# THE WORLD OF LAPP

**EPIC®** Industrial Connectors







# Legend

## Industries



Automation

e-Mobility

Food & Beverage

Mechanical and Plant Engineering

Oil & Gas

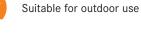
Rail

Solar Energy

Wind Energy







- Good chemical resistance
- Flame-retardant
- Wide clamping range



Halogen-free



Heat-resistant





- Cold-resistant
- Corrosion-resistant
- Maximum vibration protection
- Mechanical resistance

Assembly time

Low weight

Oil-resistant

Optimum strain relief

Space requirement



Please note: the purpose of the icons is to provide you with a quick overview and a rough indication of the product features to which the corresponding information relates. You can find details of product characteristics in the "technical data" sections on the product pages.

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ATTACANT AND A CONTRACT AND A CONTRA	HITRONIC <sup>®</sup> Optical transmission systems	294

## Success through values

Rock solid, high performance. Regional roots, global aspirations. Fast, reliable, high quality – and development that is always one step ahead. This is Lapp.

The southwest region of Germany is considered one of the most innovative and powerful industrial sectors in the world, and for good reason. Lapp is a part of this region, helping to guide it and its success worldwide.

As a completely family run company, we know: Everything that we have achieved since our founding in 1957 is based on the

daily commitment of our skilled staff and partnerships with our customers based on trust. Each of them has made a decisive contribution to our mutual success. Today, Lapp is one of the world's leading manufacturers of cables, leads, cable accessories and systems of the highest level of quality. We have approximately 3,200 employees worldwide. With 18 production sites on four continents, more than 40 sales companies and hundreds of dedicated consulting experts, we are always close by. And not just physically: customer proximity cannot be measured in mere kilometres. It is based on listening, making your challenges our own and developing solutions that help to further your business model. Candid closeness and a trusting, partnership-based cooperation are more than just words for Lapp, they are values upon which we have built our family company.

The result? Intelligent and reliable connectivity solutions precisely tailored to the needs of our globally active customers. For you as well.

Customer-oriented Successful Family based Innovative. Lapp.

- Founded in 1957
- A leading manufacturer of cables, leads, accessories and complete system solutions for connection technology
- Approximately 3,300 employees worldwide
- 17 production facilities
- More than 39 sales companies
- · Hundreds of dedicated consulting experts worldwide

Andreas Lapp, Matthias Lapp, Ursula Ida Lapp, Alexander Lapp, Siegbert Lapp. 11

LAPP

ÖLFLE

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OLFLEXS UNITRODIC\* SKINTC HITRC

**TEXIM** 

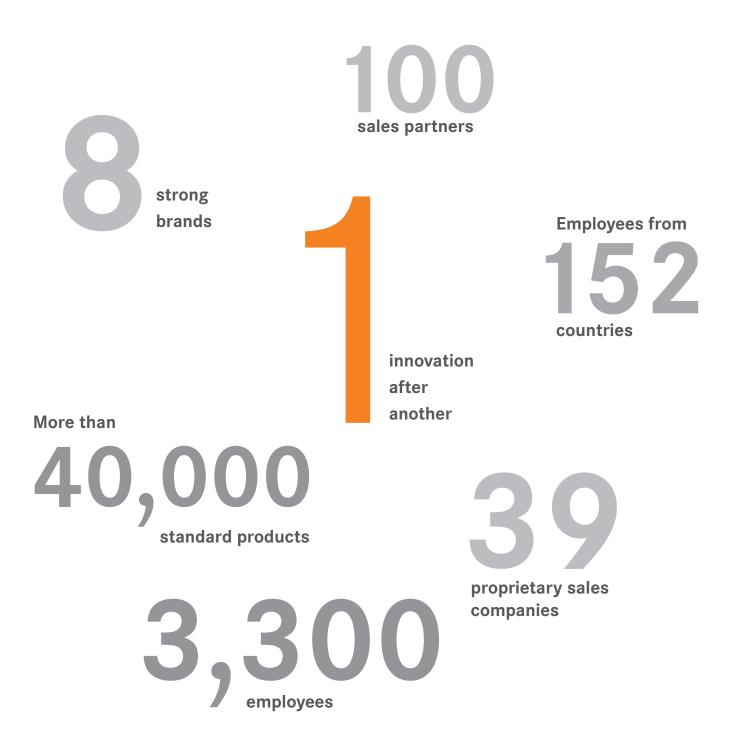
# Reliably connecting the world

We want to help you become even more productive and successful. This is why we work tirelessly on optimising our processes. We do everything to make sure we always find the best solution for you and also provide you with quick, efficient and effective support.

No matter where you are - we are always by your side. Our plants, sales companies,

partners and, above all, our competent teams of advisers ensure we offer you a comprehensive service on every continent. We do not simply distribute cable technology, we also manufacture our products ourselves – which represents another advantage for you. As a manufacturer with 18 of our own production facilities, you will benefit from our expertise in the development, design and manufacture of cables, system products and cable accessories. Thanks to this expertise, we can guarantee that Lapp will provide you with the quality that you require and that you demand.

You can always rely on quality from Lapp – wherever you are in the world. This is also embodied by our strong brands.



# Our global corporate network

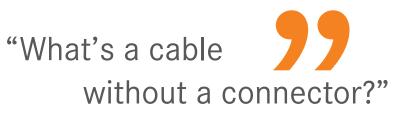


## America

Hungary

Lapp Hungária KFT

America				Africa	
Brazil	Cabos Lapp Brasil Ltda.	Italy	Lapp Italia s.r.l.	South Africa	Lapp Southern Africa
Canada	Lapp Canada Inc.		Camuna Cavi s.r.l.		Pty. Ltd.
Mexico	Lapp Mexico S. de R.L.		Lapp Sistemi Italia s.r.l.		
	de C.V.	Kazakhstan	Lapp Kazakhstan LLP		
Panama	Lapp Latinamerica Support	Latvia	Lapp Miltronic SIA	Asia	
	Corp.	Norway	Miltronic AS	China	Lapp Kabel Shanghai Co. Ltd.
USA	Lapp USA Inc.	Poland	Lapp Kabel Sp. z o.o.		Lapp Cable Works Shanghai
	Lapp Cable Works Inc.	Portugal	Policabos S.A.		Co. Ltd.
	Lapp Tannehill Inc.	Romania	Lapp Kabel Romania SRL.	India	Lapp India Pvt. Ltd.
		Russia	Lapp Russia 000	Indonesia	JPT JJ-Lapp Cable SMI
		Slovakia	Lapp Slovensko s.r.o.	Japan	Lapp Japan KK
Europe		Slovenia	Lapp, d.o.o.	Malaysia	JJ Lapp Cable (M) Sdn Bhd
Austria	Lapp Austria GmbH	Spain	Lapp Kabel España S.L.U.	Philippines	JJ Lapp Cable (P) Inc
Benelux	Lapp Benelux B.V.	Sweden	Miltronic AB	Singapore	JJ-Lapp Cable (S) Pte. Ltd.
Czech Republic	Lapp Kabel s.r.o.		Fleximark AB		Lapp Logistics Pte. Ltd.
France	Lapp France S.a.r.I.	Switzerland	Lapp Tec AG	South Korea	Lapp Korea LLC.
	Cableries Lapp S.a.r.l.	Turkey	Lapp Kablo SAN.VE TIC.	Thailand	JJ-Lapp Cable (T) Ltd.
	Lapp Muller S.A.S.		LTD.STI	Vietnam	JJ-Lapp Cable Vietnam Co
Germany	U.I. Lapp GmbH	Ukraine	Lapp Ukraine LLC		Ltd.
	Lapp GmbH Kabelwerke	United Arab	Lapp Cables Middle East		
	Lapp Systems GmbH	Emirates	F.Z.E.		
	Contact GmbH				
	Elektrische Bauelemente				
Great Britain	Lapp Ltd.				
		1			



Oskar Lapp



## Cables and connectors - we can do both

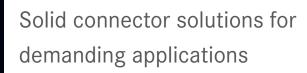
Reliably connecting the world: The Lapp Group has been successfully operating on the market with this motto for decades. Right from the very beginning, the company founder Oskar Lapp realized that this ambitious goal could not be met with high-performance cables alone. No reliable connection without a custom-fit connector solution - even the best cable is no use. That is why Lapp has always focused on both product areas: Cables and industrial connectors. A consistent and foresighted strategy that, in particular, takes account of the ever-increasing complexity of clients' requirements and the desire for reliable, complete solutions from a single source.

The fact that Lapp's name today is mainly associated with innovative cable solutions is due not least to the unprecedented ÖLFLEX® success story. The brand name is now known all over the world and stands for excellent quality and uncompromising performance. Less well known is that Oskar Lapp started out with the development of connectors and so laid the foundations for our current multifaceted EPIC<sup>®</sup> industrial connector range, which is presented to you in this brochure for the first time in its entire range.

Over 50 years of expertise in the development and manufacture of industrial connectors guarantees our customers worldwide not only unconditional first-class quality but also perfectly matched, integrated cable and connector solutions from a single source. You can also benefit from this unique know-how.







The development of the first EPIC<sup>®</sup> industrial connector more than 50 years ago was the starting point for today's versatile and constantly evolving EPIC<sup>®</sup> connector range. Be it wind energy, photovoltaic systems, mechanical engineering, servo technology, or Industry 4.0 – as technology leaders, we are always very close to the market, set industry standards and provide our international customers with reliable connector solutions for every conceivable application. That was also the case for the construction of the world's longest railway tunnel: the 57-kilometre Gotthard Base Tunnel in Switzerland.

Our EPIC<sup>®</sup> connectors were used on the project as extension connectors and ensured the power supply and control of the Herrenknecht company's giant tunnel drill,

which worked its way deeper and deeper into the hard rock. The EPIC<sup>®</sup> H-BE connectors were interconnected with housings and inserts every 50 metres. These extremely reliable connectors can withstand even higher voltages and currents without any problem. That is why they are the ideal solution for extreme underground operations.

Rely on our many years of manufacturer and solution expertise in the field of connectors. Our manufacturing facilities, subsidiaries and logistics centres around the globe guarantee short distances, fair pricing and uniform quality standards. Convince yourself of our comprehensive EPIC<sup>®</sup> product portfolio or let us advise you about individual solutions for your specific application requirements. We would be pleased to help.

Industry 4.0 **77** live at Lapp with our housing configurator

products.lappgroup.com/connector-housing

Design, insert, housing, counterpart - use the practical Connector Finder on our website and with just a few clicks, find the ideal connector solution that meets your requirements. We recommend that you also test our housing configurator to configure your individual industrial connector housings, featuring customised cable entries. Enjoy trying it out!

# EPIC<sup>®</sup> Industrial connectors at a glance

## EPIC® rectangular connectors

Flexible, robust connectors for mechanical engineering



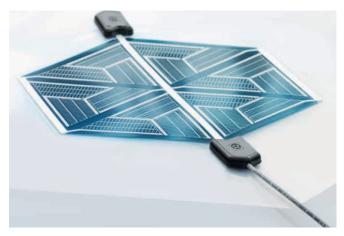
The connector system for mechanical and plant engineering and wherever a robust connection system is required. EPIC<sup>®</sup> Rectangular connectors are available as components. The right connector for any application can be made individually from housings, inserts and contacts. www.lappgroup.com/connectorfinder

For the housing, there are two performance classes to choose from

- EPIC<sup>®</sup> Standard is robust and there is a flexible choice of cable entries www.lappgroup.com/connector-housing
- EPIC<sup>®</sup> ULTRA has a high corrosion protection, EMC protection as well as a stainless steel interlocking device

EPIC<sup>®</sup> inserts are available in a fixed pin design and as a modular system

- EPIC<sup>®</sup> fixed pin inserts are easy to handle and come in a wide variety of designs
- EPIC<sup>®</sup> modular inserts offer flexibility with modules for data, signals, power, fibre-optics and pneumatics. This means every insert is individually tailor-made for the relevant modul configuration



Photographs are not to scale and do not represent detailed images of the respective products.

## EPIC<sup>®</sup> circular connectors

Compact connectors for motion control and energy transfer



Circular connections come in two designs, a signal design with gold-plated contacts for transmitting delicate signals and as high-reserve power connectors.

 $\mathsf{EPIC}^{\circledast}$  SIGNAL connectors are available as M17, M23 and R3.0 (M27)

- The metal housing with an integrated EMC screen contact reliably prevents electromagnetic interferences
- Gold-plated signal contacts reliably transmit with the lowest of currents and voltages

EPIC® POWER connectors are available as

M12, M17, LS1 (M23), LS1.5 (M40) and LS3 (M58)

- The integrated EMC cable glands offer strain relief and are perfectly sealed
- High-quality sealing materials for good chemical protection

#### EPIC<sup>®</sup> POWERLOCK

- Perfect for transmitting very high currents
- Colour coded and geometrically coded in order to prevent incorrect connections

## EPIC<sup>®</sup> SOLAR connectors

Durable connectors for photovoltaics

High-quality connections for a long-term and reliable outdoor connection

#### EPIC<sup>®</sup> SOLAR field harnessable

• Crimp and insert the contact, twist the cable gland, it's that simple

#### EPIC® SOLAR Map for organic PV modules

• Customised production instead of off-the-shelf products, that's what the new PV connection technology made by Lapp is about

# EPIC<sup>®</sup> Industrial connectors at a glance

Properties	Con	inect	ion t	уре		Connection cross section	Rated voltage acc to standards	ording		connectio	rrent for la on cross so g to standa	ection	Approvals
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Screw	Crimp	Spring	Push-In	Solder	in mm² depending on connection type	B	UL/USR	CSA/CNR	IEC	UL/USR	CSA/CNR	International
Rectangular – inserts fixed													
EPIC <sup>®</sup> H-A 3, 4	•					0.5 - 2.5	400 V	600 V	600 V	23 A	10 A	10 A	VDE, UR, CSA
EPIC® H-A 10, 16, 32, 48	•					0.5 - 2.5	250 V	600 V	600 V	16 A	14 A	16 A	VDE, UR, CSA
EPIC® STA 6, 14, 20	•				•	0.5 - 1.5/ max. 1.5	24 VAC/60 VDC	48 V	48 V	10 A	10 A	10 A	UR, CSA
EPIC® H-Q 5 EPIC® H-D 7, 8		•				0.14 - 4.0	230 V/400 V H*	600 V 250 V	600 V	16 A 10 A	16 A 10 A	16 A	UR, CSA UR
EPIC® H-D 15, 25, 40, 64		•				0.14 - 2.5	250 V	250 V	_	10 A	10 A	_	UR
EPIC <sup>®</sup> H-DD 24, 42, 72, 108		•				0.14 - 2.5	250 V	600 V	600 V	10 A	8.5 A	10 A	UR, CSA
EPIC® H-BE 6, 10, 16, 24, 32, 48	•	•	•	•		0.5 - 2.5/ 0.14 - 4.0	500 V	600 V	600 V	16 A	16 A	16 A	VDE, cURus
EPIC <sup>®</sup> H-EE 10, 18, 32, 46		•				0.14 - 4.0	500 V	600 V	600 V	16 A	16 A	16 A	UR, CSA
EPIC <sup>®</sup> H-BS 6, 12	•					0.5 - 6.0	500 V	600 V	600 V	35 A	35 A	35 A	UR, CSA
EPIC <sup>®</sup> H-BVE 3, 6, 10	•					0.5 - 2.5	630 V	600 V	600 V	16 A	16 A	16 A	VDE, cURus
POWER H-S 4	•					2.5 - 10.0	1000 V	-	-	65 A	-	-	-
EPIC <sup>®</sup> POWER K 4/0, 4/2	•					1.5 - 16.0	830 V	-	-	80 A	-	-	-
EPIC® TB-H-BE 16, 24	•					0.5 - 4.0	500 V	600 V	600 V	16 A	16 A	16 A	UR, CSA
Rectangular – inserts modular										1	1		1
ligh voltage 1+PE, 2	•					10.0 - 25.0	1000 V	600 V	-	82 A	82 A	-	VDE, cURus
EPIC® POWER HC2	_	•				16	1000 V	-	-	65 A	-	-	
POWER HHC2	_	•				16.0 - 35.0	1000 V	-	-	150 A	-	-	-
POWER HHC1		•				50.0 - 95.0	1000 V	-	-	220 A	-	-	
High voltage 3-pin		•				1.5 - 10.0	1000 V 1000 V	-	-	50 A 16 A	-	-	-
High voltage 4+PE 3-pin	_	•				0.5 - 2.5	630 V	- 600 V	- 600 V	40 A	- 40 A		– UR, CSA
HE 4-pin		•				0.5 - 4.0	630 V			25 A	40 A		
Cage clamp 4-pin		-	•			0.5 - 2.5	400 V	_	_	14 A	_	_	_
5-pin		•				0.5 - 4.0	400 V	400 V	400 V	20 A	20 A		UR, CSA
I0-pin		•				0.14 - 2.5	250 V	250 V	240 V	10 A	10 A		UR, CSA
I0-pin stamped		•				0.14 - 2.5	250 V	-	-	10 A	-	-	-
20-pin		•				0.08 - 0.56	100 V	100 V	100 V	4 A	4 A	4 A	UR, CSA
Blind						-	-	-	-	-	-	-	-
Coaxial		•				Coaxial	250 V	-	-	-	-	-	-
PROFIBUS <sup>®</sup> DP	•					0.08 - 1.5	30 V	-	-	1 A	-	-	-
Jniversal bus	•					0.08 - 1.5	30 V	-	-	1 A	-	-	-
RJ45		•				0.14 - 2.5/ 0.12 - 0.2	600 V/ 125 V	-	-	P <sup>*</sup> : 10 A S <sup>*</sup> : 1.5 A	-	-	-
Pneumatic 1, 2-pin				•		Ø 2.5/4.0 mm Ø 2.5/4.0 mm	-	-	-	-	-	-	-
Round						-		-		-	~	-	-
EPIC <sup>®</sup> POWER M12 3+PE	•					0.75 - 1.5	630 V	600 V		12 A	12 A	12 A	cURus
EPIC <sup>®</sup> SIGNAL M17 8, 17		•				0.06 - 0.56/ 0.06 - 1.0	60 V	-	-	3.6 A	-	-	-
PIC <sup>®</sup> POWER M17 3+PE		•				0.5 - 2.5	630 V	-	-	20 A	-	-	-
EPIC <sup>®</sup> POWER M17 5+PE, 6+PE, 7+PE	_	•				0.06 - 1.0	630 V	-	-	14 A	-	-	-
EPIC <sup>®</sup> POWER M17 3+PE+5		•				0.06 - 1.0/ 0.06 - 0.56	630 V/ 60 V	-	-	P <sup>*</sup> : 14 A S <sup>*</sup> : 3.6 A	-	-	-
EPIC <sup>®</sup> SIGNAL M23 6, 7		•			•	0.06 - 2.5	150 V	150 V	150 V	18A	15 A	15 A	VDE, cURus
EPIC® SIGNAL M23 8+1		•			•	0.06 - 1.0/	150 V	150 V	150 V	P*: 20 A S*: 7 A	P*: 20 A	P*: 20 A	
EPIC <sup>®</sup> SIGNAL M23 9		•			•	0.06 - 2.5	150 V	150 V	150 V	5: 7A 7A	5: 7A 7A		VDE, cURus
EPIC <sup>®</sup> SIGNAL M23 12, 16		•			•	0.06 - 1.0	100 V	100 V	100 V	7 A	7 A		VDE, cURus
EPIC® SIGNAL M23 17		•			•	0.06 - 1.0	50 V	50 V	50 V	7 A	7 A		VDE, cURus
EPIC® SIGNAL R3.0		1			•	0.06 - 1.0	24 VAC/60 VDC	-	-	7.5 A	-	-	-
EPIC® POWER LS1 5+PE		•				0.5 - 4.0	630 V	600 V	600 V	25 A	22 A	17 A	VDE, cURus
EPIC <sup>®</sup> POWER LS1 3+PE+4		•				0.5 - 4.0/ 0.4 - 1.0	630 V/250 V	600 V/ 250 V	600 V/ 250 V				VDE, cURus
EPIC <sup>®</sup> POWER LS1.5 3+PE+2, 3+PE+4		•				0.75 - 10.0/ 0.14 - 4.0	630 V/250 V	_	_	P*: 70 A S*: 30 A	-	-	-
EPIC <sup>®</sup> POWER LS3 3+PE+2, 3+PE+4		•				10.0 - 50.0/ 0.75 - 1.5	630 V/250 V	_	_	P*: 150 A S*: 12 A	-	_	_
EPIC <sup>®</sup> POWERLOCK S	•	-			-	50.0 - 120.0	1000 V	_		400 A	_	_	VDE
EPIC® POWERLOCK S	-	•				35.0 - 240.0	1000 V	-	-	400 A 660 A	-	-	
SOLAR						2.0.0		1	1		1	1	
EPIC <sup>®</sup> SOLAR 4													



# EPIC<sup>®</sup> Industrial connectors flexible, robust connectors for mechanical engineering

EPIC<sup>®</sup> industrial connectors have successfully been in use around the globe in the most diverse applications for many years. EPIC<sup>®</sup> connectors are particularly valuable in situations where maximum safety and reliability are paramount. EPIC<sup>®</sup> rectangular connectors are available as individual components or as kits. As a result, customers can select from the best solutions to meet their demands in terms of housing, inserts and contacts.

The main areas of application are:

- · Electronics and telecommunications
- Measurement, testing and control engineering
- Industrial machinery and appliances
- Drive systems and industrial automation
- Photovoltaic systems

products.lappgroup.com/connectorselector

## EPIC<sup>®</sup> Rectangular connector housing



EPIC<sup>®</sup> – apart from the products' quality and reliability, tried and tested many times on the market, our customers greatly value the option to be able to almost completely define the cable entry of the housing to meet individual specifications.

EPIC® ULTRA - the high-quality, nickel-plat-

ed housing of this EPIC<sup>®</sup>ULTRA series provides even better corrosion protection. As a result of the outstanding EMC features of this surface, the connector provides perfect, low-resistance 360° screening thanks to the high-quality bolts and clamps made of stainless steel.

products.lappgroup.com/connector-housing

## EPIC<sup>®</sup> Rectangular connector inserts



EPIC<sup>®</sup> – fixed pin inserts guarantee safe and simple handling suitable for plenty of industrial applications.

EPIC<sup>®</sup> – modular inserts provide maximum flexibility thanks to modules customers can

configure to suit their individual requirements. Users can configure modules for data, signals, output, FOC and pneumatics in any combination in one housing.

## EPIC<sup>®</sup> Accessories



Matching accessories are available for EPIC<sup>®</sup> housings and inserts. In addition to certified and approved crimping tools we also provide the matching assembly or disassembly tools. Protective covers made of impact-resistant plastic provide effective screening from environmental influences. Coding elements are suitable to prevent incorrect connections and protect the system. The range is rounded off by cover panelsand spare parts for housings.

Rectangular connectors • EPIC<sup>®</sup> H-A Inserts

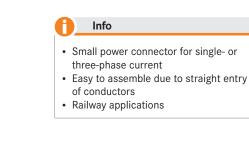
UNITRONIC®

EPIC®



H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section





## EPIC<sup>®</sup> H-A 4

Suitable housing

**Benefits** 

• EPIC<sup>®</sup> H-A 3 Housings

Railway applications

entry in the contacts

Application range

· Control engineering

Suitable tools

· Apparatus construction

• PEW 8.186 crimping pliers refer to main catalogue MULTICRIMP 6 crimping pliers refer to main catalogue

Kraftform Kompakt<sup>®</sup> Set refer to main catalogue

• Refer to Selection Table A10 to select the

- Fire protection on railway vehicles:

Requirement sets R22 and R23.

Hazard level HL1, HL2 and HL4

whenever there is minimal space.

• Easy cable connection with strait cable

• Railway applications / vehicle construction

Kraftform<sup>®</sup> adjustable torque screwdriver/

Machine and equipment manufacturing

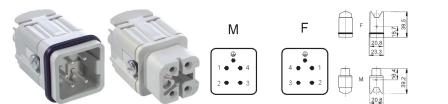
• The small H-A 3 / H-A 4 are used

Easy to service screw connection

required inserts and housings

Test according EN 45545-2.

H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section



#### Info Insert for three-phase current • application with neutral conductor • Easy to assemble due to straight entry of conductors · Railway applications **Technical data** Number of contacts Classification -EPIC<sup>®</sup> H-A 3 ETIM 5.0 Class-ID: EC000438 3 + PE ETIM 5.0 Class-Description: Contact EPIC<sup>®</sup> H-A 4 insert for industrial connectors 4 + PE Rated voltage (V) IEC: 400 V **Termination methods** 0 Screw termination: 0.5 - 2.5 mm<sup>2</sup> UL: 600 V (2.5 mm<sup>2</sup> with conductor end sleeves CSA: 600 V depending on the crimping profile) Rated im Stripping length (mm) 6 Rated cu Cycle of mechanical operation IEC: 23 A 100 UL: 10 A E-tested rtified production control: E-REG. no.: B437 tested: File Number: E75770 nperature range

ET I M

4

Amp

4 kV

npulse voltage	
A A A of soiling	
resistance ohm	0-1-

	CSA: 10 A	DIN	VDE-tested
	Degree of soiling 3	VDE	Certified production contr VDE-REG. no.: B437
	<b>Contact resistance</b> 1.5 - 4 mohm		UL-tested: UL File Number: E75770
b	<b>Contacts</b> Copper alloy, hard silver-plated	01	<b>Temperature range</b> 40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
H-A 3 screw termination	1			
10420000	H-A 3 SS	male	1 - 3	10
10421000	H-A 3 BS	female	1 - 3	10
H-A 4 screw termination	1			
10431000	H-A 4 SS	male	1 - 4	10
10432000	H-A 4 BS	female	1 - 4	10

Photographs are not to scale and do not represent detailed images of the respective products.



## APP GROUP

## EPIC<sup>®</sup> Industrial connectors

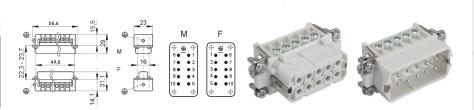
Rectangular connectors • EPIC® H-A Inserts

## EPIC® H-A 10 H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section

EPIC<sup>®</sup> H-A 16

Info

- · Slim standard insert, easy to connect by screw
- · Universal for current and voltage transmission



H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section

10 + PE

16 + PE

EPIC® H-A 16

**Termination methods** Screw termination: 0.5 - 2.5 mm<sup>2</sup>

#### Info

- Slim standard insert, easy to connect by screw
- Universal for current and voltage • transmission

#### Suitable housing

#### EPIC<sup>®</sup> H-A 10

- EPIC<sup>®</sup> H-A 10 Housings EPIC<sup>®</sup> H-A 16
- EPIC<sup>®</sup> H-A 10 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### **Benefits**

- · Slim connector insert for standard application
- Easy to service screw connection
- · Universal for current and voltage transmission

#### Application range

- · Machine and equipment manufacturing
- Control engineering

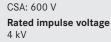
#### Suitable tools

- PEW 8.186 crimping pliers refer to main catalogue
- MULTICRIMP 6 crimping pliers refer to main catalogue
- Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt® Set refer to main catalogue

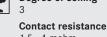
$\begin{array}{c} 73 \\ \hline $	
Technical data	
Classification ETIM 5.0 Class-ID: EC000438	Number of contacts EPIC <sup>®</sup> H-A 10

















UL File Number: E75770 Temperature range  $-40^{\circ}$ C to  $+100^{\circ}$ C, short-term up to +125°C

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-A 10 screw tern	nination				
10440100	H-A 10 SS	male	yes	1 - 10	5
10441100	H-A 10 BS	female	yes	1 - 10	5
10440000	H-A 10 SS	male		1 - 10	5
10441000	H-A 10 BS	female		1 - 10	5
H-A 16 screw term	nination				
10530000	H-A 16 SS	male	yes	1 - 16	5
10531000	H-A 16 BS	female	yes	1 - 16	5
10532000	H-A 16 SS	male		1 - 16	5
10533000	H-A 16 BS	female		1 - 16	5

Photographs are not to scale and do not represent detailed images of the respective products.

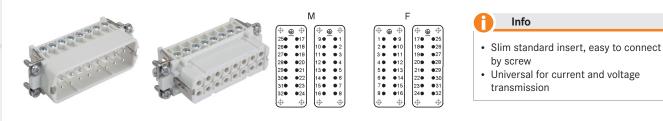
Rectangular connectors • EPIC® H-A Inserts



LAPP GROUP

## EPIC<sup>®</sup> H-A 32

H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section



## EPIC<sup>®</sup> H-A 48

H-A inserts with screw termination up to 2.5 mm<sup>2</sup> wire cross section





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- And -	41.	<b>9</b> 33	25.	●17	9
	42 🖷	<b>8</b> 34	28 🖷	●18	10
000	43 🜒	<b>0</b> 35	27 🖷	19	11
0.00	44.	<b>8</b> 36	28 🖷	20	12
0.0.	46 🖷	37	29 🖷	21	13
	46 🗣	<b>6</b> 38	30 🗣	•22	14
	47 🖷	<b>e</b> 39	31.	<b>e</b> 23	15
	48 👁	<b>e</b> 40	32 🗢	<b>e</b> 24	16
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**Technical data** 

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•17		•1	1.0		17 🖝	●25	33 🖷	• 41
<b>e</b> 18	10 🖷	•2	2 .	10	18 🖷	<b>0</b> 26	34 🖷	42
19	11 🖷	•3	3 0	@11	19 🖷	●27	35 🖷	e43
20	12 🖷	•4	4.	€12	20 🖷	●28	38 🖷	●44
•21	13 🖷	•6	6 🖷	13	21 🖷	<b>0</b> 29	37 🖷	●46
•22	14 🖷	•6	6.	€14	22 🛛	•30	38 🖷	€46
•23	15 🖷	•7	7.	€15	23 🖷	●31	39 🖷	€47
<b>e</b> 24	16 🖷	•8	8 🖷	€16	24 👁	•32	40 🖷	<b>e</b> 48
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-		
•	(A ~ A)	Info Info
•25 •26 •27 •28	(↓ (⊕ (↓ 33 ● ●41 34 ● ●42 35 ● ●43 35 ● ●44	Slim standard insert, easy to connect
●29 ●30 ●31	37 • •45 38 • •46 39 • •47	<ul><li>by screw</li><li>Universal for current and voltage</li></ul>
•32 \$	40 • •48	transmission

16 + PE

¢

#### Suitable housing

EPIC® H-A 32

• EPIC<sup>®</sup> H-A 32 Housings

EPIC<sup>®</sup> H-A 48

- EPIC<sup>®</sup> H-A 32 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Benefits

- Slim connector insert for standard application
- Easy to service screw connection
- Universal for current and voltage transmission

#### Application range

- Machine and equipment manufacturing
- Control engineering

#### Suitable tools

- PEW 8.186 crimping pliers
- refer to main catalogue
- MULTICRIMP 6 crimping pliers refer to main catalogue
- Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue

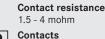
<b>E</b> TIM	Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors
4	Rated voltage (V) IEC: 250 V UL: 600 V



#### Rated impulse voltage 4 kV







Copper alloy, hard silver-plated

8 Cycle of mechanical operation 100 DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

Number of contacts

**Termination methods** 

Stripping length (mm)

Screw termination: 0.5 - 2.5 mm<sup>2</sup>

depending on the crimping profile)

(2.5 mm<sup>2</sup> with conductor end sleeves

Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU			
H-A 32 screw tern	H-A 32 screw termination							
10540000	H-A 16 SS	male	yes	17 - 32	5			
10541000	H-A 16 BS	female	yes	17 - 32	5			
10542000	H-A 16 SS	male		17 - 32	5			
10543000	H-A 16 BS	female		17 - 32	5			
H-A 48 screw term	nination							
10540100	H-A 16 SS	male	yes	33 - 48	5			
10541100	H-A 16 BS	female	yes	33 - 48	5			
10542100	H-A 16 SS	male		33 - 48	5			
10543100	H-A 16 BS	female		33 - 48	5			

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

**HITRONIC®** 

Rectangular connectors • EPIC<sup>®</sup> STA inserts

**ETHERLINE®** 

**HITRONIC®** 

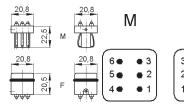
EPIC®

## **EPIC® STA 6 Screw termination**

The proven STA inserts with spring contacts



- For reliable signal transmission in harsh environmental conditions
- Mechanically robust spring contacts





## **EPIC® STA 6 Solder termination**

The proven STA inserts with spring contacts

	lr	

- For reliable signal transmission in harsh environmental conditions
- Mechanically robust spring contacts

#### Suitable housing

- EPIC® H-A 3 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Benefits

- Good contact due to the strong contact springs.
- The proven STA inserts with spring contacts

#### Application range

- Control systems
- Rack technology
- Electronic laboratory

20,8 0,1 0,1 0,1 0,1 0,8 0,1 0,8 0,8 0,8 0,8 0,8 0,8 0,8 0,8	F	
		A Carl

Tech	nical data		
ETIM	Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors		Number of contacts 6 Termination methods EPIC® STA 6 Screw termination
4	<b>Rated voltage (V)</b> IEC: 24 V AC, 60 V DC UL: 48 V		Screw termination: 0.5 - 1.5 mm <sup>2</sup> EPIC <sup>®</sup> STA 6 Solder termination Solder termination: up to 1.5 mm <sup>2</sup>
Amp.	CSA: 48 V Rated current (A) IEC: 10 A UL: 10 A	<b>⊮</b>	Stripping length (mm) 5 Cycle of mechanical operation 100
	CSA: 10 A Degree of soiling 2	DIN VDE	<b>VDE-tested</b> UL-tested: UL File Number: E75770
	Contact resistance < 3 mOhm	⁰∄	<b>Temperature range</b> -40°C up to +80°C
	<b>Contacts</b> Copper alloy, tinned		

Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
STA 6 screw term	ination			
10486100	STA 6 SS	male	1 - 6	10
10488100	STA 6 FS	Spring	1 - 6	10
STA 6 solder term	ination	· · · · · · · · · · · · · · · · · · ·		
10485200	STA 6 SL	male	1 - 6	10
10487200	STA 6 FL	Spring	1 - 6	10

Photographs are not to scale and do not represent detailed images of the respective products.

Rectangular connectors • EPIC® STA inserts

## LAPP GROUP

Info

• For reliable signal transmission in harsh

environmental conditions Mechanically robust spring contacts

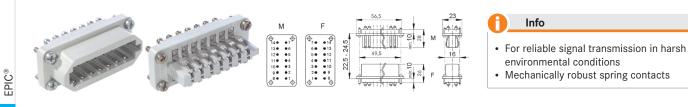
## **EPIC® STA 14 Screw termination**

The proven STA inserts with spring contacts



## **EPIC® STA 14 Solder termination**

The proven STA inserts with spring contacts



**Technical data** 

#### Suitable housing

- EPIC® H-A 10 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Benefits

- · Good contact due to the strong contact springs.
- The proven STA inserts with spring contacts

#### Application range

- · Control systems
- Rack technology

· Electronic laboratory

<b>e</b> tim	Classification ETIM 5.0 Class-ID: EC000438		Number of contacts 14
	ETIM 5.0 Class-Description: Contact insert for industrial connectors	0	Termination methods EPIC <sup>®</sup> STA 14 Screw termination
4	Rated voltage (V) IEC: 24 V AC, 60 V DC UL: 48 V		Screw termination: 0.5 - 1.5 mm <sup>2</sup> EPIC® STA 14 Solder termination Solder termination: up to 1.5 mm <sup>2</sup>
	CSA: 48 V		Stripping length (mm)
Amp.	Rated current (A)		5
	IEC: 7.5 A UL: 7.5 A CSA: 7.5 A	<b>k</b> →	<b>Cycle of mechanical operation</b> 100
		DIN	VDE-tested
	Degree of soiling 2	VDE	UL-tested: UL File Number: E75770
	Contact resistance < 3 mOhm	°‡	<b>Temperature range</b> -40°C up to +80°C

Contacts

		Copper alloy, tinned		
Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
STA 14 screw terminati	on	`		
10491100	STA 14 SS	male	1 - 14	5
10493100	STA 14 FS	Spring	1 - 14	5
STA 14 solder terminat	ion	· · ·		
10490200	STA 14 SL	male	1 - 14	5
10492200	STA 14 FL	Spring	1 - 14	5

Photographs are not to scale and do not represent detailed images of the respective products.

**HITRONIC®** 

## LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC<sup>®</sup> STA inserts

The proven STA inserts with spring contacts

UNITRONIC®

# EPIC<sup>®</sup> STA 20 Screw termination

Info

- For reliable signal transmission in harsh environmental conditions
- Mechanically robust spring contacts

# EPIC<sup>®</sup> STA 20 Solder termination

The proven STA inserts with spring contacts



• For reliable signal transmission in harsh environmental conditions

24,5

22,5 -

Mechanically robust spring contacts

#### Suitable housing

- EPIC® H-A 16 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Benefits

- Good contact due to the strong contact springs.
- The proven STA inserts with spring contacts

#### Application range

- Control systems
- Rack technology
- Electronic laboratory

Tech	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC000438	ŧ	Number of contacts 20
	ETIM 5.0 Class-Description: Contact insert for industrial connectors	01	Termination methods EPIC <sup>®</sup> STA 20 Screw termination
4	Rated voltage (V) IEC: 24 V AC, 60 V DC UL: 48 V		Screw termination: 0.5 - 1.5 mm <sup>2</sup> EPIC <sup>®</sup> STA 20 Solder termination Solder termination: up to 1.5 mm <sup>2</sup>
	CSA: 48 V		Stripping length (mm)
Amp.	Rated current (A) IEC: 7 A UL: 7 A	₩	<b>Cycle of mechanical operation</b>
	CSA: 7 A Degree of soiling 2	<u>DIN</u> VDE	VDE-tested UL-tested: UL File Number: E75770
	Contact resistance < 3 mOhm	°‡	<b>Temperature range</b> -40°C up to +80°C
	<b>Contacts</b> Copper alloy, tinned		·

Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
STA 20 screw term	ination			
10501100	STA 20 SS	male	1 - 20	5
10503100	STA 20 FS	Spring	1 - 20	5
STA 20 solder term	ination			
10500200	STA 20 SL	male	1 - 20	5
10502200	STA 20 FL	Spring	1 - 20	5

Photographs are not to scale and do not represent detailed images of the respective products.

Rectangular connectors • EPIC<sup>®</sup> H-Q 5 / H-Q12 Inserts



# EPIC<sup>®</sup> H-Q 5

With five working contacts in the proven crimp technology and one PE contact with screw termination.

12				)
Rec C		□ S 31.4 40 39.5		t, powerful standard insert aving, crimping contact
Suitable housin		Technical data		
required inserts Suitable contac • EPIC <sup>®</sup> H-BE 2.5	on Table A10 to select the and housings	Classification ETIM 5.0 Class-ID: E ETIM 5.0 Class-Desc insert for industrial of Rated voltage (V) IEC: 230 V / 400 V	connectors contact	ntact resistance mOhm ntacts per alloy, hard silver/gold-plated nber of contacts PF
Page 86		UL: 600 V CSA: 600 V	Teri	mination methods
	ce crimping contacts screw connection	Rated impulse volt 4 kV Amp. Rated current (A)	Eyc → Cyc 100	
Application rang		IEC: 16 A UL: 16 A	<u></u>	E-tested ested: UL File Number: E75770
<ul> <li>Machine and ec</li> <li>Control enginee</li> </ul>	uipment manufacturing ring	CSA: 16 A Degree of soiling 3	-40	r <b>perature range</b> °C to +100°C, rt-term up to +125°C
Article number	Article description	Contact type	Number of operating contac	cts Pieces / PU
H-Q 5 crimp termin 10431500	H-Q 5 SC	male	1 - 5	10
10432500	H-Q 5 BC	female	1 - 5	10
Viulti-pole inser	t for the small H-A 3 hous	ing		
No Port				o er contacts in confined spaces aving, crimping contact
0.0			• 12 powe	er contacts in confined spaces
		Technical data	• 12 powe	er contacts in confined spaces
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> </ul>	usings on Table A10 to select the and housings		12 powe     Space s     Space s     Cor C000438     cor contact     Cor Contact     Cor Contact     Cor Contact     Conta	er contacts in confined spaces aving, crimping contact itact resistance mOhm itacts
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r</li> </ul>	usings on Table A10 to select the and housings	Technical data Classification ETIM 5.0 Class-ID: E ETIM 5.0 Class-Deso insert for industrial of Rated voltage (V)	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> </ul>	er contacts in confined spaces aving, crimping contact ntact resistance mOhm ntacts uper alloy, hard silver/gold-plated nber of contacts
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> </ul>	usings on Table A10 to select the and housings <b>ts:</b>	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Rated voltage (V)         IEC: 400 V         UL: 600 V	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> <li>Contact connectors</li> <li>Contact connectors</li> </ul>	er contacts in confined spaces aving, crimping contact ntact resistance mOhm ntacts iper alloy, hard silver/gold-plated nber of contacts + PE
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> </ul>	usings on Table A10 to select the and housings t <b>s:</b> nachined contacts	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Rated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> <li>Conception Contact connectors</li> <li>Conception Contact Contact Connectors</li> <li>Conception Contact C</li></ul>	er contacts in confined spaces aving, crimping contact ntact resistance mOhm ntacts uper alloy, hard silver/gold-plated nber of contacts
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> </ul>	usings on Table A10 to select the and housings <b>ts:</b>	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Rated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated impulse volt         6 kV	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> <li>Contact connectors</li> <li>Contact connectors</li> <li>Contact connectors</li> <li>Contact connector contact contact connector contact co</li></ul>	er contacts in confined spaces aving, crimping contact <b>itact resistance</b> mOhm <b>itacts</b> iper alloy, hard silver/gold-plated <b>nber of contacts</b> + PE <b>mination methods</b> np termination: 0.14 - 2.5 mm <sup>2</sup> <b>le of mechanical operation</b>
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> <li>PE contact with</li> </ul>	usings on Table A10 to select the s and housings ts: nachined contacts ce crimping contacts screw connection	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Rated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated current (A)         IEC: 10 A	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> </ul>	er contacts in confined spaces aving, crimping contact <b>Itact resistance</b> mOhm <b>Itacts</b> uper alloy, hard silver/gold-plated <b>mber of contacts</b> + PE <b>mination methods</b> np termination: 0.14 - 2.5 mm <sup>2</sup> <b>Ie of mechanical operation</b> E-tested
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> <li>PE contact with</li> <li>Application rang</li> <li>Machine and eco</li> </ul>	usings on Table A10 to select the s and housings ts: nachined contacts ce crimping contacts screw connection ge uipment manufacturing	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Mated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated current (A)         IEC: 10 A         UL: 14 A         CSA: 10 A	• 12 powe • Space s • Spac	er contacts in confined spaces aving, crimping contact htact resistance mOhm htacts per alloy, hard silver/gold-plated mber of contacts + PE mination methods np termination: 0.14 - 2.5 mm <sup>2</sup> le of mechanical operation E-tested -tested: CSA File Number: 2627 rested: UL File Number: E75770
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> <li>PE contact with</li> <li>Application rang</li> <li>Machine and eco</li> </ul>	usings on Table A10 to select the s and housings ts: nachined contacts ce crimping contacts screw connection ge uipment manufacturing	Technical data         €TIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Rated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated current (A)         IEC: 10 A         UL: 14 A	• 12 powe • Space s • Spa	er contacts in confined spaces aving, crimping contact <b>itact resistance</b> mOhm <b>itacts</b> iper alloy, hard silver/gold-plated <b>mber of contacts</b> + PE <b>mination methods</b> np termination: 0.14 - 2.5 mm <sup>2</sup> <b>ie of mechanical operation</b> <b>5-tested</b> i-tested: CSA File Number: 2627
required inserts Suitable contac • EPIC® H-D 1.6 r Page 83 Benefits • High performan • PE contact with Application rang	usings on Table A 10 to select the and housings ts: nachined contacts ce crimping contacts screw connection ge upment manufacturing tring	Technical data         Image: Classification         ETIM       Classification         ETIM       5.0 Class-ID: E         ETIM       5.0 Class-Desc         insert for industrial of         Image: Classification         Rated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated impulse volt 6 kV         Amp.       Rated current (A)         IEC: 10 A       UL: 14 A         CSA: 10 A       Degree of soiling 3	• 12 powe • Space s     • Space s	er contacts in confined spaces aving, crimping contact attact resistance mOhm attacts per alloy, hard silver/gold-plated mber of contacts + PE mination methods np termination: 0.14 - 2.5 mm <sup>2</sup> le of mechanical operation E-tested -tested: CSA File Number: 26277 rested: UL File Number: 275770 aperature range °C to +120°C
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> <li>PE contact with</li> <li>Application rang</li> <li>Machine and ec</li> <li>Control enginee</li> <li>Article number</li> <li>H-Q 12 Crimp term</li> </ul>	usings on Table A10 to select the s and housings ts: nachined contacts ce crimping contacts screw connection ge uppment manufacturing string Article description ination	Technical data         ●       Classification         ETIM       Classification         ETIM       S.0 Class-ID: E         ETIM       S.0 Class-Desc         insert for industrial of         Mated voltage (V)         IEC: 400 V         UL: 600 V         CSA: 600 V         Rated current (A)         IEC: 10 A         UL: 14 A         CSA: 10 A         Imp.       Degree of soiling         3	<ul> <li>12 powe</li> <li>Space s</li> <li>Space s</li> <li>Consectors</li> <li>Co</li></ul>	er contacts in confined spaces aving, crimping contact attact resistance mOhm tacts oper alloy, hard silver/gold-plated mber of contacts + PE mination methods np termination: 0.14 - 2.5 mm <sup>2</sup> le of mechanical operation E-tested tested: CSA File Number: 2627 rested: UL File Number: E75770 terrature range °C to +120°C ts Pieces / PU
<ul> <li>EPIC<sup>®</sup> H-A 3 Ho</li> <li>Refer to Selecti required inserts</li> <li>Suitable contac</li> <li>EPIC<sup>®</sup> H-D 1.6 r Page 83</li> <li>Benefits</li> <li>High performan</li> <li>PE contact with</li> <li>Application rang</li> <li>Machine and ec</li> <li>Control enginee</li> <li>Article number</li> <li>H-O 12 Crimp term 44424049</li> <li>44424050</li> </ul>	usings on Table A10 to select the and housings ts: nachined contacts ce crimping contacts screw connection ge uppment manufacturing tring Article description	Technical data         Image: Classification ETIM 5.0 Class-ID: E ETIM 5.0 Class-Desc insert for industrial of the second secon	• 12 powe • Space s     • Space s	er contacts in confined spaces aving, crimping contact htact resistance mOhm htacts per alloy, hard silver/gold-plated mber of contacts + PE mination methods np termination: 0.14 - 2.5 mm <sup>2</sup> le of mechanical operation E-tested -tested: CSA File Number: 2627 rested: UL File Number: E75770 mperature range °C to +120°C

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC<sup>®</sup> Coding parts refer to page 183 20

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EPIC®

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# HITRONIC®

## APP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-D Inserts

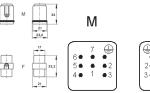
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## EPIC<sup>®</sup> H-D 7 machined

multi-pole inserts for machined crimp contacts

multi-pole inserts for stamped crimp contacts

- Info
- · Compact, powerful standard insert
- · For machined contacts for fast processing with the crimping tool







EPIC<sup>®</sup> H-D 7 stamped

# **HITRONIC®**

Info

- · For automated production with crimping machine
- Space saving, crimping contact · Suitable for processing with contacts
- on reel

#### Suitable housing

- EPIC<sup>®</sup> H-A 3 Housings
- · Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

- EPIC<sup>®</sup> H-D 7 machined
- EPIC<sup>®</sup> H-D 1.6 machined contacts Page 83

#### EPIC® H-D 7 stamped

- EPIC® H-D 1.6 stamped contacts Page 84
- EPIC<sup>®</sup> H-D 1.6 stamped contacts-on-reel Page 85

#### Benefits

- · Small, high-performance connector
- High performance crimping contacts
- · PE contact with screw connection

#### Application range

- · Machine and equipment manufacturing
- Control engineering

M 21 23,6	М	F	SE
7 1 1 1 1 1 1 1 1 1 1 1 1 1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7         •       •         2       •       •         3       1       •	

## **Technical data**

#### Classification ET I M ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors

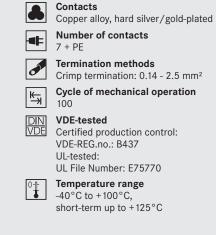
Rated voltage (V) 4 IEC: 24 V (AC)/60 V (DC) metal housing; 250 V thermoplastic housing; UL: 250 V Rated impulse voltage





Amp





Pieces / PU Article number Article description Contact type Article designation Number of operating contacts H-D 7 crimp termination 11250500 H-D 7 SCM male machined 1 - 7 10 11251500 H-D 7 BCM female machined 1 - 7 10 EPIC<sup>®</sup> H-D 7 stamped 11250000 H-D 7 SCG 1 - 7 10 male stamped 11251000 H-D 7 BCG 1 - 7 female 10 stamped

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®

EPIC<sup>®</sup> H-D 8

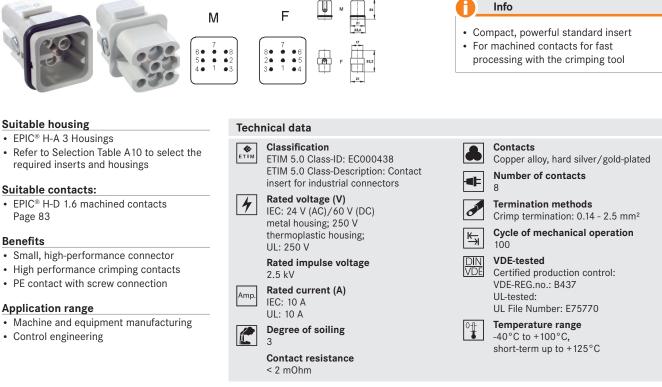
Rectangular connectors • EPIC® H-D Inserts



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Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
H-D 8 crimp term	ination			
11252500	H-D 8 SCM	male	1 - 8	10
11253500	H-D 8 BCM	female	1 - 8	10

Photographs are not to scale and do not represent detailed images of the respective products.

Rectangular connectors • EPIC<sup>®</sup> H-D Inserts

# EPIC<sup>®</sup> H-D 15 machined

EPIC® H-D 15 stamped

multi-pole inserts for machined crimp contacts

multi-pole inserts for stamped crimp contacts

#### Info

• For machined contacts for fast processing with the crimping tool



#### Info

- For automated production with crimping machine
- Suitable for processing with contacts
   on reel

#### Suitable housing

- EPIC<sup>®</sup> H-D 15 machined
- EPIC<sup>®</sup> H-A 10 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

EPIC<sup>®</sup> H-D 15 machined
EPIC<sup>®</sup> H-D 1.6 machined contacts Page 83

#### EPIC<sup>®</sup> H-D 15 stamped

- EPIC<sup>®</sup> H-D 1.6 stamped contacts Page 84
- EPIC<sup>®</sup> H-D 1.6 stamped contacts-on-reel Page 85

#### **Benefits**

 Inserts of the connector series H-D are designed for applications in which a high number of contacts are required.

#### Application range

- Machine and equipment manufacturing
- Control engineering

Tech	nical data		
ETIM	Classification ETIM 5.0 Class-ID: EC000438		Contacts Copper alloy, hard silver/gold-plated
	ETIM 5.0 Class-Description: Contact insert for industrial connectors	■⊧	Number of contacts 15 + PE
4	Rated voltage (V) IEC: 250 V UL: 250 V	o	Termination methods Crimp termination: 0.14 - 2.5 mm <sup>2</sup>
	Rated impulse voltage 2.5 kV	<b>⊬</b>	Cycle of mechanical operation

F

Μ



22,3 - 24,0

Degree of soiling 3

Contact resistance < 2 mOhm



-40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU	
H-D 15 crimp term	ination					
11283200	H-D 15 SCM	male	machined	1 - 15	5	
11282200	H-D 15 BCM	female	machined	1 - 15	5	
EPIC <sup>®</sup> H-D 15 stamped						
11255000	H-D 15 SCG	male	stamped	1 - 15	5	
11256000	H-D 15 BCG	female	stamped	1 - 15	5	

Photographs are not to scale and do not represent detailed images of the respective products.

**UNITRONIC®** 

Rectangular connectors • EPIC® H-D Inserts

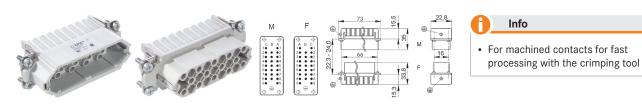




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## EPIC<sup>®</sup> H-D 25 machined

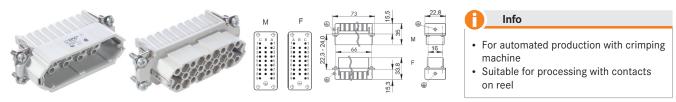
multi-pole inserts for machined crimp contacts



**Technical data** 

## EPIC<sup>®</sup> H-D 25 stamped

multi-pole inserts for stamped crimp contacts



### Suitable housing

- EPIC<sup>®</sup> H-A 16 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

- EPIC<sup>®</sup> H-D 25 machined
- EPIC® H-D 1.6 machined contacts Page 83

## EPIC<sup>®</sup> H-D 25 stamped

- + EPIC $^{\ensuremath{\circledast}}$  H-D 1.6 stamped contacts Page 84
- EPIC® H-D 1.6 stamped contacts-on-reel Page 85

#### Benefits

• Inserts of the connector series H-D are designed for applications in which a high number of contacts are required.

#### **Application range**

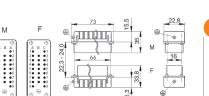
- · Machine and equipment manufacturing
- · Control engineering

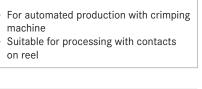
Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU	
H-D 25 crimp termination						
11283300	H-D 25 SCM	male	machined	1 - 25	5	
11282300	H-D 25 BCM	female	machined	1 - 25	5	
EPIC <sup>®</sup> H-D 25 stamped						
11260000	H-D 25 SCG	male	stamped	1 - 25	5	
11261000	H-D 25 BCG	female	stamped	1 - 25	5	

Contact resistance

< 2 mOhm

Photographs are not to scale and do not represent detailed images of the respective products.





Temperature range

short-term up to +125°C

-40°C to +100°C,

E T I M	Classification ETIM 5.0 Class-ID: EC000438		<b>Contacts</b> Copper alloy, hard silver/gold-plated
	ETIM 5.0 Class-Description: Contact insert for industrial connectors	■⊧	Number of contacts 25 + PE
4	Rated voltage (V) IEC: 250 V UL: 250 V	0	Termination methods Crimp termination: 0.14 - 2.5 mm <sup>2</sup>
	Rated impulse voltage	<del>™</del>	Cycle of mechanical operation 100
Amp.	Rated current (A) IEC: 10 A UL: 10 A	DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested:
	Degree of soiling 3		UL File Number: E75770

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EPIC

Rectangular connectors • EPIC® H-D Inserts

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# EPIC® H-D 40 machined

multi-pole inserts for machined crimp contacts

multi-pole inserts for stamped crimp contacts

EPIC<sup>®</sup> H-D 40 stamped

#### Info

· For machined contacts for fast processing with the crimping tool



#### Info

- For automated production with crimping machine
- · Suitable for processing with contacts on reel

#### Suitable housing

- EPIC® ULTRA H-B 16
- EPIC<sup>®</sup> H-B 16 Housings
- EPIC® QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### Suitable contacts:

#### EPIC® H-D 40 machined

• EPIC® H-D 1.6 machined contacts Page 83

#### EPIC<sup>®</sup> H-D 40 stamped

- EPIC<sup>®</sup> H-D 1.6 stamped contacts Page 84
- EPIC® H-D 1.6 stamped contacts-on-reel Page 85

#### **Benefits**

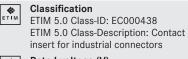
· Inserts of the connector series H-D are designed for applications in which a high number of contacts are required.

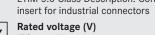
#### Application range

- Plant engineering
- Light & sound technology

84,5 77,5 012-980 920 92-9800 920 92-9800 9200 9200 92000 9000 90000000000000	M 27 F 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D         O		A LA COLOGICAL OF
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#### **Technical data**





```
IEC: 250 V
UL: 250 V
```

```
Rated impulse voltage
2.5 kV
Rated current (A)
```









Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU		
H-D 40 crimp tern	H-D 40 crimp termination						
11265200	H-D 40 SCM	male	machined	1 - 40	10		
11266200	H-D 40 BCM	female	machined	1 - 40	10		
EPIC <sup>®</sup> H-D 40 stamped							
11265000	H-D 40 SCG	male	stamped	1 - 40	5		
11266000	H-D 40 BCG	female	stamped	1 - 40	5		

Photographs are not to scale and do not represent detailed images of the respective products.

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Rectangular connectors • EPIC® H-D Inserts

## EPIC<sup>®</sup> H-D 64 machined

multi-pole inserts for machined crimp contacts

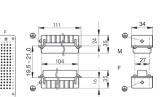


#### Info

· For machined contacts for fast processing with the crimping tool

EPIC<sup>®</sup> H-D 64 stamped multi-pole inserts for stamped crimp contacts





### Info · For automated production with crimping machine Suitable for processing with contacts

Copper alloy, hard silver/gold-plated

on reel

- EPIC® ULTRA H-B 24
- EPIC<sup>®</sup> H-B 24 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

### Suitable contacts:

EPIC® H-D 64 machined

• EPIC® H-D 1.6 machined contacts Page 83

## EPIC® H-D 64 stamped

- + EPIC  $^{\ensuremath{\mathbb{R}}}$  H-D 1.6 stamped contacts Page 84
- EPIC<sup>®</sup> H-D 1.6 stamped contacts-on-reel Page 85

#### **Benefits**

· Inserts of the connector series H-D are designed for applications in which a high number of contacts are required.

### Application range

· Plant engineering

· Light & sound technology

	insert for industrial conne
4	Rated voltage (V) IEC: 250 V UL: 250 V
	<b>Rated impulse voltage</b> 2.5 kV
Amp.	Rated current (A) IEC: 10 A

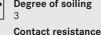
Classification

ETIM 5.0 Class-ID: EC000438

**Technical data** 

ET I M

UL: 10 A Degree of soiling



< 2 mOhm

ETIM 5.0 Class-Description: Contact insert for industrial connectors	■⊧	Number of contacts 64 + PE
Rated voltage (V) IEC: 250 V UL: 250 V	0	<b>Termination methods</b> Crimp termination: 0.14 - 2.5 mm <sup>2</sup>
Rated impulse voltage	₩	<b>Cycle of mechanical operation</b> 100
Rated current (A) IEC: 10 A UL: 10 A	DIN VDE	<b>VDE-tested</b> UL-tested: UL File Number: E75770
Degree of soiling 3	01	<b>Temperature range</b> -40°C to +100°C, short-term up to +125°C
Contact resistance		

Contacts

Article number Article description Contact type Article designation Number of operating contacts Pieces / PU H-D 64 crimp termination H-D 64 SCM 11272000 male machined 1 - 64 10 11273000 H-D 64 BCM female machined 1 - 64 10 EPIC® H-D 64 stamped 11270000 H-D 64 SCG male stamped 1-64 5 11271000 H-D 64 BCG female stamped 1 - 64 5

Photographs are not to scale and do not represent detailed images of the respective products.

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**HITRONIC®** 

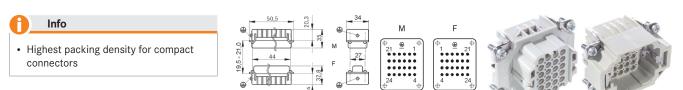
Rectangular connectors • EPIC<sup>®</sup> H-DD Inserts

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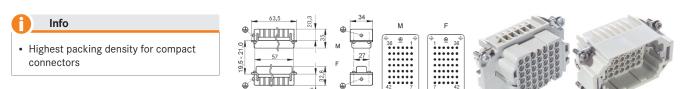
## EPIC<sup>®</sup> H-DD 24

The H-DD series with machined crimp contacts - for a high number of pin in very tight spaces.



## EPIC<sup>®</sup> H-DD 42

The H-DD series with machined crimp contacts - for a high number of pin in very tight spaces.



#### Suitable housing

#### EPIC<sup>®</sup> H-DD 24

- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### EPIC<sup>®</sup> H-DD 42

- EPIC® ULTRA H-B 10
- EPIC® H-B 10 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### Suitable contacts:

• EPIC<sup>®</sup> H-D 1.6 machined contacts Page 83

#### Benefits

• The H-DD series with machined contacts is designed for a high number of pins in very tight spaces. This allows for smaller housing types to be chosen.

#### Application range

- Mechanical engineering
- · Light & sound technology
- Plastics industry

Tech	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors	•	Contacts Copper alloy, hard silver/gold-plated Number of contacts EPIC® H-DD 24
4	Rated voltage (V) IEC: 250 V UL: 600 V		24 + PE EPIC <sup>®</sup> H-DD 42 42 + PE
	CSA: 600 V Rated impulse voltage	0	<b>Termination methods</b> Crimp termination: 0.14 - 2.5 mm <sup>2</sup>
Amp.	2.5 kV Rated current (A)	₩	Cycle of mechanical operation 100
[].	IEC: 10 A UL: 8.5 A CSA: 10 A	DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437
	Degree of soiling 2		UL-tested: UL File Number: E75770
	Contact resistance < 3 mOhm	0	<b>Temperature range</b> -40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU		
H-DD 24 crimp termination							
11285000	H-DD 24 SCM	male	machined	1 - 24	5		
11286000	H-DD 24 BCM	female	machined	1 - 24	5		
H-DD 42 crimp termination							
11285100	H-DD 42 SCM	male	machined	1 - 42	5		
11286100	H-DD 42 BCM	female	machined	1 - 42	5		

Photographs are not to scale and do not represent detailed images of the respective products.

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**HITRONIC®** 

EPIC®

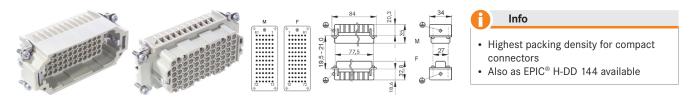
27

Rectangular connectors • EPIC® H-DD Inserts



## EPIC<sup>®</sup> H-DD 72

The H-DD series with machined crimp contacts - for a high number of pin in very tight spaces.



## EPIC<sup>®</sup> H-DD 108

The H-DD series with machined crimp contacts - for a high number of pin in very tight spaces.

**Technical data** 

Ra 4

Ra Amp.

ET I M







short-term up to +125°C

#### Suitable housing EPIC® H-DD 72

- EPIC® ULTRA H-B 16
- EPIC<sup>®</sup> H-B 16 Housings
- EPIC® QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### EPIC® H-DD 108

- EPIC<sup>®</sup> ULTRA H-B 24
- EPIC<sup>®</sup> H-B 24 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### Suitable contacts:

• EPIC® H-D 1.6 machined contacts Page 83

#### Similar products

• Further products with higher numbering in the internet. (H-DD 144, H-DD 216)

#### **Benefits**

• The H-DD series with machined contacts is designed for a high number of pins in very tight spaces. This allows for smaller housing types to be chosen.

#### Application range

- · Mechanical engineering
- · Light & sound technology
- · Plastics industry

Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors	•	Contacts Copper alloy, hard silver/gold-plated Number of contacts EPIC® H-DD 72
Rated voltage (V) IEC: 250 V UL: 600 V		72 + PE EPIC® H-DD 108 108 + PE
CSA: 600 V Rated impulse voltage 2.5 kV	0	Termination methods Crimp termination: 0.14 - 2.5 mm <sup>2</sup>
Rated current (A)	₩	Cycle of mechanical operation 100
IEC: 10 A UL: 8.5 A CSA: 10 A	DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437
Degree of soiling 2		UL-tested: UL File Number: E75770
Contact resistance < 3 mOhm	0₽	<b>Temperature range</b> -40°C to +100°C,

Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU	
H-DD 72 crimp termination						
11285200	H-DD 72 SCM	male	machined	1 - 72	5	
11286200	H-DD 72 BCM	female	machined	1 - 72	5	
H-DD 108 crimp termination						
11285300	H-DD 108 SCM	male	machined	1 - 108	5	
11286300	H-DD 108 BCM	female	machined	1 - 108	5	

Photographs are not to scale and do not represent detailed images of the respective products.

#### Similar products

 Further products with higher numbering in the internet. (H-DD 144, H-DD 216)

**ETHERLINE®** 

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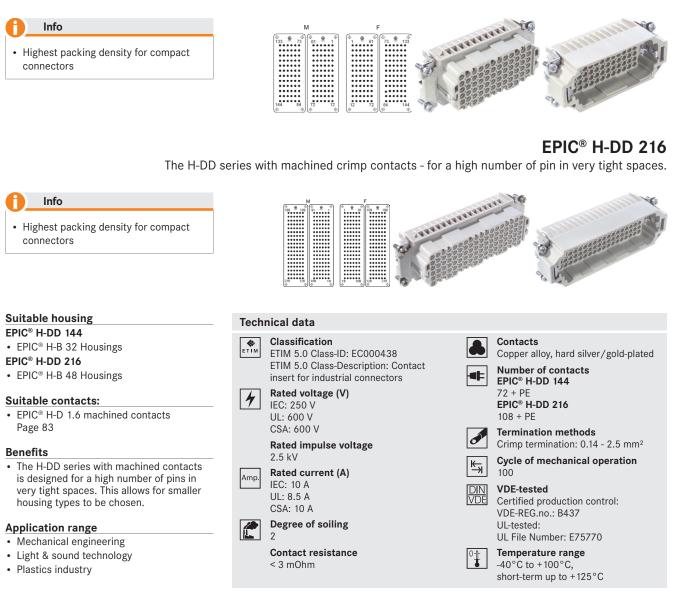
Rectangular connectors  $\mbox{ } \mbox{ } \mb$ 

## **BLAPP GROUP**

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# EPIC<sup>®</sup> H-DD 144

The H-DD series with machined crimp contacts - for a high number of pin in very tight spaces.



Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU
H-DD 144 crimp te	ermination				
11285400	H-DD 72 SCM	male	machined	73 - 144	5
11286400	H-DD 72 BCM	female	machined	73 - 144	5
H-DD 216 crimp te	ermination				
11285500	H-DD 108 SCM	male	machined	109 - 216	5
11286500	H-DD 108 BCM	female	machined	109 - 216	5

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

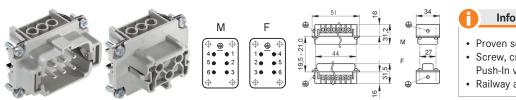
**HITRONIC®** 

Rectangular connectors • EPIC® H-BE Inserts

## EPIC<sup>®</sup> H-BE 6 Screw termination

The proven standard inserts for easy assembly



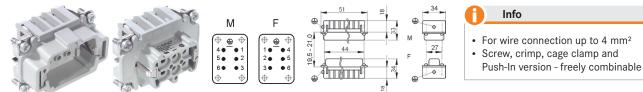


- · Proven screw for easy installation
- Screw, crimp, cage clamp and
- Push-In version freely combinable
- Railway applications

Info

## **EPIC® H-BE 6 Crimp termination**

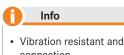
The proven standard inserts for easy assembly



## EPIC<sup>®</sup> H-BE 6 Cage clamp

The proven standard inserts for easy assembly





- Screw, crimp, cage clamp and
- Push-In version freely combinable

## EPIC<sup>®</sup> H-BE 6 Push-In termination

The proven standard inserts for easy assembly



### Suitable housing

- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

- EPIC<sup>®</sup> H-BE 6 Crimpanschluss
- EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### **Benefits**

#### **EPIC® H-BE 6 Screw termination**

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents
- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- · UL tested for application in control cabinets according UL 508 / UL 2237

#### **EPIC® H-BE 6 Crimp termination**

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC<sup>®</sup> H-BE 6 Cage clamp

appliactions

connection technology · Screw, crimp, cage clamp and Push-In version - freely combinable Multifunctional insert for versatile

Info

· Standard inserts with screw, crimp cage clamp and Push-In termination

· Push-In version - fast and easy tool free

The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC<sup>®</sup> H-BE 6 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- · Easy dismantling and insertion of wires by pushing the orange button
- Test socket for standard 2mm test tip for easy testing of Push-In inserts
- **Railway applications** - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- The  $\operatorname{EPIC}\nolimits^{\scriptscriptstyle (\! 8\!)}$  H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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**UNITRONIC®** 

**HITRONIC®** 

# EPIC®

connection





App GROUP		EPIC <sup>®</sup> Industrial connectors	C®
	Recta	angular connectors • EPIC <sup>®</sup> H-BE Inserts	UNITRONIC®
Application range	Technical data		
<ul> <li>EPIC<sup>®</sup> H-BE 6 Screw termination</li> <li>Mechanical engineering</li> <li>Plastics industry</li> <li>Light &amp; sound technology</li> <li>Railway applications / vehicle construction</li> <li>EPIC<sup>®</sup> H-BE 6 Crimp termination</li> <li>Mechanical engineering</li> <li>Light &amp; sound technology</li> </ul>	Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-ID: EC000438 Insert for industrial connectors   Rated voltage (V)   IEC: 500 VUL: 600 VCSA: 600 V   Rated impulse voltage 6 kV	Number of contacts         6 + PE         Image: Second Sec	ETHERLINE®
<ul> <li>Plastics industry</li> <li>EPIC<sup>®</sup> H-BE 6 Cage clamp</li> <li>Mechanical engineering</li> <li>Light &amp; sound technology</li> <li>Plastics industry</li> <li>EPIC<sup>®</sup> H-BE 6 Push-In termination</li> <li>Mechanical engineering</li> </ul>	Amp.       Rated current (A)         EPIC® H-BE 6 Screw termination         IEC: 16 A         UL: 16 A         CSA: 16 A         EPIC® H-BE 6 Crimp termination         IEC: 16 A         UL: 16 A	Cage clamp termination: 0.5 - 2.5 mm <sup>2</sup> EPIC <sup>®</sup> H-BE 6 Push-In termination Push-In termination: 0.14 - 2.5mm <sup>2</sup> Stripping length (mm) EPIC <sup>®</sup> H-BE 6 Screw termination 8 EPIC <sup>®</sup> H-BE 6 Cage clamp 7 EPIC <sup>®</sup> H-BE 6 Push-In termination	HITRONIC®
<ul> <li>Plastics industry</li> <li>Light &amp; sound technology</li> <li>Railway applications / vehicle construction</li> <li>Suitable tools</li> <li>EPIC® H-BE 6 Schraubanschluss</li> <li>PEW 8.186 crimping pliers refer to main catalogue</li> </ul>	CSA: 16 A EPIC® H-BE 6 Cage clamp IEC: 16 A UL: 16 A CSA: 16 A EPIC® H-BE 6 Push-In termination IEC: 16 A UL: 13 A CSA: 13 A	Image: Control of the control of t	EPIC®
<ul> <li>Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue</li> <li>Recommended crimping tool when conductor end-sleeves are used:</li> </ul>	Degree of soiling 3 Contact resistance EPIC* H-BE 6 Screw termination	UL File Number: E75770 and E483837 <b>EPIC® H-BE 6 Crimp termination</b> Certified production control: VDE-REG.no.: B437 UL-tested:	

 Recomment conductor end-sleeves are used: PEW 8.186

IEC. 10 A
UL: 13 A
CSA: 13 A
Degree of soiling 3
Contact resistance EPIC <sup>®</sup> H-BE 6 Screw termination
< 2 mOhm
EPIC <sup>®</sup> H-BE 6 Crimp termination
< 2 mOhm
EPIC <sup>®</sup> H-BE 6 Cage clamp
1.5 - 4 mohm
EPIC <sup>®</sup> H-BE 6 Push-In termination
< 2 mOhm



**EPIC® H-BE 6 Screw termination** Copper alloy, hard silver-plated EPIC<sup>®</sup> H-BE 6 Crimp termination Copper alloy, hard silver/gold-plated EPIC<sup>®</sup> H-BE 6 Cage clamp Copper alloy, hard silver-plated EPIC® H-BE 6 Push-In termination Copper alloy, hard silver-plated

UL File Number: E75770 EPIC<sup>®</sup> H-BE 6 Cage clamp UL-tested: UL File Number: E75770 EPIC® H-BE 6 Push-In termination UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 6 screw tern	nination				
10190000	EPIC <sup>®</sup> H-BE 6 SS	male	yes	1 - 6	10
10191000	EPIC <sup>®</sup> H-BE 6 BS	female	yes	1 - 6	10
10190100	EPIC <sup>®</sup> H-BE 6 SS	male		1 - 6	10
10191100	EPIC <sup>®</sup> H-BE 6 BS	female		1 - 6	10
H-BE 6 crimp termination					
10180000	EPIC <sup>®</sup> H-BE 6 SCM	male		1 - 6	10
10181000	EPIC <sup>®</sup> H-BE 6 BCM	female		1 - 6	10
H-BE 6 cage clamp termination					
10400000	EPIC <sup>®</sup> H-BE 6 SF	male	yes	1 - 6	10
10401000	EPIC <sup>®</sup> H-BE 6 BF	female	yes	1 - 6	10
H-BE 6 Push-In termination					
44423200	EPIC <sup>®</sup> H-BE 6 SP	male	yes	1 - 6	10
44423201	EPIC <sup>®</sup> H-BE 6 BP	female	yes	1 - 6	10

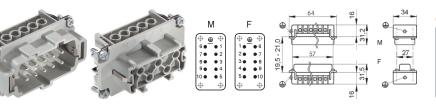
For current information see: www.lappgroup.com

Photographs are not to scale and do not represent detailed images of the respective products.

Rectangular connectors • EPIC® H-BE Inserts

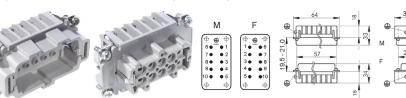
## EPIC<sup>®</sup> H-BE 10 Screw termination

The proven standard inserts for easy assembly



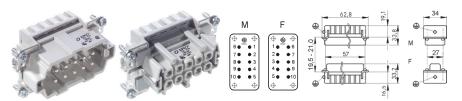
## **EPIC® H-BE 10 Crimp termination**

The proven standard inserts for easy assembly



## EPIC<sup>®</sup> H-BE 10 Cage clamp

The proven standard inserts for easy assembly



## EPIC<sup>®</sup> H-BE 10 Push-In termination

The proven standard inserts for easy assembly



### Suitable housing

- EPIC® ULTRA H-B 10
- EPIC<sup>®</sup> H-B 10 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

EPIC<sup>®</sup> H-BE 10 Crimpanschluss • EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Benefits

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#### **EPIC® H-BE 10 Screw termination**

- · Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- · UL tested for application in control cabinets according UL 508 / UL 2237

#### **EPIC® H-BE 10 Crimp termination**

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC® H-BE 10 Cage clamp

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

### Info

- · Proven screw for easy installation
- Screw, crimp, cage clamp and
- Push-In version freely combinable
- **Railway applications**



Info

- For wire connection up to 4 mm<sup>2</sup>
- Screw, crimp, cage clamp and Push-In version - freely combinable
- · Multifunctional insert for versatile appliactions
- Screw, crimp, cage clamp and Push-In version - freely combinable

## Info

- · Push-In version fast and easy tool free connection technology
- Screw, crimp, cage clamp and Push-In version - freely combinable
- Multifunctional insert for versatile appliactions

#### EPIC<sup>®</sup> H-BE 10 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- · Easy dismantling and insertion of wires by pushing the orange button
- · Test socket for standard 2mm test tip for easy testing of Push-In inserts
- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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# **HITRONIC®**

Rectangular connectors • EPIC<sup>®</sup> H-BE Inserts

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Application range	Technical data		
Application range EPIC® H-BE 10 Screw termination • Mechanical engineering • Plastics industry • Light & sound technology • Railway applications / vehicle construction EPIC® H-BE 10 Crimp termination • Mechanical engineering • Light & sound technology • Plastics industry EPIC® H-BE 10 Cage clamp • Mechanical engineering • Light & sound technology • Plastics industry EPIC® H-BE 10 Push-In termination • Mechanical engineering • Plastics industry EPIC® H-BE 10 Push-In termination • Mechanical engineering • Plastics industry • Light & sound technology • Railway applications / vehicle construction Suitable tools EPIC® H-BE 10 Schraubanschluss • PEW 8.186 crimping pliers refer to main catalogue • Kraftform® adjustable torque screwdriver/ Kraftform Kompakt® Set refer to main catalogue • Recommended crimping tool when conductor end-sleeves are used: PEW 8.186	<ul> <li>Classification ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors</li> <li>Rated voltage (V) IEC: 500 VUL: 600 VCSA: 600 V Rated impulse voltage 6 kV</li> <li>Rated current (A) EPIC® H-BE 10 Screw termination IEC: 16 A UL: 16 A CSA: 16 A EPIC® H-BE 10 Crimp termination IEC: 16 A UL: 16 A CSA: 16 A EPIC® H-BE 10 Cage clamp IEC: 16 A UL: 16 A CSA: 16 A EPIC® H-BE 10 Push-In termination IEC: 16 A UL: 13 A CSA: 13 A</li> <li>Degree of soiling 3 Contact resistance EPIC® H-BE 10 Screw termination &lt; 2 mOhm EPIC® H-BE 10 Crimp termination &lt; 2 mOhm</li> </ul>	Screw terminatic EPIC® H-BE 10 C Crimp terminatic EPIC® H-BE 10 C Cage clamp term EPIC® H-BE 10 F Push-In terminat Stripping lengtl EPIC® H-BE 10 S 8 EPIC® H-BE 10 C 7 EPIC® H-BE 10 C 7 EPIC® H-BE 10 C 7 EPIC® H-BE 10 C Cycle of mecha 100 DIN Cycle of mecha 100 DIN Certifications EPIC® H-BE 10 S Certified product VDE-REG.no.: B4 UL-tested: UL File Number: EPIC® H-BE 10 C Certified product VDE-REG.no.: B4 UL-tested: UL File Number: EPIC® H-BE 10 C Certified product VDE-REG.no.: B4 UL-tested: UL File Number: EPIC® H-BE 10 C UL-tested: UL File Number: EPIC® H-BE 10 C	thods Grew termination on: 0.5 - 2.5 mm <sup>2</sup> Crimp termination on: 0.5 - 4.0 mm <sup>2</sup> Cage clamp ination: 0.5 - 2.5 mm <sup>2</sup> or (state) of the state ion: 0.14 - 2.5 mm <sup>2</sup> or (mm) Grew termination Cage clamp Push-In termination ion control: 37 E75770 and E483837 Crimp termination ion control: 37 E75770 Cage clamp
	< 2 mOhm EPIC <sup>®</sup> H-BE 10 Crimp termination < 2 mOhm	UL File Number: <b>EPIC® H-BE 10 C</b> UL-tested: UL File Number:	<b>Cage clamp</b> E75770 <b>Push-In termination</b>
	Contacts EPIC® H-BE 10 Screw termination Copper alloy, hard silver-plated EPIC® H-BE 10 Crimp termination Copper alloy, hard silver/gold-plated EPIC® H-BE 10 Cage clamp Copper alloy, hard silver-plated EPIC® H-BE 10 Push-In termination	Temperature ra -40°C to +100°C short-term up to	nge

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 10 screw tern	nination				
10192000	EPIC <sup>®</sup> H-BE 10 SS	male	yes	1 - 10	10
10193000	EPIC <sup>®</sup> H-BE 10 BS	female	yes	1 - 10	10
10192100	EPIC <sup>®</sup> H-BE 10 SS	male		1 - 10	10
10193100	EPIC <sup>®</sup> H-BE 10 BS	female		1 - 10	10
H-BE 10 crimp term	nination				
10182000	EPIC <sup>®</sup> H-BE 10 SCM	male		1 - 10	10
10183000	EPIC <sup>®</sup> H-BE 10 BCM	female		1 - 10	10
H-BE 10 cage clam	p termination				
10400100	EPIC <sup>®</sup> H-BE 10 SF	male	yes	1 - 10	10
10401100	EPIC <sup>®</sup> H-BE 10 BF	female	yes	1 - 10	10
H-BE 10 Push-In ter	rmination				
44423202	EPIC <sup>®</sup> H-BE 10 SP	male	yes	1 - 10	10
44423203	EPIC <sup>®</sup> H-BE 10 BP	female	yes	1 - 10	10

Copper alloy, hard silver-plated

Photographs are not to scale and do not represent detailed images of the respective products.

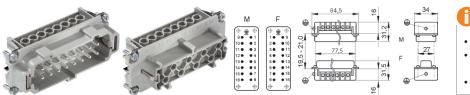
Rectangular connectors • EPIC® H-BE Inserts

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## **EPIC® H-BE 16 Screw termination**

The proven standard inserts for easy assembly



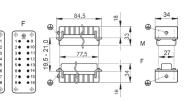
A	Info
•	Proven screw for

- easy installation • Screw, crimp, cage clamp and
- Push-In version freely combinable
- Also as EPIC<sup>®</sup> H-BE 32 available

## **EPIC® H-BE 16 Crimp termination**

The proven standard inserts for easy assembly





	Info
•	For wire connection up to 4 mm <sup>2</sup>
•	Screw crimp cage clamp and

- agı Push-In version - freely combinable
- Also as EPIC<sup>®</sup> H-BE 32 available

## EPIC<sup>®</sup> H-BE 16 Cage clamp

The proven standard inserts for easy assembly



## EPIC<sup>®</sup> H-BE 16 Push-In termination

The proven standard inserts for easy assembly



### Suitable housing

- EPIC® ULTRA H-B 16
- EPIC® H-B 16 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

## Suitable contacts:

## EPIC<sup>®</sup> H-BE 16 Crimpanschluss

• EPIC® H-BE 2.5 machined contacts Page 86

### **Benefits**

#### **EPIC® H-BE 16 Screw termination**

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable

connection when working with high voltages and currents

- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- UL tested for application in control cabinets according UL 508 / UL 2237

#### EPIC<sup>®</sup> H-BE 16 Crimp termination

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC® H-BE 16 Cage clamp

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable

- Multifunctional insert for versatile appliactions
- Screw, crimp, cage clamp and
- Push-In version freely combinable
- Also as EPIC® H-BE 32 available



- · Push-In version fast and easy tool free connection technology
- Screw, crimp, cage clamp and
- Push-In version freely combinable · Multifunctional insert for versatile
- appliactions

connection when working with high voltages and currents

#### EPIC® H-BE 16 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- · Easy dismantling and insertion of wires by pushing the orange button
- Test socket for standard 2mm test tip for easy testing of Push-In inserts
- **Railway applications** - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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Rectangular connectors • EPIC® H-BE Inserts

			NN
Application range	Technical data		
EPIC <sup>®</sup> H-BE 16 Screw termination • Mechanical engineering • Direction inductor	Classification ETIM 5.0 Class-ID: EC000438	Number of contacts 16 + PE	
<ul> <li>Plastics industry</li> <li>Light &amp; sound technology</li> <li>Railway applications / vehicle construction</li> <li>EPIC<sup>®</sup> H-BE 16 Crimp termination</li> </ul>	ETIM 5.0 Class-Description: Contact insert for industrial connectors           Rated voltage (V)           IEC: 500 VUL: 600 VCSA: 600 V	Termination methods EPIC <sup>®</sup> H-BE 16 Screw termination Screw termination: 0.5 - 2.5 mm <sup>2</sup> EPIC <sup>®</sup> H-BE 16 Crimp termination	ETHERLINE®
<ul> <li>Mechanical engineering</li> <li>Light &amp; sound technology</li> <li>Plastics industry</li> <li>EPIC<sup>®</sup> H-BE 16 Cage clamp</li> </ul>	Rated impulse voltage 6 kV Amp. Rated current (A) EPIC <sup>®</sup> H-BE 16 Screw termination	Crimp termination: 0.5 - 4.0 mm <sup>2</sup> EPIC <sup>®</sup> H-BE 16 Cage clamp Cage clamp termination: 0.5 - 2.5 mm <sup>2</sup> EPIC <sup>®</sup> H-BE 16 Push-In termination Push-In termination: 0.14 - 2.5mm <sup>2</sup>	ET
<ul> <li>Mechanical engineering</li> <li>Light &amp; sound technology</li> <li>Plastics industry</li> <li>EPIC<sup>®</sup> H-BE 16 Push-In termination</li> <li>Mechanical engineering</li> <li>Plastics industry</li> <li>Light &amp; sound technology</li> <li>Railway applications / vehicle construction</li> </ul>	IEC: 16 A UL: 16 A CSA: 16 A <b>EPIC® H-BE 16 Crimp termination</b> IEC: 16 A UL: 16 A CSA: 16 A <b>EPIC® H-BE 16 Cage clamp</b> IEC: 16 A UIL: 16 A	Stripping length (mm) EPIC® H-BE 16 Screw termination 8 EPIC® H-BE 16 Cage clamp 7 EPIC® H-BE 16 Push-In termination 10 Cycle of mechanical operation	HITRONIC®
<ul> <li>Suitable tools</li> <li>EPIC® H-BE 16 Schraubanschluss</li> <li>PEW 8.186 crimping pliers refer to main catalogue</li> <li>Kraftform® adjustable torque screwdriver/ Kraftform Kompakt® Set refer to main catalogue</li> <li>Recommended crimping tool when conductor end-sleeves are used: PEW 8.186</li> </ul>	UL: 16 A CSA: 16 A EPIC® H-BE 16 Push-In termination IEC: 16 A UL: 13 A CSA: 13 A Degree of soiling 3 Contact resistance EPIC® H-BE 16 Screw termination < 2 mOhm EPIC® H-BE 16 Crimp termination	100 Certifications EPIC® H-BE 16 Screw termination Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770 and E483837 EPIC® H-BE 16 Crimp termination Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770	EPIC®

EPIC<sup>®</sup> H-BE 16 Cage clamp UL-tested: UL File Number: E75770 EPIC® H-BE 16 Push-In termination UL-tested:

UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

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Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 16 screw terr	nination				
10194000	EPIC <sup>®</sup> H-BE 16 SS	male	yes	1 -16	5
10195000	EPIC <sup>®</sup> H-BE 16 BS	female	yes	1 -16	5
10194100	EPIC <sup>®</sup> H-BE 16 SS	male		1 -16	5
10195100	EPIC <sup>®</sup> H-BE 16 BS	female		1 -16	5
H-BE 16 crimp tern	nination				
10184000	EPIC <sup>®</sup> H-BE 16 SCM	male		1 -16	5
10185000	EPIC <sup>®</sup> H-BE 16 BCM	female		1 -16	5
H-BE 16 cage clam	p termination				
10400200	EPIC <sup>®</sup> H-BE 16 SF	male	yes	1 -16	5
10401200	EPIC <sup>®</sup> H-BE 16 BF	female	yes	1 -16	5
H-BE 16 Push-In te	rmination				
44423204	EPIC <sup>®</sup> H-BE 16 SP	male	yes	1 - 16	5
44423205	EPIC <sup>®</sup> H-BE 16 BP	female	ves	1 - 16	5

Photographs are not to scale and do not represent detailed images of the respective products.

