# THE WORLD OF LAPP

EPIC® Industrial connectors – simply complete





# Legend for icons

#### **INDUSTRIES**



Mechanical and Plant Engineering



Solar Energy

### PRODUCT CHARACTERISTICS



Mechanical resistance



Quantity



Assembly time



Optimum strain relief



Robust



Connector with standard housing unit



Interference signals



UV-resistant



Waterproof



• Complete connectors - easy to order starting from 1 piece





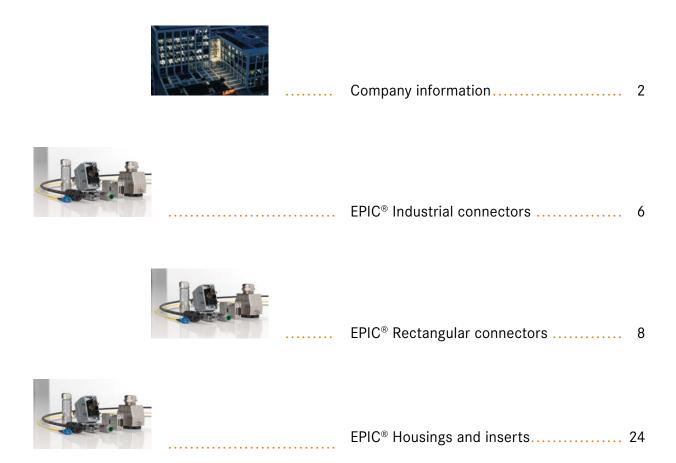
= Complete connection

Plug

Socket

**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.

# content



1



# On course for success

#### Family business and global player

LAPP is both. The history of our company has been one of success and expansion ever since it was founded in 1959 by Ursula Ida and Oskar Lapp. It remains resolutely family owned to this day. We safeguard our success by staying close to our customers and markets, maintaining our innovative strength and brand quality, and being a reliable partner. We provide continuity, always guided in our thoughts and actions by our values.

## **Customer-oriented**



Success-

oriented

Family-oriented

#### Success built on family values

At LAPP, we maintain values that promote cooperation and enable relationships with employees, suppliers and customers based on partnership and trust. Good relations and mutual respect are key elements of our company culture and a central plank of company policy. We know that our successful business development of the last decades is down in particular to our 3,770 skilled and dedicated staff around the world, as well as the reliable partnership with our customers.

With 17 production facilities, over 40 sales companies and hundreds of dedicated consultants, we are always close to the individual needs and challenges of our customers all over the globe. We are constantly developing our products and system solutions, setting standards in safety, quality and functionality. This is why we are one of the world's leading manufacturers of integrated solutions and branded products in cable and connection technology. As our success story enters its third generation, we are aware of our duty to the future.



# EPIC®

[for when things get extreme]

# EPIC® for the longest railway tunnel in the world

In June 2016, after more than 20 years of construction, the Gotthard Base Tunnel in Switzerland, which will be the longest railway tunnel in the world at 57 kilometres, is set to have its grand opening. What hardly anyone knows is that EPIC® industrial connectors from LAPP have also contributed to the success of this construction of the century. In order to dig the two railway tunnels from north to south through the hard rock, four tunnel boring machines from the tunnel

construction experts Herrenknecht based in Schwanau (Baden-Württemberg, Germany) were used. Just one machine (the so-called Gripper TBM) has over 26 tons of pressing force, is 400 metres long and 9 metres wide. This makes it possible to break down even the hardest stone. EPIC® connectors were used here as extension connectors, since the further the tunnel boring machine is driven into the mountain the longer the cable for the power supply and controls

must be. The EPIC® H-BE connectors were interconnected with housings and inserts every 50 metres to ensure that everything works reliably. These connectors are particularly suitable for higher voltages and currents and boast a high level of reliability. This is particularly important deep in the tunnel. Incidentally: the new tunnel will shorten the travel time for trains running between Zurich and Milan by an hour to just 2 hours and 40 minutes.

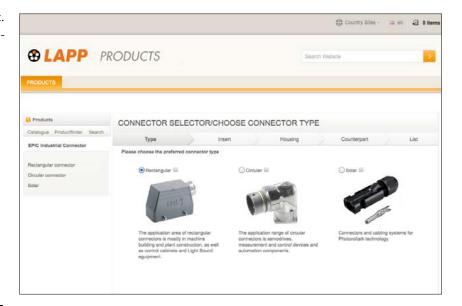
 ${\sf EPIC}^{\$} \ connectors \ also \ help \ to \ supply \ power \ to \ the \ tunnel \ boring \ machines \ from \ Herrenknecht \ in \ the \ Gotthard \ Base \ Tunnel \ power \ for \ from \ Herrenknecht \ in \ the \ Gotthard \ Base \ Tunnel \ for \ from \ Herrenknecht \ in \ the \ Gotthard \ Base \ Tunnel \ for \ from \ Herrenknecht \ in \ the \ Gotthard \ Base \ Tunnel \ for \ from \ Herrenknecht \ from \ Herrenknech$ 



# Finding solutions

# **EPIC® Connector Selector – Support for configuration of Industrial Connectors**

Design, insert, housing and counterpart. These four selections take you to the appropriate connector in just a few clicks.

