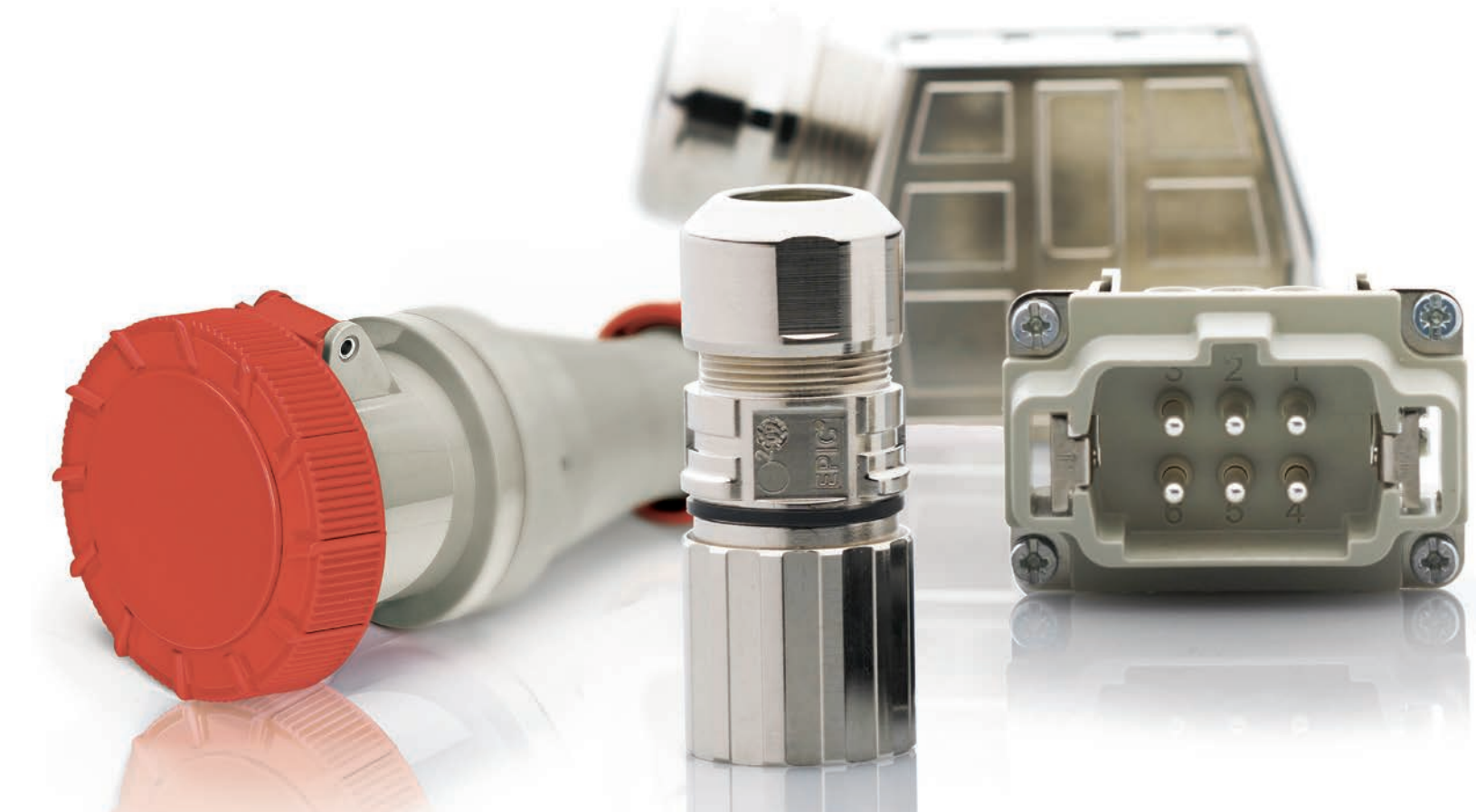
EPIC®

Environmentally Protected Industrial Connectors



make the right connection

LAPP GROUP

make the right connection

Industrial environments are not always clean and dry. They can involve physical damage, water, dirt, corrosives, and electromagnetic interference. Electrical connections can quickly degrade under these harsh environments if not properly protected.

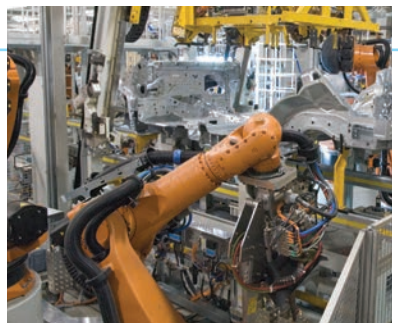
That's where EPIC® steps in.

Environmentally Protected Industrial Connectors

All of Lapp's EPIC® connector housings are designed to provide a high degree of protection and satisfy requirements for IEC EN 60529 (IP rating) and NEMA 250 (NEMA rating) standards.

Power Applications

- Widest variety of specifications
- Single- and three-phase AC power: 1+N+PE, 3+PE, 3+N+PE
- Voltage ranges up to 1000V
- Current ranges up to 125A

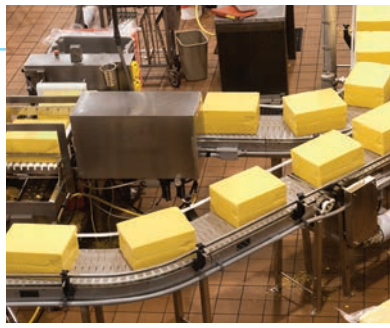


Signal Applications

- Lower voltage & current
- Digital or analog signals
- Pneumatic
- Very high contact density

Data Applications

- Ethernet, Profibus DP, USB, M8, M12, RJ45, D-Sub
- Any bus cable up to 4 contacts plus shield
- Remote access ports



