



Member of the Phoenix Contact Group

S F Series Power M23

Shielded Connectors M23
Power 630 Volt

Shielded Power Connectors M23 Series SF

Technical Data



Shell material

Machined components: Copper-Zinc alloy (CuZn)
 die cast components: Zinc (GD-Zn)
 Shell plating: Nickel (Ni) plated
 Cable entry: max. 19 mm



Insulator

Connector inserts: Polyamide (PA66) UL 94 V0

Contacts

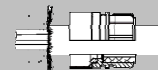
Contact material: Copper-Zinc alloy (CuZn)
 Contact plating: Nickel (Ni) with gold (Au) passivated
 Contact termination: crimp type



Sealing

Sealing rings: Fluor rubber FPM
 Gaskets: Fluor rubber FPM

All connectors with universal shielding material for different jacket and shield diameters.



Temperature

Temperature (long term) Celsius: - 20 °C up to + 125°C
 Temperature (long term) Fahrenheit: - 4 °F up to + 257 °F

Mating

Mating cycles: Standard min. 50
 Female coupling nuts: M23 screw locking
 Male receptacles: M23 screw locking


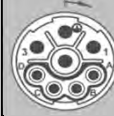


Protection

Protection class : IP 67 (mated) depends on which cable gland is used

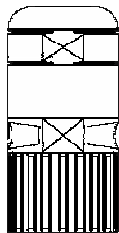
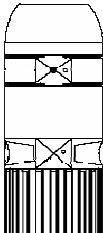
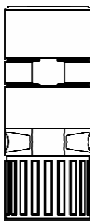
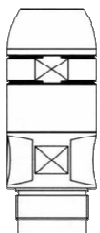
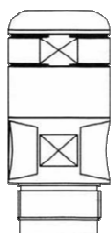
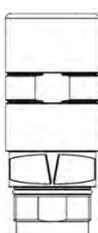
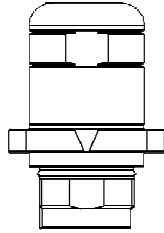
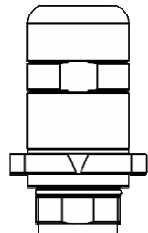
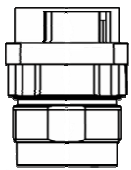


EMC
shielding

							
Number of positions		6		8			
Number of contacts		5 + PE		4+3+PE			
Contact dia. (mm Ø)		2		1 2 2			
Rated current at 25° (A)		30		9/30			
Rated voltage (V)		630		250/630			
Test voltage (V)		6,000		4,000/6,000			
Surge voltage category		III		III			
Installation altitude above sea level		3,000 m		3,000 m			
Wiring size AWG		24-14		28-18			
Wiring size AWG		24-12		24-12			

Shielded Power Connectors M23 Series SF

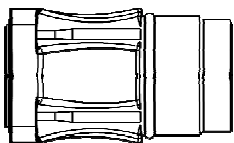
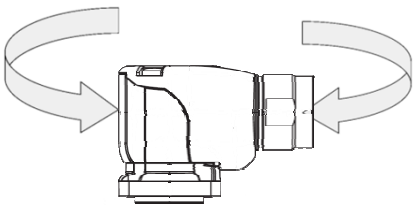
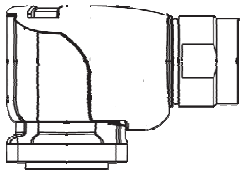
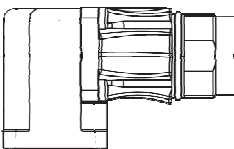
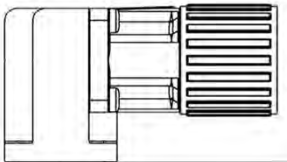
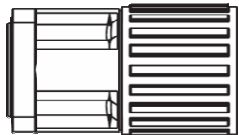
Shell styles 8, 8L, 9, 9L, R4, F4, C0, CL, WK