< 2 m0hm EPIC® H-BE 16 Cage clamp 1.5 - 4 mohm **EPIC® H-BE 16 Push-In termination** < 2 mOhm



**EPIC® H-BE 16 Screw termination** Copper alloy, hard silver-plated EPIC<sup>®</sup> H-BE 16 Crimp termination Copper alloy, hard silver/gold-plated EPIC<sup>®</sup> H-BE 16 Cage clamp Copper alloy, hard silver-plated EPIC® H-BE 16 Push-In termination Copper alloy, hard silver-plated

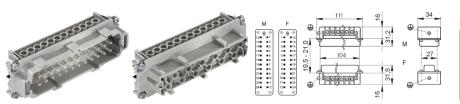
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# **EPIC® H-BE 24 Screw termination**

The proven standard inserts for easy assembly

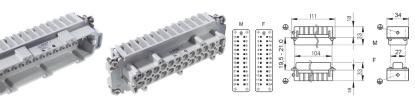


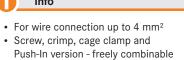
## Info

- · Proven screw for easy installation
- Screw, crimp, cage clamp and
- Push-In version freely combinable
- Also as EPIC<sup>®</sup> H-BE 48 available

# **EPIC® H-BE 24 Crimp termination**

The proven standard inserts for easy assembly





Also as EPIC<sup>®</sup> H-BE 48 available

Screw, crimp, cage clamp and Push-In version - freely combinable Also as EPIC® H-BE 48 available

# EPIC<sup>®</sup> H-BE 24 Cage clamp

The proven standard inserts for easy assembly



# EPIC<sup>®</sup> H-BE 24 Push-In termination

The proven standard inserts for easy assembly



#### Suitable housing

- EPIC® ULTRA H-B 24
- EPIC® H-B 24 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

#### EPIC<sup>®</sup> H-BE 24 Crimpanschluss

• EPIC® H-BE 2.5 machined contacts Page 86

#### Benefits

#### **EPIC® H-BE 24 Screw termination**

 Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents
- UL tested for application in control cabinets according UL 508 / UL 2237

#### **EPIC® H-BE 24 Crimp termination**

- · Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC® H-BE 24 Cage clamp

- · Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

## Info

- · Push-In version fast and easy tool free connection technology
- Screw, crimp, cage clamp and
- Push-In version freely combinable Multifunctional insert for versatile
- appliactions

#### EPIC<sup>®</sup> H-BE 24 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- · Easy dismantling and insertion of wires by pushing the orange button
- · Test socket for standard 2mm test tip for easy testing of Push-In inserts
- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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#### Application range **Technical data EPIC® H-BE 24 Screw termination** Classification Number of contacts **e**tim Mechanical engineering **a**t ETIM 5.0 Class-ID: EC000438 24 + PE · Plastics industry ETIM 5.0 Class-Description: Contact Termination methods · Light & sound technology insert for industrial connectors EPIC® H-BE 24 Screw termination · Railway applications / vehicle construction Rated voltage (V) Screw termination: 0.5 - 2.5 mm<sup>2</sup> 4 EPIC<sup>®</sup> H-BE 24 Crimp termination IEC: 500 VUL: 600 VCSA: 600 V EPIC® H-BE 24 Crimp termination • Mechanical engineering Crimp termination: 0.5 - 4.0 mm<sup>2</sup> Rated impulse voltage EPIC<sup>®</sup> H-BE 24 Cage clamp · Light & sound technology 6 kV Cage clamp termination: 0.5 - 2.5 mm<sup>2</sup> · Plastics industry Rated current (A) EPIC® H-BE 24 Push-In termination Amp EPIC® H-BE 24 Cage clamp **EPIC® H-BE 24 Screw termination** Push-In termination: 0.14 - 2.5mm<sup>2</sup> • Mechanical engineering IEC: 16 A Stripping length (mm) UL: 16 A · Light & sound technology EPIC® H-BE 24 Screw termination CSA: 16 A Plastics industry EPIC® H-BE 24 Crimp termination EPIC® H-BE 24 Push-In termination EPIC® H-BE 24 Cage clamp IEC: 16 A Mechanical engineering UL: 16 A EPIC<sup>®</sup> H-BE 24 Push-In termination · Plastics industry CSA: 16 A 10 EPIC® H-BE 24 Cage clamp Light & sound technology Cycle of mechanical operation IEC: 16 A ₩ • Railway applications / vehicle construction 100 UL: 16 A CSA: 16 A Certifications Suitable tools EPIC® H-BE 24 Push-In termination EPIC® H-BE 24 Screw termination EPIC® H-BE 24 Schraubanschluss IEC: 16 A Certified production control: • PEW 8.186 crimping pliers UL: 13 A VDE-REG.no.: B437 refer to main catalogue CSA: 13 A UL-tested: • Kraftform<sup>®</sup> adjustable torque screwdriver/ Degree of soiling UL File Number: E75770 and E483837 Kraftform Kompakt<sup>®</sup> Set EPIC<sup>®</sup> H-BE 24 Crimp termination 3 refer to main catalogue Certified production control: **Contact resistance** VDE-REG.no.: B437 · Recommended crimping tool when EPIC® H-BE 24 Screw termination conductor end-sleeves are used: UL-tested: < 2 mOhm PFW 8,186 UL File Number: E75770 EPIC® H-BE 24 Crimp termination EPIC® H-BE 24 Cage clamp < 2 m0hm UL-tested: EPIC<sup>®</sup> H-BE 24 Cage clamp UL File Number: E75770 1.5 - 4 mohm EPIC® H-BE 24 Push-In termination EPIC® H-BE 24 Push-In termination UI-tested: < 2 mOhm UL File Number: E75770 Contacts **Temperature range EPIC® H-BE 24 Screw termination** -40°C to +100°C, Copper alloy, hard silver-plated short-term up to +125°C EPIC® H-BE 24 Crimp termination Copper alloy, hard silver/gold-plated EPIC<sup>®</sup> H-BE 24 Cage clamp Copper alloy, hard silver-plated

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 24 screw termi	ination			· · · · · · · · · · · · · · · · · · ·	
10196000	EPIC <sup>®</sup> H-BE 24 SS	male	yes	1 - 24	5
10197000	EPIC <sup>®</sup> H-BE 24 BS	female	yes	1 - 24	5
10196100	EPIC <sup>®</sup> H-BE 24 SS	male		1 - 24	5
10197100	EPIC <sup>®</sup> H-BE 24 BS	female		1 - 24	5
H-BE 24 crimp termi	nation				
10186000	EPIC <sup>®</sup> H-BE 24 SCM	male		1 - 24	5
10187000	EPIC <sup>®</sup> H-BE 24 BCM	female		1 - 24	5
H-BE 24 cage clamp	termination				
10400300	EPIC <sup>®</sup> H-BE 24 SF	male	yes	1 - 24	5
10401300	EPIC <sup>®</sup> H-BE 24 BF	female	yes	1 - 24	5
H-BE 24 Push-In term	nination				
44423206	EPIC <sup>®</sup> H-BE 24 SP	male	yes	1 - 24	5
44423207	EPIC <sup>®</sup> H-BE 24 BP	female	yes	1 - 24	5

EPIC<sup>®</sup> H-BE 24 Push-In termination Copper alloy, hard silver-plated

Rectangular connectors • EPIC® H-BE Inserts

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# EPIC<sup>®</sup> H-BE 32 Screw termination

The proven standard inserts for easy assembly



# Info Proven screw for easy installation Screw, crimp, cage clamp and

Push-In version - freely combinable

# **EPIC® H-BE 32 Crimp termination**

The proven standard inserts for easy assembly







# Info For wire connection up to 4 mm<sup>2</sup> Screw, crimp, cage clamp and Push-In version - freely combinable

# EPIC<sup>®</sup> H-BE 32 Cage clamp

The proven standard inserts for easy assembly



# EPIC<sup>®</sup> H-BE 32 Push-In termination

The proven standard inserts for easy assembly



#### Suitable housing

- EPIC® H-B 32 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

- EPIC<sup>®</sup> H-BE 32 Crimpanschluss
- EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Benefits

#### EPIC<sup>®</sup> H-BE 32 Screw termination

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

 Railway applications

 Fire protection on railway vehicles: Test according EN 45545-2.
 Requirement sets R22 and R23.
 Hazard level HL1, HL2 and HL4

#### EPIC<sup>®</sup> H-BE 32 Crimp termination

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC<sup>®</sup> H-BE 32 Cage clamp

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

6	Info
•	Multifunctional insert for versatile appliactions
•	Screw, crimp, cage clamp and
	Push-In version - freely combinable

## lnfo

- Push-In version fast and easy tool free connection technology
- Screw, crimp, cage clamp and Push-In version - freely combinable
- Multifunctional insert for versatile
- appliactions

#### EPIC<sup>®</sup> H-BE 32 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- Easy dismantling and insertion of wires by pushing the orange button
- Test socket for standard 2mm test tip for easy testing of Push-In inserts
- Railway applications

   Fire protection on railway vehicles:
   Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL1, HL2 and HL4
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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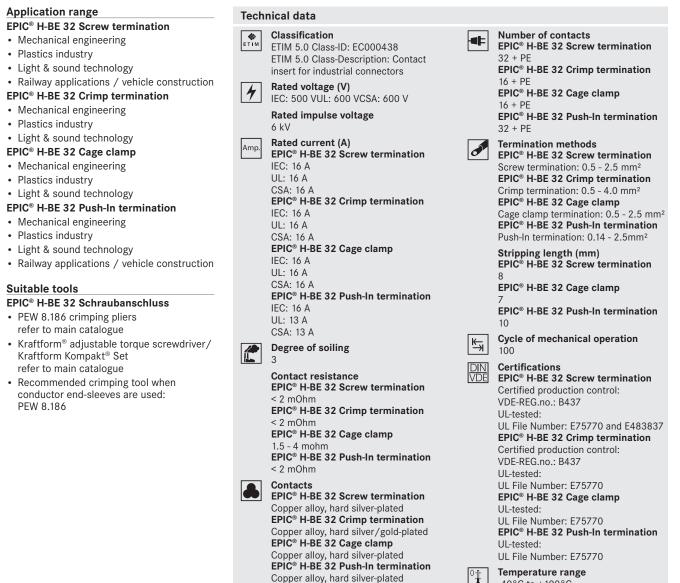
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UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

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-40°C to +1	00°C,
short-term u	up to +125°0

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 32 screw term	nination				
10202000	EPIC <sup>®</sup> H-BE 16 SS 17-32	male	yes	17 - 32	5
10203000	EPIC <sup>®</sup> H-BE 16 BS 17-32	female	yes	17 - 32	5
10202100	EPIC <sup>®</sup> H-BE 16 SS 17-32	male		17 - 32	5
10203100	EPIC <sup>®</sup> H-BE 16 BS 17-32	female		17 - 32	5
H-BE 32 crimp term	nination				
10184200	EPIC <sup>®</sup> H-BE 16 SCM 17-32	male		17 - 32	5
10185200	EPIC <sup>®</sup> H-BE 16 BCM 17-32	female		17 - 32	5
H-BE 32 cage clamp	o termination				
10400400	EPIC <sup>®</sup> H-BE 16 SF 17-32	male	yes	17 - 32	5
10401400	EPIC <sup>®</sup> H-BE 16 BF 17-32	female	yes	17 - 32	5
H-BE 32 Push-In ter	mination				
44423208	EPIC <sup>®</sup> H-BE 16 SP 17-32	male	yes	17 - 32	5
44423209	EPIC <sup>®</sup> H-BE 16 BP 17-32	female	ves	17 - 32	5

Rectangular connectors • EPIC® H-BE Inserts

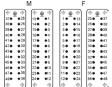




# **EPIC® H-BE 48 Screw termination**

The proven standard inserts for easy assembly





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### Info

Info

- · Proven screw for easy installation
- Screw, crimp, cage clamp and •
- Push-In version freely combinable



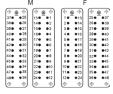
EPIC®



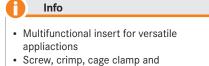
# EPIC<sup>®</sup> H-BE 48 Cage clamp

The proven standard inserts for easy assembly





# • For wire connection up to 4 mm<sup>2</sup> Screw, crimp, cage clamp and Push-In version - freely combinable



Push-In version - freely combinable

# **EPIC® H-BE 48 Push-In termination**

The proven standard inserts for easy assembly



#### Suitable housing

- EPIC® H-B 48 Housings
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

- EPIC<sup>®</sup> H-BE 48 Crimpanschluss
- EPIC® H-BE 2.5 machined contacts Page 86

#### **Benefits**

#### EPIC® H-BE 48 Screw termination

- · Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### **EPIC® H-BE 48 Crimp termination**

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The  $\operatorname{EPIC}^{\scriptscriptstyle (\! 8\!)}$  H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

#### EPIC® H-BE 48 Cage clamp

- Standard inserts with screw, crimp cage clamp and Push-In termination
- The EPIC® H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

For current information see: www.lappgroup.com



- · Push-In version fast and easy tool free connection technology
- Screw, crimp, cage clamp and Push-In version - freely combinable
- Multifunctional insert for versatile
- appliactions

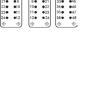
#### EPIC® H-BE 48 Push-In termination

- Insertion of cores with end sleeves in Push-In inserts gives mounting safety and time saving without any tools
- · Easy dismantling and insertion of wires by pushing the orange button
- Test socket for standard 2mm test tip for easy testing of Push-In inserts
- Railway applications Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- The EPIC<sup>®</sup> H-BE series is suitable for applications that require a reliable connection when working with high voltages and currents

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Rectangular connectors • EPIC<sup>®</sup> H-BE Inserts

E Inserts

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Application range	Tech	nical data		
EPIC <sup>®</sup> H-BE 48 Screw termination				Newslaw of contracts
<ul> <li>Mechanical engineering</li> </ul>	ETIM	Classification ETIM 5.0 Class-ID: EC000438		Number of contacts 48 + PE
<ul> <li>Plastics industry</li> </ul>		ETIM 5.0 Class-Description: Contact		
<ul> <li>Light &amp; sound technology</li> </ul>		insert for industrial connectors		Termination methods EPIC <sup>®</sup> H-BE 48 Screw termination
<ul> <li>Railway applications / vehicle construction</li> </ul>		Rated voltage (V)		Screw termination: 0.5 - 2.5 mm <sup>2</sup>
EPIC <sup>®</sup> H-BE 48 Crimp termination	4	IEC: 500 VUL: 600 VCSA: 600 V		EPIC <sup>®</sup> H-BE 48 Crimp termination
<ul> <li>Mechanical engineering</li> </ul>		Rated impulse voltage		Crimp termination: 0.5 - 4.0 mm <sup>2</sup>
<ul> <li>Light &amp; sound technology</li> </ul>		6 kV		EPIC <sup>®</sup> H-BE 48 Cage clamp
<ul> <li>Plastics industry</li> </ul>	(A.m.m.)	Rated current (A)		Cage clamp termination: 0.5 - 2.5 mm EPIC <sup>®</sup> H-BE 48 Push-In termination
EPIC <sup>®</sup> H-BE 48 Cage clamp	Amp.	EPIC <sup>®</sup> H-BE 48 Screw termination		Push-In termination: 0.14 - 2.5mm <sup>2</sup>
<ul> <li>Mechanical engineering</li> </ul>		IEC: 16 A		Stripping length (mm)
<ul> <li>Light &amp; sound technology</li> </ul>		UL: 16 A CSA: 16 A		EPIC <sup>®</sup> H-BE 48 Screw termination
Plastics industry		EPIC <sup>®</sup> H-BE 48 Crimp termination		8
EPIC <sup>®</sup> H-BE 48 Push-In termination		IEC: 16 A		EPIC <sup>®</sup> H-BE 48 Cage clamp 7
Mechanical engineering		UL: 16 A		PIC <sup>®</sup> H-BE 48 Push-In termination
Plastics industry		CSA: 16 A		10
Light & sound technology		EPIC <sup>®</sup> H-BE 48 Cage clamp IEC: 16 A		Cycle of mechanical operation
Railway applications / vehicle construction		UL: 16 A	₩.	100
Suitable tools		CSA: 16 A	DIN	Certifications
EPIC® H-BE 48 Schraubanschluss		EPIC <sup>®</sup> H-BE 48 Push-In termination	<u>DIN</u> VDE	EPIC <sup>®</sup> H-BE 48 Screw termination
PEW 8.186 crimping pliers		IEC: 16 A UL: 13 A		Certified production control:
refer to main catalogue		CSA: 13 A		VDE-REG.no.: B437 UL-tested:
<ul> <li>Kraftform<sup>®</sup> adjustable torque screwdriver/</li> </ul>		Degree of soiling		UL File Number: E75770 and E483837
Kraftform Kompakt <sup>®</sup> Set		3		EPIC <sup>®</sup> H-BE 48 Crimp termination
refer to main catalogue		Contact resistance		Certified production control:
<ul> <li>Recommended crimping tool when</li> </ul>		EPIC <sup>®</sup> H-BE 48 Screw termination		VDE-REG.no.: B437
conductor end-sleeves are used:		< 2 mOhm		UL-tested: UL File Number: E75770
PEW 8.186		EPIC <sup>®</sup> H-BE 48 Crimp termination		EPIC <sup>®</sup> H-BE 48 Cage clamp
		< 2 mOhm EPIC <sup>®</sup> H-BE 48 Cage clamp		UL-tested:
		LPIC <sup>°</sup> н-ве 48 Cage статр 1.5 - 4 mohm		UL File Number: E75770
		EPIC <sup>®</sup> H-BE 48 Push-In termination		EPIC <sup>®</sup> H-BE 48 Push-In termination
		< 2 mOhm		UL-tested: UL File Number: E75770
		Contacts		
		EPIC <sup>®</sup> H-BE 48 Screw termination	°‡	-40°C to +100°C,
		Copper alloy, hard silver-plated EPIC <sup>®</sup> H-BE 48 Crimp termination	L¥1	short-term up to +125°C
		Copper alloy, hard silver/gold-plated		
		EPIC <sup>®</sup> H-BE 48 Cage clamp		
		Copper alloy, hard silver-plated		

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BE 48 screw ter	mination				
10204000	EPIC <sup>®</sup> H-BE 24 SS 25-48	male	yes	25 - 48	5
10205000	EPIC <sup>®</sup> H-BE 24 BS 25-48	female	yes	25 - 48	5
10204100	EPIC <sup>®</sup> H-BE 24 SS 25-48	male		25 - 48	5
10205100	EPIC <sup>®</sup> H-BE 24 BS 25-48	female		25 - 48	5
H-BE 48 crimp ter	mination				
10186200	EPIC <sup>®</sup> H-BE 24 SCM 25-48	male		25 - 48	5
10187200	EPIC <sup>®</sup> H-BE 24 BCM 25-48	female		25 - 48	5
H-BE 48 cage clan	np termination				
10400500	EPIC <sup>®</sup> H-BE 24 SF 25-48	male	yes	25 - 48	5
10401500	EPIC <sup>®</sup> H-BE 24 BF 25-48	female	yes	25 - 48	5
H-BE 48 Push-In te	ermination				
44423210	EPIC <sup>®</sup> H-BE 24 SP 25-48	male	yes	25 - 48	5
44423211	EPIC <sup>®</sup> H-BE 24 BP 25-48	female	yes	25 - 48	5

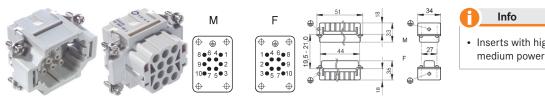
Copper alloy, hard silver-plated

Rectangular connectors • EPIC® H-EE Inserts



# EPIC<sup>®</sup> H-EE 10

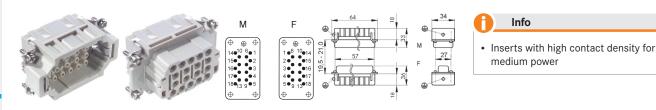
H-EE inserts with high contact density based on the proven H-BE series.



Η	Inf	ō			
•	Inserts	with high	contact	density	for

# EPIC<sup>®</sup> H-EE 18

H-EE inserts with high contact density based on the proven H-BE series.



## Suitable housing

#### EPIC<sup>®</sup> H-EE 10

- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### EPIC<sup>®</sup> H-EE 18

- EPIC<sup>®</sup> ULTRA H-B 10
- EPIC<sup>®</sup> H-B 10 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

• EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Benefits

- The H-EE inserts with machined contacts for a high number of pins in very tight spaces.
- For assembly in H-B housing

#### Application range

- Mechanical engineering
- Plant engineering
- Appliance and apparatus construction

Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU
H-EE 10 crimp ter	mination				
10180400	H-EE 10 SC	male	machined	1 - 10	10
10181400	H-EE 10 BC	female	machined	1 - 10	10
H-EE 18 crimp teri	mination				
10182400	H-EE 18 SC	male	machined	1 - 18	10
10183400	H-EE 18 BC	female	machined	1 - 18	10

Photographs are not to scale and do not represent detailed images of the respective products.



UL: 16 A

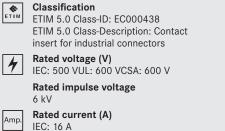
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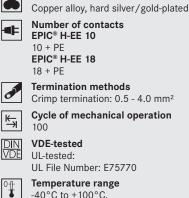
CSA: 16 A

< 2 mOhm

Degree of soiling

Contact resistance





Contacts

-40°C to +100°C, short-term up to +125°C

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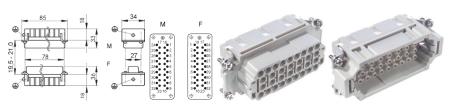
Rectangular connectors • EPIC® H-EE Inserts

# EPIC<sup>®</sup> H-EE 32

H-EE inserts with high contact density based on the proven H-BE series.

#### Info

- · Inserts with high contact density for
- medium power
- Also as EPIC<sup>®</sup> H-EE 64 available



# EPIC<sup>®</sup> H-EE 46

H-EE inserts with high contact density based on the proven H-BE series.



- · Inserts with high contact density for medium power
- Also as EPIC<sup>®</sup> H-EE 92 available

## Suitable housing

#### EPIC<sup>®</sup> H-EE 32

- EPIC® ULTRA H-B 16
- EPIC<sup>®</sup> H-B 16 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### EPIC<sup>®</sup> H-EE 46

- EPIC® ULTRA H-B 24
- EPIC<sup>®</sup> H-B 24 Housings
- EPIC® QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

+ EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Similar products

• Further products with higher numbering in the internet. (H-EE 64, H-EE 92)

#### **Benefits**

- The H-EE inserts with machined contacts for a high number of pins in very tight spaces.
- · For assembly in H-B housing

#### Application range

- Mechanical engineering
- Plant engineering
- · Appliance and apparatus construction

Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU
H-EE 32 crimp terr	nination				
10184400	H-EE 32 SC	male	machined	1 - 32	5
10185400	H-EE 32 BC	female	machined	1 - 32	5
H-EE 46 crimp terr	nination				
10186400	H-EE 46 SC	male	machined	1 - 46	5
10187400	H-EE 46 BC	female	machined	1 - 46	5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Similar products

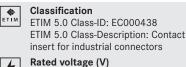
• Further products with higher numbering in the internet. (H-EE 64, H-EE 92)

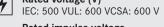
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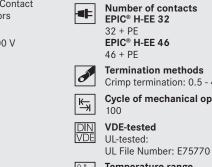


Rated impulse voltage 6 kV Rated current (A)

Amp. IEC: 16 A UL: 16 A CSA: 16 A

Degree of soiling

**Contact resistance** < 2 mOhm



**Termination methods** Crimp termination: 0.5 - 4.0 mm<sup>2</sup> Cycle of mechanical operation

Copper alloy, hard silver/gold-plated



Contacts

Rectangular connectors • EPIC® H-EE Inserts

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# EPIC<sup>®</sup> H-EE 64

H-EE inserts with high contact density based on the proven H-BE series.

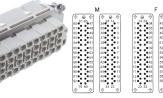




# EPIC<sup>®</sup> H-EE 92

H-EE inserts with high contact density based on the proven H-BE series.





**Technical data** 

6 kV

IEC: 16 A

UL: 16 A

CSA: 16 A

< 2 mOhm

ET I M

4

Amp.

3

Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

**Contact resistance** 

Rated impulse voltage

ETIM 5.0 Class-ID: EC000438

insert for industrial connectors

IEC: 500 VUL: 600 VCSA: 600 V

ETIM 5.0 Class-Description: Contact



Copper alloy, hard silver/gold-plated

Contacts

32 + PE

100

VDE-tested

UL-tested:

**EPIC® H-EE 92** 46 + PE

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Number of contacts EPIC<sup>®</sup> H-EE 64

**Termination methods** 

UL File Number: E75770

short-term up to +125°C

Temperature range

-40°C to +100°C,

Crimp termination: 0.5 - 4.0 mm<sup>2</sup>

Cycle of mechanical operation

#### Suitable housing

EPIC<sup>®</sup> H-EE 64EPIC<sup>®</sup> H-B 32 Housings

## EPIC® H-EE 92

• EPIC<sup>®</sup> H-B 48 Housings

Refer to Selection Table A10 to select the required inserts and housings

#### Suitable contacts:

• EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Benefits

- The H-EE inserts with machined contacts for a high number of pins in very tight spaces.
- For assembly in H-B housing

#### Application range

- · Mechanical engineering
- Plant engineering
- Appliance and apparatus construction

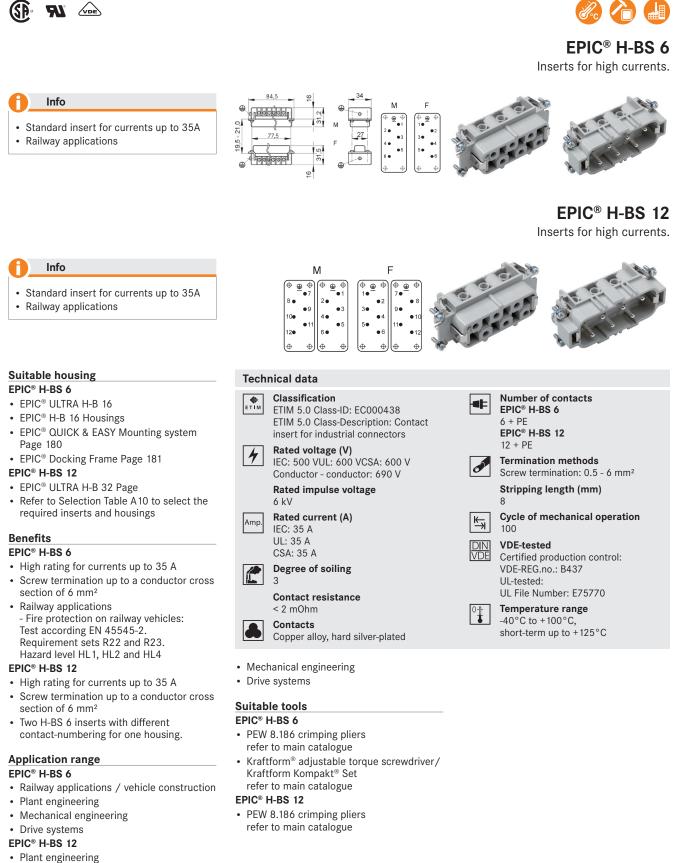
Article number	Article description	Contact type	Article designation	Number of operating contacts	Pieces / PU			
H-EE 64 crimp termination								
10184500	H-EE 32 SC	male	machined	33 - 64	5			
10185500	H-EE 32 BC	female	machined	33 - 64	5			
H-EE 92 crimp terr	nination							
10186500	H-EE 46 SC	male	machined	47 - 92	5			
10187500	H-EE 46 BC	female	machined	47 - 92	5			

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

**HITRONIC®** 

Rectangular connectors • EPIC® H-BS Inserts



Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BS 6 screw term	ination			·	
10170000	H-BS 6 SS	male	yes	1 - 6	5
10171000	H-BS 6 BS	female	yes	1 - 6	5
H-BS 12 screw terr	mination				
10170600	H-BS 6 SS	male	yes	7 - 12	5
10171600	H-BS 6 BS	female	ves	7 - 12	5

ETHERLINE®

**UNITRONIC®** 

EPIC®

Rectangular connectors • EPIC<sup>®</sup> H-BVE Inserts

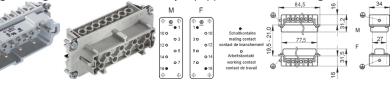
# EPIC<sup>®</sup> H-BVE 3

These high-voltage inserts are additionally equipped with 2 switching contacts

and the second sec	op here	М	F			9	⊕
Clean Al	Jeee	⊕ ⊕ ⊕ ● 1		Schaltkontakt mating contact		31,2	M 27
		70 03 90	30 30 09	contact de branchement O Arbeitskontakt		5	F
Start of	State - Car	•5	5● ⊕ ⊕	working contact contact de travail	⊕_ <u>4nbe¥loolon</u>	91	

# EPIC<sup>®</sup> H-BVE 6

These high-voltage inserts are additionally equipped with 2 switching contacts





Info

Info

contacts

- · Multipole insert with lagging switch contacts
- Switching operations possible for disconnecting under load

- · Multipole insert with lagging switch contacts
- Switching operations possible for disconnecting under load

· Multipole insert with lagging switch

Switching operations possible for disconnecting under load

**HITRONIC®** 

# EPIC<sup>®</sup> H-BVE 10

These high-voltage inserts are additionally equipped with 2 switching contacts 19999999



#### Suitable housing EPIC® H-BVE 3

- EPIC® ULTRA H-B 10
- EPIC® H-B 10 Housings
- EPIC® QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- EPIC<sup>®</sup> H-BVE 6
- EPIC® ULTRA H-B 16
- EPIC<sup>®</sup> H-B 16 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC® Docking Frame Page 181

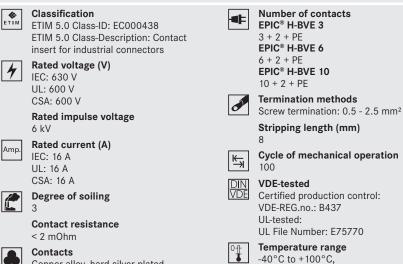
#### EPIC® H-BVE 10

- EPIC® ULTRA H-B 24
- EPIC<sup>®</sup> H-B 24 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### Benefits

- These high-voltage inserts are additionally equipped with 2 switching contacts
- With the relevant wiring, the lagging switch contacts interrupt the power supply before the working contacts are separated

### **Technical data**



## Application range

- · Plant engineering
- Mechanical engineering
- Suitable tools Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue

short-term up to +125°C

Article number	Article description	Contact type	Wire protection	Number of operating contacts	Pieces / PU
H-BVE 3 screw ter	mination				
10210010	H-BVE 3 SS	male	yes	3 + 2	10
10211010	H-BVE 3 BS	female	yes	3 + 2	10
10210110	H-BVE 3 SS	male		3 + 2	10
10211110	H-BVE 3 BS	female		3 + 2	10
H-BVE 6 screw ter	mination				
10239010	H-BVE 6 SS	male	yes	6 + 2	5
10240010	H-BVE 6 BS	female	yes	6 + 2	5
10239110	H-BVE 6 SS	male		6 + 2	5
10240110	H-BVE 6 BS	female		6 + 2	5
H-BVE 10 screw te	rmination				
10270010	H-BVE 10 SS	male	yes	10 + 2	5
10271010	H-BVE 10 BS	female	yes	10 + 2	5
10270110	H-BVE 10 SS	male		10 + 2	5
10271110	H-BVE 10 BS	female		10 + 2	5

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®

⊕

Copper alloy, hard silver-plated



Info

without special tool

space

• Very high current transfer in a small

· Axial screw termination for assembly

Rectangular connectors • H-S Inserts

MAN

Power inserts

34,4





**ETHERLINE®** 

**UNITRONIC®** 

# **HITRONIC®**

EPIC®

# 41,3

#### Suitable housing

- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings

#### Benefits

- · Fast and easy assembly
- Very high current transfer
- Lower space requirement
- Axial screw termination for assembly without special tool

## Application range

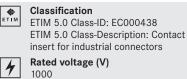
- Mechanical engineering
- Plant engineering
- Renewable energy

#### Technical data

Amp.

44

51



41.3

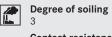
g

27

34,4



Rated current (A)



Contact resistance < 1 mOhm



51

Number of contacts 4 + PE

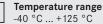
**Termination methods** Axial screw termination 2,5 mm<sup>2</sup> - 10 mm<sup>2</sup>

Stripping length (mm)



⇒

PC, polycarbonate Cycle of mechanical operation 500



Article number	Article description	Contact type	Number of operating contacts	Pieces / PU
H-S Axial screw co	onnection			
10407910	H-S 4+2xPE SAS	male	4 + PE	10
10407900	H-S 4+2xPE BAS	female	4 + PE	10
Tool for axial conn	nection			
44424028	TOOL HEX 2x100	For tightening the contacts		1

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Rectangular connectors • EPIC® K-Inserts

EPIC<sup>®</sup> Power K 4/0 Combination insert Power Info · Combination insert Power 2 EPIC<sup>®</sup> Power K 4/2 Combination insert Power and Control Info Combination insert Power and Control Suitable housing **Technical data** • EPIC® ULTRA H-B 16 Classification Contact resistance ETIM • EPIC<sup>®</sup> H-B 16 Housings ETIM 5.0 Class-ID: EC000438 < 5 mOhm• EPIC<sup>®</sup> QUICK & EASY Mounting system ETIM 5.0 Class-Description: Contact Number of contacts Page 180 **e**F insert for industrial connectors EPIC® Power K 4/0 • EPIC<sup>®</sup> Docking Frame Page 181 Rated voltage (V) 4 + PE 4 EPIC<sup>®</sup> Power K 4/0 EPIC® Power K 4/2 **Benefits** 830 V Power 4 + 2 + PE EPIC<sup>®</sup> Power K 4/2 EPIC® Power K 4/0 **Termination methods** 0 830 V Power · High power in one connector insert Screw termination: 1.5 - 16.0 mm<sup>2</sup> 400 V Control Best in combination with ÖLFLEX<sup>®</sup> SERVO Stripping length (mm) Rated impulse voltage EPIC® Power K 4/2 16 8 kV · Power and control in one connector insert 6 Rated current (A) Best in combination with ÖLFLEX<sup>®</sup> SERVO Amp. Material EPIC® Power K 4/0 PC, polycarbonate 80 A Power EPIC<sup>®</sup> Power K 4/2 **Application range** Cycle of mechanical operation · Mechanical engineering ≒ 500 80 A Power · Renewable energy 16 A Control **Temperature range** · Control engineering -40 °C ... +125 °C Degree of soiling 3 Article number Article description Contact type Number of operating contacts Pieces / PU EPIC<sup>®</sup> 4/0 screw termination EPIC® K 4/0 SS 44424041 4 + PE male 10 44424042 EPIC® K 4/0 BS 4 + PE female 10

PE connection with a 16mm<sup>2</sup> wire only with the recommended ring lug 44424029

EPIC® K 4/2 screw termination

The inserts must be used with the appropriate housings Photographs are not to scale and do not represent detailed images of the respective products.

EPIC® K 4/2 SS

EPIC® K 4/2 BS

male

female

4 + 2 + PE

4 + 2 + PE

10

10

44424043

44424044

Info

For convenient, clear wiring in control cabinets. Assembly in panel-mount base housings.

Number of contacts

EPIC® TB-H-BE 16

EPIC® TB-H-BE 24

**Termination methods** 

Stripping length (mm)

UL File Number: E75770

short-term up to +125°C

Temperature range

-40°C to +100°C,

Screw termination: 0.5 - 4.0 mm<sup>2</sup>

Cycle of mechanical operation

16 + PE

24 + PE

13

200

VDE-tested

UL-tested:

Rectangular connectors • EPIC® TB-H-BE Terminal adapter

# ETHERLINE<sup>®</sup>

For convenient, clear wiring in control cabinets. Assembly in panel-mount base housings.

EPIC® TB-H-BE 24

EPIC<sup>®</sup> TB-H-BE 16



Info
 Info
 Plug connection for control cabinets

· Plug connection for control cabinets



4Þ

⊬

#### Suitable housing EPIC<sup>®</sup> TB-H-BE 16

- EPIC<sup>®</sup> ULTRA H-B 16 AG QB Page 124
- EPIC<sup>®</sup> H-B 16 AG-LB Page 151
- EPIC<sup>®</sup> H-B 16 AD-LB Page 151
- EPIC® H-B 16 AG Page 151
- EPIC<sup>®</sup> H-B 16 AD-BO Page 147
- EPIC<sup>®</sup> H-B 16 AG-ZR

#### EPIC® TB-H-BE 24

- EPIC<sup>®</sup> ULTRA H-B 24 AG QB Page 124
- EPIC<sup>®</sup> H-B 24 AG-LB Page 151
- EPIC<sup>®</sup> H-B 24 AD-LB Page 151
- EPIC<sup>®</sup> H-B 24 AG Page 151
- EPIC<sup>®</sup> H-B 24 AD-BO Page 147
- EPIC<sup>®</sup> H-B 24 AG-ZR

#### Benefits

- Standard H-BE inserts for use with switch cabinets
- Pluggable with H-BE male inserts in hoods
- Fastening on side = "left" means that when mounting the terminal adapter on the left wall of a control cabinet, the PE connection and pin "1" are on the "top" side

#### Application range

- Control cabinet manufacturing
- Plant engineering

Article number	Article description	Contact type	Fastening on side	Number of operating contacts	Pieces / PU
16-pin terminal ac	lapter				
70315100	TB-H-BE 16 BRE	female	right	1 - 16	10
70314100	TB-H-BE 16 BLI	female	left	1 - 16	10
24-pin terminal ad	lapter				
70317100	TB-H-BE 24 BRE	female	right	1 - 24	10
70316100	TB-H-BE 24 BLI	female	left	1 - 24	10

**Technical data** 

6 kV

3

IEC: 16 A

UL: 16 A

CSA: 16 A

Contacts

ET I M

4

Amp

Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

Rated impulse voltage

ETIM 5.0 Class-ID: EC000438

insert for industrial connectors

IEC: 500 VUL: 600 VCSA: 600 V

Copper alloy, hard silver-plated

ETIM 5.0 Class-Description: Contact

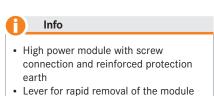
Rectangular connectors • EPIC<sup>®</sup> MC Modules

# EPIC<sup>®</sup> MC Module: High Current 1+PE

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.





· High power module 2pole with screw

Lever for rapid removal of the module

# EPIC<sup>®</sup> MC Module: High Current 2pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

Μ

for printing machines and slide-in technology.



#### Suitable housing

- EPIC<sup>®</sup> MCR Frames
- · Higher housing
- · The suitable connector housings depend on the modular frame used

#### **Benefits**

#### EPIC® MC Module: High Current 1+PE

- · The mix of different functions in one plug guarantees high flexibility
- Screw connection up to 25mm<sup>2</sup> for easy assembly without speciall tools
- · Separate protective conductor for increased safety

#### EPIC® MC Module: High Current 2pole

- The mix of different functions in one plug guarantees high flexibility
- Screw connection up to 25mm<sup>2</sup> for easy assembly without speciall tools

#### **Application range**

- · Plant engineering
- Printing machines
- Control engineering

#### Suitable tools

#### EPIC® MC Modul: Hochstrom 1+PE

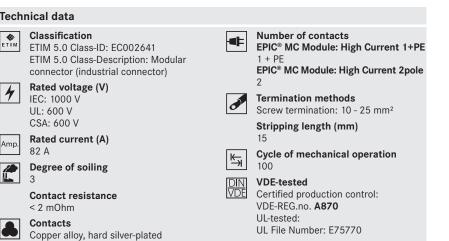
- Crimping tool for single contacts refer to main catalogue
- When connecting 25 mm<sup>2</sup> cables, please use the special crimping die (11147500) for the cable-end sleeves

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: high curr	ent 1-pin + PE				
10344600	MCS-HC 1+PE	male	1 + PE	2	5
10345600	MCB-HC 1+PE	female	1 + PE	2	5
Module: high curr	ent 2-pin				
10344100	MCS-HC 2	male	2	2	5
10345100	MCB-HC 2	female	2	2	5

Photographs are not to scale and do not represent detailed images of the respective products.



#### **Technical data**



Info

connection

Temperature range -40°C to +100°C, short-term up to +125°C

**ETHERLINE®** 

HITRONIC®

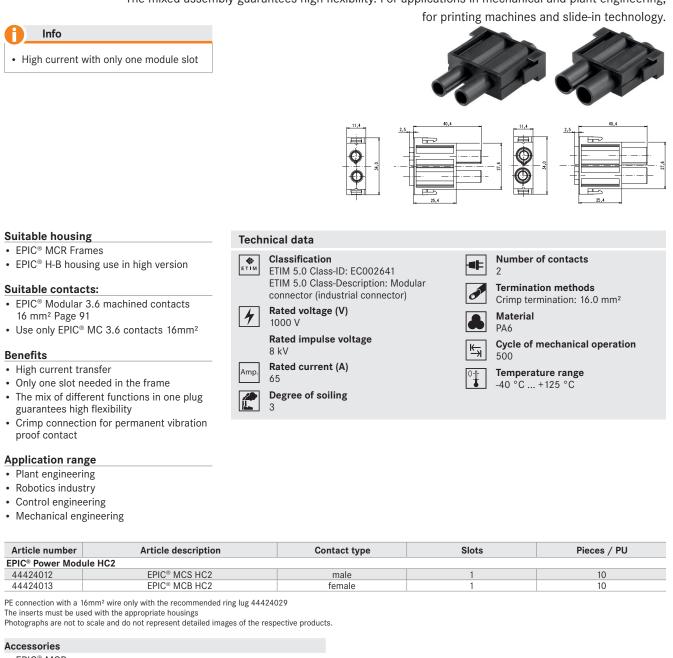
VDE

Rectangular connectors • EPIC® MC Modules



# **EPIC<sup>®</sup> Power Module HC2**

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,



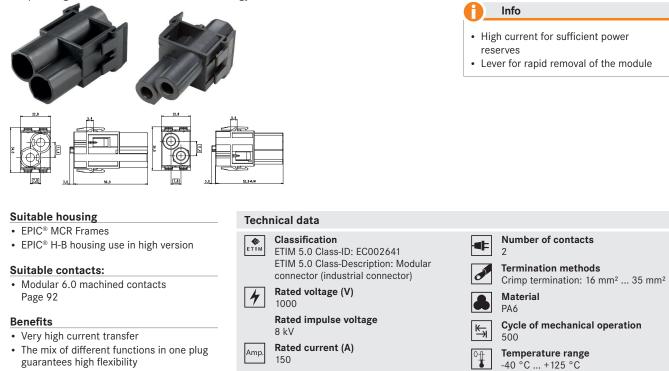
APP GROUP

UNITRONIC®

Rectangular connectors • EPIC® MC Modules

# **Power Module HHC2**

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering, for printing machines and slide-in technology.



· Crimp connection for permanent vibration proof contact

#### **Application range**

- · Mechanical engineering
- · Robotics industry
- Plant engineering
- · Renewable energy

Article number	Article description	Contact type	Slots	Pieces / PU
Power Module HH	C2			
44424017	MCS HHC2	male	2	10
44424018	MCB HHC2	female	2	10

\* Trade product, no Lapp product

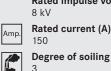
Due to reduced cross sections at PE contacts of frames, the PE contact has to be additionally protected against short circuits by using a protection circuit offering a sufficiently short breaking time (<0.25s).

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

52

• EPIC® MCR Frames



**ETHERLINE®** 

Power Module HHC1

Rectangular connectors • EPIC® MC Modules

for printing machines and slide-in technology.

Number of contacts

**Termination methods** 

**Temperature range** 

-40 °C ... +125 °C

Crimp termination: 50 mm<sup>2</sup> ... 95mm<sup>2</sup>

Cycle of mechanical operation

¢

₩

1

Material

PA6

500



#### Suitable housing

Info

power reserves

- EPIC<sup>®</sup> MCR Frames
- +  $\ensuremath{\mathsf{EPIC}}\xspace^{\ensuremath{\mathsf{\$}}}$  H-B housing use in high version

· Extremely high current for sufficient

· Lever for rapid removal of the module

#### Suitable contacts:

• EPIC<sup>®</sup> Modular 10.0 machined contacts Page 92

#### Benefits

- Extremely high current transfer
- The mix of different functions in one plug guarantees high flexibility
- Crimp connection for permanent vibration proof contact

#### Application range

- · Robotics industry
- · Renewable energy
- Plant engineering
- Mechanical engineering

Article description	Contact type	Slots	Pieces / PU
MCS HHC1	male	2	1
MCB HHC1	female	2	1
	MCS HHC1	MCS HHC1 male	MCS HHC1 male 2

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

\* Trade product, no Lapp product

Due to reduced cross sections at PE contacts of frames, the PE contact has to be additionally protected against short circuits by using a protection circuit offering a sufficiently short breaking time (<0.25s).

**Technical data** 

1000

8 kV

220

3

et i m

4

Amp

Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

Rated impulse voltage

ETIM 5.0 Class-ID: EC002641

connector (industrial connector)

ETIM 5.0 Class-Description: Modular

Photographs are not to scale and do not represent detailed images of the respective products

#### Accessories

• EPIC<sup>®</sup> MCR Frames

Rectangular connectors • EPIC® MC Modules

Contacts

¢

₩

3

100

Copper alloy, hard silver-plated

Crimp termination: 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup>

Cycle of mechanical operation

Number of contacts

**Termination methods** 

Temperature range

short-term up to +125°C

-40°C to +100°C,

# EPIC<sup>®</sup> MC Module: High Voltage 3pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

**Technical data** 

1000 V

50 A

< 2 mOhm

3

ET I M

4

Amp

Classification

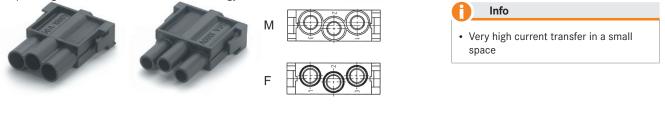
Rated voltage (V)

Rated current (A)

Degree of soiling

**Contact resistance** 

for printing machines and slide-in technology.



ETIM 5.0 Class-ID: EC002641

connector (industrial connector)

ETIM 5.0 Class-Description: Modular

### Suitable housing

- EPIC<sup>®</sup> MCR Frames
- The suitable connector housings depend on the modular frame used

#### Suitable contacts:

• EPIC<sup>®</sup> Modular 3.6 machined contacts Page 90

#### Benefits

- The mix of different functions in one plug guarantees high flexibility
- Assembly of individual connectors, suitable for different applications

#### Application range

- Plant engineering
- Printing machines
- Control engineering

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: high volta	age 3-pin				
10399800	MCS 3 CM-HV	male	3	1	10
10399900	MCB 3 CM-HV	female	3	1	10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC® MC Module removal tool refer to page 63

EPIC®

**ETHERLINE®** 

Rectangular connectors  $\mbox{ }\mbox{ }\mb$ 

for printing machines and slide-in technology.

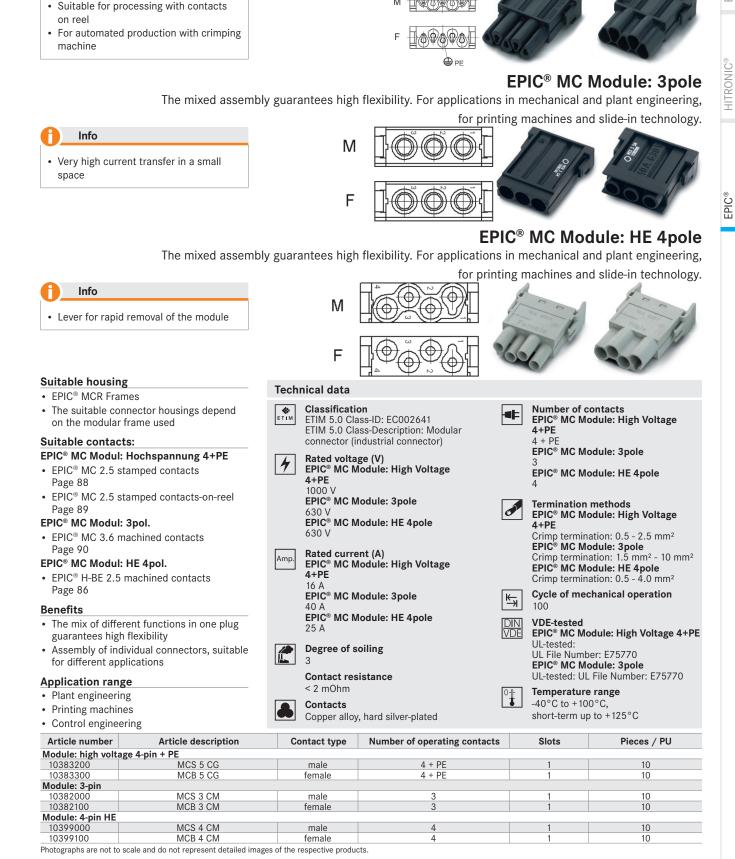
c**W**us

APP GROUP

Info

# EPIC<sup>®</sup> MC Module: High Voltage 4+PE

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,



**ETHERLINE®** 

EPIC<sup>®</sup> MC Module removal tool refer to page 63

Rectangular connectors • EPIC<sup>®</sup> MC Modules

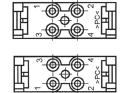
# EPIC<sup>®</sup> MC Module: Cage clamp 4pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.







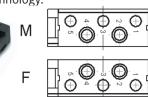
Info
 Fast connection by cage spring

## EPIC<sup>®</sup> MC Module: 5pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.





# **EPIC<sup>®</sup> MC Module: 10pole**

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

Μ

F

for printing machines and slide-in technology.



#### Suitable housing

#### • EPIC<sup>®</sup> MCR Frames

• The suitable connector housings depend on the modular frame used

#### Suitable contacts:

- EPIC<sup>®</sup> MC Modul: 5pol.
- EPIC<sup>®</sup> MC 2.5 machined contacts Page 87

#### EPIC<sup>®</sup> MC Modul: 10pol.

• EPIC<sup>®</sup> MC 1.6 machined contacts Page 83

#### Benefits

- The mix of different functions in one plug guarantees high flexibility
- Assembly of individual connectors, suitable for different applications

#### Application range

- Plant engineering
- Printing machines
- Control engineering

$\Box \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \square$	ΙΠΤΟ
∐₃ĂŎĂŎðĦ	Ideal for data transmission
Technical data	
Classification         ETIM       ETIM 5.0 Class-ID: EC002641         ETIM 5.0 Class-Description: Modular connector (industrial connector)         Rated voltage (V)         400 V         Amp.       Rated current (A)         EPIC® MC Module: Cage clamp 4pole         14 A         EPIC® MC Module: 5pole         20 A         EPIC® MC Module: 10pole         max. 10 A	Number of contacts         EPIC® MC Module: Cage clamp 4pole         4         EPIC® MC Module: 5pole         5         EPIC® MC Module: 10pole         10         Image: Second Seco
Degree of soiling         3         Contact resistance         EPIC® MC Module: Cage clamp 4pole         1.5 - 4 mohm         EPIC® MC Module: 5pole         < 2 mOhm         EPIC® MC Module: 10pole         < 2 mOhm         EPIC® MC Module: 20pole         < 2 mOhm         Contacts         EPIC® MC Module: Cage clamp 4pole         Copper alloy, hard silver-plated         EPIC® MC Module: 5pole         Copper alloy, hard silver-plated         EPIC® MC Module: 10pole         Copper alloy, hard silver-plated         EPIC® MC Module: 10pole         Copper alloy, hard silver-plated	Crimp termination: 0.14 - 2.5 mm <sup>2</sup> Stripping length (mm) EPIC <sup>®</sup> MC Module: Cage clamp 4pole 10 Cycle of mechanical operation 100 DIN EPIC <sup>®</sup> MC Module: 5pole UL-tested: UL File Number: E75770 EPIC <sup>®</sup> MC Module: 10pole UL-tested: UL File Number: E75770 Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: 4-pin cage cl	amp		· · · · · · · · · · · · · · · · · · ·		
10399600	MCS 4 F	male	4	1	10
10399700	MCB 4 F	female	4	1	10
Module: 5-pin					
10382200	MCS 5 CM	male	5	1	10
10382300	MCB 5 CM	female	5	1	10
Module: 10-pin					
10382400	MCS 10 CM	male	10	1	10
10382500	MCB 10 CM	female	10	1	10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC® MC Module removal tool refer to page 63

c**SU**s

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Rectangular connectors  $\mbox{ }$  EPIC  $^{\mbox{\tiny (B)}}$  MC Modules

#### c**W**us

# EPIC® MC Module: 10pole stamped

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

Info

APP GROUP

- Suitable for processing with contacts
   on reel
- For automated production with crimping machine

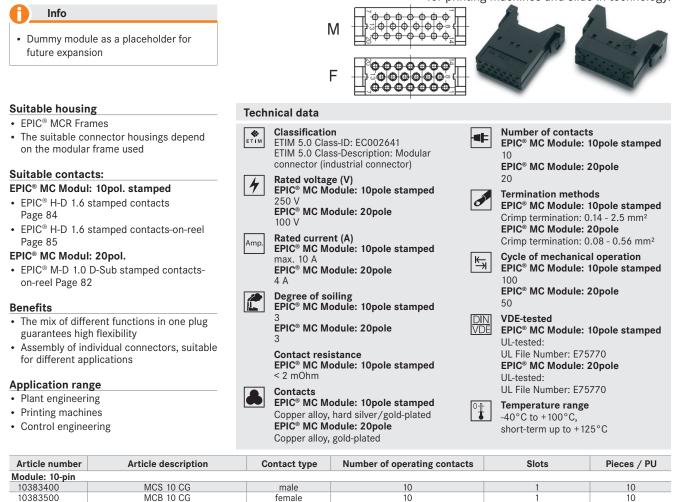


# EPIC<sup>®</sup> MC Module: 20pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology. Info φ M φ ┶┶┶┶ · Suitable for processing with contacts on reel C) HC3 78 CG For automated production with crimping Φ F machine  $\phi \phi \phi \phi \phi \phi$ **EPIC® MC Dummy Module** The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.



hotographs are not to scale and do not represent detailed images of the respective products.
ccessories

MCS 20 CG

MCB 20 CG

MCS 0 Blind

MCB 0 Blind

EPIC<sup>®</sup> MC Module removal tool refer to page 63

Module: 20-pin

Dummy module 10399400

10383600

10383700

10399500

20

20

0

male

female

male

female

10

10

10

10



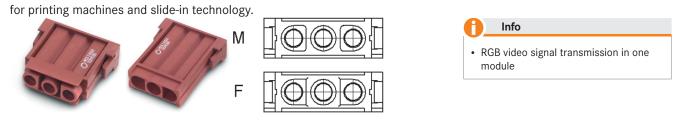
EPIC®

**ETHERLINE®** 

Rectangular connectors • EPIC<sup>®</sup> MC Modules

# EPIC<sup>®</sup> MC Module: Koax 3pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,



# EPIC<sup>®</sup> MC Module: PROFIBUS DP

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.





Info Profibus DP module for uniterruptible fieldbus operation · Lever for rapid removal of the module

# EPIC<sup>®</sup> MC Module: Universal Bus

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

**Technical data** 

250 V

30 V

30 V

1 A

< 2,7 mOhm

Contacts

3

ET I M

4

Amp

Classification

for printing machines and slide-in technology.





1 Info	
<ul> <li>Connector for shielded data cables</li> <li>Lever for rapid removal of the modu</li> </ul>	le

#### Suitable housing

- EPIC<sup>®</sup> MCR Frames
- · Higher housing
- · The suitable connector housings depend on the modular frame used

#### Suitable contacts:

- EPIC<sup>®</sup> MC Modul: Koax 3pol.
- EPIC<sup>®</sup> MC Coax-Contacts Page 93

#### **Benefits**

#### EPIC® MC Module: Koax 3pole

- · The mix of different functions in one plug guarantees high flexibility
- · Assembly of individual connectors, suitable for different applications

#### EPIC<sup>®</sup> MC Module: PROFIBUS DP

- · Uninterrupible fieldbus operartion when pulling the connector
- Transmission rate up to 12 MBit/s
- · Easy assembly by screw connection

#### · Shielding connection by strain relief

#### EPIC® MC Module: Universal Bus

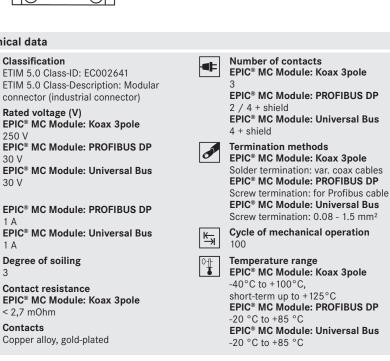
- The mix of different functions in one plug guarantees high flexibility
- · Assembly of individual connectors, suitable for different applications

#### **Application range**

- · Plant engineering
- · Light & sound technology



58



# **UNITRONIC®**

# **ETHERLINE®**

# HITRONIC®

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## Rectangular connectors • EPIC<sup>®</sup> MC Modules

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: 3-pin coax			· · · · · · · · · · · · · · · · · · ·		
10399200	MCS 3 coax	male	3	1	10
10399300	MCB 3 coax	female	3	1	10
Module: Profibus DP					
10390400	MCS 2 SS	male	2 + shield	1	5
10390500	MCS 2 BS	female	2 + shield	1	5
Module: Universal Bu	IS				
10390600	MCS 4 SS	male	4 + shield	1	5
10390700	MCS 4 BS	female	4 + shield	1	5

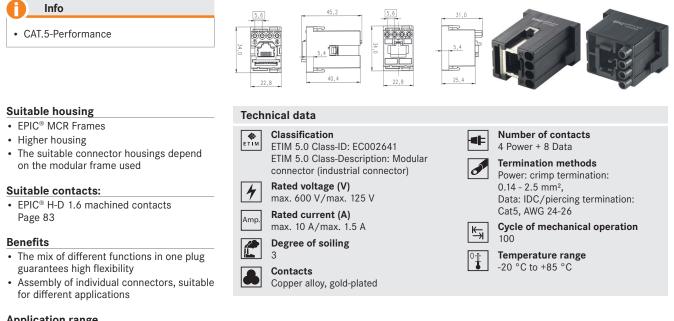
Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC<sup>®</sup> MC Module removal tool refer to page 63

# EPIC<sup>®</sup> MC Module: RJ45

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering, for printing machines and slide-in technology.



#### Application range

- Plant engineering
- Control engineering

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: RJ 45					
10344300	MCS 8 RJ45	male	4 + 8	2	5
10345300	MCB 8 RJ45	female	4 + 8	2	5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC® MC Module removal tool refer to page 63

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Contacts

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01

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8

100

Copper alloy, gold-plated

Number of contacts

**Termination methods** 

Cat 5, AWG 24-26

Temperature range

-20 °C to +85 °C

IDC/piercing termination:

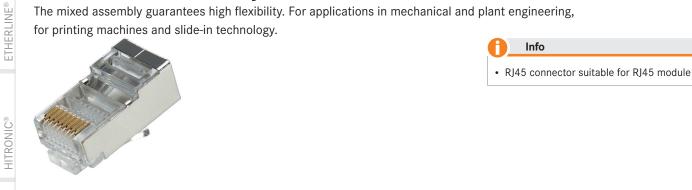
Cycle of mechanical operation

Rectangular connectors • EPIC® MC Modules



# EPIC® CE6326 Connector RJ45

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,



**Technical data** 

ET I M

4

Amp

íí.

Classification

network unit

max. 125 V

max. 1.5 A

3

Rated voltage (V)

Rated current (A)

Degree of soiling

ETIM 5.0 Class-ID: EC000309

Module for active network component/

ETIM 5.0 Class-Description:

- EPIC<sup>®</sup> MCR Frames
- The suitable connector housings depend on the modular frame used

#### Benefits

EPIC®

RJ45 connector for use in the module MCS 8 RJ45

#### **Application range**

- · Plant engineering
- · Control engineering

#### Suitable cables

• ETHERLINE<sup>®</sup> 4-pairs flexible/high flexible CAT.5e

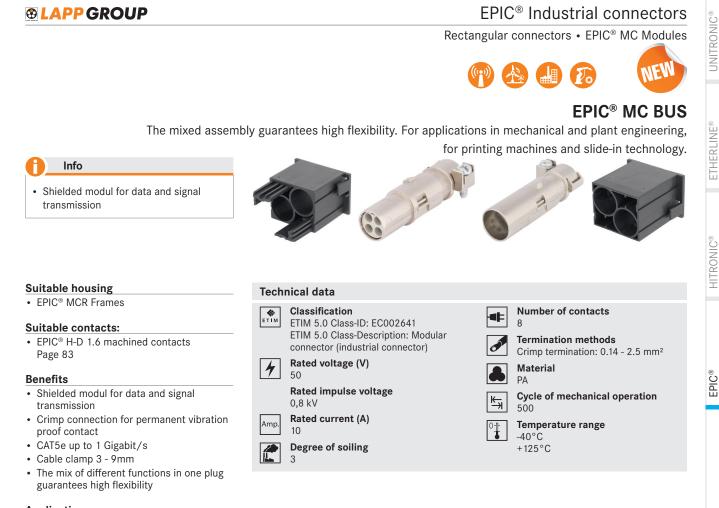
#### Suitable tools

- · Crimping tool RJ45 Stewart
- refer to main catalogue
- Use crimping tool type CE5092

Article number	Article description	Contact type	Number of operating contacts	Pieces / PU		
RJ45 connector for MCS 8 RJ45						
CE6326	CE6326	male	8	10		

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®



App	licat	tion	ra	ange	

- Mechanical engineering
- Robotics industry
- Plant engineering
- Renewable energy

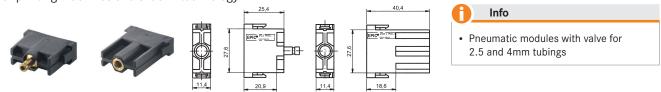
Article number	Article description	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MC BUS				
10390410	EPIC <sup>®</sup> MCS BUS 2x(4) CM	2x (4 + shield)	2	10
10390411	EPIC <sup>®</sup> MCB BUS 2x(4) CM	2x (4 + shield)	2	10
EPIC® MC BUS PIN				
10390412	EPIC <sup>®</sup> MCS BUS PIN 1x(4) CM	4 + shield		10
10390413	EPIC <sup>®</sup> MCB BUS PIN 1x(4) CM	4 + shield		10

Rectangular connectors • EPIC® MC Modules

# **EPIC<sup>®</sup> MC Module Pneumatic 1pole**

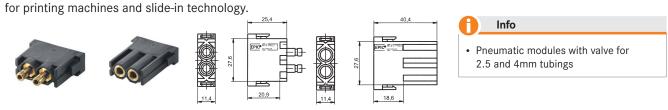
The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

for printing machines and slide-in technology.



# EPIC<sup>®</sup> MC Module Pneumatic 2pole

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,



#### Suitable housing

- EPIC<sup>®</sup> MCR Frames
- · Higher housing
- · The suitable connector housings depend on the modular frame used

#### Benefits

- · The mix of different functions in one plug guarantees high flexibility
- · Assembly of individual connectors, suitable for different applications

#### **Application range**

- · Plant engineering
- · Printing machines
- · Control engineering

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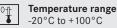
### T



Number of contacts EPIC® MC Module Pneumatic 1pole

EPIC<sup>®</sup> MC Module Pneumatic 2pole 2

**Termination methods** 01 Plug-in connection: for hose with inner diameter 2.5 mm/4.0 mm Cycle of mechanical operation |₩| 100 **Operating presure** 8 bar Testing presure 10 bar



Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
Module: pneumati	c 1-pin				
44424004	MCS 1x2,5 PNEU (10)	male	1	1	10
44424005	MCB 1x2,5 PNEU (10)	female with valve	1	1	10
44424006	MCS 1x4,0 PNEU (10)	male	1	1	10
44424007	MCB 1x4,0 PNEU (10)	female with valve	1	1	10
Module: pneumati	c 2-pin				
44424008	MCS 2x2,5 PNEU (10)	male	2	1	10
44424009	MCB 2x2,5 PNEU (10)	female with valve	2	1	10
44424010	MCS 2x4,0 PNEU (10)	male	2	1	10
44424011	MCB 2x4,0 PNEU (10)	female with valve	2	1	10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC® MC Module removal tool refer to page 63

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Rectangular connectors • EPIC® MC Modules



# EPIC<sup>®</sup> MC Module removal tool

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering, for printing machines and slide-in technology.



#### Suitable housing

• EPIC<sup>®</sup> MCR Frames

#### Benefits

This tool is used to lift built-in modules out
 of the module frames

**Technical data** 

ETIM

Classification ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

Article number	Article description	Pieces / PU
MC module remove		
11171200	MC module removal tool	1

Photographs are not to scale and do not represent detailed images of the respective products.

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Rectangular connectors • EPIC<sup>®</sup> MCR Frames

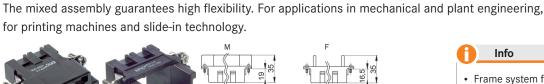
**A** VDE

**® LAPP GROUP** 

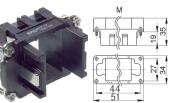
# **ETHERLINE®**

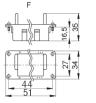
UNITRONIC®

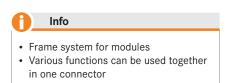
**HITRONIC®** 



**EPIC® MCR 6** 

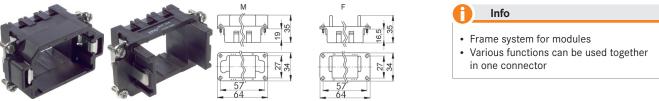






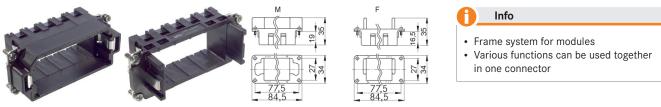
# **EPIC® MCR 10**

The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering, for printing machines and slide-in technology.



# **EPIC® MCR 16**

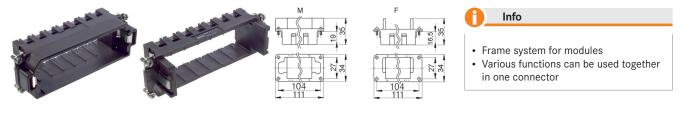
The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering, for printing machines and slide-in technology.



# EPIC<sup>®</sup> MCR 24

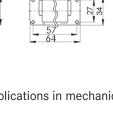
The mixed assembly guarantees high flexibility. For applications in mechanical and plant engineering,

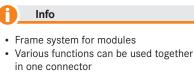
for printing machines and slide-in technology.



EPIC®







### Suitable housing

- EPIC<sup>®</sup> MCR 6
- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
  EPIC<sup>®</sup> MCR 10
- EPIC® ULTRA H-B 10
- EPIC<sup>®</sup> H-B 10 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181
- EPIC<sup>®</sup> MCR 16
- EPIC<sup>®</sup> ULTRA H-B 16
- EPIC® H-B 16 Housings
- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

### EPIC<sup>®</sup> MCR 24

- EPIC<sup>®</sup> ULTRA H-B 24
- EPIC<sup>®</sup> H-B 24 Housings

- EPIC<sup>®</sup> QUICK & EASY Mounting system Page 180
- EPIC<sup>®</sup> Docking Frame Page 181

#### Benefits

- The mix of different functions in one plug guarantees high flexibility
- Assembly of individual connectors, suitable for different applications

#### Product features

• The MCR "male" frame version is designed for use with modules with male contacts; the "female" version is designed for use with modules with female contacts

#### **Technical data**

**e**ti M

#### Classification ETIM 5.0 Class-ID: EC002310 ETIM 5.0 Class-Description: Fixing frame industrial connectors

Rectangular connectors • EPIC® MCR Frames

DIN VDE-tested VDE Certified pro

VDE-tested Certified production control: VDE-REG.no. **A870** UL-tested: UL File Number: E75770

EPIC<sup>®</sup> Industrial connectors

**ETHERLINE®** 

Article number	Article	Slots	Version	Pieces / PU
MCR 6 frame				
10381000	MCR 6 S	2	male	5
10381100	MCR 6 B	2	female	5
MCR 10 frame				
10381200	MCR 10 S	3	male	5
10381300	MCR 10 B	3	female	5
MCR 16 frame				
10381400	MCR 16 S	5	male	5
10381500	MCR 16 B	5	female	5
MCR 24 frame				
10381600	MCR 24 S	7	male	5
10381700	MCR 24 B	7	female	5

Rectangular connectors • EPIC® MH Modular System



# EPIC<sup>®</sup> MH 2 **ETHERLINE®** High flexibility by the use of any combination of inserts in one connector

**HITRONIC®** 

EPIC®



## Info

- Modular connector System, mateable with the market standard
- · High power module 2pole for compact power transmission



- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

#### Suitable contacts:

• EPIC<sup>®</sup> MH 8.0mm Contacts Page 80

#### **Benefits**

- High power module 2pole for compact power transmission
- · Crimp connection for permanent vibration proof contact
- +  $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\texttt{\$}}}$  MH system is mateable with the market standard
- · The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### **Application range**

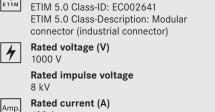
- Mechanical engineering
- · Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MH 2					
44423212	EPIC <sup>®</sup> MHS 2 CM	male	2	2	10
44423213	EPIC <sup>®</sup> MHB 2 CM	female	2	2	10

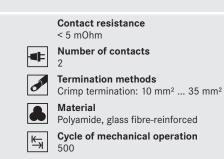
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**Technical data** 



100 A Degree of soiling 3





Rectangular connectors • EPIC® MH Modular System

**ETHERLINE®** 

# **HITRONIC®**

EPIC®

EPIC<sup>®</sup> MH 3



3

Crimp termination: 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup>



830 V Rated impulse voltage 8 kV Rated current (A) Amp 40 A

Rated voltage (V)

Degree of soiling 3

**Technical data** 

ET I M

4

Classification

ETIM 5.0 Class-ID: EC002641



High flexibility by the use of any combination of inserts in one connector

Cycle of mechanical operation 500

**Temperature range** -40°C ... +125°C

Info

- · Modular connector System, mateable with the market standard
- · Power module 3pole for compact power transmission

#### Suitable housing

- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

#### Suitable contacts:

• EPIC<sup>®</sup> MH 4.0mm Contacts Page 80

#### **Benefits**

- Power module 3pole for compact power transmission
- · Crimp connection for permanent vibration proof contact
- +  $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\texttt{\$}}}$  MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### Application range

- Mechanical engineering
- · Robotics industry
- Plant engineering
- Renewable energy
- · Railway applications / vehicle construction

Article number	Article description	Contact type Number of operating contacts		Slots	Pieces / PU
EPIC <sup>®</sup> MH 3					
44423214	EPIC <sup>®</sup> MHS 3 CM	male	3	1	10
44423215	EPIC <sup>®</sup> MHB 3 CM	female	3	1	10

Rectangular connectors • EPIC<sup>®</sup> MH Modular System



# • 6 🔒 🕰 🚯

## **EPIC® MH 4** High flexibility by the use of any combination of inserts in one connector

**HITRONIC®** 

EPIC®

UNITRONIC®



### Info

• Modular connector System, mateable with the market standard

Power module 4 pole for compact power transmission



- EPIC® MH Modular System frame
- +  $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\texttt{B}}}$  H-B housing use in high version

#### Suitable contacts:

 EPIC<sup>®</sup> MH 4.0mm Contacts Page 80

#### Benefits

- Power module 4 pole for compact power transmission
- Crimp connection for permanent vibration proof contact
- EPIC<sup>®</sup> MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications

   Fire protection on railway vehicles: Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL 1, HL2 and HL4

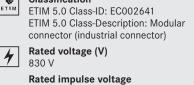
#### Application range

- Mechanical engineering
- · Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

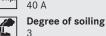
Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MH 4					
44423216	EPIC <sup>®</sup> MHS 4 CM	male	4	1	10
44423217	EPIC <sup>®</sup> MHB 4 CM	female	4	1	10

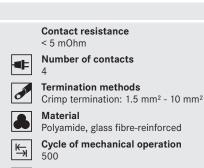
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8 kV Amp. Rated current (A)







Rectangular connectors • EPIC® MH Modular System

EPIC<sup>®</sup> MH 6

High flexibility by the use of any combination of inserts in one connector

#### Info

- · Modular connector System, mateable with the market standard
- Module 6 pole for control signals

#### Suitable housing

- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

#### Suitable contacts:

• EPIC® H-BE 2.5 machined contacts Page 86

#### Benefits

- Module 6 pole for control signals
- · Crimp connection for permanent vibration proof contact
- EPIC® MH system is mateable with the market standard
- · The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### Application range

- Mechanical engineering
- · Robotics industry
- · Plant engineering
- Renewable energy
- · Railway applications / vehicle construction

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MH 6					
44423218	EPIC <sup>®</sup> MHS 6 CM	male	6	1	10
44423219	EPIC <sup>®</sup> MHB 6 CM	female	6	1	10

**Technical data** 

500 V

6 kV

16 A

3

ET I M

4

Amp

Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

Rated impulse voltage

ETIM 5.0 Class-ID: EC002641

connector (industrial connector)

ETIM 5.0 Class-Description: Modular

Photographs are not to scale and do not represent detailed images of the respective products.



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**Contact resistance** < 5 mOhm Number of contacts



**Termination methods** Crimp termination: 0.14 - 4.0 mm<sup>2</sup>

Material

Polyamide, glass fibre-reinforced

Cycle of mechanical operation 500



**Temperature range** -40°C ... +125°C

Rectangular connectors • EPIC® MH Modular System



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**HITRONIC®** 

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# 6 🚯 🕒 🖓 🔇

# EPIC<sup>®</sup> MH 8

### High flexibility by the use of any combination of inserts in one connector





- Modular connector System, mateable
   with the market standard
- Module 8 pole for control signals

#### Suitable housing

- EPIC® MH Modular System frame
- $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\mathsf{\tiny B}}}$  H-B housing use in high version

#### Suitable contacts:

• EPIC<sup>®</sup> H-BE 2.5 machined contacts Page 86

#### Benefits

- Module 8 pole for control signals
- Crimp connection for permanent vibration proof contact
- EPIC<sup>®</sup> MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications

   Fire protection on railway vehicles:
   Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL 1, HL2 and HL4

#### Application range

- Mechanical engineering
- Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MH 8					
44423220	EPIC <sup>®</sup> MHS 8 CM	male	8	1	10
44423221	EPIC <sup>®</sup> MHB 8 CM	female	8	1	10

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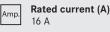


## Technical data

# Classification



dol ∨ Atted impulse voltage 6 kV







**Temperature range** -40°C ... +125°C

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® MH Modular System

EPIC<sup>®</sup> MH 12

High flexibility by the use of any combination of inserts in one connector

#### Info

- Modular connector System, mateable with the market standard
- Module 12 pole for control signals

#### Suitable housing

- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

#### Suitable contacts:

-  ${\sf EPIC^{\circledast}}$  H-D 1.6 machined contacts Page 83

#### Benefits

- Module 12 pole for control signals
- · Crimp connection for permanent vibration proof contact
- EPIC® MH system is mateable with the market standard
- · The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### Application range

- Mechanical engineering
- · Robotics industry
- · Plant engineering
- Renewable energy
- · Railway applications / vehicle construction

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU
EPIC <sup>®</sup> MH 12					
44423222	EPIC <sup>®</sup> MHS 12 CM	male	12	1	10
44423223	EPIC <sup>®</sup> MHB 12 CM	female	12	1	10

**Technical data** 

250 V

4 kV

10 A

3

ET I M

4

Amp

Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

Rated impulse voltage

ETIM 5.0 Class-ID: EC002641

connector (industrial connector)

ETIM 5.0 Class-Description: Modular

Photographs are not to scale and do not represent detailed images of the respective products.



# **HITRONIC**<sup>®</sup>

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ETHERLINE®

**Contact resistance** < 5 mOhm Number of contacts **Termination methods** 



ŧ

Crimp termination: 0.14 - 2.5 mm<sup>2</sup>

Material Polyamide, glass fibre-reinforced



12

**Temperature range** -40°C ... +125°C

Cycle of mechanical operation

For current information see: www.lappgroup.com

Rectangular connectors • EPIC® MH Modular System



# ME

### EPIC<sup>®</sup> MH 17

#### High flexibility by the use of any combination of inserts in one connector



Info

• Modular connector System, mateable with the market standard

• Universal module for 17 contacts in smallest space



- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

#### Suitable contacts:

• EPIC<sup>®</sup> H-D 1.6 machined contacts Page 83

#### **Benefits**

- Universal module for 17 contacts in smallest space
- · Crimp connection for permanent vibration proof contact
- EPIC<sup>®</sup> MH system is mateable with the market standard
- · The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

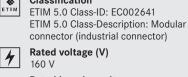
#### Application range

- Mechanical engineering
- · Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

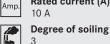
Article number	Article description	Contact type Number of operating contacts		Slots	Pieces / PU
EPIC <sup>®</sup> MH 17					
44423224	EPIC <sup>®</sup> MHS 17 CM	male	17	1	10
44423225	EPIC <sup>®</sup> MHB 17 CM	female	17	1	10

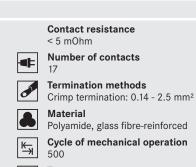
Photographs are not to scale and do not represent detailed images of the respective products.





Rated impulse voltage 2.5 kV Rated current (A)





**Temperature range** -40°C ... +125°C

EPIC

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### APP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® MH Modular System

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#### Info

- · Modular connector System, mateable with the market standard
- Double module 20 pole for control signals

#### Suitable housing

- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

ET I M

4

Amp

3

#### Suitable contacts:

• EPIC® H-BE 2.5 machined contacts Page 86

#### Benefits

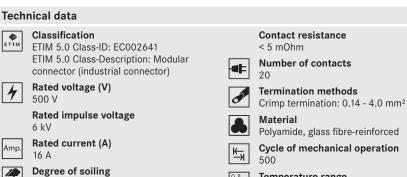
- Double module 20 pole for control signals
- · Crimp connection for permanent vibration proof contact
- $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\$}}$  MH system is mateable with the market standard
- · The mix of different functions in one plug guarantees high flexibility
- · Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### Application range

- Mechanical engineering
- · Robotics industry
- · Plant engineering
- Renewable energy
- · Railway applications / vehicle construction

Article number	Article description	Contact type	Number of operating contacts	Slots	Pieces / PU	
EPIC® MH 20						
44423226	EPIC <sup>®</sup> MHS 20 CM	male	20	2	10	
44423227	EPIC <sup>®</sup> MHB 20 CM	female	20	2	10	

Photographs are not to scale and do not represent detailed images of the respective products.





**Temperature range** -40°C ... +125°C

Rectangular connectors • EPIC® MH Modular System



## EPIC<sup>®</sup> MH 36

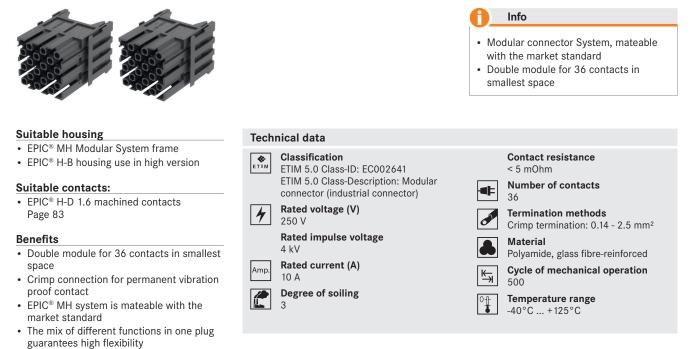
· Railway applications

Application range
Mechanical engineering
Robotics industry
Plant engineering
Renewable energy

 Fire protection on railway vehicles: Test according EN 45545-2.
 Requirement sets R22 and R23.
 Hazard level HL1, HL2 and HL4

· Railway applications / vehicle construction

High flexibility by the use of any combination of inserts in one connector



Article number Article description Number of operating contacts Slots Pieces / PU Contact type EPIC® MH 36 EPIC® MHS 36 CM 44423266 male 36 2 10 44423267 EPIC® MHB 36 CM female 36 2 10

Photographs are not to scale and do not represent detailed images of the respective products.

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#### 74

Info

transmission

### EPIC® Industrial connectors

Rectangular connectors • EPIC® MH Modular System



EPIC<sup>®</sup> MH Bus 2x(4) Modul

EPIC®

# High flexibility by the use of any combination of inserts in one connector

EPIC® MH Bus PIN 1x(4) contact holder

High flexibility by the use of any combination of inserts in one connector

Info

Modular connector System, mateable
 with the market standard

Modular connector System, mateable with the market standard
Shielded modul for data and signal

• Shielded modul for data and signal transmission

#### Suitable housing

- EPIC<sup>®</sup> MH Bus 2x(4) Modul
- EPIC<sup>®</sup> MH Modular System frame
- $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\$}}$  H-B housing use in high version

#### Suitable contacts:

#### EPIC<sup>®</sup> MH Bus 2x(4) Modul

EPIC<sup>®</sup> H-D 1.6 machined contacts Page 83
EPIC<sup>®</sup> MH Bus PIN 1x(4) Page 75

#### Benefits

- Shielded modul for data and signal transmission
- EPIC<sup>®</sup> MH system is mateable with the market standard
- Crimp connection for permanent vibration
   proof contact
- The mix of different functions in one plug guarantees high flexibility
- Railway applications

   Fire protection on railway vehicles:
   Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL1, HL2 and HL4

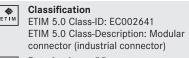
#### Application range

- Mechanical engineering
- Robotics industry
- · Plant engineering
- Renewable energy
- · Railway applications / vehicle construction

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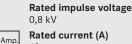


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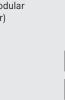


 Rated voltage (V)

 50



Degree of soiling



EPIC<sup>®</sup> MH Bus PIN 1x(4) contact holder

EPIC<sup>®</sup> MH Bus 2x(4) Modul

Number of contacts

4

-

Termination methods Crimp termination: 0.14 - 2.5 mm<sup>2</sup>

Material PA





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**Temperature range** -40°C ... +125°C

Article number Slots Pieces / PU Article description Contact type Number of operating contacts EPIC<sup>®</sup> MH Bus 2x(4) Modul EPIC<sup>®</sup> MHS Bus 2x(4) CM EPIC<sup>®</sup> MHB Bus 2x(4) CM 44423228 male 2x(4 + shield)2 10 44423230 female 2x (4 + shield) 10 2 EPIC® MH BUS PIN 1x(4) contact holder 10 44423229 EPIC® MHS Bus PIN 1x(4) CM male 4 + shield EPIC® MHB Bus PIN 1x(4) CM 44423231 female 4 + shield 10

Rectangular connectors • EPIC<sup>®</sup> MH Modular System



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### **EPIC<sup>®</sup> MH Potential set**

High flexibility by the use of any combination of inserts in one connector



A	Info		
	Equipotential	spring for multi	frame

#### Benefits

- Equipotential spring for multi frame
- For use in EPIC® MH BUS modules

# • Mechanical engine

- Mechanical engineering
- Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

Article number Article description		Pieces / PU
EPIC <sup>®</sup> MH Potentia	al set	
44423265	EPIC <sup>®</sup> MH Potential Set	10

ETIM 5.0 Class-ID: EC000796

Contact for industrial connectors

ETIM 5.0 Class-Description:

**Technical data** 

ET I M

Classification

### EPIC<sup>®</sup> Industrial connectors

EPIC<sup>®</sup> MH 0 blind modul

Rectangular connectors • EPIC® MH Modular System

High flexibility by the use of any combination of inserts in one connector



NEU

#### Suitable housing

Info

future expansion

- EPIC<sup>®</sup> MH Modular System frame
- EPIC<sup>®</sup> H-B housing use in high version

· Modular connector System, mateable with the market standard · Dummy module as a placeholder for

#### Benefits

- Dummy module as a placeholder for future expansion
- +  $\ensuremath{\mathsf{EPIC}}^{\ensuremath{\$}}$  MH system is mateable with the market standard
- "Z" version with centering function for plug in technique
- The mix of different functions in one plug guarantees high flexibility
- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### Application range

- Mechanical engineering
- · Robotics industry
- · Plant engineering
- · Renewable energy
- · Railway applications / vehicle construction

Article number	Article description	Slots	Pieces / PU
EPIC <sup>®</sup> MH 0 blind	modul		
44423232	EPIC <sup>®</sup> MH 0	1	10
EPIC <sup>®</sup> MH 0 blind	modul with centering		
44423233	EPIC <sup>®</sup> MH 0 Z	1	10

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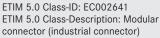


-E 0

**Technical data** 

connector (industrial connector)





Number of contacts

# Material

Polyamide, glass fibre-reinforced Temperature range -40°C ... +125°C

For current information see: www.lappgroup.com

🔁 LAPP GROUP

Rectangular connectors • EPIC<sup>®</sup> MH Modular System frame





### EPIC<sup>®</sup> MH 6 multi frame

High flexibility by the use of any combination of inserts in one connector



### EPIC<sup>®</sup> MH 10 multi frame

High flexibility by the use of any combination of inserts in one connector



## EPIC<sup>®</sup> MH 16 multi frame

High flexibility by the use of any combination of inserts in one connector



### EPIC<sup>®</sup> MH 24 multi frame

High flexibility by the use of any combination of inserts in one connector



### **EPIC® MH Clip** High flexibility by the use of any combination of inserts in one connector



#### Suitable housing EPIC<sup>®</sup> MH 6 Multirahmen

- EPIC<sup>®</sup> ULTRA H-B 6
- EPIC<sup>®</sup> H-B 6 Housings
- EPIC® MH 10 Multirahmen
- EPIC<sup>®</sup> ULTRA H-B 10
- EPIC<sup>®</sup> H-B 10 Housings
- EPIC® MH 16 Multirahmen
- EPIC<sup>®</sup> ULTRA H-B 16
  EPIC<sup>®</sup> H-B 16 Housings

### EPIC<sup>®</sup> MH 24 Multirahmen

- EPIC<sup>®</sup> ULTRA H-B 24
- EPIC® H-B 24 Housings

### Benefits

- EPIC<sup>®</sup> MH 6 multi frame
- Multi frame for own and competition modules
- EPIC<sup>®</sup> MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications

   Fire protection on railway vehicles:
   Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL1, HL2 and HL4
- PE connection from 1mm<sup>2</sup> up to 6mm<sup>2</sup> with end sleeve, 10mm<sup>2</sup> with adapter



- Modular connector System, mateable
- with the market standard
- Frame system for modules



Frame system for modules



- Modular connector System, mateable with the market standard
- Frame system for modules

#### Info

- Modular connector System, mateable
- with the market standard • Frame system for modules

#### 📔 Info

- Modular connector System, mateable
- with the market standard
- Adapter clip for modules of competition

#### EPIC<sup>®</sup> MH 10 multi frame

- Multi frame for own and competition modules
- EPIC<sup>®</sup> MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications

   Fire protection on railway vehicles: Test according EN 45545-2.
   Requirement sets R22 and R23.
   Hazard level HL1, HL2 and HL4
- PE connection from 1mm<sup>2</sup> up to 6mm<sup>2</sup> with end sleeve, 10mm<sup>2</sup> with adapter

**ETHERLINF®** 



EPIC®

## EPIC<sup>®</sup> Industrial connectors

**ETHERLINE®** 

### ETIM 5.0 Class-ID: EC002641 ETIM 5.0 Class-Description: Modular

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### Rectangular connectors • EPIC® MH Modular System frame

**e**ti M

**Technical data** 

Classification

connector

Material

Zinc die-cast

#### EPIC® MH 16 multi frame

- Multi frame for own and competition modules
- EPIC<sup>®</sup> MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- PE connection from 1mm<sup>2</sup> up to 6mm<sup>2</sup> with end sleeve, 10mm<sup>2</sup> with adapter

#### EPIC<sup>®</sup> MH 24 multi frame

- Multi frame for own and competition modules
- EPIC® MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- Railway applications
- Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4
- · PE connection from 1mm<sup>2</sup> up to 6mm<sup>2</sup> with end sleeve, 10mm<sup>2</sup> with adapter

#### EPIC<sup>®</sup> MH Clip

- EPIC<sup>®</sup> MH Clip for mounting of competition modules in EPIC® MH frame
- · EPIC® MH system is mateable with the market standard
- The mix of different functions in one plug guarantees high flexibility
- **Railway applications** - Fire protection on railway vehicles: Test according EN 45545-2. Requirement sets R22 and R23. Hazard level HL1, HL2 and HL4

#### **Application range**

- · Mechanical engineering
- · Robotics industry
- · Plant engineering
- · Renewable energy
- Railway applications / vehicle construction
- EPIC® MH 10 multi frame Zinc die-cast EPIC® MH 16 multi frame Zinc die-cast EPIC<sup>®</sup> MH 24 multi frame Zinc die-cast

EPIC® MH 6 multi frame

- Cycle of mechanical operation ₩ EPIC® MH 6 multi frame 500 EPIC<sup>®</sup> MH 10 multi frame
  - 500 EPIC® MH 16 multi frame 500 EPIC® MH 24 multi frame
    - 500
  - **Temperature range** -40°C ... +125°C
- Article number Article description Contact type Slots Pieces / PU EPIC<sup>®</sup> MH 6 multi frame 44423234 EPIC® MHS 6 R male 2 10 44423235 EPIC® MHB 6 R female 2 10 EPIC® MH 10 multi frame EPIC® MHS 10 R male 3 10 44423236 44423237 EPIC® MHB 10 R female 3 10 EPIC<sup>®</sup> MH 16 multi frame FPIC® MHS 16 R 44423238 10 male 4 EPIC® MHB 16 R 44423239 female 4 10 EPIC<sup>®</sup> MH 24 multi frame EPIC® MHS 24 R 44423240 10 male 6 44423241 EPIC® MHB 24 R female 6 10 EPIC<sup>®</sup> MH Clip EPIC<sup>®</sup> MH Clip 20 44423264

Rectangular connectors • EPIC® MH Modular System contacts and accessories



**UNITRONIC®** 

**ETHERLINE®** 

**TRONIC®** 

### **EPIC® MH 8.0mm Contacts**

High flexibility by the use of any combination of inserts in one connector



#### Benefits

- Crimp connection for permanent vibration
   proof contact
- EPIC® MH system is mateable with the market standard

#### Application range

- Mechanical engineering
- Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

•	For use in battery hydraulic crimping tool
	Klauke type EK 120/42-L

Suitable tools

# Info Modular connector System, mateable with the market standard Technical data ♥IM Classification ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors Contact resistance < 5 mOhm</li> ♥IM Termination methods Crime termination: 10 methods

Crimp termination: 10 mm<sup>2</sup> - 35 mm<sup>2</sup> Stripping length (mm) 18

Cycle of mechanical operation 500

₩

Info

10

500

₩

Modular connector System, mateable

with the market standard

**Termination methods** 

Stripping length (mm)

Crimp termination: 1.5 mm<sup>2</sup> - 10 mm<sup>2</sup>

Cycle of mechanical operation

Article number	Article description	Contact type	Connection cross section (mm <sup>2</sup> )	Pieces / PU
EPIC <sup>®</sup> MH D=8.0 c	ontacts	·		
44423242	EPIC <sup>®</sup> MH SCEM AG 10sqmm D=8.0	male	10	10
44423246	EPIC <sup>®</sup> MH BCEM AG 10sqmm D=8.0	female	10	10
44423243	EPIC <sup>®</sup> MH SCEM AG 16sqmm D=8.0	male	16	10
44423247	EPIC <sup>®</sup> MH BCEM AG 16sqmm D=8.0	female	16	10
44423244	EPIC <sup>®</sup> MH SCEM AG 25sqmm D=8.0	male	25	10
44423248	EPIC <sup>®</sup> MH BCEM AG 25sqmm D=8.0	female	25	10
44423245	EPIC <sup>®</sup> MH SCEM AG 35sqmm D=8.0	male	35	10
44423249	EPIC <sup>®</sup> MH BCEM AG 35sqmm D=8.0	female	35	10

Photographs are not to scale and do not represent detailed images of the respective products.



### EPIC<sup>®</sup> MH 4.0mm Contacts

High flexibility by the use of any combination of inserts in one connector



#### Application range

- Mechanical engineering
- Robotics industry
- Plant engineering
- Renewable energy
- Railway applications / vehicle construction

#### Suitable tools

• EPIC<sup>®</sup> MH contact removal tool 4.0mm

Article number	Article description	Contact type	Connection cross section (mm <sup>2</sup> )	Pieces / PU
EPIC <sup>®</sup> MH 4.0mm	Contacts	-		
44423250	EPIC <sup>®</sup> MH SCEM AG 1.5sqmm D=4.0	male	1.5	10
44423255	EPIC <sup>®</sup> MH BCEM AG 1.5sqmm D=4.0	female	1.5	10
44423251	EPIC <sup>®</sup> MH SCEM AG 2.5sqmm D=4.0	male	2.5	10
44423256	EPIC <sup>®</sup> MH BCEM AG 2.5sqmm D=4.0	female	2.5	10
44423252	EPIC <sup>®</sup> MH SCEM AG 4sqmm D=4.0	male	4	10
44423257	EPIC <sup>®</sup> MH BCEM AG 4sqmm D=4.0	female	4	10
44423253	EPIC <sup>®</sup> MH SCEM AG 6sqmm D=4.0	male	6	10
44423258	EPIC <sup>®</sup> MH BCEM AG 6sqmm D=4.0	female	6	10
44423254	EPIC <sup>®</sup> MH SCEM AG 10sqmm D=4.0	male	10	10
44423259	EPIC <sup>®</sup> MH BCEM AG 10sqmm D=4.0	female	10	10

Photographs are not to scale and do not represent detailed images of the respective products.

# EPIC®

80

Classification ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors

Contact resistance < 5 mOhm

**Technical data** 

ET I M

### EPIC<sup>®</sup> Industrial connectors

**EPIC® TOOL DIE 8.0mm** 

Rectangular connectors • EPIC® MH Modular System contacts and accessories



Info High flexibility by the use of any combination of inserts in one connector · Crimp dies for electro hydraulic crimp tool Info · Tool for removing the 8.0mm contacts from the EPIC<sup>®</sup> MH modules Suitable contacts: Benefits EPIC<sup>®</sup> TOOL DIE 8.0mm EPIC<sup>®</sup> MH contact removal tool 8.0mm

# EPIC® MH contact removal tool 8.0mm

High flexibility by the use of any combination of inserts in one connector

• EPIC® MH 8.0mm Contacts Page 80

### • Tool for removing the 8.0mm contacts from the EPIC® MH modules

### Suitable tools

EPIC<sup>®</sup> TOOL DIE 8.0mm For use in battery hydraulic crimping tool Klauke type EK 120/42-L

Article number	Article description	Connection cross section (mm <sup>2</sup> )	Connection cross section (mm <sup>2</sup> )	Pieces / PU
Crimping dies		·	·	
44423270	EPIC <sup>®</sup> TOOL DIE D=8.0 10sqmm	10	10.00	1
44423271	EPIC <sup>®</sup> TOOL DIE D=8.0 10sqmm	16	16.00	1
44423272	EPIC <sup>®</sup> TOOL DIE D=8.0 25sqmm	25	25.00	1
44423273	EPIC <sup>®</sup> TOOL DIE D=8.0 35sqmm	35	35.00	1
EPIC <sup>®</sup> MH contact	removal tool 8.0mm			
44423269	EPIC <sup>®</sup> MH contact removal tool 8.0mm			1

Photographs are not to scale and do not represent detailed images of the respective products.

EPIC®

**ETHERLINE®** 

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

### EPIC® M-D 1.0 D-Sub stamped contacts-on-reel

For inserts and modules of the EPIC® rectangular connectors





#### Info

- Gold plated contacts in 2 quality levels
- For automated production with crimping machine
- 2 crimp areas for wire and insulation crimp

# HITRONIC®

EPIC®

- Suitable tools

   Crimping tool for contacts-on-reel D-Sub refer to main catalogue
- Removal tool refer to main catalogue



Article number	Article description	Contact type	Conductor cross- section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Note	Pieces / PU
Contacts							
44429011	EPIC® D-SUB SCBG AU G2 0,08-0,22 (500)	male	0.08 - 0.22	Au (0.8 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429007	EPIC® D-SUB BCBG AU G2 0,08-0,22 (500)	female	0.08 - 0.22	Au (0.8 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429013	EPIC® D-SUB SCBG AU G3 0,08-0,22 (500)	male	0.08 - 0.22	Au (0.1 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429009	EPIC® D-SUB BCBG AU G3 0,08-0,22 (500)	female	0.08 - 0.22	Au (0.1 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429012	EPIC® D-SUB SCBG AU G2 0,22-0,56 (500)	male	0.22 - 0.56	Au (0.8 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429008	EPIC® D-SUB BCBG AU G2 0,22-0,56 (500)	female	0.22 - 0.56	Au (0.8 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429014	EPIC® D-SUB SCBG AU G3 0,22-0,56 (500)	male	0.22 - 0.56	Au (0.1 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1
44429010	EPIC <sup>®</sup> D-SUB BCBG AU G3 0,22-0,56 (500)	female	0.22 - 0.56	Au (0.1 µm)	2.5 + 0.5	1 reel (PU) = 500 contacts	1

Contact for industrial connectors

Photographs are not to scale and do not represent detailed images of the respective products.

