



# EPIC<sup>®</sup> CONNECTORS TO CONNECT AND PROTECT



**LAPP GROUP**

# COMPLEX APPLICATIONS DEMAND SIMPLE SOLUTIONS.



## PRECISION ENGINEERED CONNECTORS

The Lapp Group North American headquarters located in Florham Park, NJ houses Lapp USA, Lapp Systems USA, Lapp Cable Works, and our last expansion, Lapp Group's Center for Competence and Innovation. In addition, this facility houses one of two US product warehouses for connectors, cables, standard cable assemblies, and accessories. Our EPIC® Brand connectors are designed to exacting specifications and manufactured to strict quality standards.

## 2600 PEOPLE, 21 LANGUAGES 1 WORLDWIDE FAMILY

In the late 1950's, Oskar Lapp turned his visionary dream into reality with the invention of the first industrially manufactured control cable, ÖLFLEX®. This was the beginning of his family run and oriented company. Lapp Group produces innovative cables, connectors, accessories, and engineered solutions as a worldwide market leader. Oskar Lapp's vision continues today through his wife, Ursula Ida, and his sons, Andreas and Siegbert Lapp.

Within 50 years, the Lapp Group has grown to 2,600 employees operating around the globe developing, manufacturing and selling more than 40,000 products. With 17 manufacturing sites, 39 company-owned sales operations, more than 100 foreign representations and worldwide headquarters in Stuttgart, Germany, the Lapp Group people are everywhere you need us to be.



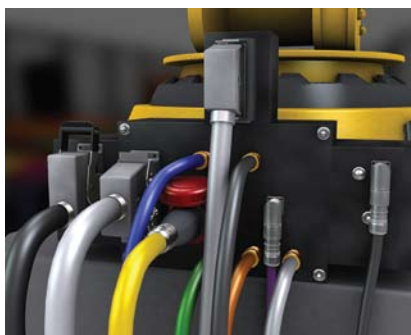
# AN EPIC<sup>®</sup> PRODUCT FROM AN EPIC COMPANY.

## EPIC<sup>®</sup> = ENVIRONMENTALLY PROTECTED INDUSTRIAL CONNECTORS



High quality and durability are synonymous with the Lapp family of products, and the EPIC<sup>®</sup> line of connectors is no exception. Whether the application is power, control, or signal/data, EPIC<sup>®</sup> connectors offer performance you can count on, providing secure and reliable electrical connections for a variety of Industrial OEM Equipment and Factory Floor Automation Systems. They excel in applications where flexibility, reliability, and durability are key.

## WE'VE GOT THREE WORDS FOR YOU. FLEXIBLE. RELIABLE. DURABLE.



### **FLEXIBILITY.**

EPIC<sup>®</sup> connectors reflect a wide variety of design types and configurations to satisfy most any application requirement for power, control, or data.



### **RELIABILITY.**

These connectors utilize silver or gold plated contacts, all housed in environmentally sealed enclosures. This protects the electrical connections from dirt, water, and other fluids typically found in industrial environments.



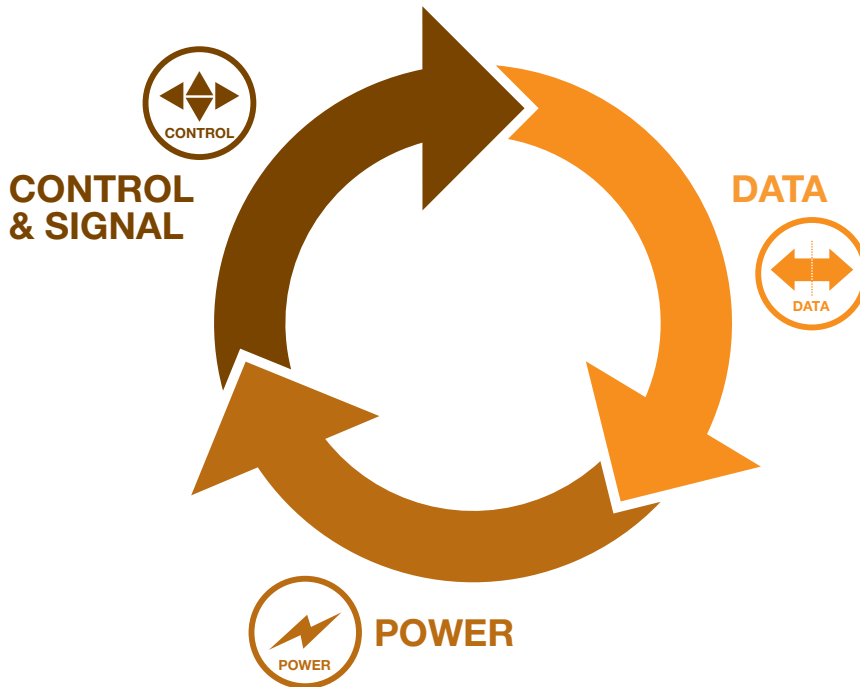
### **DURABILITY.**

The use of metal and high-impact plastic construction insures long, trouble-free service wherever a physically rugged connection is needed.

