

2172353	DATA SHEET	
Valid from: 01.12.2021	IE-6A-M12XF-S-(L*)-P-4-26-7-OE	

Description

- Industrial Ethernet patchcords Cat.6_A, shielded
- Straight M12-jack, x-coded on free conductor end
- Based on ETHERLINE[®] Cat.7 FLEX (2170934)



General characteristics

Connection method, connector	M12-jack, x-coded
Number of pins	8
Ambient temperature	-30°C to +90°C (-22°F to 194°F)
Degree of protection	IP 65, IP 67 (M12, plugged and locked)
Shielding	Shielded
Tightening torque	1.0 Nm (M12-connector) 2.0 Nm (M12-flange nut)
Colour coding (pin assignment)	TIA/EIA-568-B
Conformity	RoHS conform REACH conform LABS free

Variation

Data sheet also valid for variant lengths. Other lengths on request.

Article	Description	Length (L*) [m]
2172353	IE-6A-M12XF-S-0,5-P-4-26-7-OE	0.5
2172354	IE-6A-M12XF-S-1-P-4-26-7-OE	1
2172355	IE-6A-M12XF-S-2-P-4-26-7-OE	2
2172356	IE-6A-M12XF-S-3-P-4-26-7-OE	3
2172357	IE-6A-M12XF-S-5-P-4-26-7-OE	5
2172358	IE-6A-M12XF-S-7-P-4-26-7-OE	7
2172359	IE-6A-M12XF-S-10-P-4-26-7-OE	10
2172360	IE-6A-M12XF-S-15-P-4-26-7-OE	15
2172361	IE-6A-M12XF-S-20-P-4-26-7-OE	20

Electrical properties

Rated voltage	50 VAC / 60 VDC
Rated current at 40 °C	0.5 A
Pollution degree	3 (M12, plugged and locked)

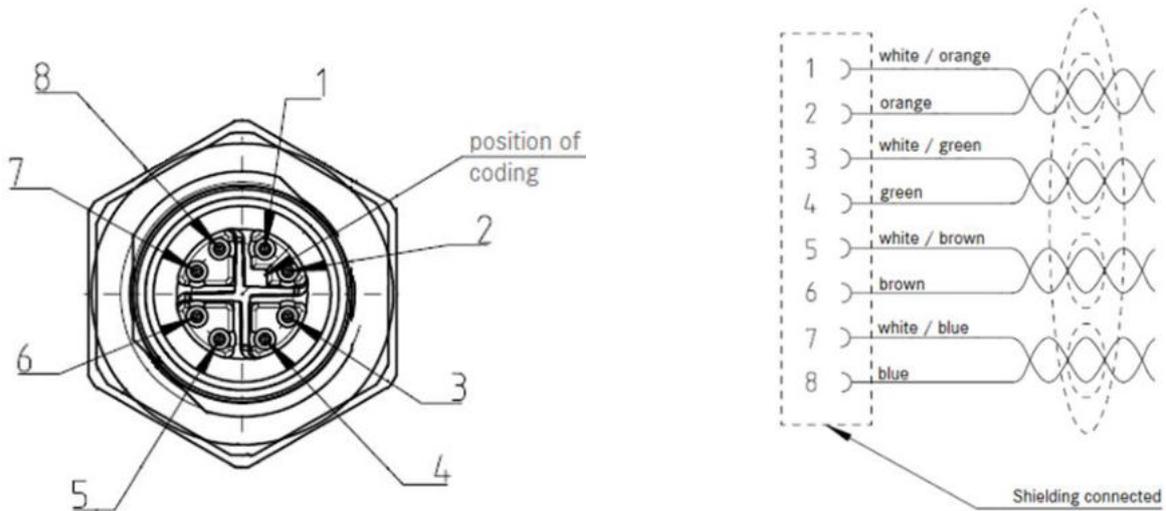
Transmission characteristics

Category (acc. ISO/IEC 11801)	6 _A
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Connector pin assignment



Mechanical properties

M12-jack

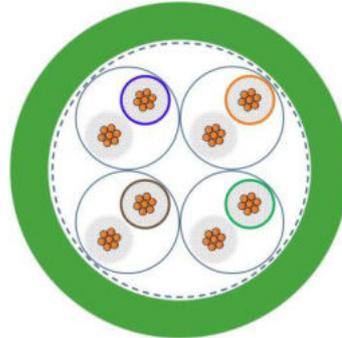
Flammability class according to UL 94

Contact, material
Contact carrier, material
Housing, material
Handle, material
Seal outer, material
Seal inner, material
Nut, material

TPU → HB
NBR, FPM/FKM → none
CuNi, gold plated
TPU, green
Cu, nickel plated
TPU, black
NBR, black
FPM/FKM, red
Cu, nickel plated

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Cable (Lapp article number: 2170934)



Design

Certification	E63634 cRUus AWM Style 21238 80°C 600V I/II A/B acc. to UL 758 & CSA C22.2 No.210
Conductor	stranded bare copper 26/7 AWG
Insulation	polyolefin (foamed) insulation-diameter: ca. 1.0 mm
Core identification code	pair 1: white/blue, pair 2: white/orange, pair 3: white/green, pair 4: white/brown (colored ring marking on the white cores is optional)
Stranding	2 cores stranded to pair, 4 pairs stranded to bundle
Pair screen	plastic laminated aluminium foil (overlapping)
Screen	braid of tinned copper wire (coverage ca. 70 %)
Outer sheath	PUR green, similar to RAL 6018 outer diameter: ca. 6.4 mm