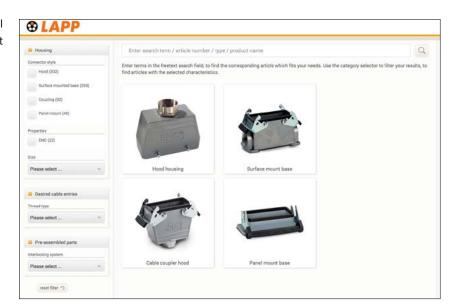






## **Cable Connector Selector**

Configure your own individual industrial connector housing with locking concept and cable entries.





http://products.lappgroup.com/connector-housing.html

At a glance

Properties	Connection type					Connection cross section	Rated voltage acce to standards	ording		Rated current for largest connection cross section according to standards			Approvals
	Screw	Crimp	Spring	Push-In	Solder	in mm² depending on connection type	EC	UL/USR	CSA/CNR	EC	UL/USR	CSA/CNR	International
Rectangular – inserts fixed													
EPIC® H-A 3, 4	•					0.5 - 2.5	400 V	600 V	600 V	23 A	10 A	10 A	VDE, UR, CS
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, CS
EPIC® STA 6, 14, 20	•				•	0.5 - 1.5/	24 VAC/60 VDC	48 V	48 V	10 A	10 A	10 A	UR, CSA
EPIC® H-Q 5		•				max. 1.5 0.14 - 4.0	230 V/400 V	600 V	600 V	16 A	16 A	16 Δ	UR, CSA
EPIC® H-D 7, 8		•				0.14 - 2.5	H*	250 V	- 000 v	10 A	10 A		UR UR
EPIC® H-D 15, 25, 40, 64		•				0.14 - 2.5	250 V	250 V	_	10 A	10 A		UR
EPIC® 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/	500 V	600 V	600 V	16 A	16 A	16 A	VDE, cURus
						0.14 - 4.0							
EPIC® H-EE 10, 18, 32, 46 EPIC® H-BS 6, 12	•	•				0.14 - 4.0 0.5 - 6.0	500 V 500 V	600 V	600 V	16 A 35 A	16 A 35 A		UR, CSA UR, CSA
EPIC® H-BVE 3, 6, 10	•					0.5 - 0.6	630 V	600 V	600 V	16 A	16 A		VDE, cURus
POWER H-S 4	•					2.5 - 10.0	1000 V	-	-	65 A	-		-
EPIC® 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													
High 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	-	-	50 A	-		-
High voltage 4+PE		•				0.5 - 2.5 1.5 - 10.0	1000 V 630 V	600 V	600 V	16 A 40 A	40 A		UR, CSA
3-pin HE 4-pin		•				0.5 - 4.0	630 V	000 V	000 V	25 A	40 A		- UK, USA
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		16 A	UR, CSA
10-pin		•				0.14 - 2.5	250 V	250 V	240 V	10 A	10 A	10 A	UR, CSA
10-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	-	_	- 1 A	-		-
PROFIBUS® DP	•					0.08 - 1.5 0.08 - 1.5	30 V	-	-	1 A	-	_	
Universal bus						0.06 - 1.5	600 V/	_	_	P*: 10 A		_	-
RJ45		•				0.12 - 0.2	125 V	-	-	S*: 1.5 A		-	-
Pneumatic 1, 2-pin				•		Ø 2.5/4.0 mm Ø 2.5/4.0 mm	-	-	_	-	-	_	-
Round													
EPIC® POWER M12 3+PE	•					0.75 - 1.5	630 V	600 V		12 A	12 A	12 A	cURus
EPIC® SIGNAL M17 8, 17		•				0.06 - 0.56/	60 V	_	_	3.6 A	_	_	_
		•				0.06 - 1.0			_		_		_
EPIC® POWER M17 3+PE EPIC® POWER M17 5+PE, 6+PE, 7+PE		•				0.5 - 2.5 0.06 - 1.0	630 V 630 V	-	-	20 A 14 A			_
· ·						0.06 - 1.0/	630 V/		-	P*: 14 A			
EPIC® POWER M17 3+PE+5		•				0.06 - 0.56	60 V	_	-	S*: 3.6 A	_	_	-
EPIC® SIGNAL M23 6, 7		•			•	0.06 - 2.5	150 V	150 V	150 V	18A			VDE, cURus
EPIC® SIGNAL M23 8+1		•			•	0.06 - 1.0/ 0.06 - 2.5	150 V	150 V	150 V	P*: 20 A S*: 7 A	P*: 20 A S*: 7 A	P*: 20 A S*: 7 A	VDE, cURus
EPIC® SIGNAL M23 9		•			•	0.06 - 1.0	150 V	150 V	150 V	7 A			VDE, cURus
EPIC® SIGNAL M23 12, 16		•			•	0.06 - 1.0	100 V	100 V	100 V	7 A			VDE, cURus
EPIC® SIGNAL M23 17		•			•	0.06 - 1.0	50 V	50 V	50 V	7 A			VDE, cURus
EPIC® SIGNAL R3.0		•			•	0.06 - 1.0	24 VAC/60 VDC	- 600 V	- 600 V	7.5 A			- VDE al IBua
EPIC® POWER LS1 5+PE  EPIC® POWER LS1 3+PE+4		•				0.5 - 4.0/ 0.5 - 4.0/ 0.4 - 1.0	630 V 630 V/250 V	600 V 600 V/ 250 V	600 V 600 V/ 250 V	25 A P*: 26 A S*: 7 A		P*: 17 A	VDE, cURus
EPIC® 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® 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® POWERLOCK S	•					50.0 - 120.0	1000 V	-	-	400 A	_	-	VDE
EPIC® POWERLOCK C		•				35.0 - 240.0	1000 V	-	-	660 A	-	_	VDE
SOLAR													

