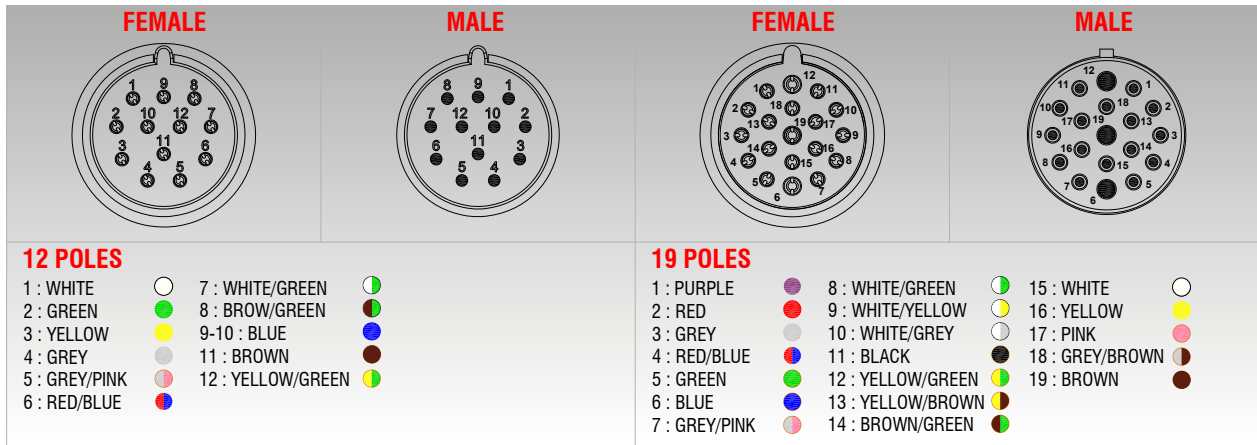




## M23 CIRCULAR CONNECTORS



### GENERAL FEATURES OF MOULDED / PANEL MOUNT CONNECTORS:

**Conductor cross section :**  
**Power contacts:**  
 0.82mm<sup>2</sup>(18AWG).  
**Signal contacts:**  
 0.34mm<sup>2</sup>(22AWG).

**Fixing system :**  
 M23 coupling nut.

**Housing material :**  
**Moulded connectors:**  
 Polypropylene.  
**Panel mount:**  
 Brass + Nickel plated.  
 Stainless steel AISI304(upon request)

**Coupling nut material :**  
 Brass + Nickel plated.  
 Stainless steel AISI304(upon request).

**Rated Voltage:**  
 150V AC/DC.

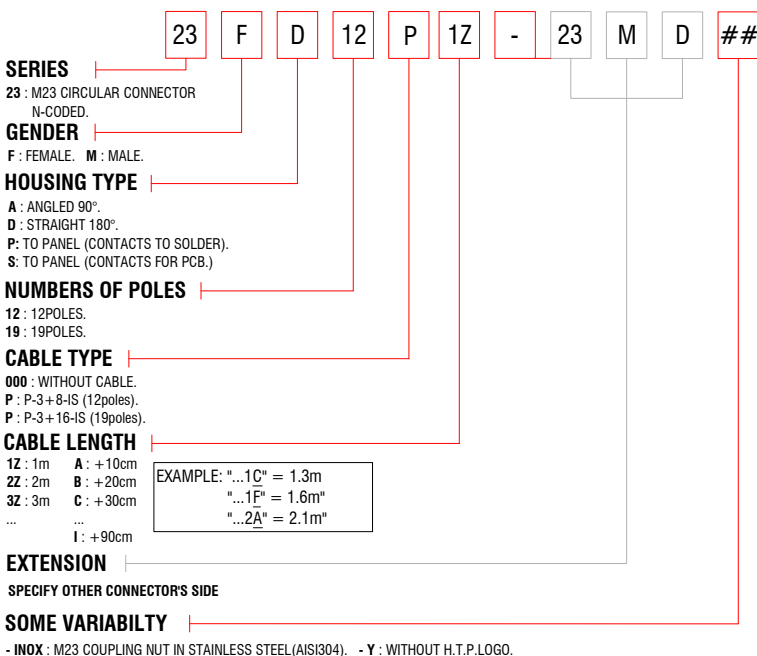
**Contact material and treatment :**  
 Brass + Gold flash.