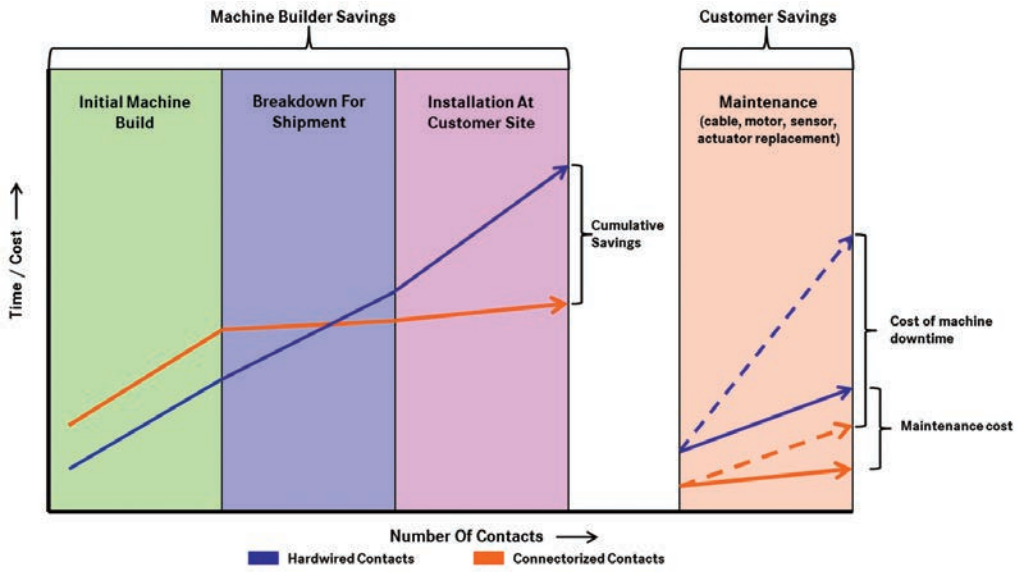
connectors vs hardwiring

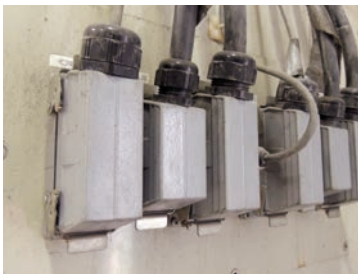
Traditional hardwiring has long been an established practice based on the premise that it can minimize initial investments for cable and wiring accessories. Machine builders considering only the cost of the initial machine build are missing out on potential cumulative cost savings from quicker disassembly for machine shipment and faster rewiring during installation and startup at the customer site.

The more connection points a machine has, the greater cost savings using connectors.

It is not uncommon that field wiring errors are made during installation, especially if the wiring is being done by a local electrician who is unfamiliar with the machine. Troubleshooting and correcting errors can result in considerable delays and additional expense. At worst, wiring errors can damage the machine, requiring costly component replacement in the field and even further delays.

With connectorized machines, wiring happens only once – during construction by a factory technician – and everything after that is as simple as saying “unplug, plug, and play”.





Connectorization	vs	Hardwiring
Allows modular machine design and pre-building of sub-assemblies, reducing final build time		Machine is built completely from scratch
Lower total cumulative costs		Lower initial costs for cable and accessories
Internal panel wiring is fixed and undisturbed		Panel wiring is disturbed during disconnection and rewiring
Connectors eliminate rewiring		Potential for wiring errors costs time and money
Cables are easily unplugged and replaced, minimizing production downtime		Customer replacement of failed or damaged cables is time consuming
Connectors allow modular work cell configuration, creating assembly line flexibility		Work cell configurations are fixed and not easily changed

connectors by application

Which Connector To Pick?

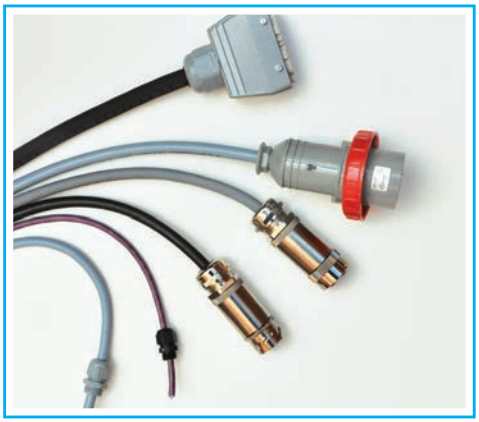
- Application type (power, signal, data)
- Number of contacts required
- Size of wire to be terminated
- Outside diameter of the cable being used
- Application voltage
- Application current