P': Power S': Signal H\*: In metal housing: 24 VAC/60 VDC; in plastic housing: 250 V

<sup>\*</sup>Find more information about EPIC® circular connectors and EPIC® SOLAR connectors in our general catalogue.

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

# EPIC® inserts are available in a fixed pin design and as a modular system

- EPIC® fixed pin inserts are easy to handle and come in a wide variety of designs
- EPIC® 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® 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.

# EPIC® 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® POWERLOCK**

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

#### EPIC® SOLAR connectors\*

Durable connectors for photovoltaics

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

#### EPIC® 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

<sup>\*</sup>Find more information about EPIC® circular connectors and EPIC® SOLAR connectors in our general catalogue.

**& LAPP** 

Rectangular connectors •  $\mathsf{EPIC}^{\circledast}$  Rectangular Kits



















## **EPIC® ULTRA KIT H-B 6**

#### **Benefits**

- EMC protection
- Corrosion-resistant
- Push-In inserts fast and easy tool free connection technology

#### **Technical data**



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A)
IEC: 16 A UL: 13 A CSA: 13 A



Number of contacts



· Complete connectors - easy to order





# 75009734 | 1 Article numbers for single components

- 70250202
- 44423200





- Male insert EPIC® H-BE 6
   Push-In termination
- EMC hood EPIC® ULTRA H-B 6
- Integrated SKINTOP® cable gland



Article number	Pieces/PU
75009735	1

#### Article numbers for single components

- 70250205
- 44423200

EPIC	ULIKA	KIT H-R	0 2L	12 FR 2	<b>/</b> -1/



- Male insert EPIC® H-BE 6 Push-In termination
- EMC hood EPIC® ULTRA H-B 6
- Integrated SKINTOP® cable gland



Article number	Pieces/PU
75009736	1

### Article numbers for single components

- 70250206
- 44423201

#### **EPIC ULTRA Kit H-B 6 BP AG LB**



- Female insert EPIC® H-BE 6
   Push-In termination
- EMC panel-mount base EPIC® ULTRA H-B 6



Article number	Pieces/PU
75009737	1

#### Article numbers for single components

- 70250209
- 44423201

#### EPIC ULTRA Kit H-B 6 BP SGR LB 9-17



- Female insert EPIC® H-BE 6 Push-In termination
- EMC surface-mount base EPIC® ULTRA H-B 6
- Integrated SKINTOP® cable gland

















## **EPIC® ULTRA KIT H-B 10**

#### **Benefits**

- EMC protection
- Corrosion-resistant
- Push-In inserts fast and easy tool free connection technology

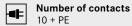
#### Technical data



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 13 A CSA: 13 A





• Complete connectors - easy to order

#### EPIC® ULTRA Kit H-B 10 SP TS QB 11-21



- Male insert EPIC® H-BE 10 Push-In termination
- EMC hood EPIC® ULTRA H-B 10
- Integrated SKINTOP® cable gland

Article number	Pieces/PU
75009738	1

#### Article numbers for single components

- 70250212
- 44423202



#### EPIC ULTRA Kit H-B 10 BP AG QB



- Female insert EPIC® H-BE 10 Push-In termination
- EMC panel-mount base EPIC® ULTRA H-B 10

Article number	Pieces/PU
75009739	1

#### Article numbers for single components

- 70250213
- 44423203























## **EPIC® ULTRA KIT H-B 16**

#### **Benefits**

- EMC protection
- · Corrosion-resistant
- Push-In inserts fast and easy tool free connection technology

#### **Technical data**

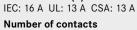


Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A)







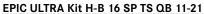
• Complete connectors - easy to order





#### Article numbers for single components

- 70250216
- 44423204





- Male insert EPIC® H-BE 16 Push-In termination
- EMC hood EPIC® ULTRA H-B 16
- Integrated SKINTOP® cable gland