SF-xxxxxxx8xxx page C-K-04	SF-xxxxxxx8Lxx page C-K-04	SF-xxxxxxxR4xx page C-K-04
Cable connector, straight with female coupling nut cable entry max. 14 mm universal shielding material	Cable connector, straight with female coupling nut cable entry max. 18 mm universal shielding material	Cable connector, straight with female coupling nut open endbell M20x1.5 universal shielding material
 <b style="color: red;">style 8	 <b style="color: red;">style 8 long	 <b style="color: red;">style R4
SF-xxxxxxx9Lxx page C-K-05	SF-xxxxxxx9xx page C-K-05	SF-xxxxxxxF4xx page C-K-05
Cable connector, straight with male thread cable entry max. 18 mm universal shielding material	Cable connector, straight with male thread cable entry max. 14 mm universal shielding material	Cable connector, straight with male thread open endbell M20x1.5 universal shielding material
 <b style="color: red;">style 9L	 <b style="color: red;">style 9	 <b style="color: red;">style F4
SF-xxxxxxxC0xx page C-K-06	SF-xxxxxxxCLxx page C-K-06	SF-xxxxxxxWKxx page C-K-07
Cable connector, straight with male thread cable entry max. 14 mm front / rear mount flange	Cable connector, straight with male thread cable entry max. 18 mm front / rear mount flange	Panel connector, straight with male thread flat design, axial O-ring square flange 28 mm □
 <b style="color: red;">style C0	 <b style="color: red;">style CL	 <b style="color: red;">style WK

Shielded Power Connectors M23 Series SF

Shell styles WA, AD,AC, AF, AK, A2, YW, Y0

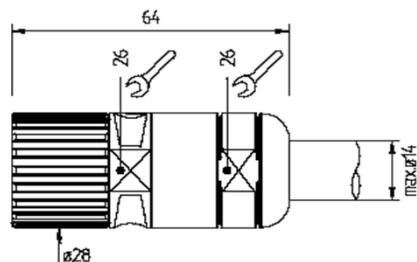


SF-xxxxxxxWxxx page C-K-07	SF-xxxxxxxAD(AC)xx page C-K-08	SF-xxxxxxxAF(AK)xx page C-K-09
Panel connector, straight with male thread axial O-ring square flange 26 mm □	Panel connector, right angled with male thread axial O-ring, rotatable square flange 26/28 mm □	Panel connector, right angled with male thread axial O-ring, fixed square flange 26/28 mm □
		
style WA	style AD/AC	style AF/AK
SF-xxxxxxxA2xx page C-K-10	SF-xxxxxxxYWxx page C-K-11	SF-xxxxxxxY0x page C-K-11
Panel connector, right angled with male thread axial O-ring, fixed square flange 26 mm □	Panel connector, right angled with female coupling nut axial O-ring, fixed square flange 26 mm □	Panel connector, straight with female coupling nut axial O-ring square flange 26 mm □
		
style A2	style YW	style Y0

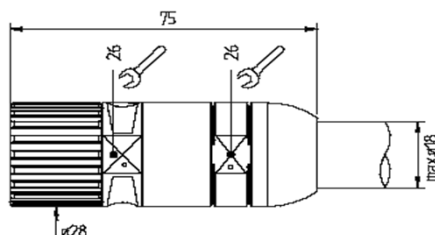
Shielded Power Connectors M23 Series SF

fits all SF Connectors with male thread

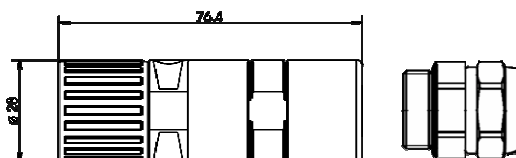
Shell style 80, 8L, R4



style 80DU short



style 8LDL long





style R4DU (R420) (R425) long

all with integrated strain relief

Caps and accessories: pages B-H-01...
Mounting tools: pages B-E-01...
Assembly instructions: page B-D-20
Crimp tools for contacts: pages B-B-03...
Crimp contacts: pages B-C-40...

We also deliver as a connector set.
Connector with crimp insert - and
the contacts are separate included.
Please ask for P/N

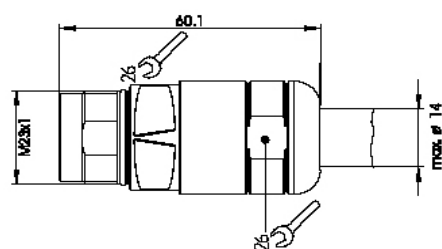


Part Number	SF-	X	X	X	X	X	X	X	X	X	X	X	
<p>Please fill in the part number of your desired connector insert</p> <p>6 position female (5+E) crimp insert w/o contacts</p> <p>8 position female (4+3+E) crimp insert w/o contacts</p>													
 <p>f.e. SF-xxxxxxxR4DU</p>  <p>f.e.SF-xxxxxxxR425</p>													