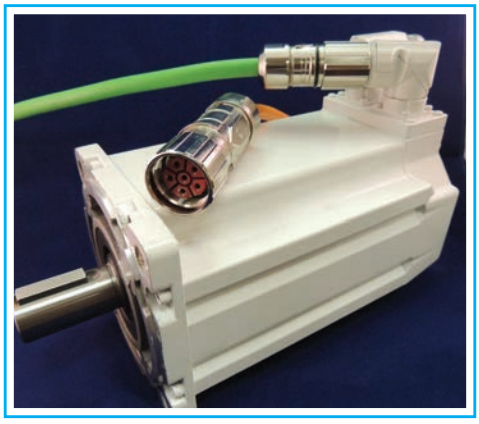
	Connector Type	Application: Power	Application: Control/ Signal	Application: Data	Number of Contacts	Rated Voltage	Rated Current	Termination Type*	Wire Range (AWG)	IP/NEMA Rating	Approvals
RECTANGULAR	HBE	✔	✔		6, 10, 16, 24, 32, 48 (+PE)	600V	16A	SC, CR, CC	20 - 14, 20 - 12	IP65, NEMA 4, 4X, 12	UL CSA VDE
	HA	✔	✔		3, 4, 10, 16, 32, 48, 64 (+PE)	600V	10A, 14A	SC	20 - 14	IP65, NEMA 4, 12	UL CSA VDE
	HQ	✔	✔		5 (+PE)	600V	16A	CR	20 - 12	IP65, NEMA 4, 12	UL CSA VDE
	STA		✔		6, 14, 20, 40	48V	10A	SC, SOL	20 - 16	IP65, NEMA 4, 12	UL CSA VDE
	HEE	✔	✔		10, 18, 32, 46, 64, 92 (+PE)	600V	16A	CR	20 - 12	IP65, NEMA 4, 4X, 12	UL CSA VDE
	HBS	✔			6, 12 (+PE)	600V	35A	SC	20 - 10	IP65, NEMA 4, 4X, 12	UL CSA VDE
	HBVE	✔			3, 6, 10 (+PE)	600V	16A	SC	20 - 14	IP65, NEMA 4, 4X, 12	UL CSA VDE
	HD		✔		7, 8, 15, 25, 40, 50, 64, 80, 128 (+PE)	600V	10A	CR	26 - 14	IP65, NEMA 4, 4X, 12	UL CSA VDE
	HDD		✔		24, 42, 72, 108, 144, 216 (+PE)	600V	8.5A	CR	26 - 14	IP65, NEMA 4, 4X, 12	UL CSA VDE
	MC	✔	✔	✔	2 - 280, Data Bus (+PE), Pneumatic	30V - 1000V	1A - 82A	SC, CR, CC, HO	28 - 4	IP65, NEMA 4, 4X, 12	UL CSA VDE
	MP	✔	✔		4/0, 4/2, 4/8 (+PE)	600V	16A, 80A	SC	12 - 6, 20 - 14	IP65, NEMA 4, 4X, 12	UL CSA VDE
CIRCULAR	LS1	✔			5+PE, 3+PE+4	600V	26A, 27A	CR	20 - 12, 24 - 18	IP67, IP68	cULus VDE
	M23	✔	✔		6, 7, 8+1, 9, 12, 16, 17	50V, 100V, 150V	7A, 14A	CR, SOL	18 - 14, 26 - 18	IP67, IP68	cULus VDE
PIN & SLEEVE	MULTIMAX	✔			1+N+PE, 2+PE, 3+PE, 3+N+PE	125V - 600V	16A - 32A	SC	16 - 12, 12 - 8	IP44	cULus
	CEE	✔			1+N+PE, 2+PE, 3+PE, 3+N+PE	125V - 500V	16A - 125A	SC	16 - 12, 12 - 8, 10 - 6, 4 - 1	IP67	cULus
	ULYSSE	✔			1+N+PE, 2+PE, 3+PE, 3+N+PE	125V - 500V	16A - 63A	SC	16 - 12, 12 - 8, 10 - 6	IP66, IP67	cULus
	ALUPRES	✔			1+N+PE, 2+PE, 2+N+PE, 3+PE, 3+N+PE	125V - 500V	16A - 63A	SC	6 - 12, 12 - 8, 10 - 6	IP67, IP55	cULus

* Termination type: SC = Screw, CR = Crimp, CC = Cage Clamp, SOL = Solder, HO = Hose

