

EPIC® Circular Connectors

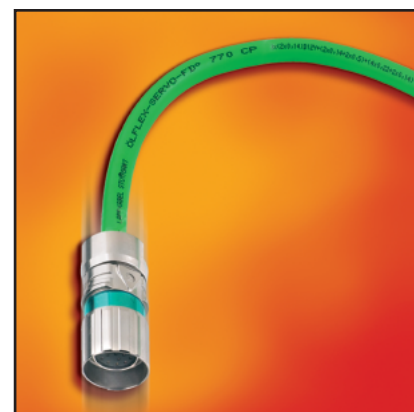
CIRCON M23 Series



The 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 insure quick and easy assembly, high reliability, and long, uninterrupted service life in tough industrial environments

Key features include:

- 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/IP68 protection, and 360 degree shielding
- Identification marking field and unique color marking clips provide positive identification and visual differentiation in multiple connector installations.
- Color-coded keying rings insure correct mating selection in applications where several connectors are mounted in the same location.



Equipment Description

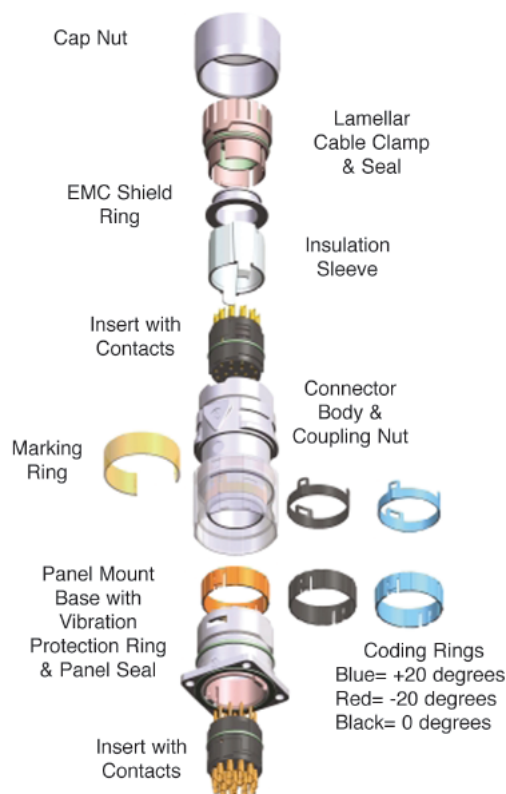
EPIC® CIRCON M23 Connectors are available in 3 housing arrangements that can accommodate 3 different insert keying positions. Inserts are offered in 7 contact configurations for mounting male or female, crimp or solder contacts. Common to all arrangements are a rugged nickel plated zinc body, plastic 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 to the right shows the general construction of these connectors.

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

TECHNICAL DATA

Technical Specifications

# of Contacts:	6, 7, 8+1, 9, 12, 16, 17
Rated Voltage:	6,7,8+1,9 poles - 150 volts 12 & 16 poles - 100 volts 17 poles - 50 volts
Rated Current:	6 & 7 pole: 14 amps; 8+1, 9, 12, 16, 17 pole: 7 amps
Impulse Voltage:	0.8 kV
Contact Resistance:	<5m Ohms
Mating Cycles:	100 minimum
Temperature Range:	-25°C to +125°C
Protection Class:	IP67/68 (10h/1m)
Wire Gauge: Crimp	1mm : 0.14-1.0mm ² (24-18 AWG) 2mm : 1.0-2.5mm ² (18-14 AWG)
Solder	1mm : up to 1mm ² (18 AWG) 2mm : up to 2.5mm ² (14 AWG)
Cable Diameter:	7.0 to 13.5 mm
Materials:	Housing: Nickel Plated Zinc Insert: PA, PBT, UL94 V-0 Contacts: gold plated copper alloy Gaskets & Seals: FPM
Standards:	DIN EN 61984
Approvals:	 



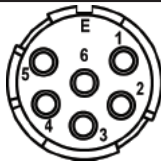
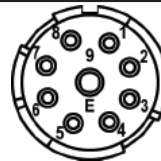
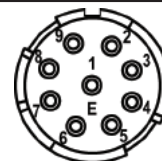
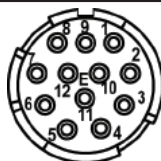
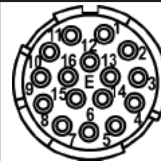
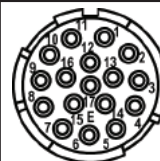
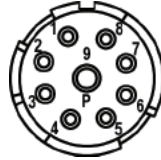
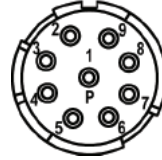
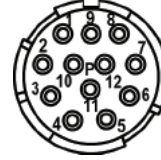
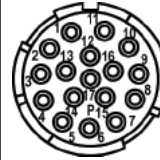
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CIRCON M23 Series