Electrical properties at 20°C

Loop resistance	≤ 29 Ω/100 m
Insulation resistance	min. 5 GΩ x km
Mutual capacitance	nom. 46 nF/km
Characteristic impedance	100 Ω acc. to IEC 61156-6
Maximum operating voltage	100 V (not for power applications)
Test voltage	core/core: 2000 V core/screen: 2000 V

Mechanical and thermal properties

Minimum bending radius	fixed: 4 × outer diameter occasional flexing: 10 × outer diameter
Temperature range	fixed: -50 °C up to +80 °C occasional flexing: -40 °C up to +80 °C UL/CSA: 80 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 HFT acc. to UL 1581 §1090
Halogen free	acc. to VDE 0472-815
UV resistance	acc. to ISO 4892-2, method A
Oil resistance	acc. to EN 50363-10-2

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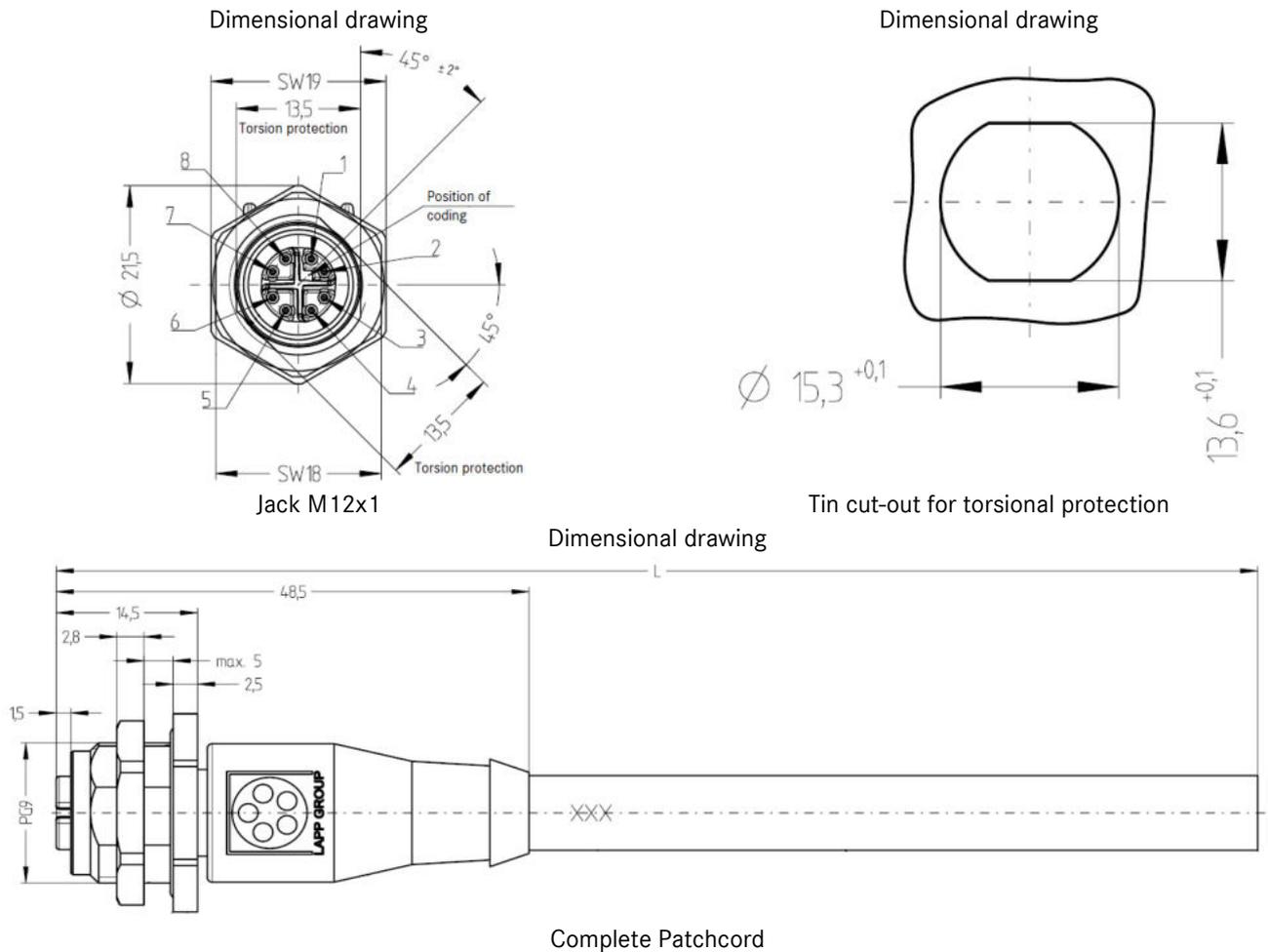
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Standards / Approvals

Product standard, M12-connector
 Generic cabling for customer premises – General requirements

IEC 61076-2-109
 DIN EN 50173-1
 ISO/IEC 11801-1

Technical drawing



Certification

Certified acc. to ECE R118

Application range

Automation, industrial machinery and plant engineering

Note

Photographs are not true to scale and do not represent detailed images of the respective products.

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