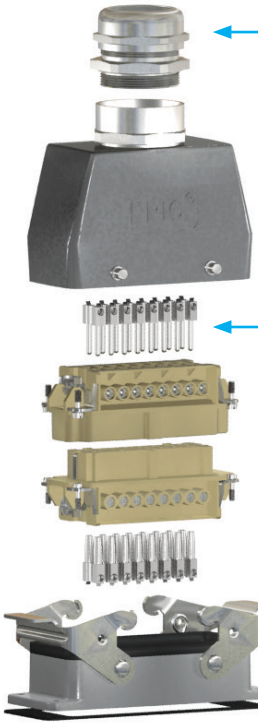
Cable		Rectangular											Circular		Pin & Sleeve
		HBE	HA	HQ	STA	HEE	HBS	HBVE	HD	HDD	Mod.	MP	LS1	M23	
ÖLFLEX® 190	# cond.	3 – 41	3 – 41	3 – 5	3 – 34	7 – 50	3 – 12	5 – 12	5 – 50	25 – 41	4 – 50	4 – 8	3 – 6	3 – 17	3 – 5
	AWG	12 – 20	14 – 20	12 – 20	16 – 20	12 – 20	10 – 20	14 – 20	14 – 20	14 – 20	4 – 26	6 – 12	14 – 20	14 – 20	2 – 18
	OD (in.)	6.7 – 28	6.7 – 28	6.7 – 12.6	6.7 – 23.8	8.4 – 28	6.7 – 18.9	7.8 – 16	7.8 – 27.7	7.8 – 28	7.2 – 27.8	10.6 – 24.3	7.8 – 10.7	7.2 – 12.4	8 – 36.1
ÖLFLEX® TRAY II / TRAY II CY	# cond.	3 – 41	3 – 41	3 – 5	3 – 34	7 – 61	3 – 12	5 – 12	5 – 61	25 – 61	4 – 61	3 – 8	3 – 6	3 – 12	3 – 5
	AWG	12 – 18	14 – 18	12 – 18	16 – 18	12 – 18	10 – 18	14 – 18	14 – 18	14 – 18	4 – 26	6 – 12	14 – 18	14 – 18	1 – 18
	OD (in.)	7.5 – 25	7.5 – 25	7.5 – 12.8	7.5 – 23	9.5 – 27.6	7.5 – 18.2	8.8 – 16.9	8.8 – 27.6	16.9 – 27.6	8.3 – 27.6	10.7 – 24.9	8.2 – 11.6	7.5 – 12.1	8.1 – 35.6
ÖLFLEX® TC 600 / 600 S	# cond.	3 – 37	3 – 37	3 – 5	3 – 37	7 – 37	3 – 12	5 – 12	3 – 37	19 – 37	3 – 37	3 – 8	3 – 6	3 – 12	3 – 5
	AWG	12 – 18	14 – 18	12 – 18	16 – 18	12 – 18	10 – 18	14 – 18	14 – 18	14 – 18	4 – 18	6 – 12	14 – 18	14 – 18	6 – 16
	OD (in.)	7.3 – 24.5	7.3 – 24.5	7.3 – 11.7	7.3 – 20.9	9.2 – 24.5	7.3 – 17.4	8.5 – 15.4	7.3 – 20.9	14.5 – 20.9	7.3 – 25.6	9.8 – 18.9	7.9 – 10.4	7.3 – 11.8	8.9 – 18.9
ÖLFLEX® VFD SLIM	# cond.	4	4	4	–	–	4	4	–	–	4	4	4	–	–
	AWG	12 – 18	14 – 18	12 – 18	–	–	10 – 18	14 – 18	–	–	6 – 18	6 – 12	14 – 18	–	–
	OD (in.)	10 – 14.8	10 – 13.1	7.3 – 11.7	–	–	10 – 17.7	10 – 13.1	–	–	10 – 25.5	14.8 – 25.5	10 – 13.1	–	–
ÖLFLEX® VFD with Signal	# cond.	4+2	4+2	–	–	–	4+2	4+2	–	–	4+2	4+2	4+2	–	–
	AWG	12 – 16	14 – 16	–	–	–	10 – 16	14 – 16	–	–	6 – 16	6 – 12	14 – 16	–	–
	OD (in.)	13.2 – 16.8	13.2 – 15.2	–	–	–	13.2 – 18.9	13.2 – 15.2	–	–	13.2 – 16.1	16.1 – 26.1	13.2 – 15.2	–	–
ÖLFLEX® CONTROL TM / TM CY	# cond.	3 – 25	3 – 25	3 – 5	3 – 19	7 – 25	3 – 12	5 – 12	5 – 25	18 – 25	3 – 25	–	3 – 5	3 – 12	–
	AWG	12 – 18	14 – 18	12 – 18	16 – 18	12 – 18	10 – 16	14 – 18	14 – 18	14 – 18	10 – 18	–	14 – 18	14 – 18	–
	OD (in.)	7.4 – 22.9	7.4 – 22.9	7.4 – 12.6	7.4 – 17.1	9.3 – 22.9	7.4 – 18	8.6 – 16.7	8.6 – 22.9	14.7 – 22.9	7.4 – 22.9	–	8 – 11.5	7.4 – 12.8	–
ÖLFLEX® SERVO FD 796 CP	# cond.	4, 4+2pr	4, 4+2pr	4, 4+2pr	–	–	4	4	4	–	4	4	4	–	–
	AWG	12 – 16	14 – 16	12 – 16	–	–	10 – 18	14 – 18	14 – 18	–	6 – 18	6 – 12	14 – 18	–	–
	OD (in.)	9.2 – 16.3	9.2 – 14.6	9.2 – 12	–	–	10 – 17.7	10 – 13.1	10 – 13.1	–	10 – 25.5	14.8 – 25.5	10 – 13.1	–	–
ÖLFLEX® FD 890 / 890 CY	# cond.	3 – 48	5 – 32	3 – 5	3 – 34	7 – 50	3 – 12	5 – 12	5 – 50	18 – 34	3 – 50	4 – 8	3 – 6	7 – 12	3 – 5
	AWG	12 – 20	14 – 20	12 – 20	16 – 20	12 – 20	10 – 20	14 – 20	14 – 20	14 – 20	4 – 20	6 – 12	14 – 20	16 – 20	2 – 18
	OD (in.)	6.7 – 27.8	8.2 – 23.5	6.7 – 13.5	6.7 – 23.5	9.7 – 27.8	6.7 – 21.8	8.2 – 18	8.2 – 27.8	13.7 – 27.1	7.2 – 27.8	13.5 – 27.1	8.2 – 14	9.7 – 13.4	8.3 – 31.8
ÖLFLEX® FD 855 P / 855 CP	# cond.	3 – 41	3 – 41	3 – 5	3 – 40	7 – 41	3 – 12	5 – 12	5 – 41	18 – 41	3 – 41	–	3 – 6	7 – 17	–
	AWG	14 – 20	14 – 20	14 – 20	16 – 20	14 – 20	14 – 20	14 – 20	14 – 20	14 – 20	14 – 20	–	14 – 20	18 – 20	–
	OD (in.)	6.5 – 26.5	6.5 – 26.5	6.5 – 12.8	6.5 – 22.4	7.7 – 26.5	6.5 – 18	6.6 – 18	6.6 – 26.5	10.9 – 26.5	6.5 – 26.5	–	7.6 – 12.8	7.1 – 13.4	–
UNITRONIC® 300 / 300 S	# cond.	3 – 25	3 – 25	3 – 5	3 – 20	7 – 25	–	3 – 10	6 – 25	15 – 25	3 – 25	–	–	3 – 15	–
	AWG	16 – 20	16 – 20	16 – 20	16 – 20	16 – 20	–	16 – 20	16 – 24	16 – 24	16 – 20	–	–	16 – 20	–
	OD (in.)	6.5 – 18.5	6.5 – 18.5	6.5 – 10.5	6.5 – 16.6	8.4 – 18.5	–	6.5 – 13	7.8 – 18.5	7.2 – 18.5	6.5 – 18.5	–	–	7.1 – 13.3	–

Note: Cable ODs shown are with standard PG glands. SKINTOP® strain relief and accessory fittings can be used to expand the OD range.





EPIC® rectangular connectors



Strain Relief
Strain relief is optional for all housings, with PG, NPT or metric threads

Hood
Hoods are available as top-entry or side-entry in a variety of sizes with PG, NPT or metric threads.

Contacts
Contacts included in screw and cage clamp inserts. Contacts must be purchased separately for crimp-terminated inserts.

Male/Female Insert
- Screw termination
- Crimp termination
- Cage clamp termination

Base
- Panel mount
- Surface mount
- Cable coupler connector (hood-to-hood)

The EPIC® range of rectangular connectors offers 11 different contact insert types and 3 housing types in 12 sizes to handle many different application requirements.

Rectangular inserts are UL Recognized (E75770) and CSA (LR53004-1) listed.

Connectors are available as part of custom cable assemblies from Lapp Systems.

EPIC® Rectangular Connector Features

- Intermateable and compatible with most equivalent DIN type rectangular connectors
- Custom housing modifications, harness assemblies, and a comprehensive offering of cable and accessory products.
- EPIC® Modular series offers multiple standard components for customizable connector construction

Technical Data

Specifications:	DIN 43652
Temperature Range:	-40°C to +125°C
- EPIC® ULTRA:	-40°C to +100°C
Protection Class*:	IP65, NEMA 4, NEMA 12, or IP65, NEMA 4X, NEMA 12 (consult for availability)

EPIC® HB Housing

EPIC® HB housings hold a wide variety of inserts for a number of applications. Locking levers ensure a reliably secure connection between components. Housings are made of aluminum alloy with plated steel levers and bolts. PG threaded hoods come with a standard gland. NPT and Metric hoods use an optional SKINTOP® gland.