### EPIC® Tools for M-D 1,0 D-Sub contacts-on-reel stamped

For inserts and modules of the EPIC® rectangular connectors



#### Suitable contacts:

 EPIC<sup>®</sup> M-D 1.0 D-Sub stamped contacts-on-reel Page 82

Article number	Article description	Version	Note	Pieces / PU
Tools				
11158400	Crimping tool	In tool case	Crimping dies included, for contacts H-D 1.0 D-Sub (0.08 - 0.56 mm²)	1
11132500	Removal tool		For ribbon contacts: D-Sub 1.0 stamped	1

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

### EPIC<sup>®</sup> H-D 1.6 machined contacts

For inserts and modules of the  $\ensuremath{\mathsf{EPIC}}\xspace^{\ensuremath{\mathbb{R}}}$  rectangular connectors

#### Info

 Choice of high quality gold or silver plated contacts

#### Suitable tools

**A To** 1

- EPIC<sup>®</sup> Tools for contacts H-D 1.6 machined refer to page 83
- Pneumatic crimping machine for single contacts refer to main catalogue
- Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue



#### **Technical data**

Article number	Article description	Contact type	Conductor cross- section (mm <sup>2</sup> )	Cross-section ratio	Surface	Stripping length (mm)	Pieces / PU
Contacts							
13162000	H-D 1.6 machined	male	0.14 - 0.37	1	Ag	8.0	100
13163000	H-D 1.6 machined	female	0.14 - 0.37	1	Ag	8.0	100
13162100	H-D 1.6 machined	male	0.50	2	Ag	8.0	100
13163100	H-D 1.6 machined	female	0.50	2	Ag	8.0	100
13162200	H-D 1.6 machined	male	0.75 - 1.00	3	Ag	8.0	100
13163200	H-D 1.6 machined	female	0.75 - 1.00	3	Ag	8.0	100
13162300	H-D 1.6 machined	male	1.50	4	Ag	8.0	100
13163300	H-D 1.6 machined	female	1.50	4	Ag	8.0	100
13162400	H-D 1.6 machined	male	2.50	5	Ag	5.8	100
13163400	H-D 1.6 machined	female	2.50	5	Ag	5.8	100
13162500	H-D 1.6 machined	male	0.14 - 0.37	1	Au	8.0	100
13163500	H-D 1.6 machined	female	0.14 - 0.37	1	Au	8.0	100
13162600	H-D 1.6 machined	male	0.50	2	Au	8.0	100
13163600	H-D 1.6 machined	female	0.50	2	Au	8.0	100
13162700	H-D 1.6 machined	male	0.75 - 1.00	3	Au	8.0	100
13163700	H-D 1.6 machined	female	0.75 - 1.00	3	Au	8.0	100
13162800	H-D 1.6 machined	male	1.50	4	Au	8.0	100
13163800	H-D 1.6 machined	female	1.50	4	Au	8.0	100
13162900	H-D 1.6 machined	male	2.50	5	Au	5.8	100
13163900	H-D 1.6 machined	female	2.50	5	Au	5.8	100

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Tools for contacts H-D 1.6 machined

For inserts and modules of the EPIC® rectangular connectors

	11147001	Product features • Locator and crimping dies with the crimping tool 111 crimping machine 111470	47000 and the	
Article number	Article description	Version	Note	Pieces / PU
ools				
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147100	Crimping dies	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 machined, H-BE 2.5 machined, MC 2.5 machined	1
11147200	Locator	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 machined, H-BE machined, MC 2.5 machined, MC 2.5 stamped	1
11161000	Removal tool		For contacts: H-D 1.6 machined, H-D 1.6 stamped	1

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®

EPIC®

Classification ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

### EPIC® H-D 1.6 stamped contacts

For inserts and modules of the  $\ensuremath{\mathsf{EPIC}}\xspace^{\ensuremath{\mathsf{e}}\xspace}$  rectangular connectors



#### Info

 Choice of high quality gold or silver plated contacts

• 2 crimp areas for wire and insulation crimp

#### Suitable tools

- Pneumatic crimping machine for single contacts refer to main catalogue
- Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue

### Technical data



Article number	Article description	Contact type	Conductor cross- section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Pieces / PU
Contacts						
11241100	H-D 1.6 stamped	male	0.14 - 0.50	Ag	2.5 + 0.5	100
11231100	H-D 1.6 stamped	female	0.14 - 0.50	Ag	2.5 + 0.5	100
11221000	H-D 1.6 stamped	male	0.50 - 1.50	Ag	3.5 + 0.5	100
11236100	H-D 1.6 stamped	female	0.50 - 1.50	Ag	3.5 + 0.5	100
11223500	H-D 1.6 stamped	male	1.50 - 2.50	Ag	3.5 + 0.5	100
11228500	H-D 1.6 stamped	female	1.50 - 2.50	Ag	3.5 + 0.5	100
11243100	H-D 1.6 stamped	male	0.14 - 0.50	Au	2.5 + 0.5	100
11233100	H-D 1.6 stamped	female	0.14 - 0.50	Au	2.5 + 0.5	100
11221300	H-D 1.6 stamped	male	0.50 - 1.50	Au	3.5 + 0.5	100
11238100	H-D 1.6 stamped	female	0.50 - 1.50	Au	3.5 + 0.5	100

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Tools for contacts H-D 1.6 stamped

For inserts and modules of the EPIC® rectangular connectors



Article number	Article description	Version	Note	Pieces / PU
Tools				
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147170	Crimping dies	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 stamped (0.14 - 0.5 mm <sup>2</sup> )	1
11147180	Crimping dies	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 stamped (0.5 - 1.5 mm <sup>2</sup> ), MC 2.5 stamped (0.5 - 1.5 mm <sup>2</sup> )	1
11147190	Crimping dies	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 stamped (1.5 - 2.5 mm <sup>2</sup> ), MC 2.5 stamped (1.5 - 2.5 mm <sup>2</sup> )	1
11147300	Locator		For contacts: H-D 1.6 machined, H-D 1.6 stamped	1
11161000	Removal tool		For contacts: H-D 1.6 machined, H-D 1.6 stamped	1

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

EPIC® H-D 1.6 stamped contacts-on-reel

For inserts and modules of the EPIC<sup>®</sup> rectangular connectors



_	
A	Info

- · Choice of high quality gold or silver plated contacts
- · For automated production with crimping machine
- 2 crimp areas for wire and insulation crimp

#### Suitable tools

- Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue



#### **Technical data**

- Classification
- et i m ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors

Article number	Article description	Contact type	Conductor cross- section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Note	Pieces / PU
Contacts						·	
11240700	H-D SCBG AG 0.14-0.5 200 LI	male	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 200 contacts	1
11230700	H-D BCBG AG 0.14-0.5 200 LI	female	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 200 contacts	1
11240400	H-D SCBG AG 0.14-0.5 2000 LI	male	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11230400	H-D BCBG AG 0.14-0.5 2000 LI	female	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11240000	H-D SCBG AG 0.14-0.5 2000 RE	male	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11230000	H-D BCBG AG 0.14-0.5 2000 RE	female	0.14 - 0.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11240500	H-D SCBG AU 0.14-0.5 2000 LI	male	0.14 - 0.50	Au	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11230500	H-D BCBG AU 0.14-0.5 2000 LI	female	0.14 - 0.50	Au	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11220700	H-D SCBG AG 0.5-1.5 200 LI	male	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 200 contacts	1
11235700	H-D BCBG AG 0.14-0.5 200 LI	female	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 200 contacts	1
11226000	H-D SCBG AG 0.5-1.5 2000 LI	male	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 2000 contacts	1
11226500	H-D BCBG AG 0.5-1.5 2000 LI	female	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 2000 contacts	1
11220000	H-D SCBG AG 0.5-1.5 2000 RE	male	0.50 - 1.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11235000	H-D BCBG AG 0.5-1.5 2000 RE	female	0.50 - 1.50	Ag	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11220100	H-D SCBG AU 0.5-1.5 2000 RE	male	0.50 - 1.50	Au	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11235200	H-D BCBG AG 0.5-1.5 200 LI	female	0.50 - 1.50	Au	2.5 + 0.5	1 reel (PU) = 2000 contacts	1
11223000	H-D SCBG AG 1.5-2.5 100 LI	male	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 100 contacts	1
11228000	H-D BCBG AG 1.5-2.5 100 LI	female	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 100 contacts	1
11222700	H-D SCBG AG 1.5-2.5 2000 LI	male	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 2000 contacts	1
11227700	H-D BCBG AG 1.5-2.5 2000 LI	female	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 2000 contacts	1

Photographs are not to scale and do not represent detailed images of the respective products.

### EPIC® Tools for contacts-on-reel H-D 1.6 stamped

For inserts and modules of the EPIC<sup>®</sup> rectangular connectors



Article number	Article description	Version	Note	Pieces / PU
EPIC <sup>®</sup> Tools for co	ntacts-on-reel H-D 1.6 stampe	ed		
11153500	Crimping tool	In tool case	Without crimping dies	1
11153600	Crimping dies	For crimping tool 11153500	For ribbon contacts: H-D 1.6 stamped (0.14 - 0.5 mm <sup>2</sup> )	1
11153700	Crimping dies	For crimping tool 11153500	For ribbon contacts: H-D 1.6 stamped (0.5 - 1.5 mm <sup>2</sup> ), MC 2.5 stamped (0.5 - 1.5 mm <sup>2</sup> )	1
11153800	Crimping dies	For crimping tool 11153500	For ribbon contacts: H-D 1.6 stamped (1.5 - 2.5 mm <sup>2</sup> ), MC 2.5 stamped (1.5 - 2.5 mm <sup>2</sup> )	1
11161000	Removal tool		For contacts: H-D 1.6 machined, H-D 1.6 stamped	1

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

### **EPIC® H-BE 2.5 machined contacts**

For inserts and modules of the EPIC® rectangular connectors



**Technical data** 

E T I M

Classification

ETIM 5.0 Class-ID: EC000796

Contact for industrial connectors

ETIM 5.0 Class-Description:



 Choice of high quality gold or silver plated contacts

# RONIC

- Pneumatic crimping machine for single contacts refer to main catalogue
- Crimping tool for single contacts refer to main catalogue
   Crimping dies for single contacts

Suitable tools

- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue

Article number	Article description	Contact type	Conductor cross-section (mm <sup>2</sup> )	Cross-section ratio	Surface	Stripping length (mm)	Pieces / PU
Contacts						· · · ·	
11190000	H-BE 2.5 machined	male	0.50	0	Ag	7.4	100
11195000	H-BE 2.5 machined	female	0.50	0	Ag	7.4	100
11190100	H-BE 2.5 machined	male	0.75 - 1.00	1	Ag	7.4	100
11195100	H-BE 2.5 machined	female	0.75 - 1.00	1	Ag	7.4	100
11190200	H-BE 2.5 machined	male	1.50	2	Ag	7.4	100
11195200	H-BE 2.5 machined	female	1.50	2	Ag	7.4	100
11190300	H-BE 2.5 machined	male	2.50	3	Ag	7.4	100
11195300	H-BE 2.5 machined	female	2.50	3	Ag	7.4	100
11190400	H-BE 2.5 machined	male	4.00	0	Ag	7.4	100
11195400	H-BE 2.5 machined	female	4.00	0	Ag	7.4	100
Contacts							
11190301	H-BE 2.5 machined	male	0.14 - 0.37	2	Au	7.4	100
11190302	H-BE 2.5 machined	female	0.14 - 0.37	2	Au	7.4	100
11192000	H-BE 2.5 machined	male	0.50	0	Au	7.4	100
11197000	H-BE 2.5 machined	female	0.50	0	Au	7.4	100
11192100	H-BE 2.5 machined	male	0.75 - 1.00	1	Au	7.4	100
11197100	H-BE 2.5 machined	female	0.75 - 1.00	1	Au	7.4	100
11192200	H-BE 2.5 machined	male	1.50	2	Au	7.4	100
11197200	H-BE 2.5 machined	female	1.50	2	Au	7.4	100

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Tools for contacts H-BE 2.5 machined

For inserts and modules of the EPIC® rectangular connectors



Article number	Article description	Version	Note	Pieces / PU
Tools				
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147100	Crimping dies	For crimping tools	For contacts: H-D 1.6 machined,	1
		11147000, 11147001	H-BE 2.5 machined, MC 2.5 machined	
11147200	Locator	For crimping tools	For contacts: H-D 1.6 machined, H-BE machined, MC 2.5 machined, MC 2.5	1
		11147000, 11147001	stamped	
11182500	Removal tool		For contacts: H-BE 2.5 machined	1

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Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

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### **EPIC® MC 2.5 machined contacts**

For inserts and modules of the EPIC® rectangular connectors

#### Info

• Choice of high quality gold or silver plated contacts



#### Suitable tools

- Pneumatic crimping machine for single contacts refer to main catalogue
- Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue

#### Technical data

Classification ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors **HITRONIC®** 

Article number	Article description	Version	Contact type	Conductor cross-section (mm <sup>2</sup> )	Cross-section ratio	Surface	Stripping length (mm)	Pieces / PU
Contacts								
1121300C	MC 2.5 machined	male		0.50		Ag	7.8	100
1121800C	MC 2.5 machined		female	0.50		Ag	7.8	100
1121310C	MC 2.5 machined	male		1.00	1	Ag	7.8	100
1121810C	MC 2.5 machined		female	1.00	1	Ag	7.8	100
1121320C	MC 2.5 machined	male		1.50	2	Ag	7.8	100
1121820C	MC 2.5 machined		female	1.50	2	Ag	7.8	100
1121330C	MC 2.5 machined	male		2.50	3	Ag	7.8	100
1121830C	MC 2.5 machined		female	2.50	3	Ag	7.8	100
1121340C	MC 2.5 machined	male		4.00		Ag	7.8	100
1121840C	MC 2.5 machined		female	4.00		Ag	7.8	100

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Tools for contacts MC 2.5 machined

For inserts and modules of the EPIC® rectangular connectors



Article number	Article description	Version	Note	Pieces / PU
Tools				-
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147100	Crimping dies	For crimping tools	For contacts: H-D 1.6 machined,	1
		11147000, 11147001	H-BE 2.5 machined, MC 2.5 machined	
11147200	Locator	For crimping tools	For contacts: H-D 1.6 machined, H-BE machined, MC 2.5 machined, MC 2.5 stamped	1
		11147000, 11147001		
11171000	Removal tool		For contacts: MC 2.5 machined	1

**ETHERLINE®** 

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools



Info

plated contacts

crimp

• Choice of high quality gold or silver

• 2 crimp areas for wire and insulation



### EPIC® MC 2.5 stamped contacts

For inserts and modules of the EPIC® rectangular connectors



- Suitable tools • Pneumatic crimping machine for single contacts refer to main catalogue
- Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue

11147001

- Removal tool refer to main catalogue
- **Technical data**



Article number	Article description	Contact type	Conductor cross-section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Pieces / PU
Contacts						
11201000	MC 2.5 stamped	male	0.50 - 1.50	Ag	3.5 + 0.5	100
11205000	MC 2.5 stamped	female	0.50 - 1.50	Ag	3.5 + 0.5	100
11202000	MC 2.5 stamped	male	1.50 - 2.50	Ag	3.5 + 0.5	100
11206000	MC 2.5 stamped	female	1.50 - 2.50	Ag	3.5 + 0.5	100

Photographs are not to scale and do not represent detailed images of the respective products.

### EPIC<sup>®</sup> Tools for contacts MC 2.5 stamped

For inserts and modules of the EPIC® rectangular connectors



with the crimping tool 11147000 and the

crimping machine 11147001

Article number	Article description	Version	Note	Pieces / PU
Tools			· · · · · · · · · · · · · · · · · · ·	
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147180	Crimping dies	For crimping tools 11147000, 11147001	For contacts: H-D 1.6 stamped (0.5 - 1.5 mm <sup>2</sup> ), MC 2.5 stamped (0.5 - 1.5 mm <sup>2</sup> )	1
11147190	Crimping dies	For crimping tools	For contacts: H-D 1.6 stamped (1.5 - 2.5 mm <sup>2</sup> ), MC 2.5 stamped (1.5 - 2.5 mm <sup>2</sup> )	1
11147300	Locator		For contacts: H-D 1.6 machined, H-D 1.6 stamped	1
11160000	Removal tool		For contacts: MC 2.5 stamped	1

Photographs are not to scale and do not represent detailed images of the respective products.

**HITRONIC®** 

### APP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

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### EPIC® MC 2.5 stamped contacts-on-reel

For inserts and modules of the EPIC® rectangular connectors

#### Info

- · Choice of high quality gold or silver plated contacts
- · For automated production with crimping machine
- 2 crimp areas for wire and insulation crimp

#### Suitable tools

- Crimping tool for single contacts refer to main catalogue
- · Crimping dies for single contacts refer to main catalogue
- Locator refer to main catalogue
- Removal tool refer to main catalogue
- **Technical data**
- Classification ¢ etim ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description:
  - Contact for industrial connectors



EPIC®

Article number	Article description	Contact type	Conductor cross-section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Note	Pieces / PU
Contacts							
11208000	MC SCBG AG 0.5-1.5 200 LI	male	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 200 contacts	1
11209000	MC BCBG AG 0.5-1.5 200 LI	female	0.50 - 1.50	Ag	3.5 + 0.5	1 reel (PU) = 200 contacts	1
11208500	H-D SCBG AG 1.5-2.5 100 LI	male	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 100 contacts	1
11209500	MC BCBG AG 1.5-2.5 100 LI	female	1.50 - 2.50	Ag	3.5 + 0.5	1 reel (PU) = 100 contacts	1

Photographs are not to scale and do not represent detailed images of the respective products.

### EPIC® Tools for contacts-on-reel MC 2.5 stamped

For inserts and modules of the EPIC® rectangular connectors

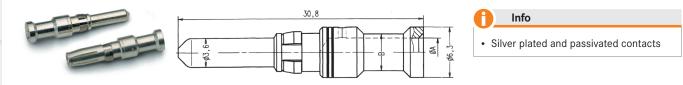


Article number	Article description	Version	Note	Pieces / PU		
EPIC <sup>®</sup> Tools for contacts-on-reel MC 2.5 stamped						
11153500	Crimping tool	In tool case	Without crimping dies	1		
11153700	Crimping dies	For crimping tool 11153500	For ribbon contacts: H-D 1.6 stamped (0.5 - 1.5 mm <sup>2</sup> ), MC 2.5 stamped (0.5 - 1.5 mm <sup>2</sup> )	1		
11153800	Crimping dies	For crimping tool 11153500	For ribbon contacts: H-D 1.6 stamped (1.5 - 2.5 mm <sup>2</sup> ), MC 2.5 stamped (1.5 - 2.5 mm <sup>2</sup> )	1		
11160000	Removal tool		For contacts: MC 2.5 stamped	1		

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

### **EPIC® Modular 3.6 machined contacts**

For inserts and modules of the EPIC® rectangular connectors



ETIM 5.0 Class-ID: EC000796

Contact for industrial connectors

ETIM 5.0 Class-Description:

**Technical data** 

ЕТІМ

Classification

#### Suitable tools

- Pneumatic crimping machine for single contacts refer to main catalogue
- · Crimping tool for single contacts refer to main catalogue
- Crimping dies for single contacts refer to main catalogue
- · Locator refer to main catalogue
- · Removal tool refer to main catalogue

Article number	Article description	Contact type	Conductor cross-section (mm <sup>2</sup> )	Surface	Stripping length (mm)	Pieces / PU
Contacts						
1121070C	MC 3.6 machined	male	1.50	Ag	10.0	100
1121570C	MC 3.6 machined	female	1.50	Ag	10.0	100
1121060C	MC 3.6 machined	male	2.50	Ag	10.0	100
1121560C	MC 3.6 machined	female	2.50	Ag	10.0	100
1121000C	MC 3.6 machined	male	4.00	Ag	10.0	100
1121500C	MC 3.6 machined	female	4.00	Ag	10.0	100
1121010C	MC 3.6 machined	male	6.00	Ag	10.0	100
1121510C	MC 3.6 machined	female	6.00	Ag	10.0	100
1121020C	MC 3.6 machined	male	10.00	Ag	10.0	100
1121520C	MC 3.6 machined	female	10.00	Ag	10.0	100

Photographs are not to scale and do not represent detailed images of the respective products.

### EPIC® Tools for contacts MC 3.6 machined

For inserts and modules of the EPIC® rectangular connectors



#### **Product features**

Locator and crimping dies fit together with the crimping tool 11147000 and the crimping machine 11147001

Article number	Article description	Version	Note	Pieces / PU
Tools		· · · · · · · · · · · · · · · · · · ·		
11147000	Crimping tool	In tool case	without crimping dies, without locator	1
11147001	Crimping machine	Pneumatic, 5 - 10 bar	without crimping dies, without locator	1
11147110	Crimping dies	For crimping tools 11147000, 11147001	For contacts: MC 3.6 machined (1.5 - 2.5 mm <sup>2</sup> )	1
11147120	Crimping dies	For crimping tools 11147000, 11147001	For contacts: MC 3.6 machined (4.0 - 10 mm <sup>2</sup> )	1
11147210	Locator	For crimping tools 11147000, 11147001	For contacts: MC 3.6 machined	1
11171100	Removal tool		For contacts: MC 3.6 machined	1

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11147001

Rectangular connectors • EPIC<sup>®</sup> Contacts + tools

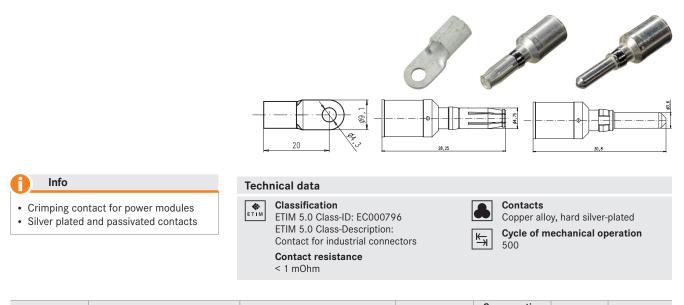
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## EPIC® Modular 3.6 machined contacts 16 mm<sup>2</sup>

For inserts and modules of the  $\ensuremath{\mathsf{EPIC}}\xspace^{\ensuremath{\$}}$  rectangular connectors



Article number	Article description	Inserts	Version	Cross-section (mm <sup>2</sup> )	Surface	Pieces / PU
Contacts						
44424014	EPIC <sup>®</sup> Modular SCEM AG 16 D=3.6	Crimping contacts for HC2 modules	male	16	Ag	20
44424015	EPIC <sup>®</sup> Modular BCEM AG 16 D=3.6	Crimping contacts for HC2 modules	female	16	Ag	20
<b>Ring lug for Prote</b>	ction earth					
44424029	EPIC <sup>®</sup> KB 16-4R	Ring cable lug to connect a 16mm <sup>2</sup> protective wire to the module frame	Ringlug	16		10
Crimping die for contacts of HC2 modules						
11147111	EPIC <sup>®</sup> TOOL DIE D=3.6/16 mm <sup>2</sup>	Crimping dies		16		1

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**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Rectangular connectors • EPIC® Contacts + tools

### Modular 6.0 machined contacts

For inserts and modules of the EPIC® rectangular connectors



Klauke type EK 60/22-L

ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors



Copper alloy, hard silver-plated

Cycle of mechanical operation 500

**Contact resistance** 

< 1 mOhm

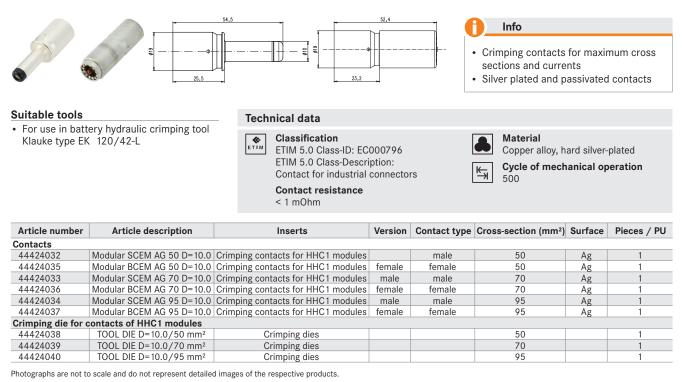
Article number	Article description	Inserts	Version	Cross-section (mm <sup>2</sup> )	Cross-section ratio	Surface	Pieces / PU
Contacts							
44424019	Modular SCEM AG 16 D=6.0	Crimping contacts for HHC2 modules	male	16	1	Ag	20
44424022	Modular BCEM AG 16 D=6.0	Crimping contacts for HHC2 modules	female	16	1	Ag	20
44424020	Modular SCEM AG 25 D=6.0	Crimping contacts for HHC2 modules	male	25	2	Ag	20
44424023	Modular BCEM AG 25 D=6.0	Crimping contacts for HHC2 modules	female	25	2	Ag	20
44424021	Modular SCEM AG 35 D=6.0	Crimping contacts for HHC2 modules	male	35	3	Ag	20
44424024	Modular BCEM AG 35 D=6.0	Crimping contacts for HHC2 modules	female	35	3	Ag	20
Crimping die for o	contacts of HHC2 modules						
44424025	TOOL DIE D=6.0/16 mm <sup>2</sup>	Crimping dies		16			1
44424026	TOOL DIE D=6.0/25 mm <sup>2</sup>	Crimping dies		25			1
44424027	TOOL DIE D=6.0/35 mm <sup>2</sup>	Crimping dies		35			1

\* Trade product, no Lapp product

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Modular 10.0 machined contacts

For inserts and modules of the EPIC® rectangular connectors



### APP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® Contacts + tools

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### **EPIC® MC Coax-Contacts**

For inserts and modules of the EPIC® rectangular connectors

#### Info

- Selection between 50 and 75 ohms contacts
- · All contacts are high quality gold plated

#### Product features

· Solder termination: the inner conductor and the outer sleeve of the COAX cable are terminated by soldering

#### Suitable cables

- UNITRONIC® VIDEO FLAT refer to main catalogue
- UNITRONIC® VIDEO RL BK refer to main catalogue
- UNITRONIC<sup>®</sup> Combi cable refer to main catalogue

#### Suitable tools

· Pneumatic crimping machine for single contacts refer to main catalogue

· Crimping tool for single contacts refer to main catalogue

- Crimping dies for single contacts refer to main catalogue
- · Locator refer to main catalogue
- · Removal tool refer to main catalogue

**Technical data** 

Classification **eti** M

ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors

Article number	Article description	Contact type	Surface	For cable type	Pieces / PU				
Solder terminatio	Solder termination								
44429018	EPIC <sup>®</sup> MC SLEM 500hm RG58CU	male	Au	RG 58 CU	10				
44429017	EPIC <sup>®</sup> MC BLEM 500hm RG58CU	female	Au	RG 58 CU	10				
44429020	EPIC <sup>®</sup> MC SLEM 750hm RG180BU	male	Au	RG 180 BU	10				
44429019	EPIC <sup>®</sup> MC BLEM 750hm RG180BU	female	Au	RG 180 BU	10				
44429022	EPIC <sup>®</sup> MC SLEM 750hm RG187AU	male	Au	RG 187 AU	10				
44429021	EPIC <sup>®</sup> MC BLEM 750hm RG187AU	female	Au	RG 187 AU	10				
Solder/crimp terr	nination								
11214200	MC SLEM COAX MALE	male	Au	RG 58	1				
11219200	MC BLEM COAX FEMALE	female	Au	RG 58	1				

Photographs are not to scale and do not represent detailed images of the respective products.

### **EPIC®** Tools for contacts MC Coax

For inserts and modules of the EPIC® rectangular connectors





Article number Article description Version Note Pieces / PU Tools 11147000 Crimping tool In tool case without crimping dies, without locator 11147001 Crimping machine Pneumatic, 5 - 10 bar without crimping dies, without locator 11147130 Crimping dies For crimping tools For coax-contacts 11214200, 11219200 11147000, 11147001 11171100 Removal tool For contacts: MC 3.6 machined

Locator and crimping dies fit together with the crimping tool 11147000 and the

crimping machine 11147001

**Product features** 

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Rectangular connectors • EPIC® H-A 3 Housings



VDE c **FL** us EPIC<sup>®</sup> H-A 3 MTG Innovative metal and plastic housing design Pg/M Info · Small, rugged metal housing · Protection rating UL50E tested EPIC<sup>®</sup> H-A 3 TG Innovative metal and plastic housing design Pg/M Info · Lightweight, chemically resistant plastic 50 housing Protection rating UL50E tested □26,8 Benefits **Technical data** Housing in plastic or metal version. For **Protection rating** Classification power supply in the smallest possible **еті**м ||P| ETIM 5.0 Class-ID: EC000437 IP 65 (latched) space ETIM 5.0 Class-Description: Housing NEMA 250, UL50E: 12, 4 (latched) for industrial connectors Application range VDE-tested Certified production control: Material · Machine and equipment manufacturing EPIC® H-A 3 MTG VDE-REG.no.: B437 Control engineering Housing: powder-coated zinc die-UL-tested: · Electronic laboratory casting, grey UL File Number: E75770 Lever: zinc-plated steel **Temperature range Product features** EPIC<sup>®</sup> H-A 3 TG -40°C to +100°C, • Hood Housing: grey thermoplastic, black short-term up to +125°C · Bolts for single lever Lever: zinc-plated steel · Straight cable entry · Versions with / without cable gland Suitable inserts Refer to Selection Table A10 to select the required inserts and housings Dimensions incl. Pieces / PU Cable clamping Article number Article description Μ PG Material Colour Cable gland cable gland range H-A housing: hood (straight cable entry) 10512100 H-A 3 MTgv Zinc die-casting 10 11 grey 10426500 H-A 3 MTgv 6.5 - 12.0 57 10 11 Zinc die-casting grey yes 19512100 H-A 3 MTgv M20 20 10 Zinc die-casting grey 19426500 H-A 3 MTgv M20 20 3.0 - 13.5 57 10 Zinc die-casting yes grey EPIC® H-A 3 TG 10425500 H-A 3 Tgv Thermoplastic black 10 10426000 H-A 3 Tgv 11 Thermoplastic 10 grey

Photographs are not to scale and do not represent detailed images of the respective products.

20

20

11

11

Thermoplastic

Thermoplastic

Thermoplastic

Thermoplastic

#### Accessories

#### EPIC<sup>®</sup> H-A 3 MTG

10426700

10426400

19425500

19426000

• EPIC® Protective cover H-A 3 refer to page 184

H-A 3 Tgv

H-A 3 Tgv

H-A 3 Tgv M20

H-A 3 Tgv M20

- SKINTOP® MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

#### EPIC® H-A 3 TG

- EPIC® Protective cover H-A 3 refer to page 184
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

black

grey

black

grey

yes

yes

6.5 - 12.0

6.5 - 12.0

62

62

10

10

10

10

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors  $\mbox{\ }\mbox{\ }\mbox\ }\mbox{\ }\mbox{\ }\mbox{\ }\mbox{\ }\mbo$ 

### EPIC<sup>®</sup> H-A 3 MTS

Innovative metal and plastic housing design



- Small, rugged metal housing
- Protection rating UL50E tested



# EPIC<sup>®</sup> H-A 3 TS

Innovative metal and plastic housing design

**HITRONIC®** 

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#### Info

- Lightweight, chemically resistant plastic housing
- Protection rating UL50E tested

#### Benefits

 Housing in plastic or metal version. For power supply in the smallest possible space

#### Application range

- Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### Product features

- Hood
- · Bolts for single lever
- Side cable entry
- Versions with / without cable gland

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

36 Pg/M			( used)	Century
<u>A</u> 26,8	36	10	-	

#### **Technical data**





Housing: powder-coated zinc diecasting, grey Lever: zinc-plated steel EPIC® H-A 3 TS Housing: grey thermoplastic, black Lever: zinc-plated steel



NEMA 250, UL50E: 12, 4 (latched)

VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested:

UL File Number: E75770

**Temperature range** -40°C to +100°C, short-term up to +125°C

Article number	Article description	м	PG	Material	Colour	Cable gland	Cable clamping range	Dimensions incl. cable gland	Pieces / PU
H-A housing: hood	d (side cable entry)								
10512300	H-A 3 MTs		11	Zinc die-casting	grey				10
10427500	H-A 3 MTs		11	Zinc die-casting	grey	yes	6.5 - 12.0	43	10
19512300	H-A 3 Ts M20	20		Zinc die-casting	grey				10
19427500	H-A 3 Ts M20	20		Zinc die-casting	grey	yes	3.0 - 13.5	43	10
EPIC <sup>®</sup> H-A 3 TS									
10427300	H-A 3 Ts		11	Thermoplastic	black				10
10427000	H-A 3 Ts		11	Thermoplastic	grey				10
10620600	H-A 3 Ts		11	Thermoplastic	black	yes	6.5 - 12.0	48	10
10427100	H-A 3 Ts		11	Thermoplastic	grey	yes	6.5 - 12.0	48	10
19427300	H-A 3 Ts M20	20		Thermoplastic	black				10
19427000	H-A 3 Ts M20	20		Thermoplastic	grey				10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

#### EPIC<sup>®</sup> H-A 3 MTS

- EPIC<sup>®</sup> Protective cover H-A 3 refer to page 184
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® H-A 3 TS
- EPIC<sup>®</sup> Protective cover H-A 3 refer to page 184
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

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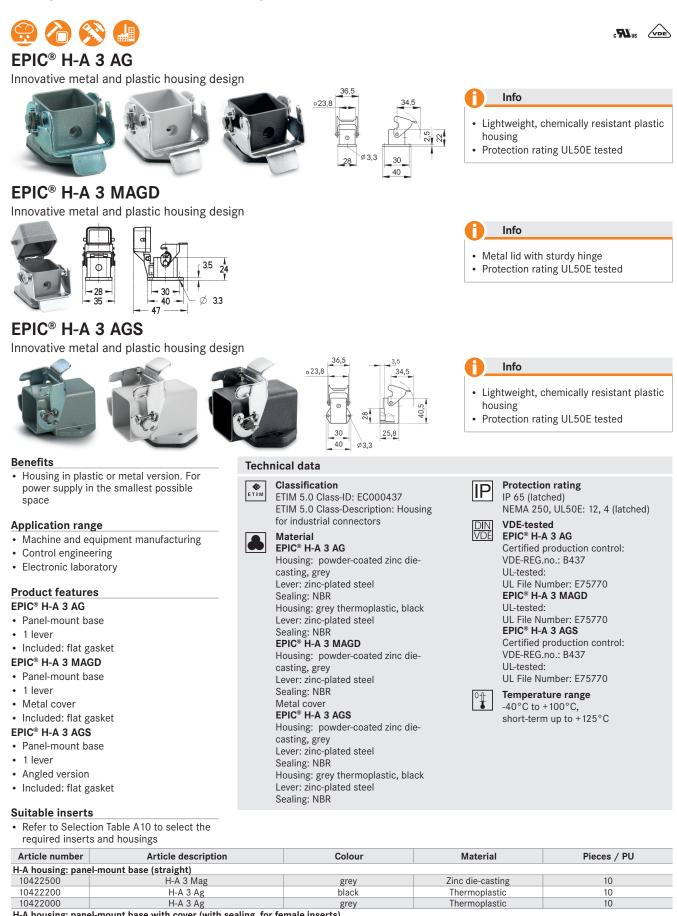
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Rectangular connectors • EPIC® H-A 3 Housings



10422000	II-A 3 Ag	grey	mernopiastic	10
H-A housing: pan	el-mount base with cover (with sealing, for fe	male inserts)		
44429015	H-A 3 MAGD	grey	Aluninium die-casting	10
H-A housing: pan	el-mount base (angled)			
10423500	H-A 3 Mags	grey	Zinc die-casting	10
10423100	H-A 3 Ags	black	Thermoplastic	10
10423000	H-A 3 Ags	grey	Thermoplastic	10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• EPIC® Protective cover H-A 3 refer to page 184

### LAPP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-A 3 Housings

Info

housing

### EPIC<sup>®</sup> H-A 3 AGSV

Innovative metal and plastic housing design





· Lightweight, chemically resistant plastic housing

Lightweight, chemically resistant plastic

Protection rating UL50E tested

Protection rating UL50E tested

#### **Benefits**

· Housing in plastic or metal version. For power supply in the smallest possible space

#### Application range

- · Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

#### **Product features**

- EPIC<sup>®</sup> H-A 3 AGSV
- · Surface-mount base
- 1 lever
- 1 cable entry
- · Versions with / without cable gland

### EPIC® H-A 3 AGSV open bottom

- · Surface-mount base
- 1 lever
- 2 cable entries
- · Housing type: with open base
- · Included: flat gasket

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Material	Colour	Cable gland	Cable clamping range	Dimensions incl. cable gland	Pieces / PU
H-A housing: surf	ace-mount base								
10512700	H-A 3 MAgsv		11	Zinc die-casting	grey			51.5	10
10424000	H-A 3 Agsv		11	Thermoplastic	grey			56	10
10424500	H-A 3 MAgsv		11	Zinc die-casting	grey	yes	6.5 - 12.0	57.5	10
10424200	H-A 3 Agsv		11	Thermoplastic	grey	yes	6.5 - 12.0	65	10
19512700	H-A 3 MAgsv M20	20		Zinc die-casting	grey			54.5	10
19421900	H-A 3 Agsv M20	20		Thermoplastic	grey	yes	3.0 - 13.5	56	10
19424500	H-A 3 MAgsv M20	20		Zinc die-casting	grey	yes	3.0 - 13.5	60.5	10
H-A housing: surf	ace-mount base (with	n open l	base)						
19517200	H-A 3 MAgsv M20	20		Zinc die-casting	grey				10
19515200	H-A 3 Agsv M20	20		Thermoplastic	grey				10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

#### EPIC<sup>®</sup> H-A 3 AGSV

- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® ST refer to main catalogue
- SKINTOP® ST-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184

#### EPIC® H-A 3 AGSV open bottom

- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> ST refer to main catalogue
- SKINTOP® ST-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184



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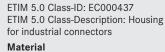
# EPIC<sup>®</sup> H-A 3 AGSV open bottom

Innovative metal and plastic housing design

D23.8 ø3,3



#### Classification ETIM



Housing: powder-coated zinc diecasting, grey Lever: zinc-plated steel Sealing: NBR Housing: grey thermoplastic, black Lever: zinc-plated steel Sealing: NBR



**Protection rating** IP IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

> VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770



Temperature range -40°C to +100°C, short-term up to +125°C Rectangular connectors • EPIC® H-A 3 Housings

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### EPIC<sup>®</sup> H-A 3 MTGVB

Innovative metal and plastic housing design



### EPIC<sup>®</sup> H-A 3 TGVB

Innovative metal and plastic housing design



**Technical data** 

**∲** E T I M

Classification

Material

casting, grey

ETIM 5.0 Class-ID: EC000437

for industrial connectors

EPIC® H-A 3 MTGVB

Lever: zinc-plated steel

Lever: zinc-plated steel

EPIC<sup>®</sup> H-A 3 TGVB

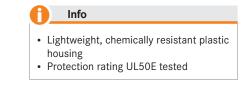
ETIM 5.0 Class-Description: Housing

Housing: powder-coated zinc die-

Housing: grey thermoplastic, black

## Info · Small, rugged metal housing

• Protection rating UL50E tested



**Protection rating** 

VDE-REG.no.: B437

**Temperature range** 

-40°C to +100°C,

NEMA 250, UL50E: 12, 4 (latched)

Certified production control:

UL File Number: E75770

short-term up to +125°C

IP 65 (latched)

VDE-tested

UL-tested:

IP

#### Benefits

· Housing in plastic or metal version. For power supply in the smallest possible space

#### Application range

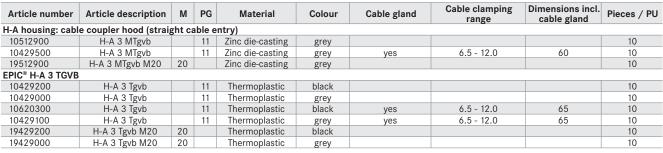
- · Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

#### Product features

- · Cable coupler hood
- 1 lever
- · Straight cable entry
- · Versions with / without cable gland

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings



Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- EPIC<sup>®</sup> H-A 3 MTGVB
- EPIC® Protective cover H-A 3 refer to page 184
- SKINTOP® MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue
- EPIC® H-A 3 TGVB
- EPIC® Protective cover H-A 3 refer to page 184
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

### LAPP GROUP

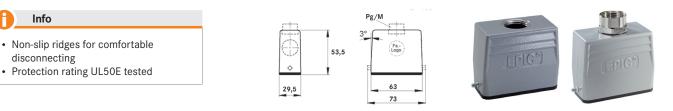
### APP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-A 10 Housings

### EPIC<sup>®</sup> H-A 10 TG

These connectors are attractive because of their compact housing.



### EPIC<sup>®</sup> H-A 10 TGH

These connectors are attractive because of their compact housing.



- · Non-slip ridges for comfortable disconnecting
- More interior space for wiring
- Protection rating UL50E tested

#### **Benefits**

· Small and space-saving for narrow available space

#### Application range

- Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### Product features

- EPIC® H-A 10 TG
- · Hood, low version
- · Bolts for single lever
- Straight cable entry
- · Versions with / without neck

#### EPIC<sup>®</sup> H-A 10 TGH

- · Hood, high version
- Bolts for single lever
- Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A 10 to select the required inserts and housings

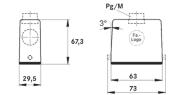
Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: hood	l (straight cable entry, bolts for sing	le lever)			
10446000	H-A 10 TG 13,5		13.5	yes	5
10446100	H-A 10 TG 16		16	yes	5
19446000	H-A 10 TG M20	20			5
19446100	H-A 10 TG M25	25			5
10456100					
H-A housing: hood	l (straight cable entry, bolts for sing	le lever, high version)			
70460200	H-A 10 TGH 16		16	yes	5
70460400	H-A 10 TGH 21		21	yes	5
79460200	H-A 10 TGH M20	20			5
79460400	H-A 10 TGH M25	25			5

For current information see: www.lappgroup.com

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#### Accessories

- SKINTOP® for industrial connectors refer to main catalogue
- SKINTOP® MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184







- Classification **E**T I M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
  - Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



**Protection rating** 

UL-tested: UL File Number: E75770

-40°C to +100°C, short-term up to +125°C

**Temperature range** 

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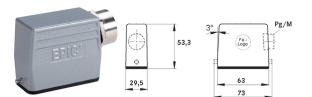
**HITRONIC®** 



**Technical data** 

Rectangular connectors • EPIC® H-A 10 Housings

These connectors are attractive because of their compact housing.



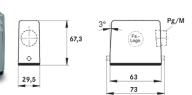
Info · Non-slip ridges for comfortable disconnecting · Protection rating UL50E tested

### EPIC<sup>®</sup> H-A 10 TSH

These connectors are attractive because of their compact housing.







Classification

Ľ	Info
•	Non-slip ridges for comfortable disconnecting More interior space for wiring
•	Protection rating UL50E tested

#### Benefits

· Small and space-saving for narrow available space

#### Application range

- Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### **Product features**

#### EPIC® H-A 10 TS

- · Hood, low version
- · Bolts for single lever
- Side cable entry
- · Versions with neck

#### EPIC® H-A 10 TSH

- · Hood, high version
- · Bolts for single lever
- · Side cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: hood	d (side cable entry, bolts for single le	ver)			
10445000	H-A 10 TS 16		16	yes	5
10445500	H-A 10 TS 21		21	yes	5
19445000	H-A 10 TS M20	20		yes	5
19445500	H-A 10 TS M25	25		yes	5
H-A housing: hood	d (side cable entry, bolts for single le	ver, high version)			
70462200	H-A 10 TSH 16		16	yes	5
70462400	H-A 10 TSH 21		21	yes	5
79462200	H-A 10 TSH M20	20			5
79462400	H-A 10 TSH M25	25			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184



- ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material
- Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



NEMA 250, UL50E: 12, 4 (latched)



Certified production control: VDE-REG.no.: B437 UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

**ETHERLINE®** 

**HITRONIC®** 

LAPP GROUP

### APP GROUP

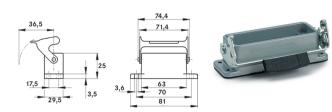
### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-A 10 Housings

### EPIC<sup>®</sup> H-A 10 AG-LB

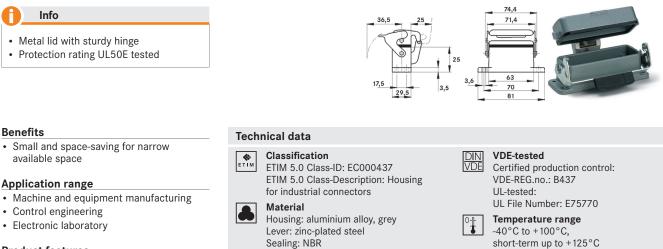
These connectors are attractive because of their compact housing.





### EPIC<sup>®</sup> H-A 10 AD-LB

These connectors are attractive because of their compact housing.



## · Electronic laboratory

available space

Application range

· Control engineering

**Benefits** 

Info

· Metal lid with sturdy hinge

· Protection rating UL50E tested

· Small and space-saving for narrow

#### Product features EPIC® H-A 10 AG-LB

- · Panel-mount base
- · Single lever

### · Included: flat gasket

- EPIC® H-A 10 AD-LB
- · Panel-mount base
- · Single lever
- · Metal cover
- · Included: flat gasket

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Pieces / PU
H-A housing: pane	el-mount base (single lever)	
10442000	H-A 10 AG-LB	5
H-A housing: pane	el-mount base (cover, single lever)	·
70444000	H-A 10 AD-LB	5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

#### EPIC® H-A 10 AG-LB

• EPIC® Protective cover H-A refer to page 184

#### EPIC® H-A 10 AD-LB

• EPIC<sup>®</sup> Protective cover H-A refer to page 184

Sealing: NBR

NEMA 250, UL50E: 12, 4 (latched)

**Protection rating** 

IP 65 (latched)

IP

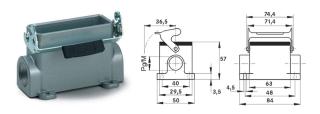
UNITRONIC®

EPIC®

Rectangular connectors • EPIC® H-A 10 Housings

### EPIC<sup>®</sup> H-A 10 SGR-LB

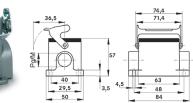
These connectors are attractive because of their compact housing.



### EPIC<sup>®</sup> H-A 10 SGRL-LB

These connectors are attractive because of their compact housing.





#### Benefits

· Small and space-saving for narrow available space

#### **Application range**

- Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

#### Product features

- EPIC® H-A 10 SGR-LB
- · Surface-mount base
- · Single lever
- 1 cable entry

#### EPIC® H-A 10 SGRL-LB

- · Surface-mount base
- · Single lever
- 2 cable entries

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

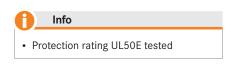
Article number	Article description	Μ	PG	Pieces / PU
H-A housing: surfa	ace-mount base (1 cable entry, single lever)			
10448100	H-A 10 SGR-LB 16		16	5
10448000	H-A 10 SGR-LB 21		21	5
19448100	H-A 10 SGR-LB M20	20		5
19448000	H-A 10 SGR-LB M25	25		5
H-A housing: surfa	ace-mount base (2 cable entries, single lever)	l.		
10450100	H-A 10 SGRL-LB 16		16	5
19450100	H-A 10 SGRL-LB M20	20		5

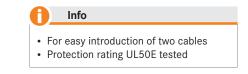
Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

102

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184





1	Classification ETIM 5.0 Class-ID: EC000437
<u>ا</u>	ETIM 5.0 Class-ID: EC000437
	ETIM 5.0 Class-Description: Housing
	for industrial connectors



lΡ

ET I M

**Technical data** 

Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

#### **Protection rating** IP 65 (latched)

NEMA 250, UL50E: 12, 4 (latched)



UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

**ETHERLINE®** 

**HITRONIC®** 

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**B LAPP GROUP** 

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VDE

### LAPP GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-A 10 Housings

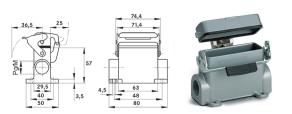


### EPIC<sup>®</sup> H-A 10 SDR-LB

These connectors are attractive because of their compact housing.

#### Info

- · Metal lid with sturdy hinge
- Protection rating UL50E tested



### EPIC<sup>®</sup> H-A 10 SDRL-LB

These connectors are attractive because of their compact housing.

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

#### Info

- · Metal lid with sturdy hinge
- For easy introduction of two cables
- Protection rating UL50E tested

#### **Benefits**

· Small and space-saving for narrow available space

#### Application range

- · Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### Product features

- EPIC® H-A 10 SDR-LB · Surface-mount base
- · Single lever
- 1 cable entry
- Metal cover

### EPIC® H-A 10 SDRL-LB

- · Surface-mount base
- · Single lever
- 2 cable entries
- · Metal cover

#### Suitable inserts

• Refer to Selection Table A 10 to select the required inserts and housings

Article number	Article description	м	PG	Pieces / PU
H-A housing: surface	ce-mount base (cover, 1 cable entry, single	lever)		
70455200	H-A 10 SDR-LB 16		16	5
70455400	H-A 10 SDR-LB 21		21	5
79455200	H-A 10 SDR-LB M20	20		5
79455400	H-A 10 SDR-LB M25	25		5
H-A housing: surface	ce-mount base (cover, 2 cable entries, single	e lever)		
70456200	H-A 10 SDRL-LB 16		16	5
70456400	H-A 10 SDRL-LB 21		21	5
79456200	H-A 10 SDRL-LB M20	20		5
79456400	H-A 10 SDRI-LB M25	25		5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184



**Technical data** 

Material

Sealing: NBR

IP 65 (latched)

**Protection rating** 

Lever: zinc-plated steel

NEMA 250, UL50E: 12, 4 (latched)

**С**Т I М

IP





DIN VDE Certified production control: VDE-REG.no.: B437 UL-tested:

UL File Number: E75770 Temperature range -40°C to +100°C,

short-term up to +125°C

Rectangular connectors • EPIC® H-A 10 Housings



### EPIC<sup>®</sup> H-A 10 TBF-LB

These connectors are attractive because of their compact housing.





## EPIC<sup>®</sup> H-A 10 TBFH-LB

These connectors are attractive because of their compact housing.





#### **Benefits**

· Small and space-saving for narrow available space

#### **Application range**

- · Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

#### Product features

- EPIC® H-A 10 TBF-LB
- · Cable coupler hood, low version
- · Single lever
- · Straight cable entry
- Versions with / without neck

#### EPIC® H-A 10 TBFH-LB

- Cable coupler hood, high version
- Single lever
- Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: cable	e coupler hood (straight cable entry,	single lever)	^		
10439000	H-A 10 TBF-LB 13,5		13.5	yes	5
70450000	H-A 10 TBF-LB 16		16	yes	5
19439000	H-A 10 TBF-LB M20	20			5
79450000	H-A 10 TBF-LB M25	25			5
H-A housing: cable	e coupler hood (straight cable entry,	single lever, high version	n)		
70450400	H-A 10 TBFH-LB 21		21	yes	5
79450400	H-A 10 TBFH-LB M25	25			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- · SKINTOP® for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

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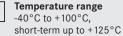
#### **Technical data**







UL File Number: E75770



For current information see: www.lappgroup.com

**ETHERLINE®** 



**еті**м

Material

Sealing: NBR

Classification ETIM 5.0 Class-ID: EC000437

Housing: aluminium alloy, grey

for industrial connectors

Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

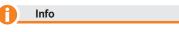
### APP GROUP

### EPIC<sup>®</sup> Industrial connectors

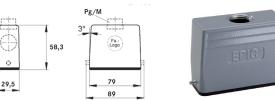
Rectangular connectors • EPIC® H-A 16 Housings

### EPIC<sup>®</sup> H-A 16 TG

These connectors are attractive because of their compact housing.



- · Non-slip ridges for comfortable
- disconnecting
- Protection rating UL50E tested





### EPIC<sup>®</sup> H-A 16 TGH

These connectors are attractive because of their compact housing.



- · Non-slip ridges for comfortable disconnecting
- · More interior space for wiring
- Protection rating UL50E tested

#### **Benefits**

· Small and compact, for applications with high number of contacts

#### Application range

- Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### Product features

- EPIC® H-A 16 TG
- · Hood, low version
- · Bolts for single lever
- Straight cable entry
- · Versions with / without neck

#### EPIC® H-A 16 TGH

- · Hood, high version
- Bolts for single lever
- Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A 10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: hood	d (straight cable entry, bolts for sing	e lever)			
10565000	H-A 16 TG 16		16	yes	5
10565300	H-A 16 TG 21		21	yes	5
19565000	H-A 16 TG M20	20			5
19565300	H-A 16 TG M25	25			5
H-A housing: hood	d (straight cable entry, bolts for sing	e lever, high version)			
70490200	H-A 16 TGH 16		16	yes	5
70490400	H-A 16 TGH 21		21	yes	5
79490200	H-A 16 TGH M20	20			5
79490400	H-A 16 TGH M25	25			5

Photographs are not to scale and do not represent detailed images of the respective products.

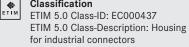
#### Accessories

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184



#### **Technical data**





Material

IP

Housing: powder-coated aluminium alloy, grey

#### Sealing: NBR **Protection rating**

- IP 65 (latched)
- NEMA 250, UL50E: 12, 4 (latched)



UL-tested: UL File Number: E75770

-40°C to +100°C, short-term up to +125°C

Temperature range



# **ETHERLINE® HITRONIC®**

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Rectangular connectors • EPIC® H-A 16 Housings

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### EPIC<sup>®</sup> H-A 16 TS

These connectors are attractive because of their compact housing.

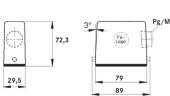


### EPIC<sup>®</sup> H-A 16 TSH

These connectors are attractive because of their compact housing.







**Technical data** 

ET I M

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Classification

Material

alloy, grey Sealing: NBR

**Protection rating** 

IP 65 (latched)

ETIM 5.0 Class-ID: EC000437

Housing: powder-coated aluminium

NEMA 250, UL50E: 12, 4 (latched)

for industrial connectors



· Non-slip ridges for comfortable

• Protection rating UL50E tested

Info

disconnecting

#### **Benefits**

• Small and compact, for applications with high number of contacts

#### **Application range**

- Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

#### **Product features**

#### EPIC® H-A 16 TS

- · Hood, low version
- · Bolts for single lever
- Side cable entry
- · Versions with neck

#### EPIC® H-A 16 TSH

- · Hood, high version
- · Bolts for single lever
- · Side cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: hood	I (side cable entry, bolts for single l	ever)			
10564000	H-A 16 TS 16		16	yes	5
10564500	H-A 16 TS 21		21	yes	5
19564000	H-A 16 TS M20	20		yes	5
19564500	H-A 16 TS M25	25		yes	5
H-A housing: hood	I (side cable entry, bolts for single le	ever, high version)			
70492200	H-A 16 TSH 16		16	yes	5
70492400	H-A 16 TSH 21		21	yes	5
79492200	H-A 16 TSH M20	20			5
79492400	H-A 16 TSH M25	25			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP<sup>®</sup> MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184



VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested:

UL File Number: E75770 Temperature range

```
-40°C to +100°C,
short-term up to +125°C
```

LAPP GROUP

VDE 

# LAPP GROUP

# EPIC<sup>®</sup> Industrial connectors

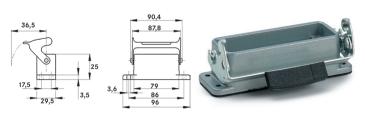
Rectangular connectors  $\mbox{ \bullet EPIC}^{\mbox{\tiny (B)}}$  H-A 16 Housings

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# EPIC® H-A 16 AG-LB

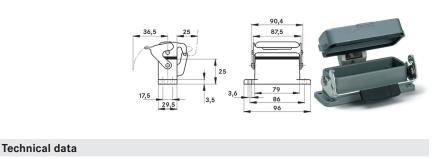
These connectors are attractive because of their compact housing.





# EPIC<sup>®</sup> H-A 16 AD-LB

These connectors are attractive because of their compact housing.



DIN VDE VDE-tested

UL-tested:

Certified production control: VDE-REG.no.: B437

UL File Number: E75770

Temperature range

-40°C to +100°C, short-term up to +125°C

#### Benefits

• Small and compact, for applications with high number of contacts

#### Application range

Info

· Metal lid with sturdy hinge

· Protection rating UL50E tested

- Machine and equipment manufacturing
- Control engineering
- Electronic laboratory

# Product features

EPIC® H-A 16 AG-LB

#### Panel-mount base

· Single lever

#### · Included: flat gasket

- EPIC<sup>®</sup> H-A 16 AD-LB
- · Panel-mount base
- Single lever
- Metal cover
- · Included: flat gasket

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Pieces / PU		
H-A housing: pane				
10462000	H-A 16 AG-LB	5		
H-A housing: panel-mount base (cover, single lever)				
70474000	H-A 16 AD-LB	5		

Classification

Material

Sealing: NBR

IP 65 (latched)

**Protection rating** 

ETIM 5.0 Class-ID: EC000437

Housing: aluminium alloy, grey

NEMA 250, UL50E: 12, 4 (latched)

for industrial connectors

Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

**e**t i M

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Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

# EPIC<sup>®</sup> H-A 16 AG-LB

- + EPIC  $^{\scriptscriptstyle \otimes}$  Flat gaskets for housings H-A and H-B refer to page 182
- + EPIC $^{\otimes}$  Protective cover H-A refer to page 184

# EPIC® H-A 16 AD-LB

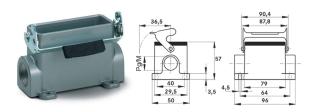
• EPIC<sup>®</sup> Flat gaskets for housings H-A and H-B refer to page 182



**HITRONIC®** 

# EPIC<sup>®</sup> H-A 16 SGR-LB

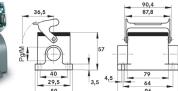
These connectors are attractive because of their compact housing.



# EPIC<sup>®</sup> H-A 16 SGRL-LB

These connectors are attractive because of their compact housing.





# Benefits

• Small and compact, for applications with high number of contacts

# Application range

- Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

# **Product features**

- EPIC® H-A 16 SGR-LB
- · Surface-mount base
- · Single lever
- 1 cable entry

# EPIC<sup>®</sup> H-A 16 SGRL-LB

- · Surface-mount base
- · Single lever
- 2 cable entries

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Μ	PG	Pieces / PU
H-A housing: surfac	ce-mount base (1 cable entry, single lever)			
10567100	H-A 16 SGR-LB 16		16	5
10567000	H-A 16 SGR-LB 21		21	5
19567100	H-A 16 SGR-LB M20	20		5
19567000	H-A 16 SGR-LB M25	25		5
H-A housing: surfac	ce-mount base (2 cable entries, single lever)			
10568100	H-A 16 SGRL-LB 16		16	5
10568000	H-A 16 SGRL-LB 21		21	5
19568100	H-A 16 SGRL-LB M20	20		5
19568000	H-A 16 SGRL-LB M25	25		5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue
- EPIC® Protective cover H-A refer to page 184







Certified production control: VDE-REG.no.: B437 UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C



Material

lΡ

Sealing: NBR

IP 65 (latched)

**Protection rating** 

ETIM 5.0 Class-ID: EC000437

Housing: aluminium alloy, grey

NEMA 250, UL50E: 12, 4 (latched)

for industrial connectors

Lever: zinc-plated steel

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

# 108

**® LAPP GROUP** 

# APP GROUP

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-A 16 Housings

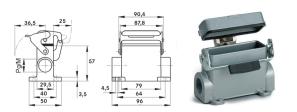


# EPIC<sup>®</sup> H-A 16 SDR-LB

These connectors are attractive because of their compact housing.

# Info

- · Metal lid with sturdy hinge
- Protection rating UL50E tested

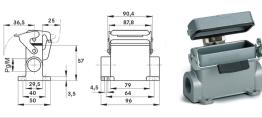


# EPIC<sup>®</sup> H-A 16 SDRL-LB

These connectors are attractive because of their compact housing.



- · Metal lid with sturdy hinge
- For easy introduction of two cables
- Protection rating UL50E tested



VDE-tested

UL-tested:

Certified production control: VDE-REG.no.: B437

UL File Number: E75770

Temperature range

-40°C to +100°C, short-term up to +125°C

#### **Benefits**

• Small and compact, for applications with high number of contacts

# Application range

- · Machine and equipment manufacturing
- · Control engineering
- · Electronic laboratory

# **Product features**

- EPIC® H-A 16 SDR-LB
- · Surface-mount base
- · Single lever
- 1 cable entry

# Metal cover

- EPIC® H-A 16 SDRL-LB
- · Surface-mount base
- Single lever
- 2 cable entries
- · Metal cover

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Pieces / PU
H-A housing: surfa	ace-mount base (cover, 1 cable entry, single	lever)		
70485200	H-A 16 SDR-LB 16		16	5
70485400	H-A 16 SDR-LB 21		21	5
79485200	H-A 16 SDR-LB M20	20		5
79485400	H-A 16 SDR-LB M25	25		5
H-A housing: surfa	ace-mount base (cover, 2 cable entries, singl	e lever)		
70486200	H-A 16 SDRL-LB 16		16	5
70486400	H-A 16 SDRL-LB 21		21	5
79486400	H-A 16 SDRL-LB M25	25		5

**Technical data** 

ET I M

IP

Classification

Material

Sealing: NBR

IP 65 (latched)

**Protection rating** 

ETIM 5.0 Class-ID: EC000437

Housing: aluminium alloy, grey

NEMA 250, UL50E: 12, 4 (latched)

for industrial connectors

Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

# EPIC® H-A 16 SDR-LB

- SKINTOP® for industrial connectors refer to main catalogue
- SKINTOP<sup>®</sup> MS refer to main catalogue
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue

# EPIC® H-A 16 SDRL-LB

- SKINTOP® for industrial connectors refer to main catalogue
- SKINTOP® MS refer to main catalogue
- SKINTOP® MS-M refer to main catalogue

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UNITRONIC®

EPIC®

DIN VDE



c**RL**us

VDE

**ETHERLINE®** 

UNITRONIC®



EPIC<sup>®</sup> H-A 16 TBF-LB

These connectors are attractive because of their compact housing.



0	Info	
• P	Protection rating UL50E tested	

# EPIC<sup>®</sup> H-A 16 TBFH-LB

These connectors are attractive because of their compact housing.





#### **Benefits**

• Small and compact, for applications with high number of contacts

# Application range

- Machine and equipment manufacturing
- Control engineering
- · Electronic laboratory

# Product features

- EPIC® H-A 16 TBF-LB
- · Cable coupler hood, low version
- · Single lever
- · Straight cable entry

# • Versions with / without neck

- EPIC<sup>®</sup> H-A 16 TBFH-LB
- Cable coupler hood, high version
- Single lever
- Straight cable entry
- · Versions with / without neck

# Suitable inserts

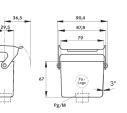
• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: cable	e coupler hood (straight cable entry,	single lever)			
10563000	H-A 16 TBF-LB 16		16	yes	5
19563000	H-A 16 TBF-LB M20	20			5
19563200	H-A 16 TBF-LB M25	25			5
H-A housing: cable	e coupler hood (straight cable entry,	single lever, high version	n)		
70480200	H-A 16 TBFH-LB 16		16	yes	5
70480400	H-A 16 TBFH-LB 21		21	yes	5
79480200	H-A 16 TBFH-LB M20	20			5
79480400	H-A 16 TBFH-LB M25	25			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- SKINTOP® MS refer to main catalogue
- SKINTOP  $^{\mbox{\tiny B}}$  MS-M refer to main catalogue
- SKINTOP<sup>®</sup> MSR refer to main catalogue
- SKINTOP® MSR-M refer to main catalogue
- EPIC<sup>®</sup> Protective cover H-A refer to page 184



# **Technical data**



**е**тім ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors



Material Housing: aluminium alloy, grey Lever: zinc-plated steel



# **Protection rating**

IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)



VDE-tested DIN VDE Certified production control: VDE-REG.no.: B437 UL-tested:

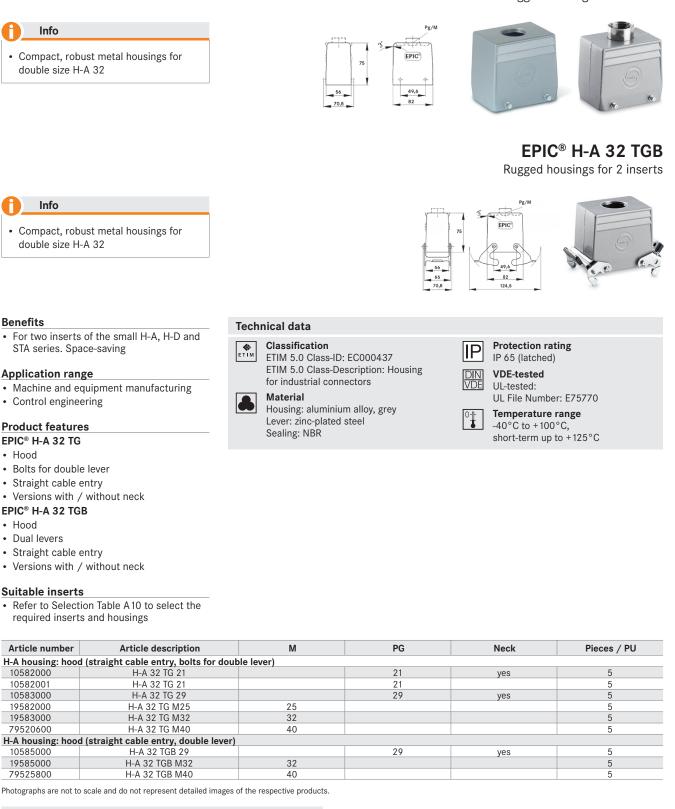
UL File Number: E75770 Temperature range

-40°C to +100°C, short-term up to +125°C

•

# EPIC® H-A 32 TG

Rugged housings for 2 inserts

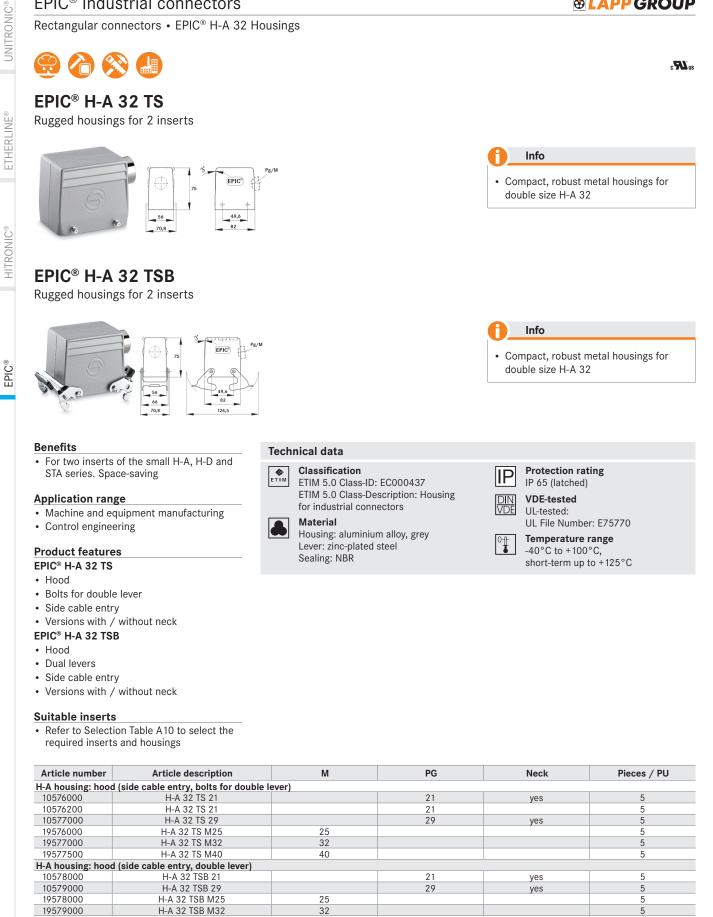


#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

**ETHERLINE®** 

**HITRONIC®** 



Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

Info

double size H-A 32

Rectangular connectors • EPIC® H-A 32 Housings

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# EPIC® H-A 32 AG

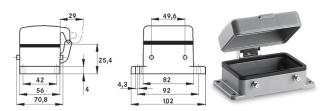
Rugged housings for 2 inserts

EPIC® H-A 32 AD-BO Rugged housings for 2 inserts **UNITRONIC®** 



Compact, robust metal housings for • double size H-A 32

Compact, robust metal housings for



#### **Benefits**

• For two inserts of the small H-A, H-D and STA series. Space-saving

# Application range

- Machine and equipment manufacturing
- · Control engineering

# Product features

- EPIC<sup>®</sup> H-A 32 AG · Panel-mount base
- Dual levers
- · Included: flat gasket
- EPIC® H-A 32 AD-BO
- · Panel-mount base
- · Bolts for double lever
- · Metal cover
- · Included: flat gasket

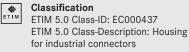
#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Pieces / PU		
H-A housing: pane	el-mount base (double lever)			
10472000	H-A 32 AG	5		
H-A housing: panel-mount base (cover, bolts for double lever)				
70503000	H-A 32 AD-BO	5		

Photographs are not to scale and do not represent detailed images of the respective products.

# **Technical data**



70,8

42

25.4

Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



124,5

49,6



UL-tested: UL File Number: E75770

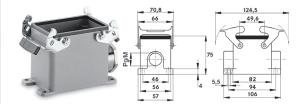
**Temperature range** -40°C to +100°C,

short-term up to +125°C

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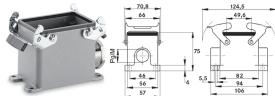
# EPIC® H-A 32 SGR

Rugged housings for 2 inserts



# EPIC<sup>®</sup> H-A 32 SGRL

Rugged housings for 2 inserts



# **Benefits**

• For two inserts of the small H-A, H-D and STA series. Space-saving

# Application range

- Machine and equipment manufacturing
- · Control engineering

# Product features

- EPIC® H-A 32 SGR
- · Surface-mount base
- Dual levers
- 1 cable entry
- EPIC® H-A 32 SGRL · Surface-mount base
- Dual levers
- · 2 cable entries

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: surfa	ce-mount base (1 cable entry, doub	le lever)			
10474000	H-A 32 SGR 21		21	yes	5
10474100	H-A 32 SGR 29		29	yes	5
19474000	H-A 32 SGR M25	25		yes	5
19474100	H-A 32 SGR M32	32		yes	5
H-A housing: surfa	ce-mount base (2 cable entries, do	uble lever)			
10482000	H-A 32 SGRL 21		21	yes	5
19482000	H-A 32 SGRL M25	25		yes	5
79506800	H-A 32 SGRL M40	40			5

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue



Classification ET I M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors



Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



· Compact, robust metal housings for

Info

double size H-A 32

IP	Protection rating IP 65 (latched)
DIN VDE	<b>VDE-tested</b> UL-tested: UL File Number: E75770
°‡	<b>Temperature range</b> -40°C to +100°C,

short-term up to +125°C

**ETHERLINE®** 

**HITRONIC®** 



Info

double size H-A 32

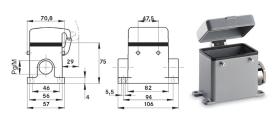
Rectangular connectors • EPIC® H-A 32 Housings

•



# EPIC<sup>®</sup> H-A 32 SDR-BO

Rugged housings for 2 inserts



# EPIC® H-A 32 SDRL-BO

Rugged housings for 2 inserts



**HITRONIC®** 

# Info

Compact, robust metal housings for • double size H-A 32

Compact, robust metal housings for

# **Benefits**

• For two inserts of the small H-A, H-D and STA series. Space-saving

#### Application range

- Machine and equipment manufacturing
- · Control engineering

# Product features

- EPIC® H-A 32 SDR-BO · Surface-mount base
- · Bolts for double lever
- 1 cable entry
- · Metal cover
- EPIC® H-A 32 SDRL-BO
- Surface-mount base
- · Bolts for double lever
- 2 cable entries
- · Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

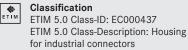
Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: surfa	ace-mount base (cover, 1 cable entry	, bolts for double lever)			
70515200	H-A 32 SDR-BO 21		21	yes	5
70515400	H-A 32 SDR-BO 29		29	yes	5
79515200	H-A 32 SDR-BO M25			yes	5
79515400	H-A 32 SDR-BO M32			yes	5
H-A housing: surfa	ace-mount base (cover, 2 cable entrie	es, bolts for double lever	)		
70516200	H-A 32 SDRL-BO 21		21	yes	5
70516400	H-A 32 SDRL-BO 29		29	yes	5
79516200	H-A 32 SDRL-BO M25	25		yes	5
79516400	H-A 32 SDRL-BO M32	32		yes	5

Photographs are not to scale and do not represent detailed images of the respective products.

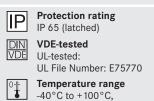
# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

#### **Technical data**



- Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
- IP IP 65 (latched) VDE-tested UL-tested: **Temperature range** -40°C to +100°C,



short-term up to +125°C

**ETHERLINE®** 



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**ETHERLINE®** 

**HITRONIC®** 

EPIC®

c 🔊 us EPIC® H-A 32 TBF Rugged housings for 2 inserts Info · Compact, robust metal housings for double size H-A 32 **Benefits Technical data** For two inserts of the small H-A, H-D and Classification **Protection rating** ET I M STA series. Space-saving IP ETIM 5.0 Class-ID: EC000437 IP 65 (latched) ETIM 5.0 Class-Description: Housing **Application range** VDE-tested DIN for industrial connectors UL-tested: • Machine and equipment manufacturing Material UL File Number: E75770 • Control engineering Housing: aluminium alloy, grey Temperature range Lever: zinc-plated steel -40°C to +100°C, **Product features** Sealing: NBR short-term up to +125°C · Cable coupler hood Dual levers · Straight cable entry · Versions with / without neck Suitable inserts • Refer to Selection Table A10 to select the required inserts and housings Article number Article description . . . .

Article number	Article description	M	PG	Neck	Pieces / PU		
H-A housing: cable coupler hood (straight cable entry, double lever)							
10588000	H-A 32 TBF 21		21	yes	5		
10588500	H-A 32 TBF 29		29	yes	5		
19588000	H-A 32 TBF M25	25			5		
19588500	H-A 32 TBF M32	32			5		

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

Info

Info

double size H-A 48

double size H-A 48

Compact, robust metal housings for

Rectangular connectors • EPIC® H-A 48 Housings

Pg/N

EPIC®

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# EPIC® H-A 48 TG

Rugged housings for 3 inserts

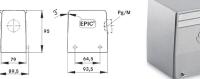
**ETHERLINE®** 

UNITRONIC®

# EPIC® H-A 48 TS Rugged housings for 3 inserts



Compact, robust metal housings for





#### **Benefits**

•

· Three different inserts, each suitable for housing type H-A 16, can be integrated in this housing. High flexibility

#### Application range

- · Machine and equipment manufacturing
- · Control engineering

# **Product features**

# EPIC® H-A 48 TG

- Hood
- · Bolts for double lever
- Straight cable entry
- · Versions with / without neck
- EPIC® H-A 48 TS
- Hood
- · Bolts for double lever
- · Side cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-A housing: hood	l (straight cable entry, bolts for dout	ole lever)			
10631800	H-A 48 TG 29		29	yes	1
10631900	H-A 48 TG 29		29		1
19631800	H-A 48 TG M32	32			1
19636600	H-A 48 TG M40	40			1
H-A housing: hood	I (side cable entry, bolts for double I	ever)			
10630800	H-A 48 TS 29		29	yes	1
10630900	H-A 48 TS 29		29		1
19630800	H-A 48 TS M32	32			1
19635600	H-A 48 TS M40	40			1

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

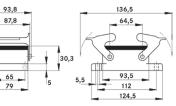
# **Technical data**

- Classification **e**t i M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
  - Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
- **Protection rating** IP IP 65 (latched) VDE-tested UL-tested: -40°C to +100°C,
  - UL File Number: E75770 **Temperature range** short-term up to +125°C

# EPIC<sup>®</sup> H-A 48 AG

Rugged housings for 3 inserts





Info Compact, robust metal housings for double size H-A 48

Compact, robust metal housings for

Compact, robust metal housings for

Info

Info

double size H-A 48

**Protection rating** 

UL File Number: E75770

short-term up to +125°C

**Temperature range** 

-40°C to +100°C,

IP 65 (latched)

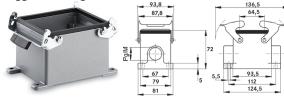
VDE-tested

UL-tested:

double size H-A 48

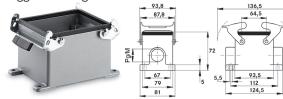
# EPIC<sup>®</sup> H-A 48 SGR

Rugged housings for 3 inserts



# EPIC<sup>®</sup> H-A 48 SGRL

Rugged housings for 3 inserts



# **Benefits**

Three different inserts, each suitable for housing type H-A 16, can be integrated in this housing. High flexibility

# Application range

- Machine and equipment manufacturing
- · Control engineering

# **Product features**

- EPIC® H-A 48 AG
- · Panel-mount base
- · Dual levers

# · Included: flat gasket

- EPIC<sup>®</sup> H-A 48 SGR
- · Surface-mount base
- Dual levers
- 1 cable entry

# **Technical data**

#### Classification **E**TIM

EPIC® H-A 48 SGRL

 Dual levers 2 cable entries

· Surface-mount base



Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

#### Suitable inserts

IΡ

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU			
H-A housing: pane	H-A housing: panel-mount base (double lever)							
10625500	H-A 48 AG				1			
H-A housing: surf	ace-mount base (1 cable entry, doub	le lever)						
10633800	H-A 48 SGR 29		29	yes	1			
19633800	H-A 48 SGR M32	32		yes	1			
19638600	H-A 48 SGR M40	40			1			
H-A housing: surf	ace-mount base (2 cable entries, dou	ible lever)						
19639600	H-A 48 SGRL M40	40			1			

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

# EPIC<sup>®</sup> H-A 48 SGR

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

# EPIC<sup>®</sup> H-A 48 SGRL

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

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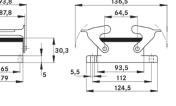
LAPP GROUP

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 





# APP GROUP

Info EMC protection · Corrosion-resistant

Info EMC protection Corrosion-resistant

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• Protection rating UL50E tested

Protection rating UL50E tested

# EPIC<sup>®</sup> Industrial connectors

EPIC<sup>®</sup> ULTRA H-A 3 TG

Rectangular connectors • EPIC® ULTRA H-B 6

Housing EPIC<sup>®</sup> ULTRA: for higher functional reliability



UNITRONIC®



EPIC®

# **EPIC® ULTRA H-A 3 TS** Housing EPIC® ULTRA: for higher functional reliability





# **EPIC® ULTRA H-A 3 TBF**

NEMA 250, UL50E: 12, 4, 4X (latched)

Housing EPIC® ULTRA: for higher functional reliability

**Protection rating** 

Temperature range

short-term up to +125°C

-40°C to +100°C,

IP 65

IP



# Info

EMC protection

- Corrosion-resistant
- · Protection rating UL50E tested

#### **Benefits**

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- · Space-saving due to compact dimensions
- · High mechanical and chemical resistance

#### Application range

- In EMC-sensitive environments
- · For fixed and flexible applications (e.g. machinery building, wind turbines)
- · Construction machinery
- Electric motor manufacturing

#### Product features

- · Pluggable with standard housings
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to • DIN EN ISO 9227, method NSS, period of test 480 hours
- · Corrosion-resistant according to **DIN EN 6988**
- · Delivery including stainless steel screw for the inserts

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	Pieces / PU		
EPIC® ULTRA H-A 3 TG					
10423300	ULTRA H-A 3 TG	20	10		
EPIC® ULTRA H-A 3 TS					
10423201	ULTRA H-A 3 TS	20	10		
EPIC® ULTRA H-A 3 TBF					
10423204	ULTRA H-A 3 TBF	20	10		

**Technical data** 

ET I M

Classification

Material

Sealing: NBR

ETIM 5.0 Class-ID: EC000437

for industrial connectors

Lever: stainless steel

ETIM 5.0 Class-Description: Housing

Housing: nickel-plated zinc diecasting

Photographs are not to scale and do not represent detailed images of the respective products.

# EPIC<sup>®</sup> ULTRA H-A 3 AG

Housing EPIC<sup>®</sup> ULTRA: for higher functional reliability



**EPIC® ULTRA H-A 3 AGS** 

Housing EPIC® ULTRA: for higher functional reliability



# EPIC<sup>®</sup> ULTRA H-A 3 AGSV

Housing EPIC® ULTRA: for higher functional reliability



# **Benefits**

- Optimum, low-resistance 360° screening .
- All-purpose due to high corrosion resistance and high environmental protection
- Space-saving due to compact dimensions
- · High mechanical and chemical resistance

# **Application range**

- In EMC-sensitive environments
- For fixed and flexible applications (e.g. machinery building, wind turbines)
- · Construction machinery
- · Electric motor manufacturing

# **Product features**

- Pluggable with standard housings
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours
- Corrosion-resistant according to DIN EN 6988
- · Delivery including stainless steel screw for the inserts

# **Technical data**

Material

Sealing: NBR



#### Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing

Housing: nickel-plated zinc diecasting

for industrial connectors

Lever: stainless steel



Protection rating IP IP 65

• Protection rating UL50E tested

Info • EMC protection Corrosion-resistant

> NEMA 250, UL50E: 12, 4, 4X (latched) ıge

카티	Temperature range
۲.	-40°C to +100°C,
	short-term up to +125°C

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	M			
EPIC® ULTRA H-A	EPIC® ULTRA H-A 3 AG				
10423200	ULTRA H-A 3 AG		10		
EPIC® ULTRA H-A	EPIC® ULTRA H-A 3 AGS				
10423202	ULTRA H-A 3 AGS		10		
EPIC® ULTRA H-A 3 AGSV					
10423203	ULTRA H-A 3 AGSV	20	10		

Photographs are not to scale and do not represent detailed images of the respective products.

**HITRONIC®** 

EPIC®

UNITRONIC®





• Protection rating UL50E tested

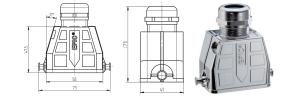
Info · EMC protection Corrosion-resistant

# EPIC<sup>®</sup> ULTRA H-B 6 TG LB

Housing EPIC<sup>®</sup> ULTRA: for higher functional reliability

# Info

- · EMC protection
- · Corrosion-resistant
- SKINTOP<sup>®</sup> integrated cable gland



# EPIC® ULTRA H-B 6 TS LB

Housing EPIC® ULTRA: for higher functional reliability

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

# Info

- EMC protection
- ٠ Corrosion-resistant
- SKINTOP<sup>®</sup> integrated cable gland

#### **Benefits**

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- · Space-saving due to compact dimensions
- Faster than any other comparable system
- High mechanical resistance

# Application range

- In EMC-sensitive environments
- · For fixed and flexible applications (e.g. machinery building, wind turbines)
- Construction machinery
- · Electric motor manufacturing

# Product features

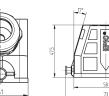
- Housings with the BRUSH addition come with BRUSH cable screen contacting
- · Pluggable with standard housings
- · Corrosion-resistant according to DIN EN 6988
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours

# Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Clamping range in mm	Minimum Ø above braiding (mm)	Pieces / PU	
H-B housing: hood	H-B housing: hood (straight cable entry, bolts for single lever)				
70250200	ULTRA H-B 6 TG-LB 6-13	6 - 13		1	
70250201	ULTRA H-B 6 TG-LB 9-17	9 - 17		1	
70250202	ULTRA H-B 6 TG-LB 9-17 BRUSH	9 - 17	6	1	
H-B housing: hood	I (side cable entry, bolts for single	e lever)			
70250203	ULTRA H-B 6 TS-LB 6-13	6 - 13		1	
70250204	ULTRA H-B 6 TS-LB 9-17	9 - 17		1	
70250205	ULTRA H-B 6 TS-LB 9-17 BRUSH	9 - 17	6	1	

Photographs are not to scale and do not represent detailed images of the respective products.









- Classification **e**t i M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
  - Material Housing: nickel-plated zinc die-casting Lever and bolts: stainless steel Sealing: NBR Cable gland Body: nickel-plated brass Insert: PA Seal: special elastomer
- IP IP 65 Temperature range

# **Protection rating**

- NEMA 250, UL50E: 12, 4, 4X (latched)

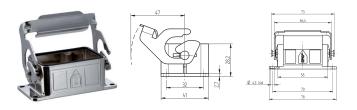




-40°C to +100°C

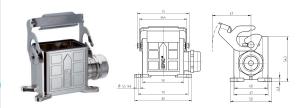
# EPIC<sup>®</sup> ULTRA H-B 6 AG LB

Housing EPIC® ULTRA: for higher functional reliability



# EPIC<sup>®</sup> ULTRA H-B 6 SGR LB

Housing EPIC<sup>®</sup> ULTRA: for higher functional reliability



#### Benefits

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- · Space-saving due to compact dimensions
- · Faster than any other comparable system
- High mechanical resistance

# Application range

- In EMC-sensitive environments
- · For fixed and flexible applications (e.g. machinery building, wind turbines)
- Construction machinery
- · Electric motor manufacturing

# Product features

- Housings with the BRUSH addition come with BRUSH cable screen contacting
- Pluggable with standard housings
- Corrosion-resistant according to DIN EN 6988
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours

# Suitable inserts

 Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Clamping range in mm	Minimum Ø above braiding (mm)	Pieces / PU
H-B housing: panel-mount base (single lever)				
70250206	ULTRA H-B 6 AG LB			1
H-B housing: surfa	ace-mount base (1 cable entry, sir	ngle lever)		
70250207	ULTRA H-B 6 SGR LB 6-13	6 - 13		1
70250208	ULTRA H-B 6 SGR LB 9-17	9 - 17		1
70250209	ULTRA H-B 6 SGR LB 9-17 BRUSH	9 - 17	6	1

**Technical data** 

Cable gland

Insert: PA

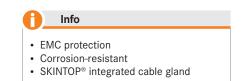
Body: nickel-plated brass

Seal: special elastomer

ET I M

Photographs are not to scale and do not represent detailed images of the respective products.

(	info
	<ul><li>EMC protection</li><li>Corrosion-resistant</li></ul>



Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing	IP	Protection rating IP 65 NEMA 250, UL50E: 12, 4, 4X (latched)
for industrial connectors Material	01	<b>Temperature range</b> -40°C to +100°C
Housing: nickel-plated zinc die-casting Lever and bolts: stainless steel Sealing: NBR		

**ETHERLINE®** 

# EPIC<sup>®</sup> ULTRA H-B 10 TS QB

Housing EPIC® ULTRA: for higher functional reliability

# Info

· EMC protection

Info EMC protection

Corrosion-resistant

- Corrosion-resistant
- SKINTOP<sup>®</sup> integrated cable gland



# **Benefits**

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- · Space-saving due to compact dimensions
- Faster than any other comparable system
- High mechanical resistance

#### Application range

- In EMC-sensitive environments
- · For fixed and flexible applications (e.g. machinery building, wind turbines)
- Construction machinery
- · Electric motor manufacturing

#### Product features

- Housings with the BRUSH addition come with BRUSH cable screen contacting
- · Pluggable with standard housings
- Corrosion-resistant according to DIN EN 6988
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Clamping range in mm	Minimum Ø above braiding (mm)	Pieces / PU	
H-B housing: hood	H-B housing: hood (side cable entry, bolts for double lever)				
70250210	ULTRA H-B 10 TS QB 7-15	7 - 15		1	
70250211	ULTRA H-B 10 TS QB 11-21	11 - 21		1	
70250212	ULTRA H-B 10 TS QB 11-21 BRUSH	11 - 21	8	1	
H-B housing: panel-mount base (double lever)					
70250213	ULTRA H-B 10 AG QB			1	

Photographs are not to scale and do not represent detailed images of the respective products.





# **Technical data**

#### Classification ET I M

- ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
- Material Housing: nickel-plated zinc die-casting Lever and bolts: stainless steel Sealing: NBR Cable gland Body: nickel-plated brass Insert: PA Seal: special elastomer





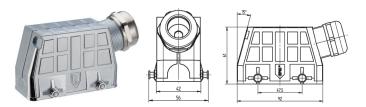
Temperature range

-40°C to +100°C



# EPIC<sup>®</sup> ULTRA H-B 16 TS QB

Housing EPIC® ULTRA: for higher functional reliability



# EPIC® ULTRA H-B 16 AG QB

Housing EPIC® ULTRA: for higher functional reliability



• SKINTOP<sup>®</sup> integrated cable gland

Info



# Benefits

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- · Space-saving due to compact dimensions
- · Faster than any other comparable system
- High mechanical resistance

# Application range

- Construction machinery
- In EMC-sensitive environments
- · For fixed and flexible applications
- (e.g. machinery building, wind turbines)
- · Electric motor manufacturing

# Product features

- Housings with the BRUSH addition come with BRUSH cable screen contacting
- · Pluggable with standard housings
- · Corrosion-resistant according to DIN EN 6988
- · Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- · Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours

# Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Clamping range in mm	Minimum Ø above braiding (mm)	Pieces / PU
H-B housing: hood	d (side cable entry, bolts for doub	le lever)		
70250214	ULTRA H-B 16 TS QB 7-15	7 - 15		1
70250215	ULTRA H-B 16 TS QB 11-21	11 - 21		1
70250216	ULTRA H-B 16 TS QB 11-21 BRUSH	11 - 21	8	1
H-B housing: panel-mount base (double lever)				
70250217	ULTRA H-B 16 AG QB			1

Photographs are not to scale and do not represent detailed images of the respective products.



# Classification ET I M

ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors



# Material Housing: nickel-plated zinc die-casting

Lever and bolts: stainless steel Sealing: NBR Cable gland Body: nickel-plated brass Insert: PA Seal: special elastomer

EMC protection Corrosion-resistant

IP	Protection rating IP 68 NEMA 250, UL50E: 12, 4, 4X (latched)
⁰‡	Temperature range -40°C to +100°C

**ETHERLINE®** 

**HITRONIC®** 

Rectangular connectors • EPIC<sup>®</sup> ULTRA H-B 24

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

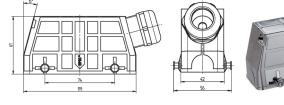
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# EPIC® ULTRA H-B 24 TS QB

Housing EPIC® ULTRA: for higher functional reliability



- EMC protection
- Corrosion-resistant
- SKINTOP<sup>®</sup> integrated cable gland





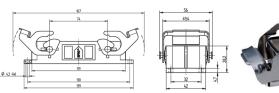
# EPIC<sup>®</sup> ULTRA H-B 24 AG QB

Housing EPIC® ULTRA: for higher functional reliability



# EMC protection

Corrosion-resistant



**Technical data** 

**е**тім

Classification

Material

Sealing: NBR

Cable gland

Insert: PA

ETIM 5.0 Class-ID: EC000437

Lever and bolts: stainless steel

for industrial connectors

Body: nickel-plated brass

Seal: special elastomer

ETIM 5.0 Class-Description: Housing

Housing: nickel-plated zinc die-casting



**Protection rating** 

**Temperature range** 

-40°C to +100°C

NEMA 250, UL50E: 12 (latched)

IP 65

**IIP** 

# Benefits

- Optimum, low-resistance 360° screening
- All-purpose due to high corrosion resistance and high environmental protection.
- Space-saving due to compact dimensions
- Faster than any other comparable system
- High mechanical resistance

# Application range

- In EMC-sensitive environments
- For fixed and flexible applications (e.g. machinery building, wind turbines)
- Construction machinery
- Electric motor manufacturing

# Product features

- Housings with the BRUSH addition come with BRUSH cable screen contacting
- Pluggable with standard housings
   Corrosion-resistant according to
- DIN EN 6988
  Resistance to cyclic salt spray is tested according to IEC 68-2-52, severity level 2
- Salt spray testing according to DIN EN ISO 9227, method NSS, period of test 480 hours

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	Clamping range in mm	Minimum Ø above braiding (mm)	Pieces / PU
H-B housing; hood (side cable entry, bolts for double lever)				
70250219	ULTRA H-B 24 TS QB 7-15	7 - 15		1
70250220	ULTRA H-B 24 TS QB 11-21	11 - 21		1
70250221	ULTRA H-B 24 TS QB 11-21 BRUSH	11 - 21	8	1
H-B housing: panel-mount base (double lever)				
70250222	ULTRA H-B 24 AG QB			1

Photographs are not to scale and do not represent detailed images of the respective products.

# **EPIC®** Protective cover H-B



# Product features

Protective cover for EPIC<sup>®</sup> ULTRA housings

# Technical data

ETIN

- Without retaining cord
- Protective cover made of FDA approved material

M	Classification
и	ETIM 5.0 Class-ID: EC002314
	ETIM 5.0 Class-Description: Cap for
	industrial connectors

Protective cover for hoods with stainless steel levers and bolts

0	Artic
ů	ULTRA
E	7025
	7025
	7025

Article number	Version	Bolts	Clamp	Pieces / PU
<b>ULTRA Protective</b>	Cover for panel and surface mount bases			
70250250	for housing ULTRA H-B 6	2		1
70250251	for housing ULTRA H-B 10	4		1
70250252	for housing ULTRA H-B 16	4		1
70250253	for housing ULTRA H-B 24	4		1
<b>ULTRA Protective</b>	Cover for hoods			
70250254	for housing ULTRA H-B 6		Single lever	1
70250255	for housing ULTRA H-B 10		Double Lever	1
70250256	for housing ULTRA H-B 16		Double Lever	1
70250257	for housing ULTRA H-B 24		Double Lever	1

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®

# APP GROUP

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 6 Housings

Info

disconnecting

Info

disconnecting

• Non-slip ridges for comfortable

Protection rating UL50E tested

· Non-slip ridges for comfortable

More interior space for wiring

• Protection rating UL50E tested

# EPIC<sup>®</sup> H-B 6 TG

Housing design H-B. The industry standard.



60 74.8



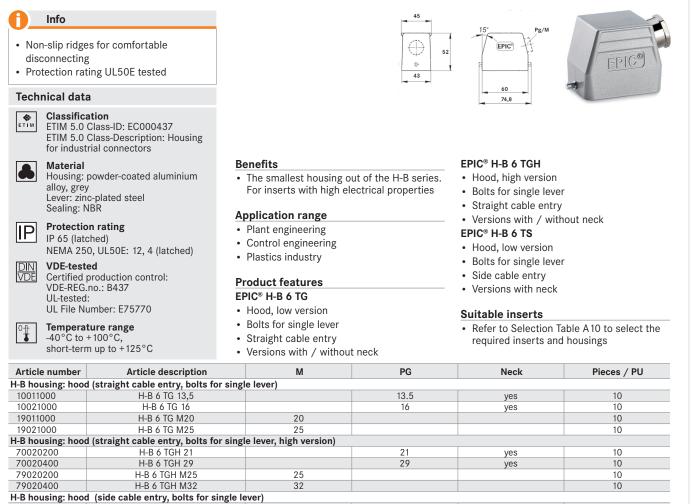
# EPIC<sup>®</sup> H-B 6 TGH

Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 6 TS

Housing design H-B. The industry standard.



H-B 6 TS M20 25 19022000 H-B 6 TS M25 Photographs are not to scale and do not represent detailed images of the respective products.

H-B 6 TS 13,5 H-B 6 TS 16

#### Accessories

10012000

10022000

19012000

• SKINTOP® MS-M refer to main catalogue

• SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

20

13.5

16

ves

ves

ves

yes

10

10

10

10

# EPIC<sup>®</sup> H-B 6 TSH

Housing design H-B. The industry standard.



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EPIC®



# EPIC<sup>®</sup> H-B 6 AG-LB

Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 6 AD-LB

Housing design H-B. The industry standard.