# EPIC<sup>®</sup> CONNECTOR APPLICATIONS



- Installation time savings; reduced maintenance downtime
- Secure electrical connections in harsh industrial environments



	CONNECTOR TYPE	APPLICATION		
		POWER	CONTROL SIGNAL	DATA
RECTANGULAR	HA	X	X	
	HBE	X	X	
	HBS	X		
	HBVE	X		
	HD		X	X
	HDD	X	X	
	HEE	X	X	
	HQ	X	X	
	MC	X	X	X
	MP	X		
CIRCULAR	STA		X	
	EAB	X		
	EAC	X		
	EPT	X	X	
	LS1	X		
	M23	X	X	
PIN & SLEEVE	MultiMax	X		
	CEE	X		
	ULYSSE	X		
	ALUPRES	X		



## TECHNICAL DATA

NUMBER OF CONTACTS	RATED VOLTAGE	RATED CURRENT	TERMINATION TYPE	WIRE RANGE (AWG)	HOUSING	IP/NEMA RATING	APPROVAL/DESIGN/SPEC
3,4,10,16,32,48,64 (+PE)	600V	10A, 14A	SC	20-14	HA	IP65,NEMA,4,4X,12	UL/CSA/VDE
6,10,16,24,32,48 (+PE)	600V	16A	SC,CR,CC	20-14, 20-12	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
6,12 (+PE)	600V	35A	SC	20-10	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
3,6,10 (+PE)	600V	16A	SC	20-14	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
7,8,15,25,40,50,64,80,128 (+PE)	600V	10A	CR,FO	26-14	HA,HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
24,42,72,108,144,216 (+PE)	600V	8.5A	CR	26-14	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
10,18,32,46,64,92 (+PE)	600V	16A	CR	20-12	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
5 (+PE)	600V	16A	CR	20-14	HA	IP65,NEMA,4,4X,12	UL/CSA/VDE
2 to 280, Data Bus (+PE), Pneumatic	63-1000V	10-82A	SC,CR,CC,FO,HO	28-4	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
4/0, 4/2, 4/8 (+PE)	600V	80/16A	SC	16-6,20-14	HB	IP65,NEMA,4,4X,12	UL/CSA/VDE
6,14,20,40	48V	10A	SC,SOL	20-16	HA	IP65,NEMA,4,4X,12	UL/CSA/VDE
2,3,4,5,6,7,8,7+2,10,11,14,14+2,17,19,24,26,37	200,500,900V	13,23,46A	CR	18-16,14-12,8	E,M,J,S	up to IP67	MIL-C-5015
2,3,4,5,6,7,8,7+2,10,11,14,14+2,17,19,24,26,37	200,500,900V	13,23,46A	CR	18-16,14-12,8	E,M,J,S	up to IP67	MIL-C-5015
3,5,6,7,8,8+4,10,14+1,16,18,19,21,22+1,26,41,55	600,1000V	7.5,13A	CR	24-20,20-16	E,M,J,S	up to IP67	MIL-C-26482
5+PE, 3+PE+4	600V	22/7A	CR	20-14,24-18	LS1	IP67/68	cRUus,VDE
6,7,8+1,9,12,16,17	150,100,50V	14,7A	CR,SOL	18-14,24-18	M23	IP67/68	cRUus,VDE
1+N+PE, 2+PE, 2+N+PE, 3+PE, 3+N+PE	125-600V	16-32A	SC	12,8	MULTIMAX	IP44	cULus
1+N+PE, 2+PE, 2+N+PE, 3+PE, 3+N+PE	125-500V	16-125A	SC	12,8,6	CEE	IP67	cULus
1+N+PE, 2+PE, 2+N+PE, 3+PE, 3+N+PE	125-500V	16-63A	SC	12,8,6	ULYSSE	IP66/67	cULus
1+N+PE, 2+PE, 2+N+PE, 3+PE, 3+N+PE	125-500V	16-63A	SC	12,8,6	ALUPRES	IP65,IP55	cULus

Termination Type: SC = Screw, CR = Crimp, CC = Cage Clamp, FO = Fiber Optic, SOL = Solder, HO = Hose