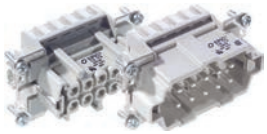
EPIC® ULTRA HB Housing

EPIC® ULTRA HB nickel-plated zinc housings offer protection from harsh environments including corrosion and electromagnetic interference. They include stainless steel levers and bolts and a built-in cable strain relief.

EPIC® Inserts

- **Crimp-terminated inserts require contacts to be selected based on the wire size (AWG) to be terminated.**

HBE Series
Medium power & control



HEE Series
High-density power

HBS Series
High current

HBVE Series
High voltage, switch contact

HD Series
High density, small space

HDD Series
Highest possible density

Modular Series
Custom configurations

MP Series
Mixed power & signal

Housing	HBE	HEE	HBS	HBVE	HD	HDD	Modular	MP
HB 6	HBE 6	HEE 10	–	–	–	HDD 24	2 Modules	–
HB 10	HBE 10	HEE 18	–	HBVE 3	–	HDD 42	3 Modules	–
HB 16	HBE 16	HEE 32	HBS 6	HBVE 6	HD 40	HDD 72	5 Modules	4/0, 4/2
HB 24	HBE 24	HEE 46	–	HBVE 10	HD 64	HDD 108	7 Modules	4/8
HB 32	HBE 32	HEE 64	HBS 12	–	HD 80	HDD 144	10 Modules	–
HB 48	HBE 48	HEE 92	–	–	HD 128	HDD 216	14 Modules	–

EPIC® HA Housing

Similar to the HBE series but more compact, EPIC® HA housings and associated inserts are for use wherever space is limited. Locking levers ensure a reliably secure and water-tight connection between components. Housings are made of an aluminum alloy or die-cast zinc, with plated steel levers and bolts. PG threaded hoods come with a standard gland. NPT and Metric hoods use an optional SKINTOP® gland.

Housing	HA	HQ	STA	HD
HA 3/4	HA 3/4	HQ 5	STA 6	HD 7/8
HA 10	HA 10	–	STA 14	HD 15
HA 16	HA 16	–	STA 20	HD 25
HA 32	HA 32	–	STA 40	HD 25
HA 48	HA 48	–	–	–
HA 64	HA 64	–	–	–

EPIC® Inserts

- **Crimp-terminated inserts require contacts to be selected based on the wire size (AWG) to be terminated.**

HA Series
Compact power & control

HQ Series
Medium power, small size

STA Series
Low voltage spring contacts

HD Series
High density, small space

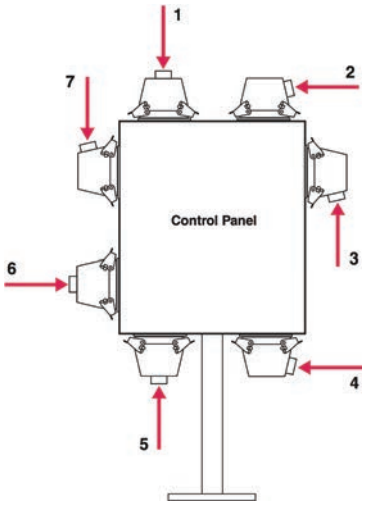
EPIC® ULTRA housings are ideal for extreme environments:

Dirt & Dust (IP65)

Electrical Noise

Water & Corrosion (IP65)

choose your connector housing configuration



Top vs Side Entry

There is no right or wrong entry configuration. The goal is to match the hood entry to the installation environment as closely as possible. Choose your housing by answering these two questions:

- Where are you mounting the connector?
- Where is the cable coming from?

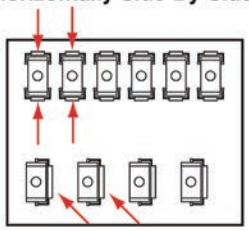
Example	Hood Entry Location	Connector Mounting Location on Panel	Cable Entry Direction
1	Top	Top	Vertical down from above
2	Side	Top	Horizontal from side
3	Side	Side	Vertical up from below
4	Side	Bottom	Horizontal from side
5	Top	Bottom	Vertical up from below
6	Top	Side	Horizontal from side
7	Side	Side	Vertical down from above

Single vs Double Lever

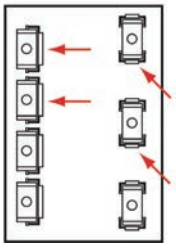
Both lever configurations are IP65 rated. Although either configuration can be used, the key is to choose a lever type that allows the connectors to be mounted as closely together as possible while providing the maximum access possible to the locking levers.

For connectors mounted horizontally side-by-side, a double lever configuration is preferred. For connectors mounted vertically top-to-bottom, a single lever configuration is preferred.

Connectors Mounted Horizontally Side-By-Side



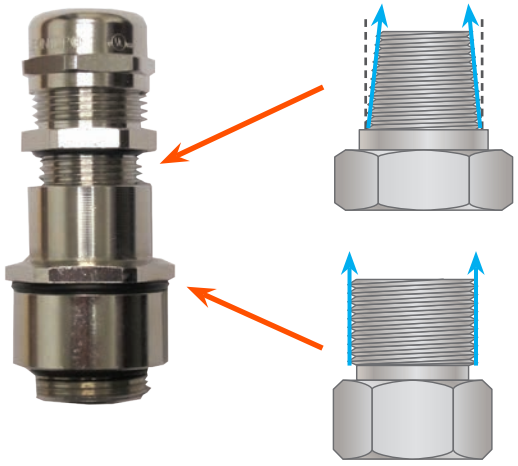
Connectors Mounted Vertically Top-To-Bottom



PG, Metric, or NPT Threaded Entry

When adding a strain relief or other accessory to the entry of a connector housing, it is always recommended to use straight thread fittings with an O-ring – either PG or metric. This allows the fitting to screw completely into the connector housing and create a watertight seal by compressing the O-ring.

Fittings with tapered threads – like NPT – are popular for their vibration resistance. However, due to their design they will only engage for 3 or 4 threads until they lock up. This provides a nice tight connection, but thread sealant compound or tape is required to create a watertight seal.



