

## Overview

- M12, Female, A-coded, 12-poles; PUR, 2000 cm, free cable end
- Dragchain capable; suitable for robotics  $\pm 180^\circ/\text{m}$
- Head A: IP65, IP66K, IP67
- Cable: good resistance against chemicals, flames, oils
- Halogen free



## Technical data

### Side A

Head A: Connection	M12
Head A: Angle cable outlet	0°
Head A: Gender	Female
Head A: Coding	A
Head A: No. of poles	12
Head A: LED	No
Head A: Width across flats	AF13
Head A: Tightening torque	0.6 Nm
Head A: Knurled nut material	Zinc-pressure die casting, surface Ni
Head A: Body color	Black
Head A: Gasket material	FKM
Labeling sleeve side A	Yes

### Side B

Head B: Connection	Open-ended wires
Labeling sleeve side B	Yes

### Cables

Cable length	2000 cm
Length tolerance	$\pm 30$ cm
Stripping length	80 mm
Shielded	No
Conductor structure	18 x 0.1 mm
AWG	26
External sheath: Material	PUR
External sheath: Color	Black
Cable diameter	6 mm $\pm 5\%$
Wire cross section	0.14 mm <sup>2</sup>

### Cable

External sheath: Shore hardness	92 $\pm 5$ A
Cable: Temperature range (mobile)	- 25 ... + 85 °C
Cable: Temperature range (fixed)	- 40 ... + 85 °C
Shielded	No
Bending radius (fixed)	45 mm
Number of wires	12
Number and diameter of wires	12x0.14
Length tolerance	$\pm 30$ cm

### Cable

Cable length	2000 cm
Acceleration (C-track)	max. 5 m/s <sup>2</sup>
AWG	26
Bending radius (fixed)	min. 7.5 x outer diameter
Torsion speed	max. 35 cycles/min
Bending radius (mobile)	min. 10 x outer diameter
Cable weight	approx. 45.1 g/m
Conductor structure	18 x 0.1 mm
Cable diameter	6 mm $\pm 5\%$
Conductor: Material	Copper, bare
External sheath: Material	PUR
Insulation: Material	PP
No. of bending cycles (C-track)	approx. 2000000 Cycles
Nominal voltage	300 V
No. of torsion cycles	approx. 2000000 Cycles
Paired stranding	No
Single wire diameter	0.1 mm
Cable: Test voltage	1.5 kV 0
Torsion stress in °	$\pm 180^\circ/\text{m}$
Total stranding	3 wires strand, above that 9 wires strand
Travel speed (C-track)	max. 3.3 m/s
Traversing path (horizontal)	max. 5 m
Wire cross section	0.14 mm <sup>2</sup>
Wire processing	No
Wire diameter incl. isolation	1 mm $\pm 5\%$
External sheath: Color	Black

### Electrical data

Operating voltage	max. 30 V AC/DC 0
Nominal voltage	300 V
Contact resistance	max. 30 mOhm
Operating current per contact	max. 1.5 A

### Mechanical data

Head A: Degree of protection	IP65, IP66K, IP67
Bending radius (mobile)	min. 10 x outer diameter
Bending radius (fixed)	min. 7.5 x outer diameter
No. of bending cycles (C-track)	approx. 2000000 Cycles

**Technical data**

**Mechanical data**

Torsion speed	max. 35 cycles/min
Torsion stress in °	± 180 °/m
No. of torsion cycles	approx. 2000000 Cycles
Acceleration (C-track)	max. 5 m/s <sup>2</sup>
Travel speed (C-track)	max. 3.3 m/s

**Environmental conditions**

Temperature range (mobile)	- 25 ...+ 85 °C
Temperature range (fixed)	- 25 ...+ 85 °C
Cable: Temperature range (fixed)	- 40 ...+ 85 °C
Dragchain capable	Yes
Head A: Chemical resistance	No

**Environmental conditions**

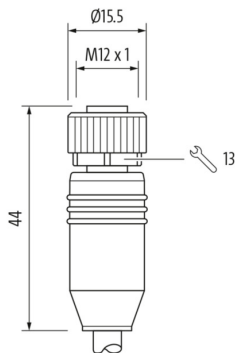
Head A: Flame resistance	HB (UL 94)
Head A: Oil resistance	ASTM 1 oil, mineral oils, limited to hydraulic oils
Head A: Acid and alkali resistant	No
Head A: Pollution degree	3
Cable: Chemical resistance	Good (VDE 0472 part 803)
Cable: Flame resistance	Conform VDE 0472 part 804 test type B, IEC 60332-2
Cable: Oil resistance	Good (VDE 0472 part 803)
Cable: Silicone-free	Yes

**Commercial data**

Eclass	27060311
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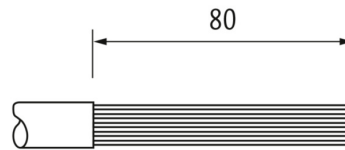
**Side A**

**Technical drawing**

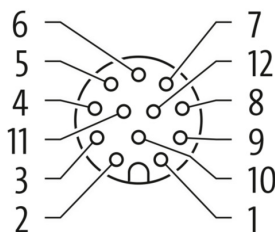


**Side B**

**Technical drawing**



**Coding**



**Connection diagram**

1 )	BN
2 )	BU
3 )	WH
4 )	GN
5 )	PK
6 )	YE
7 )	BK
8 )	GY
9 )	RD
10 )	VT
11 )	GY PK
12 )	RD BU