Article number	Pieces/PU
75009741	1

#### Article numbers for single components

- 70250217
- 44423205

#### EPIC ULTRA Kit H-B 16 BP AG QB



- Female insert EPIC® H-BE 16 Push-In termination
- EMC panel-mount base EPIC® ULTRA H-B 16

















## **EPIC® ULTRA KIT H-B 24**

#### **Benefits**

- EMC protection
- Corrosion-resistant
- Push-In inserts fast and easy tool free connection technology

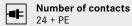
#### **Technical data**



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 13 A CSA: 13 A





• Complete connectors - easy to order

#### EPIC ULTRA Kit H-B 24 SP TS QB 11-21



- Male insert EPIC® H-BE 24 Push-In termination
- EMC hood EPIC® ULTRA H-B 24
- Integrated SKINTOP® cable gland

Article number	Pieces/PU
75009742	1

#### Article numbers for single components

- 70250221
- 44423206



#### EPIC ULTRA Kit H-B 24 BP AG QB



- Female insert EPIC® H-BE 24 Push-In termination
- EMC panel mount base EPIC® ULTRA H-B 24

Article number	Pieces/PU
75009743	1

#### Article numbers for single components

- 70250222
- 44423207















# **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

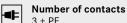
#### **Technical data**



Rated voltage (V) IEC: 400 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 23 A UL: 10 A CSA: 10 A





Complete connectors - easy to order starting from 1 piece



= Complete connection



















Article number	Pieces/PU				
EPIC® H-A 3 Kits Thermoplastic					
75009601	1				

#### Article numbers for single components

- H-A 3 SS 10420000
- H-A 3 Tgv M20 19426000

Article number	Pieces/PU			
H-A 3 Tgv M20				
75009603	1			
Article numbers for single components				

- H-A 3 SS 10420000
- H-A 3 Ts M20 19427000

Article number	Pieces/PU
H-A 3 Ts M20	
75009605	1

#### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Ag 10422000

Article number	Pieces/PU
H-A 3 Ag	
75009607	1

#### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Ags 10423000

Pieces/PU
1

#### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Agsv M20 19421900

Article number		Pieces/PU	J
H-A 3 Agsv	M20		
75009611		1	

#### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Tgvb M20 19429000

#### EPIC KIT H-A 3 SS TG M20



- EPIC® H-A 3 screw-termination male insert
- EPIC® H-A 3 hood
- · Housing: thermoplastic grey

#### EPIC KIT H-A 3 SS TS M20



- EPIC® 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® H-A 3 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- · Straight version
- · Housing: thermoplastic grey

#### **EPIC KIT H-A 3 BS AGS**



- EPIC® 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® 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® H-A 3 cable coupler hood
- · Housing: thermoplastic grey



**& LAPP** 

Rectangular connectors • EPIC® Rectangular Kits











# EPIC® H-A 3 Kits Metal

#### **Benefits**

- · Pre-packed kits with compatible components
- Uncomplicated ordering
- · No misplaced orders

#### Similar products

• EPIC® H-A 3 Kits Thermoplastic

#### Technical data

Rated voltage (V)

**Article** 

number EPIC® H-A 3 Kits Metal 75009602

Article

number H-A 3 MTgv M20 75009604

• H-A 3 SS 10420000

• H-A 3 SS 10420000

• H-A 3 Ts M20 19512300

• H-A 3 MTgv M20 19512100

IEC: 400 V UL: 600 V CSA: 600 V

Pieces/PU

Pieces/PU

Rated current (A) IEC: 23 A UL: 10 A CSA: 10 A

Number of contacts

Article numbers for single component



Complete connectors - easy to order starting from 1 piece



= Complete connection

#### EPIC KIT H-A 3 SS MTG M20



- EPIC® H-A 3 screw-termination male insert
- EPIC® H-A 3 hood
- · Housing: zinc die-casting, grey

# EPIC KIT H-A 3 SS MTS M20



- EPIC® H-A 3 screw-termination male insert
- EPIC® H-A 3 hood
- · Side cable entry
- Housing: zinc die-casting, grey

#### EPIC KIT H-A 3 BS M



- EPIC® H-A 3 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- Straight version

female insert

Angled version

female insert

Angled version

· Housing: zinc die-casting, grey

• EPIC® H-A 3 screw-termination

• EPIC® H-A 3 panel-mount base

• Housing: zinc die-casting, grey

EPIC KIT H-A 3 BS MAGS M20

• EPIC® H-A 3 screw-termination

EPIC® H-A 3 panel-mount base

· Housing: zinc die-casting, grey

**EPIC KIT H-A 3 BS MAGS** 

IAG	Article number	Pieces/PU
	H-A 3 Ts M20	
	75009606	1

#### Article numbers for single component

Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Mag 10422500











#### Article Pieces/PU number H-A 3 Mag 75009608

#### Article numbers for single components

- H-A 3 BS 10421000
- H-A 3 Mags 10423500





#### Article Pieces/PU number H-A 3 Mags 75009610

- H-A 3 BS 10421000
- H-A 3 MAgsv M20 19512700

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#### EPIC KIT H-A 3 BS MTGB M20



