

Circular connectors SIGNAL M23

EPIC® SIGNAL M23

Rugged nickel-plated zinc connectors for power applications













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
- Coding rings ensure correct mating selection in multiple connector installations

EPIC® SIGNAL M23 connectors are available in 11 housing styles that can accommodate 3 different insert keying positions. Inserts are offered in 7 contact configurations for mounting male or female, crimp, or solder contacts. Common to all arrangements are a rugged nickel-plated zinc body, plastic contact insulation body and sleeve, and gold-plated electrical contacts. Cable mounted arrangements also include an integral EMC shield ring and cable clamp and seal. The figure above shows the general construction of these connectors.

The connectors are offered with insert configurations for 6, 7, 8+1, 9, 12, 16 & 17 crimp or solder contacts in either a clockwise or counter-clockwise orientation. Used in combination, they connect one cable to another (cable coupler) or a cable to fixed wiring in a control enclosure or on a machine, instrument, encoder or servo motor.

Technical data

Number of contacts: 6, 7, 8+1, 9, 12, 16, 17

Temperature range: -25°C to +125°C

Rated voltage:

- 6, 7, 8+1 & 9 poles: 150V - 12 & 16 poles: 100V - 17 poles: 50V

Rated current:

- 6 & 7 poles: 14A - 8+1, 9, 12, 16 & 17 poles: 7A

Impulse voltage:

- 6 & 7 poles: 4kV - 8+1 poles: 2.5kV - 9, 12 & 16 poles: 1.5kV - 17 poles: 0.8kV

Protection class: IP67/68 (10h/1m)

- style A3: IP65

Wire gauge:

- crimp termination:

- 1 mm contacts: 26 - 18 AWG (0.14 - 1.0 mm²) - 2 mm contacts: 18 - 14 AWG (1.0 - 2.5 mm²)

- solder termination:

Cable diameter:7.0 - 13.5 mm

Mating cycles: 100 minimum

Material:

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: $< 4 \text{ m}\Omega$

Approvals: DIN EN 61984 cRUus #E75770





SIGNAL M23 Circular connectors

EPIC® SIGNAL M23 inserts

Connector inserts will accept both male and female contacts. A complete connection requires one E-type insert and one P-type insert.

E-type inserts

Description	6 contacts	7 contacts	8+1 contacts	9 contacts	12 contacts	16 contacts	17 contacts
without contacts	73002766	44420154	73002742	73002730	73002718	73002706	73008500
with male solder contacts	73002768	44420156	73002744	73002732	73002720	73002708	73028500
with female solder contacts	73002770	44420158	73002746	73002734	73002722	73002710	73018500
insert configurations	2 mm contacts	2 mm contacts	1 & 2 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts
			clockwise numbe	red contacts viewed from	m the mating side		

^{12 &}amp; 17 pole inserts for PCB soldering are available on request (non-stock)

P-type inserts

Description	6 contacts	7 contacts	8+1 contacts	9 contacts	12 contacts	16 contacts	17 contacts
without contacts	73002760	44420148	73002736	73002724	73002712	73002700	73008000
with male solder contacts	73002762	44420150	73002738	73002726	73002714	73002702	73028000
with female solder contacts	73002764	44420152	73002740	73002728	73002716	73002704	73018000
insert	2 mm contacts	2 mm contacts	1 & 2 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts
configurations	0000		000	0 0 0	0000	0000	0000
		counter-clockwise numbered contacts viewed from the mating side					

12 & 17 pole inserts for PCB soldering are available on request (non-stock)

EPIC® SIGNAL M23 contacts

Si	ze	Description	Termination	Part number	
AWG	mm²	Description	type	rait ilullibei	
1 mm conta	icts				
26 - 18	0.14 - 1.0	gold male contacts	crimp	72400000	
26 - 18	0.14 - 1.0	gold female contacts	crimp	74200600	
26 - 18	0.14 - 1.0	HYP gold female contacts	crimp	74034500	
up to 18	up to 1.0	gold male contacts	solder	72402000	
up to 18	up to 1.0	gold female contacts	solder	72402600	

Size		Description	Termination	Part number	
AWG	mm²	Description	type	Part number	
2 mm contacts					
18 - 14	1.0 - 2.5	gold male contacts	crimp	72401000	
18 - 14	1.0 - 2.5	gold female contacts	crimp	72401600	
up to 14	up to 2.5	gold male contacts	solder	72403000	
up to 14	up to 2.5	gold female contacts	solder	72404000	



