

2172317	DATA SHEET	
Valid from: 01.12.2021	IE-6A-M12X-S-(L*)-P-4-26-7-OE	

Description

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



General characteristics

Connection method, connector	M12-plug, 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)
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]
2172317	IE-6A-M12X-S-0,5-P-4-26-7-OE	0.5
2172318	IE-6A-M12X-S-1-P-4-26-7-OE	1
2172319	IE-6A-M12X-S-2-P-4-26-7-OE	2
2172320	IE-6A-M12X-S-3-P-4-26-7-OE	3
2172321	IE-6A-M12X-S-5-P-4-26-7-OE	5
2172322	IE-6A-M12X-S-7-P-4-26-7-OE	7
2172323	IE-6A-M12X-S-10-P-4-26-7-OE	10
2172324	IE-6A-M12X-S-15-P-4-26-7-OE	15
2172325	IE-6A-M12X-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)

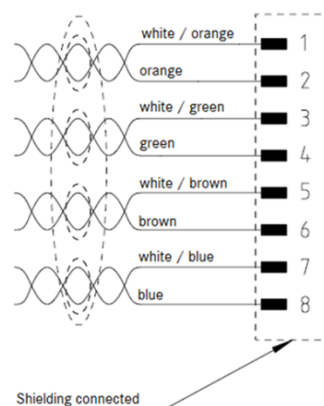
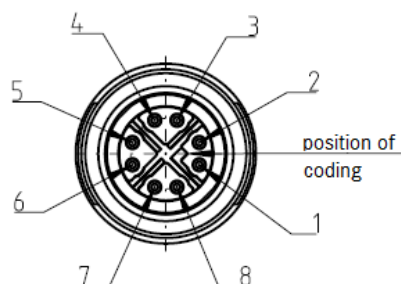
Transmission characteristics

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



Mechanical properties

M12-plug

Flammability class according to UL 94

Contact, material

Contact carrier, material

Housing, material

Knurl, material

Handle, material

TPU → HB

CuNi, gold plated

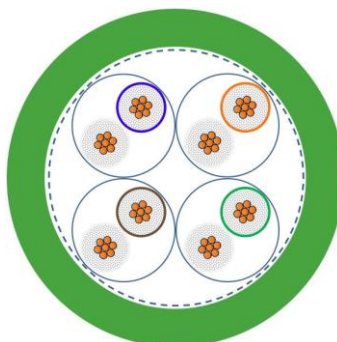
TPU, nature

Cu, nickel plated

Cu, nickel plated

TPU, black

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

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Electrical properties at 20°C

Loop resistance	$\leq 29 \Omega / 100 \text{ m}$	
Insulation resistance	min. $5 \text{ G}\Omega \times \text{km}$	
Mutual capacitance	nom. 46 nF/km	
Characteristic impedance	100Ω acc. to IEC 61156-6	
Maximum operating voltage	100 V (not for power applications)	
Test voltage	core/core:	2000 V
	core/screen:	2000 V

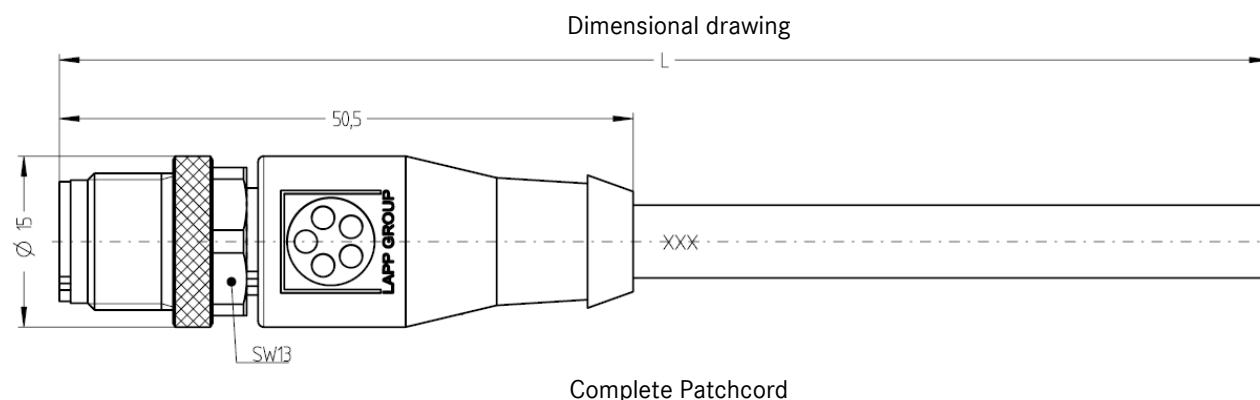
Mechanical and thermal properties

Minimum bending radius	fixed: $4 \times$ outer diameter
	occasional flexing: $10 \times$ outer diameter
Temperature range	fixed: $-50 \text{ }^{\circ}\text{C}$ up to $+80 \text{ }^{\circ}\text{C}$
	occasional flexing: $-40 \text{ }^{\circ}\text{C}$ up to $+80 \text{ }^{\circ}\text{C}$
	UL/CSA: $80 \text{ }^{\circ}\text{C}$
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

Standards / Approvals

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