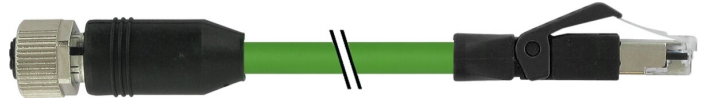


Overview

- M12, female, X-coded, 8-poles; PUR, 500 cm, shielded; RJ45, male, X-coded, 8-poles
- Dragchain capable; suitable for robotics $\pm 180^\circ/\text{m}$, CAT6A, 10Gbit/s
- Head A: IP66K, IP67; Head B: IP20
- Cable: good resistance against 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	X
Head A: No. of poles	8
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
Head A: Contact layout pin 1	OGWH
Head A: Contact layout pin 2	OG
Head A: Contact layout pin 3	GNWH
Head A: Contact layout pin 4	GN
Head A: Contact layout pin 5	BNWH
Head A: Contact layout pin 6	BN
Head A: Contact layout pin 7	BUWH
Head A: Contact layout pin 8	BU

Side B

Head B: Connection	RJ45
Head B: Angle cable outlet	0°
Head B: Gender	Male
Head B: No. of poles	8
Head B: LED	No
Head B: Body color	Black
Labeling sleeve side B	Yes
Head B: Contact layout pin 1	OGWH
Head B: Contact layout pin 2	OG

Side B

Head B: Contact layout pin 3	GNWH
Head B: Contact layout pin 4	BU
Head B: Contact layout pin 5	BUWH
Head B: Contact layout pin 6	GN
Head B: Contact layout pin 7	BNWH
Head B: Contact layout pin 8	BN

Cables

Cable length	500 cm
Length tolerance	± 7.5 cm
Shielded	Yes
Conductor structure	7 $\times$ 0.203 mm
AWG	24
External sheath: Material	PUR
External sheath: Color	Green
Cable diameter	8.9 mm $\pm 5\%$
Wire cross section	0.227 mm ²
Cable: Halogen free	Yes

Cable

Cable: Temperature range (mobile)	- 30 ...+ 70 °C
Cable: Temperature range (fixed)	- 40 ...+ 80 °C
Operating voltage (only UL listed)	30 V AC/DC
Shielded	Yes
Shielding: Covering	Approx. 85 %
Characteristic impedance	100 Ohm $\pm 15\%$
Signal delay	5.2 ns/m
Transmission rate	10 Gbit/s
Bending radius (fixed)	71.2 mm
Number of wires	8
Number and diameter of wires	8x0.227
Length tolerance	± 7.5 cm
Cable length	500 cm

Technical data
Cable

Acceleration (C-track)	Max. 4 m/s ²
AWG	24
Bending radius (fixed)	Min. 8 × outer diameter
Bending radius (mobile)	Min. 15 × outer diameter
Cable weight	Approx. 116.6 g/m
Conductor structure	7 × 0.203 mm
Cable diameter	8.9 mm ±5 %
Insulation resistance	Min. 5 MOhm x m
Conductor: Material	Copper, bare
External sheath: Material	PUR
Insulation: Material	PE
Shielding: Material	Copper, tinned; PET aluminium coated
No. of bending cycles (C-track)	Approx. 2000000 Cycles
Nominal voltage	300 V
No. of torsion cycles	Approx. 1000000 Cycles
Paired stranding	Yes
Single wire diameter	0.203 mm
Cable: Test voltage	1.5 kV AC core-core ; 1 kV AC core-shield
Torsion stress in °	± 180 °/m
Total stranding	4 x 2 wires strand to pair, pairs strand around central separator
Travel speed (C-track)	Max. 4 m/s
Traversing path (horizontal)	Max. 5 m
Wire cross section	0.227 mm ²
Wire processing	No
Wire diameter incl. isolation	1.05 mm ±5 %
External sheath: Color	Green
Protocols	CAT6A

Electrical data

Operating voltage	Max. 60 V DC
Operating voltage (only UL listed)	30 V AC/DC
Nominal voltage	300 V
Contact resistance	Max. 30 mOhm
Operating current per contact	Max. 0.5 A

Mechanical data

Head A: Degree of protection	IP66K, IP67
Head B: Degree of protection	IP20
Bending radius (mobile)	Min. 15 × outer diameter
Bending radius (fixed)	Min. 8 × outer diameter
No. of bending cycles (C-track)	Approx. 2000000 Cycles
Torsion stress in °	± 180 °/m
No. of torsion cycles	Approx. 1000000 Cycles
Acceleration (C-track)	Max. 4 m/s ²
Travel speed (C-track)	Max. 4 m/s

Environmental conditions

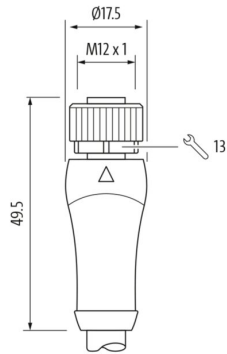
Temperature range (mobile)	- 25 ...+ 70 °C
Temperature range (fixed)	- 25 ...+ 85 °C
Cable: Temperature range (fixed)	- 40 ...+ 80 °C
Dragchain capable	Yes
Head A: Chemical resistance	No
Head A: Flame resistance	HB (UL 94)
Head A: Oil resistance	ASTM 1 oil, mineral oils, limited to hydraulic oils
Head A: Acid and alkali resistant	No
Head A: Pollution degree	3
Head B: Chemical resistance	No
Head B: Flame resistance	HB (UL 94)
Head B: Pollution degree	3
Cable: Flame resistance	Conform UL 1581 §1090, §1100 (FT2), IEC 60332-1-2 Std.
Cable: Oil resistance	Conform IEC 60811-2-1, ASTM IRM 901, ICEA S-82-552 Std.
Cable: Silicone-free	Yes
Cable: UV resistance	Yes

Commercial data

Eclass	27061801
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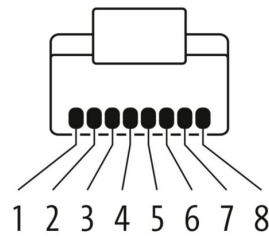
Side A

Technical drawing

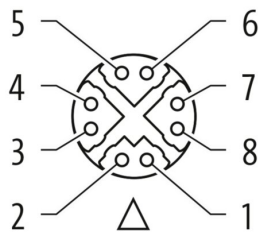


Side B

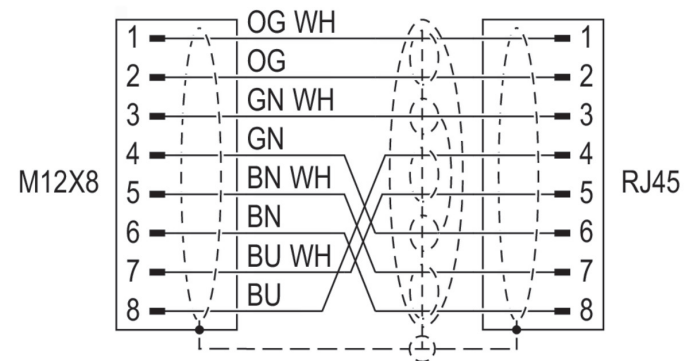
Coding



Coding



Connection diagram



Dimension drawing

Side B

Technical drawing