# Benefits

• The smallest housing out of the H-B series. For inserts with high electrical properties

# Application range

- Plant engineering
- Control engineering
- Plastics industry

# Product features

# EPIC<sup>®</sup> H-B 6 TSH

- Hood, high version
- Bolts for single lever
- Side cable entry
- Versions with / without neck

# EPIC<sup>®</sup> H-B 6 AG-LB

- Panel-mount base
- Single lever

70

74.8

- Included: flat gasket
- EPIC<sup>®</sup> H-B 6 AD-LB
- Panel-mount base
- Single lever
- Metal cover
- Included: flat gasket

# Suitable inserts

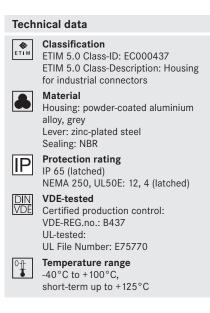
• Refer to Selection Table A10 to select the required inserts and housings

Info
Non-slip ridges for comfortable     disconnecting
<ul> <li>More interior space for wiring</li> <li>Protection rating UL50E tested</li> </ul>

Info
 Protection rating UL50E tested

A	Info	
•	Metal lid with sturdy hinge	

• Protection rating UL50E tested



Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	d (side cable entry, bolts for single le	ver, high version)			
70022200	H-B 6 TSH 21		21	yes	10
70022400	H-B 6 TSH 29		29	yes	10
79022200	H-B 6 TSH M25	25			10
79022400	H-B 6 TSH M32	32			10
H-B housing: pane	el-mount base (single lever)				
10003000	H-B 6 AG-LB				10
H-B housing: panel-mount base (cover, single lever)					
10004000	H-B 6 AD-LB				10

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

# EPIC<sup>®</sup> H-B 6 TSH

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

# EPIC<sup>®</sup> Industrial connectors

EPIC<sup>®</sup> H-B 6 SGR-LB

Rectangular connectors • EPIC® H-B 6 Housings

Housing design H-B. The industry standard.

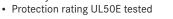
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# Info Protection rating UL50E tested

i	Info			
	Eor	0001	introduction	~

For easy introduction of two cables







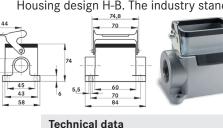


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# EPIC<sup>®</sup> H-B 6 SGRH-LB

Housing design H-B. The industry standard.



Classification **e** ti m ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

# Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

- **Protection rating** IΡ
  - IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
- VDE-tested DIN VDE Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

```
Temperature range
-40°C to +100°C,
```

short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU		
H-B housing: surfa	H-B housing: surface-mount base (1 cable entry, single lever)					
10005000	H-B 6 SGR 16		16	10		
19005000	H-B 6 SGR M20	20		10		
79005600	H-B 6 SGR M25	25		10		
H-B housing: surfa	ace-mount base (2 cable entries, single lever)					
10006000	H-B 6 SGRL 16		16	10		
19006000	H-B 6 SGRL M20	20		10		
79006600	H-B 6 SGRL M25	25		10		
H-B housing: surfa	ace-mount base (1 cable entry, single lever, h	igh version)				
70005200	H-B 6 SGRH-LB 21		21	10		
70005400	H-B 6 SGRH-LB 29		29	10		
79005200	H-B 6 SGRH-LB M25	25		10		
79005400	H-B 6 SGRH-LB M32	32		10		

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

- · More interior space for wiring
- Protection rating UL50E tested

#### **Benefits**

• The smallest housing out of the H-B series. For inserts with high electrical properties

#### Application range

- · Plant engineering
- · Control engineering
- · Plastics industry

# **Product features**

- EPIC<sup>®</sup> H-B 6 SGR-LB
- · Surface-mount base, low version
- · Single lever
- 1 cable entry

# EPIC® H-B 6 SGRL-LB

- Surface-mount base, low version
- Single lever
- 2 cable entries
- EPIC® H-B 6 SGRH-LB
- · Surface-mount base, high version
- · Single lever
- 1 cable entry

# Suitable inserts

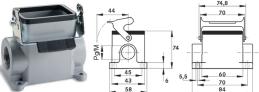
• Refer to Selection Table A10 to select the required inserts and housings

Info

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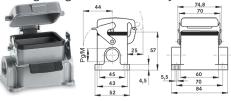
# EPIC<sup>®</sup> H-B 6 SGRLH-LB

Housing design H-B. The industry standard.



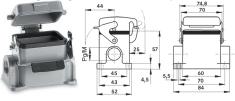
# EPIC<sup>®</sup> H-B 6 SDR-LB

# Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 6 SDRL-LB

# Housing design H-B. The industry standard.



# Benefits

• The smallest housing out of the H-B series. For inserts with high electrical properties

# Application range

- Plant engineering
- Control engineering
- Plastics industry

# Product features

- EPIC<sup>®</sup> H-B 6 SGRLH-LB
- Surface-mount base, high version
- Single lever
- 2 cable entries

# EPIC<sup>®</sup> H-B 6 SDR-LB

- Surface-mount base, low version
- Single lever
- 1 cable entry
- Metal cover

# EPIC<sup>®</sup> H-B 6 SDRL-LB

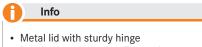
- Surface-mount base, low version
- Single lever
- 2 cable entries
- Metal cover

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

6	Info	
•	More interior space for wiring	

- For easy introduction of two cables
- Protection rating UL50E tested



Protection rating UL50E tested

# Info

- Metal lid with sturdy hinge
- Metal lid with sturdy hinge
- Protection rating UL50E tested

# Technical data

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel

Sealing: NBR Protection rating

IP 65 (latched)

NEMA 250, UL50E: 12, 4 (latched) **VDE-tested** 

- DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
  - Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU			
H-B housing: surfa	H-B housing: surface-mount base (2 cable entries, single lever, high version)						
70006200	H-B 6 SGRLH 21		21	10			
79006200	H-B 6 SGRLH M25	25		10			
79006400	H-B 6 SGRLH M32	32		10			
H-B housing: surfa	H-B housing: surface-mount base (cover, 1 cable entry, single lever)						
10007000	H-B 6 SDR 16		16	10			
19007000	H-B 6 SDR M20	20		10			
79015600	H-B 6 SDR M25	25		10			
H-B housing: surfa	H-B housing: surface-mount base (cover, 2 cable entries, single lever)						
10009000	H-B 6 SDRL-LB 16		16	10			
19009000	H-B 6 SDRL-LB M20	20		10			
79016600	H-B 6 SDRL-LB M25	25		10			

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

• Easy to install refer to main catalogue

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VDE

# **HITRONIC®**

EPIC®

**ETHERLINE®** 

# **EPIC® H-B 6 SDRH-LB**

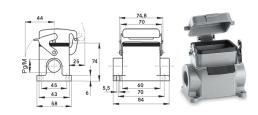
Housing design H-B. The industry standard.

# Info

- · More interior space for wiring
- · Metal lid with sturdy hinge
- Protection rating UL50E tested

· More interior space for wiring

• Metal lid with sturdy hinge • Protection rating UL50E tested

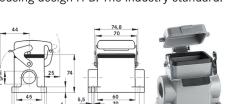


UNITRONIC®

**ETHERLINE®** 

# **EPIC® H-B 6 SDRLH-LB**

Housing design H-B. The industry standard.





#### **Benefits**

• The smallest housing out of the H-B series. For inserts with high electrical properties

# Application range

Info

- · Plant engineering
- · Control engineering
- · Plastics industry

# Product features

- EPIC® H-B 6 SDRH-LB
- · Surface-mount base, high version
- · Single lever
- 1 cable entry
- Metal cover

#### EPIC<sup>®</sup> H-B 6 SDRLH-LB

- · Surface-mount base, high version
- · Single lever
- 2 cable entries
- · Metal cover

# Suitable inserts

• Refer to Selection Table A 10 to select the required inserts and housings

Article number	Article description	М	PG	Pieces / PU		
H-B housing: surfa	H-B housing: surface-mount base (cover, 1 cable entry, single lever, high version)					
70015200	H-B 6 SDRH-LB 21		21	10		
79015200	H-B 6 SDRH-LB M25	25		10		
79015400	H-B 6 SDRH-LB M32	32		10		
H-B housing: surface-mount base (cover, 2 cable entries, single lever, high version)						
70016200	H-B 6 SDRLH-LB 21		21	10		
79016200	H-B 6 SDRLH-LB M25	25		10		
79016400	H-B 6 SDRLH-LB M32	32		10		

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### **Technical data**

#### Classification **e**t i M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing

- for industrial connectors
- Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

Certified production control: VDE-REG.no.: B437 UL-tested:

UL File Number: E75770

**Temperature range** -40°C to +100°C, short-term up to +125°C

LAPP GROUP

EPIC<sup>®</sup> H-B 6 TBF-LB Housing design H-B. The industry standard. Info Protection rating UL50E tested EPIC EPIC<sup>®</sup> H-B 6 TBFH-LB Housing design H-B. The industry standard.



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Ĩ.	50	60 <b>b</b>
SIGE)		74,8
Dercey		EPIC.
1	L-+-1	
	45	Pg/M

# **Benefits**

• The smallest housing out of the H-B series. For inserts with high electrical properties

# **Application range**

- · Plant engineering
- · Control engineering
- · Plastics industry

# **Product features**

- EPIC® H-B 6 TBF-LB · Cable coupler hood, low version
- · Single lever
- · Straight cable entry
- Versions with / without neck

- EPIC<sup>®</sup> H-B 6 TBFH-LB • Cable coupler hood, high version
- Single lever
- Straight cable entry
- · Versions with / without neck

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

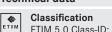
Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever)			
10014000	H-B 6 TBF 13,5		13.5	yes	10
10024000	H-B 6 TBF 16		16	yes	10
19014000	H-B 6 TBF M20	20			10
19024000	H-B 6 TBF M25	25			10
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever, high versi	ion)		
70010200	H-B 6 TBFH 21		21	yes	10
70010400	H-B 6 TBFH 29		29	yes	10
79010200	H-B 6 TBFH M25	25			10

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- ${\rm SKINTOP}^{\scriptstyle (\! 8\!)}$  for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue





ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors



Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



Info

• More interior space for wiring

• Protection rating UL50E tested

UL-tested: UL File Number: E75770 Temperature range

-40°C to +100°C, short-term up to +125°C

**ETHERLINE®** 

**HITRONIC®** 

# APP GROUP

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 10 Housings

Info

disconnecting

integrated cover

Info

integrated cover

Non-slip ridges for comfortable

Protection rating UL50E tested

More interior space for wiring

Protection rating UL50E tested

· For connection with counterpart with

For connection with counterpart with

# EPIC<sup>®</sup> H-B 10 TGB

Housing design H-B. The industry standard.



UNITRONIC®

EPIC<sup>®</sup> H-B 10 TGBH



# EPIC® H-B 10 TS

Housing design H-B. The industry standard.

Housing design H-B. The industry standard.



Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel

Sealing: NBR **Protection rating** IP 65 (latched)

- NEMA 250, UL50E: 12, 4 (latched)
- Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

# Temperature range -40°C to +100°C,

short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	I (straight cable entry, double lever)				
10041000	H-B 10 TGB 16		16	yes	10
19041000	H-B 10 TGB M20	20			10
79055700	H-B 10 TGB M25	25			10
H-B housing: hood	I (straight cable entry, double lever, I	nigh version)			
70055200	H-B 10 TGBH 21		21	yes	10
70055400	H-B 10 TGBH 29		29	yes	10
79055200	H-B 10 TGBH M25	25			10
79055400	H-B 10 TGBH M32	32			10
H-B housing: hood	I (side cable entry, bolts for double I	ever)			
10042000	H-B 10 TS 16		16	yes	10
10042100	H-B 10 TS 21		21	yes	10
19042000	H-B 10 TS M20	20		yes	10
19042100	H-B 10 TS M25	25		yes	10

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

# 133

Info

- Non-slip ridges for comfortable • disconnecting
- Protection rating UL50E tested

# Benefits

# EPIC® H-B 10 TGB

- · The smallest housing with single and double lever. The right housing is available for every application
- · Double lever version with 2 levers for increased safety

# EPIC<sup>®</sup> H-B 10 TGBH

- · The smallest housing with single and double lever. The right housing is available for every application
- · Double lever version with 2 levers for increased safety

# EPIC® H-B 10 TS

· The smallest housing with single and double lever. The right housing is available for every application

# Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

EPIC® H-B 10 TGB · Hood, low version

- Dual levers
- Straight cable entry

Product features

· Versions with / without neck

# EPIC® H-B 10 TGBH

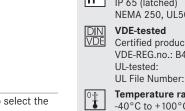
- Hood, high version
- Dual levers
- Straight cable entry
- · Versions with / without neck

# EPIC® H-B 10 TS

- · Hood, low version
- · Bolts for double lever
- · Side cable entry
- · Versions with neck

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings



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EPIC

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 10 Housings

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

# EPIC<sup>®</sup> H-B 10 TG-RO

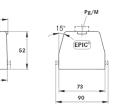
EPIC<sup>®</sup> H-B 10 TGH-RO

Housing design H-B. The industry standard.



Housing design H-B. The industry standard.

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EPIC®

73 90

# Info Non-slip ridges for comfortable disconnecting Protection rating UL50E tested

Info

Info

disconnecting

- Non-slip ridges for comfortable disconnecting
- More interior space for wiring
- Protection rating UL50E tested

· Non-slip ridges for comfortable

EPIC® H-B 10 TS-RO

Housing design H-B. The industry standard.



#### **Benefits**

· The smallest housing with single and double lever. The right housing is available for every application

# Application range

- Plant engineering
- Light & sound technology
- · Plastics industry

# **Product features**

- EPIC® H-B 10 TG-RO
- · Hood, low version
- · Reels for single lever
- Versions with / without neck

# EPIC® H-B 10 TGH-RO

Pg/N

- Hood, high version
- Reels for single lever
- Straight cable entry • • Versions with / without neck
- EPIC® H-B 10 TS-RO

# · Hood, low version

- · Reels for single lever
- Side cable entry
- Versions with neck

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Protection rating UL50E tested			
Tech	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors		
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR		
IP	Protection rating IP 65 (latched) NEMA 250, UL50E: 12 (latched)		
DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770		
0-11-	Temperature range		

#### mperature ange -40°C to +100°C, short-term up to +125°C

PG Neck Pieces / PU Article number Article description Μ H-B housing: hood (straight cable entry, bolts for single lever) 10040900 H-B 10 TG-RO 16 16 ves 10 10040700 H-B 10 TG-RO 21 21 10 yes 19040900 H-B 10 TG-RO M20 20 10 19040700 H-B 10 TG-RO M25 25 10 H-B housing: hood (straight cable entry, bolts for single lever, high version) 70044200 H-B 10 TGH-RO 21 21 10 yes 70044400 H-B 10 TGH-RO 29 29 yes 10 79044200 H-B 10 TGH-RO M25 25 10 H-B 10 TGH-RO M32 79044400 32 10 H-B housing: hood (side cable entry, bolts for single lever) 10 10042900 H-B 10 TS-RO 16 16 ves 10042800 H-B 10 TS-RO 21 21 10 yes 20 19042900 H-B 10 TS-RO M20 yes 10 19042800 H-B 10 TS-RO M25 25 10 ves

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

# LAPP GROUP

# APP GROUP

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 10 Housings



- Non-slip ridges for comfortable disconnecting
- More interior space for wiring
- Protection rating UL50E tested

# Info

- Non-slip ridges for comfortable disconnecting
- · Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

# Info

- · More interior space for wiring
- · Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

# **Benefits**

# EPIC® H-B 10 TSH

· The smallest housing with single and double lever. The right housing is available for every application

#### EPIC® H-B 10 TSB

- The smallest housing with single and double lever. The right housing is available for every application
- · For connection with counterpart with integrated cover

# EPIC® H-B 10 TSBH

- The smallest housing with single and double lever. The right housing is available for every application
- For connection with counterpart with integrated cover

# Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry
- Article number PG Article description М Neck Pieces / PU H-B housing: hood (side cable entry, bolts for double lever, high version) 70052400 H-B 10 TSH 21 10 21 yes 70052600 H-B 10 TSH 29 29 10 yes 79052400 H-B 10 TSH M25 25 10 32 79052600 H-B 10 TSH M32 10 H-B housing: hood (side cable entry, double lever) H-B 10 TSB 16 10 10045000 16 ves 20 19045000 H-B 10 TSB M20 10 ves 79057700 H-B 10 TSB M25 25 yes 10 H-B housing: hood (side cable entry, double lever, high version) 21 10 70057200 H-B 10 TSBH 21 ves 70057400 H-B 10 TSBH 29 29 10 yes 25 79057200 H-B 10 TSBH M25 10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

# EPIC<sup>®</sup> H-B 10 TSH

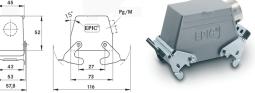
Housing design H-B. The industry standard.





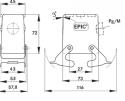
# EPIC<sup>®</sup> H-B 10 TSB

# Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 TSBH

Housing design H-B. The industry standard.



# **Product features**

# EPIC® H-B 10 TSH

- · Hood, high version
- · Bolts for double lever
- · Side cable entry · Versions with / without neck
- EPIC<sup>®</sup> H-B 10 TSB
- · Hood, low version
- · Dual levers
- · Side cable entry
- · Versions with neck

# EPIC® H-B 10 TSBH

- Hood, high version
- Dual levers
- · Side cable entry
- · Versions with / without neck

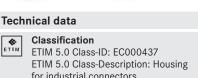
#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings



# UNITRONIC®

EPIC®



ETIM 5.0 Class-Description: Housing for industrial connectors

Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

**Protection rating** 

|IP| IP 65 (latched)

**E**TIM

- NEMA 250, UL50E: 12, 4 (latched)
- VDE-tested Certified production control: VDE-REG.no.: B437
- UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C



**UNITRONIC®** 

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

# EPIC<sup>®</sup> H-B 10 TSH-RO

Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 TG

Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 TGH

Housing design H-B. The industry standard.



# Benefits

The smallest housing with single and double lever. The right housing is available for every application

# **Application range**

- · Plant engineering
- · Light & sound technology
- · Plastics industry

# **Product features**

- EPIC® H-B 10 TSH-RO
- · Hood, high version
- · Reels for single lever
- · Side cable entry
- · Versions with / without neck

# EPIC® H-B 10 TG

· Hood, low version

EPIC

- · Bolts for double lever
- Straight cable entry
- Versions with / without neck

# EPIC® H-B 10 TGH

- · Hood, high version
- · Bolts for double lever
- Straight cable entry
- Versions with / without neck

#### Suitable inserts

· Refer to Selection Table A10 to select the required inserts and housings

f Info
Non-slip ridges for comfortable     disconnecting
<ul> <li>More interior space for wiring</li> </ul>
Protection rating UL50E tested



- disconnecting
- Protection rating UL50E tested

Info

<ul> <li>Non-slip ridges for comfortable disconnecting</li> <li>More interior space for wiring</li> <li>Protection rating UL50E tested</li> </ul>				
Tech	Technical data			
E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors			
	Material Housing: powder-coated aluminium			

alloy, grey Lever: zinc-plated steel Sealing: NBR

**Protection rating** |IP IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

: Housing

- VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
  - Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	l (side cable entry, bolts for single le	ver, high version)			
70054200	H-B 10 TSH-RO 21		21	yes	10
70054400	H-B 10 TSH-RO 29		29	yes	10
79054200	H-B 10 TSH-RO M25	25			10
79054400	H-B 10 TSH-RO M32	32			10
H-B housing: hood (straight cable entry, bolts for double lever)					
10040000	H-B 10 TG 16		16	yes	10
10040100	H-B 10 TG 21		21	yes	10
19040000	H-B 10 TG M20	20			10
19040100	H-B 10 TG M25	25			10
H-B housing: hood	I (straight cable entry, bolts for doub	le lever, high version)			
70050400	H-B 10 TGH 21		21	yes	10
70050600	H-B 10 TGH 29		29	yes	10
79050400	H-B 10 TGH M25	25			10
79050600	H-B 10 TGH M32	32			10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

# **® LAPP GROUP**

c**W**us VDE

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 10 Housings

Info

Single Lever version for quick locking and simple unlocking with lifting aid

Single Lever version for quick locking and simple unlocking with lifting aid

• Metal lid with sturdy hinge Protection rating UL50E tested

Protection rating UL50E tested

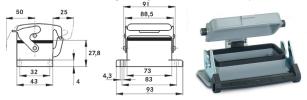
# EPIC<sup>®</sup> H-B 10 AG-LB

Housing design H-B. The industry standard.



# EPIC® H-B 10 AD-LB

Housing design H-B. The industry standard.



# EPIC®

HITRONIC®

EPIC® H-B 10 AG

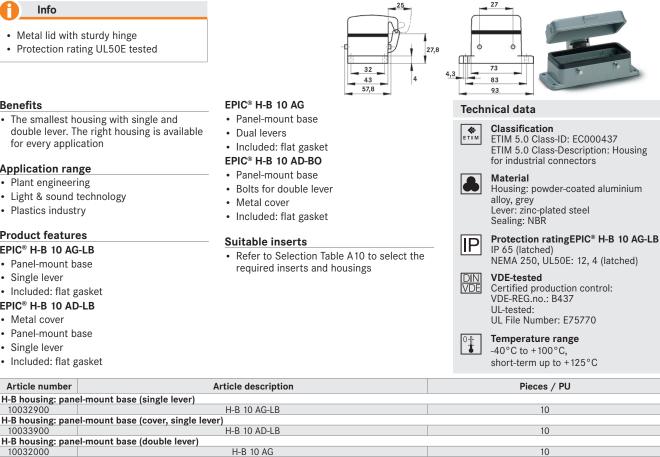
Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 AD-BO

Housing design H-B. The industry standard.

10



# Info

Info

Double lever version with 2 levers for increased safety

Protection rating UL50E tested



- · Metal lid with sturdy hinge
- Protection rating UL50E tested

# **Benefits**

The smallest housing with single and double lever. The right housing is available for every application

# Application range

- Plant engineering
- · Light & sound technology
- · Plastics industry

# **Product features**

- EPIC® H-B 10 AG-LB
- · Panel-mount base
- · Single lever

# · Included: flat gasket

- EPIC® H-B 10 AD-LB
- Metal cover
- · Panel-mount base

Article number

· Single lever

10032900

10033900

10032000

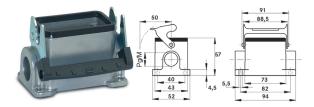
· Included: flat gasket

H-B housing: panel-mount base (cover, bolts for double lever) 10033000 H-B 10 AD-BO Photographs are not to scale and do not represent detailed images of the respective products. UNITRONIC®

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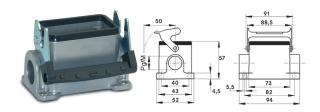
# EPIC<sup>®</sup> H-B 10 SGR-LB

Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 SGRL-LB

Housing design H-B. The industry standard.



# Benefits

• The smallest housing with single and double lever. The right housing is available for every application

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features EPIC<sup>®</sup> H-B 10 SGR-LB

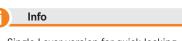
- Surface-mount base, low version
- Single lever
- Jingle level
- 1 cable entry

# EPIC® H-B 10 SGRL-LB

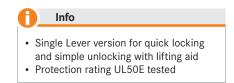
- Surface-mount base, low version
- Single lever
- 2 cable entries

# Suitable inserts

Refer to Selection Table A 10 to select the required inserts and housings



- Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested



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Tech	nical data
E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
IP	Protection rating IP 65 (latched) NEMA 250, UL50E: 12 (latched)
DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
0	Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU
H-B housing: surfa	ace-mount base (1 cable entry, single lever)			
10034900	H-B 10 SGR-LB 16		16	10
10034700	H-B 10 SGR-LB 21		21	10
19034900	H-B 10 SGR-LB M20	20		10
19034700	H-B 10 SGR-LB M25	25		10
H-B housing: surfa	ace-mount base (2 cable entries, single lever)			
10035900	H-B 10 SGRL-LB 16		16	10
19035900	H-B 10 SGRL-LB M20	20		10
79061600	H-B 10 SGRL-LB M25	25		10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

EPIC®

**ETHERLINE®** 

LAPP GROUP

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 10 Housings

# Info

- Single Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

# Info

- Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested

# Info

- · Single Lever version for quick locking and simple unlocking with lifting aid
- · Metal lid with sturdy hinge
- Protection rating UL50E tested

#### Benefits

• The smallest housing with single and double lever. The right housing is available for every application

#### Application range

- · Plant engineering
- Light & sound technology
- · Plastics industry

# Product features

- EPIC® H-B 10 SGRH-LB
- · Surface-mount base, high version
- · Single lever
- 1 cable entry

# EPIC® H-B 10 SGRLH-LB

- Surface-mount base, high version
- · Single lever
- · 2 cable entries

# EPIC® H-B 10 SDR-LB

- · Surface-mount base, low version
- · Single lever
- 1 cable entry
- Metal cover

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

			<b>Tempera</b> -40°C to	umber: E75770 <b>ture range</b>
Article number	Article description	М	PG	Pieces / PU
H-B housing: surfa	ace-mount base (1 cable entry, single lever, ł	igh version)		
70060200	H-B 10 SGRH-LB 21		21	10
70060400	H-B 10 SGRH-LB 29		29	10
79060200	H-B 10 SGRH-LB M25	25		10
79060400	H-B 10 SGRH-LB M32	32		10
H-B housing: surfa	ace-mount base (2 cable entries, single lever	high version)		
70061200	H-B 10 SGRLH-LB 21		21	10
70061400	H-B 10 SGRLH-LB 29		29	10
79061200	H-B 10 SGRLH-LB M25	25		10
79061400	H-B 10 SGRLH-LB M32	32		10
H-B housing: surfa	ace-mount base (cover, 1 cable entry, single	lever)		
1000(000			47	10

H-B 10 SDR-LB M20 79064600 H-B 10 SDR-LB M25 Photographs are not to scale and do not represent detailed images of the respective products.

H-B 10 SDR-LB 16

#### Accessories

10036900

19036900

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

20

25



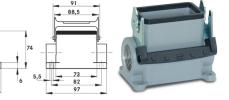
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HITRONIC®

EPIC®

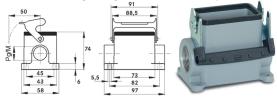


Housing design H-B. The industry standard.

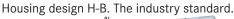
EPIC<sup>®</sup> H-B 10 SGRH-LB

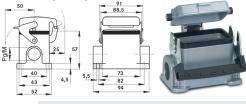
# EPIC® H-B 10 SGRLH-LB

Housing design H-B. The industry standard.



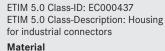
EPIC<sup>®</sup> H-B 10 SDR-LB

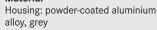




# **Technical data**

Classification ETIM

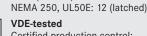




Lever: zinc-plated steel Sealing: NBR



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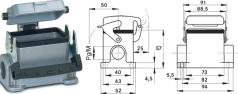


Certified production control: VDE-REG.no.: B437 UI-tested:

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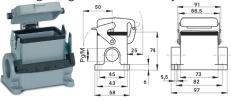
# EPIC® H-B 10 SDRL-LB

Housing design H-B. The industry standard.



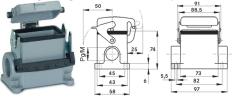
# EPIC<sup>®</sup> H-B 10 SDRH-LB

# Housing design H-B. The industry standard.



# EPIC<sup>®</sup> H-B 10 SDRLH-LB

# Housing design H-B. The industry standard.



#### Benefits

• The smallest housing with single and double lever. The right housing is available for every application

# Application range

- Plant engineering
- · Light & sound technology
- · Plastics industry

# Product features

# EPIC® H-B 10 SDRL-LB

- Surface-mount base, low version
- Single lever
- 2 cable entries
- Metal cover

# EPIC<sup>®</sup> H-B 10 SDRH-LB

- Surface-mount base, high version
- Single lever
- 1 cable entry
- Metal cover

# EPIC<sup>®</sup> H-B 10 SDRLH-LB

- Surface-mount base, high version
- Single lever
- 2 cable entries
- Metal cover

# Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

ſ	Info
	Single Lever version for quick locking and simple unlocking with lifting aid Metal lid with sturdy hinge Protection rating UL50E tested



- Single Lever version for quick locking and simple unlocking with lifting aid
- Metal lid with sturdy hinge
- Protection rating UL50E tested

# Info

- Metal lid with sturdy hinge
- For easy introduction of two cables
- Protection rating UL50E tested

# Technical data

Classification ETIM ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR **Protection rating** ||P| IP 65 (latched) NEMA 250, UL50E: 12 (latched) VDE-tested DIN Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770 Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU
H-B housing: surfa	ace-mount base (cover, 2 cable entries, singl	e lever)		
10038900	H-B 10 SDRL-LB 16		16	10
19038900	H-B 10 SDRL-LB M20	20		10
79065600	H-B 10 SDRL-LB M25	25		10
H-B housing: surfa	ace-mount base (cover, 1 cable entry, single	lever, high version)		
70064200	H-B 10 SDRH-LB 21		21	5
70064400	H-B 10 SDRH-LB 29		29	5
79064200	H-B 10 SDRH-LB M25	25		5
79064400	H-B 10 SDRH-LB M32	32		5
H-B housing: surfa	ace-mount base (cover, 2 cable entries, single	e lever, high version)		
70065200	H-B 10 SDRLH-LB 21		21	5
70065400	H-B 10 SDRLH-LB 29		29	5
79065200	H-B 10 SDRLH-LB M25	25		5
79065400	H-B 10 SDRLH-LB M32	32		5

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

• Easy to install refer to main catalogue

LAPP GROUP

# ETHERLINE®

**HITRONIC®** 

# LAPP GROUP

EPIC<sup>®</sup> H-B 10 AGS-LB

Rectangular connectors • EPIC® H-B 10 Housings



# **ETHERLINE®**

EPIC®



# Technical data

**e**tim

||P|

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel

Sealing: NBR Protection rating

IP 65 (latched) NEMA 250, UL50E: 12 (latched) **VDE-tested** Certified production control: VDE-REG.no.: B437

UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	Pieces / PU		
H-B housing: panel-mount base (angled, single lever)				
44423026	H-B 10 AGS-LB	5		

Photographs are not to scale and do not represent detailed images of the respective products.

Product features

- Panel-mount base
- Single lever
- Angled version
- Included: flat gasket

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Info

- Housing for motor terminationSingle Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Benefits

• Small angle housing for drives and control cabinets with single lever

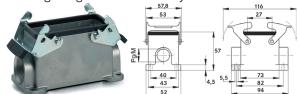
# Application range

- Plant engineering
- Drive systems
- · Light & sound technology
- Plastics industry

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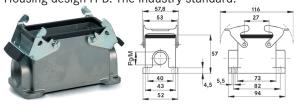
# EPIC<sup>®</sup> H-B 10 SGR

Housing design H-B. The industry standard.



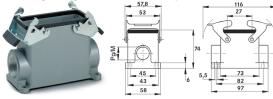
# EPIC<sup>®</sup> H-B 10 SGRL

Housing design H-B. The industry standard.



# EPIC® H-B 10 SGRH

Housing design H-B. The industry standard.



# Benefits

• The smallest housing with single and double lever. The right housing is available for every application

# Application range

- Plant engineering
- Light & sound technology
- Plastics industry

# Product features

# EPIC<sup>®</sup> H-B 10 SGR

- Surface-mount base, low version
- Dual levers
- 1 cable entry

# EPIC® H-B 10 SGRL

- Surface-mount base, low version
- Dual levers
- 2 cable entries

# EPIC<sup>®</sup> H-B 10 SGRH

- Surface-mount base, high version
- Dual levers
- 1 cable entry

# Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

A	Info
•	Double lever version with 2 levers for increased safety



- Double lever version with 2 levers for increased safety
- For easy introduction of two cables

# Info

- More interior space for wiring
- Double lever version with 2 levers for
- increased safety
- For easy introduction of two cables

# **Technical data**

**e**ti M

101

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel

Sealing: NBR Protection rating

- IP 65 (latched)
  - NEMA 250, UL50E: 12, 4 (latched)
- DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU		
H-B housing: surface-mount base (1 cable entry, double lever)						
10034000	H-B 10 SGR 16		16	10		
19034000	H-B 10 SGR M20	20		10		
19034100	H-B 10 SGR M25	25		10		
H-B housing: surface-mount base (2 cable entries, double lever)						
10035000	H-B 10 SGRL 16		16	10		
19035000	H-B 10 SGRL M20	20		10		
19035100	H-B 10 SGRL M25	25		10		
H-B housing: surface-mount base (1 cable entry, double lever, high version)						
70035200	H-B 10 SGRH 21		21	10		
70035400	H-B 10 SGRH 29		29	10		
79035200	H-B 10 SGRH M25	25		10		
79035400	H-B 10 SGRH M32	32		10		

Photographs are not to scale and do not represent detailed images of the respective products.

# Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

# LAPP GROUP

**ETHERLINE®** 

**HITRONIC®** 

#### LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

EPIC<sup>®</sup> H-B 10 SGRLH

Rectangular connectors • EPIC® H-B 10 Housings

#### Info

- More interior space for wiring
- Double lever version with 2 levers for increased safety



Info

**Benefits** 

Metal lid with sturdy hingeFor easy introduction of two cablesProtection rating UL50E tested

for every application

· Light & sound technology

• Surface-mount base, high version

Application range

· Plant engineering

· Plastics industry

**Product features** 

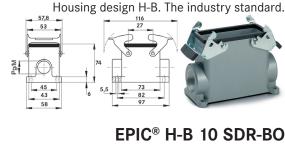
· Dual levers

· 2 cable entries

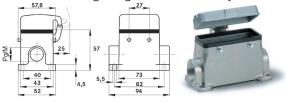
EPIC® H-B 10 SGRLH

• The smallest housing with single and

double lever. The right housing is available

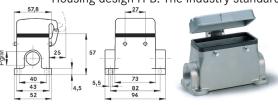


Housing design H-B. The industry standard.



### EPIC<sup>®</sup> H-B 10 SDRL-BO

Housing design H-B. The industry standard.



#### **Technical data**

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material Housing: powder-coated aluminium

alloy, grey Lever: zinc-plated steel Sealing: NBR

- Protection rating
  - IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) VDE-tested
- UNE VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

#### **Temperature range** -40°C to +100°C,

short-term up to +125°C

Article number	Article description	M	PG	Pieces / PU
H-B housing: surfac	e-mount base (2 cable entries, double leve	r, high version)		
70036200	H-B 10 SGRLH 21		21	10
70036400	H-B 10 SGRLH 29		29	10
79036200	H-B 10 SGRLH M25	25		10
79036400	H-B 10 SGRLH M32	32		10
H-B housing: surfac	e-mount base (cover, 1 cable entry, bolts f	or double lever)		
10036000	H-B 10 SDR-BO 16		16	10
19036000	H-B 10 SDR-BO M20	20		10
19036100	H-B 10 SDR-BO M25	25		10
H-B housing: surfac	e-mount base (cover, 2 cable entries, bolts	for double lever)		
10038000	H-B 10 SDRL-BO 16		16	10
19038000	H-B 10 SDRL-BO M20	20		10
79046600	H-B 10 SDRL-BO M25	25		10

EPIC® H-B 10 SDR-BO

· Bolts for double lever

EPIC® H-B 10 SDRL-BO

· Bolts for double lever

· 2 cable entries

Suitable inserts

Metal cover

1 cable entry

Metal cover

• Surface-mount base, low version

· Surface-mount base, low version

required inserts and housings

· Refer to Selection Table A10 to select the

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

**HITRONIC**<sup>®</sup>

EPIC®

Rectangular connectors • EPIC® H-B 10 Housings

## LAPP GROUP

VDE c **RU**us EPIC<sup>®</sup> H-B 10 SDRH-BO Housing design H-B. The industry standard. 57,8 Info • More interior space for wiring · Metal lid with sturdy hinge • Protection rating UL50E tested EPIC® H-B 10 SDRLH-BO Housing design H-B. The industry standard. 57,8 Info · Double lever version with 2 levers for increased safety • For easy introduction of two cables • Protection rating UL50E tested **Benefits Technical data** · The smallest housing with single and **С**ТІМ Classification **Protection rating** double lever. The right housing is available IP ETIM 5.0 Class-ID: EC000437 IP 65 (latched) for every application ETIM 5.0 Class-Description: Housing NEMA 250, UL50E: 12, 4 (latched) for industrial connectors VDE-tested Application range Material Certified production control: · Plant engineering Housing: powder-coated aluminium VDE-REG.no.: B437 · Light & sound technology UL-tested: alloy, grey · Plastics industry Lever: zinc-plated steel UL File Number: E75770 Sealing: NBR Temperature range **Product features** -40°C to +100°C, EPIC® H-B 10 SDRH-BO short-term up to +125°C • Surface-mount base, high version · Bolts for double lever • 1 cable entry Metal cover

- EPIC<sup>®</sup> H-B 10 SDRLH-BO
- Surface-mount base, high version
- Bolts for double lever
- 2 cable entries
- Metal cover

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Pieces / PU				
H-B housing: surfa	H-B housing: surface-mount base (cover, 1 cable entry, bolts for double lever, high version)							
70045200	H-B 10 SDRH-BO 21		21	5				
70045400	H-B 10 SDRH-BO 29		29	5				
79045200	H-B 10 SDRH-BO M25	25		5				
H-B housing: surfa	ace-mount base (cover, 2 cable entries, bolts	for double lever, high version						
70046200	H-B 10 SDRLH-BO 21		21	5				
79046200	H-B 10 SDRLH-BO M25	25		5				
79046400	H-B 10 SDRLH-BO M32	32		5				

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

EPIC®

**ETHERLINE®** 

#### LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC<sup>®</sup> H-B 10 Housings

## EPIC<sup>®</sup> H-B 10 TBF-LB

Housing design H-B. The industry standard.





## EPIC<sup>®</sup> H-B 10 TBFH-LB

Housing design H-B. The industry standard.





- Cable coupler hood, high version
- · Single lever
- Straight cable entry

EPIC® H-B 10 TBFH-LB

• Versions with / without neck

#### EPIC<sup>®</sup> H-B 10 TBF

- · Cable coupler hood, low version
- · Dual levers
- Straight cable entry
- · Versions with / without neck

#### Suitable inserts

 Refer to Selection Table A10 to select the required inserts and housings

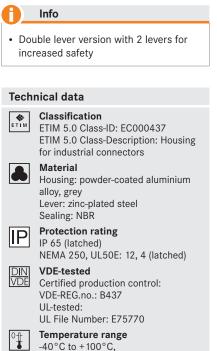
Info

#### Info

- More interior space for wiring
- Single Lever version for quick locking and simple unlocking with lifting aid

Single Lever version for quick locking and simple unlocking with lifting aid Protection rating UL50E tested

• Protection rating UL50E tested



-40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever)			
10046900	H-B 10 TBF-LB 16		16	yes	10
70042200	H-B 10 TBF-LB 21		21	yes	10
19046900	H-B 10 TBF-LB M20	20			10
79042200	H-B 10 TBF-LB M25	25			10
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever, high versi	ion)		
70042400	H-B 10 TBFH-LB 21		21	yes	10
70042600	H-B 10 TBFH-LB 29		29	yes	10
79042400	H-B 10 TBFH-LB M25	25			10
79042600	H-B 10 TBFH-LB M32	32			10
H-B housing: cable	e coupler hood (straight cable entry,	double lever)			
10046000	H-B 10 TBF 16		16	yes	10
70040200	H-B 10 TBF 21		21	yes	10
19046000	H-B 10 TBF M20	20			10
79040200	H-B 10 TBF M25	25			10

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

**ETHERLINE®** 

HITRONIC



## Benefits

The smallest housing with single and double lever. The right housing is available for every application

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features** EPIC® H-B 10 TBF-LB

- · Cable coupler hood, low version
- · Single lever
- · Straight cable entry
- Versions with / without neck

Rectangular connectors • EPIC® H-B 10 Housings



c**W**us EPIC<sup>®</sup> H-B 10 TBFH Housing design H-B. The industry standard. Info · More interior space for wiring • Double lever version with 2 levers for increased safety **Benefits Technical data** · The smallest housing with single and **Protection rating** Classification E T I M double lever. The right housing is available IP ETIM 5.0 Class-ID: EC000437 IP 65 (latched) for every application NEMA 250, UL50E: 12, 4 (latched) ETIM 5.0 Class-Description: Housing for industrial connectors Application range VDE-tested DIN VDE Material Certified production control: • Plant engineering VDE-REG.no.: B437 Housing: powder-coated aluminium · Light & sound technology alloy, grey UL-tested: · Plastics industry Lever: zinc-plated steel UL File Number: E75770 Sealing: NBR

#### **Product features**

- Cable coupler hood, high version
- Dual levers
- · Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU	
H-B housing: cable coupler hood (straight cable entry, double lever, high version)						
70040400	H-B 10 TBFH 21		21	yes	10	
70040600	H-B 10 TBFH 29		29	yes	10	
79040400	H-B 10 TBFH M25	25			10	
79040600	H-B 10 TBFH M32	32			10	

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

146

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue



Temperature range -40°C to +100°C, short-term up to +125°C

For current information see: www.lappgroup.com

**ETHERLINE®** 

EPIC®

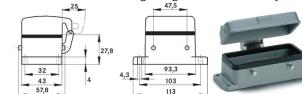
#### APP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings

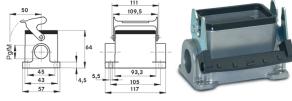
## EPIC<sup>®</sup> H-B 16 AD-BO

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 16 SGR-LB

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 16 SGRL-LB

Housing design H-B. The industry standard.



Classification

#### **Technical data**

ETIM

DIN VDE

ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR Protection rating EPIC<sup>®</sup> H-B 16 AD-BO IP 65 (latched) ||P| NEMA 250, UL50E: 12, 4 (latched) EPIC® H-B 16 SGR-LB IP 65 (latched) UL50 Type 12 (latched) EPIC<sup>®</sup> H-B 16 SGRL-LB

IP 65 (latched) UL50 Type 12 (latched)

#### VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

**Temperature range** -40°C to +100°C,

short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU			
H-B housing: pane	H-B housing: panel-mount base (cover, bolts for double lever)						
10073000	H-B 16 AD-BO			5			
H-B housing: surfa	ace-mount base (1 cable entry, single lever)						
10074900	H-B 16 SGR-LB 21		21	5			
19074900	H-B 16 SGR-LB M25	25		5			
H-B housing: surfa	ace-mount base (2 cable entries, single lever)	)					
10075900	H-B 16 SGRL-LB 21		21	5			
19075900	H-B 16 SGRL-LB M25	25		5			

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

#### EPIC® H-B 16 SGR-LB

- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

#### EPIC<sup>®</sup> H-B 16 SGRL-LB

- SKINTOP® MS-M refer to main catalogue
- · SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

#### 147

**ETHERLINE®** 

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#### Double lever version with 2 levers for increased safety

Info

- Metal lid with sturdy hinge
- Protection rating UL50E tested

#### Info

- · Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Info

- · Single Lever version for quick locking and simple unlocking with lifting aid
- For easy introduction of two cables
- Protection rating UL50E tested

#### **Benefits**

• The housing standard. Wide choice for all applications

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features**

- EPIC® H-B 16 AD-BO
- Panel-mount base
- · Bolts for double lever
- Metal cover
- · Included: flat gasket

#### EPIC® H-B 16 SGR-LB

- Surface-mount base, low version
- Single lever

- Surface-mount base, low version
- Single lever

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

- 1 cable entry
- EPIC® H-B 16 SGRL-LB

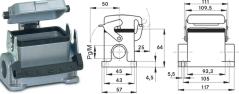
- 2 cable entries

Rectangular connectors • EPIC® H-B 16 Housings

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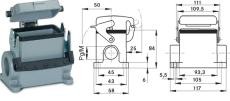
#### EPIC<sup>®</sup> H-B 16 SDRL-LB

Housing design H-B. The industry standard.



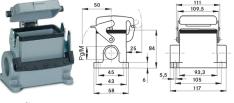
#### EPIC® H-B 16 SDRH-LB

#### Housing design H-B. The industry standard.



#### EPIC<sup>®</sup> H-B 16 SDRLH-LB

#### Housing design H-B. The industry standard.



#### Benefits

#### EPIC<sup>®</sup> H-B 16 SDRL-LB

• The housing standard. Wide choice for all applications

#### EPIC<sup>®</sup> H-B 16 SDRH-LB

- More interior space for wiring
- The housing standard. Wide choice for all applications

#### EPIC<sup>®</sup> H-B 16 SDRLH-LB

• The housing standard. Wide choice for all applications

#### Application range

- Plant engineering
- · Light & sound technology
- Plastics industry

#### Product features

- EPIC® H-B 16 SDRL-LB
- Surface-mount base, low version
- Single lever

2 cable entries
 Metal cover

#### EPIC<sup>®</sup> H-B 16 SDRH-LB

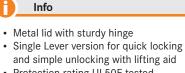
- Surface-mount base, high version
- Single lever
- 1 cable entry
- Metal cover

#### EPIC<sup>®</sup> H-B 16 SDRLH-LB

- Surface-mount base, high version
- Single lever
- 2 cable entries
- Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings



Protection rating UL50E tested



- Metal lid with sturdy hinge
- Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Info

- Metal lid with sturdy hinge
- Single Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Technical data

**E**TIM

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

#### Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR



IP 65 (latched) UL50 Type 12 (latched)

DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

**Temperature range** -40°C to +100°C, short-term up to +125°C

PG Article number Article description М Pieces / PU H-B housing: surface-mount base (cover, 2 cable entries, single lever) 10078900 21 H-B 16 SDRL-LB 21 5 19078900 H-B 16 SDRL-LB M25 25 5 H-B housing: surface-mount base (cover, 1 cable entry, single lever, high version) 70114200 H-B 16 SDRH-LB 21 21 5 H-B 16 SDRH-LB 29 70114400 29 5 79114200 H-B 16 SDRH-LB M25 25 5 79114400 H-B 16 SDRH-LB M32 32 5 H-B housing: surface-mount base (cover, 2 cable entries, single lever, high version) 70115200 H-B 16 SDRLH-LB 21 21 5 70115400 H-B 16 SDRLH-LB 29 29 25 79115200 H-B 16 SDRLH-LB M25 5 H-B 16 SDRLH-LB M32 79115400 32 5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

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**HITRONIC®** 

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#### EAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings

#### Info

- Single Lever version for quick locking
- and simple unlocking with lifting aid
- More interior space for wiring Protection rating UL50E tested

#### Info

- · Single Lever version for quick locking and simple unlocking with lifting aid
- For easy introduction of two cables
- Protection rating UL50E tested

#### Info

- · Metal lid with sturdy hinge
- Single Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

#### **Benefits**

#### EPIC® H-B 16 SGRH-LB

• The housing standard. Wide choice for all applications

#### EPIC<sup>®</sup> H-B 16 SGRLH-LB

- The housing standard. Wide choice for all applications
- · More interior space for wiring

#### EPIC® H-B 16 SDR-LB

• The housing standard. Wide choice for all applications

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features** EPIC® H-B 16 SGRH-LB

- · Surface-mount base, high version
- · Single lever
- 1 cable entry EPIC® H-B 16 SGRLH-LB
- · Surface-mount base, high version
- Single lever
- 2 cable entries

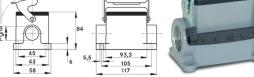
#### EPIC<sup>®</sup> H-B 16 SDR-LB

- · Surface-mount base, low version
- · Single lever
- 1 cable entry
- Metal cover

#### Suitable inserts

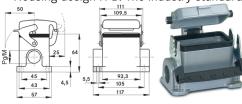
• Refer to Selection Table A10 to select the required inserts and housings





EPIC<sup>®</sup> H-B 16 SDR-LB





#### **Technical data**

Classification **С** ЕТІМ

ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material Housing: powder-coated aluminium

alloy, grey Lever: zinc-plated steel Sealing: NBR

- **Protection rating IP** IP 65 (latched)
  - UL50 Type 12 (latched)
  - VDE-tested
  - Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

```
Temperature range
-40°C to +100°C.
short-term up to +125°C
```

Article number М PG Pieces / PU Article description H-B housing: surface-mount base (1 cable entry, single lever, high version) 70110200 H-B 16 SGRH-LB 21 21 5 70110400 H-B 16 SGRH-LB 29 29 5 79110200 H-B 16 SGRH-LB M25 25 5 79110400 H-B 16 SGRH-LB M32 32 5 H-B housing: surface-mount base (2 cable entries, single lever, high version) H-B 16 SGRLH-LB 21 70111200 21 5 70111400 H-B 16 SGRLH-LB 29 29 5 79111200 H-B 16 SGRLH-LB M25 25 5 79111400 H-B 16 SGRLH-LB M32 32 5 H-B housing: surface-mount base (cover, 1 cable entry, single lever) H-B 16 SDR-LB 21 10076900 21 5 19076900 H-B 16 SDR-LB M25 25

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

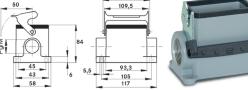
ETHERLINE®

HITRONIC®

EPIC®









Rectangular connectors • EPIC® H-B 16 Housings

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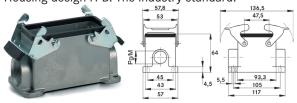
### EPIC<sup>®</sup> H-B 16 SGR

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 16 SGRL

Housing design H-B. The industry standard.



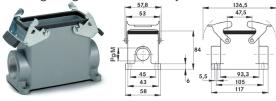
UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

## EPIC<sup>®</sup> H-B 16 SGRH

Housing design H-B. The industry standard.



#### Benefits

• The housing standard. Wide choice for all applications

#### Application range

- Plant engineering
- · Light & sound technology
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 16 SGR
- Surface-mount base, low version
- Dual levers
- 1 cable entry

#### EPIC<sup>®</sup> H-B 16 SGRL

- Surface-mount base, low version
- Dual levers
- 2 cable entries
- EPIC® H-B 16 SGRH
- Surface-mount base, high version
- Dual levers
- 1 cable entry

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

# Info Double lever version with 2

- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested



- Double lever version with 2 levers for increased safety
- For easy introduction of two cables
- Protection rating UL50E tested

#### Info

- More interior space for wiring
- Double lever version with 2 levers for
- increased safety
- Protection rating UL50E tested

#### **Technical data**

Classification
 ETIM 5.0 Class-ID: EC000437
 ETIM 5.0 Class-Description: Housing
 for industrial connectors
 Material
 Housing: powder-coated aluminium
 alloy, grey
 Lever: zinc-plated steel
 Sealing: NBR
 Protection rating
 IP 65 (latched)

- IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
- DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

PG Pieces / PU Article number Article description М H-B housing: surface-mount base (1 cable entry, double lever) 10074000 H-B 16 SGR 21 21 5 19074000 H-B 16 SGR M25 25 5 H-B housing: surface-mount base (2 cable entries, double lever) 10075000 H-B 16 SGRL 21 21 5 25 19075000 H-B 16 SGRL M25 5 H-B housing: surface-mount base (1 cable entry, double lever, high version) 70085200 21 5 H-B 16 SGRH 21 70085400 H-B 16 SGRH 29 29 5 79085200 H-B 16 SGRH M25 25 5 79085400 H-B 16 SGRH M32 32

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue

• Easy to install refer to main catalogue

## **EAPP** GROUP

### EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings

Info

Info

· Metal lid with sturdy hinge

· Single Lever version for quick locking

and simple unlocking with lifting aid Protection rating UL50E tested

· Single Lever version for quick locking and simple unlocking with lifting aid

Protection rating UL50E tested

## EPIC<sup>®</sup> H-B 16 AG-LB

Housing design H-B. The industry standard.

111

109,5

93,3 103

113

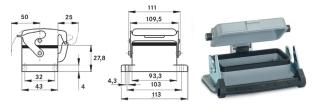
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EPIC®

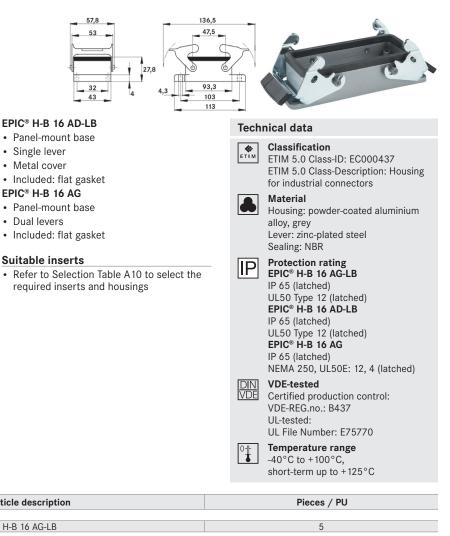
# EPIC<sup>®</sup> H-B 16 AD-LB

Housing design H-B. The industry standard.





Housing design H-B. The industry standard.



Info

- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

#### Benefits

• The housing standard. Wide choice for all applications

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features**

- EPIC® H-B 16 AG-LB
- · Panel-mount base
- · Single lever
- · Included: flat gasket



#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article description Article number H-B housing: panel-mount base (single lever) H-B 16 AG-LB 10072900 H-B housing: panel-mount base (cover, single lever) 10073900 H-B 16 AD-LB 5 H-B housing: panel-mount base (double lever) H-B 16 AG 10072000 5

Photographs are not to scale and do not represent detailed images of the respective products.

Rectangular connectors • EPIC<sup>®</sup> H-B 16 Housings

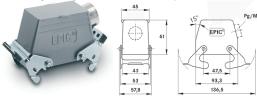
#### EPIC<sup>®</sup> H-B 16 TSH

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 16 TSB

Housing design H-B. The industry standard.



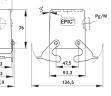
## EPIC<sup>®</sup> H-B 16 TSBH

#### Housing design H-B. The industry standard.









#### Benefits

EPIC® H-B 16 TSH • The housing standard. Wide choice for all applications

#### EPIC® H-B 16 TSB

- The housing standard. Wide choice for all applications
- · Double lever version with 2 levers for increased safety

#### EPIC<sup>®</sup> H-B 16 TSBH

- The housing standard. Wide choice for all applications
- · Double lever version with 2 levers for increased safety

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features** EPIC® H-B 16 TSH

- · Hood, high version
- Bolts for double lever •
- Side cable entry ٠
- Versions with / without neck
- EPIC® H-B 16 TSB
- · Hood, low version
- · Dual levers
- Side cable entry
- · Versions with neck
- EPIC® H-B 16 TSBH
- · Hood, high version
- Dual levers
- Side cable entry
- Versions with / without neck

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

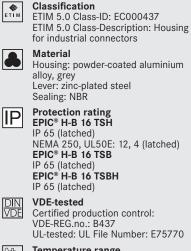


- More interior space for wiring
- Protection rating UL50E tested
- Info Non-slip ridges for comfortable disconnecting
  - For connection with counterpart with integrated cover
- NEMA 250, UL50E: 12, 4 (latched)

#### Info

- · More interior space for wiring
- For connection with counterpart with
- integrated cover
- NEMA 250, UL50E: 12, 4 (latched)

#### **Technical data**



Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	d (side cable entry, bolts for double le	ever, high version)			
70102200	H-B 16 TSH 21		21	yes	5
70102400	H-B 16 TSH 29		29	yes	5
79102200	H-B 16 TSH M25	25			5
79102400	H-B 16 TSH M32	32			5
79102800	H-B 16 TSH M40	40			5
H-B housing: hood	d (side cable entry, double lever)				
10083000	H-B 16 TSB 21		21	yes	5
19083000	H-B 16 TSB M25	25		yes	5
H-B housing: hood	d (side cable entry, double lever, high	version)			
70107200	H-B 16 TSBH 21		21	yes	5
70107400	H-B 16 TSBH 29		29	yes	5
79107200	H-B 16 TSBH M25	25			5
79107400	H-B 16 TSBH M32	32			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- · SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

## A LAPP GROUP

VDE

**ETHERLINE®** 



EPIC®

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#### LAPP GROUP

## EPIC® Industrial connectors

Rectangular connectors  $\mbox{ }\mbox{ }\mb$ 

Info

disconnecting

integrated cover

Info

integrated cover

Info

disconnecting

**Technical data** 

**еті**м

**IP** 

DIN VDE

· Non-slip ridges for comfortable

For connection with counterpart with

NEMA 250, UL50E: 12, 4 (latched)

More interior space for wiring

Protection rating UL50E tested

· Non-slip ridges for comfortable

Protection rating UL50E tested

ETIM 5.0 Class-ID: EC000437

for industrial connectors

alloy, grey Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

Housing: powder-coated aluminium

**Benefits** 

EPIC<sup>®</sup> H-B 16 TGB

applications

increased safety

EPIC<sup>®</sup> H-B 16 TGBH

increased safety

applications

EPIC® H-B 16 TS

applications

Application range

· Plant engineering

· Plastics industry

Light & sound technology

• The housing standard. Wide choice for all

• The housing standard. Wide choice for all

• The housing standard. Wide choice for all

Double lever version with 2 levers for

Double lever version with 2 levers for

Classification

Material

Sealing: NBR

**Protection rating** 

EPIC<sup>®</sup> H-B 16 TGB

EPIC® H-B 16 TGBH

Temperature range

-40°C to +100°C, short-term up to +125°C

Protection rating UL50E tested

Certified production control: VDE-REG.no.: B437

UL-tested: UL File Number: E75770

IP 65 (latched)

IP 65 (latched) EPIC<sup>®</sup> H-B 16 TS

IP 65 (latched)

VDE-tested

· For connection with counterpart with

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## EPIC<sup>®</sup> H-B 16 TGB

EPIC<sup>®</sup> H-B 16 TGBH

Housing design H-B. The industry standard.

Pg/N

EPIC

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EPIC®



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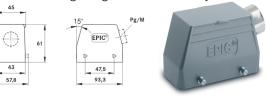


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## EPIC<sup>®</sup> H-B 16 TS

Housing design H-B. The industry standard.

Housing design H-B. The industry standard.



#### Product features

#### EPIC<sup>®</sup> H-B 16 TGB

- · Hood, low version
- Dual levers
- Straight cable entry
- · Versions with / without neck

#### EPIC<sup>®</sup> H-B 16 TGBH

- · Hood, high version
- Dual levers
- Straight cable entry
- · Versions with / without neck

#### EPIC<sup>®</sup> H-B 16 TS

- Hood, low version
- Bolts for double lever
- Side cable entry
- Versions with neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	I (straight cable entry, double lever)				
10081000	H-B 16 TGB 21		21	yes	5
19081000	H-B 16 TGB M25	25			5
H-B housing: hood	I (straight cable entry, double lever,	high version)			
70105200	H-B 16TGBH 21		21	yes	5
70105400	H-B 16TGBH 29		29	yes	5
79105200	H-B 16TGBH M25	25			5
79105400	H-B 16TGBH M32	32			5
H-B housing: hood	I (side cable entry, bolts for double	lever)			
10082000	H-B 16 TS 21		21	yes	5
10092000	H-B 16 TS 29		29	yes	5
19082000	H-B 16 TS M25	25		yes	5
19092000	H-B 16 TS M32	32		yes	5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### 153

Rectangular connectors • EPIC® H-B 16 Housings

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# EPIC<sup>®</sup> H-B 16 TGH

ETHERLINE®

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EPIC®

UNITRONIC®



## EPIC<sup>®</sup> H-B 16 TGH 2X

Housing design H-B. The industry standard.



#### Benefits

- EPIC<sup>®</sup> H-B 16 TGH
- The housing standard. Wide choice for all applications
- EPIC<sup>®</sup> H-B 16 TGH 2X
- The housing standard. Wide choice for all applications
- More interior space for wiring

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features EPIC<sup>®</sup> H-B 16 TGH

- Hood, high version
- · Bolts for double lever
- Straight cable entry
- Versions with / without neck

#### EPIC<sup>®</sup> H-B 16 TGH 2X

- Hood, high version
- Bolts for double lever
- 2 straight cable entries
- Versions without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

<ul> <li>Non-slip ridges for comfortable disconnecting</li> <li>For easy introduction of two cables</li> <li>NEMA 250, UL50E: 12, 4 (latched)</li> </ul> Technical data           Image: Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors           Image: Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors           Image: Classification ETIM 5.0 Class-Description: Housing for industrial connectors           Image: Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors           Image: Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors           Image: Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-ID: ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-ID: ETIM 5.0 Cla		0_	Info					
<ul> <li>Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors</li> <li>Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR</li> <li>Protection rating EPIC® H-B 16 TGH IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>NEM 250, UL50E: 12, 4 (latched)</li> <li>EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770</li> <li>Temperature range -40°C to +100°C,</li> </ul>		diso • For	disconnecting <ul> <li>For easy introduction of two cables</li> </ul>					
<ul> <li>Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors</li> <li>Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR</li> <li>Protection rating EPIC® H-B 16 TGH IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>NEM 250, UL50E: 12, 4 (latched)</li> <li>EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770</li> <li>Temperature range -40°C to +100°C,</li> </ul>		Tech	nical data					
<ul> <li>ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors</li> <li>Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR</li> <li>Protection rating EPIC® H-B 16 TGH IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>VDE-tested VDE</li> <li>Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770</li> <li>Temperature range -40°C to +100°C,</li> </ul>		rech						
<ul> <li>Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR</li> <li>Protection rating EPIC® H-B 16 TGH IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>NEM 250, UL50E: 12, 4 (latched)</li> <li>EPIC® H-B 16 TGH 2X IP 65 (latched)</li> <li>VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770</li> <li>Temperature range -40°C to +100°C,</li> </ul>			ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing					
EPIC® H-B 16 TGH         IP 65 (latched)         NEMA 250, UL50E: 12, 4 (latched)         EPIC® H-B 16 TGH 2X         IP 65 (latched)         VDE         VDE tested         VDE-REG.no.: B437         UL-tested:         UL File Number: E75770         Image: Comparison of the state of th			Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel					
Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770 Temperature range -40°C to +100°C,	!	IP	EPIC <sup>®</sup> H-B 16 TGH IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) EPIC <sup>®</sup> H-B 16 TGH 2X					
-40°C to +100°C,		DIN VDE	Certified production control: VDE-REG.no.: B437 UL-tested:					
		0	-40°C to +100°C,					

Info

disconnecting

• Non-slip ridges for comfortable

• More interior space for wiring

• Protection rating UL50E tested

Article number	Article description	М	PG	Neck	Pieces / PU		
H-B housing: hood (straight cable entry, bolts for double lever, high version)							
70100200	H-B 16 TGH 21		21	yes	5		
70100400	H-B 16 TGH 29		29	yes	5		
79100200	H-B 16 TGH M25	25			5		
79100400	H-B 16 TGH M32	32			5		
79100800	H-B 16 TGH M40	40			5		
H-B housing: hood (2 straight cable entries, bolts for double lever, high version)							
44422018	H-B 16 TGH 2XM25	2 x 25			5		
79128600	H-B 16 TGH 2XM32	2 x 32			5		

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• SKINTOP® MS-M refer to main catalogue

- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### APP GROUP

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Info

disconnecting

Info

disconnecting

Non-slip ridges for comfortable

More interior space for wiring

• Protection rating UL50E tested

Non-slip ridges for comfortable

Protection rating UL50E tested

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings



## EPIC<sup>®</sup> H-B 16 TSH-RO

Housing design H-B. The industry standard.



**HITRONIC**<sup>®</sup>

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# EPIC®

## EPIC<sup>®</sup> H-B 16 TG 2X

EPIC<sup>®</sup> H-B 16 TG

Housing design H-B. The industry standard.

Housing design H-B. The industry standard.



#### Info

- · Non-slip ridges for comfortable disconnecting
- For easy introduction of two cables
- Protection rating UL50E tested

#### **Technical data**

ET

<b>е</b> гтм	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
	Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

Protection rating EPIC<sup>®</sup> H-B 16 TSH-RO IΡ IP 65 (latched) UL50 Type 12 (latched) EPIC<sup>®</sup> H-B 16 TG IP 65 (latched) EPIC<sup>®</sup> H-B 16 TG 2X IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C

#### **Benefits**

• The housing standard. Wide choice for all applications

43

61

57,8

Pg/N

EPIC®

47,5

93,3

#### Application range

- · Plant engineering
- · Light & sound technology
- Plastics industry

#### **Product features** EPIC® H-B 16 TSH-RO

- · Hood, high version
- · Reels for single lever
- · Side cable entry
- Versions with / without neck

#### EPIC<sup>®</sup> H-B 16 TG

- · Hood, low version
- · Bolts for double lever
- · Straight cable entry
- Versions with / without neck
- EPIC® H-B 16 TG 2X
- · Hood, low version
- · Bolts for double lever
- 2 straight cable entries
- · Versions with neck

#### Suitable inserts

· Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	M	PG	Neck	Pieces / PU
H-B housing: hood	I (side cable entry, bolts for single le	ver, high version)			
70104200	H-B 16 TSH-RO 21		21	yes	5
70104400	H-B 16 TSH-RO 29		29	yes	5
79104200	H-B 16 TSH-RO M25	25			5
79104400	H-B 16 TSH-RO M32	32			5
79104800	H-B 16 TSH-RO M40	40			5
H-B housing: hood	I (straight cable entry, bolts for doub	le lever)			
10080000	H-B 16 TG 21		21	yes	5
10090000	H-B 16 TG 29		29	yes	5
19080000	H-B 16 TG M25	25			5
19090000	H-B 16 TG M32	32			5
H-B housing: hood	I (2 straight cable entries, bolts for d	ouble lever)			
19080500	H-B 16 TG 2XM25	2 x 25		yes	5
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 H H H H H			

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue



## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings

# EPIC<sup>®</sup> H-B 16 TG-RO Housing design H-B. The industry standard.

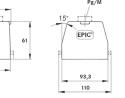
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Housing design H-B. The industry standard.



EPIC

93,3

110

# Info Non-slip ridges for comfortable disconnecting Protection rating UL50E tested



· Non-slip ridges for comfortable

· Protection rating UL50E tested

## EPIC® H-B 16 TS-RO

EPIC<sup>®</sup> H-B 16 TGH-RO

Housing design H-B. The industry standard.



• The housing standard. Wide choice for all

• The housing standard. Wide choice for all

• The housing standard. Wide choice for all

# Product features

- EPIC<sup>®</sup> H-B 16 TG-RO
- Hood, low version
- Reels for single lever
- Straight cable entry
- Versions with / without neck

#### EPIC® H-B 16 TGH-RO

- Hood, high version
- Reels for single lever
- Straight cable entry
- Versions with / without neck

#### EPIC<sup>®</sup> H-B 16 TS-RO

- Hood, low version
- Reels for single lever
- Side cable entry
- Versions with neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing
	ETIM 5.0 Glass-Description: Housing

## for industrial connectors Material

**Technical data** 

Info

disconnecting

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

- Protection rating
  - IP 65 (latched) UL50 Type 12 (latched)
- DIN VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
  - Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	d (straight cable entry, bolts for singl	e lever)	^		
10080900	H-B 16 TG-RO 21		21	yes	5
19080900	H-B 16 TG-RO M25	25			5
H-B housing: hood	d (straight cable entry, bolts for singl	e lever, high version)			
70094200	H-B 16 TGH-RO 21		21	yes	5
70094400	H-B 16 TGH-RO 29		29	yes	5
79094200	H-B 16 TGH-RO M25	25			5
79094400	H-B 16 TGH-RO M32	32			5
79094600	H-B 16 TGH-RO M40	40			5
H-B housing: hood	d (side cable entry, bolts for single le	ever)			
10082900	H-B 16 TS-RO 21		21	yes	5
10092900	H-B 16 TS-RO 29		29	yes	5
19082900	H-B 16 TS-RO M25	25		yes	5
19092900	H-B 16 TS-RO M32	32		yes	5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

• Easy to install refer to main catalogue

# 



**ETHERLINE®** 

EPIC®

**Benefits** 

EPIC® H-B 16 TG-RO

EPIC® H-B 16 TGH-RO

• More interior space for wiring

applications

applications

applications

EPIC® H-B 16 TS-RO

**Application range** 

· Plant engineering

· Plastics industry

· Light & sound technology

HITRONIC®

•

Info

EPIC<sup>®</sup> H-B 16 SGRLH

EPIC<sup>®</sup> H-B 16 SDR-BO

Rectangular connectors • EPIC<sup>®</sup> H-B 16 Housings

Housing design H-B. The industry standard.

Housing design H-B. The industry standard.

57.8

N/g

57.8

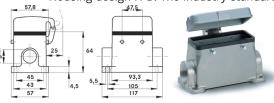
No.

**UNITRONIC®** 

# ETHERLINE®

## EPIC<sup>®</sup> H-B 16 SDRL-BO





93,3 105 117

#### Technical data

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

## Protection rating

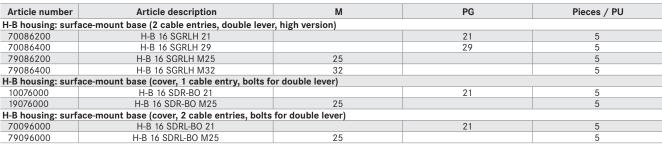
IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

#### DIN VDE-tested VDE Certified production control:

VDE-REG.no.: B437 UL-tested:

UL File Number: E75770 Temperature range

-40°C to +100°C, short-term up to +125°C



Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- ${\rm SKINTOP}^{\scriptscriptstyle (\! 8\!)}$  for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### 157

Info Metal lid with sturdy hinge

Protection rating UL50E tested

More interior space for wiring

• Protection rating UL50E tested

• For easy introduction of two cables

#### Info

- Metal lid with sturdy hinge
- · For easy introduction of two cables
- Protection rating UL50E tested

#### Benefits

#### EPIC® H-B 16 SGRLH

- The housing standard. Wide choice for all applications
- Double lever version with 2 levers for increased safety

#### EPIC<sup>®</sup> H-B 16 SDR-BO

• The housing standard. Wide choice for all applications

#### EPIC<sup>®</sup> H-B 16 SDRL-BO

• The housing standard. Wide choice for all applications

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

# Product features

- EPIC<sup>®</sup> H-B 16 SGRLH
- Surface-mount base, high version
- Dual levers
- 2 cable entries

#### EPIC® H-B 16 SDR-BO

- Surface-mount base, low version
- Bolts for double lever
- 1 cable entry
- Metal cover

#### EPIC<sup>®</sup> H-B 16 SDRL-BO

- Surface-mount base, low version
- Bolts for double lever
- 2 cable entries
- Z cable entri
   Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

∟**⊓** ase, high version Rectangular connectors • EPIC® H-B 16 Housings

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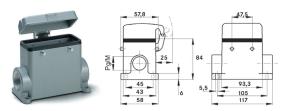
**ETHERLINE®** 

**HITRONIC®** 

EPIC®

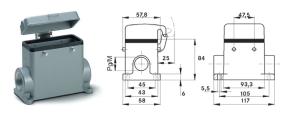
## EPIC<sup>®</sup> H-B 16 SDRH-BO

Housing design H-B. The industry standard.



### EPIC<sup>®</sup> H-B 16 SDRLH-BO

Housing design H-B. The industry standard.



#### Benefits

#### EPIC® H-B 16 SDRH-BO

• The housing standard. Wide choice for all applications

#### EPIC<sup>®</sup> H-B 16 SDRLH-BO

- The housing standard. Wide choice for all applications
- More interior space for wiring

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features EPIC<sup>®</sup> H-B 16 SDRH-BO

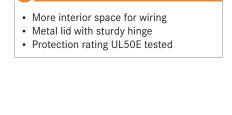
- Surface-mount base, high version
- Bolts for double lever
- 1 cable entry
- Metal cover

#### EPIC<sup>®</sup> H-B 16 SDRLH-BO

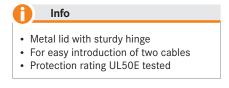
- Surface-mount base, high version
- Bolts for double lever
- 2 cable entries
- Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings



Info



Tech	nical data
E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
IP	Protection rating IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
°‡	Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU
H-B housing: surfa	ace-mount base (cover, 1 cable entry, bolts fo	or double lever, high version)		
70095200	H-B 16 SDRH-BO 21		21	5
70095400	H-B 16 SDRH-BO 29		29	5
79095200	H-B 16 SDRH-BO M25	25		5
79095400	H-B 16 SDRH-BO M32	32		5
H-B housing: surfa	ace-mount base (cover, 2 cable entries, bolts	for double lever, high version)		
70096200	H-B 16 SDRLH-BO 21		21	5
79096200	H-B 16 SDRLH-BO M25	25		5
79096400	H-B 16 SDRLH-BO M32	32		5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

158

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### APP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 16 Housings

Info

## EPIC<sup>®</sup> H-B 16 TBF-LB

Housing design H-B. The industry standard.





Housing design H-B. The industry standard.



# EPIC®

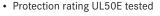
EPIC<sup>®</sup> H-B 16 TBF

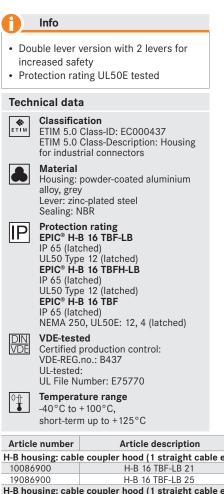
Housing design H-B. The industry standard.



Info
More interior space for wiring
Single Lever version for quick locking and simple unlocking with lifting aid

Single Lever version for quick locking and simple unlocking with lifting aid Protection rating UL50E tested





#### EPIC® H-B 16 TBFH-LB

- Cable coupler hood, high version
- Single lever
- Straight cable entry
- · Versions with / without neck
- EPIC® H-B 16 TBF
- · Cable coupler hood, low version
- · Dual levers
- · Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: cabl	e coupler hood (1 straight cable entr	y, single lever)	·		
10086900	H-B 16 TBF-LB 21		21	yes	5
19086900	H-B 16 TBF-LB 25	25			5
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever, high versi	on)		
70092200	H-B 16 TBFH-LB 21		21	yes	5
70092400	H-B 16 TBFH-LB 29		29	yes	5
79092200	H-B 16 TBFH-LB M25	25			5
79092400	H-B 16 TBFH-LB M32	32			5
H-B housing: cabl	e coupler hood (straight cable entry,	double lever)			
10086000	H-B 16 TBF 21		21	yes	5
19086000	H-B 16 TBF M25	25			5

• The housing standard. Wide choice for all

**Benefits** 

applications

Application range

· Plant engineering

· Plastics industry

**Product features** 

· Single lever

EPIC® H-B 16 TBF-LB

· Straight cable entry

· Light & sound technology

· Cable coupler hood, low version

· Versions with / without neck

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

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Rectangular connectors • EPIC® H-B 16 Housings

## **® LAPP GROUP**

## EPIC<sup>®</sup> H-B 16 TBFH

Housing design H-B. The industry standard.

# 57,8 136,5 93,3 53 43 47,5

EPIC®



#### Benefits

• The housing standard. Wide choice for all applications

#### Application range

- Plant engineering
- · Plastics industry
- · Light & sound technology

#### **Product features**

- Cable coupler hood, high version
- Dual levers
- Straight cable entry
- · Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

#### Info

- · More interior space for wiring
- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

#### **Technical data**

E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
IP	Protection rating IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
°₽ ∎	<b>Temperature range</b> -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU		
H-B housing: cable coupler hood (straight cable entry, double lever, high version)							
70090200	H-B 16 TBFH 21		21	yes	5		
70090400	H-B 16 TBFH 29		29	yes	5		
79090200	H-B 16 TBFH M25	25			5		
79090400	H-B 16 TBFH M32	32			5		
79090401	H-B 16 TBFH 2xM32	2 x 32			5		

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

#### APP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 24 Housings

Info

disconnecting

Info



## EPIC<sup>®</sup> H-B 24 TG-RO

EPIC<sup>®</sup> H-B 24 TGH-RO

Housing design H-B. The industry standard.

Housing design H-B. The industry standard.

Pg/N

EPIC

120 137

43

· Further products for two inserts in the

Ideal for many applications due to a wide

internet. (H-B 32, H-B 48)

range of housings and inserts

Pg/M

EPIC®

120

 $\oplus$ 

43

43

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EPIC<sup>®</sup> H-B 24 TS-RO

Housing design H-B. The industry standard.



#### EPIC<sup>®</sup> H-B 24 TGH-RO

- · Hood, high version
- · Reels for single lever
- Straight cable entry
- · Versions with / without neck

#### EPIC® H-B 24 TS-RO

- · Hood, low version
- · Reels for single lever
- · Side cable entry
- · Versions with neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

•	Non-slip ridges for comfortable	
	disconnecting	
	More interior space for wiring	

· More interior space for wiring · Protection rating UL50E tested

Non-slip ridges for comfortable

Protection rating UL50E tested



- Non-slip ridges for comfortable disconnecting
- Protection rating UL50E tested

#### **Technical data**

Classification **е**тім ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material



Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel

#### Sealing: NBR **Protection rating** IΡ

IP 65 (latched) NEMA 250, UL50E: 12 (latched)

**VDE-tested** Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

#### **Temperature range**

-40°C to +100°C, short-term up to +125°C **Product features** EPIC® H-B 24 TG-RO

· Light & sound technology

• Hood, low version

Application range

· Plant engineering

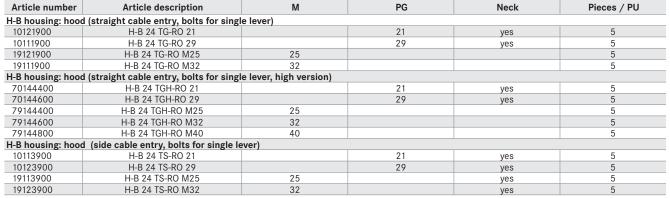
· Plastics industry

Similar products

Benefits

EPIC® H-B 24 TG-RO

- · Reels for single lever
- · Straight cable entry
- · Versions with / without neck



Photographs are not to scale and do not represent detailed images of the respective products.

#### Similar products

- EPIC® H-B 24 TG-RO
- Further products for two inserts in the internet. (H-B 32, H-B 48)

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

Rectangular connectors • EPIC® H-B 24 Housings

### EPIC<sup>®</sup> H-B 24 TSH-RO

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 TG

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 TG 2X

Housing design H-B. The industry standard.



#### **Benefits**

· Ideal for many applications due to a wide range of housings and inserts

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features**

- EPIC® H-B 24 TSH-RO
- Hood, high version
- · Reels for single lever
- Side cable entry

Accessories

· Versions with / without neck

#### EPIC® H-B 24 TG

- · Hood, low version
- Bolts for double lever
- · Straight cable entry
- Versions with / without neck •
- EPIC® H-B 24 TG 2X
- Hood, low version
- · Bolts for double lever
- 2 straight cable entries Versions with neck

#### Suitable inserts

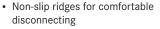
• Refer to Selection Table A10 to select the required inserts and housings





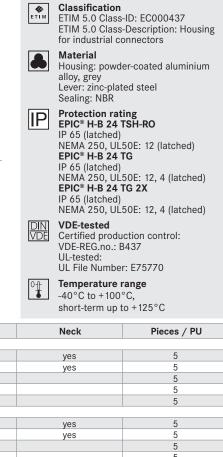
Protection rating UL50E tested •

## Info



- For easy introduction of two cables
- Protection rating UL50E tested

#### **Technical data**



• SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

• SKINTOP® MS-M refer to main catalogue

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood (s	ide cable entry, bolts for single I	ever, high version)			
70154400	H-B 24 TSH-RO 21		21	yes	5
70154600	H-B 24 TSH-RO 29		29	yes	5
79154400	H-B 24 TSH-RO M25	25			5
79154600	H-B 24 TSH-RO M32	32			5
79154800	H-B 24 TSH-RO M40	40			5
H-B housing: hood (s	traight cable entry, bolts for dou	ble lever)			
10121000	H-B 24 TG 21		21	yes	5
10111000	H-B 24 TG 29		29	yes	5
19121000	H-B 24 TG M25	25			5
19111000	H-B 24 TG M32	32			5
H-B housing: hood (2	straight cable entries, bolts for	double lever)			
44422019	H-B 24 TG 2XM25	2 x 25		yes	5
44422020	H-B 24 TG 2XM32	2 x 32		yes	5

Photographs are not to scale and do not represent detailed images of the respective products.

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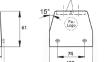
VDE

UNITRONIC®

**ETHERLINE®** 

# EPIC®

**HITRONIC®** 



## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 24 Housings

## EPIC<sup>®</sup> H-B 24 TGH

Housing design H-B. The industry standard.

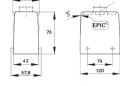


- · Non-slip ridges for comfortable disconnecting
- More interior space for wiring
- Protection rating UL50E tested

· Non-slip ridges for comfortable

Protection rating UL50E tested

• For easy introduction of two cables



Pg/N





EPIC®

## EPIC<sup>®</sup> H-B 24 TGH 2X

Housing design H-B. The industry standard.



#### **Benefits**

#### EPIC<sup>®</sup> H-B 24 TGH

Info

disconnecting

- · Ideal for many applications due to a wide range of housings and inserts
- EPIC® H-B 24 TGH 2X
- · Ideal for many applications due to a wide range of housings and inserts
- More interior space for wiring

#### Application range

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features** EPIC® H-B 24 TGH

- Hood, high version
- · Bolts for double lever
- · Straight cable entry
- Versions with / without neck

#### EPIC<sup>®</sup> H-B 24 TGH 2X

- Hood, high version
- · Bolts for double lever
- 2 straight cable entries
- Versions without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

	ETIM 5.0 Class-Description: Housing for industrial connectors
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
D	<b>Protection rating</b> IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
N Œ	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
-	<b>Temperature range</b>

ETIM 5.0 Class-ID: EC000437

0°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hood	(straight cable entry, bolts for doub	ole lever, high version)			
70150400	H-B 24 TGH 21		21	yes	5
70150600	H-B 24 TGH 29		29	yes	5
79150400	H-B 24 TGH M25	25			5
79150600	H-B 24 TGH M32	32			5
79150800	H-B 24 TGH M40	40			5
H-B housing: hood	(2 straight cable entries, bolts for d	louble lever, high version	n)		
44422021	H-B 24 TGH 2XM25	2 x 25			5
79178500	H-B 24 TGH 2XM32	2 x 32			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- ${\rm SKINTOP}^{\scriptscriptstyle (\! 8\!)}$  for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue



E T I M

6

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Rectangular connectors • EPIC® H-B 24 Housings

## EPIC® H-B 24 TGB

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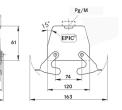
**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Housing design H-B. The industry standard.





#### Info · Non-slip ridges for comfortable disconnecting For connection with counterpart with integrated cover Protection rating UL50E tested

Non-slip ridges for comfortable

Protection rating UL50E tested

· Non-slip ridges for comfortable

• Protection rating UL50E tested

ETIM 5.0 Class-ID: EC000437

for industrial connectors

Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

Housing: powder-coated aluminium

NEMA 250, UL50E: 12, 4 (latched)

5

5

Classification

Material

alloy, grey

Sealing: NBR

IP 65 (latched)

VDE-tested

yes

yes

yes

yes

**Protection rating** 

· For connection with counterpart with

Info

disconnecting

integrated cover

Info

disconnecting

**Technical data** 

ETIM

**I**P

DIN

## EPIC<sup>®</sup> H-B 24 TGBH

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 TS

Housing design H-B. The industry standard.



#### **Benefits**

#### EPIC® H-B 24 TGB

- · Ideal for many applications due to a wide range of housings and inserts
- · Double lever version with 2 levers for increased safety

#### EPIC<sup>®</sup> H-B 24 TGBH

- · Ideal for many applications due to a wide range of housings and inserts
- · More interior space for wiring

#### EPIC® H-B 24 TS

· Ideal for many applications due to a wide range of housings and inserts

#### Application range

#### • Plant engineering

- · Light & sound tech
- · Plastics industry

79155600

10113000

10123000

#### **Product features** EPIC® H-B 24 TGB

57,8

- Hood, low version
- Dual levers
- · Straight cable entry
- · Versions with / without neck

#### EPIC® H-B 24 TGBH

- · Hood, high version
- · Dual levers
- · Straight cable entry
- Versions with / without neck

32

#### EPIC® H-B 24 TS

· Hood, low version

<ul> <li>Application range</li> <li>Plant engineering</li> <li>Light &amp; sound technology</li> <li>Plastics industry</li> </ul>		<ul> <li>Bolts for double lever</li> <li>Side cable entry</li> <li>Versions with neck</li> </ul> Suitable inserts <ul> <li>Refer to Selection Table A10 to select the required inserts and housings</li> </ul>		VDE       Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770         ●↑↑       Temperature range -40°C to +100°C, short-term up to +125°C	
Article number	Article description	М	PG	Neck	Pieces / PU
H-B housing: hoo	d (straight cable entry, double lev	er)			1
10122000	H-B 24 TGB 21		21	yes	5
10112000	H-B 24 TGB 29		29	yes	5
19122000	H-B 24 TGB M25	25			5
19112000	H-B 24 TGB M32	32			5
H-B housing: hoo	d (straight cable entry, double lev	er, high version)			
70155400	H-B 24 TGBH 21		21	yes	5
70155600	H-B 24 TGBH 29		29	yes	5
79155400	H-B 24 TGBH M25	25			5

21

29

#### 19113000 H-B 24 TS M25 25 19123000 H-B 24 TS M32 32 Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

H-B 24 TGBH M32

H-B 24 TS 21

H-B 24 TS 29

H-B housing: hood (side cable entry, bolts for double lever)

· Easy to install refer to main catalogue

# LAPP GROUP

#### APP GROUP

## rial connectors

EPIC<sup>®</sup> H-B 24 TSH

EPIC<sup>®</sup> H-B 24 TSB

Rectangular connectors • EPIC® H-B 24 Housings

#### Info

- Non-slip ridges for comfortable disconnecting
- More interior space for wiring
- Protection rating UL50E tested

#### Info

- · Non-slip ridges for comfortable disconnecting
- · For connection with counterpart with integrated cover
- Protection rating UL50E tested

#### Info

- · Non-slip ridges for comfortable disconnecting
- · For connection with counterpart with integrated cover
- Protection rating UL50E tested

#### **Benefits**

#### EPIC<sup>®</sup> H-B 24 TSH

- · Ideal for many applications due to a wide range of housings and inserts
- EPIC® H-B 24 TSB
- · Ideal for many applications due to a wide range of housings and inserts
- · Double lever version with 2 levers for increased safety

#### EPIC® H-B 24 TSBH

- · Ideal for many applications due to a wide
- range of housings and inserts · Double lever version with 2 levers for increased safety

#### Application range

- Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features** EPIC<sup>®</sup> H-B 24 TSH

#### · Hood, high version

- · Bolts for double lever
- Side cable entry
- · Versions with / without neck

#### EPIC® H-B 24 TSB

- · Hood, low version
- Dual levers
- Side cable entry · Versions with neck

#### EPIC® H-B 24 TSBH

- · Hood, high version
- Dual levers
- · Side cable entry
- · Versions with / without neck

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

Auttala usuala u				Neede	
Article number	Article description	M	PG	Neck	Pieces / PU
H-B housing: hood	d (side cable entry, bolts for double	lever, high version)			
70152400	H-B 24 TSH 21		21	yes	5
70152600	H-B 24 TSH 29		29	yes	5
79152400	H-B 24 TSH M25	25			5
79152600	H-B 24 TSH M32	32			5
79152800	H-B 24 TSH M40	40			5
H-B housing: hood	d (side cable entry, double lever)				
10114000	H-B 24 TSB 21		21	yes	5
10124000	H-B 24 TSB 29		29	yes	5
19114000	H-B 24 TSB M25	25		yes	5
19124000	H-B 24 TSB M32	32		yes	5
H-B housing: hood	d (side cable entry, double lever, hig	h version)			
70157400	H-B 24 TSBH 21		21	yes	5
70157600	H-B 24 TSBH 29		29	yes	5
79157400	H-B 24 TSBH M25	25			5
79157600	H-B 24 TSBH M32	32			5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP® MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue



# UNITRONIC®

**ETHERLINE®** 



EPIC®



#### **Technical data**

Classification

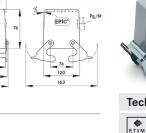
EPIC®

ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR Protection rating IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) VDE-tested

Certified production control: VDE-REG.no.: B437 UI-tested: UL File Number: E75770

#### Temperature range

-40°C to +100°C, short-term up to +125°C



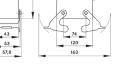
EPIC®

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Housing design H-B. The industry standard.

Housing design H-B. The industry standard.

Rectangular connectors • EPIC® H-B 24 Housings

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UNITRONIC®

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

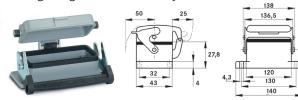
## EPIC<sup>®</sup> H-B 24 AG-LB

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 AD-LB

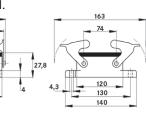
Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 AG

Housing design H-B. The industry standard.

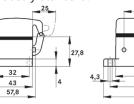




## EPIC<sup>®</sup> H-B 24 AD-BO

Housing design H-B. The industry standard.





53

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#### Benefits

Safe fixing with 4 screws

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 24 AG-LB
- Panel-mount base
- Single lever
- Included: flat gasket

#### EPIC® H-B 24 AD-LB

#### Panel-mount base

- Single lever
- Metal cover
- · Included: flat gasket

#### EPIC® H-B 24 AG

- Panel-mount base
- Dual levers

120

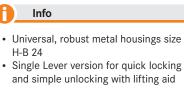
130

140

- Included: flat gasket
- EPIC<sup>®</sup> H-B 24 AD-BO
- Panel-mount base
- Bolts for double lever
- Metal cover
- Included: flat gasket

#### Suitable inserts

• Refer to Selection Table A 10 to select the required inserts and housings



Protection rating UL50E tested



- Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested

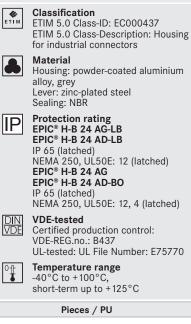
# Info

- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

## Info

- Metal lid with sturdy hinge
- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

#### **Technical data**



Article description Article number H-B housing: panel-mount base (single lever) 10102900 H-B 24 AG-LB 5 H-B housing: panel-mount base (cover, single lever) H-B 24 AD-LB 10103900 5 H-B housing: panel-mount base (double lever) H-B 24 AG 10102000 5 H-B housing: panel-mount base (cover, bolts for double lever) H-B 24 AD-BO 10103000 5

Photographs are not to scale and do not represent detailed images of the respective products.

**EXAPP GROUP** 

### EPIC<sup>®</sup> Industrial connectors

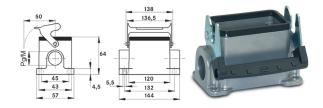
Rectangular connectors • EPIC® H-B 24 Housings

## EPIC<sup>®</sup> H-B 24 SGR-LB

Housing design H-B. The industry standard.

#### Info

- · Single Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

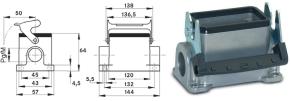


# **HITRONIC®**

EPIC®

## EPIC<sup>®</sup> H-B 24 SGRL-LB

Housing design H-B. The industry standard.



#### **Technical data**

E T I M	ETIM 5.0	<b>ition</b> Class-ID: EC000437 Class-Description: Housing rial connectors
	alloy, grey	c-plated steel
IP	Protectio IP 65 (lato NEMA 25)	
DIN VDE	VDE-REG. UL-tested	production control: no.: B437
•	-40°C to	<b>ture range</b> +100°C, n up to +125°C
PG		Pieces / PU
		<b>F</b>

Info	

- For easy introduction of two cables
- Single Lever version for quick locking
- and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Benefits

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland

#### Application range

- Plant engineering
- · Light & sound technology
- · Plastics industry

#### Product features

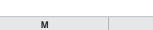
- EPIC<sup>®</sup> H-B 24 SGR-LB
- · Surface-mount base, low version
- Single lever
- 1 cable entry

#### EPIC® H-B 24 SGRL-LB

- Surface-mount base, low version
- · Single lever
- · 2 cable entries

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

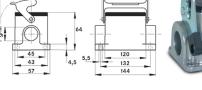


Article number	Article description	M	PG	Pieces / PU			
H-B housing: surface-mount base (1 cable entry, single lever)							
10104900	H-B 24 SGR-LB 21		21	5			
19104900	H-B 24 SGR-LB M25	25		5			
H-B housing: surfa	H-B housing: surface-mount base (2 cable entries, single lever)						
10105900	H-B 24 SGRL-LB 21		21	5			
19105900	H-B 24 SGRL-LB M25	25		5			

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue



**ETHERLINE®** 

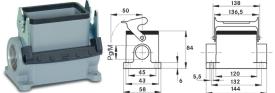


Rectangular connectors • EPIC® H-B 24 Housings

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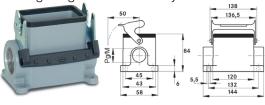
#### EPIC<sup>®</sup> H-B 24 SGRH-LB

Housing design H-B. The industry standard.



