


2172335	DATA SHEET	
Valid from: 01.12.2021	IE-6A-M12X-S-(L*)-P-4-26-7-M12XF-S	

Description

- Industrial Ethernet patchcord Cat.6_A, shielded
- Straight M12-jack, x-coded and straight M12-plug, x-coded
- Based on ETHERLINE[®] Cat.7 FLEX (2170934)



General characteristics

Connection method, connector	M12-jack, x-coded 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) 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]
2172335	IE-6A-M12X-S-0,5-P-4-26-7-M12XF-S	0.5
2172336	IE-6A-M12X-S-1-P-4-26-7-M12XF-S	1
2172337	IE-6A-M12X-S-2-P-4-26-7-M12XF-S	2
2172338	IE-6A-M12X-S-3-P-4-26-7-M12XF-S	3
2172339	IE-6A-M12X-S-5-P-4-26-7-M12XF-S	5
2172340	IE-6A-M12X-S-7-P-4-26-7-M12XF-S	7
2172341	IE-6A-M12X-S-10-P-4-26-7-M12XF-S	10
2172342	IE-6A-M12X-S-15-P-4-26-7-M12XF-S	15
2172343	IE-6A-M12X-S-20-P-4-26-7-M12XF-S	20

Electrical properties

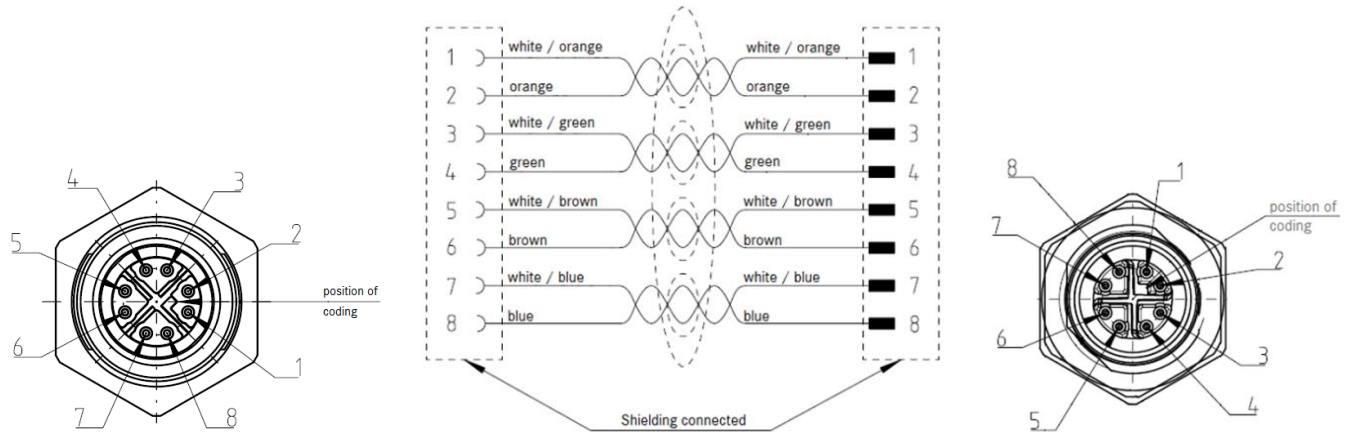
Rated voltage	50 VAC / 60 VDC
Rated current at 40 °C	0.5 A
Pollution degree	3 (M12, plugged and locked)

Transmission characteristics

Category (acc. ISO/IEC 11801)	6 _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

M12-plug

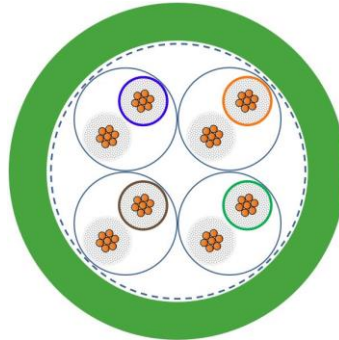
Flammability class according to UL 94

- Contact, material
- Contact carrier, material
- Housing, material
- Knurl, material
- Handle, material

- TPU → HB
- CuNi, gold plated
- TPU, nature
- Cu, vernickelt
- Cu, nickel plated
- TPU, black

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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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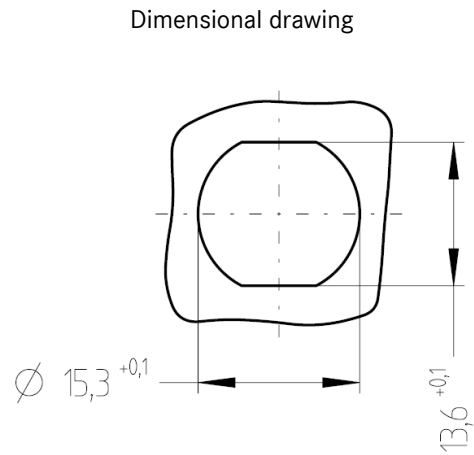
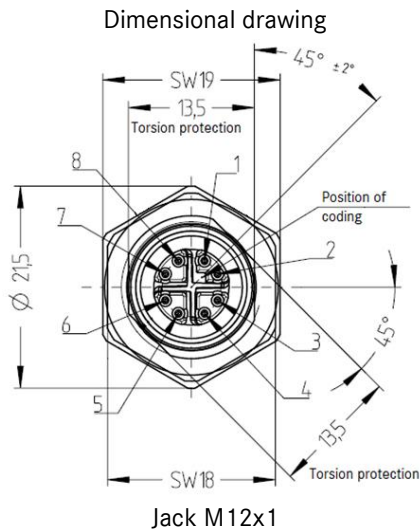
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Standards / Approvals

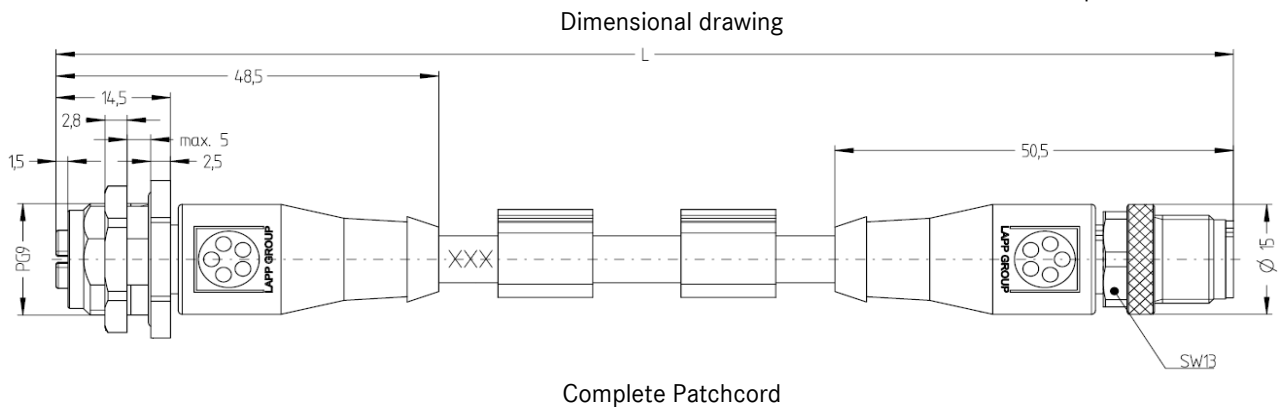
Product standard, M12-connector
 Generic cabling for customer premises – General requirements

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

Technical drawing



Tin cut-out for torsional protection



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.