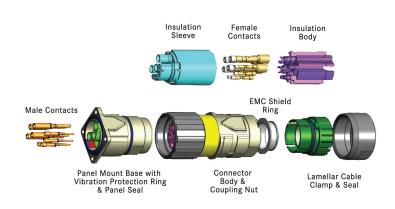
LS1 Series Circular Connectors

EPIC® CIRCON LS1 Series



Application Advantage

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- Rugged nickel-plated, die-cast zinc body
- Positive vibration protection for use with motor drives and moving assemblies
- Integral EMC cable gland provides strain-relief, IP67/68 protection, and 360° shielding



The EPIC® CIRCON LS1 connectors have many inherent features which offer application advantages and provide significant benefits. These features make it one of the most application-friendly connectors available, and ensure quick and easy assembly, high reliability, and long uninterrupted service life in tough industrial environments.

Approvals









EPIC® CIRCON LS1 connectors are available in seven housing styles and two contact configurations. Common to all arrangements are a rugged nickel-plated zinc body, plastic contact insulation body and sleeve, and gold-plated electrical contacts (included with the connector part number). Cable-mounted arrangements also include an integral EMC shield ring, cable clamp, and seal. The figure above shows the general construction of these connectors.

These connectors are offered with two contact configurations. The 5+PE contact configuration for power distribution has 5 contacts plus ground, and is rated at 630V and 25A. For feedback and servo motor with brake applications, the 3+PE+4 contact configuration handles mixed power and signal requirements with 3 contacts plus ground, rated 630V and 26A, and 4 contacts rated 250V and 7A. When used in combination, they connect one flexible cable with another (cable coupler) or one flexible cable to fixed wiring on a machine (appliance coupler).

Technical Data			
Number of Contacts:	5+PE, 3+PE+4	Wire Gauge (Crimp Tern	nination):
		- 2 mm contacts:	
Temperature Range:	-25°C to +125°C	- Styles A1, A3, G5:	20-14 AWG (0.5-2.5 mm ²)
		- Styles D, F, A6:	20-12 AWG (0.5-4.0 mm ²)
Rated Voltage:		- 1 mm contacts:	24 - 18 AWG (0.14 - 1.0 mm ²)
- UL:	600V		
- VDE:		Cable Diameter:	7.5 - 15.5 mm
- 2 mm contacts:	630V	- Styles D & F:	14 - 17 mm (12 AWG contacts)
- 1 mm contacts:	250V	·	, , , , , , , , , , , , , , , , , , ,
		Mating Cycles:	500
Rated Current:			
- 2 mm contacts:	25A (5+PE)	Materials:	
	26A (3+PE+4)	- Housing:	Nickel-plated die-cast zinc
- 1 mm contacts:	7A ,	- Insulation body:	PA, PBT, V-0 per UL 94
		- Contacts:	Gold-plated copper alloy
Impulse Voltage:		- Gaskets & seals:	FPM
- 2 mm contacts:	6kV		
- 1 mm contacts:	4kV	Contact Resistance:	< 4 mΩ
Protection Class:	IP67/68 (10h/1m)	Approvals:	DIN EN 61984
- Style A3:	IP65		cRUus #E75770

Photographs are not to scale and are not true representations of the products in question.

For current information go to our website. If not otherwise specified, all values relating to the product are nominal values.