Tapered thread

Ridge wrapped around a cone

- NPT threads
- Difference in diameter prevents threads from fitting completely together, providing a tight fit, but not a seal
- Sealant compound must be applied to seal the thread connection

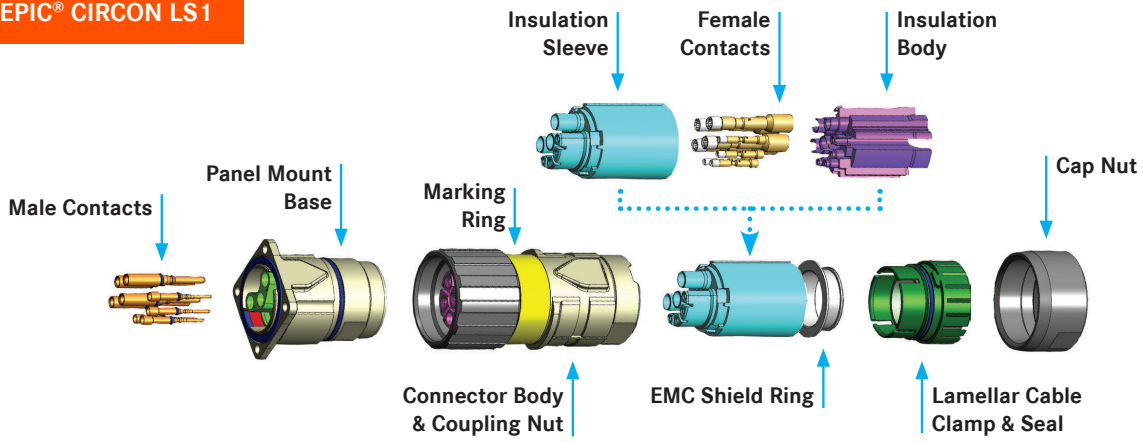
Straight thread

Ridge wrapped around a cylinder

- PG & Metric threads
- Allows two pieces to screw completely into one another
- Connection is sealed by compressing an O-ring

EPIC® circular connectors

EPIC® CIRCON LS1



EPIC® CIRCON LS1 circular connectors handle general and servomotor power and mixed power/control application requirements up to 600 volts and 26 amps. It is one of the most application-friendly connector series available, and ensures quick and easy assembly, reliability, and long uninterrupted service life. Crimp contacts are included.

Technical Data

Number of Contacts:	5+PE, 3+PE+4
Temperature Range:	-25°C to +125°C
Protection Class:	IP67/68 (10h/1m)
- Style A3:	IP65
Mating Cycles:	500
Materials:	
- Housing:	Nickel-plated die-cast zinc
- Insulation body:	PA, PBT, V-0 per UL 94
- Contacts:	Gold-plated copper alloy
- Gaskets & seals:	FPM
Contact Resistance:	< 4 mΩ

EPIC® CIRCON LS1 Features

- Seven housing styles
- Two contact configurations:
  5+PE for power distribution
  3+PE+4 for power/signal
- Nickel-plated die-cast zinc housing
- Provides IP67/68 environmental protection
- Includes integral strain relief and cable shield termination
- Standard servomotor power connector

Style A1

Style A3

Style A6

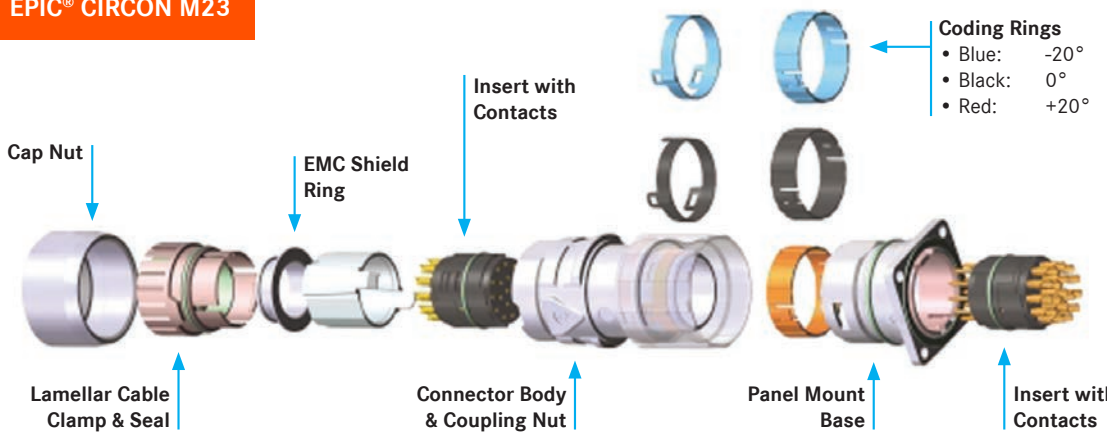
Style D6

Style F6

Style F7

Style G5

EPIC® CIRCON M23



EPIC® CIRCON M23 circular connectors handle control signal/feedback and low power application requirements up to 150 volts and 14 amps. It is one of the most application-friendly connector series available, and ensures quick and easy assembly, reliability, and long uninterrupted service life. Solder contacts are included with insert; crimp contacts must be ordered separately.

EPIC® CIRCON M23 Features

- Ten housing styles
- Seven contact configurations: 6-17 contacts
- Nickel-plated die-cast zinc housing
- Provides IP67/68 environmental protection
- Includes integral strain relief and cable shield termination
- Standard servo encoder connector

Technical Data

Number of Contacts:	6, 7, 8+1, 9, 12, 16, 17
Temperature Range:	-25°C to +125°C
Protection Class:	IP67/68 (10h/1m)
- Style A3:	IP65
Mating Cycles:	100
Materials:	
- Housing:	Nickel-plated die-cast zinc
- Style C2:	Nickel-plated copper alloy
- Insulation body:	PA, PBT, V-0 per UL 94
- Contacts:	Gold-plated copper alloy
- Gaskets & seals:	FPM
Contact Resistance:	< 4 mΩ

