

EPIC® CIRCON M23 Series



The EPIC® CIRCON M23 connectors have many inherent features which offer application advantages and provide significant benefits for the customer. 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.

**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

**Approvals**



EPIC® CIRCON 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**

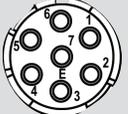
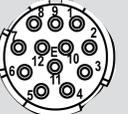
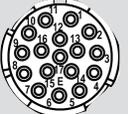
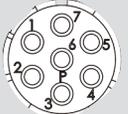
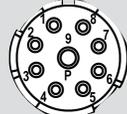
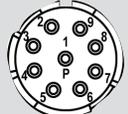
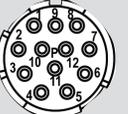
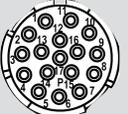
<b>Number of Contacts:</b>	6, 7, 8+1, 9, 12, 16, 17	<b>Wire Gauge:</b>	
<b>Temperature Range:</b>	-25°C to +125°C	- Crimp termination:	
<b>Rated Voltage:</b>		- 1 mm contacts:	26 - 18 AWG (0.14 - 1.0 mm <sup>2</sup> )
- 6, 7, 8+1 & 9 poles:	150V	- 2 mm contacts:	18 - 14 AWG (1.0 - 2.5 mm <sup>2</sup> )
- 12 & 16 poles:	100V	- Solder termination:	
- 17 poles:	50V	- 1 mm contacts:	up to 18 AWG (1.0 mm <sup>2</sup> )
<b>Rated Current:</b>		- 2 mm contacts:	up to 14 AWG (2.5 mm <sup>2</sup> )
- 6 & 7 poles:	14A	<b>Cable Diameter:</b>	7.0 - 13.5 mm
- 8+1, 9, 12, 16 & 17 poles:	7A	<b>Mating Cycles:</b>	100 minimum
<b>Impulse Voltage:</b>		<b>Materials:</b>	
- 6 & 7 poles:	4kV	- Housing:	Nickel-plated die-cast zinc
- 8+1 poles:	2.5kV	- Style C2:	Nickel-plated copper alloy
- 9, 12 & 16 poles:	1.5kV	- Insulation body:	PA, PBT, V-0 per UL 94
- 17 poles:	0.8kV	- Contacts:	Gold-plated copper alloy
<b>Protection Class:</b>	IP67/68 (10h/1m)	- Gaskets & seals:	FPM
- Style A3:	IP65	<b>Contact Resistance:</b>	< 4 mΩ
		<b>Approvals:</b>	DIN EN 61984 cRUus #E75770

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# EPIC® CIRCON M23 Inserts

## M23 Insert Configurations

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

# of contacts	6	7	8+1	9	12	16	17
<b>E-Type Inserts</b>							
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
E-Type Inserts							
	2 mm contacts	2 mm contacts	1 & 2 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts
							
Clockwise numbered contacts viewed from the mating side							
<b>P-Type Inserts</b>							
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
P-Type Inserts							
	2 mm contacts	2 mm contacts	1 & 2 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts	1 mm contacts
							
Counter-clockwise numbered contacts viewed from the mating side							

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

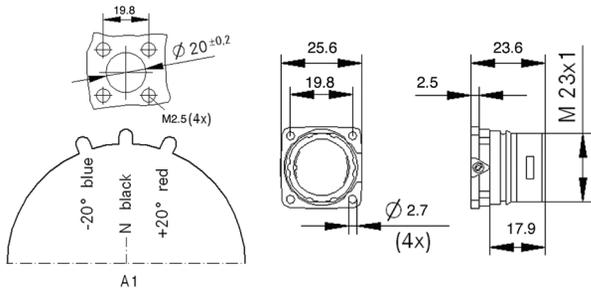
## M23 Contacts

AWG	Size mm <sup>2</sup>	Description	Termination Type	Part Number	Standard Pack Size
<b>1 mm M23 Contacts</b>					
26 - 18	0.14 - 1.0	M23 gold male contacts	Crimp	72400000	100
26 - 18	0.14 - 1.0	M23 gold female contacts	Crimp	74200600	100
26 - 18	0.14 - 1.0	M23/LS1 HYP gold female contacts	Crimp	74034500	100
up to 18	up to 1.0	M23 gold male contacts	Solder	72402000	100
up to 18	up to 1.0	M23 gold female contacts	Solder	72402600	100
<b>2 mm M23 Contacts</b>					
18 - 14	1.0 - 2.5	M23 gold male contacts	Crimp	72401000	100
18 - 14	1.0 - 2.5	M23 gold female contacts	Crimp	72401600	100
up to 14	up to 2.5	M23 gold male contacts	Solder	72403000	100
up to 14	up to 2.5	M23 gold female contacts	Solder	72404000	100

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# EPIC® CIRCON M23 Connector Style A1

## Straight Panel Mount Base



All dimensions are in mm.