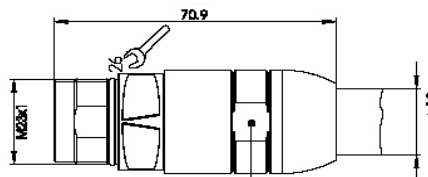
Shielded Power Connectors M23 Series SF

fits all SF Connectors with female coupling nut

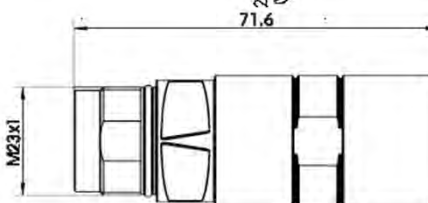
Shell style 90, 9L, F4



style 90DU short



style 9LDL long

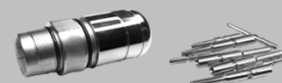


style F4DU (F420) (F425) long

all with integrated strain relief

Caps and accessories: pages B-H-01...
 Mounting tools: pages B-E-01...
 Assembly instructions: page B-D-21
 Crimp tools for contacts: pages B-B-03...
 Crimp contacts: pages B-C-40...

We also deliver as a connector set.
 Connector with crimp insert - and
 the contacts are separate included.
 Please ask for P/N



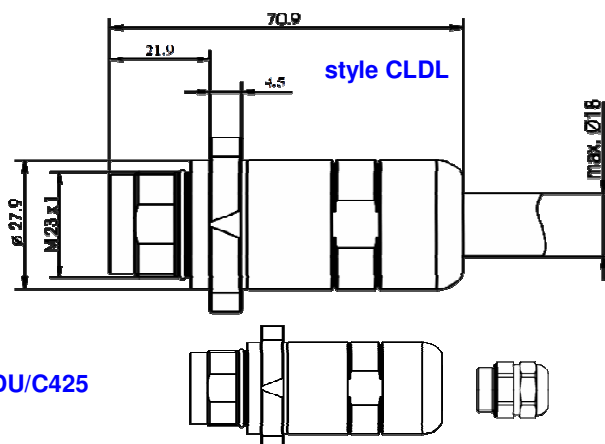
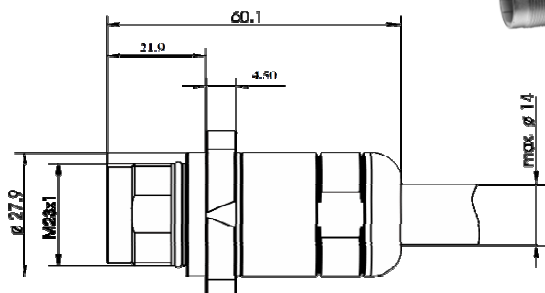
Part Number	SF-	X	X	X	X	X	X	X	X	X	X	X	
Please fill in the part number of your desired connector insert													
6 position male (5+E) crimp insert w/o contacts													
8 position male (4+3+E) crimp insert w/o contacts													
f.e. SF-xxxxxxx9LDL													
f.e. SF-xxxxxxxF4DU													

Shielded Power Connectors M23 Series SF

fits all SF Connectors with female coupling nut

Shell style C0, CL, C4 • front / rear mount •

style C0DU



style C420/C4DU/C425

all with integrated strain relief

Caps and accessories: pages B-H-01...
 Mounting tools: pages B-E-01...
 Assembly instructions: page B-D-24
 Crimp tools for contacts: pages B-B-03...
 Crimp contacts: pages B-C-40...

We also deliver as a connector set.
 Connector with crimp insert - and
 the contacts are separate included.
 Please ask for P/N



Part Number

SF-

X

X

X

X

X

X

X

X

C

X

X

X

Please fill in the part number of
 your desired connector insert

6 position male (5+E)
 crimp insert w/o contacts

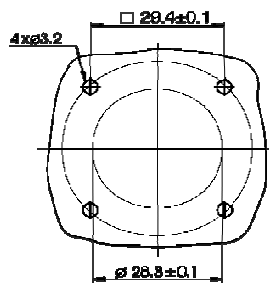
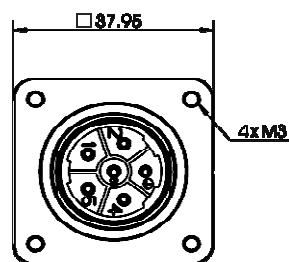