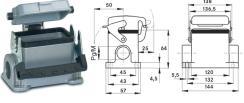
## EPIC<sup>®</sup> H-B 24 SGRLH-LB

#### Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 SDR-LB

#### Housing design H-B. The industry standard.



#### Benefits

- Safe fixing with 4 screws
- Casted neck for easy assembly of the cable gland

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 24 SGRH-LB
- Surface-mount base, high version
- Single lever
- 1 cable entry

#### EPIC<sup>®</sup> H-B 24 SGRLH-LB

- Surface-mount base, high version
- · Single lever
- 2 cable entries

#### EPIC<sup>®</sup> H-B 24 SDR-LB

- Surface-mount base, low version
- Single lever
- 1 cable entry
- Metal cover

#### Suitable inserts

Refer to Selection Table A10 to select the required inserts and housings

# Info More interior space for wiring Single Lever version for quick locking and simple unlocking with lifting aid

Protection rating UL50E tested



- More interior space for wiring
- Single Lever version for quick locking and simple unlocking with lifting aid
- Protection rating UL50E tested

#### Info

- Single Lever version for quick locking and simple unlocking with lifting aid
- Metal lid with sturdy hinge
- Protection rating UL50E tested

#### **Technical data**

Classification ETI M ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR **Protection rating** IP IP 65 (latched) NEMA 250, UL50E: 12 (latched) VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

#### Temperature range -40°C to +100°C, short-term up to +125°C

PG Article number Article description М Pieces / PU H-B housing: surface-mount base (1 cable entry, single lever, high version) H-B 24 SGRH-LB 21 70160200 21 5 70160400 H-B 24 SGRH-LB 29 29 79160200 H-B 24 SGRH-LB M25 25 5 79160400 H-B 24 SGRH-LB M32 32 5 H-B housing: surface-mount base (2 cable entries, single lever, high version) 70161200 H-B 24 SGRLH-LB 21 21 5 H-B 24 SGRLH-LB 29 70161400 29 5 79161200 H-B 24 SGRLH-LB M25 25 5 79161400 H-B 24 SGRLH-LB M32 32 5 H-B housing: surface-mount base (cover, 1 cable entry, single lever) 10107900 5 H-B 24 SDR-LB 21 21 19107900 25 H-B 24 SDR-LB M25 5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue

· Easy to install refer to main catalogue

## **EAPP** GROUP

**ETHERLINE®** 

**HITRONIC®** 

Info

· For easy introduction of two cables • Metal lid with sturdy hinge • Protection rating UL50E tested

Single Lever version for quick locking and simple unlocking with lifting aid

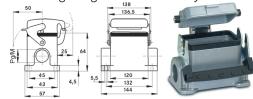
Rectangular connectors • EPIC® H-B 24 Housings



## EPIC<sup>®</sup> H-B 24 SDRL-LB

EPIC® H-B 24 SDRH-LB

Housing design H-B. The industry standard.

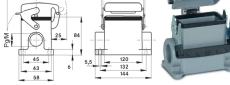




EPIC®

**UNITRONIC®** 

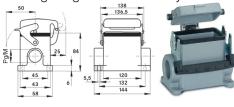
ETHERLINE®



Housing design H-B. The industry standard. 138 136,5



Housing design H-B. The industry standard.



#### **Technical data**

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

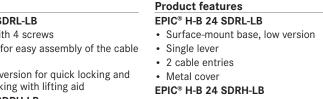
**Protection rating** IP IP 65 (latched)

NEMA 250, UL50E: 12 (latched) VDE-tested

- Certified production control: VDE-REG.no.: B437 UL-tested:
- UL File Number: E75770

Temperature range -40°C to +100°C, short-term up to +125°C





- · Surface-mount base, high version
- · Single lever
- 1 cable entry
- · Metal cover

#### EPIC® H-B 24 SDRLH-LB

- Surface-mount base, high version
- Single lever
- · 2 cable entries
- Metal cover

Application range						
•	Plant engineering					
	1.1.0					

Article number	Article description	м	PG	Pieces / PU
H-B housing: surface	e-mount base (cover, 2 cable entries, single	e lever)		
10109900	H-B 24 SDRL-LB 21		21	5
19109900	H-B 24 SDRL-LB M25	25		5
H-B housing: surface	e-mount base (cover, 1 cable entry, single	lever, high version)		
70164200	H-B 24 SDRH-LB 21		21	5
70164400	H-B 24 SDRH-LB 29		29	5
79164200	H-B 24 SDRH-LB M25	25		5
79164400	H-B 24 SDRH-LB M32	32		5
H-B housing: surface	e-mount base (cover, 2 cable entries, single	e lever, high version)		
70165200	H-B 24 SDRLH-LB 21		21	5
70165400	H-B 24 SDRLH-LB 29		29	5
79165200	H-B 24 SDRLH-LB M25	25		5
79165400	H-B 24 SDRLH-LB M32	32		5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue



Info

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#### Info

· More interior space for wiring

• Metal lid with sturdy hinge Protection rating UL50E tested

- · Metal lid with sturdy hinge
- Protection rating UL50E tested

#### **Benefits**

#### EPIC® H-B 24 SDRL-LB

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland
- Single Lever version for quick locking and simple unlocking with lifting aid

#### EPIC® H-B 24 SDRH-LB

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland
- · More interior space for wiring

#### EPIC<sup>®</sup> H-B 24 SDRLH-LB

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland
- Single Lever version for quick locking and simple unlocking with lifting aid

#### Application range

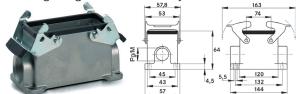
- Light & sound technology
- · Plastics industry

Rectangular connectors • EPIC® H-B 24 Housings

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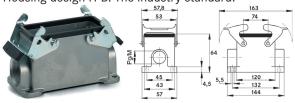
#### EPIC<sup>®</sup> H-B 24 SGR

Housing design H-B. The industry standard.



### EPIC<sup>®</sup> H-B 24 SGRL

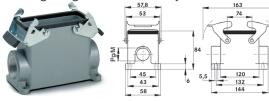
Housing design H-B. The industry standard.





## EPIC<sup>®</sup> H-B 24 SGRH

Housing design H-B. The industry standard.



#### Benefits

- · Safe fixing with 4 screws
- Casted neck for easy assembly of the cable gland

#### Application range

- Plant engineering
- Light & sound technology
- Plastics industry

#### Product features

#### EPIC<sup>®</sup> H-B 24 SGR

- Surface-mount base, low version
- Dual levers
- 1 cable entry

#### EPIC<sup>®</sup> H-B 24 SGRL

- Surface-mount base, low version
- Dual levers
- 2 cable entries

#### EPIC<sup>®</sup> H-B 24 SGRH

- Surface-mount base, high version
- Dual levers
- 1 cable entry

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings



Protection rating UL50E tested



Protection rating UL50E tested



- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

Tech	nical data
E T I M	Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
	Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR
IP	Protection rating IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)
DIN VDE	VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770
0	<b>Temperature range</b> -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU
H-B housing: surfac	e-mount base (1 cable entry, double lever)			
10104000	H-B 24 SGR 21		21	5
19104000	H-B 24 SGR M25	25		5
H-B housing: surfac	e-mount base (2 cable entries, double lever	r)		
10105000	H-B 24 SGRL 21		21	5
19105000	H-B 24 SGRL M25	25		5
H-B housing: surfac	e-mount base (1 cable entry, double lever, l	high version)		
70135200	H-B 24 SGRH 21		21	5
70135400	H-B 24 SGRH 29		29	5
79135200	H-B 24 SGRH M25	25		5
79135400	H-B 24 SGRH M32	32		5

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue

• Easy to install refer to main catalogue

## LAPP GROUP

**ETHERLINE®** 

**HITRONIC®** 



## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 24 Housings

#### Info

- More interior space for wiring
- · Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

## Info

- Metal lid with sturdy hinge
- Protection rating UL50E tested

#### EPIC® H-B 24 SDR-BO

- · Surface-mount base, low version
- · Bolts for double lever
- 1 cable entry
- Metal cover

#### EPIC<sup>®</sup> H-B 24 SDRL-BO

- · Surface-mount base, low version
- · Bolts for double lever
- 2 cable entries
- Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

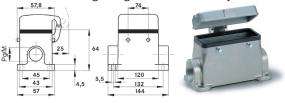
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Housing des	sign H-B. The ir	ndustry standard.
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58	144	



#### EPIC<sup>®</sup> H-B 24 SDR-BO

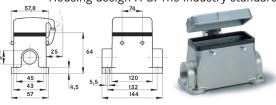
EPIC<sup>®</sup> H-B 24 SGRLH

Housing design H-B. The industry standard.









#### **Technical data**

**e**tim

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

**Protection rating** |IP|

IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched)

#### VDE-tested

Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

Temperature range -40°C to +100°C,

short-term up to +125°C

Article number	Article description	M	PG	Pieces / PU	
H-B housing: surfa	ace-mount base (2 cable entries, double leve	, high version)			
70136200	H-B 24 SGRLH 21		21	5	
70136400	H-B 24 SGRLH 29		29	5	
79136200	H-B 24 SGRLH M25	25		5	
79136400	H-B 24 SGRLH M32	32		5	
H-B housing: surfa	ace-mount base (cover, 1 cable entry, bolts fo	or double lever)			
10107000	H-B 24 SDR-BO 21		21	5	
19107000	H-B 24 SDR-BO M25	25		5	
H-B housing: surface-mount base (cover, 2 cable entries, bolts for double lever)					
10109000	H-B 24 SDRL-BO 21		21	5	
19109000	H-B 24 SDRL-BO M25	25		5	

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

HITRONIC®

Info

- · For easy introduction of two cables
- Metal lid with sturdy hinge

#### Benefits

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland

#### Application range

- Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features**

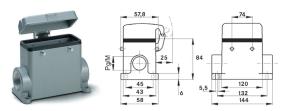
- EPIC<sup>®</sup> H-B 24 SGRLH • Surface-mount base, high version
- Dual levers
- · 2 cable entries



Rectangular connectors • EPIC® H-B 24 Housings

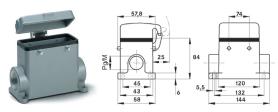
## EPIC<sup>®</sup> H-B 24 SDRH-BO

Housing design H-B. The industry standard.



## EPIC<sup>®</sup> H-B 24 SDRLH-BO

Housing design H-B. The industry standard.



#### **Benefits**

#### EPIC<sup>®</sup> H-B 24 SDRH-BO

- · Safe fixing with 4 screws
- Casted neck for easy assembly of the cable gland

#### EPIC<sup>®</sup> H-B 24 SDRLH-BO

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland
- More interior space for wiring

#### **Application range**

- · Plant engineering
- · Light & sound technology
- Plastics industry

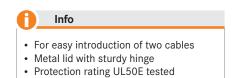
#### **Product features** EPIC® H-B 24 SDRH-BO

- · Surface-mount base, high version
- · Bolts for double lever
- 1 cable entry
- · Metal cover
- EPIC<sup>®</sup> H-B 24 SDRLH-BO
- Surface-mount base, high version
- · Bolts for double lever
- 2 cable entries
- · Metal cover

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

Π	Info
•	More interior space for wiring Metal lid with sturdy hinge Protection rating UL50E tested
	0



**Technical data** Classification **e**tim ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR **Protection rating** |IP| IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770 Temperature range -40°C to +100°C, short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU			
H-B housing: surface-mount base (cover, 1 cable entry, bolts for double lever, high version)							
70145200	H-B 24 SDRH-BO 21		21	5			
70145400	H-B 24 SDRH-BO 29		29	5			
79145400	H-B 24 SDRH-BO M32	32		5			
H-B housing: surfa	ace-mount base (cover, 2 cable entries, bolts	for double lever, high version)					
70146200	H-B 24 SDRLH-BO 21		21	5			
70146400	H-B 24 SDRLH-BO 29		29	5			
79146400	H-B 24 SDRLH-BO M32	32		5			

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

172

- SKINTOP® MS-M refer to main catalogue
- · SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

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LAPP GROUP

**ETHERLINE®** 

EPIC®

#### LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC® H-B 24 Housings

## EPIC<sup>®</sup> H-B 24 TBF-LB

Housing design H-B. The industry standard.





# HITRONIC

EPIC<sup>®</sup> H-B 24 TBFH-LB Housing design H-B. The industry standard.



### EPIC<sup>®</sup> H-B 24 TBF

Housing design H-B. The industry standard.



#### **Technical data**



#### ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

#### Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

Protection rating EPIC<sup>®</sup> H-B 24 TBF-LB IP IP 65 (latched) NEMA 250, UL50E: 12 (latched) EPIC<sup>®</sup> H-B 24 TBFH-LB IP 65 (latched) NEMA 250, UL50E: 12 (latched) EPIC<sup>®</sup> H-B 24 TBF IP 65 (latched)

NEMA 250, UL50E: 12, 4 (latched) VDE-tested

<u>DIN</u> VDE Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770

#### **Temperature range**

-40°C to +100°C, short-term up to +125°C

Info

Info

#### • More interior space for wiring

• Single Lever version for quick locking and simple unlocking with lifting aid

Single Lever version for quick locking and simple unlocking with lifting aid Protection rating UL50E tested

Protection rating UL50E tested



#### Info

- · Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

#### **Benefits**

- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland

#### Application range

- Plant engineering
- · Light & sound technology
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 24 TBF-LB
- · Cable coupler hood, low version
- Single lever
- · Straight cable entry
- · Versions with / without neck

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

Article number	Article description	М	PG	Neck	Pieces / PU			
H-B housing: cable	H-B housing: cable coupler hood (1 straight cable entry, single lever)							
10127900	H-B 24 TBF-LB 21		21	yes	5			
10117900	H-B 24 TBF-LB 29		29	yes	5			
19127900	H-B 24 TBF-LB M25	25			5			
19117900	H-B 24 TBF-LB M32	32			5			
H-B housing: cable	e coupler hood (1 straight cable entr	y, single lever, high versi	ion)					
70142400	H-B 24 TBFH-LB 21		21	yes	5			
79142400	H-B 24 TBFH-LB M25	25			5			
79142600	H-B 24 TBFH-LB M32	32			5			
H-B housing: cable	e coupler hood (straight cable entry,	double lever)						
10127000	H-B 24 TBF 21		21	yes	5			
10117000	H-B 24 TBF 29		29	yes	5			
19127000	H-B 24 TBF M25	25			5			
19117000	H-B 24 TBF M32	32			5			

Photographs are not to scale and do not represent detailed images of the respective products.



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#### EPIC® H-B 24 TBFH-LB

- · Cable coupler hood, high version
- Single lever
- · Straight cable entry
- · Versions with / without neck

#### EPIC<sup>®</sup> H-B 24 TBF

- Cable coupler hood, low version
- · Dual levers
- Straight cable entry
- Versions with / without neck

#### Suitable inserts

· Refer to Selection Table A10 to select the required inserts and housings

Rectangular connectors • EPIC® H-B 24 Housings

### EPIC<sup>®</sup> H-B 24 TBFH

Housing design H-B. The industry standard.

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#### **Benefits**

57,8

53

43

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- · Safe fixing with 4 screws
- · Casted neck for easy assembly of the cable gland

78,8

#### **Application range**

- · Plant engineering
- · Light & sound technology
- · Plastics industry

#### **Product features**

- · Cable coupler hood, high version
- Dual levers
- Straight cable entry
- Versions with / without neck

#### Suitable inserts

• Refer to Selection Table A10 to select the required inserts and housings

#### Info

- · More interior space for wiring
- Double lever version with 2 levers for increased safety
- Protection rating UL50E tested

#### E T I M Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors Material Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR **Protection rating** IP IP 65 (latched) NEMA 250, UL50E: 12, 4 (latched) VDE-tested Certified production control: VDE-REG.no.: B437 UL-tested: UL File Number: E75770 Temperature range °‡

$-40^{\circ}$ C to $+100^{\circ}$ C,
short-term up to +125°C

Article number	Article description	М	PG	Neck	Pieces / PU	
H-B housing: cable coupler hood (straight cable entry, double lever, high version)						
70140400	H-B 24 TBFH 21		21	yes	5	
70140600	H-B 24 TBFH 29		29	yes	5	
79140400	H-B 24 TBFH M25	25			5	
79140600	H-B 24 TBFH M32	32			5	

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue



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Pg/M



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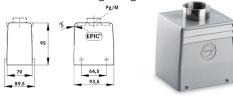
**ETHERLINE®** 

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EPIC®

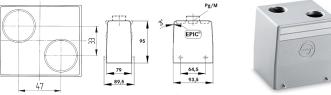
## EPIC<sup>®</sup> H-B 32 TG

Housing design H-B for 2 inserts.



## EPIC<sup>®</sup> H-B 32 TG 2X

Housing design H-B for 2 inserts.



**Technical data** 

ETI M

Classification

Material

alloy, grey

Sealing: NBR

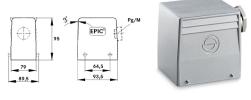
IP 65 (latched)

VDE-tested

**Protection rating** 

## EPIC® H-B 32 TS

Housing design H-B for 2 inserts.



ETIM 5.0 Class-ID: EC000437

for industrial connectors

Lever: zinc-plated steel

ETIM 5.0 Class-Description: Housing

Housing: powder-coated aluminium

#### Benefits

Two inserts in one housing. With two levers for high safety

#### Application range

- · Plant engineering
- · Control engineering
- · Plastics industry

#### **Product features**

EPIC® H-B 32 TG

Article number

10133000

10134000

- Hood
- · Bolts for double lever
- · Straight cable entry
- · Versions with / without neck

#### EPIC<sup>®</sup> H-B 32 TG 2X

- Hood
- · Bolts for double lever
- 2 straight cable entries
- Versions without neck

#### EPIC<sup>®</sup> H-B 32 TS

- Hood
- · Bolts for double lever
- Side cable entry
- · Versions with / without neck

Μ

#### Suitable inserts

- The H-B 32 housings can also be assembled with 2 different inserts of size H-B 16
- Refer to Selection Tag required inserts and

Table	e A 10 to select the usings	UL-tested: UL File Numbe Temperature I -40°C to +100 short-term up t	°C,
	PG	Neck	Pieces /
	21	yes	5
	29	yes	5
			5

IP

DIN

19134000	H-B 32 TG M32	32			5		
19134400	H-B 32 TG M40	40			5		
H-B housing; hood (2 straight cable entries, bolts for double lever)							
44422022	H-B 32 TG 2XM25	2 x 25			5		
44422023	H-B 32 TG 2XM32	2 x 32			5		
H-B housing: hood	d (side cable entry, bolts for double l	lever)					
10135000	H-B 32 TS 21		21	yes	5		
10136000	H-B 32 TS 29		29	yes	5		
10135600	H-B 32 TS 29		29		5		
19135000	H-B 32 TS M25	25			5		
19136000	H-B 32 TS M32	32			5		
19136200	H-B 32 TS M40	40			5		

Photographs are not to scale and do not represent detailed images of the respective products

Article description

H-B 32 TG 21 H-B 32 TG 29

H-B housing: hood (straight cable entry, bolts for double lever)

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

/ PU

Rectangular connectors • EPIC® H-B 32 Housings

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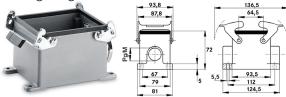
## EPIC® H-B 32 AG

Housing design H-B for 2 inserts.



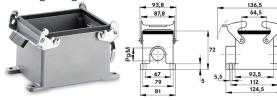
## EPIC<sup>®</sup> H-B 32 SGR

#### Housing design H-B for 2 inserts.



### EPIC<sup>®</sup> H-B 32 SGRL

#### Housing design H-B for 2 inserts.



#### **Benefits**

Two inserts in one housing. With two levers for high safety

#### **Application range**

- · Plant engineering
- · Control engineering
- · Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 32 AG
- · Panel-mount base
- Dual levers
- · Included: flat gasket

#### EPIC<sup>®</sup> H-B 32 SGR

- · Surface-mount base
- Dual levers
- 1 cable entry

#### EPIC® H-B 32 SGRL

- · Surface-mount base
- Dual levers
- 2 cable entries

#### Suitable inserts

- The H-B 32 housings can also be assembled with 2 different inserts of size H-B 16
- Refer to Selection Table A10 to select the required inserts and housings

#### Classification ETI M ETIM 5.0 Class-ID: EC000437

**Technical data** 

ETIM 5.0 Class-Description: Housing for industrial connectors Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

**Protection rating** |IP| IP 65 (latched)

VDE-tested UL-tested:

UL File Number: E75770

Temperature range -40°C to +100°C,

short-term up to +125°C

Article number	Article description	М	PG	Pieces / PU				
H-B housing: panel-mount base (double lever)								
10132000	H-B 32 AG			5				
H-B housing: surfa	H-B housing: surface-mount base (1 cable entry, double lever)							
10137000	H-B 32 SGR 29		29	5				
19137000	H-B 32 SGR M32	32		5				
19146400	H-B 32 SGR M40	40		5				
H-B housing: surfa	ace-mount base (2 cable entries, double lever	r)						
10138000	H-B 32 SGRL 29		29	5				
19138000	H-B 32 SGRL M32	32		5				
19145400	H-B 32 SGRL M40	40		5				

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

#### EPIC® H-B 32 SGR

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

#### EPIC® H-B 32 SGRL

- SKINTOP® MS-M refer to main catalogue
- SKINTOP<sup>®</sup> for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue





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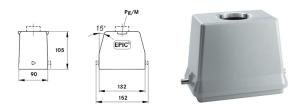
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**HITRONIC®** 

EPIC®

## EPIC<sup>®</sup> H-B 48 TG

Housing design H-B for 2 inserts.



## EPIC<sup>®</sup> H-B 48 TS

Housing design H-B for 2 inserts.



#### Benefits

• The large, robust housing for two inserts in one connector. Power and data in a single connector

#### Application range

- Plant engineering
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 48 TG
- Hood
- · Bolts for single lever
- · Straight cable entry
- Versions with / without neck

#### EPIC<sup>®</sup> H-B 48 TS

- Hood
- Bolts for single lever
- Side cable entry
- · Versions with / without neck

#### Suitable inserts

- The H-B 48 housings can also be assembled with 2 different inserts of size H-B 24
- Refer to Selection Table A10 to select the required inserts and housings

#### Technical data

IP

 Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
 Material Housing: aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

> Protection rating IP 65 (latched)

**Temperature range** -40°C to +100°C,

short-term up to +125°C

Article number	Article description	Μ	PG	Neck	Pieces / PU
H-B housing: hood (	straight cable entry, bolts for single	lever)			
10155000	H-B 48 TG 29		29	yes	1
10156000	H-B 48 TG 36		36	yes	1
10156200	H-B 48 TG 36		36		1
10157000	H-B 48 TG 42		42	yes	1
19155000	H-B 48 TG M32	32			1
19156000	H-B 48 TG M40	40			1
19157000	H-B 48 TG M50	50			1
I-B housing: hood	(side cable entry, bolts for single lev	ver)			
10158000	H-B 48 TS 29		29	yes	1
10159000	H-B 48 TS 36		36	yes	1
10159200	H-B 48 TS 36		36		1
10160000	H-B 48 TS 42		42	yes	1
19158000	H-B 48 TS M32	32			1
19159000	H-B 48 TS M40	40			1
19160000	H-B 48 TS M50	50			1

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

Rectangular connectors • EPIC® H-B 48 Housings

## EPIC<sup>®</sup> H-B 48 AG-LB

Housing design H-B for 2 inserts.



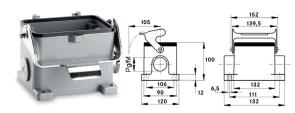
EPIC<sup>®</sup> H-B 48 AD-LB

Housing design H-B for 2 inserts.



## EPIC<sup>®</sup> H-B 48 SGR-LB

Housing design H-B for 2 inserts.



#### Benefits

• The large, robust housing for two inserts in one connector. Power and data in a single connector

#### Application range

- Plant engineering
- Plastics industry

#### Product features

- EPIC<sup>®</sup> H-B 48 AG-LB
- Panel-mount base
- Single lever
- Included: flat gasket

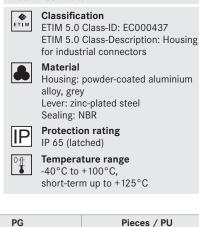
#### EPIC<sup>®</sup> H-B 48 AD-LB

- Panel-mount base
- · Single lever
- Plastic cover
- Included: flat gasket
- EPIC<sup>®</sup> H-B 48 SGR-LB
- Surface-mount base
- Single lever
- 1 cable entry

#### Suitable inserts

- The H-B 48 housings can also be assembled with 2 different inserts of size H-B 24
- Refer to Selection Table A10 to select the required inserts and housings

#### Technical data



Article number	Article description	М	PG	Pieces / PU				
H-B housing: pane	H-B housing: panel-mount base (single lever)							
10161000	H-B 48 AG-LB			1				
H-B housing: pane	H-B housing: panel-mount base (cover, single lever)							
10152000	H-B 48 AD-LB			1				
H-B housing: surfa	ace-mount base (1 cable entry, single lever)							
10165000	H-B 48 SGR 29		29	1				
10165100	H-B 48 SGR 36		36	1				
19165000	H-B 48 SGR M32	32		1				
19165100	H-B 48 SGR M40	40		1				

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- EPIC® H-B 48 SGR-LB
- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP  $\ensuremath{^{\ensuremath{\mathbb{R}}}}$  for industrial connectors refer to main catalogue
- · Easy to install refer to main catalogue

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**ETHERLINE®** 

EPIC®

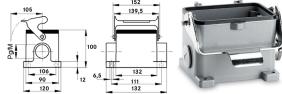
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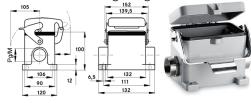
# EPIC<sup>®</sup> H-B 48 SGRL-LB

Housing design H-B for 2 inserts.

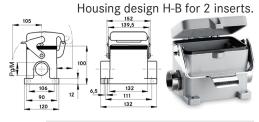


# EPIC<sup>®</sup> H-B 48 SDR-LB

Housing design H-B for 2 inserts.



# EPIC<sup>®</sup> H-B 48 SDRL-LB



### Technical data

**E** TI M

Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors

### Material

Housing: powder-coated aluminium alloy, grey Lever: zinc-plated steel Sealing: NBR

- Protection rating
- IP 65 (latched)
- **Temperature range** -40°C to +100°C,

short-term up to +125°C

Benefits

• The large, robust housing for two inserts in one connector. Power and data in a single connector

### Application range

- Plant engineering
- Plastics industry

## Product features

- EPIC® H-B 48 SGRL-LB
- Surface-mount base
   Single layer
- Single lever

### • 2 cable entries EPIC<sup>®</sup> H-B 48 SDR-LB

## Surface-mount base

- Surrace-mour
   Single lever
- 1 cable entry
- Plastic cover

### EPIC® H-B 48 SDRL-LB

- Surface-mount base
- Single lever
- 2 cable entries
- 2 cable entrie
  Plastic cover

### Suitable inserts

- The H-B 48 housings can also be
- assembled with 2 different inserts of size H-B 24
- Refer to Selection Table A10 to select the required inserts and housings

Article description	M	PG	Pieces / PU
ace-mount base (2 cable entries, single lever)			
H-B 48 SGRL 29		29	1
H-B 48 SGRL 36		36	1
H-B 48 SGRL M32	32		1
H-B 48 SGRL M40	40		1
ace-mount base (cover, 1 cable entry, single l	ever)		
H-B 48 SDR 29		29	1
H-B 48 SDR 36		36	1
H-B 48 SDR M32	32		1
H-B 48 SDR M40	40		1
ace-mount base (cover, 2 cable entries, single	e lever)		
H-B 48 SDRL 29		29	1
H-B 48 SDRL 36		36	1
H-B 48 SDRL M32	32		1
H-B 48 SDRL M40	40		1
	ace-mount base (2 cable entries, single lever)           H-B 48 SGRL 29           H-B 48 SGRL 36           H-B 48 SGRL M32           H-B 48 SGRL M32           H-B 48 SGRL M40           ace-mount base (cover, 1 cable entry, single I           H-B 48 SDR M40           ace-mount base (cover, 1 cable entry, single I           H-B 48 SDR 29           H-B 48 SDR 36           H-B 48 SDR M32           H-B 48 SDR M40           ace-mount base (cover, 2 cable entries, single           H-B 48 SDR M40           ace-mount base (cover, 2 cable entries, single           H-B 48 SDR M40           ace-mount base (cover, 2 cable entries, single           H-B 48 SDR M40           ace-mount base (cover, 2 cable entries, single           H-B 48 SDRL 29           H-B 48 SDRL 36           H-B 48 SDRL 36           H-B 48 SDRL M32	acce-mount base (2 cable entries, single lever)           H-B 48 SGRL 29           H-B 48 SGRL 36           H-B 48 SGRL M32           32           H-B 48 SGRL M40           40           acce-mount base (cover, 1 cable entry, single lever)           H-B 48 SDR 29           H-B 48 SDR 36           H-B 48 SDR M40           40           acce-mount base (cover, 2 cable entries, single lever)           H-B 48 SDR M40           H-B 48 SDR M40           40           acce-mount base (cover, 2 cable entries, single lever)           H-B 48 SDRL 29           H-B 48 SDRL 36           H-B 48 SDRL 36           H-B 48 SDRL 36	ace-mount base (2 cable entries, single lever)       29         H-B 48 SGRL 29       29         H-B 48 SGRL 36       36         H-B 48 SGRL M32       32         H-B 48 SGRL M40       40         ace-mount base (cover, 1 cable entry, single lever)       29         H-B 48 SDR 29       29         H-B 48 SDR 36       36         H-B 48 SDR M32       32         H-B 48 SDR M32       32         H-B 48 SDR M40       40         ace-mount base (cover, 2 cable entries, single lever)       29         H-B 48 SDR M40       40         ace-mount base (cover, 2 cable entries, single lever)       29         H-B 48 SDR M40       40         Ace-mount base (cover, 2 cable entries, single lever)       29         H-B 48 SDRL 29       29         H-B 48 SDRL 36       36         H-B 48 SDRL 36       36         H-B 48 SDRL 36       36         H-B 48 SDRL 36       36

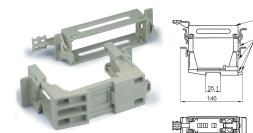
Photographs are not to scale and do not represent detailed images of the respective products.

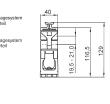
### Accessories

- SKINTOP<sup>®</sup> MS-M refer to main catalogue
- SKINTOP® for industrial connectors refer to main catalogue
- Easy to install refer to main catalogue

Rectangular connectors • EPIC® Mounting systems

# EPIC® QUICK & EASY Mounting system





 QUICK & EASY top parts are available in housing types H-B 6, H-B 10, H-B 16, H-B 24. The suitable size (number of contacts) of the different insert types are listed at the connector housings (H-B 6 ..H-B 24) Info
 Mounting system for control cabinets

### **Technical data**



Classification ETIM 5.0 Class-ID: EC002312 ETIM 5.0 Class-Description: Contact insert holder for industrial connectors

Article number	ele number Article description Material		Version	Cycles	Pieces / PU
QUICK & EASY col	mplete set				
10027000	EPIC <sup>®</sup> H-B 6 Q+E Set	Polycarbonate	Complete, for inserts size H-B 6	max. 50	1
10027100	EPIC <sup>®</sup> H-B 10 Q+E Set	Polycarbonate	Complete, for inserts size H-B 10	max. 50	1
10027200	EPIC <sup>®</sup> H-B 16 Q+E Set	Polycarbonate	Complete, for inserts size H-B 16	max. 50	1
10027300	EPIC <sup>®</sup> H-B 24 Q+E Set	Polycarbonate	Complete, for inserts size H-B 24	max. 50	1
QUICK & EASY top	o part				
10027410	EPIC <sup>®</sup> H-B 6 Q+E top part	Polycarbonate	For inserts size H-B 6	max. 50	10
10027510	EPIC <sup>®</sup> H-B 10 Q+E top part	Polycarbonate	For inserts size H-B 10	max. 50	10
10027610	EPIC <sup>®</sup> H-B 16 Q+E top part	Polycarbonate	For inserts size H-B 16	max. 50	10
10027710	EPIC <sup>®</sup> H-B 24 Q+E top part	Polycarbonate	For inserts size H-B 24	max. 50	10
QUICK & EASY bot	ttom part				
10027810	EPIC <sup>®</sup> H-B 6-24 Q+E bottom part	Polycarbonate	For inserts size H-B 6 - 24	max. 50	10

Photographs are not to scale and do not represent detailed images of the respective products.

# **EPIC® QUICK & EASY Accessories**





Application range

- Accessories for an effective use of EPIC<sup>®</sup> rectangular connectors
- This tool is used to lift built-in inserts out of the Q+E frames

**Technical data** 



ETIM 5.0 Class-ID: EC002311 ETIM 5.0 Class-Description: Coding for industrial connectors

Article number	er Article description Version		Pieces / PU
QUICK & EASY rer	noval tool		
10028100	QUICK & EASY removal tool		1
QUICK & EASY co	ding set		
10028000	EPIC <sup>®</sup> Q+E Coding set	Key pin + coding plug	50

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

EPIC®

 Available as a complete set or as single parts (top part for use as a cable connector, bottom part for mounting on a

**Application range** 

Product features

top-hat rail)

• Control cabinet manufacturing

according to DIN EN 50022

For mounting inserts on top-hat rails

Rectangular connectors • EPIC® Mounting systems

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

# **EPIC<sup>®</sup>** Docking frame



• Wind power plants

- 1 frame + 4 screws
- · Special screws adapted to frame
- Pull-In range in x and y axis: + 1,5mm
- **e**tim ETIM 5.0 Class-ID: EC002312 ETIM 5.0 Class-Description: Contact insert holder for industrial connectors Material



500

₩

Docking frame: stainless steel Screws: steel zinc plated Cycle of mechanical operation

Article number	Article description	Version	Pieces / PU
EPIC <sup>®</sup> Docking fram	ne		
44429440	H-B 6 DF	4 fixing screws each included	2
44429441	H-B 10 DF	4 fixing screws each included	2
44429442	H-B 16 DF	4 fixing screws each included	2
44429443	H-B 24 DF	4 fixing screws each included	2

Rectangular connectors • EPIC<sup>®</sup> Housing accessories

# ETHERLINE®

**HITRONIC®** 

UNITRONIC®

# EPIC® Flat gaskets for housings H-A and H-B



# **EPIC<sup>®</sup> Fixing screws**



### Application range

 Accessories for an effective use of EPIC<sup>®</sup> rectangular connectors

### Product features

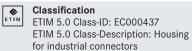
EPIC<sup>®</sup> Flat gaskets for housings H-A and H-B

• Flat gaskets as spare parts for panel-mount base

### **EPIC<sup>®</sup> Fixing screws**

• Spare parts for fastening inserts in H-A 3 housings

### **Technical data**



Article number	Article description	Pieces / PU
Flat gasket for pane	el-mount base H-A	
10607100	Flat gasket for panel-mount base H-A 3	10
10607200	Flat gasket for panel-mount base H-A 10	10
10607300	Flat gasket for panel-mount base H-A 16	10
10607600	Flat gasket for panel-mount base H-A 32	10
Flat gasket for pane	el-mount base H-B	
10051000	Flat gasket for panel-mount base H-B 6	10
10051200	Flat gasket for panel-mount base H-B 10	10
10051400	Flat gasket for panel-mount base H-B 16	10
10051600	Flat gasket for panel-mount base H-B 24	10
10052000	Flat gasket for panel-mount base H-B 32/H-A 48	10
10052200	Flat gasket for panel-mount base H-B 48	10
Fastening screws		
44423017	Screw with O-ring for EPIC H-A 3/4, H-D7/8, H-Q 5	10
44423041	Screw with O-ring for EPIC Ultra H-A 3	10
44423018	EPIC <sup>®</sup> STA Screw	10

Rectangular connectors • EPIC<sup>®</sup> Housing accessories

# EPIC<sup>®</sup> Coding parts



### **Technical data**

Classification ETIM 5.0 Class-ID: EC002311 ETIM 5.0 Class-Description: Coding for industrial connectors

### Application range

 Accessories for an effective use of EPIC<sup>®</sup> rectangular connectors

### Product features

- For rectangular connector inserts, the key pin replaces one or more fastening screws. This enables simple coding.
- In rectangular connector inserts, the guide pin replaces the fastening screws on one side and on the other side the guide socket replaces the screw. This enables a lot of coding possibilities. Also the connector gets a perfect guiding and prevents a skew mating.
- With these inserts, the H-A 3/H-A 4 Codepin is pressed into a socket contact. The corresponding pin contact is removed, meaning one electrical contact will be lost.

Article number	Article description	Pieces / PU
EPIC® H-A 3/4 Co	de pin	
10451400	EPIC <sup>®</sup> H-A 3/4 Code pin (50)	50
Key pin		
10019000	EPIC <sup>®</sup> Key pin (50)	50
Guide pin, guide s	ocket	
11281000	EPIC <sup>®</sup> Guide socket (50)	50
11280000	EPIC <sup>®</sup> Guide pin (50)	50
EPIC® H-Q. 12 Code	epin	
44424052	EPIC <sup>®</sup> H-Q 12 Key Pin (20)	20



## **EPIC®** Protective cover H-A 3



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# **EPIC®** Protective cover H-A



## **EPIC®** Protective cover H-B



## **Product features**

- **EPIC®** Protective cover H-A 3 · Protective cover made of thermoplastics and metal for H-A 3 housings
- Retaining cord with cable lug for attachment with screw on mounting base or wall
- · Retaining cord with variable loop for attachment to the cable

### **EPIC®** Protective cover H-A

- Retaining cord with cable lug for attachment with screw on mounting base or wall
- · Retaining cord with variable loop for attachment to the cable
- · Protective cover made of thermoplastics for H-A 10, H-A 16, H-A 32, H-A 48 housings

### **EPIC®** Protective cover H-B

- · Retaining cord with cable lug for attachment with screw on mounting base or wall
- · Retaining cord with variable loop for attachment to the cable
- Protective cover made of thermoplastics for H-B 6, H-B 10, H-B 16, H-B 24, H-B 32 housings

### **Technical data**



Classification ETIM 5.0 Class-ID: EC002314 ETIM 5.0 Class-Description: Cap for industrial connectors

Article number	Article description	Version	Bolts	Securing cord	Clamp	Material	Pieces / PU
For H-A 3 panel-m	ount base, surface-mo	unt base, cable coupler hood with m	ale or female i	nserts			
10513000	H-A 3 MDBF-S	for housing H-A 3 with male inserts	2	with cable lug		Metal	10
10513100	H-A 3 MDBF-B	for housing H-A 3 with female inserts	2	with cable lug		Metal	10
For H-A 3 panel-m	ount base, surface-mo	unt base, cable coupler hood with m	ale inserts				
10430000	H-A 3 KDB-S	for housing H-A 3 with male inserts	2			Plastic	10
10430400	H-A 3 KDBF-S	for housing H-A 3 with male inserts	2	with cable lug		Plastic	10
For H-A 3 panel-m	ount base, surface-mo	unt base, cable coupler hood with fe	male inserts				
10430300	H-A 3 KDB-B	for housing H-A 3 with female inserts	2			Plastic	10
10430100	H-A 3 KDBF-B	for housing H-A 3 with female inserts	2	with cable lug		Plastic	10
with bolts for H-A	10-32 panel-mount bas	se, surface-mount base, cable couple	er hood				
10457700	H-A 10 KDB	for housing H-A 10	2			Plastic	5
10469700	H-A 16 KDB	for housing H-A 16	2			Plastic	5
10481700	H-A 32 KDB	for housing H-A 32	4			Plastic	5
10457500	H-A 10 KDBF	for housing H-A 10	2	with cable lug		Plastic	5
10469500	H-A 16 KDBF	for housing H-A 16	2	with cable lug		Plastic	5
10481500	H-A 32 KDBF	for housing H-A 32	4	with cable lug		Plastic	10
with lever for H-A	10-32 hoods						
10457800	H-A 10 KDT	for H-A 10 hood			2 snap-in hooks	Plastic	5
10469800	H-A 16 KDT	for H-A 16 hood			2 snap-in hooks	Plastic	5
10481800	H-A 32 KDT	for H-A 32 hood			4 snap-in hooks	Plastic	5
10457600	H-A 10 KDTF	for H-A 10 hood		with loop	2 snap-in hooks	Plastic	5
10469600	H-A 16 KDTF	for H-A 16 hood		with loop	2 snap-in hooks	Plastic	5
10481600	H-A 32 KDT	for H-A 32 hood		with loop	4 snap-in hooks	Plastic	10
with bolts for H-B	6-24 panel-mount base	e, surface-mount base, cable couple	r hood				
10015000	H-B 6 KDB	for housing H-B 6	2	with cable lug		Plastic	10
10047000	H-B 10 KDB	for housing H-B 10	4	with cable lug		Plastic	10
10087000	H-B 16 KDB	for housing H-B 16	4	with cable lug		Plastic	5
10118000	H-B 24 KDB	for housing H-B 24	4	with cable lug		Plastic	5

**® LAPP GROUP** 

# EPIC<sup>®</sup> Industrial connectors

# Rectangular connectors • EPIC<sup>®</sup> Housing accessories

Article number	Article description	Version	Bolts	Securing cord	Clamp	Material	Pieces / PU
with lever for H-B	6-24 hood with bolts						
10016500	H-B 6 KDT	for H-B 6 hood		with loop	Single lever	Plastic	10
10048500	H-B 10 KDT	for H-B 10 hood		with loop	Double Lever	Plastic	10
10088500	H-B 16 KDT	for H-B 16 hood		with loop	Double Lever	Plastic	5
10119500	H-B 24 KDT	for H-B 24 hood		with loop	Double Lever	Plastic	5
with bolts for H-B	6-24 hoods with levers						
10015100	H-B 6 KDBP	for H-B 6 hood	2	with loop		Plastic	10
10047100	H-B 10 KDBP	for H-B 10 hood	4	with loop		Plastic	10
10087100	H-B 16 KDBP	for H-B 16 hood	4	with loop		Plastic	10
10118100	H-B 24 KDBP	for H-B 24 hood	4	with loop		Plastic	5
with bolts for H-B	10-32 panel-mount base	e, surface-mount base, cable coup	ler hood				
10048700	H-B 10 KDBF	for housing H-B 10	2	with loop		Plastic	10
10088700	H-B 16 KDBF	for housing H-B 16	2	with loop		Plastic	10
10118700	H-B 24 KDBF	for housing H-B 24	2	with loop		Plastic	10
10118020	H-B 32 / H-A 48 KDBF	for housing H-B 32/H-A 48	4	with loop		Plastic	10
with lever for H-B	10-24 hood with bolts						
10048600	H-B 10 KDTF	for H-B 10 hood		with loop	Single lever	Plastic	10
10088600	H-B 16 KDTF	for H-B 16 hood		with loop	Single lever	Plastic	10
10118600	H-B 24 KDTF	for H-B 24 hood		with loop	Single lever	Plastic	10

Rectangular connectors • EPIC<sup>®</sup> Housing accessories

**EPIC®** Cover plates



# EPIC<sup>®</sup> Adapter plates for 1 D-Sub insert



# EPIC® Adapter plates for 2 D-Sub inserts



# **EPIC®** Locking levers



### Product features EPIC<sup>®</sup> Cover plates

- For coverage of panel cut-outs for panelmount base housings type H-A and H-B
- EPIC® Adapter plates for 1 D-Sub insert
- For use of D-Sub inserts in H-B housings

# EPIC<sup>®</sup> Adapter plates for 2 D-Sub inserts For use of D-Sub inserts in H-B housings

EPIC<sup>®</sup> Locking levers
Locking levers as spare parts for H-A and H-B housings Classification EPIC<sup>®</sup> Cover plates

ETIM 5.0 Class-ID: EC002309

ETIM 5.0 Class-ID: EC002309 ETIM 5.0 Class-Description: Adapter plate industrial connectors EPIC® Adapter plates for 2 D-Sub

ETIM 5.0 Class-ID: EC002309

for industrial connectors

ETIM 5.0 Class-Description: Adapter plate industrial connectors **EPIC® Locking levers** ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing

ETIM 5.0 Class-Description: Adapter plate industrial connectors EPIC® Adapter plates for 1 D-Sub

**Technical data** 

insert

inserts

**∲** E T I M

## Rectangular connectors • EPIC<sup>®</sup> Housing accessories

UNITRONIC®

Article number	Article description	Version	Material	Pieces / PU
Cover plates for m	ounting cut-out H-A and H-B			
71180200	H-A 3	for H-A 3 panel-mount base housing		10
10018920	H-B 6	for H-B 6 panel-mount base housing		10
10018921	H-B 10	for H-B 10 panel-mount base housing		10
10018922	H-B 16	for H-B 16 panel-mount base housing		10
10018923	H-B 24	for H-B 24 panel-mount base housing		10
Adapter plates for	1 D-Sub insert			
11764200	H-B 6 / M-D 9	for 1 x D-Sub 9-pin		10
11764202	H-B 6 / M-D 15	for 1 x D-Sub 15-pin		10
11764300	H-B 10 / M-D 25	for 1 x D-Sub 25-pin		10
11764400	H-B 16 / M-D 25	for 1 x D-Sub 25-pin		10
Adapter plates for	2 D-Sub inserts			
11764201	H-B 6 / 2xM-D 9	for 2 x D-Sub 9-pin		10
11764203	H-B 6 / 2xM-D 15	for 2 x D-Sub 15-pin		10
11764301	H-B 10 / 2xM-D 25	for 2 x D-Sub 25-pin		10
Single and double	levers for H-A and H-B housings			
10458000	H-A 10 LB	single lever for H-A 10 housing	Steel	10
10468000	EPIC H-A 16 LB/H-B 32 QB	single lever for H-A 16 housing	Steel	10
10049000	H-B 10-24 QB	double lever for H-B 10 - 24 housing	Steel	10
10017000	H-B 6 LB	single lever for H-B 6 housing	Steel	10
10017100	H-B 6 LB-K	single lever for H-B 6 housing	Stainless steel	10
10049100	H-B 10-24 QB-K	double lever for H-B 10 - 24 housing	Stainless steel	10

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

Rectangular connectors • EPIC® Rectangular Kits



# **EPIC® H-A 3 Kits Thermoplastic**

### **Benefits**

- · Pre-packed kits with compatible components
- Uncomplicated ordering
- · No misplaced orders

### Similar products

• EPIC® H-A 3 Kits Metal refer to page 189





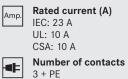








### **Technical data** Rated voltage (V) IEC: 400 V UI: 600 V CSA: 600 V





- H-A 3 SS 10420000
- H-A 3 Tgv M20 19426000
- Article Pieces / PU number EPIC<sup>®</sup> H-A 3 Kits Thermoplastic 75009603

### Article numbers for single components

- H-A 3 SS 10420000
- H-A 3 Ts M20 19427000

### Article number

EPIC® H-A 3 Kits Thermoplastic 75009605

### Article numbers for single component

Pieces / PU

- H-A 3 BS 10421000
- H-A 3 Ag 10422000
- Article Pieces / PU number EPIC<sup>®</sup> H-A 3 Kits Thermoplastic 75009607 Article numbers for single components

- H-A 3 BS 10421000 • H-A 3 Ags 10423000

Article	Pieces / PU
number	
EPIC <sup>®</sup> H-A 3 K	its Thermoplastic
75009609	1

### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Agsv M20 19421900

Article number	Pieces / PU			
EPIC <sup>®</sup> H-A 3 Kits Thermoplastic				
75009611	1			

### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Tgvb M20 19429000

# Info

Complete connectors - easy to order

### EPIC KIT H-A 3 SS TG M20



- EPIC® H-A 3 screw-termination male insert
  - EPIC<sup>®</sup> H-A 3 hood
- · Housing: thermoplastic grey

### EPIC KIT H-A 3 SS TS M20



- EPIC<sup>®</sup> H-A 3 screw-termination male insert
- EPIC® H-A 3 hood
- · Side cable entry
- · Housing: thermoplastic grey

### EPIC KIT H-A 3 BS AG

- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Straight version
- · Housing: thermoplastic grey

### EPIC KIT H-A 3 BS AGS



- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC® H-A 3 panel-mount base
- Angled version
- Housing: thermoplastic grey

### EPIC KIT H-A 3 BS AGS M20

- EPIC® H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- · Angled version
- · Housing: thermoplastic grey

### EPIC KIT H-A 3 BS TGB M20

- EPIC® H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 cable coupler hood
- · Housing: thermoplastic grey

VDE

Rectangular connectors • EPIC<sup>®</sup> Rectangular Kits

UNITRONIC®

# EPIC<sup>®</sup> H-A 3 Kits Metal

### Benefits

- Pre-packed kits with compatible components
- Uncomplicated ordering
- No misplaced orders

### Similar products

• EPIC<sup>®</sup> H-A 3 Kits Thermoplastic refer to page 188

### EPIC KIT H-A 3 SS MTG M20

# 

- EPIC® H-A 3 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- · Housing: zinc die-casting, grey

### EPIC KIT H-A 3 SS MTS M20

### 

- EPIC<sup>®</sup> H-A 3 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- Side cable entry
- Housing: zinc die-casting, grey

### EPIC KIT H-A 3 BS MAG

### 00

- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Straight version
- · Housing: zinc die-casting, grey

### EPIC KIT H-A 3 BS MAGS

### 00

- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Angled version
- Housing: zinc die-casting, grey

### EPIC KIT H-A 3 BS MAGS M20

### 00

- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC $^{\ensuremath{\circledast}}$  H-A 3 panel-mount base
- Angled version
- Housing: zinc die-casting, grey

### EPIC KIT H-A 3 BS MTGB M20

### 00

- EPIC<sup>®</sup> H-A 3 screw termination female insert
- EPIC<sup>®</sup> H-A 3 cable coupler hood
- Housing: zinc die-casting, grey

Techi	nical data
4	<b>Rated voltage (V)</b> IEC: 400 V UL: 600 V CSA: 600 V
Amp.	Rated current (A) IEC: 23 A UL: 10 A CSA: 10 A
	Number of contacts 3 + PE

Article number	Pieces / PU
EPIC® H-A	A 3 Kits Metal
75009602	1

### Article numbers for single components

- H-A 3 SS 10420000
- H-A 3 MTgv M20 19512100

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	A 3 Kits Metal
75009604	1
Article numbers for single components	

- H-A 3 SS 10420000
- H-A 3 Ts M20 19512300

Article		Disease / DU	
number		Pieces / PU	
EPIC <sup>®</sup> H-A	A 3 Kits Metal		
75009606		1	

- Article numbers for single components
- H-A 3 BS 10421000
- H-A 3 Mag 10422500

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	A 3 Kits Metal
75009608	1
Article n	umbers for single components

### • H-A 3 BS 10421000

- H-A 3 Mags 10423500
- 11-A 5 Wags 10425

Article number	Pieces / PU	
EPIC® H-A	A 3 Kits Metal	
75009610	1	
Article numbers for single components		

### • H-A 3 BS 10421000

H-A 3 MAgsv M20 19512700

Article number		Pieces / PU	
EPIC <sup>®</sup> H-A	A 3 Kits Metal		
75009612		1	

### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 MTgvb M20 19512900



• Complete connectors - easy to order













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**HITRONIC®** 

EPIC®

Rectangular connectors • EPIC® Rectangular Kits



# **EPIC® H-A 4 Kits Thermoplastic**

### Benefits

- Pre-packed kits with compatible components
- Uncomplicated ordering
- No misplaced orders

### Similar products

• EPIC<sup>®</sup> H-A 4 Kits Metal refer to page 191







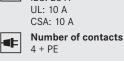






Technical data			
4	Rated voltage (V) IEC: 400 V		
	$111 \cdot 600 V$		







### Article numbers for single component

- H-A 4 SS 10431000
- H-A 3 Tgv M20 19426000
- Article number Pieces / PU EPIC® H-A 4 Kits Thermoplastic
- EPIC® H-A 4 Kits Thermoplastic

   75009615
   1

### Article numbers for single component

- H-A 4 SS 10431000
- H-A 3 Ts M20 19427000

Article number	Pieces / PU
EPIC <sup>®</sup> H-A 4 Kits Thermoplastic	
75009617	1

### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Ag 10422000
- Article number
   Pieces / PU

   EPIC® H-A 4 Kits Thermoplastic
   75009619

### Article numbers for single components • H-A 4 BS 10432000

- H-A 4 BS 10432000
  H-A 3 Ags 10423000

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	A 4 Kits Thermoplastic
75009621	1

### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Agsv M20 19421900

Article number	Pieces / PU
EPIC® H-A	4 Kits Thermoplastic
75009623	1

### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Tgvb M20 19429000

# Info Complete connectors - easy to order

### EPIC KIT H-A 4 SS TG M20



- EPIC<sup>®</sup> H-A 4 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- Straight cable entry
- Housing: thermoplastic grey

### EPIC KIT H-A 4 SS TS M20



- + EPIC  $^{\mbox{\tiny (B)}}$  H-A 4 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- Side cable entry
- Housing: thermoplastic grey

### EPIC KIT H-A 4 BS AG

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- $\operatorname{EPIC}^{\scriptscriptstyle \mathbb{R}}$  H-A 3 panel-mount base
- Straight version
- Housing: thermoplastic grey

### EPIC KIT H-A 4 BS AGS



- EPIC<sup>®</sup> H-A 4 screw termination female insert
- ${\sf EPIC}^{\scriptstyle {\mathbb 8}}$  H-A 3 panel-mount base
- Angled version
- Housing: thermoplastic grey

### EPIC KIT H-A 4 BS AGS M20

### 00

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Angled version
- Housing: thermoplastic grey

### EPIC KIT H-A 4 BS TGB M20

### lo c

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC<sup>®</sup> H-A 3 cable coupler hood
- Straight cable entry
- Housing: thermoplastic grey

VDE

# EPIC<sup>®</sup> Industrial connectors

Rectangular connectors • EPIC<sup>®</sup> Rectangular Kits

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# EPIC<sup>®</sup> H-A 4 Kits Metal

### Benefits

- Pre-packed kits with compatible components
- Uncomplicated ordering
- No misplaced orders

### Similar products

 EPIC<sup>®</sup> H-A 4 Kits Thermoplastic refer to page 190

### EPIC KIT H-A 4 SS MTG M20

# 

- EPIC<sup>®</sup> H-A 4 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- Straight cable entry
- · Housing: zinc die-casting, grey

### EPIC KIT H-A 4 SS MTS M20

### 

- EPIC<sup>®</sup> H-A 4 screw-termination male insert
- EPIC<sup>®</sup> H-A 3 hood
- Side cable entry
- Housing: zinc die-casting, grey

### EPIC KIT H-A 4 BS MAG

### 00

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Straight version
- Housing: zinc die-casting, grey

### EPIC KIT H-A 4 BS MAGS

### 00

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC<sup>®</sup> H-A 3 panel-mount base
- Angled version
- Housing: zinc die-casting, grey

### EPIC KIT H-A 4 BS MAGS M20

### 00

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC $^{\ensuremath{\circledast}}$  H-A 3 panel-mount base
- Angled version
- Housing: zinc die-casting, grey

### EPIC KIT H-A 4 BS TGB M20

### 00

- EPIC<sup>®</sup> H-A 4 screw termination female insert
- EPIC<sup>®</sup> H-A 3 cable coupler hood
- Straight cable entry
- Housing: zinc die-casting, grey

Technical data		
4	<b>Rated voltage (V)</b> IEC: 400 V UL: 600 V CSA: 600 V	
Amp.	Rated current (A) IEC: 23 A UL: 10 A CSA: 10 A	
╼╞	Number of contacts 4 + PE	

Article number	Pieces / PU
EPIC® H-A	A 4 Kits Metal
75009614	1

### Article numbers for single components

- H-A 4 SS 10431000)
- H-A 3 MTgv M20 19512100

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	A 4 Kits Metal
75009616	1

### Article numbers for single component

- H-A 4 SS 10431000
- H-A 3 Ts M20 19512300

	Article number		Pieces / PU	
E	EPIC <sup>®</sup> H-A	A 4 Kits Metal		
2	75009618		1	

- Article numbers for single components
- H-A 4 BS 10432000
- H-A 3 Mag 10422500

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	4 Kits Metal
75009620	1

### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Mags 10423500

Article number	Pieces / PU	
EPIC <sup>®</sup> H-A 4 Kits Metal		
75009622	1	
Article numbers for single components		

- H-A 4 BS 10432000
- H-A 3 MAgsv M20 19512700

	Article number	Pieces / PU
EPIC <sup>®</sup> H-A 4 Kits Metal		A 4 Kits Metal
	75009624	1
	Article nu	umbers for single components

- H-A 4 BS 10432000
- H-A 3 MTgvb M20 19512900















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# EPIC<sup>®</sup> H-A 10 Kits

· Pre-packed kits with compatible

• Uncomplicated ordering

· No misplaced orders

# **ETHERLINE®**

**Benefits** 

components

**HITRONIC®** 

	Article Pieces / PU EPIC® H-A 10 Kits
Contraction of the second	75009625 1
EPIC"	Article numbers for single components
Sha W	• H-A 10 SS 10440100
Corra	• H-A 10 TG M20 19446000
	Article Pieces / PU
	EPIC <sup>®</sup> H-A 10 Kits
(ung)	75009626 1
	Article numbers for single components
	• H-A 10 SS 10440100
	<ul> <li>H-A 10 TS M20 19445000</li> </ul>
	Article Pieces / PU
	EPIC <sup>®</sup> H-A 10 Kits
	75009627 1
a second	Article numbers for single components





	Article number		Pieces / PU
	EPIC® H-A	A 10 Kits	
(married)	75009626		1
	Article n	umbers for sing	gle components
	• H-A 10	SS 10440100	
	• H-A 10	TS M20 19445	5000
B	Article		Pieces / PU
10	number EPIC <sup>®</sup> H-A	10 Kite	
	75009627		1
	Article n	umbers for sing	gle components
		BS 10441100	5p
	• H-A 10	AG-LB 104420	000
	Article		
NG.	number		Pieces / PU
	EPIC <sup>®</sup> H-A 75009628	A 10 Kits	1
			gle components
		BS 10441100	
	• H-A 10	SGR-LB M20	19448100
9	Article		Pieces / PU
	number EPIC <sup>®</sup> H-A	10 Kits	,

**Technical data** 

4

Amp.

Rated voltage (V)

Rated current (A)

Number of contacts

IEC: 250 V

UI: 600 V

IEC: 16 A UL: 14 A CSA: 16 A

10 + PE

CSA: 600 V

Article number	Pieces / PU
EPIC® H-A	A 10 Kits
75009629	1
Article n	umbers for single components
• H-A 10	BS 10441100

• H-A 10 TBF-LB M20 19439000

EPIC KIT H-A 10 SS TG M20

· Complete connectors - easy to order



- EPIC® H-A 10 screw-termination male insert
- · With wire protection
- EPIC<sup>®</sup> H-A 10 hood

Info

### EPIC KIT H-A 10 SS TS M20

- EPIC® H-A 10 screw-termination male insert
- With wire protection
- EPIC® H-A 10 hood

### EPIC KIT H-A 10 BS AG

- EPIC<sup>®</sup> H-A 10 screw termination female insert
- · With wire protection
- EPIC® H-A 10 panel-mount base

### EPIC KIT H-A 10 BS SGR-LB M20



- EPIC<sup>®</sup> H-A 10 screw termination female insert
- With wire protection
- EPIC<sup>®</sup> H-A 10 surface-mount base

### EPIC KIT H-A 10 BS TBF-LB M20

- EPIC® H-A 10 screw termination female insert
- · With wire protection
- EPIC<sup>®</sup> H-A 10 cable coupler hood

# EPIC<sup>®</sup> Industrial connectors

· Complete connectors - easy to order

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Info

UNITRONIC®

EPIC<sup>®</sup> H-A 16 Kits

### Benefits

• Pre-packed kits with compatible components

VDE

- Uncomplicated ordering
- No misplaced orders

KIT H-A	16 SS TG M	20
1		

- EPIC<sup>®</sup> H-A 16 screw-termination male insert
- · With wire protection
- EPIC<sup>®</sup> H-A 16 hood

### EPIC KIT H-A 16 SS TS M20

# 

EPIC

- EPIC<sup>®</sup> H-A 16 screw-termination male insert
- With wire protection
- EPIC® H-A 16 hood

### EPIC KIT H-A 16 BS AG

### 00

- EPIC<sup>®</sup> H-A 16 screw termination female insert
- With wire protection
- ${\sf EPIC}^{\circledast}$  H-A 16 panel-mount base

### EPIC KIT H-A 16 BS SGR-LB M20

### 00

- EPIC<sup>®</sup> H-A 16 screw termination female insert
- · With wire protection
- EPIC<sup>®</sup> H-A 16 surface-mount base

### EPIC KIT H-A 16 BS TBF-LB M20

### 00

- EPIC<sup>®</sup> H-A 16 screw termination female insert
- · With wire protection
- EPIC<sup>®</sup> H-A 16 cable coupler hood

Technical data			
4	<b>Rated voltage (V)</b> IEC: 250 V UL: 600 V CSA: 600 V		
Amp.	<b>Rated current (A)</b> IEC: 16 A UL: 14 A CSA: 16 A		
<b>•</b>	Number of contacts 16 + PE		

Article number	Pieces / PU
EPIC <sup>®</sup> H-A	16 Kits
75009630	1

Pieces / PU

Pieces / PU

Pieces / PU

### Article numbers for single component

Article numbers for single componer

Article numbers for single components

Article numbers for single componen

• H-A 16 SGR-LB M20 19567100

• H-A 16 SS 10530000

Article

number

Article

number EPIC<sup>®</sup> H-A 16 Kits 75009632

Article

number EPIC<sup>®</sup> H-A 16 Kits 75009633

EPIC® H-A 16 Kits 75009631

• H-A 16 SS 10530000

• H-A 16 BS 10531000

• H-A 16 BS 10531000

• H-A 16 AG-LB 10462000

• H-A 16 TS M20 19564000

• H-A 16 TG M20 19565000









- H-A 16 BS 10531000
- H-A 16 TBF-LB M20 19563000



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EAPP GROUP

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# **EPIC® H-BE 6 Kits**

• Pre-packed kits with compatible

• Uncomplicated ordering

No misplaced orders

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**Benefits** 

components

**HITRONIC®** 

EPIC®





PIC®







UL: 16 A CSA: 16 A Number of contacts 6 + PF	
Article Pieces / PU number Pieces / PU EPIC® H-BE 6 Kits	EPIC <sup>®</sup> KIT H-BE 6 SS TG M20
Procession         1           Article numbers for single components         •           • EPIC® H-BE 6 SS 10190000         •           • H-B 6 TG M20 19011000         •	<ul> <li>EPIC<sup>®</sup> H-BE 6 screw-terminat insert</li> <li>With wire protection</li> <li>EPIC<sup>®</sup> H-B 6 hood</li> </ul>
Article number         Pieces / PU           EPIC® H-BE 6 Kits         1           75009636         1           Article numbers for single components           • EPIC® H-BE 6 SS 10190000           • H-B 6 TS M20 19012000	<ul> <li>EPIC<sup>®</sup> KIT H-BE 6 SS TS M20</li> <li>EPIC<sup>®</sup> H-BE 6 screw-terminat insert</li> <li>With wire protection</li> <li>EPIC<sup>®</sup> H-B 6 hood</li> </ul>
Article number         Pieces / PU           EPIC® H-BE 6 Kits         75009637           75009637         1           Article numbers for single components         6           • EPIC® H-BE 6 BS 10191000         •           • H-B 6 AG-LB 10003000         •	<ul> <li>EPIC<sup>®</sup> KIT H-BE 6 BS AG-LB</li> <li>EPIC<sup>®</sup> H-BE 6 screw terminationsert</li> <li>With wire protection</li> <li>EPIC<sup>®</sup> H-B 6 panel-mount base</li> </ul>
Article number         Pieces / PU           EPIC® H-BE 6 Kits         75009638         1           Article numbers for single components         6         5009638         1           • EPIC® H-BE 6 BS 10191000         •         H-BE 6 SGR M20 19005000         1	<ul> <li>EPIC<sup>®</sup> KIT H-BE 6 BS SGR-LB</li> <li>EPIC<sup>®</sup> H-BE 6 screw terminationsert</li> <li>With wire protection</li> <li>EPIC<sup>®</sup> H-B 6 surface-mount b</li> </ul>
Article number     Pieces / PU       EPIC® H-BE 6 Kits     1       75009639     1       Article numbers for single components       • EPIC® H-BE 6 BS 10191000	<ul> <li>EPIC<sup>®</sup> KIT H-BE 6 BS TBF-LB</li> <li>EPIC<sup>®</sup> H-BE 6 screw terminationsert</li> <li>With wire protection</li> </ul>

EPIC<sup>®</sup> H-BE 6 BS 10191000 • H-B 6 TBF M20 19014000

**Technical data** 

4

Amp

Rated voltage (V) IEC: 500 VUL: 600 VCSA: 600 V

Rated current (A)

IEC: 16 A

Info

### 0



ition male

· Complete connectors - easy to order

ition male



F

- tion female
- ise

### B M20



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- tion female
- base

### 3 M20

- tion female
- With wire protection
- EPIC<sup>®</sup> H-B 6 cable coupler hood

VDE

# EPIC<sup>®</sup> Industrial connectors

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Info

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# EPIC<sup>®</sup> H-BE 10 Kits

# **ETHERLINE®**











· Pre-packed kits with compatible Rated voltage (V) 4 Complete connectors - easy to order IEC: 500 VUL: 600 VCSA: 600 V · Uncomplicated ordering Rated current (A) · No misplaced orders Amp IEC: 16 A UL: 16 A CSA: 16 A Number of contacts ¢ 10 + PF Article Pieces / PU number EPIC<sup>®</sup> H-BE 10 Kits 75009640 1 Article numbers for single component • EPIC<sup>®</sup> H-BE 10 SS 10192000 • H-B 10 TG M25 19040100 Article Pieces / PU number EPIC® H-BE 10 Kits 75009641 Article numbers for single component • EPIC<sup>®</sup> H-BE 10 SS 10192000 • H-B 10 TS M25 19042100 Article Pieces / PU number EPIC<sup>®</sup> H-BE 10 Kits 75009642 Article numbers for single component • EPIC® H-BE 10 BS 10193000 • H-B 10 AG 10032000 Article Pieces / PU number EPIC® H-BE 10 Kits 75009643 Article numbers for single component • EPIC® H-BE 10 BS 10193000 • H-B 10 SGR M25 19034100 • EPIC® H-B 10 surface-mount base Article Pieces / PU number EPIC® H-BE 10 Kits 75009644 Article numbers for single componen • EPIC® H-BE 10 BS 10193000 • H-B 10 TBF M25 79040200 For current information see: www.lappgroup.com

**Technical data** 

### EPIC® KIT H-BE 10 SS TG M25

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**Benefits** 

components

- EPIC® H-BE 10 screw-termination male insert
- · With wire protection
- EPIC® H-B 10 hood

### EPIC® KIT H-BE 10 SS TS M25



- EPIC® H-BE 10 screw-termination male insert
- · With wire protection
- EPIC® H-B 10 hood

### EPIC KIT H-BE 10 BS AG

- EPIC® H-BE 10 screw termination female insert
- · With wire protection
- EPIC® H-B 10 panel-mount base

### EPIC KIT H-BE 10 BS SGR M25

- EPIC® H-BE 10 screw termination female insert
- · With wire protection

# EPIC® KIT H-BE 10 BS TBF M25

- EPIC® H-BE 10 screw termination female insert
- With wire protection
- EPIC<sup>®</sup> H-B 10 cable coupler hood

Rectangular connectors • EPIC<sup>®</sup> Rectangular Kits



# EPIC<sup>®</sup> H-BE 16 Kits

· Pre-packed kits with compatible

Uncomplicated orderingNo misplaced orders

# ETHERLINE®

**Benefits** 

components

- **HITRONIC®**

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	16 + PE	
	Article number         Pieces / PU           EPIC® H-BE 16 Kits         75009645           75009645         1           Article numbers for single components           • EPIC® H-BE 16 SS 10194000           • H-B 16 TG M25 19080000	<ul> <li>EPIC<sup>®</sup> KIT</li> <li>EPIC<sup>®</sup> H</li> <li>With with</li> <li>EPIC<sup>®</sup> H</li> </ul>
	Article number         Pieces / PU           EPIC® H-BE 16 Kits         1           75009646         1           Article numbers for single components           • EPIC® H-BE 16 SS 10194000           • H-B 16 TS M25 19082000	• EPIC <sup>®</sup> KI • EPIC <sup>®</sup> H insert • With wit • EPIC <sup>®</sup> H
A STATE OF THE STA	Article number         Pieces / PU           EPIC® H-BE 16 Kits         75009647           75009647         1           Article numbers for single components         6           • EPIC® H-BE 16 BS 10195000         •           • H-B 16 AG 10072000         •	<ul> <li>EPIC<sup>®</sup> KIT</li> <li>EPIC<sup>®</sup> H</li> <li>With wit</li> <li>EPIC<sup>®</sup> H</li> </ul>
	Article number         Pieces / PU           EPIC® H-BE 16 Kits         1           75009648         1           Article numbers for single components         1           EPIC® H-BE 16 BS 10195000         1           • EPIC® H-BE 16 SGR M25 19074000         1	<ul> <li>EPIC<sup>®</sup> KIT</li> <li>EPIC<sup>®</sup> H</li> <li>With win</li> <li>EPIC<sup>®</sup> H</li> </ul>
	Article number     Pieces / PU       EPIC® H-BE 16 Kits     1       75009649     1       Article numbers for single components	• EPIC <sup>®</sup> KIT

**Technical data** 

4

Amp.

Rated voltage (V)

Rated current (A)

Number of contacts

IEC: 16 A

UL: 16 A CSA: 16 A

IEC: 500 VUL: 600 VCSA: 600 V

## EPIC<sup>®</sup> H-BE 16 BS 10195000

H-B 16 TBF M25 19086000 )

# Info Complete connectors - easy to order

### EPIC<sup>®</sup> KIT H-BE 16 SS TG M25



- EPIC<sup>®</sup> H-BE 16 screw termination male insert
- With wire protection
- EPIC<sup>®</sup> H-B 16 hood

### EPIC® KIT H-BE 16 SS TS M25

# 

- EPIC<sup>®</sup> H-BE 16 screw termination male insert
- With wire protection
- EPIC<sup>®</sup> H-B 16 hood

### EPIC<sup>®</sup> KIT H-BE 16 BS AG

### 00

- EPIC<sup>®</sup> H-BE 16 screw termination female insert
- With wire protection
- EPIC® H-B 16 panel-mount base

### EPIC<sup>®</sup> KIT H-BE 16 BS SGR M25

## 00

- EPIC<sup>®</sup> H-BE 16 screw termination female insert
- With wire protection
- EPIC<sup>®</sup> H-B 16 surface-mount base

### EPIC® KIT H-BE 16 BS TBF M25



- EPIC<sup>®</sup> H-BE 16 screw termination female insert
- With wire protection
- EPIC<sup>®</sup> H-B 16 cable coupler hood

VDE

# EPIC<sup>®</sup> Industrial connectors

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Info

# EPIC<sup>®</sup> H-BE 24 Kits











**Benefits** 

- Uncomplicated ordering
- · No misplaced orders

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<ul> <li>EPIC<sup>®</sup> H-BE 24 screw-termination male insert</li> </ul>	

- · With wire protection
- EPIC® H-B 24 hood

### EPIC® KIT H-BE 24 SS TS M25

EPIC® KIT H-BE 24 SS TG M25



- EPIC® H-BE 24 screw-termination male insert
- With wire protection
- EPIC® H-B 24 hood

### EPIC® KIT H-BE 24 BS AG

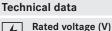
- EPIC® H-BE 24 screw termination female insert
- · With wire protection
- EPIC® H-B 24 panel-mount base

### EPIC® KIT H-BE 24 BS SGR M25

- EPIC<sup>®</sup> H-BE 24 screw termination female insert
- With wire protection • EPIC® H-B 24 surface-mount base

### EPIC® KIT H-BE 24 BS TBF M25

- EPIC<sup>®</sup> H-BE 24 screw termination female insert
- With wire protection
- EPIC<sup>®</sup> H-B 24 cable coupler hood



4 IEC: 500 VUL: 600 VCSA: 600 V Rated current (A) Amp IEC: 16 A UL: 16 A CSA: 16 A Number of contacts 24 + PF



- Article numbers for single component EPIC<sup>®</sup> H-BE 24 SS 10196000
- H-B 24 TG M25 19121000

### Article Pieces / PU number EPIC<sup>®</sup> H-BE 24 Kits 75009651 1

### Article numbers for single components

- EPIC® H-BE 24 SS 10196000
- H-B 24 TS M25 19113000
- Autiala

Article number	Pieces / PU	
EPIC® H-E	3E 24 Kits	
75009652	1	
	P	

### Article numbers for single components

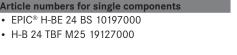
- EPIC® H-BE 24 BS 10197000
- H-B 24 AG 10102000

Article number	Pieces / PU
EPIC <sup>®</sup> H-E	BE 24 Kits
75009653	1
Article n	imbers for single components

- EPIC® H-BE 24 BS 10197000
- H-B 24 SGR M25 19104000

Article number	Pieces / PU
EPIC <sup>®</sup> H-BE 24 Kits	3
75009654	1

- Article numbers for single components







# EPIC<sup>®</sup> Circular connectors compact connectors for motion control and energy transfer

 $\ensuremath{\mathsf{EPIC}}^{\circledast}$  – circular connectors are divided into the following categories:

- Signal connectors
- Power connectors
- Hybrid connectors

Signal connectors, the majority of which feature gold-plated contacts, are suitable for a transfer of sensitive signals.

Power connectors transfer high outputs and supply the application with the sufficient amount of energy. Hybrid applications merge both worlds in one housing.

# EPIC<sup>®</sup> SIGNAL Circular connectors



EPIC<sup>®</sup> – SIGNAL connectors are available as M17, M23 and R3.0 (M27). The EMC screen contact surface reliably prevents electromagnetic influences. Even the lowest currents and voltages are reliably transferred by the gold-plated contacts.

# EPIC® POWER Circular connectors



The integrated EMC cable glands offer strain relief and are perfectly sealed. The high-quality sealing materials guarantee very high levels of chemical protection.

# EPIC<sup>®</sup> POWERLOCK



EPIC<sup>®</sup> – POWERLOCK – these single-pin connectors transfer very high currents, are colour-coded and designed in different shapes to prevent incorrect connections and exclude any resulting hazards for users. Circular connectors • EPIC® POWER M12 630V

c**W**us

# EPIC® POWER M12 630V panel base

Circular connectors for servomotors and power supply



### **Application range**

- Power Supply for small devices
- For 1-phase cables or 3-phase wihout

ts	ETIM	Classification ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular	ŧ	Number of contacts 3 + PE S-coded
	4	connector (industrial connector) <b>Rated voltage (V)</b> 630 V	0	Termination methods Screw termination: 0.75 - 1.5mm <sup>2</sup> with 0,2m PP-wire, 4x1.5mm <sup>2</sup>
N		Rated impulse voltage 6 kV	IP	Protection rating IP 67
	Amp.	Rated current (A) 12 A	₩	<b>Cycle of mechanical operation</b> 100
		Degree of soiling 3	0₽	Temperature range -40 °C to +85 °C
		Contact resistance < 3 mOhm		

Article number	Article description	Fastening type	Pieces / PU		
EPIC <sup>®</sup> POWER M12	EPIC® POWER M12 630V panel base				
44423144	Panel base with pin contacts	M20	1		
44423145	Panel base with socket contacts	M20	1		
44423146	Panel base with pin contacts	M16 (with wires 4xAWG16/0.2m)	1		
44423147	Panel base with socket contacts	M16 (with wires 4xAWG16/0.2m)	1		

Photographs are not to scale and do not represent detailed images of the respective products.

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## APP GROUP

# EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® POWER M12 630V

c**W**us



# EPIC<sup>®</sup> POWER M12 630V cable connector

Circular connectors for servomotors and power supply



### Benefits

- · To terminate only screw driver is neccessary
- Small and space-saving for narrow available space
- High performance gold plated contacts

### Application range

Info

- Power Supply for small devices
- For 1-phase cables or 3-phase wihout N

Techi	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC002635		Contact resistance < 3 mOhm
	ETIM 5.0 Class-Description: Circular connector (industrial connector)	-	Number of contacts 3 + PE
4	Rated voltage (V)		S-coded
	630 V	2	Termination methods
	Rated impulse voltage		Screw termination: 0.75 - 1.5mm <sup>2</sup>
	6 kV	IP	Protection rating
Amp.	Rated current (A)		IP 67
	12 A Degree of soiling	₩	Cycle of mechanical operation 100
	3	0⋕	<b>Temperature range</b> -40 °C to +85 °C

Article number	Article description	Clamping range in mm	Pieces / PU
EPIC® POWER M12 630V cable connector			
44423140	Cable coupler with pin contacts	8 - 10	1
44423141	Cable connector with socket contacts	8 - 10	1
44423142	Cable coupler with pin contacts, angled	8 - 10	1
44423143	Cable connector with socket contacts, angled	8 - 10	1

Photographs are not to scale and do not represent detailed images of the respective products.

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Circular connectors • EPIC® POWER M17

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# **EPIC® POWER M17 A1**

Circular connectors for servomotors and power supply



# Info High Power with smallest space requirements

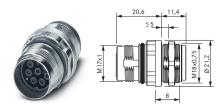
# EPIC<sup>®</sup> POWER M17 A3

Circular connectors for servomotors and power supply



# EPIC<sup>®</sup> POWER M17 G4

Circular connectors for servomotors and power supply



### Suitable contacts:

- EPIC<sup>®</sup> M17 Contacts Page 207
  The contacts have to be ordered
- separately

### Benefits

- Version with less contacts for higher current
- Sensor/ ac
- EMC protection

### Application range

- Servo drives and servo assemblies
- Plant engineering, machinery manufacturing



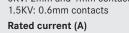
## Classification

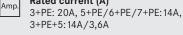


ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector) Rated voltage (V)



630V: 2mm and 1mm contacts 60V: 0,6mm contacts **Rated impulse voltage** 6KV: 2mm and 1mm contacts











Rotateable with 310° cable outlet

• For installation in existing hole

Info

4	Number of contacts 3+PE, 5+PE, 6+PE, 7+PE, 3+PE+5 Contacts:3+PE(2mm), 5+PE(1mm), 6+PE(1mm), 7+PE(1mm), 3+PE+5(1mm/0.6mm)
01	Termination methods Crimp: 3+PE: 0.5-2.5mm <sup>2</sup> , 5+PE/6+PE/7+PE: 0.06-1mm <sup>2</sup> , 3+P+5: 0.06-1/0.06-0.5mm <sup>2</sup>
	Material Housing: nickel-plated zinc die-casting, nickel-plated brass Insert: PA, Seal: FPM
IP	Protection rating IP 67
₩	<b>Cycle of mechanical operation</b> 100

**Temperature range** -40°C to +125°C

01

**HITRONIC®** 

# EPIC<sup>®</sup> Industrial connectors

# Circular connectors • EPIC<sup>®</sup> POWER M17

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
ype M17 A1, front v	vall mounting		· · ·	
44423075	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	3+PE (2mm contact)	5
44423070	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	3+PE (2mm contact)	5
44423076	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	5+PE (1mm contact)	5
44423071	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	5+PE (1mm contact)	5
44423077	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	5+PE (1mm contact)	5
44423072	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	6+PE (1mm contact)	5
44423078	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	7+PE (1mm contact)	5
44423073	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	7+PE (1mm contact)	5
44423079	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	3+PE+5 (1mm / 0,6mm contact)	5
44423074	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	3+PE+5 (1mm / 0,6mm contact)	5
ype M17 A3, angled	and rotateable			
44423085	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	3+PE (2mm contact)	5
44423080	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	3+PE (2mm contact)	5
44423086	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	5+PE (1mm contact)	5
44423081	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	5+PE (1mm contact)	5
44423087	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	6+PE (1mm contact)	5
44423082	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	6+PE (1mm contact)	5
44423088	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	7+PE (1mm contact)	5
44423083	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	7+PE (1mm contact)	5
44423089	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	3+PE+5 (1mm / 0,6mm contact)	5
44423084	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	3+PE+5 (1mm / 0,6mm contact)	5
ype M17 G4, front v	vall mounting			
44423095	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	3+PE (2mm contact)	5
44423090	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	3+PE (2mm contact)	5
44423099	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	5+PE (1mm contact)	5
44423094	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	5+PE (1mm contact)	5
44423096	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	6+PE (1mm contact)	5
44423091	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	6+PE (1mm contact)	5
44423097	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	7+PE (1mm contact)	5
44423092	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	7+PE (1mm contact)	5
44423098	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	3+PE+5 (1mm / 0,6mm contact)	5
44423093	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	3+PE+5 (1mm / 0,6mm contact)	5

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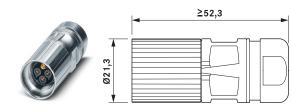
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Circular connectors • EPIC® POWER M17

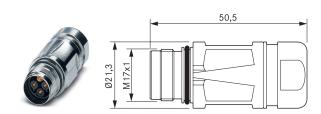
# EPIC<sup>®</sup> POWER M17 D6

Circular connectors for servomotors and power supply



# EPIC<sup>®</sup> POWER M17 F6

Circular connectors for servomotors and power supply



### Suitable contacts:

- EPIC<sup>®</sup> M17 Contacts Page 207
- · The contacts have to be ordered separately

### **Benefits**

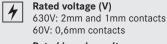
- Sensor/ ac
- · Version with less contacts for higher
- current
- · EMC protection

### Application range

- · Servo drives and servo assemblies
- Plant engineering, machinery manufacturing

<b>e</b> t i m	Classification
ETIM	ETIM 5.0 Class-ID: EC002635
	ETIM 5.0 Class-Description: Circular
	connector (industrial connector)
	Rated voltage (V)

**Technical data** 



Rated impulse voltage 6KV: 2mm and 1mm contacts 1.5KV: 0.6mm contacts



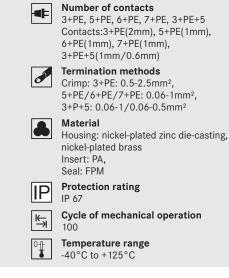
3+PE+5:14A/3,6A Degree of soiling



Contacts Gold-plated brass



• High Power with smallest space requirements



Article number	Article description	Clamping range in mm	Pin configuration	Pieces / PU
Type M17 D6, cable cor	nnector			
44423050	EPIC <sup>®</sup> M17 female	3.5 - 11	3+PE (2mm contact)	5
44423055	EPIC <sup>®</sup> M17 male	3.5 - 11	3+PE (2mm contact)	5
44423051	EPIC <sup>®</sup> M17 female	3.5 - 11	5+PE (1mm contact)	5
44423056	EPIC <sup>®</sup> M17 male	3.5 - 11	5+PE(1mm contact)	5
44423052	EPIC <sup>®</sup> M17 female	3.5 - 11	6+PE(1mm contact)	5
44423057	EPIC <sup>®</sup> M17 male	3.5 - 11	6+PE(1mm contact)	5
44423053	EPIC <sup>®</sup> M17 female	3.5 - 11	7+PE(1mm contact)	5
44423058	EPIC <sup>®</sup> M17 male	3.5 - 11	7+PE(1mm contact)	5
44423054	EPIC <sup>®</sup> M 17 female	3.5 - 11	3+PE+5 (1mm / 0,6mm contact)	5
44423059	EPIC <sup>®</sup> M17 male	3.5 - 11	3+PE+5 (1mm / 0,6mm contact)	5
Type M17 F6, cable cou	ıpler			
44423065	EPIC <sup>®</sup> M17 female	3.5 - 11	3+PE (2mm contact)	5
44423060	EPIC <sup>®</sup> M17 male	3.5 - 11	3+PE (2mm contact)	5
44423066	EPIC <sup>®</sup> M 17 female	3.5 - 11	5+PE (1mm contact)	5
44423061	EPIC <sup>®</sup> M17 male	3.5 - 11	5+PE (1mm contact)	5
44423067	EPIC <sup>®</sup> M 17 female	3.5 - 11	6+PE (1mm contact)	5
44423062	EPIC <sup>®</sup> M17 male	3.5 - 11	6+PE (1mm contact)	5
44423068	EPIC <sup>®</sup> M 17 female	3.5 - 11	7+PE (1mm contact)	5
44423063	EPIC <sup>®</sup> M17 male	3.5 - 11	7+PE (1mm contact)	5
44423069	EPIC <sup>®</sup> M17 female	3.5 - 11	3+PE+5 (1mm / 0,6mm contact)	5
44423064	EPIC <sup>®</sup> M17 male	3.5 - 11	3+PE+5 (1mm / 0,6mm contact)	5

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Info

Info

Connector for shielded data cables

Rotateable with 310° cable outlet

## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® SIGNAL M17



# EPIC<sup>®</sup> SIGNAL M17 A1

Circular connectors for servomotors and power supply

**HITRONIC®** 







Info

· For installation in existing hole



## Suitable contacts:

- EPIC<sup>®</sup> M17 Contacts Page 207
- · The contacts have to be ordered separately

### **Benefits**

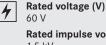
- Sensor/ ac
- EMC protection

### Application range

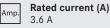
Feedback / signal cables



### Classification et i m ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector)



Rated impulse voltage 1.5 kV



Degree of soiling 3



Contacts Gold-plated brass

Number of contacts

1 Contacts: 8(1mm), 17(0.6mm)



IP

⊬

### **Termination methods**

Circular connectors for servomotors and power supply

Crimp termination: 0.06 - 0.56 mm<sup>2</sup> (0,6mm contacts) Crimp termination: 0.06 - 1.0 mm<sup>2</sup> (1mm contacts)

**EPIC® SIGNAL M17 G4** 

Material

Housing: nickel-plated zinc die-casting, nickel-plated brass Insert: PA, Seal: FPM

**Protection rating** 



Cycle of mechanical operation 100

Temperature range -40°C to +125°C

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
EPIC <sup>®</sup> SIGNAL M17	7 A 1			
44423110	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	8 (1mm contact)	5
44423108	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	8 (1mm contact)	5
Type M17 A1, from	t wall mounting			
44423111	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	17 (0,6mm contact)	5
44423109	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	17 (0,6mm contact)	5
Type M17 A3, angl	ed and rotateable			
44423114	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	8 (1mm contact)	5
44423112	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	8 (1mm contact)	5
44423115	EPIC <sup>®</sup> M17 female	Ø 2.7 mm (4x)	17 (0,6mm contact)	5
44423113	EPIC <sup>®</sup> M17 male	Ø 2.7 mm (4x)	17 (0,6mm contact)	5
Type M17 G4, fron	t wall mounting			
44423118	EPIC <sup>®</sup> M17 female	M18x0,75 (order counternut separately)	8 (1mm contact)	5
44423116	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	8 (1mm contact)	5
44423119	EPIC <sup>®</sup> M 17 female	M18x0,75 (order counternut separately)	17 (0,6mm contact)	5
44423117	EPIC <sup>®</sup> M17 male	M18x0,75 (order counternut separately)	17 (0,6mm contact)	5

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Circular connectors • EPIC® SIGNAL M17

## EPIC<sup>®</sup> SIGNAL M17 D6

Circular connectors for servomotors and power supply





# **EPIC® SIGNAL M17 F6**

Circular connectors for servomotors and power supply



### Suitable contacts:

- EPIC<sup>®</sup> M17 Contacts Page 207
- The contacts have to be ordered separately

### Benefits

- Sensor/ ac
- · EMC protection

### Application range

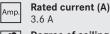
• Feedback / signal cables

ETIM	ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector)
4	Rated voltage (V) 60 V

Classification

**Technical data** 

Rated impulse voltage 1.5 kV







Number of contacts Contacts: 8(1mm), 17(0.6mm)



**Termination methods** 



IP

K⇒ |

°‡

Cycle of mechanical operation 100

Temperature range -40°C to +125°C

Article number	Article description	Clamping range in mm	Pin configuration	Pieces / PU
Type M17 D6, cable con	nnector			
44423100	EPIC <sup>®</sup> M17 female	3.5 - 11	8 (1mm contact)	5
44423102	EPIC <sup>®</sup> M 17 male	3.5 - 11	8 (1mm contact)	5
44423101	EPIC <sup>®</sup> M17 female	3.5 - 11	17 (0,6mm contact)	5
44423103	EPIC <sup>®</sup> M 17 male	3.5 - 11	17 (0,6mm contact)	5
Type M17 F6, cable cou	Jpler			
44423106	EPIC <sup>®</sup> M17 female	3.5 - 11	8 (1mm contact)	5
44423104	EPIC <sup>®</sup> M 17 male	3.5 - 11	8 (1mm contact)	5
44423107	EPIC <sup>®</sup> M17 female	3.5 - 11	17 (0,6mm contact)	5
44423105	EPIC <sup>®</sup> M 17 male	3.5 - 11	17 (0,6mm contact)	5

Photographs are not to scale and do not represent detailed images of the respective products.

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Circular connectors • EPIC® M17 Contacts, tools, accessories

# EPIC<sup>®</sup> M17 Contacts

Contacts, tools, accessories for circular connectors



**EPIC® M17 Tools** Contacts, tools, accessories for circular connectors



### Technical data

Classification EPIC® M17 Contacts ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors EPIC® M17 Tools ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

Article number	Article description	Version	Inserts	Version	Pieces / PU
0.6mm contacts	female				
44423125	M17 BCM 0,6mm 0,06-0,25			0.06-0.25mm <sup>2</sup>	10
44423126	M17 BCM 0.6mm 0.06-0.34			0.06-0.34mm <sup>2</sup>	10
44423127	M17 BCM 0,6mm 0,34-0,5			0.34-0.5mm <sup>2</sup>	10
1mm contacts fe	male				
44423122	M17 BCM 1mm 0,06-0,25			0.06-0.25mm <sup>2</sup>	10
44423123	M17 BCM 1mm 0.34-0.5			0.34-0.5mm <sup>2</sup>	10
44423124	M17 BCM 1mm 0,5-1,0			0.5-1.0mm <sup>2</sup>	10
2mm contacts fe	male				
44423120	M 17 BCM 2mm 0,25-1,0			0.25-1.0mm <sup>2</sup>	10
44423121	M17 BCM 2mm 1,0-2,5			1.0-2.5mm <sup>2</sup>	10
0.6mm contacts	male				
44423133	M17 SCM 0,6mm 0,06-0,25			0.06-0.25mm <sup>2</sup>	10
44423134	M17 SCM 0,6mm 0,06-0,34			0.06-0.34mm <sup>2</sup>	10
44423135	M17 SCM 0,6mm 0,34-0,5			0.34-0.5mm <sup>2</sup>	10
1mm contacts m	ale				
44423130	M17 SCM 1mm 0,06-0,25			0.06-0.25mm <sup>2</sup>	10
44423131	M17 SCM 1mm 0,34-0,5			0.34-0.5mm <sup>2</sup>	10
44423132	M17 SCM 1mm 0,5-1,0				10
2mm contacts m	ale				
44423128	M17 SCM 2mm 0,25-1,0			0.25-1.0mm <sup>2</sup>	10
44423129	M17 SCM 2mm 1,0-2,5			1.0-2.5mm <sup>2</sup>	10
Crimping tool					
44423136	Crimptool M17	Crimpzange with Locator for EPIC <sup>®</sup> M17	for EPIC <sup>®</sup> M17 POWER and SIGNAL		1

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Circular connectors • EPIC<sup>®</sup> M17 Contacts, tools, accessories

# **EPIC<sup>®</sup> M17 Accessories**

Contacts, tools, accessories for circular connectors



Technical	data

Classification ETIM 5.0 Class-ID: EC002314 ETIM 5.0 Class-Description: Cap for industrial connectors

Article number	Version	Inserts	Pieces / PU				
EPIC® M17 Accessories							
44423148	for M17 type G4 housing	Counternut M18x0 75	10				

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Info

Coulour coding for easy connecting

# EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC<sup>®</sup> SIGNAL M23 Housings

# **EPIC® SIGNAL M23 A1**

Circular connectors for Servo Cables and encoders



# EPIC<sup>®</sup> SIGNAL M23 A1 D3.2

Circular connectors for Servo Cables and encoders



# **EPIC® SIGNAL M23 A3**

Circular connectors for Servo Cables and encoders 52,9 25,6

M23 x 1



Rotateable with clearly defined • adjustment positions

### Benefits

### EPIC® SIGNAL M23 A1

- · Safe fixing with 4 screws
- · Permanent vibration protection

### EPIC® SIGNAL M23 A1 D3.2

- Housings are very flexible cable connectors with wide clamping range, receptacle housings for assembling the inserts from the front and rear
- · Permanent vibration protection

### EPIC® SIGNAL M23 A3

- · Housings are very flexible cable connectors with wide clamping range, receptacle housings for assembling the inserts from the front and rear
- · Permanent vibration protection

### Application range

- · Plant engineering
- · Servo drives and servo assemblies
- · Measurement and control technology

### **Technical data**



Material Housing: nickel-plated zinc die-casting Sealing: FPM

**Protection rating** lIΡ EPIC® SIGNAL M23 A1 IP68 (10h/1m) EPIC® SIGNAL M23 A1 D3.2 IP68 (10h/1m) EPIC® SIGNAL M23 A3 IP 65



-25°C up to +125°C

Article number	Article	Coding	Fastening type	Pieces / PU
Type M23 A1 panel-i	mount box, front wall mo	unting		
72004000	M23 A1	black (N)	Ø 2.7 mm (4x)	5
72004010	M23 A1	black (N)	Ø 2.7 mm (4x)	20
72004200	M23 A1	red (+20°)	Ø 2.7 mm (4x)	5
72004210	M23 A1	red (+20°)	Ø 2.7 mm (4x)	20
72004100	M23 A1	blue (-20°)	Ø 2.7 mm (4x)	5
72004110	M23 A1	blue (-20°)	Ø 2.7 mm (4x)	20
Гуре М23 А1 D3.2 р	anel-mount box, front wa	all mounting		
44420018	M23 A1 D3,2	black (N)	Ø 3.2 mm (4x)	5
44420017	M23 A1 D3,2	black (N)	Ø 3.2 mm (4x)	20
44420020	M23 A1 D3,2	red (+20°)	Ø 3.2 mm (4x)	5
44420019	M23 A1 D3,2	red (+20°)	Ø 3.2 mm (4x)	20
44420016	M23 A1 D3,2	blue (-20°)	Ø 3.2 mm (4x)	5
44420015	M23 A1 D3,2	blue (-20°)	Ø 3.2 mm (4x)	20
Type M23 A3 panel-i	mount connector, angled	, rotatable, front wall mounting		
24420055	M23 A3	black (N)	Ø 2.7 mm (4x)	5
24420054	M23 A3	black (N)	Ø 2.7 mm (4x)	20

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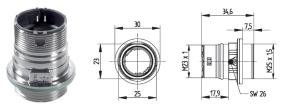
VDE

Circular connectors • EPIC® SIGNAL M23 Housings

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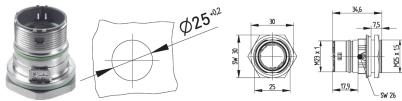
# **EPIC® SIGNAL M23 G4**

Circular connectors for Servo Cables and encoders



# **EPIC® SIGNAL M23 G5**

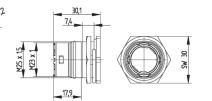
Circular connectors for Servo Cables and encoders



# EPIC<sup>®</sup> SIGNAL M23 G6

Circular connectors for Servo Cables and encoders





### Benefits

210

- · Fast and easy assembly
- Only one M25 bore hole necessary

### **Application range**

- Plant engineering
- · Servo drives and servo assemblies
- · Measurement and control technology



**Technical data** 

Housing: nickel-plated zinc die-casting Sealing: FPM **Protection rating** IP68 (10h/1m)

DIN VDE VDE-tested

Info

boreholes

· For mounting in existing M25 threads or

Certified production control: VDE-REG.no. C24 (according to EN 61984, SELV according to DIN VDE 0100-410 has to be guaranteed) UL File Number: E249137

```
Temperature range
°‡
     -25°C up to +125°C
```

Article number	Article	Coding	Fastening type	Pieces / PU
Type M23 G4 panel-	mount box, front wall mo	unting		
44420032	M23 G4	black (N)	M25 x 1.5	5
44420031	M23 G4	black (N)	M25 x 1.5	20
44420034	M23 G4	red (+20°)	M25 x 1.5	5
44420033	M23 G4	red (+20°)	M25 x 1.5	20
44420030	M23 G4	blue (-20°)	M25 x 1.5	5
44420029	M23 G4	blue (-20°)	M25 x 1.5	20
Type M23 G5 panel-	mount box, front wall mo	unting		
44420046	M23 G5	black (N)	M25 x 1.5 (with nut)	5
44420045	M23 G5	black (N)	M25 x 1.5 (with nut)	20
44420048	M23 G5	red (+20°)	M25 x 1.5 (with nut)	5
44420047	M23 G5	red (+20°)	M25 x 1.5 (with nut)	20
44420044	M23 G5	blue (-20°)	M25 x 1.5 (with nut)	5
44420043	M23 G5	blue (-20°)	M25 x 1.5 (with nut)	20
Type M23 G6 panel-	mount box, rear wall mou	nting		
44420071	M23 G6	black (N)	M25 x 1.5 (with nut)	5
44420073	M23 G6	black (N)	M25 x 1.5 (with nut)	20

Photographs are not to scale and do not represent detailed images of the respective products.