# EPIC<sup>®</sup> RECTANGULAR



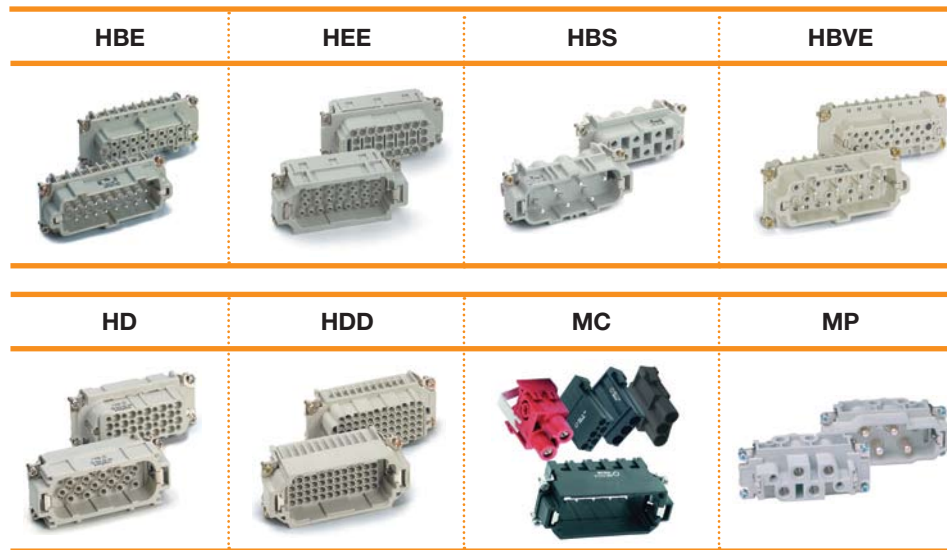
EPIC<sup>®</sup> rectangular connectors offer 11 different contact insert types and 2 housing series sizes to handle application requirements up to 1000 volts, 82 amps, and from 3 to 280 contacts. Rugged aluminum alloy enclosures provide environmental protection ratings of IP65, NEMA 4 and 12. All rectangular connector products are UL (E75770) and CSA (LR53004-1) listed.



## KEY PRODUCT/SERVICE 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 for unsurpassed application flexibility and support
- Web-based product selection and cross reference tools provide 24/7/365 support
- Large North American based inventory for fast delivery of our most popular items

## INSERTS FOR HB HOUSINGS



## EPIC<sup>®</sup> HB SIZE HOUSINGS & THEIR INSERTS

HOUSINGS	PLUGS AND RECEPTACLES							
	HBE	HEE	HBS	HBVE	HD	HDD	MC	MIXED PWR
HB6	HBE6	HEE10				HDD24	2 Mod	
HB10	HBE10	HEE18		HBVE3		HDD42	3 Mod	
HB16	HBE16	HEE32	HBS6	HBVE6	HD40	HDD72	5 Mod	4 Pwr/0 Sgl 4 Pwr/2 Sgl
HB24	HBE24	HEE46		HBVE10	HD64	HDD108	7 Mod	4 Pwr/8 Sgl
HB32	HBE32	HEE64	HBS12		HD80	HDD144	10 Mod	
HB48	HBE48	HEE92			HD128	HDD216	14 Mod	