Insert Configurations

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

E-Type Insert (Clockwise numbered contacts viewed from the mating side)	73002766 without contacts	73002754 without contacts	73002742 without contacts	73002730 without contacts	73002718 without contacts	73002706 without contacts	73008500 without contacts
	73002768 with male solder	73002756 with male solder	73002744 with male solder	73002732 with male solder	73002720 with male solder	73002708 with male solder	73028500 with male solder
	73002770 with female solder	73002758 with female solder	73002746 with female solder	73002734 with female solder	73002722 with female solder	73002710 with female solder	73018500 with female solder
							
	Use 2mm Contacts	Use 2mm Contacts	Use 1 & 2mm Contacts	Use 1mm Contacts	Use 1mm Contacts	Use 1mm Contacts	Use 1mm Contacts
							
# of Contacts	6	7	8+1	9	12	16	17
P-Type Insert (Counter- Clockwise numbered contacts viewed from the mating side)							
							
	Use 2mm Contacts	Use 2mm Contacts	Use 1 & 2mm Contacts	Use 1mm Contacts	Use 1mm Contacts	Use 1mm Contacts	Use 1mm Contacts
	73002760 without contacts	73002748 without contacts	73002736 without contacts	73002724 without contacts	73002712 without contacts	73002700 without contacts	73008000 without contacts
	73002762 with male solder	73002750 with male solder	73002738 with male solder	73002726 with male solder	73002714 with male solder	73002702 with male solder	73028000 with male solder
	73002764 with female solder	73002752 with female solder	73002740 with female solder	73002728 with female solder	73002716 with female solder	73002704 with female solder	73018000 with female solder

Contacts

Part Number	Description	Pack Size
72400000	M23 Gold Male Crimp 1mm Contact: 0.14 -1.0 mm ² (26 - 18 AWG)	100
72402000	M23 Gold Male Solder Contact: up to 1.0 mm ² (18 AWG)	100
72402600	M23 Gold Female Solder Contact: up to 1.0 mm ² (18 AWG)	100
74200600	M23 Gold Female Crimp Contact: 0.14 -1.0 mm ² (26 -18 AWG)	100
74034500	M23/LS1 HYP Gold Female Crimp Contact D6: 0.14 - 1.0 mm ² (26 -18 AWG)	100
72401600	M23 Gold Female Crimp 2 mm Contact: 1.0 - 2.5 mm ² (18 - 14 AWG)	100
72404000	M23 Gold Female Solder Contact 2mm up to 2.5 mm ² (14 AWG)	100
72401000	M23 Gold Male Crimp 2mm Contact: 1.0 - 2.5 mm ² (18 - 14 AWG)	100
72403000	M23 Gold Male Solder 2 mm Contact: up to 2.5 mm ² (14 AWG)	100

STRAIGHT PANEL MOUNT BASE (STYLE A1)

Keying "N"



Part
Number

72004000

Keying "-20"



Part
Number

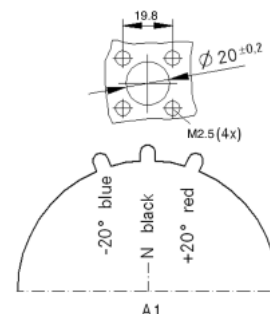
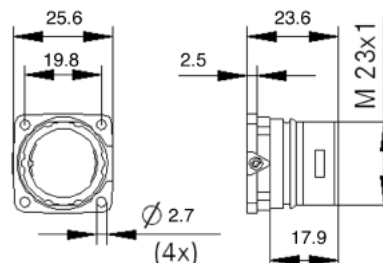
72004100

Keying "+20"



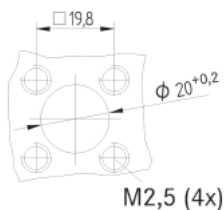
Part
Number

72004200



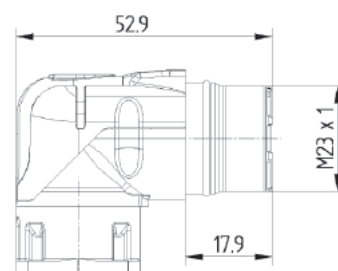
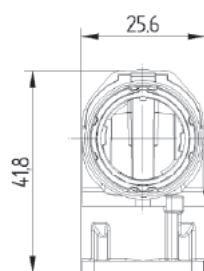
(All dimensions above are in mm)

ANGLED PANEL MOUNT BASE (STYLE A3)