Circular Connectors LS1 Series

EPIC® CIRCON LS1 Series

EPIC® CIRCON LS1 5+PE

View from contact side





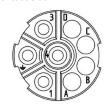
Male Insert

Female Insert

EPIC® CIRCON LS1 3+PE+4

View from contact side





Male Insert

Female Insert

Derating Curve

Basic and derating curve LS-1. 5+PE, 2,5 mm³
Female hyper boloid

Derating

Derating

Ambient temperature (°C)

Contact Size		Max. Current according to UL		
mm²	AWG	5+PE	3+PE+4	
2 mm Con	tacts			
0.34	22	5A	5A	
0.50	20	9A	9A	
1.00	18	13A (11A*)	13A (11A*)	
1.50	16	12A	12A	
2.50	14	22A	22A	
4.00	12	25A	26A	
1 mm Contacts				
up to 0.14	up to 26	_	1A	
1.00	18	_	7A	

^{*} cUR

EPIC® CIRCON LS1 Connector Style A1

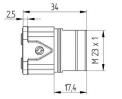
Straight Panel Mount Inlet with Male Contacts

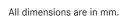
5+PE



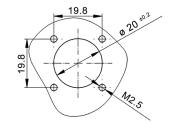


Contact Configuration	Part Number
5+PE	76003000
3+PE+4	76004000





ø2.7x 4
=
25.4



Complete the Installation						
Crimp Tool: 11148000		Locator: 11148300		Removal 1 nm contacts: 2 mm contacts:	75017400	

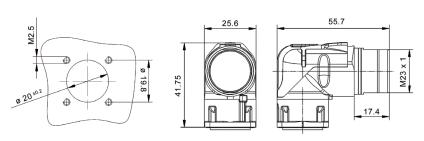
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LS1 Series Circular Connectors

EPIC® CIRCON LS1 Connector Style A3

Angled Rotatable Panel Mount Inlet with Male Contacts



All dimensions are in mm.

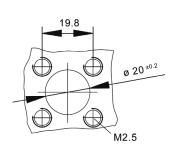


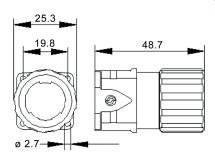


Contact Configuration	Part Number
5+PE	24420058
3+PE+4	24420056

EPIC® CIRCON LS1 Connector Style A6

Panel Mount Receptacle with Female Contacts





All dimensions are in mm.

Short Body



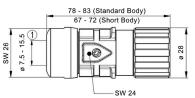


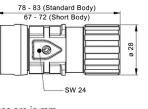


Contact Configuration	Part Number
5+PE	76083000
3+PE+4	76084000

EPIC® CIRCON LS1 Connector Style D6

Cable Connector with Female Contacts









Short Body



Standard Body



Standard Body

Contact Configuration	Standa 22 - 14 AWG	rd Body 12 AWG	Short Body
5+PE	76123000	44420091	76123100
3+PE+4	76124000	44420089	76124100

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Circular Connectors LS1 Series

EPIC® CIRCON LS1 Connector Style F6

Cable Coupler with Male Contacts

5+PE 3+PE+4



ŀ	72 - 77	
SW 26	SW 24	M23 x 1

All dimensions are in mm.

Contact	Part Number		
Configuration	up to 14 AWG	12 AWG	
5+PE	76133000	44420095	
3+PE+4	76134000	44420093	



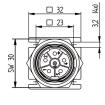
EPIC® CIRCON LS1 Connector Style F7

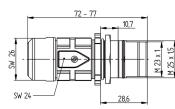
Cable Coupler with Male Contacts

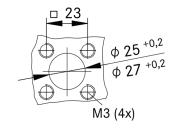
5+PE 3+PE+4











All dimensions are in mm.

Contact Configuration	Part Number
5+PE	76143000
3+PE+4	76144000

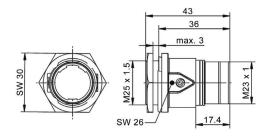


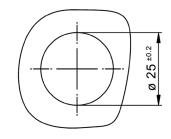
EPIC® CIRCON LS1 Connector Style G5

Straight Panel Mount Inlet with Male Contacts & Locknut

5+PE







All dimensions are in mm.

Contact Configuration	Part Number
5+PE	76153000
3+PE+4	76154000

Complete the Installation						
	Crimp Tool: 11148000		Locator: 11148300		Removal 1 nm contacts: 2 mm contacts:	75017400