5 E P 1 N 8 A

8 position male (4+3+E)
 crimp insert w/o contacts



7 E P 1 N 8 A

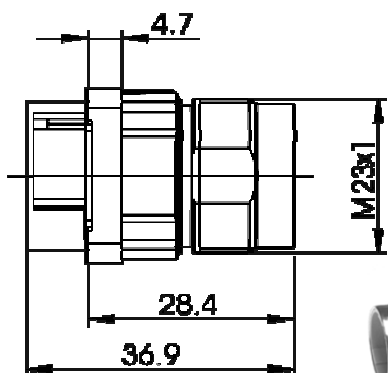


0 D U	short version
	cable entry 7.5-14 mm
L D L	long version
	cable entry 7.5-18 mm
4 D U	long version
	endbell open
	with thread M20x1.5
4 2 0	long version
	endbell M20x1.5
	with IP 68 cable gland
	cable Ø 9-14 mm
4 2 5	long version
	endbell M25x1.5
	with IP 68 cable gland
	cable Ø 13-19 mm
	(with adaptor)

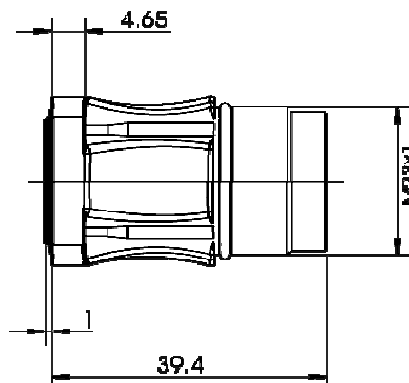
Shielded Power Connectors M23 Series SF

fits all SF Connectors with female coupling nut

Shell style WK, WA • front mount •



dimension style WK



dimensions style WA



Caps and accessories: pages B-H-01...

Mounting tools: pages B-E-01...

Assembly instructions: page B-D-28

Crimp tools for contacts: pages B-B-03...

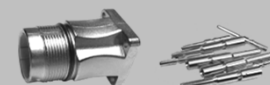
Crimp contacts: pages B-C-40...

We also deliver as a connector set.

Connector with crimp insert - and

the contacts are separate included.

