

EPIC® POWER LS1

Rugged nickel-plated zinc connectors for power applications



Approvals



Application advantage

- 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

EPIC® POWER 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).

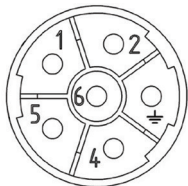
Technical data

Number of contacts:	5+PE, 3+PE+4	Wire gauge (crimp termination):	
Temperature range:	-25°C to +125°C	- 2 mm contacts:	- styles A1, A3, G5: 20 - 14 AWG (0.5 - 2.5 mm ²)
Rated voltage:		- styles D, F:	20 - 12 AWG (0.5 - 4.0 mm ²)
- UL:	600V	- 1 mm contacts:	26 - 18 AWG (0.14 - 1.0 mm ²)
- VDE:		Cable diameter:	7.5 - 15.5 mm
- 2 mm contacts:	630V	- styles D & F:	14 - 17 mm
- 1 mm contacts:	250V	Mating cycles:	500
Rated current:		Material:	
- 2 mm contacts:	25A (5+PE)	- housing:	nickel-plated die-cast zinc
	26A (3+PE+4)	- insulation body:	PA, PBT, V-0 per UL 94
- 1 mm contacts:	7A	- contacts:	gold-plated copper alloy
Impulse voltage:		- gaskets & seals:	FPM
- 2 mm contacts:	6kV	Contact resistance:	< 4 mΩ
- 1 mm contacts:	4kV	Approvals:	DIN EN 61984 cRUus #E75770
Protection class:	IP68 (10h/1m)		
- style A3:	IP65		

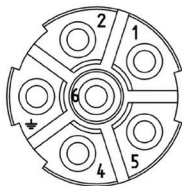
EPIC® POWER LS 1

5+PE

view from contact side



male insert



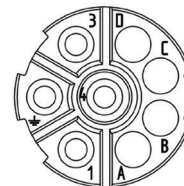
female insert

3+PE+4

view from contact side

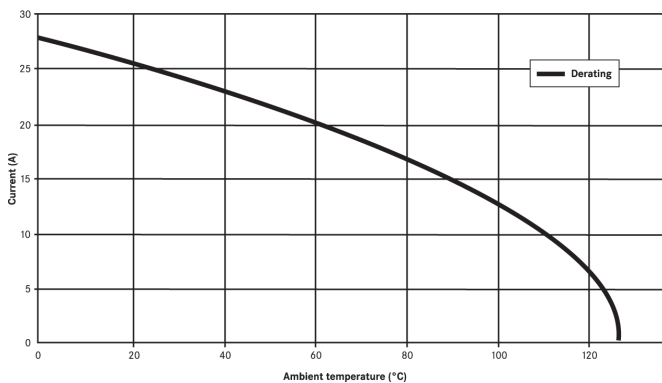


male insert



female insert

Basic and derating curve LS-1. 5+PE, 2,5 mm²
Female hyper boloid



Contact size		Max. current according to UL	
mm ²	AWG	5+PE	3+PE+4
2 mm contacts			
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

* cUL

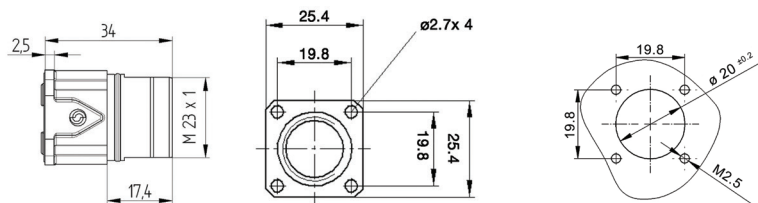
EPIC® POWER LS 1 style A1

Straight panel mount inlet with male contacts

5+PE



3+PE+4



all dimensions are in mm

Contact configuration	Part number
5+PE	76003000
3+PE+4	76004000

Contact tools



Crimp tool:
11148000



Locator:
11148300



Removal tool:
1 mm contacts: 75017400
2 mm contacts: 75017500

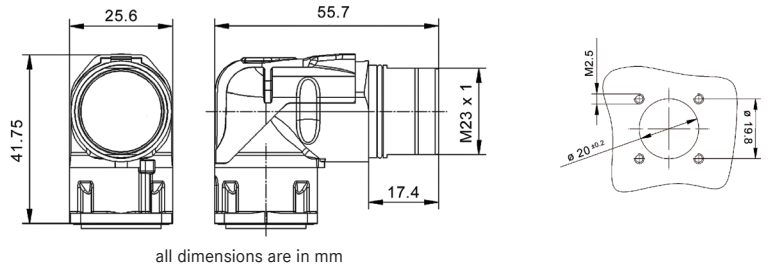
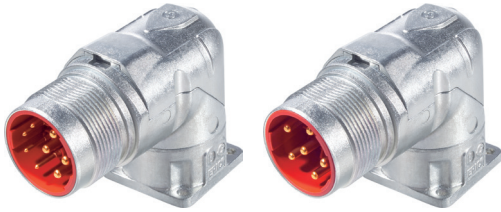
POWER LS1