# EPIC<sup>®</sup> RECTANGULAR



## HOUSINGS

### PG



### NPT



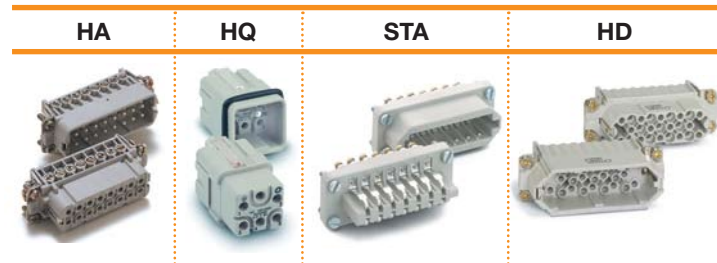
### METRIC



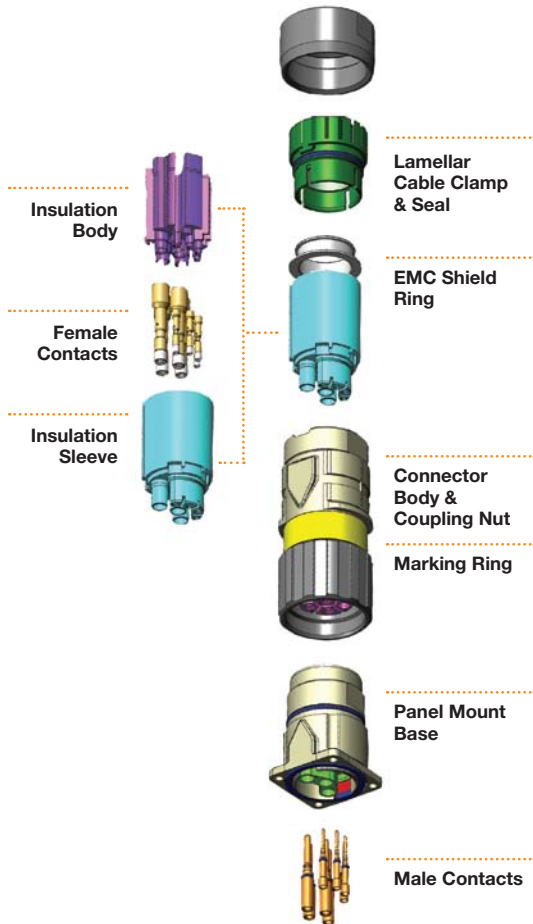
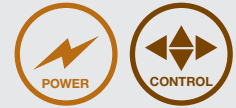
## EPIC<sup>®</sup> HA SIZE HOUSINGS & THEIR INSERTS

HOUSINGS	PLUGS & RECEPTICALS			
	HA	HQ	STA	HD
HA3/4	HA3/4	HQ5	STA6	HD7/8
HA10	HA10		STA14	HD15
HA16	HA16		STA20	HD25
HA32	HA32		STA40	HD50
HA48	HA48			
HA64	HA64			

### INSERTS FOR HA HOUSINGS



# EPIC<sup>®</sup> DIN CIRCULAR



## EPIC<sup>®</sup> LS1

EPIC<sup>®</sup> LS1 circular connectors handle power and mixed power/control application requirements up to 600 volts and 22 amps. Rugged nickel plated die-cast zinc housings provide an environmental protection rating of IP67/IP68. LS1 connectors are offered in seven housing styles and two contact configurations: 5+PE for power distribution and 3+PE+4 for a combination of power and control signal requirements such as servo motor with brake and feedback applications. These connectors include integral strain relief and cable shield termination.



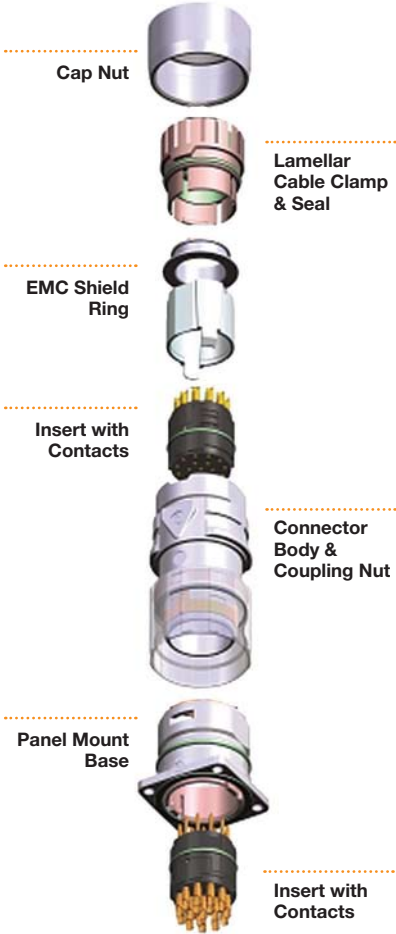
### KEY PRODUCT/SERVICE FEATURES

- Positive vibration protection for use with motor drives and moving assemblies
- Available as part of pretested custom harness assemblies
- SKINTOP<sup>®</sup> based backshell designs provide superior environmental seal and strain relief with jacketed cable, and a quick, easy method of shield termination for 360 degree EMC protection when used with shielded, jacketed cable





# EPIC<sup>®</sup> DIN CIRCULAR



## EPIC<sup>®</sup> M23

EPIC<sup>®</sup> M23 circular connectors handle control signal/feedback and low power application requirements up to 150 volts and 14 amps. Rugged nickel plated die-cast zinc housings provide an environmental protection rating of IP67/IP68. M23 connectors are offered in ten housing styles and seven contact configurations from 6 to 17 contacts. They are ideal for servo encoder applications and include integral strain relief and cable shield termination.



