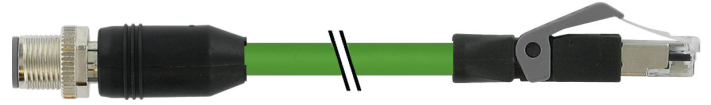


Overview

- M12, male, D-coded, 4-poles; PUR, 500 cm, shielded; RJ45, male, 4-poles
- Suitable for robotics $\pm 180^\circ/\text{m}$
- Head A: IP67; Head B: IP20
- Cable: good resistance against flames, oils



Technical data

Side A		Cable	
Head A: Connection	M12	Transmission rate	100 MBit/s
Head A: Angle cable outlet	0°	Bending radius (fixed)	52.8 mm
Head A: Gender	Male	Length tolerance	± 7.5 cm
Head A: Coding	D	Cable length	500 cm
Head A: No. of poles	4	AWG	22/19
Head A: LED	No	Bending radius (fixed)	min. $8 \times$ outer diameter
Head A: Width across flats	AF13	Bending radius (mobile)	min. $12 \times$ outer diameter
Head A: Tightening torque	0.6 Nm	Cable weight	approx. 67 g/m
Head A: Knurled nut material	Zinc-pressure die casting, surface Ni-ial	Conductor structure	19×0.16 mm
Head A: Body color	Black	Cable diameter	$6.6 \text{ mm} \pm 5\%$
Labeling sleeve side A	Yes	Insulation resistance	min. 5 MOhm x m
Side B		Conductor: Material	Copper, tinned
Head B: Connection	RJ45	External sheath: Material	PUR
Head B: Angle cable outlet	0°	Insulation: Material	PE
Head B: Gender	Male	Shielding: Material	Copper, tinned; PET aluminium coated
Head B: No. of poles	4	Nominal voltage	300 V
Head B: LED	No	Paired stranding	No
Head B: Body color	Black	Single wire diameter	0.16 mm
Labeling sleeve side B	Yes	Cable: Test voltage	2 kV AC
Cables		Torsion stress in °	$\pm 180^\circ/\text{m}$
Cable length	500 cm	Wire processing	No
Length tolerance	± 7.5 cm	Wire diameter incl. isolation	$1.6 \text{ mm} \pm 5\%$
Shielded	Yes	External sheath: Color	Green
Conductor structure	19×0.16 mm	Protocols	CAT5e
AWG	22/19	Electrical data	
External sheath: Material	PUR	Operating voltage	max. 60 V DC
External sheath: Color	Green	Operating voltage (only UL listed)	30 V DC
Cable diameter	$6.6 \text{ mm} \pm 5\%$	Nominal voltage	300 V
Cable		Contact resistance	max. 30 mOhm
Cable: Temperature range (mobile)	- 20 ...+ 60 °C	Operating current per contact	max. 1.5 A
Cable: Temperature range (fixed)	- 40 ...+ 80 °C	Mechanical data	
Operating voltage (only UL listed)	30 V DC	Head A: Degree of protection	IP67
Shielded	Yes	Head B: Degree of protection	IP20
Shielding: Covering	approx. 85 %	Bending radius (mobile)	min. $12 \times$ outer diameter
Characteristic impedance	100 mOhm $\pm 15\%$	Bending radius (fixed)	min. $8 \times$ outer diameter
Signal delay	5 ns/m	Torsion stress in °	$\pm 180^\circ/\text{m}$

Technical data

Environmental conditions

Temperature range (mobile)	- 20 ...+ 60 °C
Temperature range (fixed)	- 25 ...+ 80 °C
Cable: Temperature range (fixed)	- 40 ...+ 80 °C
Dragchain capable	No
Head A: Chemical resistance	No
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
Head B: Chemical resistance	No

Environmental conditions

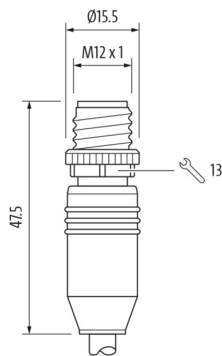
Head B: Flame resistance	HB (UL 94)
Head B: Oil resistance	ASTM 1 oil, mineral oils, limited to hydraulic oils
Head B: Acid and alkali resistant	No
Head B: Pollution degree	3
Cable: Chemical resistance	No
Cable: Flame resistance	Conform UL 1581 §1060 (FT1), §1061 (cable flame), §1080 (VW-1), IEC 60332-1-2 Std.
Cable: Oil resistance	Conform IEC 60811-2-1, ICEA S-82-552, ASTM-oil 1 Std.
Cable: Acid and alkali resistant	No
Cable: Silicone-free	Yes

Commercial data

Eclass	27061801
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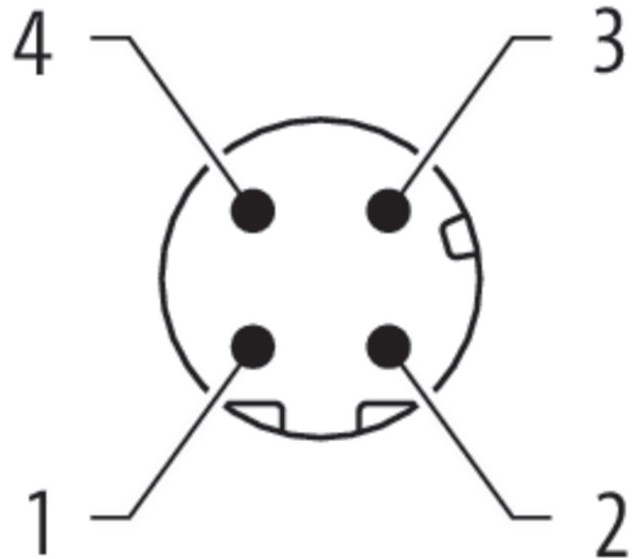
Side A

Technical drawing



Side A

Coding

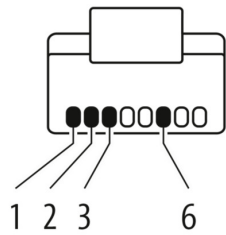


Side B

Technical drawing



Coding



Connection diagram

