

Overview

- M12, male, D-coded; 4-poles; TPE-S, 1000 cm, shielded, free cable end
- Dragchain capable; suitable for robotics $\pm 180^\circ/\text{m}$; suitable for food & beverage
- Head A: IP65, IP68, IP69K
- Halogen free



Technical data

Side A		Cable	
Head A: Connection	M12	Operating voltage (only UL listed)	30 V AC/DC
Head A: Angle cable outlet	0°	Shielded	Yes
Head A: Gender	Male	Shielding: Covering	approx. 85 %
Head A: Coding	D	Bending radius (fixed)	32.5 mm
Head A: No. of poles	4	Number of wires	4
Head A: LED	No	Number and diameter of wires	4x0.34
Head A: Width across flats	AF14	Length tolerance	± 15 cm
Head A: Tightening torque	0.6 Nm	Cable length	1000 cm
Head A: Knurled nut material	Stainless steel (V4A)	Acceleration (C-track)	max. 2 m/s ²
Head A: Body color	Blue	AWG	22
Labeling sleeve side A	No	Bending radius (fixed)	min. 5 × outer diameter
Head A: Contact layout pin 1	YE	Torsion speed	max. 35 cycles/min
Head A: Contact layout pin 2	WH	Bending radius (mobile)	min. 15 × outer diameter
Head A: Contact layout pin 3	OG	Cable weight	approx. 61.6 g/m
Head A: Contact layout pin 4	BU	Conductor structure	7 × 0.25 mm
Side B		Cable diameter	6.5 mm $\pm 5\%$
Head B: Connection	Open-ended wires	Conductor: Material	Copper, bare
Labeling sleeve side B	No	External sheath: Material	TPE-S
Cables		Insulation: Material	PP
Cable length	1000 cm	Shielding: Material	Copper, tinned
Length tolerance	± 15 cm	No. of bending cycles (C-track)	approx. 2000000 Cycles
Stripping length	20 mm	Nominal voltage	300 V AC
Shielded	Yes	No. of torsion cycles	approx. 2000000 Cycles
Conductor structure	7 × 0.25 mm	Paired stranding	No
AWG	22	Single wire diameter	0.25 mm
External sheath: Material	TPE-S	Cable: Test voltage	3 kV AC
External sheath: Color	Blue	Torsion stress in °	$\pm 180^\circ/\text{m}$
Cable diameter	6.5 mm $\pm 5\%$	Total stranding	4 wires strand around core-filler
Wire cross section	0.34 mm ²	Travel speed (C-track)	max. 3.3 m/s
Cable: Halogen free	Yes	Traversing path (horizontal)	max. 5 m
Cable		Wire cross section	0.34 mm ²
Cable: Temperature range (mobile)	0 0	Wire processing	No
Cable: Temperature range (fixed)	- 40 ...+ 80 °C	Wire diameter incl. isolation	1.55 mm $\pm 5\%$
		External sheath: Color	Blue
		Protocols	CAT5e

Technical data

Electrical data

Operating voltage	max. 60 V DC
Operating voltage (only UL listed)	30 V AC/DC
Nominal voltage	300 V AC
Contact resistance	max. 30 mOhm
Operating current per contact	max. 4 A

Mechanical data

Head A: Degree of protection	IP65, IP68, IP69K
Bending radius (mobile)	min. 15 × outer diameter
Bending radius (fixed)	min. 5 × outer diameter
No. of bending cycles (C-track)	approx. 2000000 Cycles
Torsion speed	max. 35 cycles/min
Torsion stress in °	± 180 °/m
No. of torsion cycles	approx. 2000000 Cycles
Acceleration (C-track)	max. 2 m/s ²
Travel speed (C-track)	max. 3.3 m/s

Environmental conditions

Temperature range (mobile)	- 20 ...+ 80 °C
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Environmental conditions

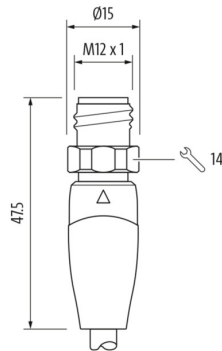
Temperature range (fixed)	- 25 ...+ 85 °C
Cable: Temperature range (fixed)	- 40 ...+ 80 °C
Dragchain capable	Yes
Head A: Chemical resistance	Chemical resistance tested according to ECOLAB. If other media are used, the material resistance must be tested according to the application.
Head A: Flame resistance	HB (UL 94)
Head A: Oil resistance	ASTM 1 oil, mineral oils, limited to hydraulic oils
Head A: Acid and alkali resistant	ECOLAB tested
Head A: Pollution degree	3
Cable: Acid and alkali resistant	Good (FDA 21 178.3620, 178.3297, 177.1520, EU 10/2011)
Cable: Silicone-free	Yes
Cable: UV resistance	Yes

Commercial data

Eclass	27061801
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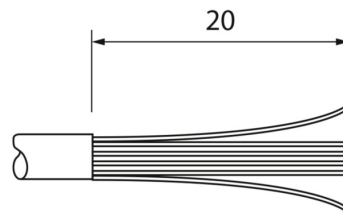
Side A

Technical drawing

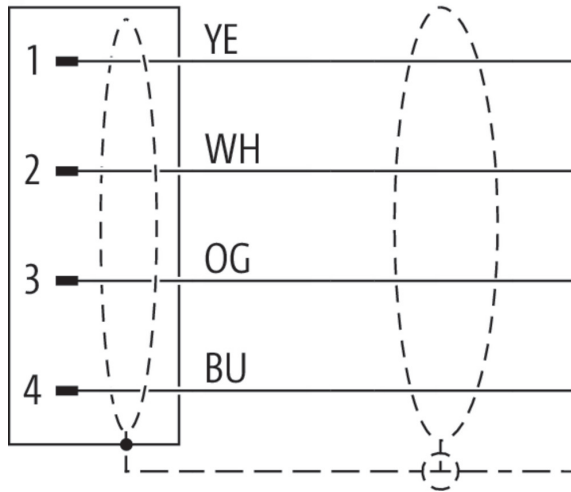


Side B

Technical drawing



Connection diagram



Dimension drawing