**Internal core material :**  
 PA66.



**Protection class :**  
 IP 67.

**Rated current:**  
 12poles: 8A.  
 19poles: 10A (power contacts), 8A(signal contacts).

**Operating temperature :**  
 -25°C +90°C.



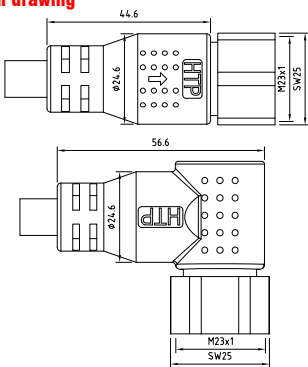
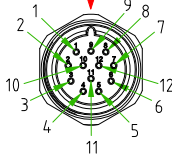
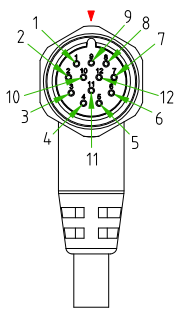
### M23 CONNECTORS CABLE:

Code	Material	Type of cable	Colour	Section	No.core	Cable $\varnothing$ mm $\pm 0.3$	Temperature range °C
<b>P-3+8-IS</b>	PUR/PP	 ULstyle 20549	Black	3GAWG 18 + 8xAWG 22 (0.82mm <sup>2</sup> ) (0.34mm <sup>2</sup> )	3 + 8	$\varnothing 8.8$ mm	-40°C / +80°C
<b>P-3+16-IS</b>	PUR/PP	 ULstyle 20549	Black	3GAWG 18 + 16xAWG 22 (0.82mm <sup>2</sup> ) (0.34mm <sup>2</sup> )	3 + 16	$\varnothing 10.6$ mm	-40°C / +80°C

# M23 CIRCULAR CONNECTORS

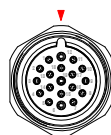
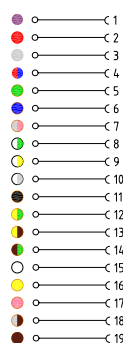
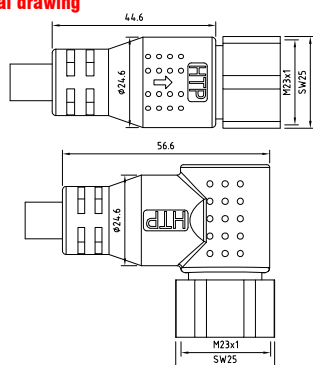
## Moulded cable connectors



<b>Technical drawing</b>			
	<ul style="list-style-type: none"> <li>○ — c1</li> <li>● — c2</li> <li>○ — c3</li> <li>● — c4</li> <li>○ — c5</li> <li>● — c6</li> <li>○ — c7</li> <li>● — c8</li> <li>○ — c9</li> <li>● — c10</li> <li>○ — c11</li> <li>● — c12</li> </ul>		
		<ul style="list-style-type: none"> <li>○ — c1</li> <li>● — c2</li> <li>○ — c3</li> <li>● — c4</li> <li>○ — c5</li> <li>● — c6</li> <li>○ — c7</li> <li>● — c8</li> <li>○ — c9</li> <li>● — c10</li> <li>○ — c11</li> <li>● — c12</li> </ul>	
<b>Product description</b>			
Connector type	Circular connector with moulded cable	Circular connector with moulded cable	
Construction type	M23 N-Coded	M23 N-Coded	
Description	Circular connector M23 series with moulded cable	Circular connector M23 series with moulded cable	
Part number	<b>23FD12P1Z-K6-IS</b>	<b>23FA12P1Z-K6-IS</b>	
Housing type	Straight 180°	Angled 90°	
Cable gland	Moulded cable	Moulded cable	
Contacts type	Female	Female	
Number of contacts	12poles	12poles	
Housing colour	Black	Black	
<b>Technical data</b>			
Type of termination	Contacts to solder wires	Contacts to solder wires	
Contacts material	Brass + Gold flash	Brass + Gold flash	
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)	
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated	
M23 coupling nut torque	-	-	
Rated voltage	150V AC/DC	150V AC/DC	
Rated current	8A	8A	
O-ring material	-	-	
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549	
Cable jacket colour	Black	Black	
No. Conductors / Section	8x22AWG + 3x18AWG	8x22AWG + 3x18AWG	
Conductor colours	Wh;Gn;Ye;Gy;Gy/Pk;Rd/Bu;Wh/Gn; Bn/Gn;Bu;Bn;Ye/Gn.	Wh;Gn;Ye;Gy;Gy/Pk;Rd/Bu;Wh/Gn; Bn/Gn;Bu;Bn;Ye/Gn.	
Cable diameter	ø8.8mm (±0.3)	ø8.8mm (±0.3)	
Cable length	1m	1m	
<b>Packaging</b>			
Qty/Bag	1 pc / bag	1 pc / bag	
<b>Other accessories options</b>			
See accessories section			
<b>Notes:</b> Connectors available with different features: See the general features and codification scheme page See the cables list section			