- EPIC® H-A 3 screw-termination female insert
- EPIC® H-A 3 cable coupler hood
- · Housing: zinc die-casting, grey

Article number	Pieces/PU	
H-A 3 MAgsv M20		
75009612	1	
Article numbers for single components		

- H-A 3 BS 10421000
- H-A 3 MTgvb M20 19512900













# **EPIC® H-A 4 Kits Thermoplastic**

#### **Benefits**

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- · No misplaced orders

#### Similar products

• EPIC® H-A 4 Kits Metal

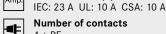
#### **Technical data**



Rated voltage (V) IEC: 400 V UL: 600 V CSA: 600 V

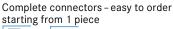


Rated current (A)



**Number of contacts** 







Info

+ O = Complete connection













#### Article Pieces/PU number EPIC® H-A 4 Kits Thermoplastic 75009613

#### Article numbers for single component

- H-A 4 SS 10431000
- H-A 3 Tgv M20 19426000

Article number	Pieces/PU	
H-A 3 Tgv M	20	
75009615	1	
Auticle mumbers for single commonents		

- H-A 4 SS 10431000
- H-A 3 Ts M20 19427000

Article number	Pieces/PU
H-A 3 Ts M20	)
75009617	1

#### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Ag 10422000

Article number	Pieces/PU
H-A 3 Ag	
75009619	1

#### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Ags 10423000

Article number	Pieces/PU
H-A 3 Ags	
75009621	1

## Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Agsv M20 19421900

Article number	Pieces/PU
H-A 3 Agsv M20	
75009623	1

## Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Tgvb M20 19429000

#### EPIC KIT H-A 4 SS TG M20



- EPIC® H-A 4 screw-termination male insert
- EPIC® H-A 3 hood
- Straight cable entry
- Housing: thermoplastic grey

#### EPIC KIT H-A 4 SS TS M20



- EPIC® H-A 4 screw-termination male insert
- EPIC® H-A 3 hood
- Side cable entry
- Housing: thermoplastic grey

#### **EPIC KIT H-A 4 BS AG**



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- · Straight version
- · Housing: thermoplastic grey

#### **EPIC KIT H-A 4 BS AGS**



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- Angled version
- · Housing: thermoplastic grey

#### EPIC KIT H-A 4 BS AGS M20



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- Angled version
- · Housing: thermoplastic grey

#### EPIC KIT H-A 4 BS TGB M20



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 cable coupler hood
- Straight cable entry
- · Housing: thermoplastic grey















# EPIC® H-A 4 Kits Metal

#### **Benefits**

- · Pre-packed kits with compatible components
- Uncomplicated ordering
- · No misplaced orders

#### Similar products

• EPIC® H-A 4 Kits Thermoplastic

#### Technical data

Rated voltage (V)

IEC: 400 V UL: 600 V CSA: 600 V

Rated current (A) IEC: 23 A UL: 10 A CSA: 10 A

**Number of contacts** 

Complete connectors - easy to order starting from 1 piece



= Complete connection

#### EPIC KIT H-A 4 SS MTG M20



- EPIC® H-A 4 screw-termination male insert
- EPIC® H-A 3 hood
- · Straight cable entry
- · Housing: zinc die-casting, grey

#### EPIC KIT H-A 4 SS MTS M20



- EPIC® H-A 4 screw-termination male insert
- EPIC® H-A 3 hood
- · Side cable entry
- · Housing: zinc die-casting, grey

#### **EPIC KIT H-A 4 BS MAG**



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 panel-mount base
- · Straight version

female insert

· Angled version

· Housing: zinc die-casting, grey

• EPIC® H-A 4 screw-termination

• EPIC® H-A 3 panel-mount base

· Housing: zinc die-casting, grey

**EPIC KIT H-A 4 BS MAGS M20** 

• EPIC® H-A 4 screw-termination

• EPIC® H-A 3 panel-mount base

• Housing: zinc die-casting, grey

EPIC KIT H-A 4 BS TGB M20

**EPIC KIT H-A 4 BS MAGS** 

Article number	Pieces/PU
EPIC® H-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	
H-A 3 MTgv M20		
75009616	1	
Article numbers for single components		

- H-A 4 SS 10431000

•	H-A 3	Ts	M20	19512300

Article number	Pieces/PU	
H-A 3 Ts M20	)	
75009618	1	
Autiala mumbana fan ainala aanmananta		

- H-A 4 BS 10432000
- H-A 3 Mag 10422500









#### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 Mags 10423500







#### Article Pieces/PU number H-A 3 Mags 75009622

#### Article numbers for single components

- H-A 4 BS 10432000
- H-A 3 MAgsv M20 19512700

Article number	Pieces/PU	
H-A 3 MAgsv M20		
75009624	1	
Article numbers for single components		