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## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® SIGNAL M23 Housings

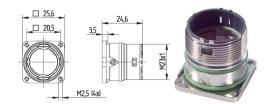
Info

 Housing for mounting at inner side to save space outside of device



# EPIC<sup>®</sup> SIGNAL M23 B1

Circular connectors for Servo Cables and encoders

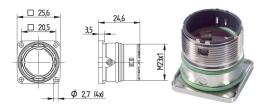


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Circular connectors for Servo Cables and encoders

**EPIC® SIGNAL M23 B2** 



### Benefits

### EPIC® SIGNAL M23 B1

- Defined stop position when mounting at device prevents uncontrolled pressing of sealing
- Harnessed insulation body can easily inserted from back side in already mounted housing

### EPIC® SIGNAL M23 B2

- Housings are very flexible cable connectors with wide clamping range, receptacle housings for assembling the inserts from the front and rear
- Harnessed insulation body can easily inserted from back side in already mounted housing

### Application range

- Plant engineering
- Servo drives and servo assemblies

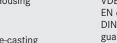
Article number	Article	Coding	Fastening type	Pieces / PU
Type M23 B1 panel-m	ount box, rear wall mou	nting		
44420024	M23 B1	black (N)	M2.5 (4x)	5
44420023	M23 B1	black (N)	M2.5 (4x)	20
44420026	M23 B1	red (+20°)	M2.5 (4x)	5
44420025	M23 B1	red (+20°)	M2.5 (4x)	20
44420022	M23 B1	blue (-20°)	M2.5 (4x)	5
44420021	M23 B1	blue (-20°)	M2.5 (4x)	20
Type M23 B2 panel-m	ount box, rear wall mou	nting		
44420050	M23 B2	black (N)	Ø 2.7 mm (4x)	5
44420051	M23 B2	black (N)	Ø 2.7 mm (4x)	20
44420035	M23 B2	red (+20°)	Ø 2.7 mm (4x)	5
44420049	M23 B2	red (+20°)	Ø 2.7 mm (4x)	20
44420052	M23 B2	blue (-20°)	Ø 2.7 mm (4x)	5
44420053	M23 B2	blue (-20°)	Ø 2.7 mm (4x)	20

Photographs are not to scale and do not represent detailed images of the respective products.

### Technical data

- Classification ETIM 5.0 Class-ID: EC000437 ETIM 5.0 Class-Description: Housing for industrial connectors
  - Material Housing: nickel-plated zinc die-casting Sealing: FPM





DIN VDE-tested

Certified production control: VDE-REG.no. C24 (according to EN 61984, SELV according to DIN VDE 0100-410 has to be guaranteed) UL File Number: E249137

Temperature range

-25°C up to +125°C

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Circular connectors • EPIC® SIGNAL M23 Housings

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# EPIC<sup>®</sup> SIGNAL M23 D6

Circular connectors for Servo Cables and encoders



Info

Robust metal connector with integrated EMC cable gland

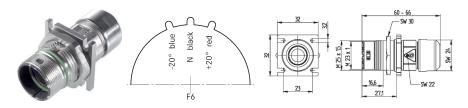
# **EPIC® SIGNAL M23 F6**

Circular connectors for Servo Cables and encoders



# EPIC<sup>®</sup> SIGNAL M23 F7

Circular connectors for Servo Cables and encoders



### **Benefits**

- Low-resistance screen contact, optimum EMC protection
- Use of high quality materials for increased reliability

### Application range

- · Plant engineering
- · Servo drives and servo assemblies
- · Measurement and control technology





Material Housing: nickel-plated zinc die-casting Sealing: FPM

**Protection rating** 

IP68 (10h/1m)



-25°C up to +125°C

Article number	Article	Coding	Cable clamping range	Fastening type	Pieces / PU				
Type M23 D6 cab	Type M23 D6 cable connector								
44420037	M23 D6	black (N)	7.0 - 13.5		5				
72044030	M23 D6	black (N)	7.0 - 10.0		5				
72044020	M23 D6	black (N)	7.0 - 10.0		20				
72044000	M23 D6	black (N)	9.5 - 13.5		5				
72044010	M23 D6	black (N)	9.5 - 13.5		20				
44420038	M23 D6	red (+20°)	7.0 - 13.5		5				
72044230	M23 D6	red (+20°)	7.0 - 10.0		5				
72044220	M23 D6	red (+20°)	7.0 - 10.0		20				
72044200	M23 D6	red (+20°)	9.5 - 13.5		5				
72044210	M23 D6	red (+20°)	9.5 - 13.5		20				
44420036	M23 D6	blue (-20°)	7.0 - 13.5		5				
72044130	M23 D6	blue (-20°)	7.0 - 10.0		5				
72044120	M23 D6	blue (-20°)	7.0 - 10.0		20				
72044100	M23 D6	blue (-20°)	9.5 - 13.5		5				
72044110	M23 D6	blue (-20°)	9.5 - 13.5		20				

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# EPIC<sup>®</sup> Industrial connectors

## Circular connectors • EPIC® SIGNAL M23 Housings

Article number	Article Coding		Cable clamping range	Fastening type	Pieces / PU	
Type M23 F6 coupli	ing connector					
44420040	M23 F6	black (N)	7.0 - 13.5		5	
72064030	M23 F6	black (N)	7.0 - 10.0		5	
72064020	M23 F6	black (N)	7.0 - 10.0		20	
72064000	M23 F6	black (N)	9.5 - 13.5		5	
72064010	M23 F6	black (N)	9.5 - 13.5		20	
44420041	M23 F6	red (+20°)	7.0 - 13.5		5	
72064230	M23 F6	red (+20°)	7.0 - 10.0		5	
72064220	M23 F6	red (+20°)	7.0 - 10.0		20	
72064200	M23 F6	red (+20°)	9.5 - 13.5		5	
72064210	M23 F6	red (+20°)	9.5 - 13.5		20	
44420039	M23 F6	blue (-20°)	7.0 - 13.5		5	
72064130	M23 F6	blue (-20°)	7.0 - 10.0		5	
72064120	M23 F6	blue (-20°)	7.0 - 10.0		20	
72064100	M23 F6	blue (-20°)	9.5 - 13.5		5	
ype M23 F7 panel-	mount connector, fr	ont/rear wall mount	ng			
44420009	M23 F7	black (N)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420010	M23 F7	black (N)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	
44420011	M23 F7	black (N)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420012	M23 F7	black (N)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	
44420001	M23 F7	red (+20°)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420002	M23 F7	red (+20°)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	
44420003	M23 F7	red (+20°)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420004	M23 F7	red (+20°)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	
44420005	M23 F7	blue (-20°)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420006	M23 F7	blue (-20°)	7.0 - 10.0	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	
44420007	M23 F7	blue (-20°)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5	
44420008	M23 F7	blue (-20°)	9.5 - 13.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	20	

Photographs are not to scale and do not represent detailed images of the respective products.



# **EPIC® SIGNAL M23 C2**

Circular connectors for Servo Cables and encoders



### Benefits

- Quick and easy separation of connection from both sides of a wall
- · For connecting two pre-assembled M23 D6 cable connectors

### Application range

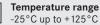
- · Plant engineering
- Measurement and control technology

### **Technical data**



socket/plug for high currents Material Housing: nickel-plated copper alloy







Insert: thermoplastic Sealing: neoprene

Article number	Article description	Version	Contacts included	Fastening type	Pin configuration	Pieces / PU					
Type M23 C2 feed-through connector											
00010108	EPIC <sup>®</sup> M23 C2 12	black (N)	12	Ø 2.7 mm (4x)	12E male - 12P female	5					
00010521	EPIC <sup>®</sup> M23 C2 17	black (N)	17	Ø 2.7 mm (4x)	17E male - 17P female	5					

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Circular connectors • EPIC® SIGNAL M23 Inserts

# EPIC<sup>®</sup> SIGNAL M23 Inserts 6 pole

Inserts for M23 circular connectors



## EPIC<sup>®</sup> SIGNAL M23 Inserts 7 pole



### Suitable housing

- EPIC® SIGNAL M23 A1 Page 209
- EPIC<sup>®</sup> SIGNAL M23 A1 D3.2
- Page 209 EPIC<sup>®</sup> SIGNAL M23 A3 Page 209
- EPIC<sup>®</sup> SIGNAL M23 G4 Page 210 • EPIC® SIGNAL M23 G5 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G6 Page 210
- EPIC® SIGNAL M23 B1 Page 211 EPIC<sup>®</sup> SIGNAL M23 B2 Page 211
- EPIC® SIGNAL M23 O1
- EPIC<sup>®</sup> SIGNAL M23 D6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F7 Page 212
- · All inserts fit into all housings

### Suitable contacts:

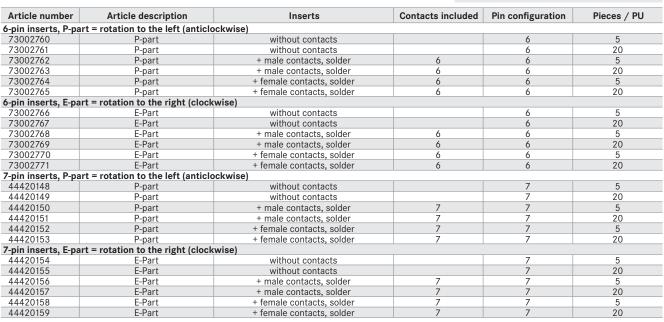
- EPIC® SIGNAL M23 Contacts male Page 219
- EPIC® SIGNAL M23 Contacts female Page 219
- Use 2 mm contacts

### Benefits

 Universal further processing of the M23 inserts through different packaging units. Fully assembled with suitable solder contacts or unpopulated for individual assembly with crimp or solder contacts

### Application range

- Plant engineering
- · Measurement and control technology
- · Apparatus construction

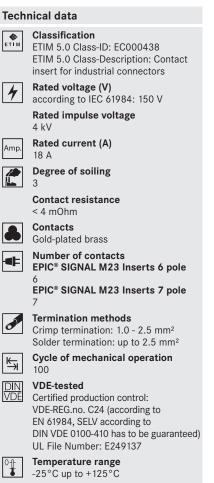


The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise). E-component = right turning (clockwise)

For current information see: www.lappgroup.com

Photographs are not to scale and do not represent detailed images of the respective products.



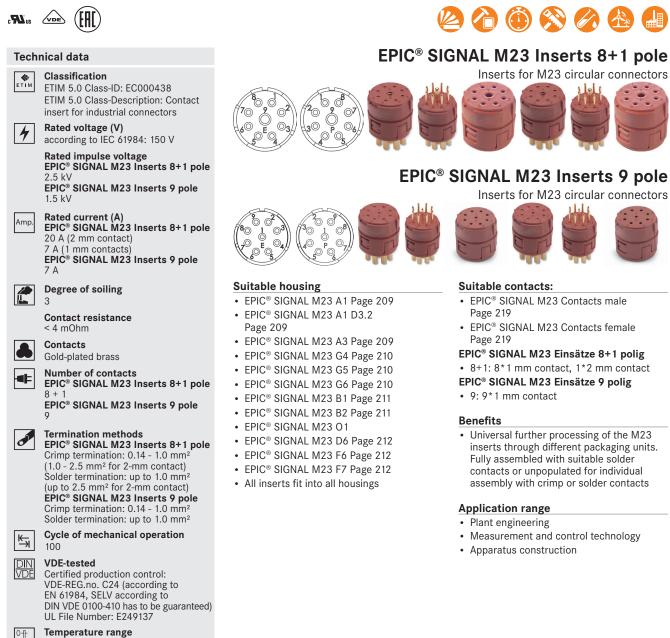


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## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® SIGNAL M23 Inserts



-25°C up to +125°C

- EPIC® SIGNAL M23 Contacts male
- EPIC<sup>®</sup> SIGNAL M23 Contacts female
- EPIC® SIGNAL M23 Einsätze 8+1 polig • 8+1: 8\*1 mm contact, 1\*2 mm contact
- Universal further processing of the M23 inserts through different packaging units. Fully assembled with suitable solder contacts or unpopulated for individual assembly with crimp or solder contacts
- · Measurement and control technology

Article number	Article description	Inserts	Contacts included	Pin configuration	Pieces / PU
8+1-pin inserts, P-p	art = rotation to the left (ant	iclockwise)	`		
73002736	P-part	without contacts		8+1	5
73002737	P-part	without contacts		8+1	20
73002738	P-part	+ male contacts, solder	9	8+1	5
73002739	P-part	+ male contacts, solder	9	8+1	20
73002740	P-part	+ female contacts, solder	9	8+1	5
73002741	P-part	+ female contacts, solder	9	8+1	20
8+1-pin inserts, E-pa	art = rotation to the right (cl	ockwise)			
73002742	E-Part	without contacts		8+1	5
73002743	E-Part	without contacts		8+1	20
73002744	E-Part	+ male contacts, solder	9	8+1	5
73002745	E-Part	+ male contacts, solder	9	8+1	20
73002746	E-Part	+ female contacts, solder	+ female contacts, solder 9		5
73002747	E-Part	+ female contacts, solder	9	8+1	20
9-pin inserts, P-part	= rotation to the left (anticle	ockwise)			
73002724	P-part	Unpopulated		9	5
73002725	P-part	Unpopulated		9	20
73002726	P-part	+ male contacts, solder	9	9	5
73002727	P-part	+ male contacts, solder	9	9	20
73002728	P-part	+ female contacts, solder	9	9	5
73002729	P-part	+ female contacts, solder	9	9	20
9-pin inserts, E-part	= rotation to the right (clocl	kwise)			
73002730	E-Part	Unpopulated		9	5
73002731	E-Part	Unpopulated		9	20
73002732	E-Part	+ male contacts, solder	9	9	5
73002733	E-Part	+ male contacts, solder	9	9	20
73002734	E-Part	+ female contacts, solder	9	9	5
73002735	E-Part	+ female contacts, solder	9	9	20

The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise), E-component = right turning (clockwise)

Photographs are not to scale and do not represent detailed images of the respective products.



Circular connectors • EPIC® SIGNAL M23 Inserts

# 2 2 6 8 8 2 4

## EPIC<sup>®</sup> SIGNAL M23 Inserts 12 pole

Inserts for M23 circular connectors



## EPIC<sup>®</sup> SIGNAL M23 Inserts 16 pole

Inserts for M23 circular connectors



#### Suitable housing

- EPIC® SIGNAL M23 A1 Page 209
- EPIC<sup>®</sup> SIGNAL M23 A1 D3.2 Page 209
- EPIC® SIGNAL M23 A3 Page 209
- EPIC<sup>®</sup> SIGNAL M23 G4 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G5 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G6 Page 210
- EPIC<sup>®</sup> SIGNAL M23 B1 Page 211
- EPIC<sup>®</sup> SIGNAL M23 B2 Page 211
- EPIC<sup>®</sup> SIGNAL M23 O1
- EPIC<sup>®</sup> SIGNAL M23 D6 Page 212
- EPIC® SIGNAL M23 F6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F7 Page 212
- All inserts fit into all housings



- EPIC<sup>®</sup> SIGNAL M23 Contacts male Page 219
- EPIC<sup>®</sup> SIGNAL M23 Contacts female Page 219

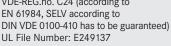
#### Benefits

 Universal further processing of the M23 inserts through different packaging units.
 Fully assembled with suitable solder contacts or unpopulated for individual assembly with crimp or solder contacts

#### Application range

- Plant engineering
- Measurement and control technology
- Apparatus construction

#### **Technical data** Classification ETIM ETIM 5.0 Class-ID: EC000438 ETIM 5.0 Class-Description: Contact insert for industrial connectors Rated voltage (V) 4 according to IEC 61984: 100 V Rated impulse voltage 1.5 kV Rated current (A) Amp. 7 A Degree of soiling 3 **Contact resistance** < 4 mOhm Contacts Gold-plated brass Number of contacts EPIC® SIGNAL M23 Inserts 12 pole 13 EPIC® SIGNAL M23 Inserts 16 pole 16 **Termination methods** 01 Crimp termination: 0.14 - 1.0 mm<sup>2</sup> Solder termination: up to 1.0 mm<sup>2</sup> Cycle of mechanical operation |₩ 100 VDE-tested DIN VDE Certified production control: VDE-REG.no. C24 (according to



**Temperature range** -25°C up to +125°C

Article number	Article description	Inserts	Contacts included	Pin configuration	Pieces / PU
12-pin inserts, P-pa	rt = rotation to the left (antic	lockwise)			
73002712	P-part	Unpopulated		12	5
73002713	P-part	Unpopulated		12	20
73002714	P-part	+ male contacts, solder	12	12	5
73002715	P-part	+ male contacts, solder	12	12	20
73002716	P-part	+ female contacts, solder	12	12	5
73002717	P-part	+ female contacts, solder	12	12	20
12-pin inserts, E-pai	rt = rotation to the right (cloc	kwise)			
73002718	E-Part	Unpopulated		12	5
73002719	E-Part	Unpopulated		12	20
73002720	E-Part	+ male contacts, solder	12	12	5
73002721	E-Part	+ male contacts, solder	12	12	20
73002722	E-Part	+ female contacts, solder	+ female contacts, solder 12		5
73002723	E-Part	+ female contacts, solder	12	12	20
16-pin inserts, P-pa	rt = rotation to the left (antic	lockwise)			
73002700	P-part	Unpopulated		16	5
73002701	P-part	Unpopulated		16	20
73002702	P-part	+ male contacts, solder	16	16	5
73002703	P-part	+ male contacts, solder	16	16	20
73002704	P-part	+ female contacts, solder	16	16	5
73002705	P-part	+ female contacts, solder	16	16	20
16-pin inserts, E-pai	rt = rotation to the right (cloc	kwise)			
73002706	E-Part	Unpopulated		16	5
73002707	E-Part	Unpopulated		16	20
73002708	E-Part	+ male contacts, solder	16	16	5
73002709	E-Part	+ male contacts, solder	16	16	20
73002710	E-Part	+ female contacts, solder	16	16	5
73002711	E-Part	+ female contacts, solder	16	16	20

The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise), E-component = right turning (clockwise)

Photographs are not to scale and do not represent detailed images of the respective products.



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## LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Circular connectors  $\mbox{ \bullet EPIC}^{\mbox{\tiny (8)}}$  SIGNAL M23 Inserts



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# EPIC<sup>®</sup> SIGNAL M23 Inserts 17 pole

**Technical data** 

0.8 kV

7 A

3

17

100 VDE-tested

**E**TIM

4

Amp

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DIN VDE Classification

Rated voltage (V)

Rated current (A)

Degree of soiling

**Contact resistance** 

**Termination methods** 

Certified production control: VDE-REG.no. C24 (according to EN 61984, SELV according to DIN VDE 0100-410 has to be guaranteed)

UL File Number: E249137

Int. Temperature range

Crimp termination: 0.14 - 1.0 mm<sup>2</sup> Solder termination: up to 1.0 mm<sup>2</sup> **Cycle of mechanical operation** 

< 4 mOhm

Contacts Gold-plated brass Number of contacts

ETIM 5.0 Class-ID: EC000438

insert for industrial connectors

according to IEC 61984: 50 V

Rated impulse voltage

ETIM 5.0 Class-Description: Contact

Inserts for M23 circular connectors



#### Suitable housing

- EPIC<sup>®</sup> SIGNAL M23 A1 Page 209
- EPIC<sup>®</sup> SIGNAL M23 A1 D3.2
- Page 209
- EPIC® SIGNAL M23 A3 Page 209
- EPIC<sup>®</sup> SIGNAL M23 G4 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G5 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G6 Page 210
- EPIC<sup>®</sup> SIGNAL M23 B1 Page 211
- EPIC<sup>®</sup> SIGNAL M23 B2 Page 211
- EPIC<sup>®</sup> SIGNAL M23 O1
- EPIC<sup>®</sup> SIGNAL M23 D6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F7 Page 212
- All inserts fit into all housings
- C C

#### Suitable contacts:

- EPIC<sup>®</sup> SIGNAL M23 Contacts male Page 219
- EPIC<sup>®</sup> SIGNAL M23 Contacts female Page 219

#### Benefits

 Universal further processing of the M23 inserts through different packaging units. Fully assembled with suitable solder contacts or unpopulated for individual assembly with crimp or solder contacts

#### **Application range**

- Plant engineering
- Measurement and control technology
- Apparatus construction

		-25°C up to +125°C				
Article number	Article description	Inserts	Contacts included	Pin configuration	Pieces / PU	
17-pin inserts, P-pa	rt = rotation to the left (anticl	ockwise)				
73008000	P-part	Unpopulated		17	5	
73008010	P-part	Unpopulated		17	20	
73028000	P-part	+ male contacts, solder	17	17	5	
73028010	P-part	+ male contacts, solder	17	17	20	
73018000	P-part	+ female contacts, solder	17	17	5	
73018010	P-part	+ female contacts, solder	17	17	20	
17-pin inserts, E-pa	rt = rotation to the right (cloc	kwise)				
73008500	E-Part	Unpopulated		17	5	
73008510	E-Part	Unpopulated		17	20	
73028500	E-Part	+ male contacts, solder	17	17	5	
73028510	E-Part	+ male contacts, solder	17	17	20	
73018500	E-Part	+ female contacts, solder	17	17	5	
73018510	E-Part	+ female contacts, solder	17	17	20	

The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise), E-component = right turning (clockwise)

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Circular connectors • EPIC® SIGNAL M23 Inserts

(FAT)

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## EPIC® SIGNAL M23 Inserts 12 pole D-Sub

Inserts for M23 circular connectors



## EPIC® SIGNAL M23 Inserts 17 pole D-Sub

Inserts for M23 circular connectors



**Technical data** 

D-Sub

D-Sub

**D-Sub** 1.5 kV

D-Sub

0.8 kV

4 A

Amp.

Rated current (A)

ET I M

Classification

Rated voltage (V)

ETIM 5.0 Class-ID: EC000438

insert for industrial connectors

according to IEC 61984: 100 V

according to IEC 61984: 50 V

Rated impulse voltage

ETIM 5.0 Class-Description: Contact

EPIC® SIGNAL M23 Inserts 12 pole

EPIC® SIGNAL M23 Inserts 17 pole

EPIC® SIGNAL M23 Inserts 12 pole

EPIC® SIGNAL M23 Inserts 17 pole

#### Suitable housing

- EPIC® SIGNAL M23 A1 Page 209
- EPIC<sup>®</sup> SIGNAL M23 A1 D3.2
- Page 209
- EPIC<sup>®</sup> SIGNAL M23 A3 Page 209
- EPIC® SIGNAL M23 G4 Page 210
- EPIC<sup>®</sup> SIGNAL M23 G5 Page 210
- EPIC® SIGNAL M23 G6 Page 210
- EPIC<sup>®</sup> SIGNAL M23 B1 Page 211
- EPIC<sup>®</sup> SIGNAL M23 B2 Page 211
- EPIC® SIGNAL M23 O1
- EPIC<sup>®</sup> SIGNAL M23 D6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F6 Page 212
- EPIC<sup>®</sup> SIGNAL M23 F7 Page 212

#### Suitable contacts:

 EPIC<sup>®</sup> M-D 1.0 D-Sub stamped contacts-on-reel Page 82

#### Benefits

 Efficient assembling due to the use of D-Sub contacts-on-reel

#### Application range

#### Plant engineering

- Measurement and control technology
- Apparatus construction

Article number	Article description	Inserts	Pin configuration	Pieces / PU
12-pin inserts, E-part	t = rotation to the right (clockw	ise)		
44420120	E-Part	Unpopulated, for male D-Sub crimp-contacts on reel	12	5
44420121	E-Part	Unpopulated, for male D-Sub crimp-contacts on reel	12	20
44420122	E-Part	Unpopulated, for female D-Sub crimp-contacts on reel	12	5
44420123	E-Part	Unpopulated, for female D-Sub crimp-contacts on reel	12	20
12-pin inserts, P-part	t = rotation to the left (anticloc	(wise)		
44420124	P-part	Unpopulated, for male D-Sub crimp-contacts on reel	12	5
44420125	P-part	Unpopulated, for male D-Sub crimp-contacts on reel	12	20
44420126	P-part	Unpopulated, for female D-Sub crimp-contacts on reel	12	5
44420127	P-part	Unpopulated, for female D-Sub crimp-contacts on reel	12	20
17-pin inserts, E-part	t = rotation to the right (clockw	ise)		
44420128	E-Part	Unpopulated, for male D-Sub crimp-contacts on reel	17	5
44420129	E-Part	Unpopulated, for male D-Sub crimp-contacts on reel	17	20
44420130	E-Part	Unpopulated, for female D-Sub crimp-contacts on reel	17	5
44420131	E-Part	Unpopulated, for female D-Sub crimp-contacts on reel	17	20
17-pin inserts, P-part	t = rotation to the left (anticloc	(wise)		
44420132	P-part	Unpopulated, for male D-Sub crimp-contacts on reel	17	5
44420133	P-part	Unpopulated, for male D-Sub crimp-contacts on reel	17	20
44420134	P-part	Unpopulated, for female D-Sub crimp-contacts on reel	17	5
44420135	P-part	Unpopulated, for female D-Sub crimp-contacts on reel	17	20

The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise), E-component = right turning (clockwise)

Photographs are not to scale and do not represent detailed images of the respective products.



- For D-Sub ribbon contacts
- For automated production with crimping machine



Degree of soiling

**Contact resistance** 

Partly gold-plated brass

**Termination methods** 

**Temperature range** 

-25°C up to +125°C

EPIC® SIGNAL M23 Inserts 12 pole

EPIC® SIGNAL M23 Inserts 17 pole

Crimp termination: 0.08 - 0.56 mm<sup>2</sup>

Cycle of mechanical operation

Number of contacts

< 4 mOhm

Contacts

D-Sub

D-Sub

13

17

50

- For automated production with crimping
- machine

0

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## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® SIGNAL M23 Contacts, tools, accessories

## **EPIC® SIGNAL M23 Contacts male**

Contacts, tools, accessories for circular connectors M23

#### Info

- All contacts are high quality gold plated
- Contacts are designed for wide crimping range, therefore low number of variants
- Contacts in solder or crimp version available



## **EPIC® SIGNAL M23 Contacts female**

Contacts, tools, accessories for circular connectors M23

- All contacts are high quality gold plated · Contacts are designed for wide crimping
- range, therefore low number of variants · Contacts in solder or crimp version
- available



Article number	Article designation	Version	For design	Pieces / PU
1mm contacts ma	ale			
72400001	EPIC® M23 SCEM 1 mm AU 0,14 - 1,0 (10)	1 mm male crimp	M23 inserts (not D-Sub)	10
72400000	EPIC® M23 SCEM 1 mm AU 0,14 - 1,0 (100)	1 mm male crimp	M23 inserts (not D-Sub)	100
72402001	EPIC <sup>®</sup> M23 SLEM 1 mm AU 1.0 (10)	1 mm male solder	M23 inserts (not D-Sub)	10
72402000	EPIC <sup>®</sup> M23 SLEM 1 mm AU 1.0 (100)	1 mm male solder	M23 inserts (not D-Sub)	100
2mm contacts ma	ale			
72401000	EPIC <sup>®</sup> M23 SCEM 2 mm AU 1,0 - 2,5 (100)	2 mm male crimp	M23 inserts (not D-Sub)	100
72403100	EPIC <sup>®</sup> M23 SLEM 2 mm AU (10)	2 mm male solder	M23 inserts (not D-Sub)	10
72403000	EPIC <sup>®</sup> M23 SLEM 2 mm AU (100)	2 mm male solder	M23 inserts (not D-Sub)	100
1mm contacts fer	male			
74020601	EPIC <sup>®</sup> M23 BCEMS 1 mm AU 0.14 - 1.0 (10)	1 mm female slot 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	10
74200600	EPIC® M23 BCEMS 1 mm AU 0.14 - 1.0 (100)	1 mm female slot 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	100
72402601	EPIC <sup>®</sup> M23 BLEMS 1 mm 1.0 AU (10)	1 mm female slot solder	M23 inserts (not D-Sub)	10
72402600	EPIC <sup>®</sup> M23 BLEMS 1 mm 1.0 AU (100)	1 mm female slot solder	M23 inserts (not D-Sub)	100
74034500	LS1 D BCEMS 1 mm AU 0.14 - 1.0 (100)	1 mm female hyperboloid 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	100
74034501	LS1 D BCEMS 1 mm AU 0.14 - 1.0 (10)	1 mm female hyperboloid 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	10
2mm contacts fer	male			
72401601	EPIC <sup>®</sup> M23 BCEMS 2 mm AU 1,0 - 2,5 (10)	2 mm female crimp	M23 inserts (not D-Sub)	10
72401600	EPIC® M23 BCEMS 2 mm AU 1,0 - 2,5 (100)	2 mm female crimp	M23 inserts (not D-Sub)	100
72404100	EPIC® M23 BLEMS 2 mm AU 1,0 - 2,5 (10)	2 mm female solder	M23 inserts (not D-Sub)	10
72404000	EPIC® M23 BLEMS 2 mm AU 1,0 - 2,5 (100)	2 mm female solder	M23 inserts (not D-Sub)	100

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**EPIC® SIGNAL M23 Tools** 

Info

Universal 4-indent crimping tool
Resolver Locator for quick changes in processing other contacts

Circular connectors • EPIC<sup>®</sup> SIGNAL M23 Contacts, tools, accessories

Contacts, tools, accessories for circular connectors M23

EPIC®

Article number	Article description	Inserts	Pieces / PU
Tools			•
11148000	Crimping tool	In tool case, without locator	1
11148001	4-mandrel digital crimping tool	In tool case, without locator	1
11148002	Crimping machine	Pneumatic for 5 - 10 bar, locator not included	1
11148300	Locator for crimping tool LS1, M23		1
44420078	M23 removal tool for inserts	For housing type A, B, G, O	1

Photographs are not to scale and do not represent detailed images of the respective products.

## **EPIC® SIGNAL M23 Accessories**

Contacts, tools, accessories for circular connectors M23

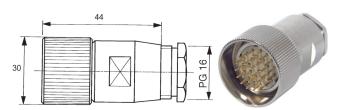


Article number	Article description	Inserts	Pieces / PU
EPIC <sup>®</sup> SIGNAL M2	3 Accessories		
75007810	M23-LS1 A, B, F, G protective cap	Plastic cap for A1, B1, B2, F6, F7, G4, G5, G6	20
75007710	M23 / LS1 D protective cap	Plastic cap for D6, A6	20
75018010	M23 A, B protective cap, plastic cord with cable lug	Metal cap for A1, A3, B1, B2	20
75018110	M23 A, B protective cap, plastic cord with variable loop	Metal cap for A1, A3, B1, B2	20
75018410	M23 D screw cap, plastic cord with loop	Metal screw cap for D	20
55001312	SILVYN ADAPTER M23/M20x1,5	For all integrated M23 cable glands	1

Circular connectors • EPIC® SIGNAL R 3.0

## EPIC® SIGNAL R 3.0 D PG16

Circular connectors with solder termination, 21-pin and 26-pin

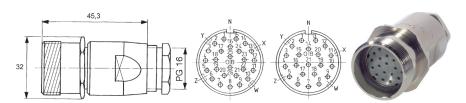




Compact and reliable connector for multicore signal cables

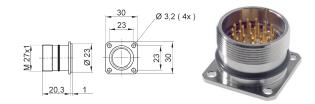
## EPIC® SIGNAL R 3.0 F PG16

Circular connectors with solder termination, 21-pin and 26-pin



## **EPIC® SIGNAL R 3.0 A**

Circular connectors with solder termination, 21-pin and 26-pin



Number of contacts

**Termination methods** 

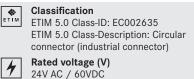
21-pin / 26-pin

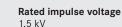
#### Benefits

- · Highest contact density at small space requirements
- · Connector in solder version for easy maintanance

#### Application range

- · Machine and equipment manufacturing
- · Measurement and control technology

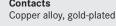


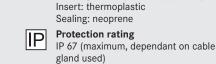


- Rated current (A) 7.5 A

Amp

**Contact resistance** < 3 mOhm Contacts





Material

Cycle of mechanical operation 500

Solder termination: up to 1.0 mm<sup>2</sup>

Housing: nickel-plated copper alloy

**Temperature range** -40°C to +100°C,

short-term up to +125°C

Article number	Article	Version	Contacts	Pin configuration	Coding	Cable clamping range	Fastening type	Pieces / PU
R 3.0 D PG16								
00009045	SIGNAL R 3.0 D	male	1 - 21	E-Part	N	6.5 - 16.0		5
00008899	SIGNAL R 3.0 D	male	1 - 26	E-Part	Ν	6.5 - 16.0		5
00008749	SIGNAL R 3.0 D	female	1 - 21	P-Part	N	6.5 - 16.0		5
00008829	SIGNAL R 3.0 D	female	1 - 26	P-Part	N	6.5 - 16.0		5
R 3.0 F PG16								
00008854	SIGNAL R 3.0 F	male	1 - 21	E-Part	N	6.5 - 16.0		5
00008822	SIGNAL R 3.0 F	male	1 - 26	E-Part	N	6.5 - 16.0		5
00008779	SIGNAL R 3.0 F	female	1 - 21	P-Part	N	6.5 - 16.0		5
00008979	SIGNAL R 3.0 F	female	1 - 26	P-Part	N	6.5 - 16.0		5
R 3.0 A								
00008747	SIGNAL R 3.0 A	male	1 - 21	E-Part	N		Ø 3.2 mm (4x)	5
00008825	SIGNAL R 3.0 A	male	1 - 26	E-Part	N		Ø 3.2 mm (4x)	5
00008867	SIGNAL R 3.0 A	female	1 - 21	P-Part	Ν		Ø 3.2 mm (4x)	5
00008746	SIGNAL R 3.0 A	female	1 - 26	P-Part	N		Ø 3.2 mm (4x)	5

The housing is available with male or female inserts. The contact

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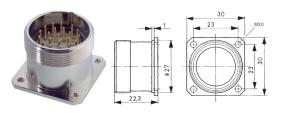
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Circular connectors • EPIC® SIGNAL R 3.0

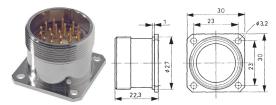
## EPIC<sup>®</sup> SIGNAL R 3.0 B1

Circular connectors with solder termination, 21-pin and 26-pin



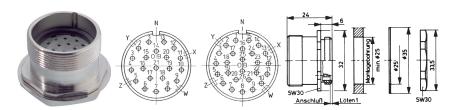
## EPIC® SIGNAL R 3.0 B2

Circular connectors with solder termination, 21-pin and 26-pin



## EPIC<sup>®</sup> SIGNAL R 3.0 G1

Circular connectors with solder termination, 21-pin and 26-pin



### **Benefits**

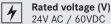
- · Highest contact density at small space requirements
- · Connector in solder version for easy maintanance

#### **Application range**

- · Machine and equipment manufacturing
- · Measurement and control technology







Rated impulse voltage 1.5 kV



**Contact resistance** < 3 mOhm Contacts

Copper alloy, gold-plated



Info

· Compact and reliable connector for

multicore signal cables

21-pin / 26-pin **Termination methods** 

Solder termination: up to 1.0 mm<sup>2</sup>

Housing: nickel-plated copper alloy Insert: thermoplastic

**Protection rating** IP 67 (maximum, dependant on cable

Cycle of mechanical operation

**Temperature range** -40°C to +100°C.

short-term up to +125°C

Article number	Article	Version	Contacts	Pin configuration	Coding	Fastening type	Pieces / PU
R 3.0 B1							
00009082	SIGNAL R 3.0 B1	male	1 - 21	E-Part	Ν	M3 (4x)	5
00009135	SIGNAL R 3.0 B1	female	1 - 21	P-Part	Ν	M3 (4x)	5
00008978	SIGNAL R 3.0 B1	female	1 - 26	P-Part	Ν	M3 (4x)	5
R 3.0 B2						· · · · ·	
00008939	SIGNAL R 3.0 B2	male	1 - 26	E-Part	Ν	Ø 3.2 mm (4x)	5
00009470	SIGNAL R 3.0 B2	female	1 - 26	P-Part	Ν	Ø 3.2 mm (4x)	5
R 3.0 G1							
00009371	ZYLIN R 3.0 G1	male	1 - 21	E-Part	Ν	Ø 25 mm (1x)	5
00009894	ZYLIN R 3.0 G1	male	1 - 26	E-Part	Ν	Ø 25 mm (1x)	5
00009057	ZYLIN R 3.0 G1	female	1 - 21	P-Part	Ν	Ø 25 mm (1x)	5
00009005	ZYLIN R 3.0 G1	female	1 - 26	P-Part	Ν	Ø 25 mm (1x)	5

The housing is available with male or female inserts. The contact

Photographs are not to scale and do not represent detailed images of the respective products.

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Circular connectors • EPIC<sup>®</sup> SIGNAL R3.0 tools, accessories

## EPIC<sup>®</sup> SIGNAL R 3.0 Tools

Contacts, tools, accessories for circular connectors







**Technical data** 

Classification EPIC® SIGNAL R 3.0 Tools ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection EPIC® SIGNAL R 3.0 Accessories ETIM 5.0 Class-ID: EC002314 ETIM 5.0 Class-Description: Cap for industrial connectors

Article number	Article designation	For design	Pieces / PU
EPIC® SIGNAL R 3.0 To	ools		
50200800	R3.0 assembly/disassembly tool	for type D, F	1
Flat gasket			
50201203	R3.0 A flat gasket	for type A1	5
50202203	R3.0 B flat gasket	for type B	5
Metal cap			
50201120	R3.0 A metal screw-cap	for type A1	5

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Circular connectors • EPIC® POWER LS1

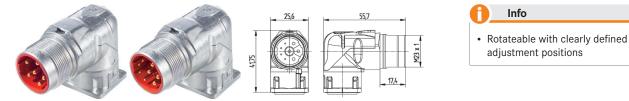
## EPIC<sup>®</sup> POWER LS1 A1

Circular connectors for servomotors and power supply



## **EPIC® POWER LS1 A3**

Circular connectors for servomotors and power supply



Classification

**Technical data** 

#### Suitable contacts:

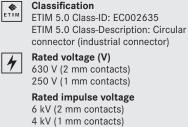
- EPIC<sup>®</sup> POWER LS1 Contacts male Page 228
- PU = 5 pieces: the contacts are included. 2 mm contact crimp range is 0.5 - 2.5 mm<sup>2</sup>.
- PU = 20 pieces: the contacts must be ordered separately

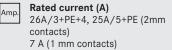
#### **Benefits**

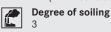
- High power at smallest installation space, Optimal solution for electric motors
- EMC-optimised design
- · Safety use in field environment by high protection class

#### **Application range**

- Plant engineering
- · Servo drives and servo assemblies



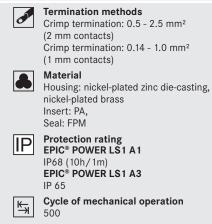




**Contact resistance** < 4 mOhm



Number of contacts 3+PE+4(2mm/1mm) 5+PE(2mm)





-25°C up to +125°C

Article number	Article description	Contacts included	Fastening type	Pin configuration	Pieces / PU
Type LS1 A1, front	wall mounting, 6-pin, for ma	le contacts			
76003000	LS1 A1	6	Ø 2.7 mm (4x)	5+PE	5
76003510	LS1 A1		Ø 2.7 mm (4x)	5+PE	20
Type LS1 A1, front	wall mounting, 8-pin, for ma	le contacts			
76004000	LS1 A1	8	Ø 2.7 mm (4x)	3+PE+4	5
76004510	LS1 A1		Ø 2.7 mm (4x)	3+PE+4	20
Type LS1 A3, angle	ed, rotatable, 6-pin, for male	contacts			
24420058	LS1 A3	6	Ø 2.7 mm (4x)	5+PE	5
24420059	LS1 A3		Ø 2.7 mm (4x)	5+PE	20
Type LS1 A3, angle	ed, rotatable, 8-pin, for male	contacts			
24420056	LS1 A3	8	Ø 2.7 mm (4x)	3+PE+4	5
24420057	LS1 A3		Ø 2.7 mm (4x)	3+PE+4	20

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Circular connectors • EPIC<sup>®</sup> POWER LS1



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EPIC<sup>®</sup> POWER LS1 G5

## EPIC<sup>®</sup> POWER LS1 A6

Circular connectors for servomotors and power supply

\$ \$\$ 20 ±0,2

19,8 M 2,5 (4x)

Circular connectors for servomotors and power supply

max. 3

48,7

5

Ø 2,7 (4x)



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## Suitable contacts:

Info

EPIC® POWER LS1 G5
EPIC® POWER LS1 Contacts male Page 228

· Allows a elecrical disconnecting point

directly at power source

#### EPIC<sup>®</sup> POWER LS1 A6

- EPIC<sup>®</sup> POWER LS1 Contacts male Page 228
- PU = 5 pieces: the contacts are included. 2 mm contact crimp range is 0.5 - 2.5 mm<sup>2</sup>.
- PU = 20 pieces: the contacts must be ordered separately

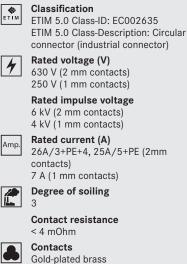
#### Benefits

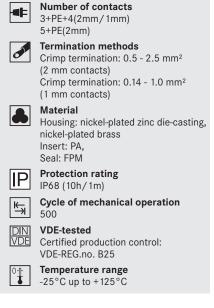
- High power at smallest installation space, Optimal solution for electric motors
- EMC-optimised design
- Safety use in field environment by high protection class

#### Application range

- Plant engineering
- Servo drives and servo assemblies

### Technical data





Article number	Article description	Contacts included	Fastening type	Pin configuration	Pieces / PU
Type LS1 G5, front	wall mounting, 6-pin, for ma	le contacts		· · ·	
76153000	LS1 G5	6	M25 x 1.5 (with nut)	5+PE	5
76153510	LS1 G5		M25 x 1.5 (with nut)	5+PE	20
Type LS1 G5, front	wall mouning, 8-pin, for mal	e contacts			
76154000	LS1 G5	8	M25 x 1.5 (with nut)	3+PE+4	5
76154510	LS1 G5		M25 x 1.5 (with nut)	3+PE+4	20
Type LS1 A6, front	wall mounting, 6-pin, for fer	nale contacts			
76083000	LS1 A6	6	Ø 2.7 mm (4x)	5+PE	5
76083510	LS1 A6		Ø 2.7 mm (4x)	5+PE	20
Type LS1 A6, front	wall mounting, 8-pin, for fer	nale contacts			
76084000	LS1 A6	8	Ø 2.7 mm (4x)	3+PE+4	5

Circular connectors • EPIC® POWER LS1



## EPIC<sup>®</sup> POWER LS1 D6

Circular connectors for servomotors and power supply

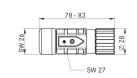


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## EPIC<sup>®</sup> POWER LS1 D6 (short)

Circular connectors for servomotors and power supply



#### Suitable contacts:

- EPIC<sup>®</sup> POWER LS1 Contacts female Page 228
- PU = 5 pieces: the contacts are included. 2 mm contact crimp range is 0.5 - 2.5 mm<sup>2</sup>.
- PU = 20 pieces: the contacts must be ordered separately

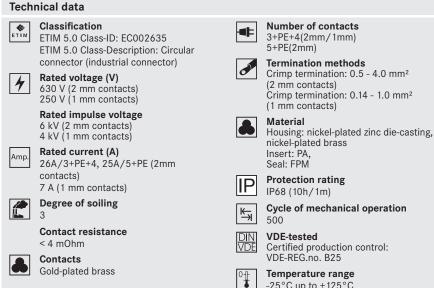
#### Benefits

- High power at smallest installation space, Optimal solution for electric motors
- EMC-optimised design
- · Safety use in field environment by high protection class

#### **Application range**

- · Plant engineering
- · Servo drives and servo assemblies





Info

easy to assemble

• Reduced length for cables which are

-25°C up to +125°C

Article number	Article description	Contacts included	Clamping range in mm	Pin configuration	Pieces / PU
Type LS1 D6, cab	e connector, 6-pin, for female contac	ts			
73000004	ĹSÍD6	6	8.5 - 11	5+PE	5
73000006	LS1 D6		8.5 - 11	5+PE	20
73000005	LS1 D6	6	10.5 - 15.5	5+PE	5
73000007	LS1 D6		10.5 - 15.5	5+PE	20
76123000	LS1 D6	6	7.5 - 15.5	5+PE	5
76123510	LS1 D6		7.5 - 15.5	5+PE	20
44420091	LS1 D6 with 2mm contact for 4mm <sup>2</sup> termination	6	14 - 17	5+PE	5
44420090	LS1 D6		14 - 17	5+PE	20
ype LS1 D6, cab	e connector, 8-pin, for female contac	ts			
73000000	LS1 D6	8	8.5 - 11	3+PE+4	5
73000002	LS1 D6		8.5 - 11	3+PE+4	20
73000001	LS1 D6	8	10.5 - 15.5	3+PE+4	5
73000003	LS1 D6		10.5 - 15.5	3+PE+4	20
76124000	LS1 D6	8	7.5 - 15.5	3+PE+4	5
76124510	LS1 D6		7.5 - 15.5	3+PE+4	20
44420089	LS1 D6 with 2mm contact for 4mm <sup>2</sup> termination	8	14 - 17	3+PE+4	5
44420088	LS1 D6		14 - 17	3+PE+4	20
	t, cable connector, 6-pin, for female of	contacts			
73000028	LS1 D6	6	8.5 - 11	5+PE	5
73000030	LS1 D6		8.5 - 11	5+PE	20
73000029	LS1 D6	6	10.5 - 15.5	5+PE	5
73000031	LS1 D6		10.5 - 15.5	5+PE	20
76123100	LS1 D6	6	7.5 - 15.5	5+PE	5
76123610	LS1 D6		7.5 - 15.5	5+PE	20
	t, cable connecor, 8-pin, for female co	ontacts			
73000024	LS1 D6	8	8.5 - 11	3+PE+4	5
73000026	LS1 D6		8.5 - 11	3+PE+4	20
73000025	LS1 D6	8	10.5 - 15.5	3+PE+4	5
73000027	LS1 D6		10.5 - 15.5	3+PE+4	20
76124100	LS1 D6	8	7.5 - 15.5	3+PE+4	5
76124610	LS1 D6		7.5 - 15.5	3+PE+4	20

Photographs are not to scale and do not represent detailed images of the respective products.

LAPP GROUP



## EPIC<sup>®</sup> Industrial connectors

EPIC<sup>®</sup> POWER LS1 F6

EPIC<sup>®</sup> POWER LS1 F7

Temperature range -25°C up to +125°C

Circular connectors • EPIC® POWER LS1

Circular connectors for servomotors and power supply

S3

72-77

SW 24



HITRONIC

Info

· For fast and safe wall mounting of a cable extension

#### Suitable contacts:

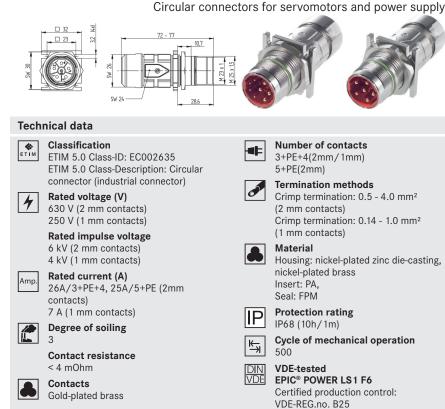
- EPIC<sup>®</sup> POWER LS1 Contacts male Page 228
- PU = 5 pieces: the contacts are included. 2 mm contact crimp range is 0.5 - 2.5 mm<sup>2</sup>.
- PU = 20 pieces: the contacts must be ordered separately

#### **Benefits**

- High power at smallest installation space, Optimal solution for electric motors
- EMC-optimised design
- · Safety use in field environment by high protection class

#### Application range

- Plant engineering
- · Servo drives and servo assemblies



Article number	Article description	Contacts included	Clamping range in mm	Fastening type	Pin configuration	Pieces / PU
Type LS1 F6, cal	ole coupler, 6-pin, for mal	e contacts				-
73000012	LS1 F6	6	8.5 - 11		5+PE	5
73000014	LS1 F6		8.5 - 11		5+PE	20
73000013	LS1 F6	6	10.5 - 15.5		5+PE	5
73000015	LS1 F6		10.5 - 15.5		5+PE	20
76133000	LS1 F6	6	7.5 - 15.5		5+PE	5
76133510	LS1 F6		7.5 - 15.5		5+PE	20
44420095	LS1 F6 with 2mm contact for 4mm <sup>2</sup> termination	6	14 - 17		5+PE	5
44420094	LS1 F6		14 - 17		5+PE	20
Type LS1 F6, cal	ole coupler, 8-pin, for mal	e contacts				
73000008	LS1 F6	8	8.5 - 11		3+PE+4	5
73000010	LS1 F6		8.5 - 11		3+PE+4	20
73000009	LS1 F6	8	10.5 - 15.5		3+PE+4	5
73000011	LS1 F6		10.5 - 15.5		3+PE+4	20
76134000	LS1 F6	8	7.5 - 15.5		3+PE+4	5
76134510	LS1 F6		7.5 - 15.5		3+PE+4	20
44420093	LS1 F6 with 2mm contact for 4mm <sup>2</sup> termination	8	14 - 17		3+PE+4	5
44420092	LS1 F6		14 - 17		3+PE+4	20
Type LS1 F7, cab	le coupler wih mounting	flange, 6-pin, for m	ale contacts			
73000020	LS1 F7	6	8.5 - 11	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5+PE	5
73000021	LS1 F7	6	10.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5+PE	5
73000023	LS1 F7		10.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5+PE	20
76143000	LS1 F7	6	7.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	5+PE	5
Type LS1 F7, 8-p	in, for male contacts					
73000016	LS1 F7	8	8.5 - 11	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	3+PE+4	5
73000017	LS1 F7	8	10.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	3+PE+4	5
76144000	LS1 F7	8	7.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	3+PE+4	5
76144510	LS1 F7		7.5 - 15.5	Ø 3.2 mm (4x), M25 x 1.5 (with nut)	3+PE+4	20

Circular connectors • EPIC® POWER LS1 Contacts, tools, accessories

# 

## **EPIC® POWER LS1 Contacts male**

Contacts, tools, accessories for circular connectors



#### Info

• All contacts are high quality gold plated

**® LAPP GROUP** 

- Contacts are designed for wide crimping range, therefore low number of variants
- Only available as crimp version due to the high mechanical stress in servo applications

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## **EPIC® POWER LS1 Contacts female**

Contacts, tools, accessories for circular connectors



### Info

• All contacts are high quality gold plated • Contacts are designed for wide crimping

- range, therefore low number of variants • Only available as crimp version due to
- the high mechanical stress in servo applications

Article number	Article designation	Version	For design	Pieces / PU
1mm contacts ma	ale			
74033001	LS1 A SCEM 1 mm AU 0.14 - 1.0 (10)	1 mm male 0.14 - 1.0 mm <sup>2</sup>	LSI A 1, A 3, G 5	10
74033000	LS1 A SCEM 1 mm AU 0.14 - 1.0 (100)	1 mm male 0.14 - 1.0 mm <sup>2</sup>	LSI A1, A3, G5	100
74034001	LS1 F SCEM 1 mm AU 0.14 - 1.0 (10)	1 mm male 0.14 - 1.0 mm <sup>2</sup>	LS1 F6, F7	10
74034000	LS1 F SCEM 1 mm AU 0.14 - 1.0 (100)	1 mm male 0.14 - 1.0 mm <sup>2</sup>	LS1 F6, F7	100
2mm contacts ma	ale			
74033101	LS1 A SCEM 2 mm AU 0.5 - 2.5 (10)	2 mm male 0.5 - 2.5 mm <sup>2</sup>	LSI A1, A3, G5	10
74033100	LS1 A SCEM 2 mm AU 0.5 - 2.5 (100)	2 mm male 0.5 - 2.5 mm <sup>2</sup>	LSI A1, A3, G5	100
74034101	LS1 F SCEM 2 mm AU 0.5 - 2.5 (10)	2 mm male 0.5 - 2.5 mm <sup>2</sup>	LS1 F6, F7	10
74034100	LS1 F SCEM 2 mm AU 0.5 - 2.5 (100)	2 mm male 0.5 - 2.5 mm <sup>2</sup>	LS1 F6, F7	100
44420103	LS1 F SCEM 2 mm AU 4,0 (100)	2 mm male 4.0 mm <sup>2</sup>	LS1 F6, F7	100
1mm contacts fee	male			
74020601	EPIC <sup>®</sup> M23 BCEMS 1 mm AU 0.14 - 1.0 (10)	1 mm female slot 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	10
74200600	EPIC <sup>®</sup> M23 BCEMS 1 mm AU 0.14 - 1.0 (100)	1 mm female slot 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	100
74034501	LS1 D BCEMS 1 mm AU 0.14 - 1.0 (10)	1 mm female hyperboloid 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	10
74034500	LS1 D BCEMS 1 mm AU 0.14 - 1.0 (100)	1 mm female hyperboloid 0.14 - 1.0 mm <sup>2</sup>	per inserts M23 (not D-Sub), LS1 D6, A6	100
2mm contacts fer	male			
44429371	LS1 D BCEMF 2 mm AU 0.5 - 2.5 (10)	2 mm female spring 0,5-2,5mm <sup>2</sup>	LS1 D6, A6	10
2mm contacts fer	male			
44429371	LS1 D BCEMF 2 mm AU 0.5 - 2.5 (10)	2 mm female spring 0.5 - 2.5 mm <sup>2</sup>	LS1 D6, A6	10
44429370	LS1 D BCEMF 2 mm AU 0.5 - 2.5 (100)	2 mm female spring 0,5-2,5mm <sup>2</sup>	LS1 D6, A6	100
44420104	LS1 D BCEMD 2 mm AU 4,0 (10)	2 mm female hyperboloid 4 mm <sup>2</sup>	for type D6, A6	10
44420105	LS1 D BCEMD 2 mm AU 4,0 (100)	2 mm female hyperboloid 4 mm <sup>2</sup>	for type D6, A6	100
44429001	EPIC CIRCON BCBG 2MM 1.0-2.5 (3000) RE	2 mm female crimp	LS1 D6, A6	1

Circular connectors • EPIC® POWER LS1 Contacts, tools, accessories

## **EPIC® POWER LS1 Tools**

Contacts, tools, accessories for circular connectors



Article number	Article	Article Version	
Tools			
11148000	Crimping tool	In tool case, without locator	1
11148001	4-mandrel digital crimping tool	In tool case, without locator	1
11148002	Crimping machine	Pneumatic for 5 - 10 bar, locator not included	1
11148300	Locator for crimping tool LS1, M23		1
75017400	LS1 removal tool for 1 mm contacts	For housing type A, G	1
75017500	LS1 removal tool for 2 mm contacts	For housing type A, G	1
11161000	Removal tool		1
11182500	Removal tool		1

Photographs are not to scale and do not represent detailed images of the respective products.

## **EPIC® POWER LS1 Accessories**

Contacts, tools, accessories for circular connectors



Article number	Article	Version	Pieces / PU
EPIC <sup>®</sup> POWER LS	1 Accessories		
75007810	M23-LS1 A, B, F, G protective cap	Plastic cap for A1, B1, B2, F6, F7, G4, G5, G6	20
75007710	M23 / LS1 D protective cap	Plastic cap for D6, A6	20
75018010	M23 A, B protective cap, plastic cord with cable lug	Metal cap for A1, A3, B1, B2	20
Accessories			
75018310	LS1 A, G, F screw cap, plastic cord with loop	Metal cap for A1, A3, F6, F7, G4, G5	20
55001310	SILVYN Adapter LS1/M25x1,5	For integrated cable glands 8.5 - 11mm, 10.5 - 15.5mm	1

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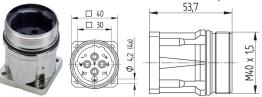
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Circular connectors • EPIC® POWER LS1.5

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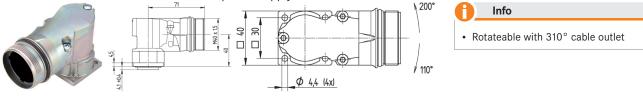
## EPIC<sup>®</sup> POWER LS1.5 A1

Circular connectors for servomotors and power supply



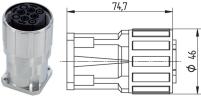
## EPIC<sup>®</sup> POWER LS1.5 A3

Circular connectors for servomotors and power supply



## EPIC<sup>®</sup> POWER LS1.5 A6

Circular connectors for servomotors and power supply



#### Suitable contacts:

- EPIC® POWER LS 1.5 A1
  EPIC® POWER LS 1.5 Contacts male Page 232
- EPIC<sup>®</sup> POWER LS1.5 A3
- EPIC<sup>®</sup> POWER LS1.5 Contacts male Page 232
- EPIC<sup>®</sup> POWER LS1.5 A6
- EPIC<sup>®</sup> POWER LS1.5 Contacts male Page 232
- The contacts have to be ordered separately

#### Benefits

- More power for servo motors
- Vibration-proof rugged design
- EMC version for cables with large cross-sections

#### Application range

- Plant engineering
- Servo drives and servo assemblies

#### Suitable tools

• EPIC<sup>®</sup> POWER LS1.5 Tools refer to page 232

Tech	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular		Number of contacts 3+PE+2(3.6mm/2mm) 3+PE+4(3.6mm/2mm)
4	connector (industrial connector) <b>Rated voltage (V)</b> 630 V (3.6 mm contacts) 250 V (2 mm contacts)	0	Termination methods Crimp termination: 0.75 - 10 mm <sup>2</sup> (3.6 mm contacts) Crimp termination: 0.14 - 4.0 mm <sup>2</sup>
	Rated impulse voltage 6 kV (3.6 mm contacts) 4 kV (2 mm contacts)		(2 mm contacts) Material Housing: nickel-plated zinc die-casting
Amp.	Rated current (A) 70 A (3.6-mm contacts) at 25 °C 30 A (2-mm contacts) at 25 °C		nickel-plated brass Insert: PA, Seal: FPM
	Degree of soiling 3	IP	Protection rating IP 67
	Contacts Gold-plated brass	<b>₩</b>	Cycle of mechanical operation 50
		°‡	<b>Temperature range</b> -20 °C +125 °C

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
Type LS1.5 A1 for ma	ale contacts			
44429308	EPIC <sup>®</sup> POWER LS1.5 A1	Ø 4.2 mm (4x)	3+PE+2	1
44429309	EPIC <sup>®</sup> POWER LS1.5 A1	Ø 4.2 mm (4x)	3+PE+4	1
Type LS1.5 A3 for ma	ale contacts			
44429306	EPIC <sup>®</sup> POWER LS1.5 A3	Ø 4.2 mm (4x)	3+PE+2	1
44429307	EPIC <sup>®</sup> POWER LS1.5 A3	Ø 4.2 mm (4x)	3+PE+4	1
Type LS1.5 A6 for fer	male contacts			
44429316	EPIC <sup>®</sup> POWER LS1.5 A6	Ø 4.2 mm (4x)	3+PE+2	1
44429317	EPIC <sup>®</sup> POWER LS1.5 A6	Ø 4.2 mm (4x)	3+PE+4	1

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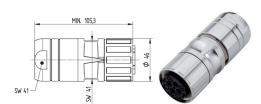
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Circular connectors • EPIC<sup>®</sup> POWER LS1.5

## **EPIC® POWER LS1.5 D6**

Info · EMC protection



Circular connectors for servomotors and power supply

## **EPIC® POWER LS1.5 F6**

Circular connectors for servomotors and power supply



Suitable contacts: EPIC<sup>®</sup> POWER LS1.5 D6

+ EPIC $^{\ensuremath{\circledast}}$  POWER LS1.5 Contacts female Page 232

#### **EPIC® POWER LS1.5 F6**

- + EPIC  $^{\ensuremath{\circledast}}$  POWER LS1.5 Contacts female Page 232
- The contacts have to be ordered separately

#### **Benefits**

- More power for servo motors
- Vibration-proof rugged design
- · EMC version for cables with large crosssections

#### Application range

- Plant engineering
- · Servo drives and servo assemblies

#### Suitable tools

• EPIC<sup>®</sup> POWER LS1.5 Tools refer to page 232

Article number	Article description	Clamping range in mm	Pin configuration	Pieces / PU
Type LS1.5 D6 for	female contacts	· · · · ·		
44429310	EPIC <sup>®</sup> POWER LS1.5 D6	9 - 14	3+PE+2	1
44429311	EPIC <sup>®</sup> POWER LS1.5 D6	14 - 20.5	3+PE+2	1
44429312	EPIC <sup>®</sup> POWER LS1.5 D6	20.5 - 26.5	3+PE+2	1
44429313	EPIC <sup>®</sup> POWER LS 1.5 D6	9 - 14	3+PE+4	1
44429314	EPIC <sup>®</sup> POWER LS1.5 D6	14 - 20.5	3+PE+4	1
44429315	EPIC <sup>®</sup> POWER LS1.5 D6	20.5 - 26.5	3+PE+4	1
Type LS1.5 F6 for	male contacts			
44429300	EPIC <sup>®</sup> POWER LS1.5 F6	9 - 14	3+PE+2	1
44429301	EPIC <sup>®</sup> POWER LS1.5 F6	14 - 20.5	3+PE+2	1
44429302	EPIC <sup>®</sup> POWER LS1.5 F6	20.5 - 26.5	3+PE+2	1
44429303	EPIC <sup>®</sup> POWER LS1.5 F6	9 - 14	3+PE+4	1
44429304	EPIC <sup>®</sup> POWER LS1.5 F6	14 - 20.5	3+PE+4	1
44429305	EPIC <sup>®</sup> POWER LS1.5 F6	20.5 - 26.5	3+PE+4	1

For current information see: www.lappgroup.com

Photographs are not to scale and do not represent detailed images of the respective products.

Tech	nical data		
E T I M	Classification ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular	4	Number of contacts 3+PE+2(3.6mm/2mm) 3+PE+4(3.6mm/2mm)
4	connector (industrial connector) <b>Rated voltage (V)</b> 630 V (3.6 mm contacts) 250 V (2 mm contacts)	0	Termination methods Crimp termination: 0.75 - 10 mm <sup>2</sup> (3.6 mm contacts) Crimp termination: 0.14 - 4.0 mm <sup>2</sup>
	Rated impulse voltage 6 kV (3.6 mm contacts) 4 kV (2 mm contacts)		(2 mm contacts) Material Housing: nickel-plated zinc die-casting,
Amp.	Rated current (A) 70 A (3.6-mm contacts) at 25 °C 30 A (2-mm contacts) at 25 °C		nickel-plated brass Insert: PA, Seal: FPM
	Degree of soiling	IP	Protection rating IP 67
	Contacts Gold-plated brass	₩	<b>Cycle of mechanical operation</b> 50
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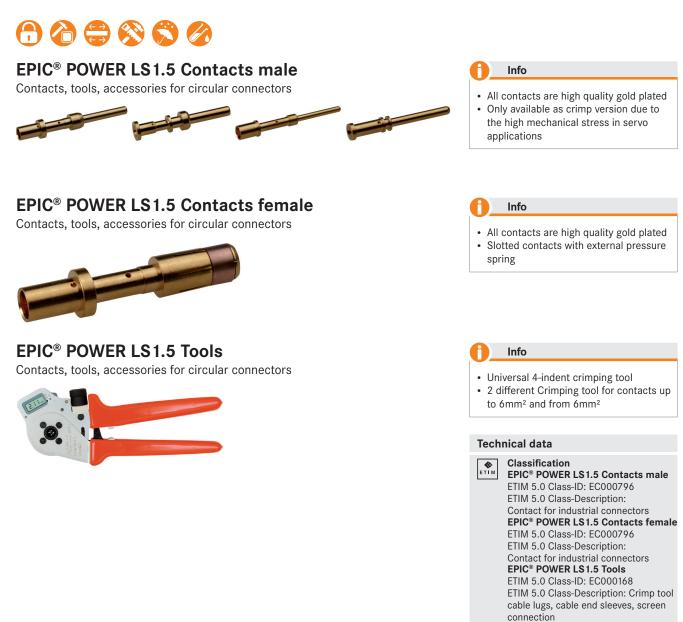
- **Temperature range** ₽**₽** 

  - -20 °C ... +125 °C

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**HITRONIC®** 

Circular connectors • EPIC<sup>®</sup> POWER LS1.5 contact, tools, accessories



Article number	Article designation	Description	Version	For design	Pieces / PU
3.6 mm male co	ntacts		· · · · · · · · · · · · · · · · · · ·		
44429334	LS1.5 A SCEM 3,6MM AU 0,75-1,5		3.6 mm male 0.75 - 1.5	for type A1, A3	10
44429335	LS1.5 A SCEM 3,6MM AU 1,0-2,5		3.6 mm male 1.0 - 2.5 mm <sup>2</sup>	for type A1, A3	10
44429336	LS1.5 A SCEM 3,6MM AU 1,5-4,0		3.6 mm male 1.5 - 4.0 mm <sup>2</sup>	for type A1, A3	10
44429337	LS1.5 A SCEM 3,6MM AU 4,0-6,0		3.6 mm male 4.0 - 6.0 mm <sup>2</sup>	for type A1, A3	10
44429338	LS1.5 A SCEM 3,6MM AU 6,0-10,0		3.6 mm male 6.0 - 10.0 mm <sup>2</sup>	for type A1, A3	10
44429326	LS1.5 F SCEM 3,6MM AU 1,0-2,5		3.6 mm male 1.0 - 2.5 mm <sup>2</sup>	for type F6	10
44429327	LS1.5 F SCEM 3,6MM AU 2,5-4,0		3.6 mm male 2.5 - 4.0 mm <sup>2</sup>	for type F6	10
44429328	LS1.5 F SCEM 3,6MM AU 4,0-6,0		3.6 mm male 4.0 - 6.0 mm <sup>2</sup>	for type F6	10
44429329	LS1.5 F SCEM 3,6MM AU 6,0-10,0		3.6 mm male 6.0 - 10.0 mm <sup>2</sup>	for type F6	10
2 mm male cont	tacts				
44429339	LS1.5 A SCEM 2MM AU 0,14-0,25		2 mm male 0.14 - 0.25 mm <sup>2</sup>	for type A1, A3	10
44429340	LS1.5 A SCEM 2MM AU 0,25-1,0		2 mm male 0.25 - 1.0 mm <sup>2</sup>	for type A1, A3	10
44429341	LS1.5 A SCEM 2MM AU 0,75-1,5		2 mm male 0.75 - 1.5 mm <sup>2</sup>	for type A1, A3	10
44429342	LS1.5 A SCEM 2MM AU 1,0-2,5		2 mm male 1.0 - 2.5 mm <sup>2</sup>	for type A1, A3	10
44429343	LS1.5 A SCEM 2MM AU 4,0		2 mm male 2.5-4.0 mm <sup>2</sup>	for type A1, A3	10
44429330	LS1.5 F SCEM 2MM AU 0,25-1,0		2 mm male 0.25 - 1.0 mm <sup>2</sup>	for type F6	10
44429331	LS1.5 F SCEM 2MM AU 0,75-1,5		2 mm male 0.75 - 1.5 mm <sup>2</sup>	for type F6	10
44429332	LS1.5 F SCEM 2MM AU 1,0-2,5		2 mm male 1.0 - 2.5 mm <sup>2</sup>	for type F6	10
44429333	LS1.5 F SCEM 2MM AU 2,5-4,0		2 mm male 2.5-4.0 mm <sup>2</sup>	for type F6	10
3.6 mm female	contacts				
44429318	LS1.5 D BCEM 3,6MM AU 1,0-2,5		3.6 mm female 1.0 - 2.5 mm <sup>2</sup>	for type D6, A6	10
44429319	LS1.5 D BCEM 3,6MM AU 2,5-4,0		3.6 mm female 2.5 - 4.0 mm <sup>2</sup>	for type D6, A6	10
44429320	LS1.5 D BCEM 3,6MM AU 4,0-6,0		3.6 mm female 4.0 - 6.0 mm <sup>2</sup>	for type D6, A6	10
44429321	LS1.5 D BCEM 3,6MM AU 6,0-10,0		3.6 mm female 6.0 - 10.0 mm <sup>2</sup>	for type D6, A6	10
2 mm female co	ntacts				
44429322	LS1.5 D BCEM 2MM AU 0,25-1,0		2 mm female 0.25 - 1.0 mm <sup>2</sup>	for type D6, A6	10
44429323	LS1.5 D BCEM 2MM AU 0,75-1,5		2 mm female 0.75 - 1.5 mm <sup>2</sup>	for type D6, A6	10
44429324	LS1.5 D BCEM 2MM AU 1,0-2,5		2 mm female 1.0 - 2.5 mm <sup>2</sup>	for type D6, A6	10
44429325	LS1.5 D BCEM 2MM AU 4,0		2 mm female 4.0 mm <sup>2</sup>	for type D6, A6	10
Crimping tool					
44429367	LS1.5 CRIMPING TOOL 0.08 - 6.0	4-mandrel digital crimping tool including locator	0.14 - 6.0 mm <sup>2</sup>	for LS1.5, LS3	1
44429368	LS1.5 CRIMPING TOOL 6.0 - 10.0	4-mandrel digital crimping tool including locator	6.0 - 10.0 mm <sup>2</sup>	for LS1.5	1

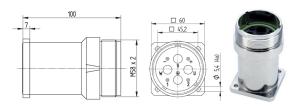
Photographs are not to scale and do not represent detailed images of the respective products.

**UNITRONIC®** 

Circular connectors • EPIC® POWER LS3

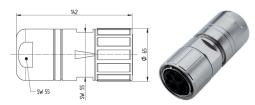
## **EPIC® POWER LS3 A1**

Circular connectors for servomotors and power supply



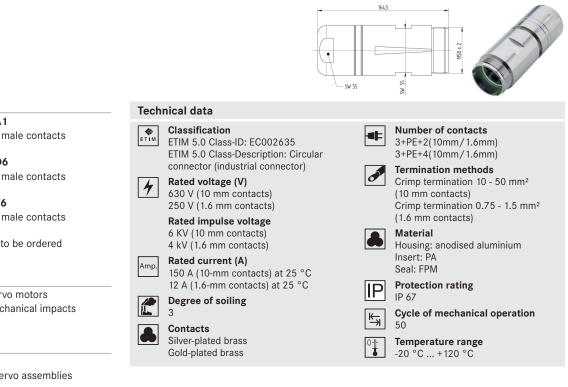
## **EPIC® POWER LS3 D6**

Circular connectors for servomotors and power supply



## **EPIC® POWER LS3 F6**

Circular connectors for servomotors and power supply



## Info · Robust power supply connector

#### EPIC® POWER LS3 A1 • EPIC® POWER LS3 male contacts

Page 234

## **EPIC® POWER LS3 D6**

Suitable contacts:

- EPIC<sup>®</sup> POWER LS3 male contacts Page 234
- EPIC® POWER LS3 F6
- EPIC® POWER LS3 male contacts Page 234
- The contacts have to be ordered separately

### Benefits

- · More power for servo motors
- Robust against mechanical impacts
- EMC protection

## Application range

- Plant engineering
- · Servo drives and servo assemblies

### Suitable tools

- EPIC<sup>®</sup> POWER LS3 Tools
- refer to page 234

Article number	Article description	Clamping range in mm	Fastening type	Pin configuration	Pieces / PU
Type LS3 A1 for ma	le contacts				
44429352	LS3 A1		Ø 4.2 mm (4x)	3+PE+2	1
44429353	LS3 A1		Ø 4.2 mm (4x)	3+PE+4	1
Type LS3 D6 for fen	nale contacts				
44429344	LS3 D6	17 - 25		3+PE+2	1
44429345	LS3 D6	25 - 36		3+PE+2	1
44429346	LS3 D6	17 - 25		3+PE+4	1
44429347	LS3 D6	25 - 36		3+PE+4	1
Type LS3 F6 for ma	le contacts				
44429348	LS3 F6	17 - 25		3+PE+2	1
44429349	LS3 F6	25 - 36		3+PE+2	1
44429350	LS3 F6	17 - 25		3+PE+4	1
44429351	LS3 F6	25 - 36		3+PE+4	1

Circular connectors • EPIC<sup>®</sup> POWER LS3 Contacts, tools, accessories



## **EPIC® POWER LS3 male contacts**

Contacts, tools, accessories for circular connectors



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**ETHERLINE®** 

**EPIC® POWER LS3 female contacts** Contacts, tools, accessories for circular connectors





## **EPIC® POWER LS3 Tools**

Contacts, tools, accessories for circular connectors



#### Info

- Only available as crimp version due to the high mechanical stress in servo applications
- Power contacts silver plated, signal contacts gold plated



- Only available as crimp version due to the high mechanical stress in servo applications
- Power contacts silver plated, signal contacts gold plated



- Individual components available on request
- For the signal contacts crimping tool 44429339 is used

#### **Technical data**

Classification EPIC® POWER LS3 male contacts ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors EPIC® POWER LS3 female contacts ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors EPIC® POWER LS3 Tools ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

Article number	Article designation	Description	Version	For design	Pieces / PU
EPIC <sup>®</sup> POWER LS3	EPIC® POWER LS3 male contacts				
44429360	LS3 A, F SCEM 10MM AG 10		10 mm male 10 mm <sup>2</sup>	for type A1, F6	4
44429361	LS3 A, F SCEM 10MM AG 16		10 mm male 16 mm <sup>2</sup>	for type A1, F6	4
44429362	LS3 A, F SCEM 10MM AG 25		10 mm male 25 mm <sup>2</sup>	for type A1, F6	4
44429363	LS3 A, F SCEM 10MM AG 35		10 mm male 35 mm <sup>2</sup>	for type A1, F6	4
44429364	LS3 A, F SCEM 10MM AG 50		10 mm male 50 mm <sup>2</sup>	for type A1, F6	4
44429365	LS3 A, F SCEM 1.6MM AU 0.75-1.5		1.6 mm male 0.75 - 1.5 mm <sup>2</sup>	for type A1, F6	4
EPIC® POWER LS3 female contacts					
44429354	LS3 D BCEM 10MM AG 10		10 mm female 10 mm <sup>2</sup>	for type D6	4
44429355	LS3 D BCEM 10MM AG 16		10 mm female 16 mm <sup>2</sup>	for type D6	4
44429356	LS3 D BCEM 10MM AG 25		10 mm female 25 mm <sup>2</sup>	for type D6	4
44429357	LS3 D BCEM 10MM AG 35		10 mm female 50 mm <sup>2</sup>	for type D6	4
44429358	LS3 D BCEM 10MM AG 50		10 mm female 50 mm <sup>2</sup>	for type D6	4
44429359	LS3 D BCEM 1.6MM AU 0.75-1.5		1.6 mm female 0.75 - 1.5 mm <sup>2</sup>	for type D6	4
Crimping tool					
44429366	LS3 crimping tool 10.0 - 50.0	Electro-hydraulic crimping tool includes charging device, accumulator and crimping dies for 10 - 50 mm <sup>2</sup>	10.0 - 50.0 mm <sup>2</sup>	for LS3	1

Uncomplicated orderingNo misplaced orders

components

· Pre-packed kits with compatible

**Benefits** 

Circular connectors • EPIC® SIGNAL M23 Kits



## EPIC<sup>®</sup> SIGNAL M23 Kits 8+1pol.

· Complete connectors - easy to order

Info

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## EPIC KIT M23 A3 8+1-POL FEMALE



- EPIC<sup>®</sup> M23 8+1-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup> (2 mm Ø contacts max. 2.5 mm<sup>2</sup>)
- P-Part, rotation to the left, anti-clockwise
- D6 cable connector, clamping range 7.0 13.5 mm

#### EPIC KIT M23 A3 8+1-POL MALE



- EPIC<sup>®</sup> M23 8+1-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup> (2 mm Ø contacts max. 2.5 mm<sup>2</sup>)
- E-Part, rotation to the right, clockwise
- A1 panel-mount box, front wall mounting

## EPIC KIT M23 A3 8+1-POL MALE



- EPIC<sup>®</sup> M23 8+1-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup> (2 mm Ø contacts max. 2.5 mm<sup>2</sup>)
- E-Part, rotation to the right, clockwise
- A3 panel-mount box, angled and rotatable, front wall mounting

#### EPIC KIT M23 A3 8+1-POL MALE

## 

- EPIC<sup>®</sup> M23 8+1-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup> (2 mm Ø contacts max. 2.5 mm<sup>2</sup>)
- E-Part, rotation to the right, clockwise
- F6 cable coupler, clamping range 7.0 - 13.5 mm

Technical data		
4	Rated voltage (V) 150 V (2 mm contacts) 150 V (1 mm contacts)	
Amp.	Rated current (A) 20 A (2 mm contact) 7 A (1 mm contacts)	
ŧ	Number of contacts 8 + 1	

Article number	Pieces / PU	
EPIC <sup>®</sup> SIGNAL M23 Kits 8+1pol.		
75009698	1	

Article numbers for single component

P-Part 73002740

• M23 D6 44420037



Article number	Pieces / PU	
EPIC <sup>®</sup> SIGNAL M23 Kits 8+1pol.		
75009699	1	
Article numbers for single components		

• E-Part 73002744

• M23 A1 72004000





Article number	Pieces / PU
EPIC <sup>®</sup> SIG	SNAL M23 Kits 8+1pol.
25009700	1

#### Article numbers for single components

- E-Part 73002744
- M23 A3 24420055



Article number	Pieces / PU
EPIC <sup>®</sup> SIGNAL M23 Kits 8+1pol.	
75009701	1

#### Article numbers for single components

- E-Part 73002744
- M23 F6 44420040



Circular connectors • EPIC<sup>®</sup> SIGNAL M23 Kits

#### $\leq$

• Uncomplicated ordering

• Pre-packed kits with compatible

No misplaced orders

components

## EPIC<sup>®</sup> SIGNAL M23 Kits 12pol.

**Technical data** 

4

Rated voltage (V)

100 V (1 mm contacts)

· Complete connectors - easy to order

Info

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**Benefits** 

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Amp. <b>Rated current (A)</b> 7 A (1 mm contacts)	
Number of contacts	
13	
Article Pieces / PU	EPIC <sup>®</sup> KIT M23 D6 12-POL FEMALE
EPIC® SIGNAL M23 Kits 12pole	
75009710 1	• EPIC <sup>®</sup> M23 12-pin solder termination
Article numbers for single components	female insert
• E-Part 73002722	Max. cross-section 1.0 mm <sup>2</sup>
• M23 D6 44420037	• E-Part, rotation to the right, clockwise
	D6 cable connector, clamping range
	7.0 - 13.5 mm
Article	EPIC <sup>®</sup> KIT M23 D6 12-POL FEMALE
number Pieces / PU	
EPIC® SIGNAL M23 Kits 12pole	
Article numbers for single components	EPIC <sup>®</sup> M23 12-pin solder termination
• P-part 73002716	female insert
• M23 D6 44420037	<ul> <li>Max. cross-section 1.0 mm<sup>2</sup></li> <li>P-part, rotation to the left, anticlockwise</li> </ul>
	<ul> <li>D6 cable connector, clamping range</li> </ul>
	7.0 - 13.5 mm
Article Pieces / PU	EPIC® KIT M23 A1 12-POL MALE
EPIC <sup>®</sup> SIGNAL M23 Kits 12pole	
75009703 1	EPIC <sup>®</sup> M23 12-pin solder-termination male
Article numbers for single components	insert
• E-Part 73002720	Max. cross-section 1.0 mm <sup>2</sup>
• M23 A1 72004000	<ul> <li>E-Part, rotation to the right, clockwise</li> </ul>
	A1 panel-mount box, front wall mounting
Article Pieces / PU	EPIC <sup>®</sup> KIT M23 A1 12-POL MALE
EPIC® SIGNAL M23 Kits 12pole	
75009711 1	• EPIC <sup>®</sup> M23 12-pin solder-termination male
Article numbers for single components	insert
• P-part 73002714	Max. cross-section 1.0 mm <sup>2</sup>
• M23 A1 72004000	<ul> <li>P-part, rotation to the left, anticlockwise</li> </ul>
	A1 panel-mount box, front wall mounting
Article Pieces / PU	EPIC <sup>®</sup> KIT M23 A3 12-POL MALE
EPIC® SIGNAL M23 Kits 12pole	
25009704 1	EDIC® M22 12 pip colder termination
25009704 1 Article numbers for single components	EPIC <sup>®</sup> M23 12-pin solder-termination male insert
i	<ul> <li>EPIC<sup>®</sup> M23 12-pin solder-termination male insert</li> <li>Max. cross-section 1.0 mm<sup>2</sup></li> </ul>
Article numbers for single components	insert
Article numbers for single components <ul> <li>E-Part 73002720</li> </ul>	<ul> <li>insert</li> <li>Max. cross-section 1.0 mm<sup>2</sup></li> <li>E-Part, rotation to the right, clockwise</li> <li>A3 panel-mount box, angled and rotatable,</li> </ul>
Article numbers for single components <ul> <li>E-Part 73002720</li> </ul>	<ul> <li>insert</li> <li>Max. cross-section 1.0 mm<sup>2</sup></li> <li>E-Part, rotation to the right, clockwise</li> </ul>

Circular connectors • EPIC® SIGNAL M23 Kits

#### EPIC® KIT M23 A3 12-POL MALE



- EPIC<sup>®</sup> M23 12-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup>
- P-part, rotation to the left, anticlockwise • A3 panel-mount box, angled and rotatable, front wall mounting

### EPIC® KIT M23 F6 12-POL MALE

## 

- EPIC<sup>®</sup> M23 12-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup>
- E-Part, rotation to the right, clockwise • F6 cable coupler, clamping range 7.0 - 13.5 mm

## EPIC® KIT M23 F6 12-POL MALE

## 2

- EPIC® M23 12-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup>
- · P-part, rotation to the left, anticlockwise
- F6 cable coupler, clamping range
- 7.0 13.5 mm

Article Pieces / PU number EPIC<sup>®</sup> SIGNAL M23 Kits 12pole

Pieces / PU

## Article numbers for single component

- P-part 73002714
- M23 A3 24420055

EPIC® SIGNAL M23 Kits 12pole

Article numbers for single component

Article

number

75009705



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#### Article .... nι EP 75

Article numbers for single component

• E-Part 73002720

• M23 F6 44420040

- P-part 73002714 • M23 F6 44420040



The inserts are suitable for both male and female contacts. For a complete connection, you will need one P-component and one E-component. P-component = left turning (anticlockwise), E-component = right turning (clockwise) Photographs are not to scale and do not represent detailed images of the respective products.

umber	Pieces / PU
PIC® SIG	SNAL M23 Kits 12pole
009713	1

## For current information see: www.lappgroup.com

Circular connectors • EPIC® SIGNAL M23 Kits

# (((0))

• Uncomplicated ordering

• No misplaced orders

components

## EPIC<sup>®</sup> SIGNAL M23 Kits 17pol.

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**Technical data** Info Rated voltage (V) 4 Complete connectors - easy to order 50 V (1 mm contacts) · Pre-packed kits with compatible Rated current (A) Amp 7 A (1 mm contacts) Number of contacts 4 17 EPIC KIT M23 D6 17-POL FEMALE Article Pieces / PU number EPIC® SIGNAL M23 Kits 17pol. 75009706 EPIC® M23 17-pin solder termination Article numbers for single component female insert P-part 73018000 Max. cross-section 1.0 mm<sup>2</sup> M23 D6 44420037 • P-part, rotation to the left, anticlockwise • D6 cable connector, clamping range 7.0 - 13.5 mm EPIC KIT M23 A1 17-POL MALE Article Pieces / PU number EPIC® SIGNAL M23 Kits 17pol. 75009707 • EPIC® M23 17-pin solder-termination male Article numbers for single component insert E-Part 73028500 Max. cross-section 1.0 mm<sup>2</sup> • M23 A1 72004000 · E-Part, rotation to the right, clockwise · A1 panel-mount box, front wall mounting Article EPIC KIT M23 A3 17-POL MALE Pieces / PU number 2 EPIC® SIGNAL M23 Kits 17pol. 25009708 • EPIC<sup>®</sup> M23 17-pin solder-termination male Article numbers for single component insert • E-Part 73028500 Max. cross-section 1.0 mm<sup>2</sup> M23 A3 24420055 · E-Part, rotation to the right, clockwise • A3 panel-mount box, angled and rotatable, front wall mounting EPIC KIT M23 F6 17-POL MALE Article Pieces / PU number EPIC® SIGNAL M23 Kits 17pol. 75009709

- Article numbers for single components
- E-Part 73028500
- M23 F6 44420040

- EPIC® M23 17-pin solder-termination male insert
- Max. cross-section 1.0 mm<sup>2</sup>
- E-Part, rotation to the right, clockwise
- F6 cable coupler, clamping range 7.0 - 13.5 mm

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**ETHERLINE®** 

**Benefits** 









Circular connectors • EPIC® POWER LS1 Kits

EPIC<sup>®</sup> POWER LS1 Kits 6pol.

· Complete connectors - easy to order

Info



EPIC®









630 V (2 mm contacts) Rated current (A) Amp 26A/3+PE+4, 25A/5+PE (2mm contacts) Number of contacts 4Þ 5 + PFArticle Pieces / PU number EPIC<sup>®</sup> LS1 Kits 6pole 75009690 1 Article numbers for single component • LS1 D6 76123000 Article Pieces / PU number EPIC<sup>®</sup> LS1 Kits 6pole 75009691 Article numbers for single component • LS1 A1 76003000 Article Pieces / PU number EPIC<sup>®</sup> LS1 Kits 6pole 25009692 Article numbers for single component LS1 A3 24420058 Article Pieces / PU number EPIC<sup>®</sup> LS1 Kits 6pole 75009693 Article numbers for single component • LS1 F6 76133000 For current information see: www.lappgroup.com

**Technical data** 

4

Rated voltage (V)

**Benefits** 

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- · No misplaced orders

## EPIC KIT LS1 D6 6-POL FEMALE

- Pin configuration 5+PE, for female contacts 2 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> are included
- · D6 cable connector, clamping range 7.5 - 15.5 mm

### EPIC KIT LS1 A1 6-POL MALE



- Pin configuration 5+PE, for male contacts 2 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> are included
- A1 panel-mount box, front wall mounting

#### EPIC KIT LS1 A3 6-POL MALE

## 7

- Pin configuration 5+PE, for male contacts 2 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> are included
- · A3 panel-mount box, angled and rotatable, front wall mounting

#### EPIC KIT LS1 F6 6-POL MALE



- Pin configuration 5+PE, for male contacts 2 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> are included
- F6 cable coupler, clamping range 7.5 15.5 mm

Circular connectors • EPIC® POWER LS1 Kits

• Uncomplicated ordering

· Pre-packed kits with compatible

• No misplaced orders

components

## EPIC® POWER LS1 Kits 8pol.

# ETHERLINE®

**Benefits** 

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**HITRONIC®** 

EPIC®

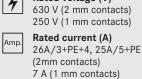


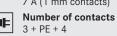






lech	nical data
	Rated voltage (V)





Article number	Pieces / PU
EPIC® LS	1 Kits 8pole
75009694	1
Article numbers for single components	

• LS1 D6 76124000

Article number	Pieces / PU	
EPIC <sup>®</sup> LS	1 Kits 8pole	
75009695	1	
Article numbers for single components		

• LS1A1 76004000

20171170001000

Article number	Pieces / PU	
EPIC <sup>®</sup> LS	1 Kits 8pole	
25009696	1	
Article numbers for single components		

• LS1 A3 24420056

Article number		Pieces / PU
EPIC <sup>®</sup> LS	1 Kits 8pole	
75009697		1

Article numbers for single components

LS1 F6 76134000

Complete connectors - easy to order	
PIC KIT LS1 D6 8-POL FEMALE	
0	0
• Pin configuration 3+PE+4, for female	

Info

- Pin configuration 3+PE+4, for female contacts 2 mm Ø + 1 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> and 0.14 - 1.0 mm<sup>2</sup> are included
   D6 apple compactor elemping range
- D6 cable connector, clamping range 7.5 - 15.5 mm

#### EPIC KIT LS1 A1 8-POL MALE



- Pin configuration 3+PE+4, for male contacts 2 mm Ø + 1 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> and 0.14 - 1.0 mm<sup>2</sup> are included
- A1 panel-mount box, front wall mounting

### EPIC KIT LS1 A3 8-POL MALE

## 

- Pin configuration 3+PE+4, for male contacts 2 mm Ø + 1 mm Ø
- Machined crimp contacts 0.5 2.5 mm<sup>2</sup> and 0.14 - 1.0 mm<sup>2</sup> are included
- A3 panel-mount box, angled and rotatable, front wall mounting

#### EPIC KIT LS1 F6 8-POL MALE



- Pin configuration 3+PE+4, for male contacts 2 mm Ø + 1 mm Ø
- Machined crimp contacts 0.5 2.5  $\mbox{ mm}^2$  and 0.14 1.0  $\mbox{ mm}^2$  are included
- F6 cable coupler, clamping range 7.5 - 15.5 mm

## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® POWERLOCK SCREW 400A



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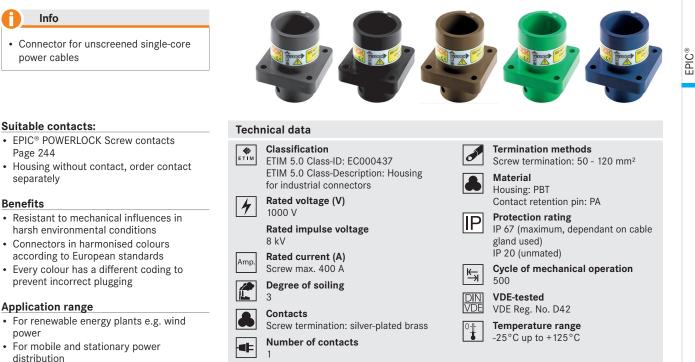
## EPIC<sup>®</sup> POWERLOCK A1 S

Single-pin circular connector for mobile power distribution, electro motors and generators



## EPIC<sup>®</sup> POWERLOCK A6 S

Single-pin circular connector for mobile power distribution, electro motors and generators



- For the connection of motors,
- transformers and generatorsLight & sound technology

#### Product features

- Panel-mount base, straight entry, flat
  gasket included
- Contact fixing by contact retention pin, each pin can only be used once
- Housing without contact, order contact separately

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
Type POWERLOCK	(A1, panel-mount box, drain for cont	act with M12 threaded post		
44420272	POWERLOCK A1 PE/GN	Ø 5.5 mm (4x)	PE, Green	1
44420273	POWERLOCK A1 N/BL	Ø 5.5 mm (4x)	N, Blue	1
44420274	POWERLOCK A1 L1/BN	Ø 5.5 mm (4x)	L1, Brown	1
44420275	POWERLOCK A1 L2/BK	Ø 5.5 mm (4x)	L2, Black	1
44420276	POWERLOCK A1 L3/GY	Ø 5.5 mm (4x)	L3, Grey	1
L1/red for direct	current applications in conjunction v	vith L2/black		
44420320	POWERLOCK A1 L1/RD	Ø 5.5 mm (4x)	L1, Red	1
Type POWERLOCK	(A6, panel-mount box, source for co	ntact with M12 threaded post		
44420277	POWERLOCK A6 PE/GN	Ø 5.5 mm (4x)	PE, Green	1
44420278	POWERLOCK A6 N/BL	Ø 5.5 mm (4x)	N, Blue	1
44420279	POWERLOCK A6 L1/BN	Ø 5.5 mm (4x)	L1, Brown	1
44420280	POWERLOCK A6 L2/BK	Ø 5.5 mm (4x)	L2, Black	1
44420281	POWERLOCK A6 L3/GY	Ø 5.5 mm (4x)	L3, Grey	1
L1/red for direct	current applications in conjunction v	vith L2/black		
44420321	POWERLOCK A6 L1/RD	Ø 5.5 mm (4x)	L1, Red	1

Photographs are not to scale and do not represent detailed images of the respective products.