### Technical drawing



### Product description

Connector type	Circular connector with moulded cable	Circular connector with moulded cable
Construction type	M23 N-Coded	M23 N-Coded
Description	Circular connector M23 series with moulded cable	Circular connector M23 series with moulded cable
Part number	<b>23FD19P1Z-K6-IS</b>	<b>23FA19P1Z-K6-IS</b>
Housing type	Straight 180°	Angled 90°
Cable gland	Moulded cable	Moulded cable
Contacts type	Female	Female
Number of contacts	19poles	19poles
Housing colour	Black	Black

### Technical data

Type of termination	Contacts to solder wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M23 coupling nut torque	-	-
Rated voltage	150V AC/DC	150V AC/DC
Rated current	Power contacts: 10A / Signal contacts: 8A	Power contacts: 10A / Signal contacts: 8A
O-ring material	-	-
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549
Cable jacket colour	Black	Black
No. Conductors / Section	19x22AWG + 3x18AWG	19x22AWG + 3x18AWG
Conductor colours	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh;Gn;Wh;Ye; Wh;Gy;Bk;Ye;Gn;Ye;Bn;Bn;Gn;Wh;Ye;Pk;Gy;Bn;Bn.	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh;Gn;Wh;Ye; Wh;Gy;Bk;Ye;Gn;Ye;Bn;Bn;Gn;Wh;Ye;Pk;Gy;Bn;Bn.
Cable diameter	ø10.6mm (±0.3)	ø10.6mm (±0.3)
Cable length	1m	1m

### Packaging

Qty/Bag	1 pc / bag	1 pc / bag
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### Other accessories options

See accessories section

**Notes:** Connectors available with different features:  
See the general features and codification scheme page  
See the cables list section

# M23 CIRCULAR CONNECTORS

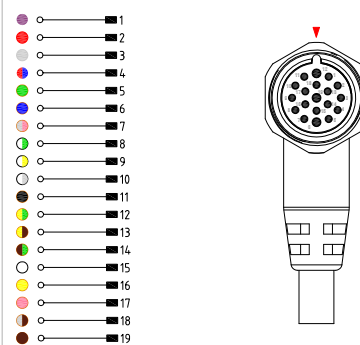
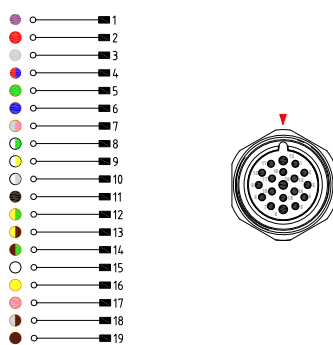
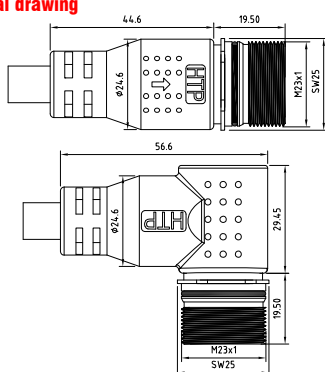
## Moulded cable connectors