Please ask for P/N



Part Number

SF-

X

X

X

X

X

X

X

X

W

X

X

X

Please fill in the part number of your desired connector insert

6 position male (5+E)
crimp insert w/o contacts



5 E P 1 N 8 A

8 position male (4+3+E)
crimp insert w/o contacts



7 E P 1 N 8 A

K 0 0 flat design, axial O-ring

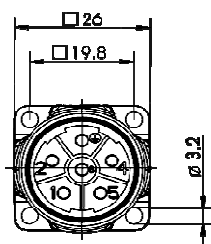
flange 28 mm □

4 holes 3.2 mm Ø

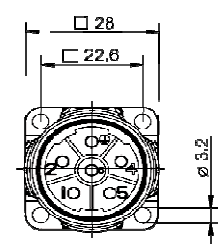
A 0 0 with axial O-ring

flange 26 mm □

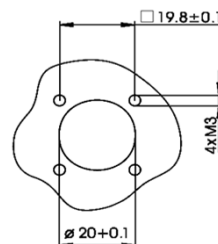
4 holes 3.2 mm Ø



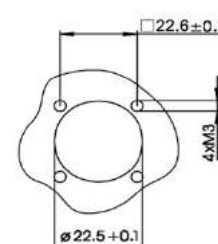
flange style WA



flange style WK



mounting style WA

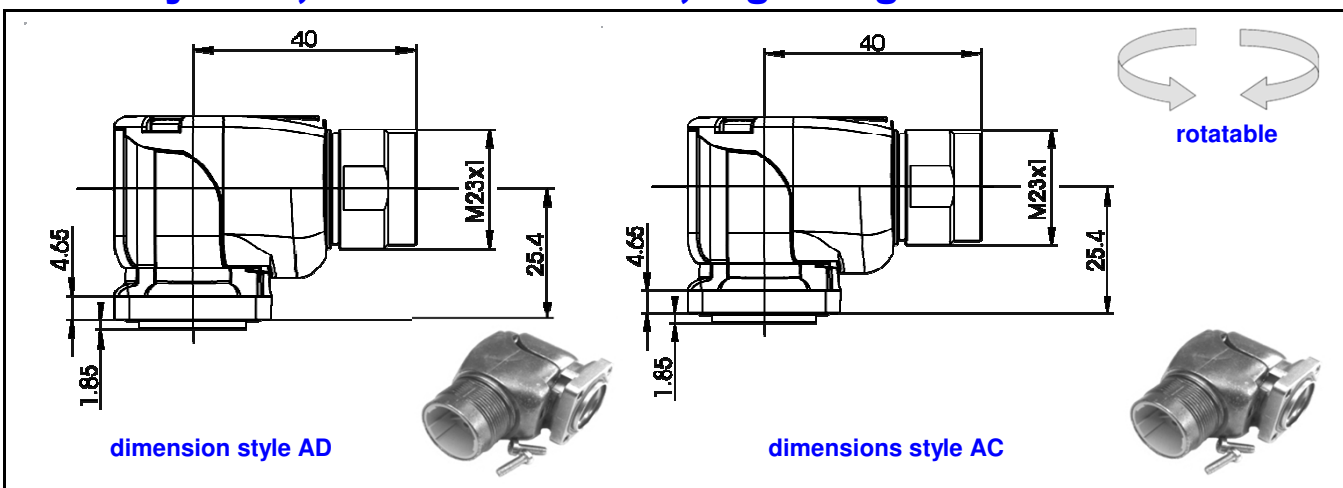


mounting style WK

Shielded Power Connectors M23 Series SF

fits all SF Connectors with female coupling nut

Shell style AD, AC • front mount, right angled •



Caps and accessories: pages B-H-01...

Mounting tools: pages B-E-01...

Assembly instructions: page B-D-23

Crimp tools for contacts: pages B-B-03...

Crimp contacts: pages B-C-40...

We also deliver as a connector set.

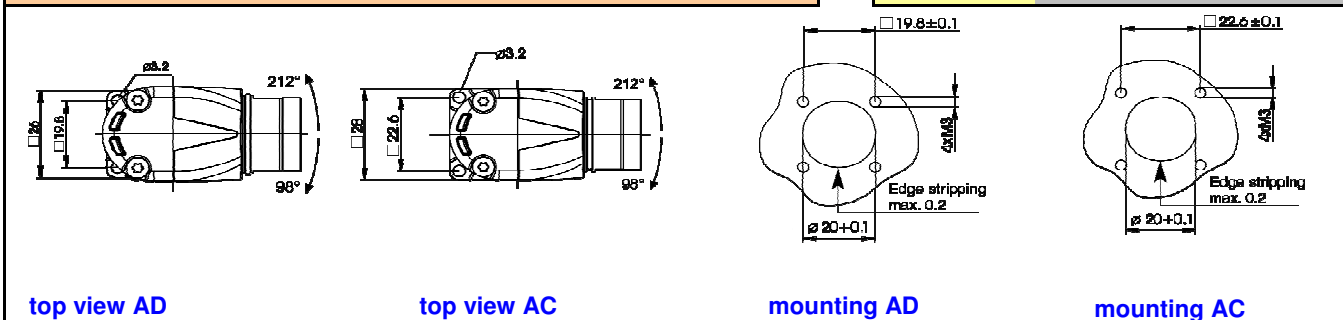
Connector with crimp insert - and

the contacts are separate included.

Please ask for P/N



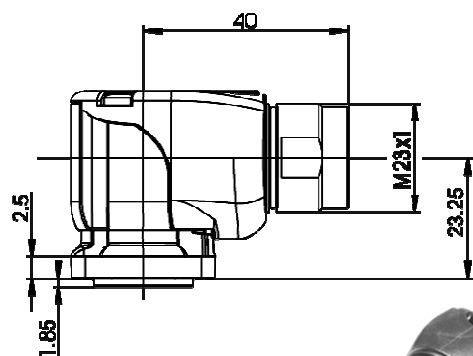
Part Number	SF-	X	X	X	X	X	X	X	A	X	X	X
Please fill in the part number of your desired connector insert												
6 position male (5+E) crimp insert w/o contacts										D	0	0
8 position male (4+3+E) crimp insert w/o contacts										C	0	0



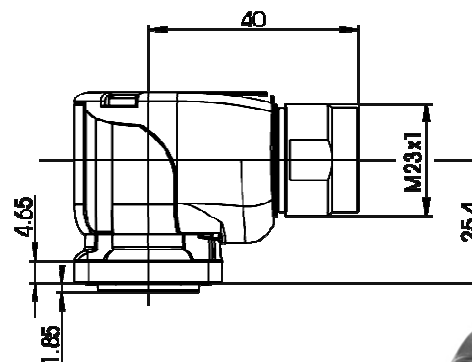
Shielded Power Connectors M23 Series SF

fits all SF Connectors with female coupling nut

Shell style AF, AK • front mount, right angled •



dimension style AF



dimensions style AK



Caps and accessories: pages B-H-01...