Keying: +20°



Keying: -20°



Keying: N



### Complete the Installation



Crimp Tool:  
11148000



Locator:  
11148300

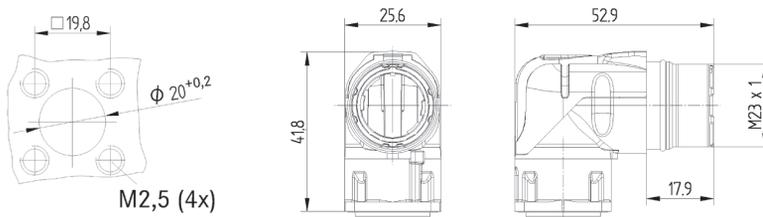


Removal Tool:  
44420078

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

# EPIC® CIRCON M23 Connector Style A3

## Angled Panel Mount Base



All dimensions are in mm.



### Complete the Installation



Crimp Tool:  
11148000



Locator:  
11148300

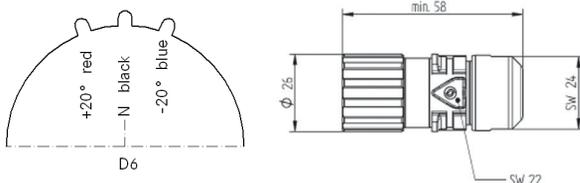


Removal Tool:  
44420078

Part Number
24420055

# EPIC® CIRCON M23 Connector Style D6

## Cable Connector



All dimensions are in mm.

Keying: +20°



Keying: -20°



Keying: N



### Complete the Installation



Crimp Tool:  
11148000



Locator:  
11148300

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

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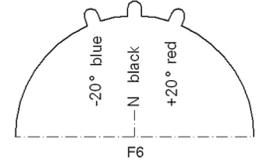
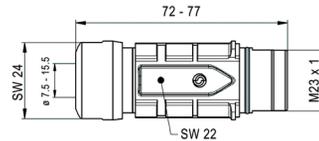
# EPIC® CIRCON M23 Connector Style F6

## Cable Coupler

Keying: N

Keying: -20°

Keying: +20°



All dimensions are in mm.

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

**Complete the Installation**



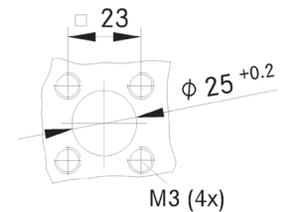
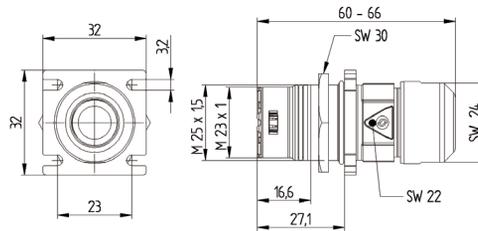
Crimp Tool: 11148000



Locator: 11148300

# EPIC® CIRCON M23 Connector Style F7

## Cable Coupler with Flange



All dimensions are in mm.

Max. Cable Outer Diameter	Part Number
7 - 10 mm	44420009
9.5 - 13.5 mm	44420011

Keying available on request

**Complete the Installation**



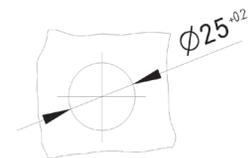
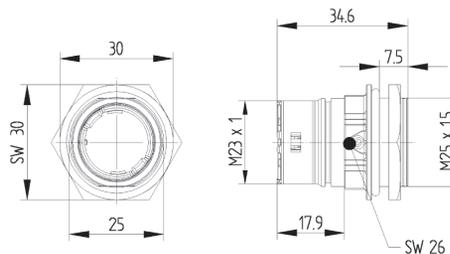
Crimp Tool: 11148000



Locator: 11148300

# EPIC® CIRCON M23 Connector Style G5

## Front Wall Mounting with Locknut or M25 x 1.5 Thread Mount



All dimensions are in mm.

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

**Complete the Installation**



Crimp Tool: 11148000



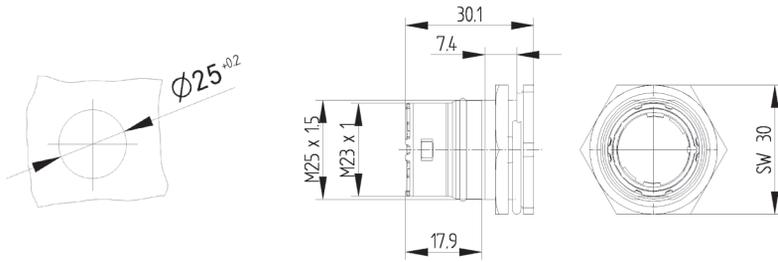
Locator: 11148300



Removal Tool: 44420078

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# EPIC® CIRCON M23 Connector Style G6 Rear Wall Mounting



All dimensions are in mm.