- H-A 3 MTgvb M20 19512900







female insert

Angled version



- EPIC® H-A 4 screw-termination female insert
- EPIC® H-A 3 cable coupler hood
- · Straight cable entry
- · Housing: zinc die-casting, grey













## EPIC® H-A 10 Kits

#### **Benefits**

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- · No misplaced orders

#### **Technical data**



Rated voltage (V) IEC: 250 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 14 A CSA: 16 A



**Number of contacts** 



Complete connectors - easy to order starting from 1 piece





+ O = Complete connection





Article number	Pieces/PU
EPIC® H-A 10	) Kits
75009625	1

#### Article numbers for single components

- H-A 10 SS 10440100
- H-A 10 TG M20 19446000





- EPIC® H-A 10 screw-termination male insert
- · With wire protection
- EPIC® H-A 10 hood





Article number	Pieces/PU	
H-A 10 TG M	20	
75009626	1	
Article numbers for single components		

- H-A 10 SS 10440100
- H-A 10 TS M20 19445000

### EPIC KIT H-A 10 SS TS M20



- EPIC® H-A 10 screw-termination male insert
- With wire protection
- EPIC® H-A 10 hood



Article number	Pieces/PU
H-A 10 TS M20	)
75009627	1

## Article numbers for single components

- H-A 10 BS 10441100
- H-A 10 AG-LB 10442000

#### **EPIC KIT H-A 10 BS AG**



- EPIC® H-A 10 screw-termination female insert
- With wire protection
- EPIC® H-A 10 panel-mount base



Article number	Pieces/PU
H-A 10 AG-LB	
75009628	1

- H-A 10 BS 10441100
- H-A 10 SGR-LB M20 19448100

#### EPIC KIT H-A 10 BS SGR-LB M20



- EPIC® H-A 10 screw-termination female insert
- With wire protection
- EPIC® H-A 10 surface-mount base



Article number	Pieces/PU	
H-A 10 SGR-LB M20		
75009629	1	
Article num	hare for single companents	

- H-A 10 BS 10441100
- H-A 10 TBF-LB M20 19439000

#### EPIC KIT H-A 10 BS TBF-LB M20



- EPIC® H-A 10 screw-termination female insert
- With wire protection
- EPIC® H-A 10 cable coupler hood













# EPIC® H-A 16 Kits

#### **Benefits**

- Pre-packed kits with compatible components
- · Uncomplicated ordering
- No misplaced orders

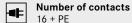
#### **Technical data**



Rated voltage (V)
IEC: 250 V UL: 600 V CSA: 600 V



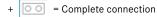
Rated current (A)
IEC: 16 A UL: 14 A CSA: 16 A





 Complete connectors – easy to order starting from 1 piece





#### EPIC KIT H-A 16 SS TG M20



- EPIC® H-A 16 screw-termination male insert
- · With wire protection
- EPIC® H-A 16 hood

Article number	Pieces/PU
EPIC® H-A 16	Kits
75009630	1

#### Article numbers for single components

- H-A 16 SS 10530000
- H-A 16 TG M20 19565000



#### EPIC KIT H-A 16 SS TS M20



- EPIC® H-A 16 screw-termination male insert
- With wire protection
- EPIC® H-A 16 hood

Article number	Pieces/PU
H-A 16 TG M20	
75009631	1

#### Article numbers for single components

- H-A 16 SS 10530000
- H-A 16 TS M20 19564000



### EPIC KIT H-A 16 BS AG



- EPIC® H-A 16 screw termination female insert
- With wire protection
- EPIC® H-A 16 panel-mount base

Article number	Pieces/PU	
H-A 16 TS M20		
75009632	1	

#### Article numbers for single components

- H-A 16 BS 10531000
- H-A 16 AG-LB 10462000



#### EPIC KIT H-A 16 BS SGR-LB M20



- EPIC® H-A 16 screw termination female insert
- With wire protection
- EPIC® H-A 16 surface-mount base

Article number	Pieces/PU	
H-A 16 AG-LB		
75009633	1	
75009633	1	

#### Article numbers for single components

- H-A 16 BS 10531000
- H-A 16 SGR-LB M20 19567100



#### EPIC KIT H-A 16 BS TBF-LB M20



- EPIC® H-A 16 screw termination female insert
- With wire protection
- EPIC® H-A 16 cable coupler hood

Article number	Pieces/PU
H-A 16 SGR-	LB M20
75009634	1

#### Article numbers for single components

- H-A 16 BS 10531000
- H-A 16 TBF-LB M20 19563000















## **EPIC® H-BE 6 Kits**

#### **Benefits**

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- · No misplaced orders

#### **Technical data**



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 16 A CSA: 16 A



**Number of contacts** 



Complete connectors - easy to order starting from 1 piece



+ O = Complete connection



#### Article Pieces/PU number EPIC® H-BE 6 Kits 75009635

#### Article numbers for single components

- EPIC® H-BE 6 SS 10190000
- H-B 6 TG M20 19011000





- EPIC® H-BE 6 screw-termination male insert
- · With wire protection
- EPIC® H-B 6 hood