<b>Technical drawing</b>		
<b>Product description</b>		
Connector type	Circular connector with moulded cable	Circular connector with moulded cable
Construction type	M23 N-Coded	M23 N-Coded
Description	Circular connector M23 series with moulded cable	Circular connector M23 series with moulded cable
Part number	<b>23MD12P1Z-K6-IS</b>	<b>23MA12P1Z-K6-IS</b>
Housing type	Straight 180°	Angled 90°
Cable gland	Moulded cable	Moulded cable
Contacts type	Male	Male
Number of contacts	12poles	12poles
Housing colour	Black	Black
<b>Technical data</b>		
Type of termination	Contacts to solder wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M23 coupling nut torque	-	-
Rated voltage	150V AC/DC	150V AC/DC
Rated current	8A	8A
O-ring material	NBR	NBR
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549
Cable jacket colour	Black	Black
No. Conductors / Section	8x22AWG + 3x18AWG	8x22AWG + 3x18AWG
Conductor colours	Wh;Gn;Ye;Gy;Gy/Pk;Rd/Bu;Wh/Gn; Bn/Gn;Bu;Bn;Ye/Gn.	Wh;Gn;Ye;Gy;Gy/Pk;Rd/Bu;Wh/Gn; Bn/Gn;Bu;Bn;Ye/Gn.
Cable diameter	ø8.8mm (±0.3)	ø8.8mm (±0.3)
Cable length	1m	1m
<b>Packaging</b>		
Qty/Bag	1 pc / bag	1 pc / bag
<b>Other accessories options</b>		
See accessories section		
<b>Notes:</b> Connectors available with different features: See the general features and codification scheme page See the cables list section		



### Technical drawing



### Product description

Connector type	Circular connector with moulded cable	Circular connector with moulded cable
Construction type	M23 N-Coded	M23 N-Coded
Description	Circular connector M23 series with moulded cable	Circular connector M23 series with moulded cable
Part number	<b>23MD19P1Z-K6-IS</b>	<b>23MA19P1Z-K6-IS</b>
Housing type	Straight 180°	Angled 90°
Cable gland	Moulded cable	Moulded cable
Contacts type	Male	Male
Number of contacts	19poles	19poles
Housing colour	Black	Black

### Technical data

Type of termination	Contacts to solder wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M23 coupling nut torque	-	-
Rated voltage	150V AC/DC	150V AC/DC
Rated current	Power contacts: 10A / Signal contacts: 8A	Power contacts: 10A / Signal contacts: 8A
O-ring material	NBR	NBR
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549
Cable jacket colour	Black	Black
No. Conductors / Section	19x22AWG + 3x18AWG	19x22AWG + 3x18AWG
Conductor colours	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh/Gn;Wh;Ye;Wh/Gy;Bk;Ye/Gn;Ye/Bn;Bn/Gn;Wh;Ye;Pk;Gy/Bn;Bn.	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh/Gn;Wh;Ye;Wh/Gy;Bk;Ye/Gn;Ye/Bn;Bn/Gn;Wh;Ye;Pk;Gy/Bn;Bn.
Cable diameter	ø10.6mm (±0.3)	ø10.6mm (±0.3)
Cable length	1m	1m

### Packaging

Qty/Bag	1 pc / bag	1 pc / bag
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### Other accessories options

See accessories section

**Notes:** Connectors available with different features:  
See the general features and codification scheme page  
See the cables list section

# M23 CIRCULAR CONNECTORS

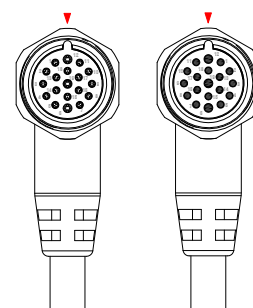
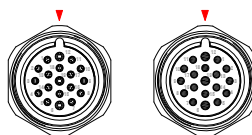
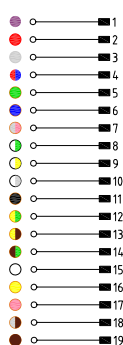
## Moulded cable connectors



<b>Technical drawing</b>		
<b>Product description</b>		
Connector type	Circular connectors with moulded cable	Circular connectors with moulded cable
Construction type	M23 N-Coded	M23 N-Coded
Description	Extension M23-M23 connectors with moulded cable	Extension M23-M23 connectors with moulded cable
Part number	<b>23FD12P1Z23MD-K6-IS</b>	<b>23FA12P1Z23MA-K6-IS</b>
Housing type	Straight 180°	Angled 90°
Cable gland	Moulded cable	Moulded cable
Contacts type	Female-Male	Female-Male
Number of contacts	12poles	12poles
Housing colour	Black	Black
<b>Technical data</b>		
Type of termination	Contacts to solder wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M23 coupling nut torque	-	-
Rated voltage	150V AC/DC	150V AC/DC
Rated current	8A	8A
O-ring material	NBR	NBR
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549
Cable jacket colour	Black	Black
No. Conductors / Section	8x22AWG + 3x18AWG	8x22AWG + 3x18AWG
Conductor colours	Wh;Gn;Ye;Gy;Gy/Pk;Rd;Bu;Wh;Gn; Bn/Gn;Bu;Bn;Ye/Gn.	Wh;Gn;Ye;Gy;Gy/Pk;Rd;Bu;Wh;Gn; Bn/Gn;Bu;Bn;Ye/Gn.
Cable diameter	ø8.8mm (±0.3)	ø8.8mm (±0.3)
Cable length	1m	1m
<b>Packaging</b>		
Qty/Bag	1 pc / bag	1 pc / bag
<b>Other accessories options</b>		
See accessories section		
<b>Notes:</b> Connectors available with different features: See the general features and codification scheme page See the cables list section		