Circular connectors

EPIC® POWER LS1 style A3
Angled rotatable panel mount inlet with male contacts

5+PE

3+PE+4



Contact configuration	Part number
5+PE	24420058
3+PE+4	24420056

Contact tools



Crimp tool:
11148000



Locator:
11148300

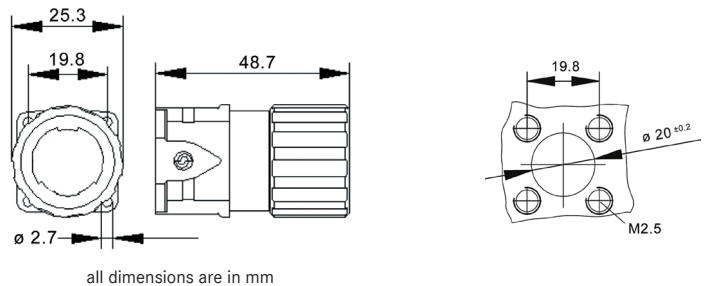
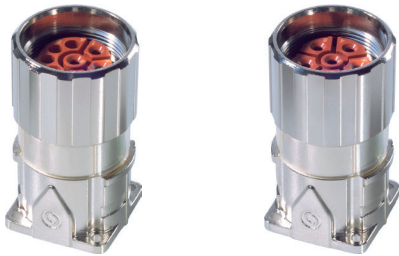


Removal tool:
1 mm contacts: 75017400
2 mm contacts: 75017500

EPIC® POWER LS1 style A6
Panel mount receptacle with female contacts

5+PE

3+PE+4



Contact configuration	Part number
5+PE	76083000
3+PE+4	76084000

Contact tools



Crimp tool:
11148000

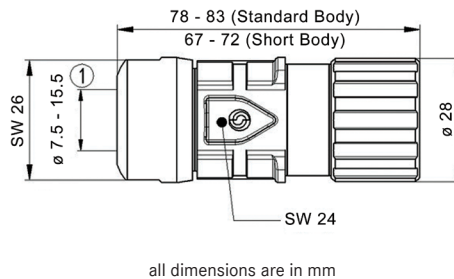


Locator:
11148300

EPIC® POWER LS1 style D6
Cable connector with female contacts

standard body

short body



Contact tools



Contacts
page 445



Crimp tool:
11148000



Locator:
11148300

Part number	Contact configuration	Wire size	Clamping range mm	Contacts included
Standard body				
76123000	5+PE	20 - 14 AWG	7.5 - 15.5	yes
76124000	3+PE+4	20 - 14 AWG	7.5 - 15.5	yes
44420091	5+PE	12 AWG	14 - 17	yes
44420089	3+PE+4	12 AWG	14 - 17	yes

Part number	Contact configuration	Wire size	Clamping range mm	Contacts included
44420090	5+PE	20 - 14 AWG	14 - 17	no
44420088	3+PE+4	20 - 14 AWG	14 - 17	no
Short body				
76123100	5+PE	20 - 14 AWG	7.5 - 15.5	yes
76124100	3+PE+4	20 - 14 AWG	7.5 - 15.5	yes

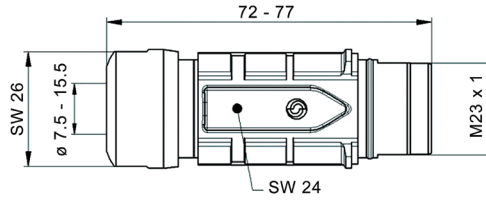
If not otherwise specified, all values relating to the product are nominal values. Photographs are not to scale and are not true representations of the products in question.