Article number	Pieces/PU	
H-B 6 TG M20		
75009636	1	

#### Article numbers for single components

- EPIC® H-BE 6 SS 10190000
- H-B 6 TS M20 19012000

#### EPIC® KIT H-BE 6 SS TS M20



- EPIC® H-BE 6 screw-termination male insert
- · With wire protection
- EPIC® H-B 6 hood



Article number	Pieces/PU	
H-B 6 TS M20		
75009637	1	
Article number	o for single components	

- EPIC® H-BE 6 BS 10191000
- H-B 6 AG-LB 10003000

#### **EPIC® KIT H-BE 6 BS AG-LB**



- EPIC® H-BE 6 screw-termination female insert
- With wire protection
- EPIC® H-B 6 panel-mount base



Article number	Pieces/PU
H-B 6 AG-LB	
75009638	1
Article numbers for single components	

- EPIC® H-BE 6 BS 10191000
- H-B 6 SGR M20 19005000

<b>EPIC®</b>	KIT	H-BE	6 BS	SGR-LB	M20
--------------	-----	------	------	--------	-----



- EPIC® H-BE 6 screw-termination female insert
- With wire protection
- EPIC® H-B 6 surface-mount base



Article number	Pieces/PU	
H-B 6 SGR M20		
75009639	1	

- EPIC® H-BE 6 BS 10191000
- H-B 6 TBF M20 19014000

#### EPIC® KIT H-BE 6 BS TBF-LB M20



- EPIC® H-BE 6 screw-termination female insert
- With wire protection
- EPIC® H-B 6 cable coupler hood

18













# EPIC® H-BE 10 Kits

#### **Benefits**

- Pre-packed kits with compatible components
- · Uncomplicated ordering
- No misplaced orders

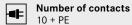
#### **Technical data**



Rated voltage (V)
IEC: 500 V UL: 600 V CSA: 600 V



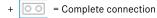
Rated current (A)
IEC: 16 A UL: 16 A CSA: 16 A





Complete connectors – easy to order starting from 1 piece





#### EPIC® KIT H-BE 10 SS TG M25



- EPIC® H-BE 10 screw-termination male insert
- · With wire protection
- EPIC® H-B 10 hood

Article number	Pieces/PU	
EPIC® H-BE 10 Kits		
75009640	1	

#### Article numbers for single components

- EPIC® H-BE 10 SS 10192000
- H-B 10 TG M25 19040100



#### EPIC® KIT H-BE 10 SS TS M25



- EPIC® H-BE 10 screw-termination male insert
- With wire protection
- EPIC® H-B 10 hood

Article number	Pieces/PU
H-B 10 TG M25	
75009641	1

#### Article numbers for single components

- EPIC® H-BE 10 SS 10192000
- H-B 10 TS M25 19042100



#### 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

Article number	Pieces/PU			
H-B 10 TS M25				
75009642	1			
Article num	hava far single companents			

#### Article numbers for single components

- EPIC® H-BE 10 BS 10193000
- H-B 10 AG 10032000



#### EPIC KIT H-BE 10 BS SGR M25



- EPIC® H-BE 10 screw-termination female insert
- · With wire protection
- EPIC® H-B 10 surface-mount base

Article number	Pieces/PU
H-B 10 AG	
75009643	1
Artiala numbara	for single compensate

#### Article numbers for single components

- EPIC® H-BE 10 BS 10193000
- H-B 10 SGR M25 19034100



#### EPIC® KIT H-BE 10 BS TBF M25



- EPIC® H-BE 10 screw-termination female insert
- With wire protection
- EPIC® H-B 10 cable coupler hood

Article number	Pieces/PU
H-B 10 SGR M25	
75009644	1

#### Article numbers for single components

- EPIC® H-BE 10 BS 10193000
- H-B 10 TBF M25 79040200















## EPIC® H-BE 16 Kits

#### **Benefits**

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- · No misplaced orders

#### **Technical data**



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 16 A CSA: 16 A



**Number of contacts** 



Complete connectors - easy to order starting from 1 piece







#### Article Pieces/PU number EPIC® H-BE 16 Kits 75009645

#### Article numbers for single components

- EPIC® H-BE 16 SS 10194000
- H-B 16 TG M25 19080000





- EPIC® H-BE 16 screw-termination female insert
- · With wire protection
- EPIC® H-B 16 hood



Article number	Pieces/PU		
H-B 16 TG M25			
75009646	1		

#### Article numbers for single components

- EPIC® H-BE 16 SS 10194000
- H-B 16 TS M25 19082000

## EPIC® KIT H-BE 16 SS TS M25



- EPIC® H-BE 16 screw-termination female insert
- · With wire protection
- EPIC® H-B 16 hood



Article number	Pieces/PU		
H-B 16 TS M25			
75009647	1		
Autiala mumaha	us for single some such		

