

M23 female 90° with cable

PUR 16x0.5+3x1.0 gy UL/CSA+drag ch. 10m

Art.No.: 7000-23351-4521000

Weight: 2.408

Country of origin: DE

Model designation: MS23SNDD19-000_452_10.0

Advantages of our connectors:

Our connectors are versatile and specially optimised for industrial environments. All connectors are 100% tested during the manufacturing process to ensure the highest quality and reliability.

The contacts are gold-plated, which ensures optimum conductivity. Thanks to the high degree of protection, the connectors are ideal for demanding industrial environments. They are also vibration-resistant - this is ensured by the union nut with vibration protection.

Our connectors are resistant to oils and cooling lubricants, but resistance to aggressive media should be tested for each specific application. Different cable lengths available [on request](#)

If you are missing technical information? Please feel free to use our [dictionary](#) to find more technical details.

Product details:

Female 90°

M23, 19-pole

19-pole used

for 8-way distribution boxes, 5-pole

Further cable lengths on request.

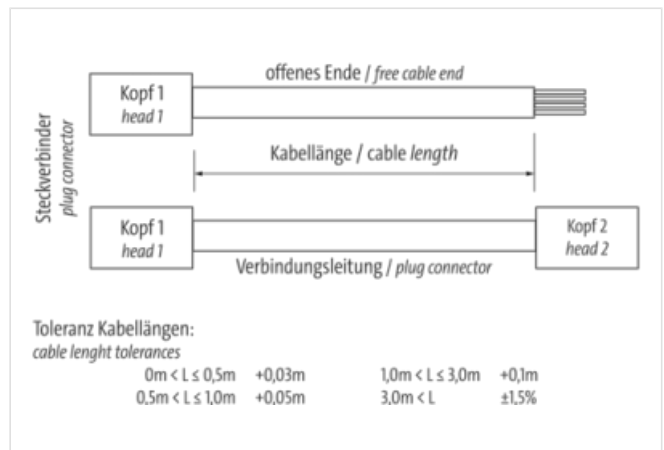
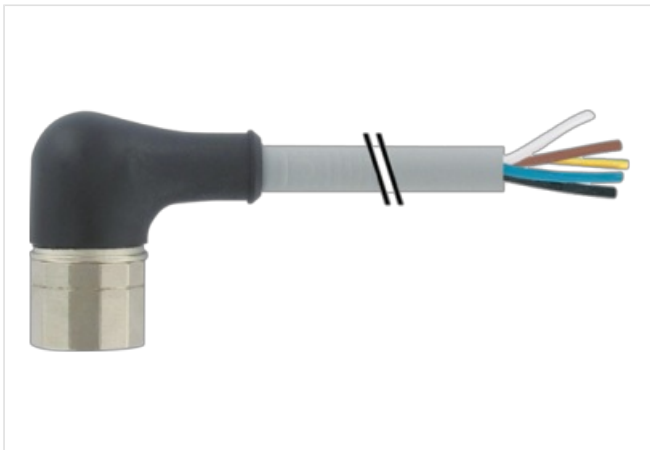
Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

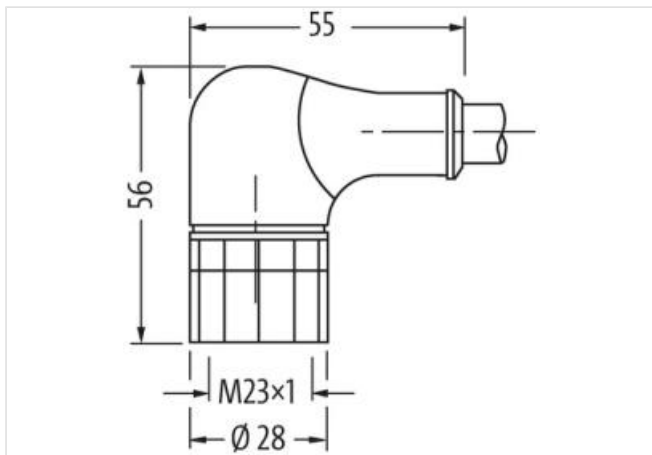
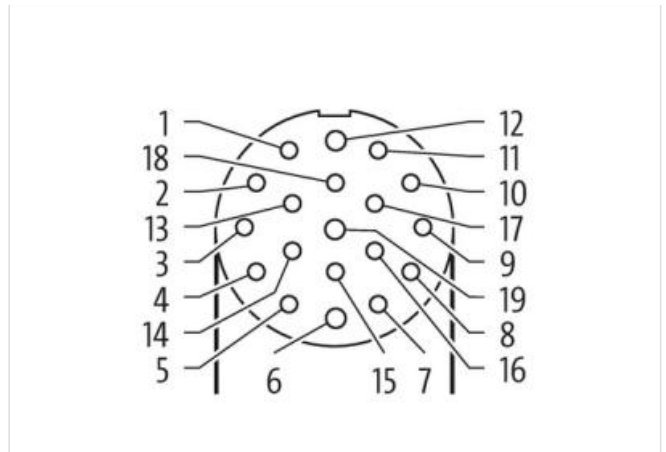
7.5 A (1.0 mm²); 3.5 A (0.5 mm²)

Link to Product

Illustration



1 >	VT
2 >	RD
3 >	GY
4 >	RD BU
5 >	GN
6 >	BU
7 >	GY PK
8 >	GN WH
9 >	YE WH
10 >	GY WH
11 >	BK
12 >	GN YE
13 >	BN YE
14 >	BN GN
15 >	WH
16 >	YE
17 >	PK
18 >	BN GY
19 >	BN