Circular connectors SIGNAL M23

EPIC® SIGNAL M23 style A1

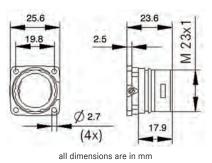
Straight panel mount base

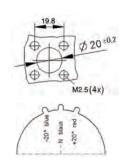
keying: N

keying: -20°









Keying	Part number
N	72004000
-20°	72004100
+20°	72004200

Contact tools

Crimp tool: 11148000



Locator: 11148300



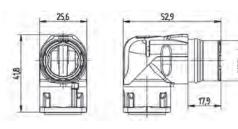
Removal tool: 44420078

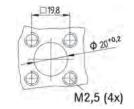
EPIC® SIGNAL M23 style A3

Angled panel mount base



Part number	
24420055	





all dimensions are in mm



Crimp tool: 11148000



Locator: 11148300



Removal tool: 44420078

EPIC® SIGNAL M23 style D6

Cable connector

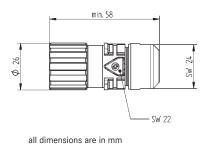


keying: -20°





keying: +20°





Keying	Part number
N	44420037
-20°	44420036
+20°	44420038





SIGNAL M23 Circular connectors

EPIC® SIGNAL M23 style F6

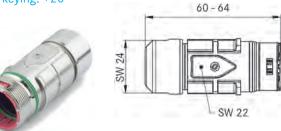
Cable coupler

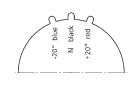
keying: N

keying: -20°

keying: +20°







all	dime	nsions	are	ın	mm

Keying	Part number
N	44420040
-20°	44420039
+20°	44420041

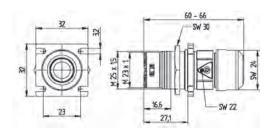


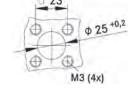
EPIC® SIGNAL M23 style F7

Cable coupler with flange



Max. cable outer diameter	Part number
7 - 10 mm	44420009
9.5 - 13.5 mm	44420011





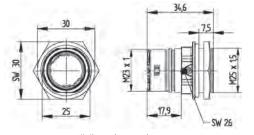
all dimensions are in mm

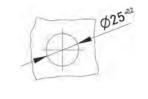
Contact tools	Contact tools						
Cri	imp tool:		Locator:				
111	148000		11148300				

EPIC® SIGNAL M23 style G5 Front wall mounting with locknut or M25 x 1.5 thread mount



Keying	Part number
N	44420046
-20°	44420044
+20°	44420048





all dimensions are in mm





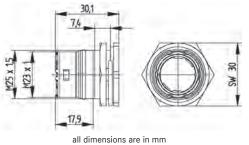
Circular connectors SIGNAL M23

EPIC® SIGNAL M23 style G6





Part number 44420071









Crimp tool: 11148000



Locator: 11148300

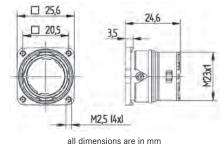


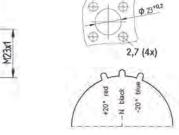
Removal tool: 44420078

EPIC® SIGNAL M23 style B1 **Rear wall mounting**



Keying	Part number
N	44420024
-20°	44420022
+20°	44420026





	m				



Crimp tool: 11148000



Locator: 11148300

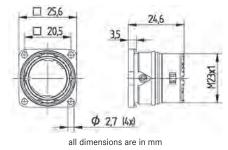


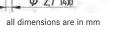
Removal tool: 44420078

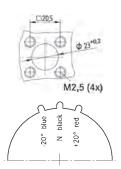
EPIC® SIGNAL M23 style B2 **Rear wall mounting**



Keying	Part number
N	44420050
-20°	44420052
+20°	44420035









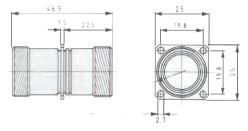
SIGNAL M23 Circular connectors

EPIC® SIGNAL M23 style C2

Panel mount feed-through



Number of contacts	Part number
12	00010108
17	00010521



all dimensions are in mm



EPIC® SIGNAL M23 accessories & tools

metal screw cap



Style 1 Style 2

Style	Connector Style	Part number
1	A, F6, G	75018110
2	A, B, F7, O	75018010

plastic protection cap



Size	Part number		
D6	75007710		
A, B, F, G, O	75007810		

SILVYN® adapter



Adapter allows connection to jacketed cable run in SILVYN $\!\!^{\tiny{\circledR}}$ conduit.

Size	Part number
M20 x 1.5	55001312

removal tool



Part number 44420078



800.633.6339 www.lapptannehill.com