Mounting tools: pages B-E-01...

Assembly instructions: page B-D-23

Crimp tools for contacts: pages B-B-03...

Crimp contacts: pages B-C-40...

We also deliver as a connector set.

Connector with crimp insert - and

the contacts are separate included.

Please ask for P/N



Part Number

SF-

X

X

X

X

X

X

X

X

A

X

X

X

Please fill in the part number of your desired connector insert

6 position male (5+E)

crimp insert w/o contacts



5 E P 1 N 8 A

8 position male (4+3+E)

crimp insert w/o contacts



7 E P 1 N 8 A

F 0 0 axial O-ring

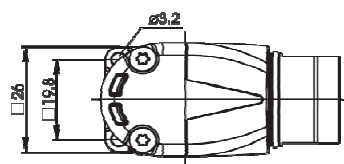
flange 26 mm □

4 holes 3.2 mm Ø

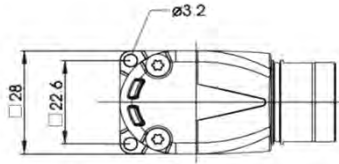
K 0 0 axial O-ring

flange 28 mm □

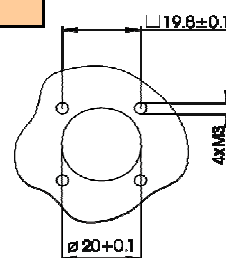
4 holes 3.2 mm Ø



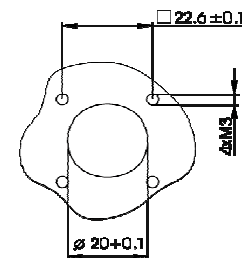
top view AF



top view AK

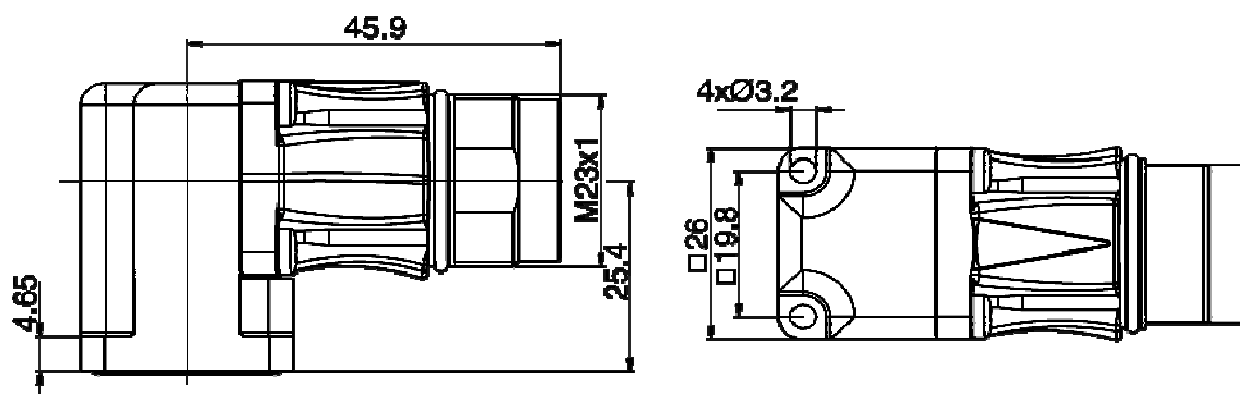


mounting AF



mounting AK

Shielded Power Connectors M23 Series SF
fits all SF Connectors with female coupling nut
Shell style A2 • front mount, right angled •



Caps and accessories: pages B-H-01...
 Mounting tools: pages B-E-01...
 Assembly instructions: page B-D-22
 Crimp tools for contacts: pages B-B-03...
 Crimp contacts: pages B-C-40...