## Article numbers for single components

- EPIC® H-BE 16 BS 10195000
- H-B 16 AG 10072000

#### EPIC® KIT H-BE 16 BS AG



- EPIC® H-BE 16 screw termination female insert
- With wire protection
- EPIC® H-B 16 panel-mount base



Article number	Pieces/PU
H-B 16 AG	
75009648	1
Article numbers	for single components

- EPIC® H-BE 16 BS 10195000
- H-B 16 SGR M25 19074000

#### EPIC® KIT H-BE 16 BS SGR M25



- EPIC® H-BE 16 screw termination female insert
- With wire protection
- EPIC® H-B 16 surface-mount base



Article number	Pieces/PU
H-B 16 SGR M25	
75009649	1

- EPIC® H-BE 16 BS 10195000
- H-B 16 TBF M25 19086000

#### EPIC® KIT H-BE 16 BS TBF M25



- EPIC® H-BE 16 screw termination female insert
- With wire protection
- EPIC® H-B 16 cable coupler hood













# EPIC® H-BE 24 Kits

#### **Benefits**

- · Pre-packed kits with compatible components
- · Uncomplicated ordering
- No misplaced orders

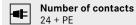
#### **Technical data**



Rated voltage (V) IEC: 500 V UL: 600 V CSA: 600 V



Rated current (A) IEC: 16 A UL: 16 A CSA: 16 A





Complete connectors - easy to order starting from 1 piece





+ O = Complete connection

#### EPIC® KIT H-BE 24 SS TG M25



- EPIC® H-BE 24 screw-termination male insert
- With wire protection
- EPIC® H-B 24 hood

Article number	Pieces/PU				
EPIC® H-BE 2	24 Kits				
75009650	1				

#### Article numbers for single components

- EPIC® H-BE 24 SS 10196000
- H-B 24 TG M25 19121000



#### EPIC® KIT H-BE 24 SS TS M25



- EPIC® H-BE 24 screw-termination male insert
- With wire protection
- EPIC® H-B 24 hood

Article number	Pieces/PU		
H-B 24 TG M25			
75009651	1		

#### Article numbers for single components

- EPIC® H-BE 24 SS 10196000
- H-B 24 TS M25 19113000



#### 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

Article number	Pieces/PU			
H-B 24 TS M25				
75009652	1			
Article numb	acro for single companents			

- EPIC® H-BE 24 BS 10197000
- H-B 24 AG 10102000



#### EPIC® KIT H-BE 24 BS SGR M25



- EPIC® H-BE 24 screw-termination female insert
- · With wire protection
- EPIC® H-B 24 surface-mount base

Article number	Pieces/PU		
H-B 24 AG			
75009653	1		
Article numbers	for single components		

- EPIC® H-BE 24 BS 10197000
- H-B 24 SGR M25 19104000



## EPIC® KIT H-BE 24 BS TBF M25



- EPIC® H-BE 24 screw-termination female insert
- With wire protection
- EPIC® H-B 24 cable coupler hood

Article number	Pieces/PU			
H-B 24 SGR M25				
75009654	1			
Article num	here for single components			

- EPIC® H-BE 24 BS 10197000
- H-B 24 TBF M25 19127000



## Table 31-1: EPIC® rectangular connectors





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.

Please pay attention on the EPIC® 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.



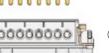
## 2. Upper housing:

Hood

## 3. Male insert:

Types of contact termination

- Screw
- Crimp\*
- · Cage clamp
- Push-In





Types of contact termination

- Screw
- Crimp\*
- Cage clamp
- Push-In



#### 5. Lower housing:

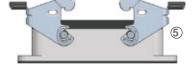
- · Panel mounting (cable entry though cut out in panel)
- · Surface mounting (cable entry through a gland into the side of the connector base)
- Cable Connector Hood. cable to cable connection
- contacts must be ordered separately

#### High variety of applications with EPIC® 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® MS-M.)
- EMC protection (For applications with EMC requirements, we recommend the EPIC® ULTRA in combination with the SKINTOP® 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® 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. 2):

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. 3):

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.









ε,  →	A	-	
1		0	•
m		0	٩
-	С	-	

Panel cut out for panel mount base (mm)					
Panel mount base	А	В	С	D	E
H-A 3	30	_	21	21	3.3
H-A 10	70	17.5	57.5	24	3.6
H-A 16	86	17.5	73.7	24	3.6
H-A 32	92	42	74.2	48.4	4.3
H-A 48	110	65	85.5	71	5.5
H-B 6	70	32	52.2	35	4.3
H-B 10	83	32	65.2	35	4.3
H-B 16	103	32	85.5	35	4.3
H-B 24	130	32	112.2	35	4.3
H-B 32	110	65	85.5	71	5.5
H-B 48	148	70	117	82	7

Screw thread	мз	M4	M5	
Screw thread	M3	WI4	IVIO	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® connectors refer to IEC 61984.

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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

#### 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 this 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.

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