Style A1

Style A3

Style B1

Style B2

Style D6

Style F6

Style F7

Style G5

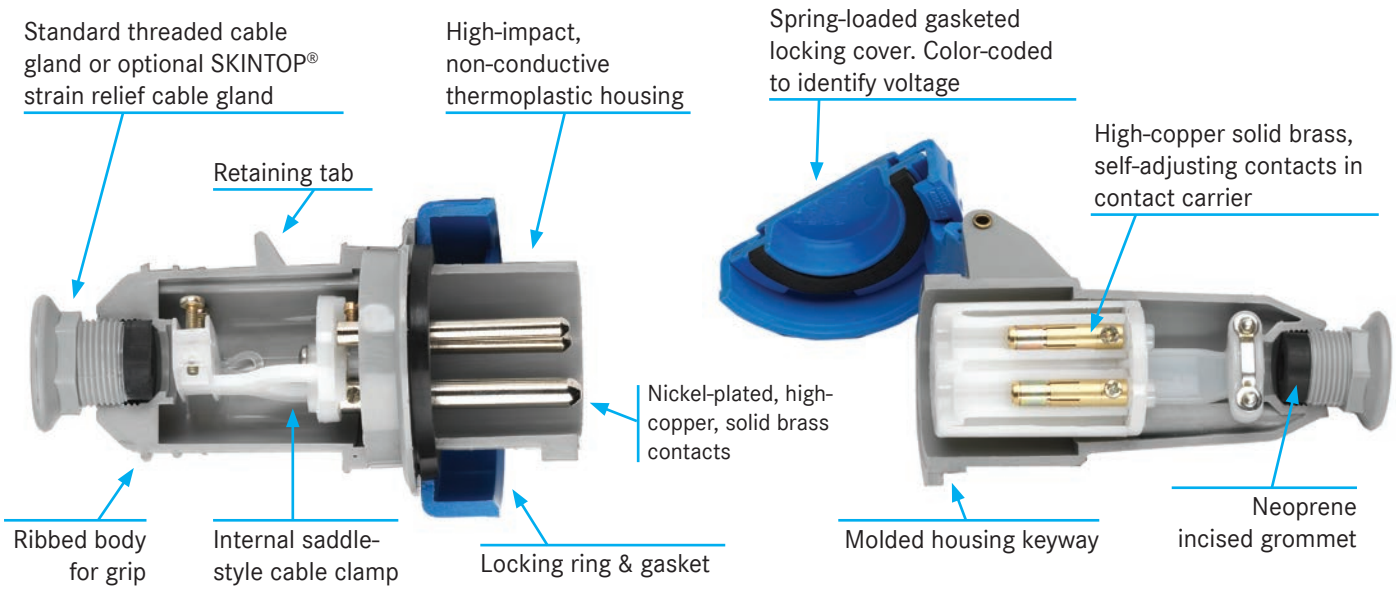
Style G6

Style O1

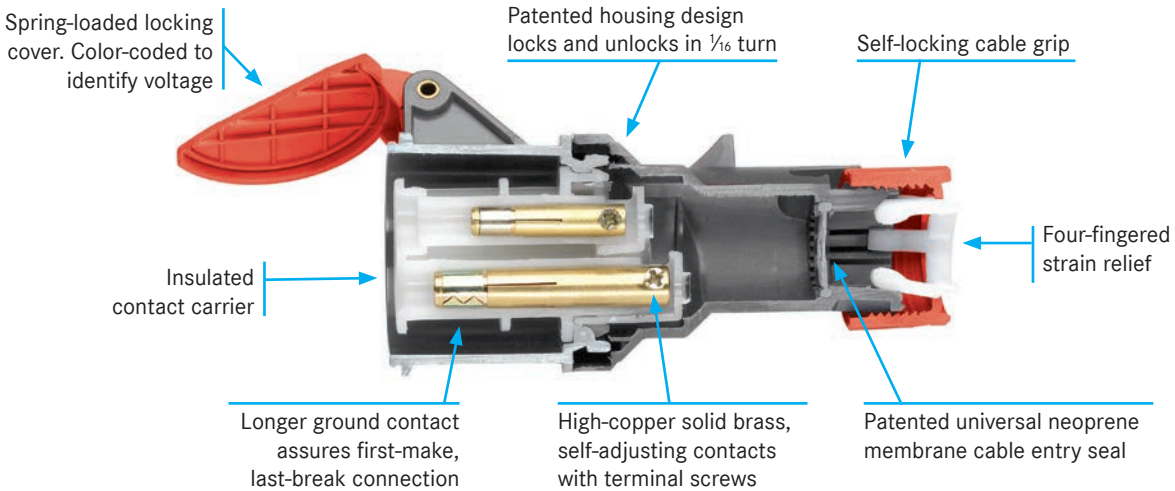
EPIC® pin & sleeve connectors

EPIC® Pin & Sleeve connectors conform to IEC 60309-1 and -2, as well as UL 1682 and UL 1686 standards. They are designed to meet the power connectivity requirements for a wide variety of industrial applications. Whether you are designing machinery for that important domestic or international customer, specifying mobile power solutions on the factory floor, or planning outdoor power distribution systems, EPIC® Pin & Sleeve connectors and interlocked switched-socket outlets can provide a **safe, cost-effective solution for your industrial wiring requirements.**

EPIC® CEE connectors IP44 & IP67



MULTIMAX connectors IP44



Plugs, inlets, connectors & receptacles

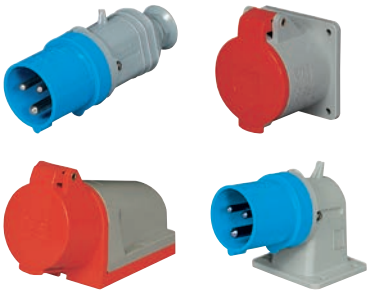
EPIC® CEE IP67

EPIC® CEE and MULTIMAX series pin & sleeve connectors handle single phase and three phase power requirements up to 600 volts and 125 amps. MULTIMAX connectors can be assembled in under 20 seconds, and an innovative retaining tab prevents unintentional withdrawal by engaging with the mating connector's cover.