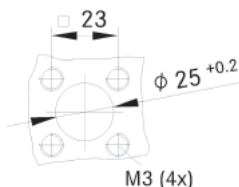
Part
Number

44420055

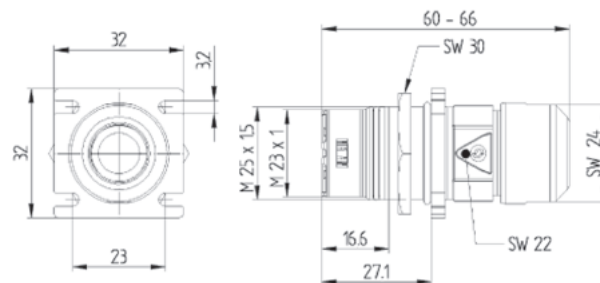


(All dimensions above are in mm)

CABLE COUPLER WITH FLANGE (STYLE F7)



Part Number	Max. Cable O.D.
44420009	7 - 10 mm
44420011	9.5 - 13.5 mm



(All dimensions above are in mm)

CABLE CONNECTOR (STYLE D6)

Keying "N"



Part
Number

44420037

Keying "-20"



Part
Number

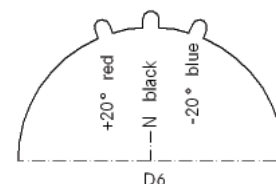
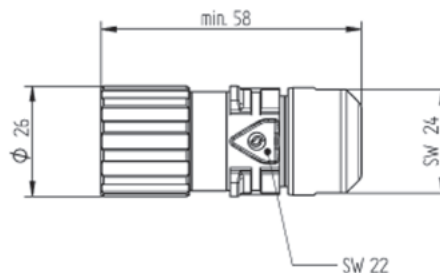
44420036

Keying "+20"

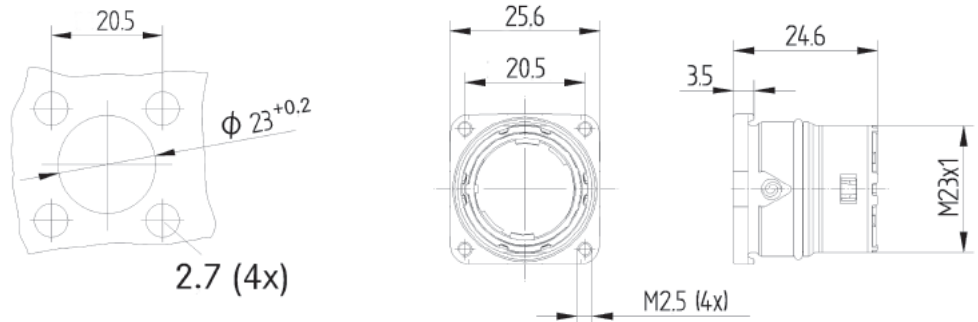


Part
Number

44420038



REAR WALL MOUNTING (STYLE B1)



Keying "N"

Keying "-20"

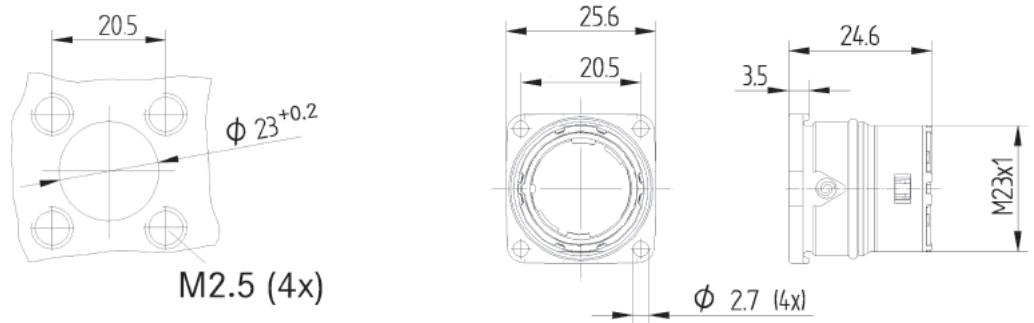
Keying "+20"

Part Number
44420024

Part Number
44420022

Part Number
44420026

REAR WALL MOUNTING (STYLE B2)



Keying "N"

Keying "-20"

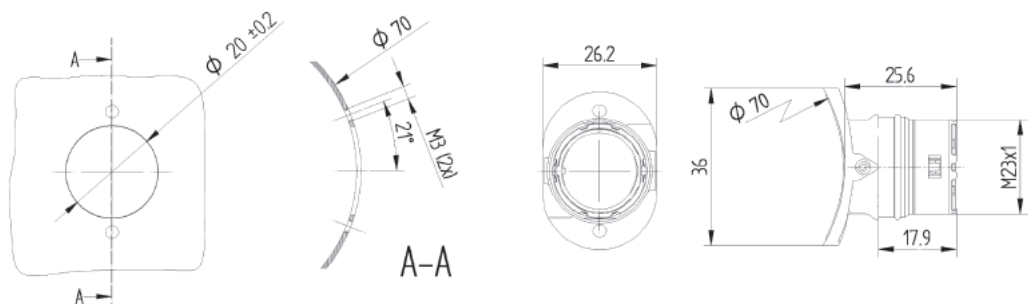
Keying "+20"