**HITRONIC®** 



## EPIC<sup>®</sup> POWERLOCK D6 S

EPIC<sup>®</sup> POWERLOCK F6 S

Single-pin circular connector for mobile power distribution, electro motors and generators



# **HITRONIC®**

**UNITRONIC®** 

**ETHERLINE®** 

Single-pin circular connector for mobile power distribution, electro motors and generators



# EPIC®

#### Suitable contacts:

- EPIC<sup>®</sup> POWERLOCK Screw contacts Page 244
- · Housing without contact, order contact separately

#### Benefits

- · Resistant to mechanical influences in harsh environmental conditions
- · Connectors in harmonised colours according to European standards
- · Every colour has a different coding to prevent incorrect plugging

#### **Application range**

- · For renewable energy plants e.g. wind power
- · For mobile and stationary power distribution
- For the connection of motors, transformers and generators
- · Light & sound technology

#### Product features

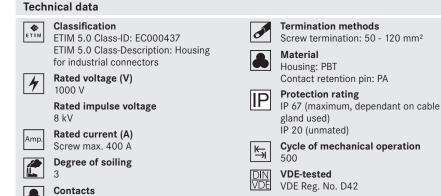
- · Straight connector with M40 thread
- Order SKINTOP® ST-M 40 or STR-M 40 separately
- · Contact fixing by contact retention pin, each pin can only be used once
- · Housing without contact, order contact separately

Article number	Article description	М	Pin configuration	Pieces / PU
Type POWERLOCK	D6, cable connector, source for screw contained	act		
44420267	POWERLOCK D6 PE/GN	40	PE, Green	1
44420268	POWERLOCK D6 N/BL	40	N, Blue	1
44420269	POWERLOCK D6 L1/BN	40	L1, Brown	1
44420270	POWERLOCK D6 L2/BK	40	L2, Black	1
44420271	POWERLOCK D6 L3/GY	40	L3, Grey	1
L1/red for direct of	current applications in conjunction with L2/	black		
44420305	POWERLOCK D6 L1/RD	40	L1, Red	1
Type POWERLOCK	F6, coupling connector, drain for screw con	tact		
44420262	POWERLOCK F6 PE/GN	40	PE, Green	1
44420263	POWERLOCK F6 N/BL	40	N, Blue	1
44420264	POWERLOCK F6 L1/BN	40	L1, Brown	1
44420265	POWERLOCK F6 L2/BK	40	L2, Black	1
44420266	POWERLOCK F6 L3/GY	40	L3, Grey	1
L1/red for direct of	current applications in conjunction with L2/	black		
44420301	POWERLOCK F6 L1/RD	40	L1, Red	1

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

SKINTOP<sup>®</sup> Standard



Screw termination: silver-plated brass

Number of contacts

**Temperature range** 

-25°C up to +125°C

## EPIC<sup>®</sup> Industrial connectors

Circular connectors • EPIC® POWERLOCK SCREW 400A

**Protection rating** 

**Temperature range** 

-20 °C to +85 °C

Cycle of mechanical operation

IP 67

500

<del>K</del>≯



1000 V

Contacts

3

Amr

Rated current (A)

Screw max. 400 A

Degree of soiling

Screw termination: silver-plated brass

## Info

VDE

Can be locked to prevent unauthorised disconnection

#### Benefits

- Guarantees the correct sequence is followed when connecting and disconnecting a set of connectors (PE, N, L1, L2, L3)
- Every colour has a different coding to prevent incorrect plugging
- IP 20 finger-protected
- Integrated micro-switch that can be connected to circuit breaker or alarm circuit

#### Application range

- · Alternative energy installations · For mobile and stationary power
- distribution · For the connection of motors, transformers and generators
- · Light & sound technology

#### Housings

· Sealed security lid is optional

#### **Product features**

- Included: Contacts with M12 threaded post
- · Cable connector for microswitch optional
- 19" housing with height unit 2HE/2U

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
POWERLOCK BOX	A1, panel-mount base, drain with M	12 threaded post		
44420282	POWERLOCK BOX A1 S	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A1, panel-mount base with cover, dr	ain with M12 threaded post		
44420283	POWERLOCK BOX A1 SD	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A6, panel-mount base, source with I	M12 threaded post		
44420286	POWERLOCK BOX A6 S	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A6, panel-mount base with cover, so	ource with M12 threaded post		
44420287	POWERLOCK BOX A6 SD	Ø 6.5 mm (4x)	4+PE	1

\* Trade product, no Lapp product

Photographs are not to scale and do not represent detailed images of the respective products.

Circular connectors • EPIC® POWERLOCK Contacts, tools, accessories

## **EPIC® POWERLOCK Screw contacts**

Contacts, tools, accessories for circular connectors



• Screw max. 400 A

• Do not plug with crimp-type (660 A)

#### Technical data



Article number	Article designation	Version	For design	PU
Drain - contact wi	th M12 threaded post for type POWER	LOCK A1 S, contact retaining pin included		
44420241	POWERLOCK SP M 12	Contact Drain, M12 Thread for cable lugs	for type A1	1
Source - contact v	with M12 threaded post for type POWE	RLOCK A6 S, contact retaining pin included		
44420242	POWERLOCK QP M12	Lamella contact source, M12 thread for cable lug	for type A6	1
Source - screw co	ntact for type POWERLOCK D6 S, conta	act retaining pin included		
44420237	POWERLOCK QS 120	120 mm <sup>2</sup>	for type D6	1
Drain - screw con	tact for type POWERLOCK F6 S, contac	t retaining pin included		
44420232	POWERLOCK SS 120	120 mm <sup>2</sup>	for type F6	1

Photographs are not to scale and do not represent detailed images of the respective products.

## **EPIC® POWERLOCK Tools**

Contacts, tools, accessories for circular connectors





**E** T I M

Classification ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

Article number	Article description	Version	PU
Tools			
44420243	POWERLOCK DISCONNECTION TOOL	for mated connection	1
44420337	Crimping tool		1
44420330	Crimp die for Crimp tool	50 mm <sup>2</sup>	1
44420331	Crimp die for Crimp tool	70 mm <sup>2</sup>	1
44420332	Crimp die for Crimp tool	95 mm <sup>2</sup>	1
44420333	Crimp die for Crimp tool	120 mm <sup>2</sup>	1
44420334	Crimp die for Crimp tool	150 mm <sup>2</sup>	1
44420335	Crimp die for Crimp tool	185 mm <sup>2</sup>	1
44420336	Crimp die for Crimp tool	240 mm <sup>2</sup>	1

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

**HITRONIC®** 

Circular connectors • EPIC® POWERLOCK Contacts, tools, accessories

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

## **EPIC® POWERLOCK Accessories**

Contacts, tools, accessories for circular connectors



**Technical data** 



ETIM 5.0 Class-ID: EC002314 ETIM 5.0 Class-Description: Cap for industrial connectors

Article number	Article	For design	Version	PU
Protective caps				
44420252	POWERLOCK PROTECTION CAP A1	for type A1	IP54	1
44420253	POWERLOCK PROTECTION CAP A6	for type A6	IP54	1
44420251	POWERLOCK PROTECTION CAP D6	for type D6	IP54	1
44420250	POWERLOCK PROTECTION CAP F6	for type F6	IP54	1
Spare part: Conta	ct retention pin			
44420259	POWERLOCK RETENTION PIN A1, A6	for type A1, A6		1
44420255	POWERLOCK RETENTION PIN D6	for type D6		1
44420254	POWERLOCK RETENTION PIN F6	for type F6		1
Conductor end slo	eeves for POWERLOCK screw contact			
44420244	POWERLOCK WIRE SLEEVE 120	Spare part for POWERLOCK 120 SS/QS contact	120 mm <sup>2</sup>	1
44420245	POWERLOCK WIRE SLEEVE SET 95	Reduction set for POWERLOCK 120 SS/QS screw contact	95 mm <sup>2</sup>	1
44420246	POWERLOCK WIRE SLEEVE SET 70	Reduction set for POWERLOCK 120 SS/QS screw contact	70 mm <sup>2</sup>	1
44420247	POWERLOCK WIRE SLEEVE SET 50	Reduction set for POWERLOCK 120 SS/QS screw contact	50 mm <sup>2</sup>	1

Circular connectors • EPIC® POWERLOCK CRIMP 660A

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## **EPIC® POWERLOCK A1 C**

Single-pin circular connector for mobile power distribution, electro motors and generators



## **EPIC® POWERLOCK A6 C**

Single-pin circular connector for mobile power distribution, electro motors and generators



#### Suitable contacts:

- EPIC<sup>®</sup> POWERLOCK Crimp contacts Page 249
- Housing without contact, order contact separately

#### Benefits

- Resistant to mechanical influences in harsh environmental conditions
- Connectors in harmonised colours according to European standards
- Every colour has a different coding to prevent incorrect plugging

#### Application range

- For renewable energy plants e.g. wind power
- For mobile and stationary power distribution
- For the connection of motors, transformers and generators
- · Light & sound technology

#### Product features

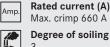
- Panel-mount base, straight entry, flat gasket included
- Contact fixing by contact retention pin, each pin can only be used once
- Housing without contact, order contact separately





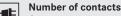


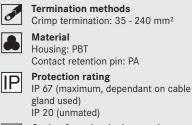
**Rated impulse voltage** 8 kV





Crimp termination: copper, silver-plated





⊬

VDE

**Cycle of mechanical operation** 500

VDE-tested VDE Reg. No. D42

Temperature range

-25°C up to +125°C

Article number Article description Fastening type Pin configuration Pieces / PU Type POWERLOCK A1, panel-mount box, drain for contact with M12 threaded post 44420221 POWERLOCK A1 PE/GN Ø 5.5 mm (4x) PE, Green 44420222 POWERLOCK A1 N/BL Ø 5.5 mm (4x) N, Blue 44420223 POWERLOCK A1 L1/BN Ø 5.5 mm (4x) L1, Brown 44420224 POWERLOCK A1 L2/BK Ø 5.5 mm (4x) L2, Black 44420225 POWERLOCK A1 L3/GY Ø 5.5 mm (4x) L3, Grey L1/red for direct current applications in conjunction with L2/black POWERLOCK A1 L1/RD Ø 5.5 mm (4x) L1, Red 44420316 Type POWERLOCK A6, panel-mount box, source for contact with M12 threaded post 44420226 POWERLOCK A6 PE/GN Ø 5.5 mm (4x) PE, Green 44420227 POWERLOCK A6 N/BL Ø 5.5 mm (4x) N, Blue Ø 5.5 mm (4x) 44420228 POWERLOCK A6 L1/BN L1, Brown 44420229 POWERLOCK A6 L2/BK Ø 5.5 mm (4x) L2, Black Ø 5.5 mm (4x) 44420230 POWERLOCK A6 L3/GY L3, Grey L1/red for direct current applications in conjunction with L2/black L1, Red 44420317 POWERLOCK A6 L1/RD Ø 5.5 mm (4x)

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

## LAPP GROUP

## EPIC<sup>®</sup> Industrial connectors

Circular connectors  $\bullet$  EPIC  $^{\otimes}$  POWERLOCK CRIMP 660A



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## EPIC<sup>®</sup> POWERLOCK D6 C

Single-pin circular connector for mobile power distribution, electro motors and generators



## EPIC<sup>®</sup> POWERLOCK F6 C

Single-pin circular connector for mobile power distribution, electro motors and generators



Connector for unscreened single-core
 power cables

#### Suitable contacts:

Info

- EPIC<sup>®</sup> POWERLOCK Crimp contacts Page 249
- Housing without contact, order contact separately

#### Benefits

- Resistant to mechanical influences in harsh environmental conditions
- Connectors in harmonised colours according to European standards
- Every colour has a different coding to prevent incorrect plugging

#### Application range

- For renewable energy plants e.g. wind power
- For mobile and stationary power distribution
- For the connection of motors, transformers and generators
- · Light & sound technology

#### Product features

- Straight connector with M40 thread
- Order SKINTOP<sup>®</sup> ST-M 40 or STR-M 40 separately
- Contact fixing by contact retention pin, each pin can only be used once
- Housing without contact, order contact separately

Article number	Article description	М	Pin configuration	Pieces / PU
Type POWERLOCK	D6, cable connector, source for crimp conta	ict		
44420216	POWERLOCK D6 PE/GN	40	PE, Green	1
44420217	POWERLOCK D6 N/BL	40	N, Blue	1
44420218	POWERLOCK D6 L1/BN	40	L1, Brown	1
44420219	POWERLOCK D6 L2/BK	40	L2, Black	1
44420220	POWERLOCK D6 L3/GY	40	L3, Grey	1
L1/red for direct of	current applications in conjunction with L2/	black		
44420319	POWERLOCK D6 L1/RD	40	L1, Red	1
Type POWERLOCK	F6, coupling connector, drain for crimp con	tact		
44420211	POWERLOCK F6 PE/GN	40	PE, Green	1
44420212	POWERLOCK F6 N/BL	40	N, Blue	1
44420213	POWERLOCK F6 L1/BN	40	L1, Brown	1
44420214	POWERLOCK F6 L2/BK	40	L2, Black	1
44420215	POWERLOCK F6 L3/GY	40	L3, Grey	1
L1/red for direct of	current applications in conjunction with L2/	black		
44420318	POWERLOCK F6 L1/RD	40	L1, Red	1

**Technical data** 

1000 V

8 kV

3

Contacts

ETIM

4

Amp

Classification

ETIM 5.0 Class-ID: EC000437

for industrial connectors Rated voltage (V)

Rated impulse voltage

Rated current (A)

Max. crimp 660 A

Degree of soiling

Number of contacts

ETIM 5.0 Class-Description: Housing

Crimp termination: copper, silver-plated

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• SKINTOP<sup>®</sup> Standard refer to main catalogue

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<b>Termination methods</b> Crimp termination: 35 - 240 mm <sup>2</sup>
Material Housing: PBT Contact retention pin: PA
Protection rating IP 67 (maximum, dependant on cab

IP 67 (maximum, dependant on cable gland used) IP 20 (unmated)

**Cycle of mechanical operation** 500

VDE-tested VDE Reg. No. D42

IΡ

⊬

Temperature range -25°C up to +125°C

Circular connectors • EPIC® POWERLOCK CRIMP 660A

## **POWERLOCK BOX C\***

Guarantees the correct sequence

is followed when connecting and

disconnecting a set of connectors

connected to circuit breaker or alarm

Circular connectors for servomotors and power supply



**Technical data** 

Contacts

3

Crimp termination: copper, silver-plated

**E** T I M

4

Amp.

	f Info
	Can be locked to prevent unauthorised disconnection
nical data	
Classification ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector)	Number of contacts         4 + PE         Termination methods
Rated voltage (V) 1000 V	Crimp termination: 35 - 240 mm <sup>2</sup> Protection rating IP 65 (latched)
Rated current (A) Max. crimp 660 A	$\begin{array}{c} \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \\ \hline \\ \\ \\ \\ \\ \\ \\$
Degree of soiling	□ □ Temperature range

-25°C ... +85°C

Application range

circuit

(PE, N, L1, L2, L3)

- Alternative energy installations
- · For mobile and stationary power distribution
- For the connection of motors, transformers and generators
- Light & sound technology

#### Housings

· Sealed security lid is optional

#### **Product features**

- Included: Contacts with M12 threaded post
- Cable connector for microswitch optional
- 19" housing with height unit 2HE/2U

Article number	Article description	Fastening type	Pin configuration	Pieces / PU
POWERLOCK BOX	A1, panel-mount base, drain with M	12 threaded post		
44420288	POWERLOCK BOX A1 C	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A1, panel-mount base with cover, dr	ain with M12 threaded post		
44420289	POWERLOCK BOX A1 CD	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A6, panel-mount base, source with I	M12 threaded post		
44420284	POWERLOCK BOX A6 C	Ø 6.5 mm (4x)	4+PE	1
POWERLOCK BOX	A6, panel-mount base with cover, so	ource with M12 threaded post		
44420285	POWERLOCK BOX A6 CD	Ø 6.5 mm (4x)	4+PE	1

\* Trade product, no Lapp product

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

**HITRONIC®** 

**Benefits** 

Circular connectors • EPIC<sup>®</sup> POWERLOCK Contacts, tools, accessories

**ETHERLINE®** 

**HITRONIC®** 

EPIC®

## EPIC® POWERLOCK Crimp contacts

Contacts, tools, accessories for circular connectors



- Max. crimp 660 A
- Do not plug with screw-type (400 A)



#### Technical data

Classification ETIM 5.0 Class-ID: EC000796 ETIM 5.0 Class-Description: Contact for industrial connectors

Article number	Article designation	Version	PU
Drain - contact with	M 12 threaded post, for type POWER	LOCK A1 C, contact retaining pin included	
44420260	POWERLOCK SP M12	Contact Drain, M12 Thread for cable lugs	1
Source - contact wi	th M12 threaded post for type POWE	RLOCK A6 C, contact retaining pin included	
44420261	POWERLOCK QP M 12	Lamella contact source, M12 thread for cable lug	1
Source - crimp cont	act for type POWERLOCK D6 C, cont	act retaining pin included	
44420290	POWERLOCK QCM 35	35 mm²	1
44420291	POWERLOCK QCM 50	50 mm²	1
44420292	POWERLOCK QCM 70	70 mm <sup>2</sup>	1
44420236	POWERLOCK QCM 95	95 mm²	1
44420238	POWERLOCK QCM 120	120 mm <sup>2</sup>	1
44420257	POWERLOCK QCM 150	150 mm²	1
44420239	POWERLOCK QCM 185	185 mm²	1
44420240	POWERLOCK QCM 240	240 mm <sup>2</sup>	1
Drain - Crimp conta	ct, for type POWERLOCK F6 C, conta	ct retaining pin included	
44420293	POWERLOCK SCM 35	35 mm²	1
44420294	POWERLOCK SCM 50	50 mm <sup>2</sup>	1
44420295	POWERLOCK SCM 70	70 mm <sup>2</sup>	1
44420231	POWERLOCK SCM 95	95 mm²	1
44420233	POWERLOCK SCM 120	120 mm <sup>2</sup>	1
44420256	POWERLOCK SCM 150	150 mm <sup>2</sup>	1
44420234	POWERLOCK SCM 185	185 mm <sup>2</sup>	1
44420235	POWERLOCK SCM 240	240 mm <sup>2</sup>	1

## **EPIC® POWERLOCK Tools**

Contacts, tools, accessories for circular connectors





ETIM E

Classification ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

Article number	Article description	Version	PU		
Tools					
44420243	POWERLOCK DISCONNECTION TOOL	for mated connection	1		
44420337	Crimping tool		1		
44420330	Crimp die for Crimp tool	50 mm <sup>2</sup>	1		
44420331	Crimp die for Crimp tool	70 mm <sup>2</sup>	1		
44420332	Crimp die for Crimp tool	95 mm <sup>2</sup>	1		
44420333	Crimp die for Crimp tool	120 mm <sup>2</sup>	1		
44420334	Crimp die for Crimp tool	150 mm <sup>2</sup>	1		
44420335	Crimp die for Crimp tool	185 mm²	1		
44420336	Crimp die for Crimp tool	240 mm <sup>2</sup>	1		

Circular connectors • EPIC® POWERLOCK Contacts, tools, accessories

### **EPIC® POWERLOCK Accessories**

Contacts, tools, accessories for circular connectors



### **Technical data**

Classification ETIM 5.0 Class-ID: EC002314 ETIM 5.0 Class-Description: Cap for industrial connectors

Article number	Article	For design	Version	PU
Protective caps	I	I		
44420252	POWERLOCK PROTECTION CAP A1	for type A1	IP54	1
44420253	POWERLOCK PROTECTION CAP A6	for type A6	IP54	1
44420251	POWERLOCK PROTECTION CAP D6	for type D6	IP54	1
44420250	POWERLOCK PROTECTION CAP F6	for type F6	IP54	1
Spare part: Conta	ct retention pin			
44420259	POWERLOCK RETENTION PIN A1, A6	for type A1, A6		1
44420255	POWERLOCK RETENTION PIN D6	for type D6		1
44420254	POWERLOCK RETENTION PIN F6	for type F6		1

Photographs are not to scale and do not represent detailed images of the respective products.

EPIC®





# EPIC<sup>®</sup> Solar connectors durable connectors for photovoltaic systems

EPIC<sup>®</sup> SOLAR provides cabling solutions for photovoltaic systems in all power categories. Configurable connectors for installers, junction boxes for module manufacturers and installation connectors as well as T distributors for inverter manufacturers. Lapp develops customised connection systems including for the most recent, technological generation of organic photovoltaic modules.

EPIC<sup>®</sup> SOLAR connectors and ÖLFLEX<sup>®</sup> SOLAR cables are a perfect match and they have been ideally configured to suit the demands of the photovoltaic industry.

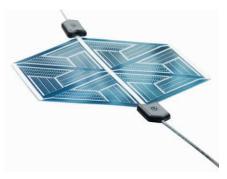


### EPIC® SOLAR 4

EPIC<sup>®</sup> – SOLAR the connector for easy, on-site assembly that can be configured to meet individual requirements. Simply insert the crimped contact into the housing and tighten it – done.

### EPIC<sup>®</sup> SOLAR splitter

Connectors for photovoltaic systems to connect strings in parallel.



### EPIC<sup>®</sup> SOLAR MAP

EPIC® SOLAR MAP for organic PV modules. A technically and economically ideal solution for durable and safe connections in what can be extreme outdoor climate conditions.

### EPIC<sup>®</sup> Industrial connectors

Solar connectors • EPIC® SOLAR BOX

# NEW



### **EPIC® SOLAR PL008**

Pre-assembled solar cables for weatherproof cabling of photovoltaic systems





**Technical data** 

ET I M

4

Amp.

Classification

Rated voltage (V)

Rated current (A)

connector

1000 V

11 A

ETIM 5.0 Class-ID: EC002638

ETIM 5.0 Class-Description: Cable

LAPP GROUP

**Protection rating** 

**Protection class** 

Temperature range

-40°C ... +105°C

IP 65

Ш

IP

0

### Benefits

- Cable variations and 4 diodes version on request
- · Cost-efficient plastic junction box
- Factory assembled and tested
- Traceability of every junction box ensured by barcode

### Application range

· Photovoltaic plants

### **Product features**

- Robust jun photovoltai
- Version wit modules
- PTFE memb balance and of the junc
- · Assembled and ÖLFLEX

nbrane equalize the pressure nd enables humidity to stay out ction box d with EPIC® SOLAR 4 connector EX® SOLAR cable 4mm <sup>2</sup>	nction box for cabling of aic modules ith 3 diodes for three-string		
	nd enables humidity to stay out ction box d with EPIC® SOLAR 4 connector		

Article number	Article description	PU
EPIC <sup>®</sup> SOLAR PL008		
44428214	EPIC <sup>®</sup> SOLAR PL008/3/11 4THIN 4/1	1

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EPIC®

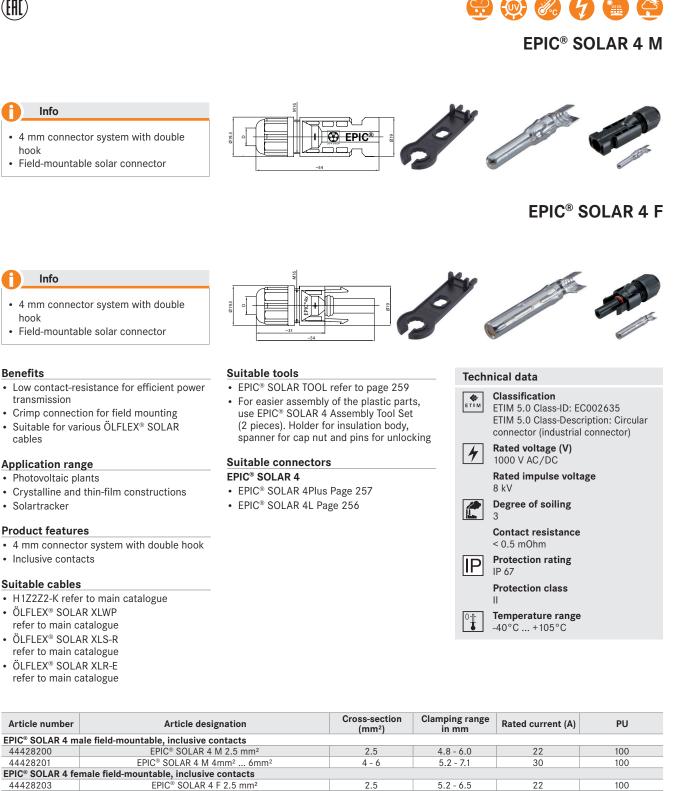
Solar connectors • EPIC® SOLAR 4



**ETHERLINE®** 

**HITRONIC**<sup>®</sup>

EPIC®



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EPIC® SOLAR 4 F 4mm<sup>2</sup> ... 6mm<sup>2</sup>

EPIC® SOLAR 4 Assembly Tool Set

44428204

44428224

EPIC<sup>®</sup> SOLAR 4 assembly tool

4 - 6

5.2 - 7.2

30

100

1

### EPIC<sup>®</sup> Industrial connectors

Solar connectors • EPIC® SOLAR 4



UNITRONIC®

**ETHERLINE®** 

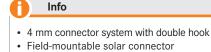
**HITRONIC®** 



### **EPIC<sup>®</sup> SOLAR 4L M**

Connector system for weatherproof cabling of photovoltaic systems





### **EPIC® SOLAR 4L F**

Connector system for weatherproof cabling of photovoltaic systems



### Benefits

- · Low contact-resistance for efficient power transmission
- · Crimp connection for field mounting • Suitable for various ÖLFLEX® SOLAR cables

### Application range

- · Photovoltaic plants
- · Crystalline and thin-film constructions
- · Solartracker

### **Product features**

- 4 mm connector system with double hook
- · Inclusive contacts
- Tested according EN 50521: 2008+A1
- TÜV Rheinland certified

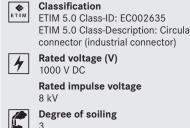
### Suitable cables

- H1Z2Z2-K refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLWP
- refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLS-R refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLR-E
- refer to main catalogue

### Suitable tools

• EPIC® SOLAR TOOL refer to page 259

Tech	nnical	data
	Clas	sificatio





- 4 mm connector system with double hook
- · Field-mountable solar connector

	<b>Contact resistance</b> < 0.5 mOhm
IP	Protection rating IP 67
⊬	Cycle of mechanical operation
	Protection class
0	<b>Temperature range</b> -40°C +85°C
	<u> </u>

#### Passende Steckverbinder EPIC<sup>®</sup> SOLAR 4L M

- EPIC® SOLAR 4Plus F refer to page 257 EPIC<sup>®</sup> SOLAR 4L F refer to page 256
- EPIC<sup>®</sup> SOLAR 4 F refer to page 255
- EPIC<sup>®</sup> SOLAR 4 Splitter refer to page 258
- EPIC® SOLAR 4 Built in socket refer to page 258

### **EPIC® SOLAR 4L F**

- EPIC<sup>®</sup> SOLAR 4L M refer to page 256
- EPIC® SOLAR 4Plus M refer to page 257
- EPIC® SOLAR 4 M refer to page 255
- EPIC<sup>®</sup> SOLAR 4 Splitter refer to page 258
- EPIC<sup>®</sup> SOLAR 4 Built in socket

refer to page 258

Article number	Article designation	Cross-section (mm <sup>2</sup> )	Clamping range in mm	Rated current (A)	PU
EPIC® SOLAR 4L n	nale field-mountable, inclusive contacts				
44428251	EPIC <sup>®</sup> SOLAR 4L M 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0	5.2 - 7.1	30	100
EPIC® SOLAR 4 m	ale contacts as spare part				
44428219	EPIC <sup>®</sup> SOLAR 4 PIN M 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0			100
EPIC® SOLAR 4L f	emale field-mountable, inclusive contacts				
44428252	EPIC <sup>®</sup> SOLAR 4L F 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0	5.2 - 7.1	30	100
EPIC® SOLAR 4 fe	male contacts as spare part				
44428220	EPIC <sup>®</sup> SOLAR 4 PIN F 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0			100

### EPIC<sup>®</sup> Industrial connectors

Solar connectors • EPIC® SOLAR 4

Info

system voltage

Available 2017



### **EPIC® SOLAR 4Plus M**

**EPIC® SOLAR 4Plus F** 

Connector system for weatherproof cabling of photovoltaic systems

Connector system for weatherproof cabling of photovoltaic systems



UNITRONIC®

EPIC®

### Info

• 4 mm connector system with double hook

• 4 mm connector system with double hook • For photovoltaic plants up to 1.5kV

- For photovoltaic plants up to 1.5kV
- system voltage Available 2017

### **Benefits**

- · Low contact-resistance for efficient power transmission
- Crimp connection for field mounting
- Suitable for various ÖLFLEX® SOLAR cables • Reliable connection, only possible to unlock with a tool, according NEC standard

### Application range

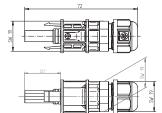
- · Photovoltaic plants
- · Crystalline and thin-film constructions
- Solartracker

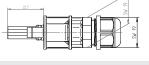
### **Product features**

- 4 mm connector system with double hook
- 10mm<sup>2</sup> maximum crimp connection for high currents and long cables
- TÜV Rheinland: in preparation

### Suitable cables

- H1Z2Z2-K refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLWP refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLS-R
- refer to main catalogue ÖLFLEX<sup>®</sup> SOLAR XLR-E
- refer to main catalogue







### **Technical data**



Rated impulse voltage 16 kV Degree of soiling 3



Temperature range -40°C ... +105°C

### Suitable tools

• EPIC® SOLAR TOOL refer to page 259

- Suitable connectors
- EPIC® SOLAR 4L
- EPIC® SOLAR 4 Splitter refer to page 258
- EPIC<sup>®</sup> SOLAR 4 Built in socket
  - refer to page 258

Article number	Article designation	Cross-section (mm <sup>2</sup> )	Clamping range in mm	Rated current (A)	PU
EPIC <sup>®</sup> SOLAR 4Plu	s male field-mountable, inclusive contacts				
44428233	EPIC <sup>®</sup> SOLAR 4Plus M 2.5mm <sup>2</sup>	2.5	4.8 - 6.0	22	100
44428235	EPIC <sup>®</sup> SOLAR 4Plus M 4mm <sup>2</sup> 6mm <sup>2</sup>	4 - 6	5.2 - 7.1	30	100
44428237	EPIC <sup>®</sup> SOLAR 4Plus M 10mm <sup>2</sup>	10	7.0 - 10.0	35	100
EPIC <sup>®</sup> SOLAR 4Plu	s male contacts as spare part				
44428217	EPIC <sup>®</sup> SOLAR 4Plus PIN M 2.5mm <sup>2</sup>	2.5			100
44428219	EPIC <sup>®</sup> SOLAR 4Plus PIN M 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0			100
44428239	EPIC <sup>®</sup> SOLAR 4Plus PIN M 10mm <sup>2</sup>	10			100
EPIC <sup>®</sup> SOLAR 4Plu	s female field-mountable, inclusive contacts				
44428234	EPIC <sup>®</sup> SOLAR 4Plus F 2.5mm <sup>2</sup>	2.5	4.8 - 6.0	22	100
44428236	EPIC <sup>®</sup> SOLAR 4Plus F 4mm <sup>2</sup> 6mm <sup>2</sup>	4 - 6	5.2 - 7.1	30	100
44428238	EPIC <sup>®</sup> SOLAR 4Plus F 10mm <sup>2</sup>	10	7.0 - 10.0	35	100
EPIC® SOLAR 4Plu	s female contacts as spare part				
44428218	EPIC <sup>®</sup> SOLAR 4Plus PIN F 2.5mm <sup>2</sup>	2.5			100
44428220	EPIC <sup>®</sup> SOLAR 4Plus PIN F 4mm <sup>2</sup> 6mm <sup>2</sup>	4.0 - 6.0			100
44428240	EPIC <sup>®</sup> SOLAR 4Plus PIN F 10mm <sup>2</sup>	10			100

NEW **2 EPIC® SOLAR 4 Splitter** Info Connector system for weatherproof cabling of photovoltaic systems • 4 mm connector system with double hook · Splitter for parallel connection of photovoltaic modules **Technical data** Classification ETIM ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector) Rated voltage (V) 4 1000 V AC/DC Rated impulse voltage: 8 kV Benefits **Product features** Rated current (A) Amp. Mateable with EPIC® SOLAR 4PLUS, Splitter for pallalel connection of PV-30 A modules and strings' EPIC® SOLAR 4 Degree of soiling Splitter MFF 1x connection male, Easy plug and play 3 · Fixing option for a clear installation with a 2x connection female **Protection rating** Splitter MFF 1x connection female, Ø 5mm mounting hole IP IP65/IP67 2x connection male Application range Cycle of mechanical operation ⊬ Suitable connectors 100 · Photovoltaic plants • EPIC® SOLAR 4 · Crystalline and thin-film constructions Protection class: II • EPIC® SOLAR 4Plus · Solartracker Temperature range • EPIC<sup>®</sup> SOLAR 4 Built in socket -40 °C ... +85 °C refer to page 258 Article number Article designation PU EPIC<sup>®</sup> SOLAR 4 Splitter 25 EPIC® SOLAR 4 Splitter MFF 44428226 44428227 EPIC<sup>®</sup> SOLAR 4 Splitter FMM 25 Photographs are not to scale and do not represent detailed images of the respective products.



### EPIC<sup>®</sup> SOLAR 4 Built in socket

Connector system for weatherproof cabling of photovoltaic systems

### **Benefits**

Built in fitting for inverters, PV string circuit breakers and fuse boxes

### Application range

- · Photovoltaic plants
- Inverters
- PV string circuit breakers

### Product features

· PV panel connector to be screwed in directly or fastening with the included plastic locknut

- Internal plug connector diameter 2.5mm, flush connector pin
- Installation hole: drilling diameter 12mm
- · Other types of connection on request
- Suitable connectors
- EPIC<sup>®</sup> SOLAR 4
- EPIC® SOLAR 4Plus
- EPIC® SOLAR 4 Splitter refer to page 258

• 4 mm connector system with double hook

· Built in socket for use in inverters

### **Technical data**

Classification ETI M ETIM 5.0 Class-ID: EC002635 ETIM 5.0 Class-Description: Circular connector (industrial connector) Rated voltage (V) 4 1000 V AC/DC Rated impulse voltage: 8 kV Rated current (A) Amp. 30 A Degree of soiling 3 Contact resistance: < 0.5 mOhm **Protection rating** lΙΡ IP 67 Cycle of mechanical operation | <del>K</del>⇒| 100 **Protection class** Ш **Temperature range** 

Article number	Article designation	PU
EPIC® SOLAR 4 bu	ilt in socket with counter nut	
44428222	EPIC <sup>®</sup> SOLAR 4 AD M Pin 2.5	100
44428223	EPIC <sup>®</sup> SOLAR 4 AD F Pin 2.5	100

Photographs are not to scale and do not represent detailed images of the respective products.

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**UNITRONIC® ETHERLINE®** 

**HITRONIC®** 

EPIC®

Info

-40°C ... +105°C

### EPIC® Industrial connectors

Solar connectors • EPIC® SOLAR TOOL

### **EPIC® CRIMPTOOL**

For inserts and modules of the EPIC® rectangular connectors



**EPIC® SOLAR TOOL CSC** 

Cutting, stripping and crimping with just one tool

ETHERLINE®

UNITRONIC®

# EPIC®

### **EPIC® SOLAR TOOL**

3 cross section in one tool



### Technical data



Classification ETIM 5.0 Class-ID: EC000168 ETIM 5.0 Class-Description: Crim

ETIM 5.0 Class-Description: Crimp tool cable lugs, cable end sleeves, screen connection

3 cross section in one tool

### Application range

Info

### EPIC<sup>®</sup> SOLAR TOOL CSC

 For crimping of the photovoltaic connector EPIC<sup>®</sup> SOLAR 4 in the field
 For EPIC<sup>®</sup> SOLAR 4 and MC4 suitable

### EPIC<sup>®</sup> SOLAR TOOL

- For crimping of the photovoltaic connector EPIC<sup>®</sup> SOLAR 4 in the field
- For EPIC<sup>®</sup> SOLAR 4 and MC4 suitable

### Product features

### EPIC<sup>®</sup> SOLAR TOOL CSC

- Multifunctional die for cutting, stripping and crimping with just one tool
- Locator for the safe and accurate positioning of the crimping contacts

### EPIC<sup>®</sup> SOLAR TOOL

- Crimping die for the cable cross sections of 2.5mm<sup>2</sup>, 4mm<sup>2</sup> and 6mm<sup>2</sup>
- Locator for the safe and accurate positioning of the crimping contacts

### Suitable cables

- **EPIC® SOLAR TOOL CSC** • H1Z2Z2-K refer to main catalogue
- H 12222-K refer to main ca
   ÖLFLEX<sup>®</sup> SOLAR XLWP
- refer to main catalogue • ÖLFLEX<sup>®</sup> SOLAR XLS-R
- refer to main catalogue • ÖLFLEX<sup>®</sup> SOLAR XLR-E
- refer to main catalogue

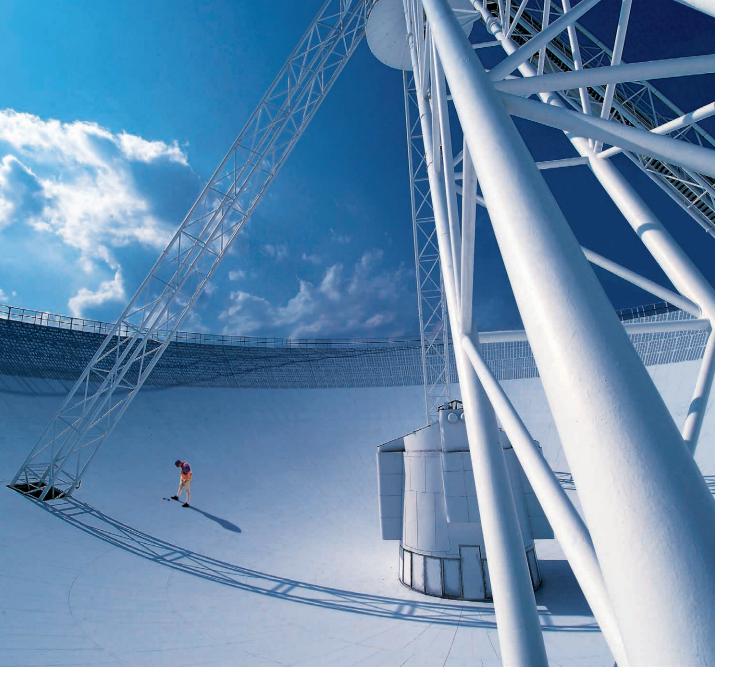
### EPIC<sup>®</sup> SOLAR TOOL

- H1Z2Z2-K refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLWP refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLS-R refer to main catalogue
- ÖLFLEX<sup>®</sup> SOLAR XLR-E refer to main catalogue

### Suitable connectors

- EPIC<sup>®</sup> SOLAR TOOL CSC
- EPIC<sup>®</sup> SOLAR 4
- EPIC<sup>®</sup> SOLAR TOOL
- EPIC® SOLAR 4

Article number	Article description	Cross-section (min) in mm <sup>2</sup>	Cross-section (max) in mm <sup>2</sup>	Version	Note	PU
Tools						
11147000	Crimping tool			In tool case	without crimping dies, without locator	1
Multi-functional of	lie CSC					
44428992	EPIC <sup>®</sup> SOLAR TOOL CSC DIE 4mm <sup>2</sup>		4			1
44428993	EPIC <sup>®</sup> SOLAR Tool CSC DIE 6mm <sup>2</sup>		6			1
44428994	EPIC <sup>®</sup> SOLAR TOOL LOC 4, 6mm <sup>2</sup>	4	6			1
Crimping die						
44428995	EPIC <sup>®</sup> SOLAR Tool DIE 2.5, 4, 6mm <sup>2</sup>	2.5	6			1
44428996	EPIC <sup>®</sup> SOLAR Tool LOC 2.5, 4, 6mm <sup>2</sup>	2.5	6			1
44428243		4	10			1
44428244		4	10			1



# EPIC® DATA Connectors for sensor/actuator and fieldbus connections

Do you need to perform quick cabling of sensors and actuators in the field? No problem thanks to our comprehensive range of field-configurable M8 and M12 connectors. Be it with conventional screw connections or time-saving fast connections. Thanks to metal variants with screen contact surface, shielded cables can also be safely connected in environments subject to EMC regulations. We recommend M8 and M12 flush-type connectors with integrated strands for device connections suitable for PCBs or terminals.

In terms of fieldbus wiring, our EPIC<sup>®</sup> Data range provides connectors that can be assembled in the field for all conventional fieldbus systems:

- PROFIBUS DP
- CAN Bus
- DeviceNET
- ASI

We provide IP20 variants for application in control cabinets and IP67 variants for application outside control cabinets to comply with the different environmental conditions applicable to industrial applications.

Fieldbus connectors with reliable connection systems, such as screw-on, cage clamp and ID termination enable a free choice of preferred cable connection systems.

# Bus Connectors at a glance



# Sensor Connectors at a glance

EPIC <sup>®</sup> SENSOR M8 Field mountable connectors M8		276
EPIC <sup>®</sup> SENSOR Flush-type connectors M8		277
<b>M8 Y-distributor</b> Y-distributor M8	55	282
EPIC <sup>®</sup> SENSOR M12 Field mountable connectors M12		278
EPIC <sup>®</sup> SENSOR Flush-type connectors M12		280
M12 accessories Y-distributor, T-distributor, control cabinet feed-trough, cable coupler round	55 J (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	282
M12 POWER Field mountable M12 POWER-connectors and Flush-type connectors M12		283

Bus system AS-Interface • AS-Interface accessories

### **ASI Distributor**

AS-Interface Distributor

**HITRONIC®** 







### Product Make-up

Suitable cables

catalogue

- Wire cross-section: 0,34 mm<sup>2</sup>
- Colour-code: bn (1), wh (2), bu (3), bk (4)

• UNITRONIC® BUS ASI refer to main catalogue

• UNITRONIC® BUS ASI FD refer to main

• Outer sheath: PUR halogen-free, black

- Space-saving due to compact dimensions · Easy to install

**Benefits** 

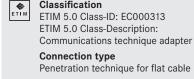
### **Product features**

• Field mountable distributor with flat cable clamp • On 2 flat cables or straight M12 socket

Cost-efficient and rational wiring for

AS-Interface installations

- (A-coded)
- · Suitable for drag chains
- Panel mounting
- Rated current  $\leq$  4 A (H-distributor:  $I \le 8 A$ )



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**Technical data** 

#### **Protection rating** |IP| IP 67

Classification

(H-distributor: IP69)

Ambient temperature (operation) -25°C to +75°C

Article number	Article designation	Length (m)	PU
Distribution of 1 flat cable			
on 2 flat cables (H distribut	or)		
22260802	AB-ASI-J-Y-Y-N		1
on M12 socket (2-pos.)			
22260800	AB-ASI-J-Y-N-M12FS		1
22260803	AB-ASI-J-Y-N-PUR-1,0-M12FS	1	1
22260804	AB-ASI-J-Y-N-PUR-2,0-M12FS	2	1
Distribution of 2 flat cables			
on M12 socket (4-pos.)			
22260801	AB-ASI-J-Y-B-M12FS		1
22260805	AB-ASI-J-Y-B-PUR-1,0-M12FS	1	1
22260806	AB-ASI-J-Y-B-PUR-2,0-M12FS	2	1

Copper price basis: inclusive of copper. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges. Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• Kraftform® adjustable torque screwdriver/Kraftform Kompakt® Set refer to main catalogue

### **® LAPP GROUP**

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### **LAPP GROUP**

### Data communication systems

Bus system PROFIBUS-DP/FMS/FIP  ${\scriptstyle \bullet}$  Sub-D Bus-Connectors

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# EPIC<sup>®</sup> DATA PB Sub-D

PROFIBUS connectors with screw terminals | REPEATER function | ATEX

### Info

- Optional with LED diagnostic
- ATEX and REPEATER Version
- Versions with 2th Sub-D ports

### Benefits

- Easy connection with proven srew clamp connection
- Sensor/ ac
- Terminating resistor (integrated) can be switched
- REPEATER version: Regeneration of data signal
- (slope, power and mark-to-space ratio)
- ATEX version: For use within intrinsicallysafe circuits in zone 2 areas with an explosion hazard (explosive gas atmosphere occurs only rarely and briefly)

#### Product features

- Max. transmission rate 12 Mbit/s possible
- Current consumption max. 12,5 mA (with LED 35 mA / REPEATER 100 mA)
- Supply voltage 4.75 5.25 V DC (supplied from the terminal)
- Terminating resistor "ON" the outbound bus cable is disconnected
- REPEATER version: Easy extension of the PROFIBUS network:
  - up to 3 repeaters
- 1 additional PROFIBUS segment
- galvanic isolation

- Norm references / Approvals
- IEC 61158, IEC 61784
- UL File No. E331560
- ATEX version: DIN EN 60079-0:2006, DIN 60079-15:2005 (category 3G zone 2)

#### Product Make-up

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- Improved electromagnetic compatibility (EMC) by metallized housing
- Versions with additional Sub-D interface for programming/diagnostic ('PG')
- For cable outer diameter: 5 8 mm
  LED Version indicate: bus operation - (green) station transmission - (blue) terminating resistor "on" - (orange)

### Suitable cables

Bus system PROFIBUS-DP/FMS/FIP

#### Suitable tools

 Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue

### Technical data

Classification **E**TIM ETIM 5.0 Class-ID: EC001132 ETIM 5.0 Class-Description: **D-Sub connector** Dimensions 54 mm x 40 mm x 17 mm - 35° 64 mm x 40 mm x 17 mm - 90° 68 mm x 40 mm x 17 mm - 180° (LxWxH) **Connection type** Screwing **Protection rating** IP 20 **Terminating resistor** 150 W Interfaces PROFIBUS station: D-Sub socket, 9-pin PROFIBUS cable: 4 terminal blocks for wires up to 1.0 mm<sup>2</sup>

(solid/flexible 7/19 wire)

Permissble ambient conditions Operating temperature: -25°C to +85°C \*The max. temperature for UL is 60 °C.

Article number	Article designation	Version	PG-Interface	Diagnostic LEDs	PU
35° cable outlet					
21700507	ED-PB-35		no	no	1
21700506	ED-PB-35-PG		yes	no	1
90° cable outlet					
21700504	ED-PB-90		no	no	1
21700503	ED-PB-90-PG		yes	no	1
21700530	ED-PB-90-LED		no	yes	1
21700529	ED-PB-90-PG-LED		yes	yes	1
21700541	ED-PB-90-RP-PG	REPEATER	yes	yes	1
21700543	ED-PB-90-ATEX	ATEX	no	no	1
21700542	ED-PB-90-PG-ATEX	ATEX	yes	no	1
180° (AX) cable ou	tlet				
21700505	ED-PB-AX		no	no	1

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For current information see: www.lappgroup.com



HITRONIC

Bus system PROFIBUS-DP/FMS/FIP • Sub-D Bus-Connectors



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### EPIC<sup>®</sup> DATA PB Sub-D FC

**PROFIBUS Connectors Fast Connect** 







### Info

- New innovative insulation displacement terminals suitable for solid and flexible conductors (90° and 180° versions)
- Versions with 2th Sub-D ports
- Optional with LED diagnostic

- Quick installation with Fast Connect ('FC') technology
- Sensor/ ac
- No loose parts
- Visual bus connection control
- Terminating resistor (integrated) can be switched

### Product features

- Fully compatible with market standard
- Max. transmission rate 12 Mbit/s possible
- Current consumption max. 12,5 mA (with LED 35 mA)
- Supply voltage 4.75 5.25 V DC (supplied from the terminal)
- Terminating resistor "ON" the outbound bus cable is disconnected

### Norm references / Approvals

- IEC 61158, IEC 61784
- UL File No. E331560

### Product Make-up

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- Improved electromagnetic compatibility (EMC) by metallized housing
- Max. cable outer diameter: 8 mm

Bus Green R ON

- Versions with additional Sub-D interface for programming/diagnostic ('PG')
- LED Version indicate: bus operation - (green) station transmission - (blue) terminating resistor "on" - (orange)

### Suitable cables

Bus system PROFIBUS-DP/FMS/FIP

### Suitable tools

- FC STRIP stripping tool refer to main catalogue
- Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue

_	Tech	nical data
	ETIM	Classification ETIM 5.0 Class-ID: EC001132 ETIM 5.0 Class-Description: D-Sub connector
	Ø	Dimensions 95 mm x 70 mm x 17 mm - 35° 72 mm x 40 mm x 17 mm - 90° 70 mm x 35 mm x 17 mm - 180° (LxWxH)
		Connection type Fast Connect
_	IP	Protection rating IP 20
_		Terminating resistor 150 W
/		Interfaces PROFIBUS station: SUB-D socket, 9-pin PROFIBUS cable: FC standard cable, Ø 0.64 mm
	0	<b>Permissble ambient conditions</b> Operating temperature: -25°C to +85°C *The max. temperature for UL is 60 °C

Article number	Article designation	PG-Interface	Diagnostic LEDs	PU
35° cable outlet for s	olid conductor			
21700511	ED-PB-35-FC	no	no	1
21700513	ED-PB-35-PG-FC	yes	no	1
35° cable outlet for 7	-/19-wire stranded conductor			
21700514	ED-PB-35-FC-FLEX	no	no	1
21700515	ED-PB-35-PG-FC-FLEX	yes	no	1
90° cable outlet for se	olid/ 7-/ 19-wire stranded conductor			
21700502	ED-PB-90-FC	no	no	1
21700501	ED-PB-90-PG-FC	yes	no	1
21700547	ED-PB-90-LED-FC	no	yes	1
21700546	ED-PB-90-PG-LED-FC	yes	yes	1
180° (AX) cable outle	t for solid/ 7-/ 19-wire stranded cond	uctor		
21700544	ED-PB-AX-FC	no	no	1

Photographs are not to scale and do not represent detailed images of the respective products.

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### APP GROUP

### Data communication systems

Bus system PROFIBUS-DP/FMS/FIP • Sub-D Bus-Connectors

ETI M

IP

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### EPIC<sup>®</sup> DATA PB Sub-D M12

**PROFIBUS Connectors M12** 

### Info

Plug & Play together with ready-to-use PROFIBUS M12 cordsets

### **Benefits**

- Cost-efficient due to quick installation (Plug & Play)
- Sensor/ ac
- · No loose parts
- . Terminating resistor (integrated) can be switched
- Suitable for assembled M12 PB cables

### **Product features**

- Max. transmission rate 12 Mbit/s possible
- Current consumption max. 12,5 mA
- Supply voltage 4.75 5.25 V DC (supplied from the terminal)
- · Switch can also be operated when the connector is plugged and setting is clearly visible
- Terminating resistor "ON" the outbound bus cable is disconnected

### Norm references / Approvals

- IEC 61158, IEC 61784
- UL File No. E331560

### **Product Make-up**

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- Connector M12, B-coded
- Improved electromagnetic compatibility (EMC) by metallized housing
- · Version with additional Sub-D port for programming/diagnostic ('PG')

### Suitable cables

- UNITRONIC® BUS PB M12 refer to main catalogue
- UNITRONIC<sup>®</sup> BUS PB M12-M12 refer to main catalogue





EPIC®

#### **Technical data** Classification ETIM 5.0 Class-ID: EC001132 ETIM 5.0 Class-Description: D-Sub connector Dimensions 70 mm x 40 mm x 17 mm (L x W x H) Connection type M12 **Protection rating** IP 20 Terminating resistor 150 W Interfaces **PROFIBUS** station: D-Sub socket, 9-pin PROFIBUS cable:

M12 PB system cabling

Permissble ambient conditions Operating temperature:

-25°C to +85°C \*The max. temperature for UL is 60 °C.

Article number	Article designation	PG-Interface	PU
90° cable outlet			
21700520	ED-PB-PG-90-M12	yes	1

Bus system PROFIBUS-DP/FMS/FIP • Sub-D Bus-Connectors

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### EPIC<sup>®</sup> DATA PB Sub-D PRO

PROFIBUS Connectors full-metall M12 connection /spring type connection









- Info
- · For high mechanical stress
- · High EMC protection

### **Benefits**

- Optimum EMC protection
- Robust housing material for harsh environments
- · No loose parts
- · Cost-efficient due to quick installation (Plug & Play)
- Terminating resistor (integrated) can be switched

### **Product features**

- Extended temperature range
- High mechnical strength (200 contact durability)
- Less transmission loss
- Max. transmission rate 12 Mbit/s possible
- Supply voltage 4.75 5.25 V DC (supplied from the terminal)

### Norm references / Approvals

• IEC 61158, IEC 61784

### Product Make-up

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- 360° shielding due full-metall housing (ZnAI)
- With additional Sub-D port for programming/diagnostic 'PG' (35° and 90° version)
- · With EMC connector protection (PG port)
- M12 version: 5-pin connector, M12 B-coded

- Suitable cables • UNITRONIC® BUS PB M12
- refer to main catalogue • UNITRONIC<sup>®</sup> BUS PB M12-M12
- refer to main catalogue

### Suitable tools

• Kraftform® adjustable torque screwdriver/ Kraftform Kompakt® Set refer to main catalogue

#### **Technical data** Classification ETI M ETIM 5.0 Class-ID: EC001132 ETIM 5.0 Class-Description: D-Sub connector Dimensions $| \heartsuit$ see technical data sheet **Connection type** M12 or Internal spring type terminal **Protection rating** IP IP 30 **Terminating resistor** 150 W Interfaces PROFIBUS station: D-Sub socket, 9-pin PROFIBUS cable:

M12 PROFIBUS cordsets Spring type for solid conductor 0,08 - 0,5 mm<sup>2</sup> (AWG28 - AWG14) Cable diameter: 8 - 9 mm

Permissble ambient conditions Operating temperature: -20°C to +70°C

Article number	Article designation	Connection type	PG-Interface	PU
35° cable outlet				
21700564	ED-PB-35-PG-ST-PRO	Internal spring type	yes	1
21700561	ED-PB-35-PG-M12-PRO	M 12	yes	1
0° cable outlet				
21700565	ED-PB-90-PG-ST-PRO	Internal spring type	yes	1
21700562	ED-PB-90-PG-M12-PRO	M 12	yes	1
80° (AX) cable outlet				
21700566	ED-PB-AX-M12-PRO	Internal spring type	no	1
21700563	ED-PB-AX-M12-PRO	M12	no	1

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### APP GROUP

### Data communication systems

**PROFIBUS Connectors Optical Link Modul** 

Bus system PROFIBUS-DP/FMS/FIP • Sub-D Bus-Connectors

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# ETHERLINE®

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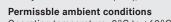
### chnical data Classification **E**TIM ETIM 5.0 Class-ID: EC001132 D-Sub connector





Connection: Sub-D socket, 9-pin FO-cable:

- Polymeric-optical-fiber (POF), 650 nm - Polymer-cladded-fiber (PCF), 650 nm



Operating temperature: 0°C to +60°C

- Info
- · PROFIBUS repeater with integrated optical interface

### **Benefits**

- Easy covering of large distances (PCF 250 m / POF 65 m)
- · Cost-efficient due to quick installation (Plug & Play)
- Galvanic isolation in case of potential differences within PROFIBUS network
- · For EMC critical environments
- Integrated repeater functionality: Regeneration of data signal (slope, power and mark-to-space ratio)

### **Product features**

- Max. distance: POF fiber: 65 m PCF fiber: 250 m
- Diagnostic LEDs (blue, green, red, yellow)
- · Bus termination is integrated
- · Current consumption typ. 100 mA
- Supply voltage 5.0 V DC
- (supplied from the terminal)

### Norm references / Approvals

• IEC 61158, IEC 61784

Article number	Article designation	PG-Interface	Diagnostic LEDs	PU
90° cable outlet				
For HFBR connect	tor			
21700568	ED-PB-90-PG-FO-HFBR-650	yes	yes	1
For SMA connecto	or			
21700569	ED-PB-90-PG-FO-SMA-650	yes	yes	1
For BFOC(ST) con	nector			
21700570	ED-PB-90-PG-FO-BFOC-650	yes	yes	1

Applicable optical connectors (POF) included

Photographs are not to scale and do not represent detailed images of the respective products. Note: For one optical link 2 modules are required

#### Accessories

- PCF Assembly Sets refer to page 302
- PCF Connector HFBR refer to page 301
- PCF Connector F-SMA and ST(BFOC) refer to page 301
- POF Assembly Sets refer to page 299
- POF Connector F-SMA and ST(BFOC) refer to page 297
- POF Connector SC-RJ refer to page 298



		Tec

۲ EPIC<sup>®</sup> Data

RXE

TXD

FO Emer-Active-yellow

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- Improved electromagnetic compatibility (EMC) by metallized housing
- · Versions with additional Sub-D interface for programming/diagnostic ('PG')
- An external 24 V supply is not necessary
- Connection for optical cable (POF or PCF)

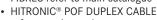
### Suitable cables

Product Make-up

- HITRONIC<sup>®</sup> POF DUPLEX BUFFERED FIBRES refer to main catalogue
- refer to main catalogue HITRONIC<sup>®</sup> POF cables for PROFINET







# Applications refer to main catalogue

- Suitable connectors
- HBFR, SMA and BFOC(ST)

Bus system PROFIBUS-DP/FMS/FIP • M12 Connectors and accessories

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### EPIC® DATA PB M12

Field mountable M12 BUS-connectors, shielded for PROFIBUS



### Benefits

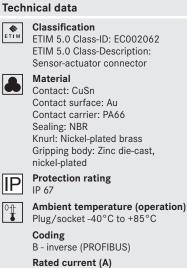
- Quick and easy on-site assembly
- For creating of individual cable lengthsCost efficient and rational wiring for BUS
- installationsSpace-saving due to compact dimensions

### Product features Screened version

- Connector M12, B-coded
- PG9- / PG11-thread
- Screw connection

#### Suitable cables

- Bus system PROFIBUS-DP/FMS/FIP
- UNITRONIC<sup>®</sup> BUS PB M12
  - refer to main catalogue



A A Rated current (A

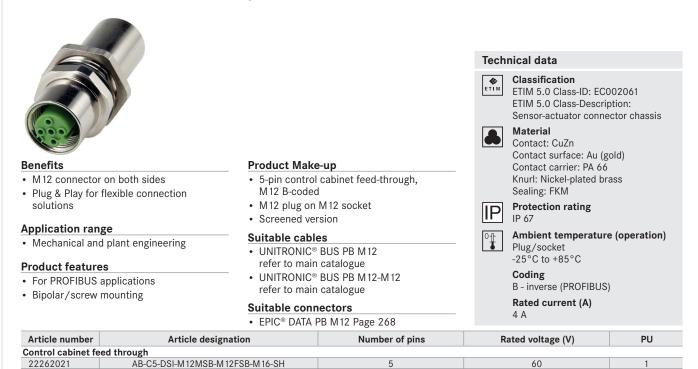
Article number	Article designation	Min. conductor cross-section, flexible, in mm <sup>2</sup>	Max. conductor cross-section, flexible, in mm <sup>2</sup>	Min. conductor cross-section AWG/kcmil	Max. conductor cross-section AWG/kcmil	Min. cable	Max. cable diameter (mm)	PU
Plug, straight	1							
22260653	AB-C5-M12MSB-PG9-SH-AU	0.25	0.75	24	18	6	8.5	1
22262078	AB-C5-M12MSB-PG11-SH-AU	0.25	0.75	24	18	8	10	1
Socket, straig	ght							
22260646	AB-C5-M12FSB-PG9-SH-AU	0.25	0.75	24	18	6	8.5	1
22260889	AB-C5-M12FSB-PG11-SH-AU	0.25	0.75	24	18	8	10	1

Photographs are not to scale and do not represent detailed images of the respective products.

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### EPIC<sup>®</sup> DATA PB M12/M12

PROFIBUS M12 control cabinet feed-through, shielded



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#### For current information see: www.lappgroup.com

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<u>98089</u>

Bus system PROFIBUS-DP/FMS/FIP • M12 Connectors and accessories

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# **EPIC® DATA PB TR M12**

M12 Terminating resistor for PROFIBUS





### Benefits

- · Cost efficient termination of a bus systems
- · Space-saving due to compact dimensions
- Robust design

### Application range

· Mechanical and plant engineering

### Product features

• 150 W terminating resistor for PROFIBUS

### Product Make-up

- Straight connector M12 with integrated termination resistor
- Straight connector M12, with integrated termination resistor, shielded

Tech	nical data
<b>E</b> TIM	Classification ETIM 5.0 Class-ID: EC000448 ETIM 5.0 Class-Description: Terminal resistor
IP	Protection rating IP65/IP67 (plug) IP 67 (socket)
01	Ambient temperature (operation) -25°C to +90°C (plug) -40°C to +85°C (socket)
	Contact material CuSn
	<b>Coding</b> B - inverse (PROFIBUS)
	Rated current (A) 4 A

Article number	Article designation	Number of pins	Rated voltage (V)	PU
Plug, unshielded (te	erminating resistor)			
22260722	AB-C4-M12MS-PB-TR	4	60	5
Socket, shielded (te	erminating resistor)			
22261001	AB-C5-M12FS-PB-TR-SH	4	32	1

Photographs are not to scale and do not represent detailed images of the respective products.

Accessories

EPIC<sup>®</sup> DATA PB M12T refer to page 270

00000 EPIC<sup>®</sup> DATA PB M12T Info M12 T distributor, shielded for PROFIBUS Fully suitable for industrial use 1 1 **Technical data** Classification **♦** E T I M ETIM 5.0 Class-ID: EC002925 3 3 ETIM 5.0 Class-Description: 4 Sensor-actuator adapting connector Material 5 Contact: CuSn Contact surface: Ni/Au Contact carrier: PUR 1 2 3 4 5 Knurl: Nickel-plated brass Gripping body: PUR Sealing: FKM **Protection rating** lΡ **Benefits** Product features IP 67 Cost efficient and rational wiring for · For PROFIBUS stubs Ambient temperature (operation) **PROFIBUS** installations · Screened version Plug/socket · Space-saving due to compact dimensions -25°C to +80°C Product Make-up · Robust design Coding 4-pin PROFIBUS T-connector B - inverse Application range • M12 plug to M12 plug and M12 socket Rated current (A) · Mechanical and plant engineering 4 A

Article number	Article designation	Number of pins	Rated voltage (V)	PU
T distributor				
22260761	AB-C2-M12T-2XM12FS PB	4	60	1

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

EPIC<sup>®</sup> DATA PB TR M12 refer to page 269



### **EPIC® DATA PB CCR**

Cable coupler round, shielded for e.g. sensor /PROFIBUS /CAN cables



#### **Benefits**

- Time-saving assembly with IDC connection technology
- Optimum EMC protection with 360 ° shielding

#### Application range

- To extend existing cable systems
- Repairkit for damaged cables

#### Product features

- 5-pin cable coupler round
- Screened version

#### Suitable cables

 UNITRONIC<sup>®</sup> BUS PB refer to main catalogue

- Technical data
  - Material Contact: CuZn Contact surface: Ni/Au Knurl: Zinc die-cast, nickel-plated Gripping body: Zinc die-cast, nickel-plated

08080 10081

**Protection rating** IP65/IP67

> Ambient temperature (operation) -40°C to +85°C

Rated current (A)

nmunication
PROFIBUS-DP/F

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Article number	Article designation	Number of pins	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Cable coupler rou	ind					
21700641	AB-C5-CCR-SH	5	0,14 - 0,5	5 - 9,7	60	1

CANopen

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Bus system CAN / DeviceNet • Sub-D Bus-Connectors



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EPIC®

EPIC<sup>®</sup> DATA CAN Sub-D

CAN Bus-Connectors with screw connection EPIC® Data EPIC® Data 🏵 ED-CAN-90 Order.-No.: 2170053 ED-CAN-90-PG Order.-No.: 21700536 CAN CAN 

### **Benefits**

- Terminating resistor (integrated) can be switched
- · Sensor/ ac
- · No loose parts
- With additional 24 V DC output to supply external devices (90° version only)

### Product features

- Max. transmission rate 1 Mbit/s possible
- Terminating resistor "ON" the outbound ٠
- bus cable is disconnected The integrated, connectable terminating resistor enable the CAN-Bus to be terminated or

connected through

- Sub-D pin assignment: CAN Low = Pin 2
- CAN High = Pin 7
- CAN Gnd = Pin 3
- GND
- = Pin 6 (90° version only) CAN V+ = Pin 9 (90° version only)
- (shield = housing)

- Norm references / Approvals
- UL File No. E331560

#### Product Make-up

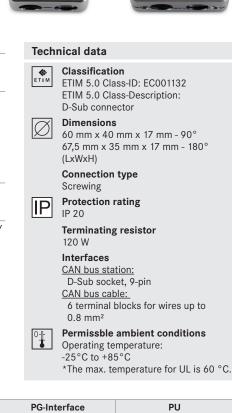
- D-Sub plug, 9-pin, fixing screws 4-40 UNC
- Screw connection
- · Improved electromagnetic compatibility (EMC) by metallized housing
- For cable outer diameter: 5 8 mm

#### Suitable cables

Bus system CAN / DeviceNet

#### Suitable tools

 Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue



Article number	Article designation	Cable outlet	PG-Interface	PU
Sub-D connector				
21700537	ED-CAN-90	90°	no	1
21700536	ED-CAN-90-PG	90°	yes	1
21700538	ED-CAN-AX	180° axial	no	1

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DeviceNet. CANODRA

Bus system CAN / DeviceNet • Sub-D Bus-Connectors

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### EPIC<sup>®</sup> DATA CAN Sub-D PRO

CAN Bus-Connectors full-metall



### Benefits

- High flexibility by extended cable clamping range
- Cost-saving due to quick and easy installation
- Robust housing material for harsh environments
- For EMC critical environments

### Product features

- Extended temperature range
- High mechnical strength (200 contact durability)
- Less transmission loss
- Less transmission loss
   Pue terminetion in integr
- Bus termination is integrated
- Sub-D pin assignment: CAN Low = Pin 2 CAN High = Pin 7 CAN Gnd = Pin 3 GND = Pin 6 (90° version only) CAN V+ = Pin 9 (90° version only) (shield = housing)

### Product Make-up

- D-Sub plug, 9-pin, fixing screws 4-40 UNC
  - 360° shielding due full-metall housing (ZnAl)
- External cable clamp connection (7 - 10 mm)
- 90° version: With additional Sub-D port for programming/diagnostic ('PG')
- 90° version: PG port with undetachable EMC Sub-D protection

### Suitable cables

- UNITRONIC<sup>®</sup> DeviceNet THICK + THIN refer to main catalogue
- UNITRONIC<sup>®</sup> BUS CAN
   refer to main catalogue
- UNITRONIC<sup>®</sup> DeviceNet FD THICK+THIN refer to main catalogue
- UNITRONIC<sup>®</sup> BUS CAN FD P refer to main catalogue
- UNITRONIC<sup>®</sup> BUS CAN TRAY refer to main catalogue
- UNITRONIC<sup>®</sup> BUS CAN BURIAL refer to main catalogue

### Suitable tools

 Kraftform<sup>®</sup> adjustable torque screwdriver/ Kraftform Kompakt<sup>®</sup> Set refer to main catalogue



- High EMC protection
- · For cable diameters up to 10 mm

#### **Technical data** Classification **E**TIM ETIM 5.0 Class-ID: EC001132 ETIM 5.0 Class-Description: D-Sub connector Dimensions 63 x 45 x 18 - 90° 81 x 36 x 15 - 180° (LxWxH) **Connection type** Screwing **Protection rating** ||P| IP 30 Terminating resistor 120 W Interfaces CAN-Bus station: D-SUB socket, 9-pin CAN-Bus cable:

- srew terminals for wires 0.14 - 0.5 mm<sup>2</sup>

Permissble ambient conditions Operating temperature: -20°C to +70°C

Article number	Article designation	Cable outlet	PG-Interface	PU
Sub-D connector				
21700590	ED-CAN-90-PG-PRO	90°	yes	1
21700591	ED-CAN-AX-PRO	180° axial	no	1

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Bus system CAN / DeviceNet • M12 Connectors and accessories

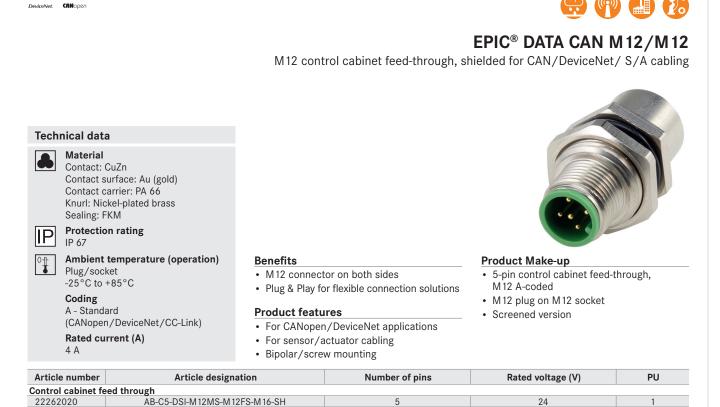
DeviceNet C 🗃 A CANOpen

#### EPIC<sup>®</sup> DATA CAN M12 Field mountable M12 BUS-connectors shielded for DeviceNet/CANopen **Technical data Connection type** Screwing Material Contact: CuSn Contact surface: Au Contact carrier: PA66 Sealing: NBR Knurl: Nickel-plated brass Gripping body: Zinc die-cast, nickel-plated **Protection rating** IP IP 67 Ambient temperature (operation) Plug/socket -40°C to +85°C **Benefits** Product Make-up Coding · Quick and easy on-site assembly • M12 plug, 5-pins, A-coded A - Standard · For creating of individual cable lengths Screw connection (CANopen/DeviceNet/CC-Link) · Cost efficient and rational wiring for BUS • PG9 thread Rated current (A) installations · Screened version 4 A · Space-saving due to compact dimensions

Article number	Article designation	Connection type	Number of pins	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Plug, straight							
22260135	AB-C5-M12MS-PG9-SH	screw	5	0.25 - 0.75	6.0 - 8.0	60	1
Socket, straight							
22260136	AB-C5-M12FS-PG9-SH	screw	5	0.25 - 0.75	6.0 - 8.0	60	1

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### Bus system CAN / DeviceNet • M12 Connectors and accessories



A - Standard (CANopen/DeviceNet)

DeviceNet. CANopen

Rated current (A)

4 A

**Technical data** 

**С**ТІМ

Classification

Material Contact: CuZn

ETIM 5.0 Class-ID: EC002925 ETIM 5.0 Class-Description: Sensor-actuator adapting connector

Contact surface: Ni/Au Contact carrier: TPU GF Knurl: Zinc die-cast, nickel-plated Gripping body: TPU, flame-retardant,

self-extinguishing

**Protection rating** IP65/IP67

Ambient temperature (operation)

Plug/socket -25°C to +90°C

(CANopen/DeviceNet/CC-Link)

Sealing: NBR

Coding

4 A

A - Standard

Rated current (A)

00000 CANopen DeviceNet. **EPIC® DATA CAN TR M12** M12 Terminating resistor for DeviceNet/CANopen Info · Fully suitable for industrial use **Technical data** Classification E T I M ETIM 5.0 Class-ID: EC000448 ETIM 5.0 Class-Description: Terminal resistor **Protection rating** lΡ IP65/IP67 Ambient temperature (operation) Benefits Product features -25°C to +90°C · Cost efficient termination of a bus systems 120 W terminating resistor for DeviceNet/ **Contact material** CANopen · Space-saving due to compact dimensions CuSn · Robust design Coding

#### Application range

· Mechanical and plant engineering

#### **Product Make-up**

Straight connector M12 with integrated termination resistor

Article number	Article designation	Number of pins	Rated voltage (V)	PU
Plug, unshielded (	(terminating resistor)			
22260766	AB-C5-M12MS-DN-TR	5	60	5

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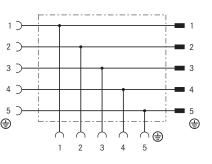
#### Accessories

EPIC<sup>®</sup> DATA CAN M12T refer to page 274

### EPIC<sup>®</sup> DATA CAN M12T

M12 T parallel distributor for CAN/ DeviceNet/ S/A cabling





#### Benefits

- Cost-effective, efficient wiring of fieldbus and sensor/ actuator installations
- · Space-saving due to compact dimensions · Robust design
- Product Make-up

Product features

• PWIS-free

- 5-pin parallel distributor
- M12 socket on M12 plug and M12 socket

• For CANopen/DeviceNet applications

		1 0		
Article number	Article designation	Number of pins	Rated voltage (V)	PU
T distributor				
22260765	AB-C5-M12T-2XM12FS DN	5	60	5

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Bus system CAN / DeviceNet • M12 Connectors and accessories

DeviceNet. CANopen

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### **EPIC® DATA CAN CCR**

Cable coupler round, shielded for e.g. sensor / PROFIBUS / CAN cables



### Benefits

- Product features
  - 5-pin cable coupler round
  - Screened version
- Time-saving assembly with IDC connection technology
- Optimum EMC protection with 360  $^\circ$  shielding

### Application range

- To extend existing cable systems
- Repairkit for damaged cables

	Contact: CuZn Contact surface: Ni/Au Knurl: Zinc die-cast, nickel-plated Gripping body: Zinc die-cast, nickel-plated
ΙP	Protection rating IP65/IP67
0	Ambient temperature (operation) -40°C to +85°C
	Rated current (A) 4 A

**Technical data** 

Material

**e**tim

Classification

ETIM 5.0 Class-ID: EC002062

ETIM 5.0 Class-Description:

Sensor-actuator connector

Article number	Article designation	Number of pins	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Cable coupler rou	Cable coupler round					
21700641	AB-C5-CCR-SH	5	0.14 - 0.50	5.0 - 9.7	60	1

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**UNITRONIC®** 

**EPIC® SENSOR M8** 

Field mountable connectors M8

Sensor/actuator cabling • M8 Field mountable connectors and wall ducts

EPIC®



### Benefits

- Easy connection with proven srew clamp connection
- For creating of individual cable lengths
- Quick and easy on-site assembly
- No special tools required for connecting the cables
- Time-saving assembly with IDC connection technology

### **Product features**

- 3 and 4-pin version
- Version with piercing, insulation displacement contacts (IDC) or screw connection
- PWIS-free

### Suitable cables

- UNITRONIC<sup>®</sup> SENSOR refer to main catalogue
- UNITRONIC<sup>®</sup> SENSOR FD
- refer to main catalogue
- UNITRONIC<sup>®</sup> ROBUST S/A FD refer to main catalogue

### **Technical data**

Classification ETIM 5.0 Class-ID: EC002062

ETIM 5.0 Class-Description: Sensor-actuator connector Material

Contact: CuZn Contact surface: Au (gold)

Protection rating IP 65/IP 67 (IDC) IP 68 (piercing) IP 67 (screw)

**IP** 



-40°C to +85°C (screw)

Coding A-standard

Rated current (A)

4 A

Article number	Article designation	Number of pins	Connection type	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Plug, straight		•					
22260993	AB-C3-M8MS-F0,25	3	IDC	0.08 - 0.25	2.5 - 5	60	1
22260985	AB-C3-M8MS-F0,5	3	IDC	0.25 - 0.5	2.5 - 5	60	1
22260043	AB-C4-M8MS-F0,25	4	IDC	0.08 - 0.25	2.5 - 5	30	1
22260044	AB-C4-M8MS-F0,5	4	IDC	0.25 - 0.5	2.5 - 5	30	1
22260122	AB-C3-M8MS-P	3	Piercing	0.14 - 0.38	3 - 5	60	1
22260123	AB-C4-M8MS-P	4	Piercing	0.14 - 0.38	3 - 5	30	1
22260120	AB-C3-M8MS	3	screw	0.14 - 0.5	3.5 - 5	60	1
22260121	AB-C4-M8MS	4	screw	0.14 - 0.5	3.5 - 5	30	1
Plug, straight shie	elded						
22262025	AB-C3-M8MS-M-0,34-SH	3	screw	0.14 - 0.5	3.5 - 5.5	60	1
22262027	AB-C4-M8MS-M-0,34-SH	4	screw	0.14 - 0.5	3.5 - 5	30	1
Plug, angled							
22262110	AB-C3-M8MA	3	screw	0.14 - 0.5	3.5 - 5	60	1
22262111	AB-C4-M8MA	4	screw	0.14 - 0.5	3.5 - 5	30	1
Socket, straight							
22260994	AB-C3-M8FS-F0,25	3	IDC	0.08 - 0.25	2.5 - 5	60	1
22260986	AB-C3-M8FS-F0,5	3	IDC	0.25 - 0.5	2.5 - 5	60	1
22260045	AB-C4-M8FS-F0,25	4	IDC	0.08 - 0.25	2.5 - 5	30	1
22260046	AB-C4-M8FS-F0,5	4	IDC	0.25 - 0.5	2.5 - 5	30	1
22260124	AB-C3-M8FS-P	3	Piercing	0.14 - 0.38	3 - 5	60	1
22260119	AB-C4-M8FS-P	4	Piercing	0.14 - 0.38	3 - 5	30	1
22260125	AB-C3-M8FS	3	screw	0.14 - 0.5	3.5 - 5	60	1
22260126	AB-C4-M8FS	4	screw	0.14 - 0.5	3.5 - 5	30	1
Socket, straight s	hielded						
22262026	AB-C3-M8FS-M-0,34-SH	3	screw	0.14 - 0.5	3.5 - 5.5	60	1
22262028	AB-C4-M8FS-M-0,34-SH	4	screw	0.14 - 0.5	3.5 - 5.5	30	1
Socket, angled							
22262112	AB-C3-M8FA	3	screw	0.14 - 0.5	3.5 - 5	60	1
22262113	AB-C4-M8FA	4	screw	0.14 - 0.5	3.5 - 5	30	1

**Benefits** 

device concepts

Application range

· Flexible connection solutions for individual

• Simple installation in devices (e.g. cabinet)

· Connection of enclosures and cabinets

Sensor/actuator cabling • M8 Field mountable connectors and wall ducts



### **EPIC® SENSOR Flush-type M8**

UNITRONIC®

EPIC®

Ambient temperature (operation) Plug/socket -25°C to +85°C

Coding

**Technical data** 

**е**тім

IΡ

Classification

Contact: CuSn

Contact surface: Ag

**Protection rating** 

Material

IP 67

ETIM 5.0 Class-ID: EC002061

ETIM 5.0 Class-Description: Sensor-actuator connector chassis

A-standard

Rated current (A) 4 A

Article number	Article designation	Number of pins	Rated voltage (V)	PU
Panel-mount conn	ector male	· · · · ·		
22260100	AB-C3-M8MS-0,5	3	60	1
22260101	AB-C4-M8MS-0,5	4	30	1
Panel-mount conn	ector female			
22260102	AB-C3-M8FS-0,5	3	60	1
22260103	AB-C4-M8FS-0,5	4	30	1

Copper price basis: inclusive of copper. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges. Photographs are not to scale and do not represent detailed images of the respective products.

**Product features** 

Product Make-up

• PWIS-free

· M8 fastening thread

• Designs for front mounting

• TPE single strands, I = 0.5 m

Core cross section: 0.25 mm<sup>2</sup>

#### Accessories

Matching fitting nut: 22260104

Sensor/actuator cabling • M12 Field mountable connectors and wall ducts



### **EPIC® SENSOR M12**

Field mountable connectors M12



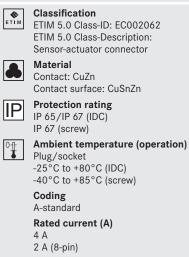
### Benefits

- For creating of individual cable lengths
- Quick and easy on-site assembly
- No special tools required for connecting the cables
- Time-saving assembly with IDC connection technology
- Easy connection with proven srew clamp connection

### Product features

- 4, 5 and 8-pin version
- Screened and non-screened version
- Screw connection or insulation displacement contacts (IDC)
- PWIS-free

### **Technical data**



Article number	Article designation	Number of pins	Connection type	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Plug, straight		•					
22260132	AB-C4-M12MS-F0,34	4	IDC	0.14 - 0.34	3.5 - 6	125	1
22260134	AB-C4-M12MS-F0,75	4	IDC	0.34 - 0.75	4 - 8	250	1
22260649	AB-C4-M12MS-PG7	4	screw	0.25 - 0.75	4 - 6	250	1
22260995	AB-C4-M12MS-PG9	4	screw	0.25 - 0.75	6 - 8	250	1
22260129	AB-C5-M12MS-PG7	5	screw	0.25 - 0.75	4 - 6	60	1
22260651	AB-C5-M12MS-PG9	5	screw	0.25 - 0.75	6 - 8	60	1
22260996	AB-C5-M12MS-PG9-SKINTOP®	5	screw	0.25 - 0.75	6 - 8	60	1
Plug, straight shie	elded				· · ·		
22260135	AB-C5-M12MS-PG9-SH	5	screw	0.25 - 0.75	6 - 8	60	1
22260825	AB-C8-M12MS-PG9-SH	8	screw	0.25 - 0.75	6 - 8	30	1
Plug, angled					· · · · · ·		
22260647	AB-C4-M12MA-PG7	4	screw	0.25 - 0.75	4 - 6	250	1
22260130	AB-C5-M12MA-PG7	5	screw	0.25 - 0.75	4 - 6	60	1
22260648	AB-C5-M12MA-PG9	5	screw	0.25 - 0.75	6 - 8	60	1
22262023	AB-C5-M12MA-PG9-SKINTOP®	5	screw	0.25 - 0.75	6 - 8	60	1
Plug angled, shiel	lded						
22262108	AB-C5-M12MA-PG7-SH	5	screw	0.25 - 0.75	4 - 6	60	1
Socket, straight	·				· · · · ·		-
22260131	AB-C4-M12FS-F0,34	4	IDC	0.14 - 0.34	3.5 - 6	125	1
22260133	AB-C4-M12FS-F0,75	4	IDC	0.34 - 0.75	4 - 8	250	1
22260640	AB-C4-M12FS-PG7	4	screw	0.25 - 0.75	4 - 6	250	1
22260641	AB-C4-M12FS-PG9	4	screw	0.25 - 0.75	6 - 8	250	1
22260127	AB-C5-M12FS-PG7	5	screw	0.25 - 0.75	4 - 6	60	1
22260644	AB-C5-M12FS-PG9	5	screw	0.25 - 0.75	6 - 8	60	1
22260997	AB-C5-M12FS-PG9-SKINTOP®	5	screw	0.25 - 0.75	6 - 8	60	1
Socket, straight s	hielded						
22260136	AB-C5-M12FS-PG9-SH	5	screw	0.25 - 0.75	6 - 8	60	1
22260826	AB-C8-M12FS-PG9-SH	8	screw	0.25 - 0.75	6 - 8	30	1
Socket, angled							
22260636	AB-C4-M12FA-PG7	4	screw	0.25 - 0.75	4 - 6	250	1
22260128	AB-C5-M12FA-PG7	5	screw	0.25 - 0.75	4 - 6	60	1
22260638	AB-C5-M12FA-PG9	5	screw	0.25 - 0.75	6 - 8	60	1
22262024	AB-C5-M12FA-PG9-SKINTOP®	5	screw	0.25 - 0.75	6 - 8	60	1
Socket angled, sh	ielded						
22262109	AB-C5-M12FA-PG7-SH	5	screw	0.25 - 0.75	4 - 6	60	1

Photographs are not to scale and do not represent detailed images of the respective products.

**ETHERLINE®** 

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EPIC®

Sensor/actuator cabling • M12 Field mountable connectors and wall ducts

### EPIC<sup>®</sup> SENSOR M12 V4A

Field mountable connectors M12 for Food & Beverage/ Outdoor



Article number	Article designation	Number of pins	Cross-section in mm <sup>2</sup>	Cable diameter in mm	Rated voltage (V)	PU
Plug, straight						
22262049	AB-C4-M12MS-PG7-VA	4	0.25 - 0.75	4 - 6	250	1
22262123	AB-C4-M12MS-PG7-VA-SKINTOP	4	0.25 - 0.75	4.0 - 6.5	250	1
Socket, straight						
22262050	AB-C4-M12FS-PG7-VA	4	0.25 - 0.75	4 - 6	250	1
22262124	AB-C4-M12FS-PG7-VA-SKINTOP	4	0.25 - 0.75	4.0 - 6.5	250	1
Socket angled						
22262051	AB-C4-M12FA-PG7-VA	4	0.25 - 0.75	4 - 6	250	1

Photographs are not to scale and do not represent detailed images of the respective products.

AB-C5-DSI-M12MS-M12FS-M16-SH

Photographs are not to scale and do not represent detailed images of the respective products.

CANOpe DeviceNet.

22262020



### EPIC<sup>®</sup> SENSOR M12/M12

M12 control cabinet feed-through, shielded for CAN/DeviceNet/ S/A cabling

24

Technical data					
ETIM 5.0 C	<b>tion</b> Class-ID: EC002061 Class-Description: Luator connector chassis				
Contact: C Contact su Contact ca	urface: Au (gold) urrier: PA 66 cel-plated brass				
IP 67	n rating				
Ambient t Plug/socke -25°C to +		Benefits Plug & Play for flexible connect			ol cabinet feed-through,
<b>Coding</b> A - Standar		<ul> <li>M12 connector on both sides</li> <li>Product features</li> <li>For CANopen/DeviceNet app</li> </ul>		M 12 A-code • M 12 plug o • Screened v	n M12 socket
Rated cur 4 A	rent (A)	<ul> <li>For sensor/actuator cabling</li> <li>Bipolar/screw mounting</li> </ul>	louiono		
Article number	Article designation	Number of pins	Rated volt	age (V)	PU

Control cabinet feed through

5

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Sensor/actuator cabling • M12 Field mountable connectors and wall ducts



### EPIC<sup>®</sup> SENSOR Flush-type M12

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EPIC®

### Benefits

- · Flexible connection solutions for individual device concepts
- · Simple installation in devices (e.g. cabinet)
- Outside plugable with M12 connection,
- inside housing connected with fixed wires

### Application range

· Connection of enclosures and cabinets

### Product features

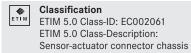
- With M12, M16 or PG9 fastening thread
- Designs for front and rear wall-mounting
- M12 connector, A-coded with quick-locking system
- PWIS-free
- Rear wall-mounting versions inclusive fitting nut

### Norm references / Approvals

• UL File Number: E249137

### Product Make-up

- TPE single strands, I = 0.5 m  $\,$
- Wire cross-section: 0,34 mm<sup>2</sup>



|IP

°‡

**Technical data** 

Material Contact: CuZn Contact surface: Au (gold)

**Protection rating** IP 67

Ambient temperature (operation) Plug/socket -25°C to +85°C

Coding A-standard

Rated current (A)

4 A

Article number	Article number Article designation		Fastening thread	Rated voltage (V)	PU	
Plug for front-mou	Inting					
22260108	AB-C4-M12MS-M16-0,5	4	M16	250	1	
22260106	AB-C5-M12MS-M16-0,5	5	M 16	60	1	
22260083	AB-C4-M12MS-M16-PO-0,5	4	M16 positionable	250	1	
22260084	AB-C5-M12MS-M16-PO-0,5	5	M16 positionable	60	1	
22260113	AB-C4-M12MS-PG9-0,5	4	PG9	250	1	
22260112	AB-C5-M12MS-PG9-0,5	5	PG9	60	1	
22260087	AB-C4-M12MS-PG9-PO-0,5	4	PG9 positionable	250	1	
22260088	AB-C5-M12MS-PG9-PO-0,5	5	PG9 positionable	60	1	
Plug for rear-mou	nting					
22260999	AB-C4-DSI-M12MS-M12-0,5	4	M 12	250	1	
22260117	AB-C4-DSI-M12MS-PG9-0,5	4	PG9	250	1	
22260115	AB-C5-DSI-M12MS-PG9-0,5	5	PG9	60	1	
Socket for front-m	ounting					
22260107	AB-C4-M12FS-M16-0,5	4	M 16	250	1	
22260105	AB-C5-M12FS-M16-0,5	5	M16	60	1	
22260085	AB-C4-M12FS-M16-PO-0,5	4	M16 positionable	250	1	
22260086	AB-C5-M12FS-M16-PO-0,5	5	M16 positionable	60	1	
22260114	AB-C4-M12FS-PG9-0,5	4	PG9	250	1	
22260111	AB-C5-M12FS-PG9-0,5	5	PG9	60	1	
22260089	AB-C4-M12FS-PG9-PO-0,5	4	PG9 positionable	250	1	
22260090	AB-C5-M12FS-PG9-PO-0,5	5	PG9 positionable	60	1	
Socket for rear-me	ounting					
22260118	AB-C4-DSI-M12FS-PG9-0,5	4	PG9	250	1	
22260116	AB-C5-DSI-M12FS-PG9-0,5	5	PG9	60	1	

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Copper price basis: inclusive of copper. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges. Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

• Matching fitting nut: 22261062 (M12), 52003500 (PG9), 22260110 (M16)







Sensor/actuator cabling • M12 Field mountable connectors and wall ducts

4 A

DeviceNet. CANopen

Benefits

Robust design

### **EPIC® SENSOR M 12T**



Article number	Article designation	Number of pins	Rated voltage (V)	PU
T distributor				
22260765	AB-C5-M12T-2XM12FS DN	5	60	5

Photographs are not to scale and do not represent detailed images of the respective products.

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### EPIC<sup>®</sup> SENSOR CCR

Cable coupler round, shielded for e.g. sensor /PROFIBUS /CAN cables



Benefits

- · Optimum EMC protection with 360 ° shielding
- Time-saving assembly with IDC connection technology

Cross-section in mm<sup>2</sup>

0,14 - 0,50

### Application range

- · To extend existing cable systems
- · Repairkit for damaged cables

### **Product features**

Number of pins

5

- · 5-pin cable coupler round Screened version
- Material Contact: CuZn Contact surface: Ni/Au Knurl: Zinc die-cast, nickel-plated Gripping body: Zinc die-cast, nickel-plated **Protection rating** lΙΡ IP65/IP67 Ambient temperature (operation) -40°C to +85°C Rated current (A) 4 A Cable diameter in mm Rated voltage (V) 5,0 - 9,7 60

**Technical data** 

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DeviceNet is a registered trademark of ODVA

Article number

Cable coupler round 21700641

Photographs are not to scale and do not represent detailed images of the respective products.

Article designation

AB-C5-CCR-SH

### Data communication systems

Sensor/actuator cabling • Y connectors



### EPIC<sup>®</sup> SENSOR M8Y | M12Y

Y distributor M8 | M12



### Benefits

- Cost-saving due to quick and easy installation
- · Space-saving due to compact dimensions
- · Fast and easy error tracking

### Product features

- · Design: Plug on 2x socket
- M12 design with screw hole
- · PWIS-free

### Product Make-up

- 22260600:
- M12, 3-pin+ PE, straight M12 plug on 2x straight M12 socket, pin 2+4 bridged
- 22260601:
- M12, 3-pin+ PE, straight M12 plug on 2x straight M12 socket
- 22260602:
- M12, 5-pin straight M12 plug on 2x 3-pin straight M8 socket, parallel distributor 22260603:
- M8, 4-pin M8 plug on 2x 3pin M8 socket
- 22260604:
- M8 plug on M8 socket, 3-pin parallel distributor

ETIM	ETIM 5.0 Class-ID: EC002925							
	ETIM 5.0 Class-Description:							
	Sensor-actuator adapting connector							

Classification

**Technical data** 

Material Contact: CuZn Contact surface: Ni/Au Knurl: Zinc die-cast, nickel-plated Gripping body: TPU, flame-retardant, self-extinguishing

Protection rating IΡ IP65/IP67



Coding A-standard

Rated current (A)

4 A 3 A (M8)

Article number Article designation Rated voltage (V) PU M12 Y distributor 22260600 AB-C3-M12Y-2XM12FS B E 60 5 22260601 AB-C3-M12Y-2XM12FS E 60 22260602 AB-C5-M12Y-2XM12FS V 60 5 M8 Y distributor 30 AB-C3-M8Y-2XM8FS 22260603 5 22260604 AB-C3-M8Y-2XM8FS V 60

Photographs are not to scale and do not represent detailed images of the respective products.

