


2172344	<b>DATA SHEET</b>	
Valid from: 01.12.2021	<b>IE-6A-M12XF-S-(L*)-P-4-26-7-M12XF-S</b>	

## Description

- Industrial Ethernet patchcord Cat.6<sub>A</sub>, shielded
- Straight M12-jack, x-coded and straight M12-jack, x-coded
- Based on ETHERLINE<sup>®</sup> 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]
2172344	IE-6A-M12XF-S-0,5-P-4-26-7-M12XF-S	0.5
2172345	IE-6A-M12XF-S-1-P-4-26-7-M12XF-S	1
2172346	IE-6A-M12XF-S-2-P-4-26-7-M12XF-S	2
2172347	IE-6A-M12XF-S-3-P-4-26-7-M12XF-S	3
2172348	IE-6A-M12XF-S-5-P-4-26-7-M12XF-S	5
2172349	IE-6A-M12XF-S-7-P-4-26-7-M12XF-S	7
2172350	IE-6A-M12XF-S-10-P-4-26-7-M12XF-S	10
2172351	IE-6A-M12XF-S-15-P-4-26-7-M12XF-S	15
2172352	IE-6A-M12XF-S-20-P-4-26-7-M12XF-S	20


## Electrical properties

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

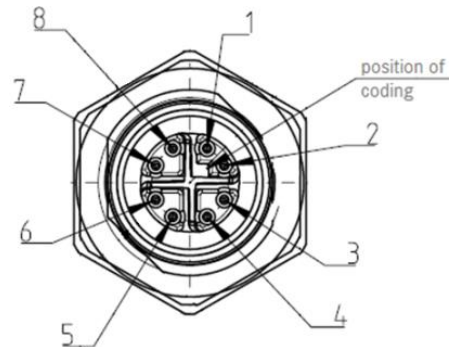
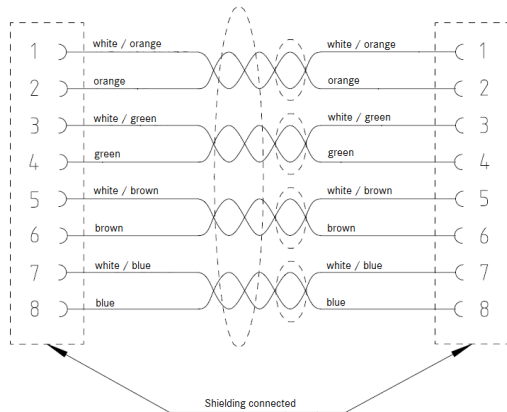
## Transmission characteristics

Category (acc. ISO/IEC 11801)	6 <sub>A</sub>
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### Connector pin assignment




### Mechanical properties

#### M12-jack

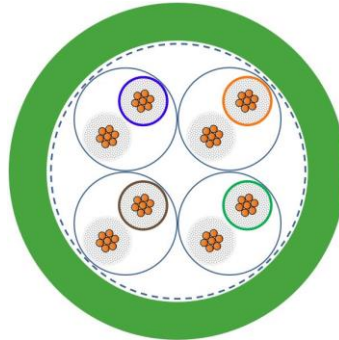
Flammability class according to UL 94

- 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

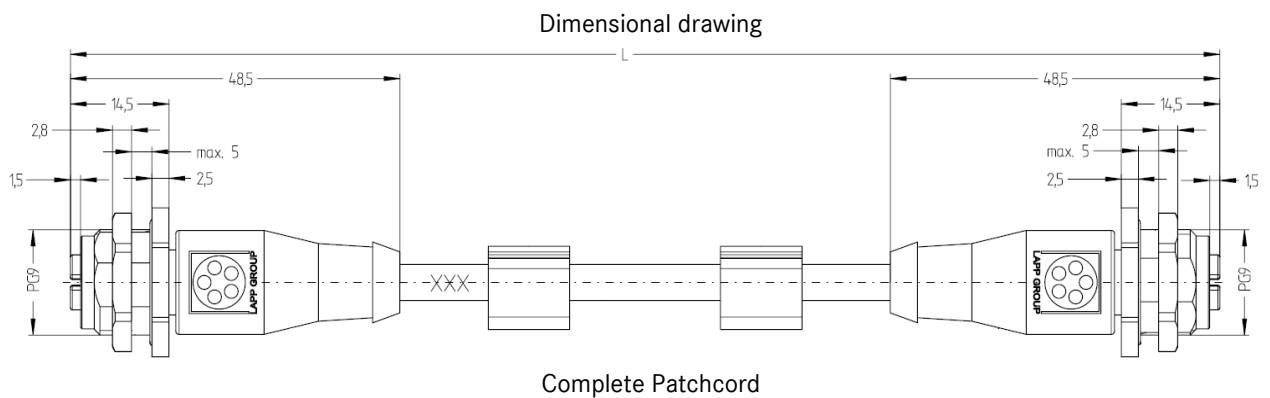
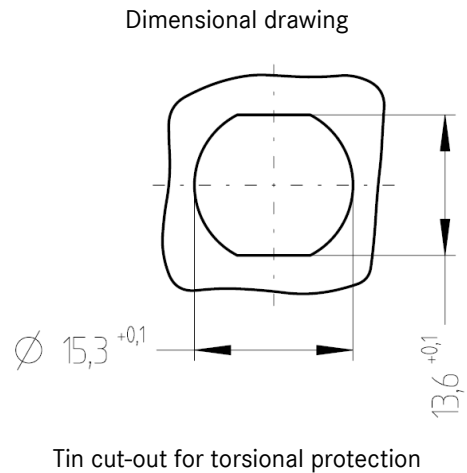
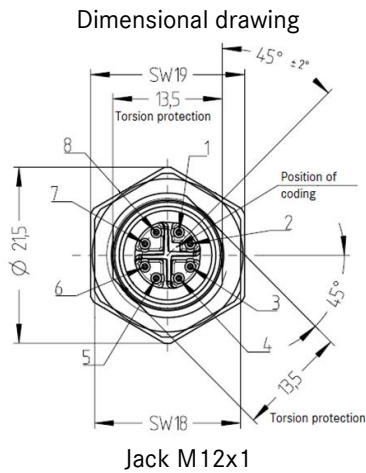
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### Standards / Approvals

Product standard, M12-connector IEC 61076-2-109  
 Generic cabling for customer premises – General requirements 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.