EPIC® POWER LS1 style F6

Cable coupler with male contacts

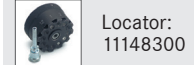
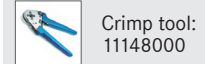
5+PE

3+PE+4



all dimensions are in mm

Contact tools



Part number	Contact configuration	Wire size	Clamping range mm	Contacts included
76133000	5+PE	20 - 14 AWG	7.5 - 15.5	yes
76134000	3+PE+4	20 - 14 AWG	7.5 - 15.5	yes
44420094	5+PE	20 - 14 AWG	14 - 17	no

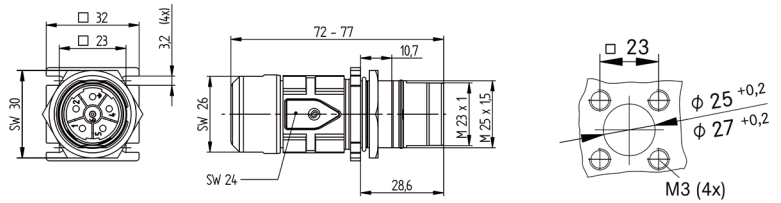
Part number	Contact configuration	Wire size	Clamping range mm	Contacts included
44420092	3+PE+4	20 - 14 AWG	14 - 17	no
44420095	5+PE	12 AWG	14 - 17	yes
44420093	3+PE+4	12 AWG	14 - 17	yes

EPIC® POWER LS1 style F7

Cable coupler with male contacts

5+PE

3+PE+4



all dimensions are in mm

Contact configuration	Part number	Clamping range mm
5+PE	76143000	7.5 - 15.5
3+PE+4	76144000	7.5 - 15.5

Contact tools

Crimp tool:
11148000

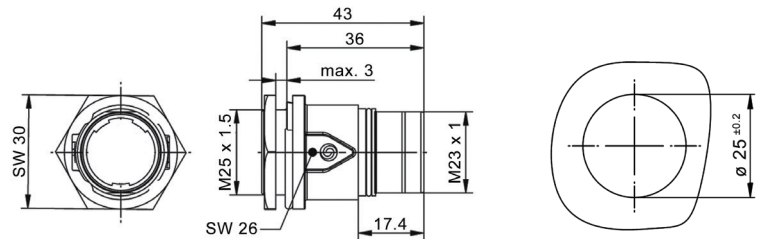
Locator:
11148300

EPIC® POWER LS1 style G5

Straight panel mount inlet with male contacts & locknut

5+PE

3+PE+4



all dimensions are in mm

Contact configuration	Part number
5+PE	76153000
3+PE+4	76154000

Contact tools

Crimp tool:
11148000

Locator:
11148300

Removal tool:
1 mm contacts: 75017400
2 mm contacts: 75017500

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EPIC® POWER LS1 accessories

metal screw cap



Connector style	Part number
A1, A3, F6, F7, G5	75018310

plastic protection cap



Connector style	Part number
A6, D6	75007710
A1, F6, F7, G5	75007810

SILVYN® adapter



Size	Part number
M25 x 1.5	55001310

Adapter allows connection to jacketed cable run in SILVYN® conduit.

EPIC® POWER LS1 tools

crimp tool



Part number
11148000

locator



Part number
11148300

removal tool



Contact size	Part number
1 mm	75017400
2 mm	75017500

Replacement contacts

style A1, A3 & G5



style F6 & F7



style D6 & A6



Part number	Wire size		Contact type	Connector style	Strip length mm	Pack size
	mm ²	AWG				
1 mm contacts						
74033001	0.14 - 1.0	26 - 18	male	A1, A3, G5	8	10
74033000	0.14 - 1.0	26 - 18	male	A1, A3, G5	8	100
74034001	0.14 - 1.0	26 - 18	male	F6, F7	6	10
74034000	0.14 - 1.0	26 - 18	male	F6, F7	6	100
74034501	0.14 - 1.0	26 - 18	female*	D6, A6	6.5	10
74034500	0.14 - 1.0	26 - 18	female*	D6, A6	6.5	100
2 mm contacts						
74033101	0.50 - 2.5	20 - 14	male	A1, A3, G5	7	10
74033100	0.50 - 2.5	20 - 14	male	A1, A3, G5	7	100
74034101	0.50 - 2.5	20 - 14	male	F6, F7	8	10
74034100	0.50 - 2.5	20 - 14	male	F6, F7	8	100
44429371	0.50 - 2.5	20 - 14	female*	D6, A6	8	10
44429370	0.50 - 2.5	20 - 14	female*	D6, A6	8	100
44420103	4.0	12	male	F6, F7	8	100
44420104	4.0	12	female*	D6	8	10
44420105	4.0	12	female*	D6	8	100

* Hyper boloid

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