We also deliver as a connector set.
 Connector with crimp insert - and
 the contacts are separate included.
 Please ask for P/N



Part Number

SF-

X X X X X X X **A 2 0 0**

Please fill in the part number of
 your desired connector insert

6 position male (5+E)
 crimp insert w/o contacts

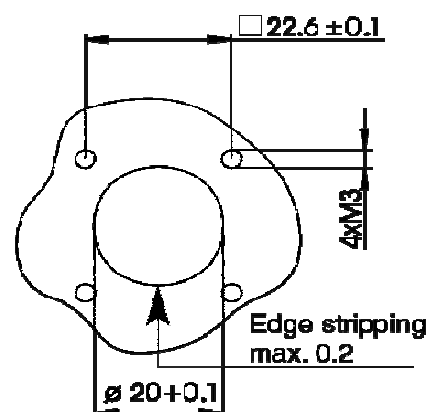
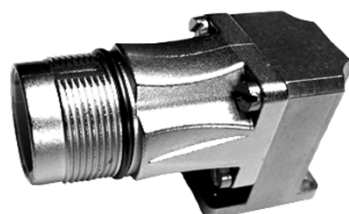


5 E P 1 N 8 A

8 position male (4+3+E)
 crimp insert w/o contacts



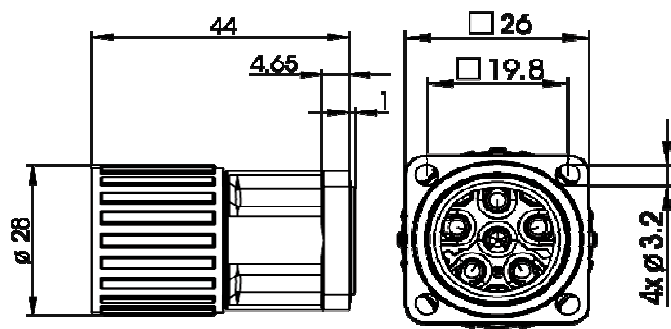
7 E P 1 N 8 A



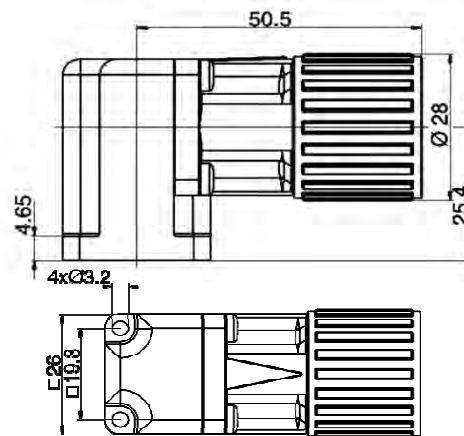
Shielded Power Connectors M23 Series SF

fits all SF Connectors with male thread

Shell style YW, Y0 • front mount, straight / right angled •



dimensions Y000





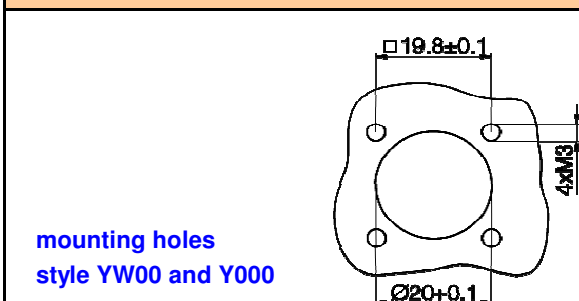
dimensions YW00

Caps and accessories: pages B-H-01...
Mounting tools: pages B-E-01...
Assembly instructions: page B-D-29
Crimp tools for contacts: pages B-B-03...
Crimp contacts: pages B-C-40...

We also deliver as a connector set.
Connector with crimp insert - and
the contacts are separate included.
Please ask for P/N



Part Number	SF-	X	X	X	X	X	X	X	Y	X	X	X	
Please fill in the part number of your desired connector insert													
6 position female (5+E) crimp insert w/o contacts		5 E S 1 N 8 A											
8 position female (4+3+E) crimp insert w/o contacts		7 E S 1 N 8 A											
<div><div><div>□ 19.8±0.1</div><div></div></div></div>													
W 0 0 right angled axial O-ring, square flange 4 holes 3.2 mm Ø flange size 26 mm □													
0 0 0 straight axial O-ring, square flange 4 holes 3.2 mm Ø flange size 26 mm □													



mounting holes
style YW00 and Y000

style YW00



style Y000