DeviceNet. CANopen

Sensor/actuator cabling • M12 Connectors for power transmission (T-coded)



# 2000

### EPIC® POWER M12 60V / EPIC® POWER M12 60V flush-type connectors

Field mountable M12 POWER connectors

- Info
- DC high-power connector - 60 VDC / 12 A



EPIC<sup>®</sup> POWER M12 60V



EPIC® POWER M12 60V flush-type connectors

UNITRONIC®

ETHERLINE

HITRONIC

#### Benefits

- Compact and standardized M12 design saves space and costs
- Fault proof connection through M12 T coding of the connector face
- Low voltage drop
- Safety use in field environment by high protection class

### Application range

- Power Supply for small devices
- Tool shop
- Wiring of machines, tools, devices, appliances and control cabinets
- Suitable for use in measuring, control and regulating circuits

#### Product features EPIC<sup>®</sup> POWER M12 60V

- Robust M12 circular connector with screw connection and knurled srew
- Screw-locking connection, to be connected to different conductor
- For conductor cross-section 0.75 1.5 mm<sup>2</sup> (AWG 18 - AWG 16)

# EPIC<sup>®</sup> POWER M12 60V flush-type connectors

- Designs for front mounting
- Flush type connector with M16 thread and preharnessed wires
- Flush-type connector with M20 thread with screw contacts
- Contact durability: > 100

### Norm references / Approvals

• UL File Number: E249137

### Product Make-up

### EPIC<sup>®</sup> POWER M12 60V flush-type connectors

- PVC single stranded wires, I = 0.2 m (4x AWG 16)
- 4-pin: bn (1), wh (2), bu (3), bk (4)
- High quality gold-plated contacts
- For screw contacts: 0,75 mm<sup>2</sup> 1,5 mm<sup>2</sup> (AWG 18 - AWG 16)

### Suitable cables

#### EPIC<sup>®</sup> POWER M12 60V

- ÖLFLEX<sup>®</sup> FD 855 P refer to main catalogue
- (ÖLFLEX<sup>®</sup> FD 855 P: Example for harsh conditions)

# EPIC<sup>®</sup> POWER M12 60V flush-type connectors

 ÖLFLEX® FD 855 P refer to main catalogue
 (MULTI-STANDARD SC 2.1.: Example for panel mount connectors with screw terminals)

#### Suitable connectors

### EPIC<sup>®</sup> POWER M12 60V flush-type connectors

- EPIC® POWER M12 60V Page 283
- **Technical data** Classification ETIM EPIC® POWER M12 60V ETIM 5.0 Class-ID: EC002062 ETIM 5.0 Class-Description: Sensor-actuator connector EPIC® POWER M12 60V flush-type connectors ETIM 5.0 Class-ID: EC002061 ETIM 5.0 Class-Description: Sensor-actuator connector chassis Material EPIC® POWER M12 60V Contact: CuZn Contact surface: Au (gold) Knurl: Zinc die-cast, nickel-plated Gripping body: PA EPIC® POWER M12 60V flush-type connectors Contact: CuZn Contact surface: Au (gold) **Protection rating** lΡ IP 67 Ambient temperature (operation) Plug/socket -40°C to +85°C Coding T - Power Rated current (A) 12 A

Article number	Article designation	Design	Number of pins	Cable diameter in mm	Rated voltage (V)	PU
EPIC <sup>®</sup> POWER M12	2 60V					
Plug						
22262010	AB-C4-M12MST-PG11	straight	4	8.0 - 10.0	60	1
22262012	AB-C4-M12MAT-PG11	angled	4	8.0 - 10.0	60	1
Socket						
22262011	AB-C4-M12FST-PG11	straight	4	8.0 - 10.0	60	1
22262013	AB-C4-M12FAT-PG11	angled	4	8.0 - 10.0	60	1
EPIC® POWER M12	2 60V flush-type connectors	, male				
Screw connection						
22262014	AB-C4-M12MST-M20-PO	M20 thread	4		60	1
With PVC single c	ores					
22262016	AB-C4-M12MST-M16-0,2	M16 thread	4		60	1
EPIC <sup>®</sup> POWER M12	2 60V flush-type connectors	s, female				
Screw connection						
22262015	AB-C4-M12FST-M20-PO	M20 thread	4		60	1
With PVC single c	ores					
22262017	AB-C4-M12FST-M16-0,2	M16 thread	4		60	1
Photographs are not to	scale and do not represent detaile	d images of the respect	tive products.			

Photographs are not to scale and do not represent detailed images of the respective pro

### Accessories

EPIC® POWER M12 60V flush-type connectors

• SKINDICHT<sup>®</sup> SM-M refer to main catalogue



### EPIC® DATA Connectors for industrial Ethernet systems

In recent years, data communication systems based on Ethernet technology have become increasingly prevalent in industrial applications. The advantages of this are clear: with Ethernet technology, the fields of industrial machinery and plant engineering benefit from innovations from the IT sector. Simple interconnection via the internet becomes possible. The networks that can be created are practically limitless, when compared to the fieldbuses previously employed, and the complexity resulting from multiple, incompatible fieldbus systems is reduced.

To prevent failures, downtimes and quality issues, you can rely on the integrated, high-quality cabling and connection systems offered by the Lapp Group. Our wide range of EPIC<sup>®</sup> data connectors is subjected to stringent checks in our test centre and laboratory. Do you require Ethernet connectors to suit exacting requirements, covering a diverse range of applications, suitable for harsh environmental conditions or with international approval?

Our range includes the perfect Ethernet connector for any industrial application – be it the RJ45 commonly used in offices or the M12 that has become standard in industrial environments. Thanks to the user organisations for industrial communication systems such as PROFINET<sup>®</sup>, ETHERCAT<sup>®</sup> and EtherNet/IPTM, various connectors have been standardised. Our connector solutions support system-compliant network creation. Ethernet connectors from Cat.5 to Cat.6A enable data rates of up to 10Gbit/s.

Lapp ensures that every connector can be easily attached to the corresponding cable – without the use of special tools where possible. When connectors need to be routed through a control cabinet wall, panel feed-throughs with an IP67 protection rating are an ideal solution. This enables the creation of continuous Ethernet cabling from the devices in the control cabinet up to the field devices. If you do not wish to establish your own connections, but instead require a robust, fully assembled connection solution, you can use our ETHERLINE<sup>®</sup> preassembled cables with extruded connectors.

# Connectors for Ethernet technology at a glance

No.	Cable type	Max. Ø- cable	Category	Core dimension	Article designation	Article number	Page	
				RJ45 male c	onnector			
1	flexible	5.8 mm	Cat.5	AWG26	RJ45 connector TM11 Hirose, beige	CE6321	292	
2	flexible	5.72 mm	Cat.5	AWG26	RJ45 Steckverbinder Stewart, grey	CE6323	292	
3	solid + flexible	6.6 mm	Cat.6	AWG27 - 24	RJ45 connector TM21 Hirose, beige	CE6324	293	No.
4	solid + flexible	8 mm	Cat.5e	AWG26 - 22	RJ45 connector FM45	21700540	292	
5	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	7 - 22 TIA568A ED-IE-AX-6A-A-20-FC		287	
6	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG26 - 24 flexible: AWG27 - 24	RJ45-connector, straight, Cat.6 <sub>A</sub> TIA568A ED-IE-AX-6A-A-20-FD-FC	21700615	287	
7	solid + flexible	10 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	RJ45-connector, angled, Cat.6 <sub>A</sub> TIA568A ED-IE-90-6A-A-20-FC	21700636	288	T-1
8	solid + flexible	10 mm	Cat.6 <sub>A</sub>	solid: AWG26 - 24 fle- xible: AWG27 - 24	RJ45-connector, angled, Cat.6 <sub>A</sub> TIA568A ED-IE-90-6A-A-20-FD-FC	21700639	288	
9	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG26 - 24 fle- xible: AWG27 - 24	RJ45-connector, straight, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-6A-B-20-FC	21700601	287	
10	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	RJ45-connector, straight, Cat.6 <sub>A</sub> TIA568B ED-IE-90-6A-B-20-FD-FC	21700616	287	
11	solid + flexible	10 mm	Cat.6 <sub>A</sub>	solid: AWG26 - 24 fle- xible: AWG27 - 24		21700637	288	-
12	solid + flexible	10 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	RJ45-connector, angled, Cat.6 <sub>A</sub> TIA568B ED-IE-90-6A-B-20-FD-FC	21700640	288	
13	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	Circular connector IP68 (incl. 21700601) ED-IE-AX-RJ45-6A-B-68-FC	21700630	289	as
14	solid + flexible	9 mm	Cat.5e	solid: AWG24 - 22	RJ45-connector, straight, Cat.5e, PROFINET®	21700605	286	
15	solid + flexible	10 mm	Cat.5e	flexible: AWG27 - 22 solid: AWG24 - 22	ED-IE-AX-5-PN-20-FC RJ45 connector, angled, Cat.5e, PROFINET®	21700638	286	C
				flexible: AWG27 – 22 M12 male co	ED-IE-90-6A-PN-20-FC			C.
			a ( -		M12 D-coded, Cat.5e, PROFINET®			
16	solid + flexible	9.7 mm	Cat.5e	AWG26 - 22	ED-IE-AX-M12D-5-PN-67-FC	21700647	290	
17	solid + flexible	6.3 mm	Cat.5e	AWG26 - 22	M12 D-coded, Cat.5e TIA568B ED-IE-AX-M12D-5-67	21700648	290	
18	solid + flexible	9.7 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	M12 X-coded, Cat.6 TIA568B ED-IE-AX-M12X-6A-67-FC	21700602	290	
19	solid + flexible	6.3 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	M12 X-coded, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-M12X-6A-67-FC-S	21700644	290	000
				M12 female of	connector			
20	flexible	8 mm	Cat.5e	AWG26 - 22	M12 D-coded, Cat.5e TIA568B AB-C4-M12FSD-SH	22261016	290	
21	solid + flexible	9.7 mm	Cat.6 <sub>A</sub>	solid: AWG24-22 fle- xible: AWG27-22	M12 X-coded, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-M12XF-6A-67-FC	21700621	290	
22	solid + flexible	6.3 mm	Cat.6 <sub>A</sub>	solid: AWG24-22 fle- xible: AWG27-22	M12 X-coded, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-M12XF-6A-67-FC-S	21700645	290	
23	solid + flexible	9.7 mm	Cat.6	solid: AWG24-22 fle-	M12 X-coded, for rear-mounitng, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-M12XF-RM-6A-67-FC	21700622	290	a .
24	solid + flexible	6.3 mm	Cat.6	xible: AWG27-22 solid: AWG24-22 fle-	M12 X-coded, for rear-mounitng, Cat.6 <sub>A</sub>	21700646	290	
-			A	xible: AWG27-22 Cable co	TIA568B ED-IE-AX-M12XF-RM-6A-67-FC-S			
25	solid + flexible	9.7 mm	Cat.7 <sub>A</sub>	AWG26 - 22	Cable coupler round EPIC® DATA CCR FA	21700623	291	
				RJ45 female	connector			
26	solid	-	Cat.6	AWG24 - 22	LANmark-6 EVO 250 MHz Snap-In connector	62104	*	
27	flexible	-	Cat.6	AWG26	LANmark-6 EVO 250MHz Snap-In for AWG26	62105	*	
28	solid	-	Cat.6	AWG24 - 22	LANmark-6 EVO 10 G Snap-In connector	62106	*	
29	solid + flexible	5 – 9 mm	Cat.6 <sub>A</sub>	AWG27 - 22	RJ45 connector, Cat.6 <sub>A</sub> TIA568A ED-IE-AX-RJ45F-6A-A-FC	21700611	288	A
30	solid + flexible	5 – 9 mm	Cat.6 <sub>A</sub>	AWG27 - 22	RJ45 connector, straight, Cat.6 <sub>A</sub> TIA568B ED-IE-AX-RJ45F-6A-B-FC	21700612	288	No. 1
31	solid + flexible	9 mm	Cat.6 <sub>A</sub>	solid: AWG24 - 22 flexible: AWG27 - 22	Circular bulkhead housing IP68 (incl. 21700612), ED-IE-RJ45F-6A-B-68-FC	21700632	289	
32	solid + flexible	_	Cat.6	AWG24 - 22	Circular bulkSnapIn rail mount adapter	60795	*	5.2
33	solid + flexible	5 – 9 mm	Cat.6	AWG27 - 22	1-single incl. Cat.6 head housing Rail mount adapter, Cat.6	21700613	289	C'st
34			^	AWG27 - 22	TIA568A EPIC <sup>®</sup> DATA HS RJ45 F 10G A Rail mount adapter, Cat.6 <sub>A</sub>		289	1
34	solid + flexible	5 – 9 mm	Cat.6 <sub>A</sub>		TIA568B EPIC® DATA HS RJ45 F 10G B	21700614	209	
	1	1	1	LANmark SnapIn		1		
		1	1	AWG24 - 22	LANmark-7A, 1000 MHz	1	*	11 - 11

Legend: \*see www.lappgroup.com/products. Please see detailed technical information on the data sheet (www.lappgroup.com/products).



# AWG 7-wire 27 - 22

Data communication systems for ETHERNET technology

Connectors for industrial cabling • Industrial Ethernet connectors RJ45



286

4 different angled cable outlets possible





### LAPP GROUP

### Data communication systems for ETHERNET technology

Connectors for industrial cabling • Industrial Ethernet connectors RJ45



Info

CAT.6<sub>A</sub> qualified for 10Gbit/s
Installation without tools

(P) (D) (S) (L) (D)

EPIC<sup>®</sup> DATA AX RJ45 Cat.6<sub>A</sub>

UNITRONIC®

### Product features

- Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51
- Qualified for 10 Gigabit Ethernet
- Housing: zinc die-casting, grey
- By a multi-level relief setting the connector can accomodate a cable diameter from 5,0 mm up to 9,0 mm
- Suitable for stranded cores with AWG27/7 -22/7 and for solid conductors with AWG24/1- 22/1
- Suitable for use in industrial applications
- Available with colour code T568A or T568B

### Norm references / Approvals

- Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51
- UL-listed (E-File E353543)



### **Technical data**



Classification ETIM 5.0 Class-ID: EC001121 ETIM 5.0 Class-Description: Modular connector



Ambient temperature (operation) -40°C to +85°C

Article number	Article designation	Min. outer diameter (mm)	Max. outer diameter (mm)	Min. Core diameter in mm	Max. Core diameter in mm	AWG solid	AWG 7-wire	AWG 19-wire
RJ45 connec	tor acc. to T568A							
21700600	EPIC <sup>®</sup> DATA ED-IE-AX-6A-A-20-FC	5	9	1	1.6	24 - 22	27 - 22	
RJ45 connec	tor acc. to T568A, specifically for cab	les with 19-wire	cores					
21700615	EPIC DATA ED-IE-AX-6,-A-20-FD-FC	5	9	0.85	1.1	26 - 24	27 - 24	26
RJ45 connec	tor acc. to T568B							
21700601	EPIC <sup>®</sup> DATA ED-IE-AX-6A-B-20-FC	5	9	1	1.6	24 - 22	27 - 22	
RJ45 connec	tor acc. to T568B, specifically for cab	les with 19-wire	cores					
21700616	EPIC DATA ED-IE-AX-6 <sub>A</sub> -B-20-FD-FC	5	9	0.85	1.1	26 - 24	27 - 24	26

Photographs are not to scale and do not represent detailed images of the respective products.

10 pieces in one blister

An approval is necessary for 19-wire cables by Lapp Group

### Data communication systems for ETHERNET technology

Connectors for industrial cabling • Industrial Ethernet connectors RJ45

**HITRONIC®** 



EPIC<sup>®</sup> DATA RJ45F Cat.6

### **Product features**

- Field assembly Industrial Ethernet module RJ45 according to IEC 60603-7-51
- Qualified for 10 Gigabit Ethernet
- Housing: zinc die-casting, grey
- By a multi-level relief setting the connector can accomodate a cable diameter from 5,0 mm up to 9,0 mm
- Suitable for stranded cores with AWG27/7 -22/7 and for solid conductors with AWG26/1-22/1
- Suitable for use in industrial applications
- Available with colour code T568A or T568B

### Norm references / Approvals

- Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51
- UL-listed (E-File E353543)

### **Technical data**



IΡ

ETIM 5.0 Class-ID: EC001121 ETIM 5.0 Class-Description: Modular connector

**Protection rating** 

IP 20

Ambient temperature (operation) -40°C to +70°C

Article number	Article designation
RJ45 Modul acc. t	o T568A
21700611	ED-IE-AX-RJ45F-6A-A-FC
RJ45 Modul acc. t	o T568B
21700612	ED-IE-AX-RJ45F-6A-B-FC

Photographs are not to scale and do not represent detailed images of the respective products.



### EPIC® DATA 90 RJ45 Cat.6



### **Product features**

- · Cable outlet in 4 different 90° angles possible
- · Qualified for 10 Gigabit Ethernet
- Housing: zinc die-casting, grey
- · Suitable for stranded cores with
- AWG27/7 -22/7 and for solid conductors with AWG24/1-22/1
- Suitable for use in industrial applications
- Available with colour code T568A or T568B

### Norm references / Approvals

- · Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51
- UL-listed (E-File E353543)

### Info

- CAT.6, gualified for 10Gbit/s
- · Installation without tools
- · 4 different angled cable outlets possible

### **Technical data**

ETIM

### **Protection rating**

Ambient temperature (operation) -40°C to +85°C

Article number	Article designation	Min. outer diameter (mm)	Max. outer diameter (mm)	Min. Core diameter in mm	Max. Core diameter in mm	AWG solid	AWG 7-wire	AWG 19-wire
RJ45 connect	or acc. to T568A							
21700636	ED-IE-90-6A-A-20-FC	5.5	10	1	1.6	24 - 22	27 - 22	
RJ45 connect	or acc. to T568A, specifically	for cables with	19-wire cores					
21700639	ED-IE-90-6A-A-20-FD-FC	5.5	10	0.85	1.1	26 - 24	27 - 24	26
RJ45 connect	or acc. to T568B							
21700637	ED-IE-90-6A-B-20-FC	5.5	10	1	1.6	24 - 22	27 - 22	
RJ45 connect	or acc. to T568B, specifically	for cables with	19-wire cores					
21700640	ED-IE-90-6A-B-20-FD-FC	5.5	10	0.85	1.1	26 - 24	27 - 24	26

Photographs are not to scale and do not represent detailed images of the respective products. An approval is necessary for 19-wire cables by Lapp Group



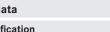




Classification ETIM 5.0 Class-ID: EC001121



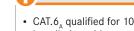












Connectors for industrial cabling • Industrial Ethernet connectors RJ45

**ETHERLINE®** 

**HITRONIC®** 

# **EPIC® DATA AX RJ45 Cat.6** IP68 RJ45 connector in IP68 housing

<ul> <li>Info</li> <li>CAT.6<sub>A</sub> qualified for 10Gbit/s</li> <li>Installation without tools</li> </ul>	<ul> <li>Product features</li> <li>Housing: brass nickel plated</li> <li>Qualified for 10 Gigabit Ethernet</li> <li>Suitable for stranded cores with</li> </ul>	
Technical data	<ul> <li>AWG27/7 -22/7 and for solid conductors with AWG26/1-22/1</li> <li>By a multi-level relief setting the connector</li> </ul>	
Classification ETIM 5.0 Class-ID: EC002597 ETIM 5.0 Class-Description: Modular connector	can accomodate a cable diameter from 5,0 mm up to 9,0 mm Norm references / Approvals	
Protection rating IP 68	<ul> <li>Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51</li> </ul>	

• UL-listed (E-File E353543)

EPIC®

Article number	Article designation
circular connecto	r (male) inclusive RJ45 connector
21700630	ED-IE-AX-RJ45-6A-B-68-FC
dust cap for RJ45	connector
21700631	ED-IE-AX-RJ45-AC-DC
circular bulkead h	nousing inclusive RJ45 Modul acc. to T568B
21700632	ED-IE-RJ45F-6A-B-68-FC
dust cap for RJ45	Modul
21700633	ED-IE-RJ45F-AC-DC

Photographs are not to scale and do not represent detailed images of the respective products.

Ambient temperature (operation) Plug/socket -40°C to +70°C circular housing: -40  $^\circ\text{C}$  to +85  $^\circ\text{C}$ 



### EPIC® DATA HS RJ45F Cat.6<sub>A</sub>

Cat.6, rail mount adapter

### **Technical data**

Classification **е**тім ETIM 5.0 Class-ID: EC001121 ETIM 5.0 Class-Description: Modular connector

#### **Protection rating** P IP 20

Ambient temperature (operation) -40°C to +70°C

#### Product features

- Plastic housing including Easy Connect RJ45 Modul Cat.6A 10G
- · Suitable for use in industrial applications
- Integrated strain relief for cable O.D.
- to 9 mm
- Colour: light grey (RAL 7035)
- Suitable for stranded cores with • AWG27/7 -22/7 and for solid conductors with AWG26/1-22/1

### Norm references / Approvals

• Field assembly Industrial Ethernet module RJ45 according to IEC 60603-7-51



Article number	Article designation
Inclusive RJ45 Mo	odul acc. to T568A
21700613	EPIC DATA HS RJ45 F 10G A
Inclusive RJ45 Mo	odul acc. to T568B
21700614	EPIC DATA HS RJ45 F 10G B

Photographs are not to scale and do not represent detailed images of the respective products.

Connectors for industrial cabling • M12 Field mountable connectors and wall ducts

EPIC <sup>®</sup> DATA M12D M12 D-coded connectors		
		<ul> <li>Info</li> <li>CAT.5-Performance</li> <li>Installation without tools</li> </ul>
Product features	Norm references / Approvals	Technical data
<ul> <li>Field assembly Industrial Ethernet connector, M12 D-coded according to IEC 61076-2-101</li> <li>Suitable for use in industrial applications</li> <li>Robust and vibrations- resistant</li> <li>Toolfree installation, small and compact design</li> </ul>	Data transmission is conform to category Cat.5 acc. to ISO 11801	<ul> <li>Classification ETIM 5.0 Class-ID: EC001121 ETIM 5.0 Class-Description: Modular connector</li> <li>Protection rating IP 67</li> <li>Ambient temperature (operation -25°C to +85°C</li> </ul>

Article number	Article designation	Min. outer diameter (mm)	Max. outer diameter (mm)	AWG solid	AWG 7-wire
M12 D-coded plug	, straight, colour coding ac	c. to PROFINET	· · · · · ·		
21700647	ED-IE-AX-M12D-5-PN-67-FC	6.2	9.7	24 - 22	26 - 22
M12 D-coded plug	g, straight, colour coding ac	c. to TIA 568			
21700648	ED-IE-AX-M12D-5-67	5	6.1	24 - 22	26 - 22
M12 D-coded soc	ket, straight, TIA 568 colou	r coding			
22261016	AB-C4-M12FSD-SH	4	8	26 - 22	26 - 22

Photographs are not to scale and do not represent detailed images of the respective products.



### **EPIC® DATA M12X**

M12 X-coded connectors



### **Product features**

- Field assembly Industrial Ethernet connector, M12 X-coded according to IEC 61076-2-109
- Qualified for 10 Gigabit Ethernet
- Suitable for use in industrial applications
- Robust and vibrations- resistant
- Housing: zinc die-casting, grey
- Insulation displacement contacts for conductor diameter of AWG27/7 -
- AWG22/7 and AWG24/1 AWG22/1; max. outer diameter 9,7 mm • Toolfree installation, small and compact
- Ioolfree installation, small and compact design

### Norm references / Approvals

- Acc. to standard IEC 61076-2-109
- Data transmission is conform to category Cat.6<sub>A</sub>acc. to ISO/IEC 11801:2010

### f Info

- CAT.6₄ qualified for 10Gbit/s
- Installation without tools

### **Technical data**

	Classification
ETIM	Classification ETIM 5.0 Class-ID: EC001121
	ETIM 5.0 Class-Description:
	Modular connector

### IP Protection rating

1

Ambient temperature (operation) Plug/socket -40°C to +85°C

Article number	Article designation
M12 X-coded plug	, straight
21700602	ED-IE-AX-M 12X-6A-67-FC
M12 X-coded sock	xet, straight
21700621	ED-IE-AX-M12XF-6,-67-FC
M12 X-coded sock	xet, straight for wall mounting
21700622	ED-IE-AX-M12XF-RM-6 <sub>A</sub> -67-FC

Photographs are not to scale and do not represent detailed images of the respective products.

UNITRONIC®

Connectors for industrial cabling • M12 Field mountable connectors and wall ducts

EPIC<sup>®</sup> DATA FT IE Industrial Ethernet feed through Product features Norm references / Approvals **Technical data** Designs for front and rear wall-mounting • Acc. to standard IEC 61076-2 Classification **E** T I M • D-coded: Cat.5 acc. to ISO 11801 • M12 panel feed-throughs for direct ETIM 5.0 Class-ID: EC002061 connecting with PCB X-coded: Cat.6, acc. to ISO 11801 ETIM 5.0 Class-Description: · Can be used for Industrial Ethernet in Sensor-actuator connector chassis harsh industrial environments **Protection rating** · Housing: zinc die-casting, grey IP 67 Ambient temperature (operation) -25°C to +85°C Article number Article designation M12 feed through, socket on socket, D-coded AB-C4-DSI-M12FSD-M12FSD-M16-SH 22262022 M12 flush-type connector socket for front-mounting, X-coded

ED-IE-M12F-X-FM

ED-IE-M12F-X-RM

M12 flush-type connector socket for rear-mounting, solder contacts, X-coded Photographs are not to scale and do not represent detailed images of the respective products.

### EAPP GROUP

21700617

21700618

### Data communication systems for ETHERNET technology

Connectors for industrial cabling • Cable coupler



# **EPIC® DATA CCR FA**

Cable coupler round

### Info

- Cable coupler round class F
- · Installation without tools

### Product features

- · Field mountable cable coupler for data cables up to Cat.7
- Compact, round design
- Qualified for 10 Gigabit Ethernet •
- Suitable for use in industrial applications •
- Robust and vibrations- resistant
- · Housing: zinc die-casting, grey
- · Insulation displacement contacts for conductor diameter of AWG24/7 -AWG22/7 and AWG24/1 - AWG22/1; max. outer diameter 9,7 mm

### Norm references / Approvals

- Compliance to class  $\mathrm{F}_{\mathrm{A}}$  up to 1000 MHz in connection with  $Cat.7^{^{}}_{A}$  cables
- Data transmission is conform to category Cat.7, acc. to ISO/IEC 11801



### **Technical data**

Classification **e**tim ETIM 5.0 Class-ID: EC001121 ETIM 5.0 Class-Description: Modular connector **Protection rating** IP IP 67 Ambient temperature (operation) Plug/socket -40°C to +85°C

Article number	Article designation	Min. outer diameter (mm)	Max. outer diameter (mm)	AWG solid	AWG 7-wire
EPIC <sup>®</sup> DATA CCR F	A				
21700623	EPIC <sup>®</sup> DATA CCR FA	5	9.7	24 - 22	24 - 22

Photographs are not to scale and do not represent detailed images of the respective products.

EPIC

Connectors for office applications • Industrial Ethernet connectors RJ45

### Connector RJ45 CAT.5 Hirose TM11

**UNITRONIC®** 

### Product features

- Screened version
- Suitable for stranded conductors (AWG26)
- Included: bend protection and guide plate
- Anti-kink protection: beige
- Max. outer sheath diameter: 5.8 mm

#### **Technical data**



Classification ETIM 5.0 Class-ID: EC002641 ETIM 5.0 Class-Description: Modular connector (industrial connector)

Article number	Article designation
Connector RJ45 C	CAT.5 Hirose TM11
CE6321	Connector RI45 CAT.5 Hirose TM11

Accessories

· Crimping tool RJ45 Hirose refer to main catalogue

EPIC®

### Connector RJ45 CAT.5 Stewart SS37

Photographs are not to scale and do not represent detailed images of the respective products.



### **Product features**

- Screened version
- Suitable for stranded conductors (AWG26)
- · Included: bend protection and guide plate
- Anti-kink protection: light grey
- Max. outer sheath diameter: 5.72 mm

### Technical data



Classification ETIM 5.0 Class-ID: EC002641 ETIM 5.0 Class-Description: Modular connector (industrial connector)

#### Article number Connector RJ45 CAT.5 Stewart SS37 CE6323

Article designation

Connector RJ45 CAT.5 Stewart SS37

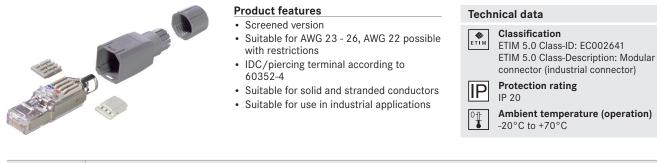
Stewart is a registered trademark of Bel Fuse Inc.

Other colours are available upon request. Photographs are not to scale and do not represent detailed images of the respective products.

Accessories

· Crimping tool RJ45 Stewart refer to main catalogue

### Field-Terminable Connector RJ45 CAT.5e FM45



### Article number RJ45 connector acc. to T568A

Article designation

21700540

Field-Terminable Connector RJ45 CAT.5e FM45

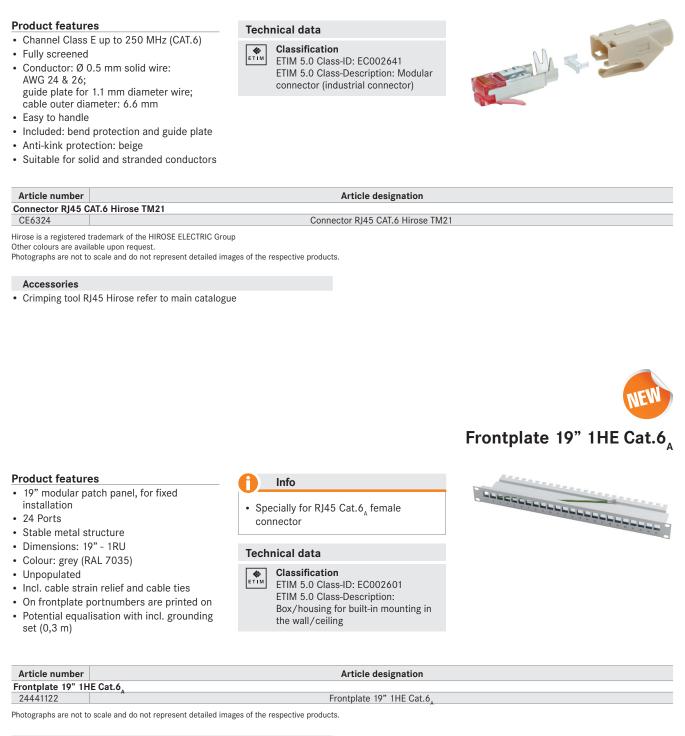
Photographs are not to scale and do not represent detailed images of the respective products.

### LAPP GROUP

### Data communication systems for ETHERNET technology

Connectors for office applications • Industrial Ethernet connectors RJ45

### Connector RJ45 CAT.6 Hirose TM21



EPIC<sup>®</sup> DATA RJ45F Cat.6<sub>A</sub> refer to page 288



**ETHERLINE®** 



## HITRONIC® Connectors for optical data transmission

In the face of ever increasing data volumes in telecommunication and industrial areas, optical data transmission systems are becoming ever more important. Wherever large data quantities have to be transmitted across long distances or in areas subject to electromagnetic interference, fibre optic cables represent an ideal complement to copper-based networks.

HITRONIC<sup>®</sup> connectors ensure interference-free and interception-proof transmission of large data volumes, with utmost ease and virtually at the speed of light. Moreover, the data transfer is not impaired by electromagnetic radiation. To complement the optical cables, the HITRONIC<sup>®</sup> range includes suitable connectors for all transmission technologies: POF (polymer optical fibre), PCF (polymer cladded fibre) and GOF (glass optical fibre). For the most demanding conditions and reliable application in industrial environments.

Our range also includes suitable tool sets to ensure quick and simple installation of the optical connectors. Application range

- Telecommunication and network technology
- Industrial cabling and automation systems
- Industrial machinery and plant
   engineering
- Data transmission under harsh conditions (mining and tunnel construction, oil and gas platforms, wind power plants)

# Optical transmission systems · HITRONIC® Product Overview

Type of fibre		Cables	Connectors and adapters	Accessories
	POF SIMPLEX PE		and man E	
	POF SIMPLEX PE-PUR	LAPP KABEL STUTTGART HITRONIC" POF SIMPLEX PE-PUR		
POF	POF DUPLEX PE-PUR	LAPP KABEL STUTIGART HITRONIC" POF DUPLEX PE-PUR		=
	POF DUPLEX Heavy	LAPP KABEL STUTTGART HITRONIC" POF DUPLEX HEAVY PE-PUR		
	POF SIMPLEX/DUPLEX FD PE-PUR	LAPP KABEL STUTTGART HITRONIC" POF DUPLEX FD PE-PUR		333753333
	POF DUPLEX for PROFINET <sup>®</sup> applications	LAPP KABEL STUTTGART HITRONIC" POF DUPLEX FD PNC PA-PUR		
	PCF SIMPLEX Outdoor	LANY KAND, STUÏISANT HITRONIC' DO'S SURFES HAR OUTGOOR IN 200320		
	PCF DUPLEX Outdoor	LAPP KABEL STUTIGART HITRONIC <sup>®</sup> PCF DUPLEX FRNC-PE outdoor		
PCF	PCF DUPLEX Indoor	LAPP KABEL STUTIGART HITRONIC" POF DUPLEX FRNC-PUR Indeor	reconnect Birth Connector	
	PCF DUPLEX FD Universal	LAPP KABEL STUTTGART HITRONIC" PCF DUPLEX FD FRNC-PUR		
	PCF DUPLEX for PROFINET <sup>®</sup> applications			
	HITRONIC <sup>®</sup> FIRE		The states	
	HITRONIC <sup>®</sup> TORSION			
	HRM-FD Flexible		ta	
	HDM Reel			
	HQN Outdoor			
	HVN Stranded Outdoor			
	HVN-Mini Outdoor (air blowable)			
GOF	HQW Armoured Outdoor			$\mathbf{O}$
Ō	HVW Armoured Stranded Outdoor			
	HQW-Plus Armoured Outdoor			
	HQA Aerial ADSS			
	HQA-Plus Aerial ADSS			- 11
	HUN Universal			
	HUW Armoured Universal		- And	A
	HRH Breakout	STUTIGART HITRONIC <sup>®</sup> HRH400 2G 50/125 OM3		
	HDH Mini Breakout			pin to the

Photographs are not to scale and do not represent detailed images of the respective products.

POF - Polymer optical fibre accessories • Connectors and adapters

### POF Connector and Adapter HFBR



UNITRONIC®





Article number

### Benefits

- Compatible with HP Versatile Link
   Connectors and Components series
- Different colours for channel coding

### Application range

- Factory automation
- Medical equipment
- Telecommunications Switching Systems
- Automotive Networks
- Printed Circuit Board

### Product features

Article designation

- HFBR connector series for 2.2 mm POF
- For crimping or clamping
- Simplex or Duplex variations

### Technical data



Classification ETIM 5.0 Class-ID: EC000752 ETIM 5.0 Class-Description: Fibre optic connector

PU

Connector HFBR-4501, S	implex, with Crimp Sleve	
29140099	POF Connector HFBR4501 GY Simplex /4PC	4 piece
29140098	POF Connector HFBR4501 GY Simplex /50PC	50 piece
Latching Connector HFB	R-4503, Simplex, with Crimp Sleve	
29141099	POF Connector HFBR4503 GY Simplex /4PC	4 piece
29141098	POF Connector HFBR4503 GY Simplex /50PC	50 piece
Connector HFBR-4506, D	uplex, with Crimp Sleve	
29142099	POF Connector HFBR4506 WH Duplex /4PC	4 piece
29142098	POF Connector HFBR4506 WH Duplex /50PC	50 piece
Connector HFBR-4511, Si	mplex, with Crimp Sleve	
29143099	POF Connector HFBR4511 BL Simplex /4PC	4 piece
29143098	POF Connector HFBR4511 BL Simplex /50PC	50 piece
Latching Connector HFB	R-4513, Simplex, with Crimp Sleve	
29144099	POF Connector HFBR4513 BL Simplex /4PC	4 piece
29144098	POF Connector HFBR4513 BL Simplex /50PC	50 piece
Latching Connector HFB	R-4516, Duplex, with Crimp Sleve	
29145099	POF Connector HFBR4516 GY Duplex /4PC	4 piece
29145098	POF Connector HFBR4516 GY Duplex /50PC	50 piece
<b>Clamp Connector HFBR-4</b>	1531, Simplex	
29146099	POF Connector HFBR4531 BK Simplex /4PC	4 piece
29146098	POF Connector HFBR4531 BK Simplex /50PC	50 piece
Clamp and Latching Con	nector HFBR-4532, Simplex	
29147099	POF Connector HFBR4532 BK Simplex /4PC	4 piece
29147098	POF Connector HFBR4532 BK Simplex /50PC	50 piece
<b>Clamp Connector HFBR-4</b>	1533, Simplex	
29148099	POF Connector HFBR4533 BL Simplex /4PC	4 piece
29148098	POF Connector HFBR4533 BL Simplex /50PC	50 piece
HFBR4505 Adapters		
29440099	POF Adapter HFBR4505 GY Simplex /4PC	4 piece
HFBR4515 Adapters		
29441099	POF Adapter HFBR4515 BL Simplex /4PC	4 piece

Photographs are not to scale and do not represent detailed images of the respective products.

### Accessories

• POF Cutting Tools refer to page 299

POF Polishing tools and accessories refer to page 300

POF - Polymer optical fibre accessories • Connectors and adapters

**POF Connector F05 Simplex** 

#### **Benefits** Info · Easy to assemble Compatible with TOCP155K Application range • Digital audio · Factory automation **Technical data** Office Automation Classification (Smart House) ET I M ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: **Product features** • F-05 (TOCP) SIMPLEX clamp connector for Fibre optic connector connecting to polymer optical fibre without crimping or gluing · Snap-In Connector · Suitable for 2.2 mm POF PU Article number Article designation **Connector F05 Simplex** 29150099 POF Connector F05 Simplex /4PC 4 piece 29150098 POF Connector F05 Simplex /50PC 50 piece Adapter for Connector F05 Simplex

29450099 POF Adapter F05 Simplex /4PC

Photographs are not to scale and do not represent detailed images of the respective products.

### Accessories

· POF Cutting Tools refer to page 299

POF Polishing tools and accessories refer to page 300

#### **Benefits**

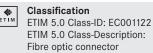
· As crimp or clamp version for easy assembling

### **Product features**

- FSMA and ST(BFOC) connector with knurled nut or hexagonal nut for crimping, gluing or easy clamping
- · Suitable for 2.2 mm POF
- · Available for different cable diameters (2.2 mm and 6.0 mm)
- · Connector including bend protection boot and dust cap
- Bend protection boot colour: black and red

- Info
- FSMA and ST(BFOC) connectors for POF cable assembly

### **Technical data**



### POF Connector F-SMA and ST(BFOC)



4 piece

Article number	Article designation	PU
FSMA Connectors with knurl	ed nut for crimping	I
29135099	POF Connector FSMA Crimp 2.2 /4PC	4 piece
29135098	POF Connector FSMA Crimp 2.2 /50PC	50 piece
29137099	POF Connector FSMA Crimp 6.0 /4PC	4 piece
29137098	POF Connector FSMA Crimp 6.0 / 50PC	50 piece
FSMA Connectors with hexag	ional nut for crimping	
29135089	POF Connector FSMA Hex Crimp 2.2 /4PC	4 piece
29135088	POF Connector FSMA Hex Crimp 2.2 /50PC	50 piece
29132089	POF Connector FSMA Hex Crimp 6.0 /4PC	4 piece
29132088	POF Connector FSMA Hex Crimp 6.0 /50PC	50 piece
FSMA Connectors with knurle	ed nut for clamping	
29130099	POF Connector FSMA Clamp 2.2 /4PC	4 piece
29130098	POF Connector FSMA Clamp 2.2 /50PC	50 piece
FSMA Connectors with hexag	ional nut for clamping	
29130089	POF Connector FSMA Hex Clamp 2.2 /4PC	4 piece
29130088	POF Connector FSMA Hex Clamp 2.2 /50PC	50 piece
ST(BFOC) Connectors for crin	nping	
29125099	POF Connector ST(BFOC) Crimp 2.2 /4PC	4 piece
29125098	POF Connector ST(BFOC) Crimp 2.2 /50PC	50 piece
ST(BFOC) Connectors for clar	nping	
29120099	POF Connector ST(BFOC) Clamp 2.2 /4PC	4 piece
29120098	POF Connector ST(BFOC) Clamp 2.2 /50PC	50 piece

Photographs are not to scale and do not represent detailed images of the respective products

#### Accessories

- POF Assembly Sets refer to page 299
- POF Cutting Tools refer to page 299
- POF Polishing tools and accessories refer to page  $300\,$
- POF Measurement Equipment refer to main catalogue

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POF - Polymer optical fibre accessories • Connectors and adapters

### **POF Connector SC-RJ**



### Benefits

As crimp version for easy assembling

#### Product features

- Connector set included two SC connectors,
   SC-RJ housing, two bending protection boots, dust caps
- Suitable for 2.2 mm POFBend protection boot colour:
- black and red

POF Connector SC-RJ Crimp 2.2

### Info SC-RJ connectors for POF

- cable assembly
- Connectors for PROFINET Data Cabling

### **Technical data**

Classification ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: Fibre optic connector

PU

1 piece

## Article number Article designation POF Connector SC-RJ

Photographs are not to scale and do not represent detailed images of the respective products.

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### Accessories

29161097

- POF Assembly Sets refer to page 299
- POF Cutting Tools refer to page 299
- POF Polishing tools and accessories refer to page 300
- POF Measurement Equipment refer to main catalogue

### POF Adapter F-SMA



### Product features

- POF Adapter FSMA: version with two fixing nuts and lock wahser
- POF Adapter FSMA hexa: version with hexagonal flange, fixing nuts and lock wahser

### Info

Can be used for POF and PCF connector types

### **Technical data**

Classification ETIM 5.0 Class-ID: EC000752 ETIM 5.0 Class-Description: Fibre optic coupler

Article number	Article designation	PU
FSMA Adapters		
29430099	POF Adapter FSMA /4PC	4 piece
29430089	POF Adapter FSMA Hex /4PC	4 piece

Photographs are not to scale and do not represent detailed images of the respective products.

### POF Adapter ST (BFOC)



### Product features

 ST(BFOC) adapter with flange, fixing nuts and lock washer

### 🔒 Info

Can be used for POF and PCF connector types

### **Technical data**

Classification ETIM 5.0 Class-ID: EC000752 ETIM 5.0 Class-Description: Fibre optic coupler

 Article number
 Article designation

 ST(BFOC) Adaptera

 29420099

 POF Adapter ST (BFOC) /4PC

 4 piece

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tor SC-RJ

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### **POF Assembly Sets**

### Benefits

- · Easy to handle Set includes all the necessary tools for connector assembly
- · Suitable for on-site assembly

### Product features

- Sets available for POF connector types FSMA and ST (BFOC) and SC / SC-RJ
- Contents: crimp tool, buffered fibre stripper, polishing disc FSMA, polishing film, cutter

	(
ETIM	1

### Technical data

Classification ETIM 5.0 Class-ID: EC002609 ETIM 5.0 Class-Description: Accessories for optic fibre technique



**POF Cutting Tools** 

1 piece

1 piece

0
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ΗH

Article number	Article designation	PU
Assembly Set for	POF FSMA Connector	
29500001	Assembly Set POF Connector FSMA	1 piece
Assembly Set for	POF ST(BFOC) Connector	
29500002	Assembly Set POF Connector ST(BFOC)	1 piece
Assembly Set for	POF SC/SC-RJ Connector	
29500004	Assembly Set for POF Connector SC	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

#### Product features **Technical data** · Cutting tools for the POF cable and Various tools for cutting buffered fibres Classification connector product range (2.2mm) ETIM ETIM 5.0 Class-ID: EC000163 from very simple to version with automatic ETIM 5.0 Class-Description: Application range blade advance Fibre optic cleaver Cable stripper for different jacket materials · Crimping tool suitable for the and cable diameter POF(PCF) connector program Article number Article designation PU POF Bare Fibre Cutter POF Cutter 2.2/1.0mm Guillotine 5 pieces POF BufferedFibreCutter 2.2mm manuel 1 piece POF BufferedFibreCutter 2.2mm automatic 1 piece POF Cable Stripper POF Buffered Fibre Stripper 2.2 mm (P980/1000) 1 piece POF Cable Stripper PA 2.2mm 1 piece POF Cable Stripper 3.6/6.0mm 1 piece Strain relief element scissors Strain relief element scissors

Photographs are not to scale and do not represent detailed images of the respective products.

#### Similar products

**Benefits** 

29500014

29500015

29500016

29500011

29500013

29500012

29500017

29500010

POF Crimping Tool

• POF Assembly Sets refer to page 299

### For current information see: www.lappgroup.com

POF Crimp Tool 2.5/3.0/4.5/4.95mm

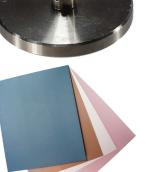
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POF - Polymer optical fibre accessories • Tools and Accessories

# **POF Polishing tools and accessories**





### **Benefits**

- · Easy to handle
- Suitable to POF Connector Assembly Sets

#### **Product features**

- · Accessories for POF Assembly
- Polishing disc for various POF connector types
- · Other versions are available upon request
- Polishing film with different graining size
- types for fibre end face treatment
- Polishing process: POF - Polishing Film 1000 (BU) Polishing Film 5µm (BN) Polishing Film 1µm (GN)
  - PCF Polishing Film 5 μm (BN) Polishing Film 1 μm (GN) Polishing Film 0.3 µm (WH)

### **Technical data**



Classification ETIM 5.0 Class-ID: EC001688 ETIM 5.0 Class-Description: Fibre optic cleaver

Article number	Article designation	PU
Polishing Disc for POF co	onnector assembly	
29500031	Polishing Disc POF FSMA Connector	1 piece
29500032	Polishing Disc POF ST(BFOC) Connector	1 piece
29500033	Polishing Disc POF HFBR4501/4511 SIMPLEX	1 piece
29500034	Polishing Disc POF HFBR4516 DUPLEX	1 piece
29500035	Polishing Disc POF F05 Connector	1 piece
29500036	Polishing Disc POF Simplex 2.2mm	1 piece
29500733	Polishing Disc PCF HFBR4521 Connector	1 piece
29500037	Polishing Disc POF SC Connector	1 piece
Polishing film		
29500021	Polishing film graining size 1000 (BL)	10 pieces
29500024	Polishing film graining size 5 µm (BR)	10 pieces
29500023	Polishing film graining size 1 µm (GN)	10 pieces
29500022	Polishing film graining size 0.3 µm (WH)	10 pieces
Polishing accessories		
29500020	Polishing glass plate 150x230mm	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

#### Similar products

• POF Assembly Sets refer to page 299

PCF - Plastic Cladded Fibre Accessories • Connectors and adapters

### PCF Connector HFBR

#### **Benefits Technical data** Compatible with HP Versatile Link Classification **e**tim Connectors and Components series ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: Application range Fibre optic connector Factory automation · Medical equipment · Telecommunications Switching Systems Product features HFBR4521 connector for 2.2 mm PCF cable diameter as crimp version HFBR4521 connector for 3.0 mm PCF cable diameter as clamp version • HFBR4521 clamp connector compatible with Assemby Set PCF Connector HFBR4521 Article number Article designation PU Connector HFBR4521 for 2.2 mm cables - crimp version 29140799 PCF Connector HFBR4521 BK Simplex 2.2 /4PC 4 piece 29140798 PCF Connector HFBR4521 BK Simplex 2.2 /50PC 50 piece Connector HFBR4521 for 3.0 mm cables - clamp version

Photographs are not to scale and do not represent detailed images of the respective products.

### PCF Connector F-SMA and ST(BFOC)

### Benefits

29141799

29141798

- Easy to assemble
- Designed for field assembly
- Reusable as it can be removed

### Product features

- Connectors for clamp and cleave assembly
- Available for different cable diameters (2.2mm and 3.0mm)
- Adapters available on request
- Bend protection boot colour:
- black and red

PCF Connector HFBR4521 Clamp 3.0 /4PC

PCF Connector HFBR4521 Clamp 3.0 /50PC

Classification ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: Fibre optic connector



4 piece

50 piece

Article number	Article designation	PU
Connector FSMA	Clamp for 3.0 mm cables	'
29136799	PCF Connector FSMA Clamp 3.0 /4PC	4 piece
29136798	PCF Connector FSMA Clamp 3.0 /50PC	50 piece
Connector FSMA	Clamp for 2.2 mm cables	
29135799	PCF Connector SC-RJ Clamp 2.2	4 piece
29135798	PCF Connector FSMA Clamp 2.2 /50PC	50 piece
Connector ST(BFC	DC) Clamp for 3.0 mm cables	
29126799	PCF Connector ST (BFOC) Clamp 3.0 /4PC	4 piece
29126798	PCF Connector ST (BFOC) Clamp 3.0 /50PC	50 piece
Connector ST(BFC	DC) Clamp for 2.2 mm cables	
29125799	PCF Connector ST (BFOC) Clamp 2.2 /4PC	4 piece
29125798	PCF Connector ST (BFOC) Clamp 2.2 /50PC	50 piece

Photographs are not to scale and do not represent detailed images of the respective products.

### Similar products

• POF Adapter F-SMA refer to page 298

• POF Adapter ST (BFOC) refer to page 298

PCF Cutting Tools refer to page 303

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# **PCF Connector SC-RJ**



### Benefits

- Easy to assemble
- Designed for field assembly
- · Reusable as it can be removed

### **Product features**

- Connector set included two SC connectors, SC-RJ housing, two bending protection boots, dust caps
- · Connectors for clamp and cleave assembly
- Available for different cable
- diameters (2.2mm and 3.0mm) Bend protection boot colour:
  - black and red



Connectors for PROFINET Data Cabling

### **Technical data**



Classification ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: Fibre optic connector

Article designation	PU
PCF Connector SC-RJ Clamp 3.0	1 piece
PCF Connector SC-RJ Clamp 2.2	1 piece
	PCF Connector SC-RJ Clamp 3.0

Photographs are not to scale and do not represent detailed images of the respective products.

### Accessories

• PCF Cutting Tools refer to page 303

**PCF Assembly Sets** 

### Benefits

- · Easy to handle
- · Set includes all the necessary tools for connector assembly from clamp connector versions
- · Suitable for on-site assembly

### **Product features**

- · Sets available for PCF clamp connector types
- FSMA, ST (BFOC), SC and HFBR4521
- · Contents: stripper, cleave tool, kevlar scissor, cutter, microscope

### **Technical data**

Classification **е**тім

ETIM 5.0 Class-ID: EC002609 ETIM 5.0 Class-Description: Accessories for optic fibre technique

Article number	Article designation	PU
Assembly Set For	PCF FSMA Connectors	
29500701	Assemby Set PCF Connector FSMA	1 piece
Assembly Set For	PCF ST(BFOC) Connectors	
29500702	Assemby Set PCF Connector ST(BFOC)	1 piece
Assembly Set For	PCF HFBR4521 Connectors	
29500703	Assembly Set PCF Connector HFBR4521	1 piece
Assembly Set For	PCF SC/SC-RJ Connectors	
29500704	Assemby Set PCF Connector SC	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

#### Accessories

- PCF Connector F-SMA and ST(BFOC) refer to page 301
- PCF Cutting Tools refer to page 303
- PCF Connector SC-RJ refer to page 302



PCF - Plastic Cladded Fibre Accessories • Tools and Accessories

## **PCF Cutting Tools**

### Benefits

- Optimally coordinated tools for the PCF cable and connector product range
- For the processing of PCF fibres

#### Product features

 PCF cleaving tool for connector types: -FSMA -ST(BFOC) 21

-HFBR4	5	2
-SC		

ETIM 5.0 Class-ID: EC001126 ETIM 5.0 Class-Description: Cable stripping tool	

Article number	Article designation	PU
CF Buffered Fibre Strip	oper	·
29500711	PCF Buffered Fibre Stripper 0.5mm (K200/230)	1 piece
PCF Fibre Cleaving Tool		
29500712	PCF Cleaving Tool FSMA Connector	1 piece
29500713	PCF Cleaving Tool ST(BFOC) Connector	1 piece
29500714	PCF Cleaving Tool HFBR4521 Connector	1 piece
29500715	PCF Cleaving Tool SC Connector	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

### Similar products

PCF Assembly Sets refer to page 302

### **PCF Measurement Equipment**

#### Benefits

 Inspection Microscope with 100x magnification for connector inspection

### · Easy to handle

### Product features

- Interchangeable adapter for PCF connector types FSMA, ST(BFOC), HFBR
- Interchangeable adapters are not included in microscope, please order separately
- · Other adapters available on request

### **Technical data**

ET I M

**Technical data** 

**e**tim

Classification

Classification ETIM 5.0 Class-ID: EC001685 ETIM 5.0 Class-Description: Microscope for glass fibre

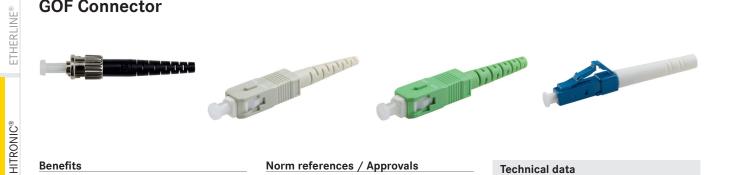


Article number	Article designation	PU
PCF Inspection Mi	croscope (100x) without adapter	
29500770	PCF Inspection Microscope (100x)	1 piece
PCF Microscope A	dapter For Connector Types	
29500771	PCF Microscope Adapter FSMA Simplex	1 piece
29500772	PCF Microscope Adapter ST(BFOC) Simplex	1 piece
29500773	PCF Microscope Adapter HFBR Simplex	1 piece

Photographs are not to scale and do not represent detailed images of the respective products.

GOF - Fiber optic accessories • Connectors and adapters

### **GOF Connector**



### **Benefits**

- · Ideal for assembling
- For assembly process: cable preparation/ glueing/crimping/polishing
- · Assembly instructions can be found in the GOF assembly toolbox (not included in Lapp product range)
- Trained optical installers should be used in all connector assembly

### **Application range**

· For connector assemblies in production or laboratory environment

### Product features

· Connector sets include all needed parts for assembly

### Norm references / Approvals

- LC comply with IEC standard 61754-20
- SC comply with IEC standard 61754-4
- ST comply with IEC standard 61754-2

#### Product Make-up

- Ferrule diameter:
  - 1.25mm (zirconia) LC:
- SC, ST: 2.5mm (zirconia) · Can be assembled with cables of
- 1.7mm-2.1mm diameter LC and SC connector sets available in green (single-mode APC), blue (single-

mode PC) and grey (multimode)

#### **Technical data**

#### Classification ETI M

- ETIM 5.0 Class-ID: EC001122 ETIM 5.0 Class-Description: Fibre optic connector
- Permissible tensile force kg Tensile load 70N

Tensile strength after assembly > 100N



Operating LC: -40°C to 75°C SC: -40°C to 75°C ST: -40°C to 85°C Humidity 95% Flammability UL 94 V-0

Article number	Article designation	PU
Singlemode		1
29110999	GOF Connector SC Single-mode Blue /4PC	4 piece
29110998	GOF Connector SC Single-mode Blue /50PC	50 piece
29110989	GOF Connector SC Single-mode APC Green/ 4PC	4 piece
29110988	GOF Connector SC Single-mode APC Green / 50PC	50 piece
29130999	GOF Connector LC Single-mode Blue /4PC	4 piece
29130998	GOF Connector LC Single-mode Blue /50PC	50 piece
29130989	GOF Connector LC Single-mode APC GR /4PC	4 piece
29130988	GOF Connector LC Single-mode APC GR/50PC	50 piece
29120999	GOF Connector ST Single-mode /4PC	4 piece
29120998	GOF Connector ST Single-mode /50PC	50 piece
29140999	GOF Connector FC Single-mode /4PC	4 piece
Multimode		
29110199	GOF Connector SC Multimode Beige /4PC	4 piece
29110198	GOF Connector SC Multimode Beige /50PC	50 piece
29130199	GOF Connector LC Multimode Beige /4PC	4 piece
29130198	GOF Connector LC Multimode Beige /50PC	50 piece
29120199	GOF Connector ST Multimode /4PC	4 piece
29120198	GOF Connector ST Multimode /50PC	50 piece
29140199	GOF Connector FC Multimode /4PC	4 piece

Photographs are not to scale and do not represent detailed images of the respective products.

Product features

connector types.

The couplings connect the glass fibre

Norm references / Approvals

connectors with the same or different

• LC comply with IEC standard 61754-20

SC comply with IEC standard 61754-4

• ST comply with IEC standard 61754-2

• Comply with IEC, EIA/TIA standards

**GOF Adapters** 

GOF - Fiber optic accessories • Connectors and adapters

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### 1000 cycles (dB) < 0.2 Temperature range

Attenuation (dB) < 0.2

ETIM 5.0 Class-ID: EC000752

ETIM 5.0 Class-Description:

**Technical data** 

**e**tim

01

Classification

Attenuation

Repeatability

Fibre optic coupler

Operating LC: -25°C to 70°C SC: -40°C to 75°C ST: -40°C to 85°C Humidity 95% Flammability UL 94 V-0

Article number	Article designation	PU
Singlemode		
29410999	GOF Adapter Duplex SC Single-mode Blue /4PC	4 piece
29410989	GOF Adapter Duplex SC Single-mode APC Green /4PC	4 piece
29430999	GOF Adapter Duplex LC Single-mode Blue /4PC	4 piece
29430989	GOF Adapter Duplex LC Single-mode APC Green /4PC	4 piece
29420999	GOF Adapter Simplex ST(BFOC) Single-mode /4PC	4 piece
29421999	GOF Adapter Duplex ST-SC Single-mode /4PC	4 piece
Multimode		
29410199	GOF Adaper Duplex SC Multimode Beige /4PC	4 piece
29430199	GOF Adaper Duplex LC Multimode Beige /4PC	4 piece
29420199	GOF Adapter Simplex ST(BFOC) Multimode /4PC	4 piece
29421199	GOF Adaper Duplex ST-SC Multimode /4PC	4 piece

Photographs are not to scale and do not represent detailed images of the respective products.

# and grey (multimode)

• LC and SC adapters available in green

(single-mode APC), blue (single-mode PC)

Product Make-up

Zirconia sleeves

# Fibre optic connectors for PROFINET<sup>®</sup> applications according to PNO

### In terms of connectors, a distinction is made with regard to the fibre type and the application.

### Connector for fibre type POF

- Very easy to handle. Configurable by means of crimp or clamp connection
- Connector with inner bore > 1 mm at a fibre diameter of 1000 µm and pin diameter (ferrule) of 2.5 mm
- Tailored tool set for straightforward field configuration

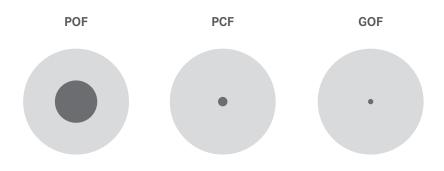
### Connector for fibre type PCF

- Easy to handle. Configurable by means of crimp and cleave technology
- Connector with inner bore > 230 µm at a fibre diameter of 230 µm and pin diameter (ferrule) of 2.5 mm
- Tailored tool set for straightforward field configuration

### Connector for fibre type GOF

- Handling requires existing knowledge. Assembly by means of bonding and polishing process
- Connector with inner bore > 125 μm at a fibre diameter of 125 μm and pin diameter (ferrule) of 2.5 mm or 1.25 mm (depending on connector type)
- Assembly by qualified staff
- The use of pre-assembled cables is recommended

### Schematic size comparison of connector pin (2.5 mm) and hole (POF - PCF - GOF)

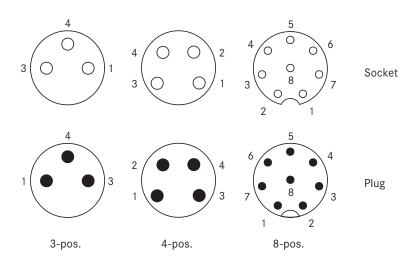


When comparing the different connector holes with regard to the fibre diameter, it becomes apparent that these are not interchangeable with one another. In other words, a PCF connector cannot be used for a POF cable. A PCF connector cannot be used for a POF cable as the fibre geometries and parameters are not compatible with one another.

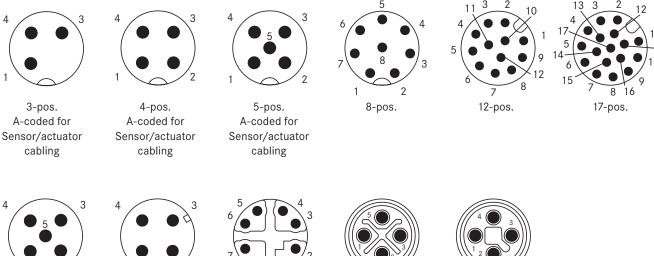


## Pin assignments

M8 pin assignments (IEC 61076-2-104)



### M12 pin assignments (IEC 61076-2-101)



5-pos. B-coded for Profibus

1

2 4-pos.

D-coded for Industrial Ethernet

8-pos. X-coded for Cat.6

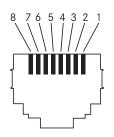
3+PE-pos. S-coded

4-pos.

T-coded

### RJ45 pin assignment (IEC 60603-7-51)

2

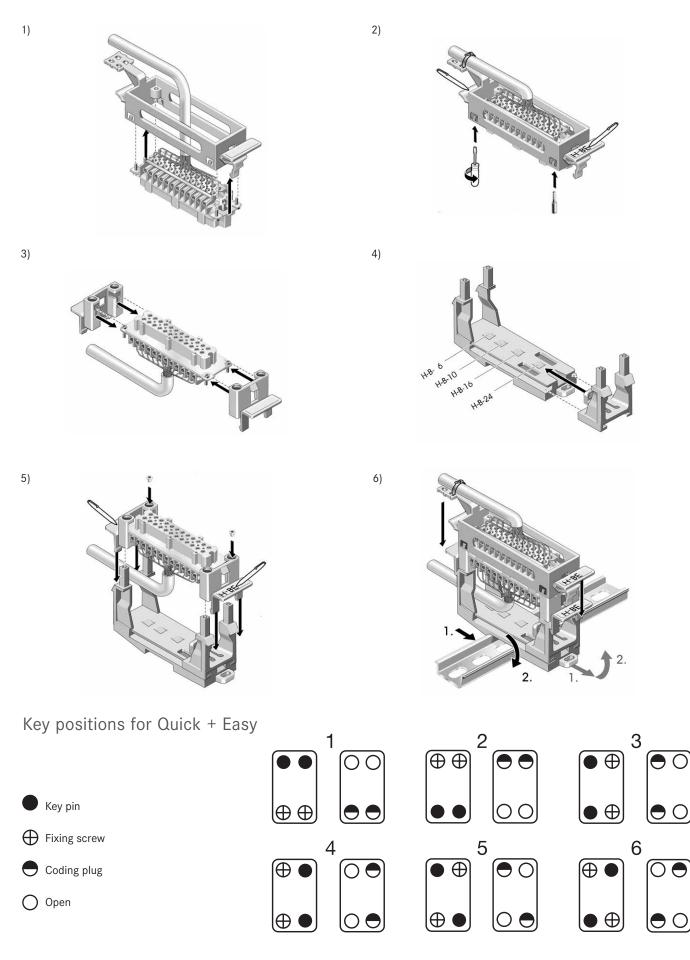


### Connector pin assignments

TIA 568-A	TIA 568-B	<b>PROFINET</b> <sup>®</sup>	RJ45	M12 D-coded	M12 X-coded	M8
White/Green	White/Orange	Yellow	1	1	1	1
Green	Orange	Orange	2	3	2	4
White/Orange	White/Green	White	3	2	3	2
Blue	Blue	-	4		8	
White/Blue	White/Blue	-	5		7	
Orange	Green	Blue	6	4	4	3
White/Brown	White/Brown	-	7		5	
Brown	Brown	-	8		6	

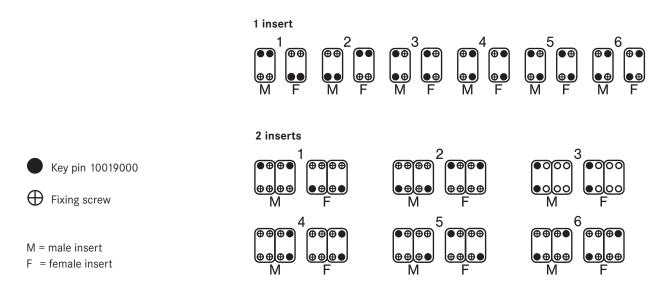
# EPIC<sup>®</sup> Industrial connectors

Mounting instruction for Quick + Easy



## EPIC<sup>®</sup> Industrial connectors

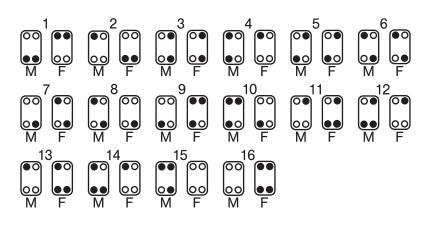
Key positions with using of key pin

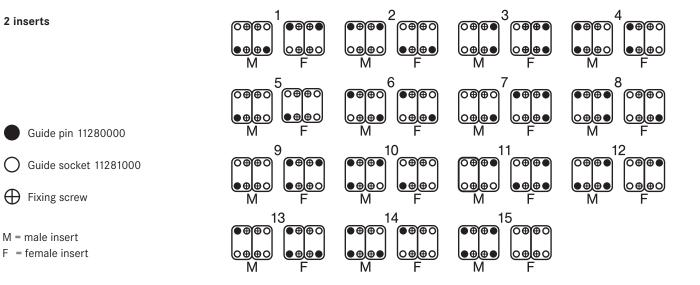


Key positions with using of guide pin und guide socket

1 insert

()





# Technical data for EPIC<sup>®</sup> Rectangular connectors

Usage criteria								EPI	C® rec	tangu	lar cor	nnecto	ors/ins	serts							
Main catalogue page	534	534	535	535	535	535	536	536	537	537	538	538	539	540	540	541	542	542	543	543	544
	EPIC® H-A 3	EPIC <sup>®</sup> H-A 4	EPIC <sup>®</sup> H-A 10	EPIC <sup>®</sup> H-A 16	EPIC <sup>®</sup> H-A 32	EPIC <sup>®</sup> H-A 48	EPIC <sup>®</sup> STA 6	EPIC <sup>®</sup> STA 6	EPIC <sup>®</sup> STA 14	EPIC <sup>®</sup> STA 14	EPIC <sup>®</sup> STA 20	EPIC <sup>®</sup> STA 20	EPIC® H-Q 5	EPIC <sup>®</sup> H-D 7	EPIC <sup>®</sup> H-D 7	EPIC <sup>®</sup> H-D 8	EPIC <sup>®</sup> H-D 15	EPIC <sup>®</sup> H-D 15	EPIC <sup>®</sup> H-D 25	EPIC <sup>®</sup> H-D 25	EPIC <sup>®</sup> H-D 40
Parameter																					
Number of contacts	3 + PE	4 + PE	10 + PE	16 + PE	32 + PE	48 + PE	6	6	14	14	20	20	5 + PE	7 + PE	7 + PE	8	15 + PE	15 + PE	25 + PE	25 + PE	40 + PE
Connection system: screw	V	V	V	V	V	V	V		V		V										
solder								~		V		V									
crimp													V	V	V	V	V	V	V	V	V
cage clamp																					
Suitable contacts: H-BE 2.5, machined													V	4							
H-D 1.6, machined														V		V	V		V		V
H-D 1.6, stamped		0.5	0.5	0.5	0.5	0.5	0.5		0.5		0.5		0.5	0.14	V	0.14	0.14	V 0.14	0.14	V 0.14	0.14
Cross-section [mm <sup>2</sup> ]	0.5 -2.5		0.5 -2.5	0.5 -2.5	0.5 - 2.5	0.5 - 2.5	0.5 - 1.5		0.5 - 1.5		- 1.5	max. 1.5	0.5 - 2.5		0.14 - 2.5		0.14 - 2.5	0.14 - 2.5	0.14 - 2.5		0.14 - 2.5
IEC: rated voltage [V] 400	V	V																			
250			V	V	V	V											V	V	V	V	V
24 AC/60 DC							V	V	V	V	V	V									
230/400													V								
24 AC/60 DC/250														V	V	V					
500																					
IEC: rated current [A]	23	23	16	16	16	16	10	10	10	10	10	10	16	10	10	10	10	10	10	10	10
UL: rated voltage [V]	600	600	600	600	600	600	48	48	48	48	48	48	600	250	250	250	250	250	250	250	250
UL: rated current [A]	10	10	14	14	14	14	10	10	10	10	10	10	16	10	10	10	10	10	10	10	10
CSA: rated voltage [V]	400	400	600	600	600	600	48	48	48	48	48	48	600	-	-	-	-	-	-	-	-
CSA: rated current [A]	10	10	16	16	16	16	10	10	10	10	10	10	16	-	-	-	-	-	-	-	-
Suitable housing	H-A 3	H-A 3	H-A 10	H-A 16	H-A 32	H-A 48	H-A 3	H-A 3	H-A 10	H-A 10	H-A 16	H-A 16	H-A 3	H-A 3	H-A 3	H-A 3	H-A 10	H-A 10	H-A 16	H-A 16	H-B 16
Usage criteria	-		_	_	_	-	_	CDI	<b>C</b> ®				ors/ins		_	-	_			-	

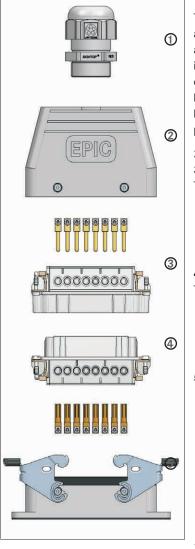
Usage criteria									EPI	C® rec	tangu	lar cor	necto	ors/ins	serts							
Main ca	talogue page	544	545	545	546	546	547	547	547	547	548	548	548	550	550	550	552	552	552	554	554	554
		40	64	64	0 24	0 42	0 72	0 108	0 144	0 216	9	9	9	10	10	10	16	16	16	24	24	24
		H-D 40	H-D	H-D	H-DC	H-DI	H-DC	H-DI	H-DI	H-DC	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE	H-BE
		EPIC®	EPIC <sup>®</sup> H-D 64	EPIC <sup>®</sup> H-D 64	EPIC® H-DD 24	EPIC® H-DD	EPIC® H-DD 72	EPIC <sup>®</sup> H-DD 108	EPIC® H-DD 144	EPIC <sup>®</sup> H-DD 216	EPIC® H-BE 6	EPIC <sup>®</sup> H-BE	EPIC <sup>®</sup> H-BE 6	EPIC <sup>®</sup> H-BE	EPIC <sup>®</sup> H-BE 10	EPIC <sup>®</sup> H-BE	EPIC® H-BE 16	EPIC <sup>®</sup> H-BE 16	EPIC <sup>®</sup> H-BE 16	EPIC® H-BE 24	EPIC <sup>®</sup> H-BE 24	EPIC <sup>®</sup> H-BE 24
Parameter			_	_	_	_		_	_	_	_	_	_	_		_	_	_	_	_	_	_
Number of contacts	_	40 + PE	64 + PE	64 + PE	24 + PE	42 + PE	72 + PE	108 + PE	144 + PE	216 + PE	6 + PE	6 + PE	6 + DE	10 + PE	10 + PE	10 + PE	16 + PE	16 + PE	16 + PE	24 + PE	24 + PE	24 + PE
Connection system:	screw	TPE	TPE	TPL	TPE	TPE	TPE	TPE	TPL	TPL	T PE	TPE	TPE	T PE	TPE	TPE	T PE	TPL	TFL	V	TPE	TPL
	solder										•						·			Ť		
	crimp	V	V	V	V	V	V	V	V	V		V			V			V			V	
ca	age clamp												V			V			V			V
Suitable contacts: H-BE 2.5,	machined											V			V			V			V	
H-D 1.6,	machined		V		V	V	V	V	V	V												
H-D 1.6,	, stamped	V		$\checkmark$																		
Cross-section [mm <sup>2</sup> ]		0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.5 - 2.5	0.5 - 4.0	0.5 - 2.5	0.5 - 2.5	0.5 - 4.0	0.5 - 2.5	0.5 -2.5	0.5 -4.0	0.5 - 2.5	0.5 - 2.5	0.5 -4.0	0.5 - 2.5
IEC: rated voltage [V]	400																					
	250	V	V	V	V	V	V	V	V	V												
24 A	C/60 DC																					
	230/400																					
24 AC/60	DC/250																					
	500										V	V	V	V	V	V	V	V	V	V	V	V
IEC: rated current [A]		10	10	10	10	10	10	10	10	10	16	16	16	16	16	16	16	16	16	16	16	16
UL: rated voltage [V]		250	250	250	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
UL: rated current [A]		10	10	10	8.5	8.5	8.5	8.5	8.5	8.5	16	16	16	16	16	16	16	16	16	16	16	16
CSA: rated voltage [V]		-	-	-	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
CSA: rated current [A]		-	-	-	10	10	10	10	10	10	16	16	16	16	16	16	16	16	16	16	16	16
Suitable housing		H-B 16	H-B 24	H-B 24	H-B 6	H-B 10	H-B 16	H-B 24	H-B 32	H-B 48	H-B 6	H-B 6	H-B 6	H-B 10	H-B 10	H-B 10	H-B 16	H-B 16	H-B 16	H-B 24	H-B 24	H-B 24

# Technical data for EPIC<sup>®</sup> Rectangular connectors

					-				50							-	-	-				
Usage criteria		660	550	552	552	550	550	554	_	_		lar con	_		_	550	550	550	-	-	540	540
	Main catalogue page	552	552	552	552	552	552	556	556	557	557	557	557	558	558	559	559	559			562	562
		EPIC <sup>®</sup> H-BE 32	EPIC <sup>®</sup> H-BE 32	EPIC <sup>®</sup> H-BE 32	EPIC <sup>®</sup> H-BE 48	EPIC <sup>®</sup> H-BE 48	EPIC <sup>®</sup> H-BE 48	EPIC <sup>®</sup> H-EE 10	EPIC <sup>®</sup> H-EE 18	EPIC <sup>®</sup> H-EE 32	EPIC <sup>®</sup> H-EE 46	EPIC <sup>®</sup> H-EE 64	EPIC <sup>®</sup> H-EE 92	EPIC® H-BS 6	EPIC <sup>®</sup> H-BS 12	EPIC <sup>®</sup> H-BVE 3	EPIC <sup>®</sup> H-BVE 6	EPIC® H-BVE 10	EPIC <sup>®</sup> Terminal adapter TB-H-BE 6	EPIC <sup>®</sup> Terminal adapter TB-H-BE 10	EPIC <sup>®</sup> Terminal adapter TB-H-BE 16	EPIC <sup>®</sup> Terminal adapter TB-H-BE 24
Parameter		ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	ш	шн	ш⊢	шн	ш н
		32	32	32	48	48	48	10	18	32	46	64	92	6	12	3+2	6+2	10+2	6	10	16	24
Number of contacts		+ PE			+ PE		+ PE	+ PE		+ PE	+ PE	+ PE			+ PE	+ PE	+ PE	+ PE		+ PE	+ PE	+ PE
Connection system:	screw	V			V									V	V	V	V	V	V	V	V	V
	solder																					
	crimp		~			V		V	V	V	~	V	~									
Suitable contacts:	cage clamp			V		4	~				4											
	H-BE 2.5, machined	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Cross-section [mm <sup>2</sup> ]		-2.5	-4.0	-2.5	- 2.5	-4.0	- 2.5	-4.0	-4.0	-4.0	-4.0	-4.0	- 4.0	- 6.0	- 6.0	-2.5	-2.5	- 2.5	- 4.0	-4.0	-4.0	-4.0
IEC: rated voltage [V]		500	500	500	500	500	500	500	500	500	500	500	500	500	500	630	630	630	500	500	500	500
IEC: rated current [A]		16	16	16	16	16	16	16	16	16	16	16	16	35	35	16	16	16	16	16	16	16
UL: rated voltage [V] UL: rated current [A]		600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 16	600 35	600 35	600 16	600 16	600 16	600 16	600 16	600 16	600 16
CSA: rated voltage [V]		600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600
CSA: rated current [A]		16	16	16	16	16	16	16	16	16	16	16	16	35	35	16	16	16	16	16	16	16
Suitable housing:		H-B 32	H-B 32	H-B 32	H-B 48	H-B 48	H-B 48	H-B 6	H-B 10	H-B 16	H-B 24	H-B 32	H-B 48	H-B 16	H-B 32	H-B 10	H-B 16	H-B 24	H-B 6	H-B 10	H-B 16	H-B 24
			_	_	_	_		_	_	_	_	_		_	_	_		_		_		_
Usage criteria	M. 1	540	563	567	568	561	0 6	568	569	569	569	lar cor 570	570	571 571	erts 571	57	1 5	73	576	576	576	576
	Main catalogue page	563	203			500	0 0	008	209	209		570	570				1 0.	/3	570	570	570	5/0
		EPIC <sup>®</sup> High-current module, 1+PE	EPIC® High-current module, 2-pin	EPIC <sup>®</sup> High-voltage mod- ule. 3-pin	EPIC® High-voltage mod-	ule, 4+PE EPIC® 3-oin module			EPIC® 4-pin module, cage clamp	EPIC <sup>®</sup> 5-pin module	EPIC <sup>®</sup> 10-pin module, ma- chined	EPIC <sup>®</sup> 10-pin module, stamped	EPIC <sup>®</sup> 20-pin module	EPIC <sup>®</sup> 3-pin module coaxi- al	EPIC® Profibus DP module	EPIC® Universal Bus mod	ule ratio® attr	EPIC® KJ45 module	EPIC® MCR & module frame	EPIC <sup>®</sup> MCR 10 module frame	EPIC <sup>®</sup> MCR 16 module frame	EPIC <sup>®</sup> MCR 24 module frame
Parameter																						
Number of contacts		1 + PE	2	3	4 + P	_ 3		4	4	5	10	10	20	3	2 +	4 - en scre		+4	-	_	-	-
Connection system:	screw					-																
	solder	V	V												V	~						
	crimp					_	,			V				~			_	/				
	cage clamp			~	~	V		/		~	V	V	V					/				
Suitable contacts:	MC 3.6, machined			./			,		V													
outable contacts.	MC 2.5, stamped			~	V	V																
	H-BE 2.5, machined				V			~														
	MC 2.5, machined							<i>v</i>		V												
	H-D 1.6, machined										V						6	/				
	H-D 1.6, stamped											V										
	MD 1.0, stamped												V									
	MC coaxial													V								
	for 2 modules																		~			
	for 3 modules																			V		
	for 5 modules																				V	
	for 7 modules																					V
Cross-section [mm <sup>2</sup> ]		10.0 - 25.0		1.5 - 10.0			1.5	0.5	0.5 - 2.5	0.5 - 4.0	0.14 - 2.5	0.14 - 2.5			max 1.5		5 (	at.5 ).14	-	_	-	-
IEC: rated voltage [V]		1000	1000	1000					400	400	250	250	100	250	30	30	12	2.5 5/ 00	-	-	-	_
IEC: rated current [A]		82	82	50	16	40	)	25	14	20	10	10	4	-	1	1	1.	5/		_	-	_
UL: rated voltage [V]		600	600	-	-	60			600	400	250	-	100	-	_	-	1	0		_	_	_
UL: rated current [A]		82	82	_	-	40		-	14	20	10	-	4	-	_			_	-	_	-	_
CSA: rated voltage [V]		-	-	-	-	60			600	400	240	-	100	-	_			-	-	_	-	-
CSA: rated current [A]		-	-	-	-	35		-	14	16	10	-	4	-	-			-	-	-	-	-
Suitable housing:		**	**	**	**	**		**	**	**	**	**	**	**	**	**	* *	*	H-B	H-B	H-B	H-B 24
carcabie nousing.																			6	10	16	0 24

\*\*Module frame

## EPIC<sup>®</sup> housings and inserts · Rectangular connectors



### 1. Cable Gland:

The Cable Gland provides a seal between the cable and the connector housing. It may also be used to offer additional functions like strain relief and and braid continuity for EMC protection.

### 2. Upper housing: Hood

### 3. Male insert:

Types of contact termination

- Screw
- Crimp\*
  - Cage clampPush-In

### 4. Female insert:

Types of contact termination

- Screw
- Crimp\*
- Cage clamp
- Push-In

### 5. Lower housing:

- Panel mounting (cable entry though cut out in panel)
- Surface mounting (cable entry through a gland into the side of the connector base)
- Cable Connector Hood, cable to cable connection
- contacts must be ordered separately

Please pay attention on the EPIC<sup>®</sup> Selection table A10, this table is a great guide in helping you to find the right insert and suitable housings. It is particularly convenient using the connector with the connectorfinder in the internet (www.lappgroup.com/connectorfinder) and the connector housing configurator for customized solutions (www.lappgroup.com/connector-housing). You will also find configurated connector kits in our webcatalogue.

# High variety of applications with EPIC<sup>®</sup> rectangular connectors:

- Number of pins from 1 up to 216
- Currents up to 220A
- Voltage up to 1.000V
- Modular system with inserts for power supply, signal and data transmission, fiber optics, coax connection and compressed air
- Termination technologies: Screw, crimp, cage clamp, solder, Push-In
- Housings for cable connection and for the assembly on devices
- **Degree of protection** (depends on the type of housing and the cable gland. Therefore we recommend to use a brass gland with integrated sealing ring for example SKINTOP<sup>®</sup> MS-M.)
- EMC protection (For applications with EMC requirements, we recommend the EPIC<sup>®</sup> ULTRA in combination with the SKIN-TOP<sup>®</sup> BRUSH.)

**Tip:** Only use tools recommended and approved by Lapp. This ensures the safe and long-term operation of the connector. An assurance of the technical characteristics, as well as the validity of the certificates can only be given if all components are used exclusively by Lapp.

**Warning:** EPIC<sup>®</sup> industrial connectors may not be connected or disconnected under load.

### Table 31-2: EPIC® housings and inserts

### Hood (Fig.

It may have a top or angle (side) entry of different PG sizes to accommodate a wide range of cable diameters. The hood can be mated with either a surface or panel mounting base, or a cable coupler hood (for cable to cable connection).

### Panel mount base (Fig. \_\_\_):

It is wired from below though a hole cut in a panel. The panel base is attached to the surface of a control panel for connection of control or power cables.

### Surface mount base (Fig. **ESE**):

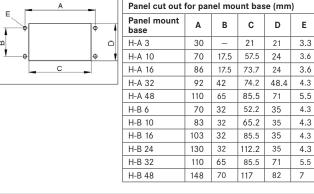
The surface base is a complete enclosure only offering cable entry through a cable gland mounted either on one or both sides of the base.

### Cable Coupler (Fig. 4):

The cable connector hood mates with a top entry hood to offer cable to cable connection. This is frequently used to extend cables.







Screw connection technology (as DIN EN 60	999)			
Screw thread	М3	M4	M5	M6
Starting torque Nm	0.5	1.2	2.0	2.5
Clamping screw: H-A, H-BE, H-BVE	•			
Clamping screw: H-BS		•		
Grounding screw: H-A, H-BE, H-BVE		•		
Grounding screw: H-BS			•	
Clamping screw: Module High-Current				•
Fixing screw: Inserts and Module frames	•			

All EPIC<sup>®</sup> connectors refer to IEC 61984.

## EPIC® Industrial connectors · Definitions and instructions for use

### **General information**

Connectors may not be connected or disconnected under load. The temperature range for connectors can be found in the catalog data. The degree of contamination is given in the technical data of the connector. The rated voltage and rated current are based on a power system with DC or AC (rms) at a frequency of 50 or 60 Hz at 0 ... 2000 m above sea level, and are given in the technical data of the connector. For other applications, the additional loads (e.g. electrical, chemical, climatic, biological, mechanical or radio-active) can mean for the connector, or request mateability with competitive products the user is responsible for the review and approval.

### Connectors

Connectors are devices that are not for connection or disconnection under load.

**Application Note:** This distinguishes these kind of connectors from plug devices that may be connected or disconnected under load. When connecting or disconnecting a connector under load, sparks and at short-term high temperatures that can cause damage to the contact surface and finally a total failure of the connector.

### Types of connection

For EPIC<sup>®</sup> Industrial Connectors different connection types of wire to the electrical contact are available. There is the classic screw, crimping, soldering and the spring-loaded terminals and Push-In. **Application Note:** Each of these connection types has advantages and disadvantages. Screw is the simplest and a very common practice. Crimping gives with the appropriate crimping tool 100% process-reliable results, but it requires special tools. Spring loaded terminals also allows quick and easy connection and is vibration resistant. Soldering requires little space and is often used with small connector systems. Push-In is ideal for massive conductors and cores with wire end sleeves.

### **Rated voltage**

The rated voltage is the voltage according to which the connectors are designed and related to the relevant operating characteristics. **Application Note:** The rated voltage is defined depending on the environmental degree of contamination for which the connector it is developed and tested. If the same connector is tested for pollution degree 1, the rated voltage given in the catalogue is significantly higher than when he was tested for pollution degree 2. EPIC<sup>®</sup> connectors are generally designed for pollution degree 3 and therefore have high safety reserves, even if the plug moist inside or should be dirty.

### **Rated current**

A current value assigned by the manufacturer, which the connector or PSD can carry continuously (without interruption) and simultaneously through all its contacts wired with the largest conductor preferrably at an ambient temperature of 40°C without the upper temperature being exceeded. The rated current is specified for the largest conductor cross-section.

#### Rated impulse withstand voltage

The test voltage is the maximum voltage at which a connector will not be subjected to flashover under the set conditions.

**Application Note:** In this specified voltage there will be no spark damage to the connector.

### EMC (electromagnetic compatibility)

The capacity of an electrical installation to function satisfactorily in its electromagnetic environment without an unacceptable influence to the environment which also includes other installations (DIN/VDE 0870, Section 1).

**Application Note:** For good EMC shielding, there is a diagram that describes the behavior for different frequencies. This serves a s a n evaluation criterion to compare different components. In the industrial sector, the interfering frequencies are in the lower frequency range. Typically less than 100kHz. In this frequency range, it depends mainly on a low impedance, high crosssection, 360° shielding. When evaluating the different EMC concepts such qualitative parameters can be recognized easily. The EPIC<sup>®</sup> ULTRA housing convinces with a highly sophisticated sealing and contact technology. The innovative design allows safe EMC contact and allows the current on the cable screen to flow to the ground. The 360° shield connection is done via the cable gland SKINTOP<sup>®</sup> BRUSH.

### Coding

Coding is a system by which it is possible to prevent interfacing confusion between adjacent connectors which are of the same configuration. This is useful if two or more connectors of the same type are mounted on the same unit

**Application Note:** So plugging errors and incorrect wiring is prevented. When coding the rectangular connector with guide pin and guide bushing in addition the plug insert is centered. Uncentred connection is prevented resulting in an increased service life of the contacts. For every EPIC<sup>®</sup> connectors exists the right coding element.

## EPIC® Industrial connectors · Definitions and instructions for use

**Contact :** The coating of the base material with a precious metal is necessary to guarantee a long lasting and good connection. The contacts are plated normally by galvanic processes. To reach a long-lasting plating, there are some requirements for the contact and the plating material.

Lapp uses mainly silver (Ag) and gold (Au) for surface coating,

- Silver has the highest electrical conductivity of all metals and is the most cost effective precious metal. By sulfur or sulfur-containing substances in the ambient air rapidly forms a brownish to black oxide layer of silver sulfide (Ag2S). This layer, however, can break during mating or is broken at high currents, so that the required electrical conductivity is maintained. Passivation of the silver surface reduces the formation of the oxide layer and reduces the plug and pulling forces.
- Gold is the most stable precious metal. The oxide and sulfide formation can be neglected. Gold contacts are characterized by low insertion and extraction forces. They are mainly used in the transmission of signals with low current and voltage values. Due to high-precision manufacturing of contacts and selection of the contact materials is the lifetime of the EPIC<sup>®</sup> connector very high.

**Mating cycles:** Mating cycles are mechanical operations of connectors by insertion and removal. **Application Note:** The maximum number of mating cycles resulting from the increase in the resistance of the connection after X-time insertion and removal. This must not be more than 50% increase in-or exceed 5mOhm. Another soft factor is the condition of the contacts or the locking elements. There should be no harmful abrasion inside the connector. EPIC<sup>®</sup> has for the soft factors extremely high internal standards. This internal review can vary widely depending on the manufacturer.

**Temperature range:** The temperature range is determined by the upper and lower limit temperature. These temperatures are the highest and lowest allowable temperatures at which a connector must still be operated.

**Application Note:** The higher temperature limit includes the heating of contacts and the-ambient temperature. It is always measured at the hottest point. These are either the transition of the crimp area or the contacts in general. The temperature of the protective housing is usually much lower than the hottest point of contact. The lower limit temperature is the lowest permissible temperature at which a connector may be operated. In particular, the sealing materials get stiff at low temperatures and lose elasticity. Is the connector mated or unmated under in this temperature range, separated or assembled, it may cause damage to the seals. At static use depending on the connector system and application can be used at a lower temperature range. Due to the used materials and the design of the housing the temperature range of the EPIC<sup>®</sup> connectors is very wide.

### Degree of pollution

Numerical value which states the anticipated pollution in the micro-environment. The pollution degree 3 is typical for industrial environments, whilst pollution degree 2 is typical for households. **Pollution degree 1:** No pollution or only dry, non-conductive pollution occurs. This pollution has no influence. Example for environment: Open, unprotected insulation in air-conditioned or clean, dry rooms.

**Pollution degree 2:** Only non-conductive pollution occurs. Occasionally, however, it may be anticipated that transient conductivity arises due to condensation. Example for environment: Open unprotected insulations in residential, commercial or business premises (fine mechanical engineering workshops, laboratories, test areas, rooms used for medical purposes).

**Pollution degree 3:** Conductive pollution arises, or dry, nonconductive pollution which becomes conductive because condensation has to be anticipated. Example for environment: Example: Open unprotected insulations in rooms of industrial, commercial and agricultural companies, unheated storage rooms, boilerhouses and workshops.

**Pollution degree 4:** The pollution generates persistent conductivity caused by conductive dust, rain or snow.

**Pre-mating contact:** If the construction of the circuit requires that for safety reasons, e.g. for neutral conductors, one or several contacts of a connector have to make contact first upon mating, or have to be separated last upon unmating, then connectors with switch (extended) contacts are used.

**Safety note:** In the case of EPIC<sup>®</sup> inserts such as H-BE or H-BS, the protective conductor connection can be changed. When connecting the protective conductor, the low-resistance connection to the protective conductor of the counter piece must not be interrupted. Terminal screw changes must be performed on both sides to ensure that the protective function is maintained.

Otherwise, the relevant specifications apply in accordance with: DIN EN 50110-1 (VDE 0105-1) – Operation of electrical installations. It is up to the user to assess whether, in specific areas of application not covered by us, the components listed in this catalogue comply with regulations other than those specified here. We reserve the right to make constructional and design modifications due to quality improvements, enhancements or manufacturing requirements. The information in this catalogue serves to specify the components and does not guarantee properties.

Assurance of the technical properties can only be given if all components are supplied by Lapp. Otherwise, any testing and approval is the responsibility of the operator.

**Certificates:** VDE, certificate number 40016270, 40011894, 40013251, 40019264UL, file number: E75770, E249137, E192484 CSA files: E75770, E249137, E192484 TÜV

For further information on the topic, see 2016/2017 main catalogue: Table T22: Definition of protection according to EN 60529 and DIN 40050 Table T23-1: PG/Metric: Connection thread of EPIC<sup>®</sup> housing

Notes	

Notes	

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#### The following applies for the use of our products

The conformity of our products to the relevant European directives and compliance with the provisions contained therein shall be indicated by the CE marking. The safety of our products is closely associated with how they are used. A knowledge of and adherence to the respective international/national standards of use (e.g. DIN VDE 0100; 0298) are mandatory. There are particular risks if installed improperly. This applies to all our products/items:

Processing is only to be done by an authorised electrician! Otherwise, there is the risk of an electric shock or a fire ignited by electric current!

#### Safety

Without exception, our products are tested for application safety in accordance with defined standards and our own regulations, which complement the standards. Relevant legal requirements and safety regulations are also observed. Provided due care and attention is paid, the possibility of product-specific danger to the user may thus reasonably be excluded. Where products are used carelessly or incorrectly, however, considerable danger to persons and the environment may arise. For this reason, our cables must only be processed and/or used responsibly by trained electricians or specialists. This catalogue contains general information for the application of each product. Independent of such information, the application standards DIN VDE 0298 and DIN VDE 0891 for cables will apply. Excerpts from these standards, as well as complementary selection and application tables, design and installation guidelines, are contained in the tables in the appendix to the current main catalogue. Our machines and installation tools are – where necessary – designed in accordance with the machine guidelines and display the CE identification mark. It must be noted, however, that our machines and installation tools must only be used by trained specialist personnel and for the purpose for which they were designed. <sup>©</sup>Copyright by U.I. Lapp GmbH. Reprinting or reproduction of the text or the illustrations may be made only with written approval and with correct indication of source. We reserve the right to make modifications to our products, especially those based on technical improvements or continued development. All illustrations and numerical data etc. are therefore without warranty and are subject to change.















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