Part Number
44420050

Part Number
44420052

Part Number
44420035

CURVED SURFACE FRONT MOUNT (STYLE O1)



Mounting
ø 50mm

Mounting
ø 58mm

Mounting
ø 70mm

Mounting
ø 90mm

Part Number
44420083

Part Number
44420085

Part Number
44420087

Part Number
44420028

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CIRCON M23 Series



Crimp Tool
0.14 - 6.0 mm²

Part Number
11148000



Locator

Part Number
11148300



Removal Tool
Panel Base Insert:
Style A, B, G, O

Part Number
44420078



Metal Screw Cap

Style	Part #	For Housings
1	75018110	Style D, F, G
2	75018010	Style A, B, F7, O



Plastic Protection Cap

Style	Part #	For Housings
1	75007710	Style D6
2	75007810	Style A, B, F, G, O



**Yellow Marking
Rings**

Part Number
44420098



**Red Marking
Rings**

Part Number
44420100



**Blue Marking
Rings**

Part Number
44420096



**Green Marking
Rings**

Part Number
44420099

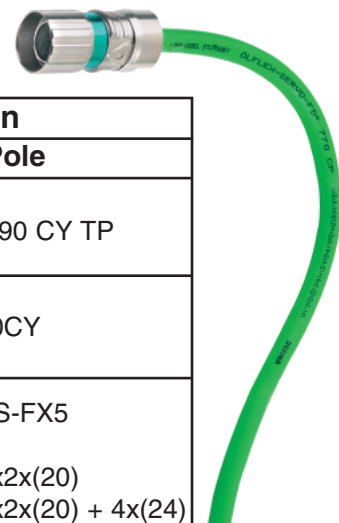


**Transparent
Marking Rings**

Part Number
44420097

The CIRCON M23 connectors are ideal for use with industrial control and data cables, and servo feedback cables. Based on the specific application, a wide variety of cable/connector combinations is possible. The tables below provide a sampling of the possibilities.

Stationary/Flexible Applications



Application	Use With Connector Contact Configuration	
	6 & 7 Pole	8+1, 9, 12, 16, & 17 Pole
Industrial Equipment Control and Signal	OLFLEX® 190/190 CY	UNITRONIC® 190/190 CY/190 CY TP
	OLFLEX® 490P/490 CP	
	OLFLEX® 590P/590 CP	
	OLFLEX® SPIRAL 400P/540 P	UNITRONIC® 300/300CY
	OLFLEX® TC 600	
	OLFLEX® Tray II	
Servo Feedback (Siemens)		OLFLEX® Servo LK-SMS-FX5 0025724 - 4x2x(22) + 4x(20) 0025725 - 3x2x(26) + 4x(26) + 1x2x(20) 0025726 - 3x2x(26) + 4x(26) + 1x2x(20) + 4x(24)

UNITRONIC 300 (UL) TYPE CMG or PLTC 105°C CSA CMG or AWM II A/B 300V pbf(+)

OLFLEX®-SERVO LK-SMS-FX8 AWM, AWM CE

OLFLEX®-SERVO LK-INX AWM AWM CE

OLFLEX TC 600-(UL) TYPE TC-ER 90°C 600V---CSA AWM FT4 RoHS

Continuous Flex Applications

Application	Use With Connector Contact Configuration	
	6 & 7 Pole	8+1, 9, 12, 16, & 17 Pole
Industrial Equipment Control and Signal	OLFLEX® FD 890/890 CY	UNITRONIC® FD 890
	OLFLEX® FD 891/891 CY	UNITRONIC® FD P
	OLFLEX® FD 890 P/890 CP	UNITRONIC® FD CP
	OLFLEX® FD 891 P/891 CP	UNITRONIC® FD CP (TP)
Servo Feedback (Siemens)		OLFLEX® SERVO FD LK-SMS-FX8 0027711 - 4x2x(22) + 4x(20) 0027713 - 3x2x(26) + 4x(26) + 1x2x(20) 0027714 - 3x2x(26) + 4x(26) + 1x2x(20) + 4x(24)
		OLFLEX® SERVO FD LK-INX 7072400 - 4x2x(24) + 2x(18) 7072401 - 4x2x(24) + 2x(20) 7072402 - 9x(20)