### Technical drawing



### Product description

Connector type	Circular connector with moulded cable	Circular connector with moulded cable
Construction type	M23 N-Coded	M23 N-Coded
Description	Extension M23-M23 connectors with moulded cable	Extension M23-M23 connectors with moulded cable
Part number	<b>23FD19P1Z23MD-K6-IS</b>	<b>23FA19P1Z23MA-K6-IS</b>
Housing type	Straight 180°	Angled 90°
Cable gland	Moulded cable	Moulded cable
Contacts type	Female-Male	Female-Male
Number of contacts	19poles	19poles
Housing colour	Black	Black

### Technical data

Type of termination	Contacts to solder wires	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash
Coupling nut type	Hexagonal (SW25)	Hexagonal (SW25)
M23 coupling nut material	Brass + Nickel plated	Brass + Nickel plated
M23 coupling nut torque	-	-
Rated voltage	150V AC/DC	150V AC/DC
Rated current	Power contacts: 10A / Signal contacts: 8A	Power contacts: 10A / Signal contacts: 8A
O-ring material	NBR	NBR
Cable type	PUR/TPO ULstyle20549	PUR/TPO ULstyle20549
Cable jacket colour	Black	Black
No. Conductors / Section	19x22AWG + 3x18AWG	19x22AWG + 3x18AWG
Conductor colours	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh;Gn;Wh;Ye; Wh;Gy;Bk;Ye;Gn;Ye;Bn;Bn;Gn;Wh;Ye;Pk;Gy;Bn;Bn.	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy;Pk;Wh;Gn;Wh;Ye; Wh;Gy;Bk;Ye;Gn;Ye;Bn;Bn;Gn;Wh;Ye;Pk;Gy;Bn;Bn.
Cable diameter	ø10.6mm (±0.3)	ø10.6mm (±0.3)
Cable length	1m	1m

### Packaging

Qty/Bag	1 pc / bag	1 pc / bag
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### Other accessories options

See accessories section

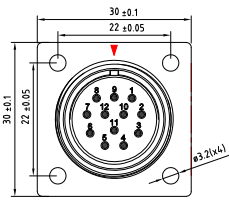
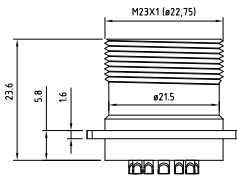
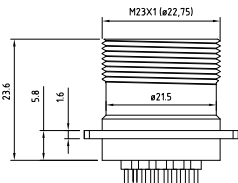
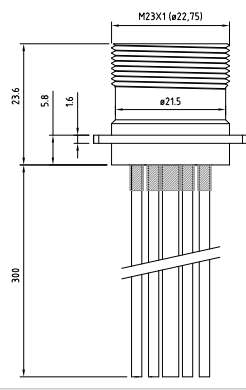
**Notes:** Connectors available with different features:  
See the general features and codification scheme page  
See the cables list section



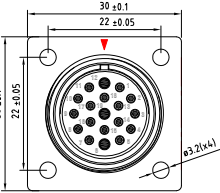
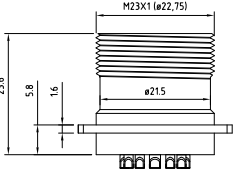
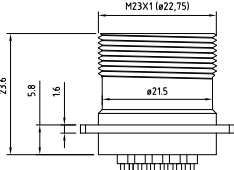
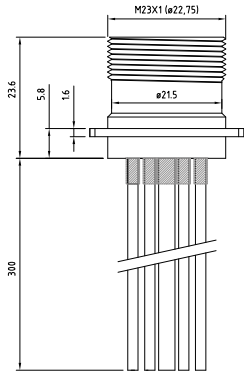
# M23 CIRCULAR CONNECTORS