Product may differ from Image



Cable length	10 m
Side 1	
Tightening torque	2 Nm
Mounting method	inserted, screwed
Family construction form	M23
Thread	M23 x 1
suitable for corrugated tube (internal Ø)	16 mm
Material	PUR
No. of poles	19
Width across flats	SW27
Degree of protection (EN IEC 60529)	IP67
Commercial data	
ECLASS-6.0	27279218
ECLASS-7.0	27279218
ECLASS-8.0	27279218
ECLASS-9.0	27060311
ECLASS-10.1	27060311
ECLASS-11.1	27060311

ECLASS-12.0	27060311
ETIM-5.0	EC001855
customs tariff number	85444290
customs tariff number	85444290
EAN	4048879187831
EAN	4048879187831
Packaging unit	1
Packaging unit	1

Electrical data | Supply

Operating voltage AC max.	125 V
Operating voltage DC max.	125 V
Current operating per contact max.	7,5 A

Installation | Connection

Mounting set	M23 x 1
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Device protection | Electrical

Additional condition protection degree	inserted, screwed
Pollution Degree	3
Rated surge voltage	2 kV
Material group (IEC 60664-1)	I

Mechanical data | Material data

Coating locking	nickel plated
Coating of fitting	nickel plated
Locking material	Brass
Material screw connection	Brass

Mechanical data | Mounting data

Mounting method	inserted, screwed, Shaking protection
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Environmental characteristics | Climatic

Operating temperature min.	-25 °C
Operating temperature max.	85 °C
Additional condition temperature range	depending on cable quality

Important installation notes

Note on strain relief	Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.
Note on bending radius	Attention: Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces.

Installation | Cable

wire arrangement	gray-pink, brown-green, yellow, green-white, green, red-blue, white, (brown-gray, black, gray-white, red, brown-yellow, pink, yellow-white, gray, blue, brown, green-yellow, violet)
Cable identification	452
Function cable	Hybrid, Signal, Power
Jacket Color	gray
Type of Certificate	cURus
Amount stranding	1
Stranding	7 wires around Core filler twisted
Amount stranding (type 2)	1
Stranding (type 2)	12 wires counter-rotating twisted
Banding	Fleece
Filler	yes
wire arrangement	gray-pink, brown-green, yellow, green-white, green, red-blue, white, (brown-gray, black, gray-white, red, brown-yellow, pink, yellow-white, gray, blue, brown, green-yellow, violet)
Cable weight	231 g/m
Material jacket	PUR
Shore hardness jacket	90 ± 5 Shore A

Freedom from ingredients (jacket)	lead-free, cadmium-free, CFC-free, halogen-free
Outer-diameter (jacket)	11,5 mm
Tolerance outer diameter (sheath)	± 5 %
Material wire insulation	PP
Amount wires	16
Outer diameter insulation	1,6 mm
Outer diameter tolerance core insulation	± 5 %
Shore hardness wire insulation	70 ± 5 Shore D
Ingredient freeness wire insulation	lead-free, CFC-free, halogen-free, silicone-free, LABS-free
Amount strands (wire)	64
Diameter of single wires	0,1 mm
Conductor crosssection (wire)	0,5 mm ²
Material conductor wire	Stranded copper wire, bare
Conductor type (wire)	strand class 6
Material wire insulation (Power)	PP
Outer diameter wire insulation (Power)	2,1 mm
Tolerance outer diameter wire insulation (Power)	±5 %
Shore hardness wire insulation (Power)	70 Shore D±5 Shore D
Ingredient freeness wire insulation (Power)	lead-free, cadmium-free, CFC-free, halogen-free, silicone-free, LABS-free
Amount wires (Power)	3
Amount strands wire (Power)	128
Diameter of single wires (Power)	0,1 mm
Wire conductor cross section (Power)	1 mm ²
Material conductor wire (Power)	Stranded copper wire, bare
Conductor type wire (Power)	strand class 6
Max. rated voltage (conductor - conductor)	500 V
Max. rated voltage (conductor - ground)	300 V
Current load capacity (standard)	to DIN VDE 0298-4
Current load capacity min. wire	5,9 A
Current load capacity min. Wire (Data)	15 A
Electrical resistance line constant wire	39 Ω/km @ 20 °C
Electrical resistance coating wire (Power)	19,5 Ω/km @20 °C
AC withstand voltage (wire - wire)	2 kV @ 60 s
Power frequency withstand voltage (wire - jacket)	2 kV @ 60 s
Min. operating temperature (static)	-40 °C
Max. operating temperature (fixed)	80 °C / 90 °C @ 10000 h Operation
Operating temperature min. (dynamic)	-25 °C
Operating temperature max. (dynamic)	80 °C / 90 °C @ 10000 h Operation
Flame resistance	UL 1581 § 1100 FT2 IEC 60332-2-2 UL 1581 § 1090
chemical resistance	Good, application-related testing
Gasoline resistance	Good, application-related testing
Oil resistance	Good, application-related testing DIN EN 60811-404
Bending radius (fixed)	7,5 x Outer diameter
Bending radius (dynamic)	10 x Outer diameter
No. of bending cycles (C-track)	5 Mio. @ 25 °C
Traversing distance (C-track)	10 m @ 25 °C horizontal
Travel speed (C-track)	3 m/s @ 25 °C