EPIC® CEE & MULTIMAX Features

- Male plugs & inlets, female connectors & receptacles
- Single phase (1+N+PE) and three phase (3+PE, 3+N+PE) power
- Intermateable and compatible with all IEC 60309-1 and -2 type connectors
- Provides IP44 or IP67 environmental protection
- Available as part of pre-tested custom harness assemblies

EPIC® CEE IP44



MULTIMAX IP44

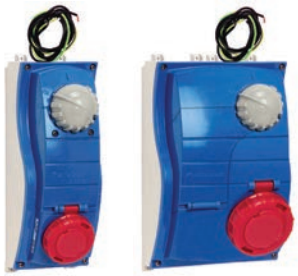
Technical Data

Number of Contacts:	1+N+PE, 2+PE, 3+PE, 3+N+PE
Ambient Temperature:	-25°C to +70°C
Operating Voltage:	
- North America:	125, 250, 480, 120/208
- International:	110-130, 200-250, 380-415
Operating Current:	
- North America:	20, 30, 60, 100
- International:	16, 32, 63, 125

Switched-socket outlets

EPIC® ULYSSE

EPIC® ULYSSE switched-socket outlets are made of thermoset plastic and provide IP66/67 environmental protection.



EPIC® ALUPRES

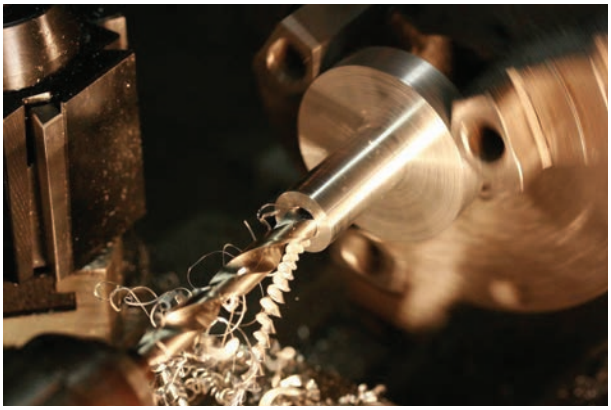
EPIC® ALUPRES switched-socket outlets are made of a heavy duty aluminium alloy and provide IP67 or IP55 environmental protection.

EPIC® ULYSSE & ALUPRES Features

- Prewired outlets compatible with all IEC 60309-1 and -2 type connectors
- Available for North American and International power requirements
- Mechanical interlock incorporates numerous safety precautions
- Heavy-duty reinforced enclosure provides outstanding resistance to heat and chemical agents
- UL 508 Listed for direct switching of motor and other resistance and inductive electrical loads

make the right connection in any application

Machine Tool
Challenges: impact, oils, electrical noise



Wastewater Treatment
Challenges: weather, corrosion, chemicals

Brewery
Challenges:
alcohol, CO_2, water, detergents

Manufacturing
Challenges:
impact, electrical noise

Food & Beverage
Challenges:
water, detergents, corrosion

Car Wash
Challenges: corrosion, detergents

Printing Machines
Challenges: impact, electrical noise

Fabricating Metal Cutting
Challenges: corrosion, oils, solvents

Food Processing
Challenges: corrosion, detergents

Chemical/Petrochemical
Challenges: weather, corrosion, impact, electrical noise

Transportation
Challenges: weather, corrosion, electrical noise

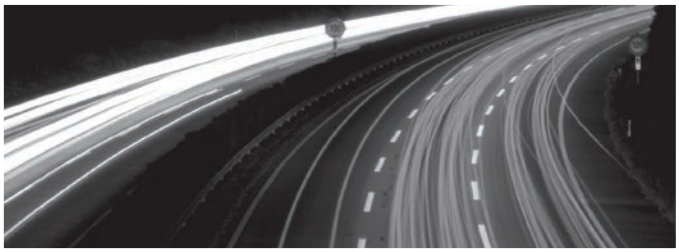
Amusement Parks
Challenges: impact, weather, corrosion

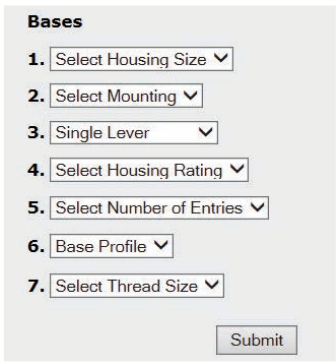
Wind Turbines
Challenges: weather, corrosion, electrical noise

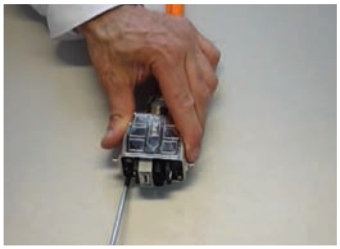
Cranes & Hoists
Challenges: impact, weather, corrosion

Lapp resources

Lapp Group is dedicated to making your job easier when it comes to choosing the connector that is right for your application. We have a number of online resources to help you make the right choice quickly and confidently. **See for yourself at www.lappgroupna.com.**







Quick Ship Program

Lapp's most popular connectors and strain relief glands are available for off-the-shelf delivery within 48 hours. See our website for program details and a complete listing of eligible part numbers.

Autocad Drawings

Download 2D and 3D CAD drawings for the full line of EPIC® rectangular housings, inserts, and circular connectors.

Product Selector

Take the guesswork out of finding your connector. Product selectors for rectangular and pin & sleeve connectors will recommend the part numbers that meet all of your requirements.

Cross References

Upgrade to EPIC® with our competitor part number cross reference. Make sure you make the right connection with our Lapp cable-to-connector cross reference tool.

White Papers

Lapp Group keeps you informed and on the cutting edge with targeted white papers regarding EPIC® connectors and other Lapp products and offerings.

Videos & Multimedia

Browse the video gallery to see the latest Lapp Group innovations and instructional material. Various multimedia resources can help you identify connectors in real-world applications.

Connector Assemblies & Track Design

Lapp Systems specializes in custom populated track and assemblies. They will develop a complete design solution, from concept development to electrical engineering to production.

ÖLFLEX®

UNITRONIC®

EPIC®

SKINTOP®

ETHERLINE®

HITRONIC®

SILVYN®

FLEXIMARK®

For more information or to connect with your local
Lapp Group representative please call 800-774-3539
or visit **lappgroupna.com**

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