### KEY PRODUCT/SERVICE FEATURES

- Positive vibration protection for use with motor drives and moving assemblies
- Available as part of pretested custom harness assemblies
- SKINTOP<sup>®</sup> based backshell designs provide superior environmental seal and strain relief with jacketed cable, and a quick, easy method of shield termination for 360 degree EMC protection when used with shielded, jacketed cable

A1	A3	B1	B2	D6
F6	F7	G5	G6	O1

# EPIC® PIN & SLEEVE



EPIC® CEE and MULTIMAX series pin & sleeve connectors handle single phase (2+PE) and three phase (3+PE and 3+N+PE) power application requirements up to 600 volts and 125 amps.

EPIC® ULYSSE and ALUPRES interlocked switch outlets satisfy indoor and outdoor power distribution needs and allow direct switching of motor and other highly inductive electrical loads up to 500 volts and 63 amps.



## CONNECTORS

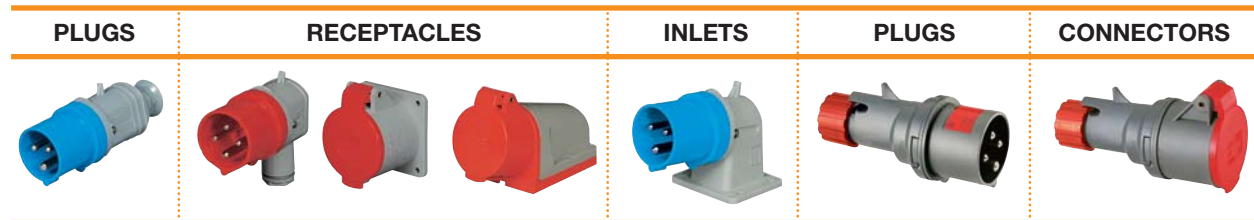
### KEY PRODUCT/SERVICE FEATURES

- Intermateable and compatible with all IEC60309 type connectors
- IP44 or IP67
- North American Version: cULus Listed, UL 1682 & 1686- File E22377
- International Version: IEC60309-1, -2
- Available as part of pretested custom harness assemblies
- Web-based product selection and cross reference tools provide 24/7/365 support

### CEE IP67



### CEE IP44



### MULTIMAX IP44

## SWITCH OUTLETS

### KEY PRODUCT/SERVICE FEATURES

- Compatible with all IEC60309 type plugs
- ULYSSE: Thermoset Plastic: IP66 and IP67
- ALUPRES: Powder Painted Aluminum Cast: IP67 or IP 55 (60/63A)
- North American Version: cULus Listed, UL 508- File E330239
- International Version
- Mechanical interlock secures the mating plug when power is turned on: eliminates arc-flash hazard



# EPIC® MIL-TYPE CIRCULAR



EPIC® EAB, EAC, and EPT MIL-type circular connectors handle power and control application requirements up to 1000 volts and 46 amps. Rugged nickel plated aluminum housings provide an environmental protection rating of IP67. They are modern, industrialized versions

of MIL-DTL-5015 and MIL-DTL-26482 military designs and provide full intermateability with their military counterparts, while offering many preferred features found in European DIN type connectors.

RoHS ✓

## EPIC® EAB, EAC

### KEY PRODUCT/SERVICE FEATURES

- Available in five housing styles, eight housing sizes, and twenty contact configurations
- Intermateable with MIL-DTL-5015 and VG95234 connectors – same shell dimensions, contact layouts, and performance characteristics
- Available as part of pretested custom overmolded harness assemblies
- SKINTOP® MS backshell designs provide superior environmental seal and strain relief with jacketed cable, and a quick, easy method of shield termination for 360 degree EMC protection when used with shielded, jacketed cable



## EPIC® EPT

### KEY PRODUCT/SERVICE FEATURES

- Available in four housing styles, six housing sizes, and sixteen contact configurations
- Intermateable with MIL-DTL-26482 connectors – same shell dimensions, contact layouts, and performance characteristics
- Available as part of pretested custom overmolded harness assemblies
- SKINTOP® MS backshell designs provide superior environmental seal and strain relief with jacketed cable, and a quick, easy method of shield termination for 360 degree EMC protection when used with shielded, jacketed cable



**ÖLFLEX<sup>®</sup>**  
Power And Control Cables

**SKINTOP<sup>®</sup>**  
Cable Glands

**SILVYN<sup>®</sup>**  
Conduit

**ETHERLINE<sup>®</sup>**  
Industrial Ethernet

**EPIC<sup>®</sup>**  
Connectors

**UNITRONIC<sup>®</sup>**  
Data Cables

**FLEXIMARK<sup>®</sup>**  
Marking Systems

**HITRONIC<sup>®</sup>**  
Fiber Optic Cables



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