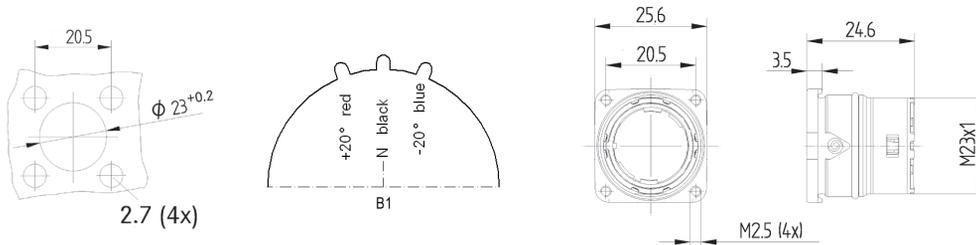


**Complete the Installation**

	Crimp Tool: 11148000		Locator: 11148300		Removal Tool: 44420078
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Part Number
44420071

# EPIC® CIRCON M23 Connector Style B1 Rear Wall Mounting



All dimensions are in mm.

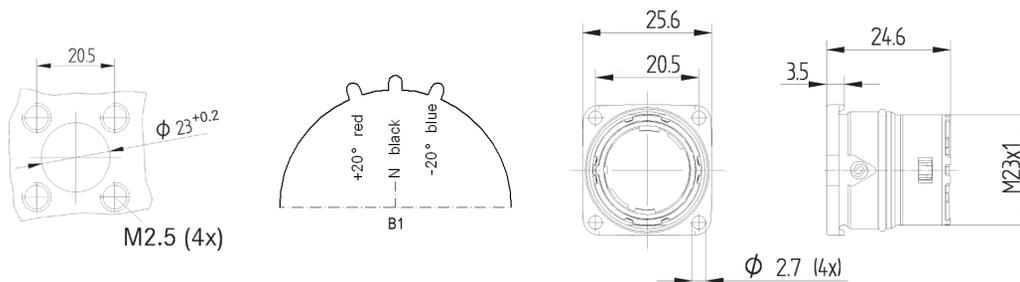


**Complete the Installation**

	Crimp Tool: 11148000		Locator: 11148300		Removal Tool: 44420078
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Keying	Part Number
N	44420024
-20°	44420022
+20°	44420026

# EPIC® CIRCON M23 Connector Style B2 Rear Wall Mounting



All dimensions are in mm.



**Complete the Installation**

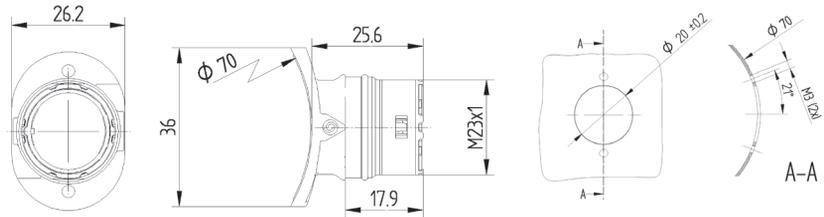
	Crimp Tool: 11148000		Locator: 11148300		Removal Tool: 44420078
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Keying	Part Number
N	44420050
-20°	44420052
+20°	44420035

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# EPIC® CIRCON M23 Connector Style O1

Curved Surface Front Mount



All dimensions are in mm.

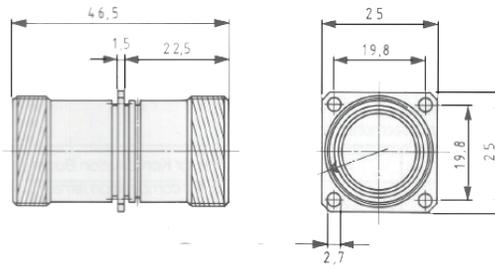
Mounting Diameter	Part Number
50 mm	44420083
58 mm	44420085
70 mm	44420087
90 mm	44420028

**Complete the Installation**

	Crimp Tool: 11148000		Locator: 11148300		Removal Tool: 44420078
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# EPIC® CIRCON M23 Connector Style C2

Panel Mount Feed-Through



All dimensions are in mm.

Description	Part Number
12 contact ME/FP	00010108
17 contact ME/FP	00010521

Maximum wall thickness is 3 mm.

# EPIC® CIRCON M23 Accessories

**Metal Screw Cap**



Style	For Housing Style	Part Number
1	A, F6, G	75018110
2	A, B, F7, O	75018010

**Plastic Protection Cap**



For Housing Style	Part Number
D6	75007710
A, B, F, G, O	75007810

**SILVYN® Adapter**



Accessory Thread	Part Number
M20 x 1.5	55001312

Allows connection to jacketed cable run in conduit.

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