## Panel mount connectors



<b>Technical drawing</b>			
			
<b>Product description</b>			
Connector type	Circular connector to panel	Circular connector to panel	Circular connector to panel
Conforms to	-	-	-
Construction type	M23 N-Coded	M23 N-Coded	M23 N-Coded
Description	Circular connector M23 series, panel mount.	Circular connector M23 series, panel mount, with contacts suitable for solder PCB.	Circular connector M23 series, panel mount, with PVC soldered wires.
Part number	<b>23MP12000-FL</b>	<b>23MS12000-FL</b>	<b>23MP12P0C-FL</b>
Mounting type	Frontal side of the panel	Frontal side of the panel	Frontal side of the panel
Contacts type	Male	Male	Male
Number of contacts	12 poles	12 poles	12 poles
Fixing Type	Flange 30x30mm	Flange 30x30mm	Flange 30x30mm
Number of fixing holes	n° 4	n° 4	n° 4
<b>Technical data</b>			
Type of termination	Contacts to solder wires	Contacts to solder PCB	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Housing /coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
Mobile nut material(SW)	-	-	-
M23 coupling nut torque	-	-	-
Rated voltage	150V AC/DC	150V AC/DC	150V AC/DC
Rated current	8A	8A	8A
O-ring material	NBR	NBR	NBR
Cable type	-	-	TPO
No. Conductors / Section	-	-	3 x 18AWG + 16 x 22AWG
Conductor colours	-	-	Wh;Gn;Ye;Gy;Gy/Pk;Rd;Bu;Wh/Gn; Bn/Gn;Bu;Bn;Ye/Gn.
Cable diameter	-	-	-
Wires length	-	-	0.3m
<b>Packaging</b>			
Qty/Bag	-	-	-
<b>Other accessories options</b>			
See accessories section			
<b>Notes:</b> Connectors available with different features: See the general features and codification scheme page See the cables list section			



<b>Technical drawing</b>			
			
<b>Product description</b>			
Connector type	Circular connector to panel	Circular connector to panel	Circular connector to panel
Conforms to	-	-	-
Construction type	M23 N-Coded	M23 N-Coded	M23 N-Coded
Description	Circular connector M23 series, panel mount.	Circular connector M23 series, panel mount, with contacts suitable for solder PCB.	Circular connector M23 series, panel mount, with PVC soldered wires.
Part number	<b>23MP19000-FL</b>	<b>23MS19000-FL</b>	<b>23MP1900C-FL</b>
Mounting type	Frontal side of the panel	Frontal side of the panel	Frontal side of the panel
Contacts type	Male	Male	Male
Number of contacts	19 poles	19 poles	19 poles
Fixing Type	Flange 30x30mm	Flange 30x30mm	Flange 30x30mm
Number of fixing holes	n° 4	n° 4	n° 4
<b>Technical data</b>			
Type of termination	Contacts to solder wires	Contacts to solder PCB	Contacts to solder wires
Contacts material	Brass + Gold flash	Brass + Gold flash	Brass + Gold flash
Housing /coupling nut material	Brass + Nickel plated	Brass + Nickel plated	Brass + Nickel plated
Mobile nut material(SW)	-	-	-
M23 coupling nut torque	-	-	-
Rated voltage	150V AC/DC	150V AC/DC	150V AC/DC
Rated current	Power contacts: 10A / Signal contacts: 8A	Power contacts: 10A / Signal contacts: 8A	Power contacts: 10A / Signal contacts: 8A
O-ring material	NBR	NBR	NBR
Cable type	-	-	TPO
No. Conductors / Section	-	-	3 x 18AWG + 16 x 22AWG
Conductor colours	-	-	Vt;Rd;Gy;Rd;Bu;Gn;Bu;Gy/Pk;Wh/Gn;Wh/Ye; Wh/Gy;Bk;Ye/Gn;Ye/Bn;Bn/Gn;Wh;Ye;Pk;Gy/Bn;Bn.
Cable diameter	-	-	-
Wires length	-	-	0.3m
<b>Packaging</b>			
Qty/Bag	-	-	-
<b>Other accessories options</b>			
See accessories section			
<b>Notes:</b> Connectors available with different features: See the general features and codification scheme page See the cables list section			