

2172380	DATA SHEET	
Valid from: 01.12.2021	IE-6A-M12X-S-(L*)-P-4-26-7-RJ45	

Description

- Industrial Ethernet patchcord Cat.6A, shielded
- Straight M12-plug, x-coded and straight RJ45-plug
- Based on ETHERLINE® Cat.7 FLEX (2170934)



General characteristics

Connection method, connector	M12-plug, x-coded RJ45-plug
Number of pins	8
Ambient temperature	-30°C to +70°C (-22°F to 158°F)
Degree of protection	IP 20 (RJ45) 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 available on request.

Article	Description	Length (L*) [m]
2172380	IE-6A-M12X-S-0,5-P-4-26-7-RJ45	0.5
2172381	IE-6A-M12X-S-1-P-4-26-7-RJ45	1
2172382	IE-6A-M12X-S-2-P-4-26-7-RJ45	2
2172383	IE-6A-M12X-S-3-P-4-26-7-RJ45	3
2172384	IE-6A-M12X-S-5-P-4-26-7-RJ45	5
2172385	IE-6A-M12X-S-7-P-4-26-7-RJ45	7
2172386	IE-6A-M12X-S-10-P-4-26-7-RJ45	10
2172387	IE-6A-M12X-S-15-P-4-26-7-RJ45	15
2172388	IE-6A-M12X-S-20-P-4-26-7-RJ45	20

Electrical properties

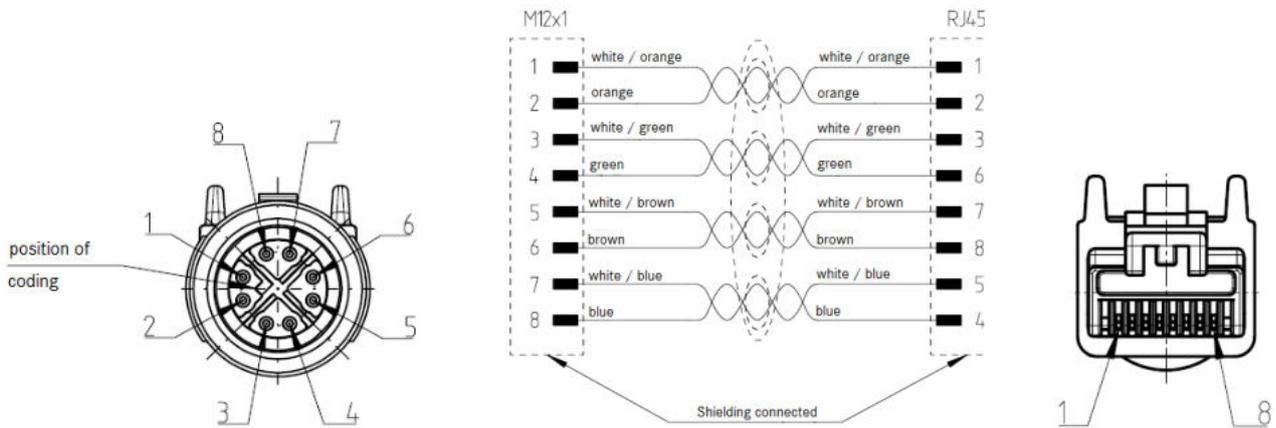
Rated voltage (max.)	50 V
Rated current at 40 °C	0.5 A
Pollution degree	1 (RJ45) 3 (M12, plugged and locked)

Transmission characteristics

Category (acc. ISO/IEC 11801)	6A
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Creator: FELI1/FEJA1/PDP Released: IVSE1/PDP	Document: DB2172380EN Version: 04	Page 1 of 4
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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

RJ45-plug

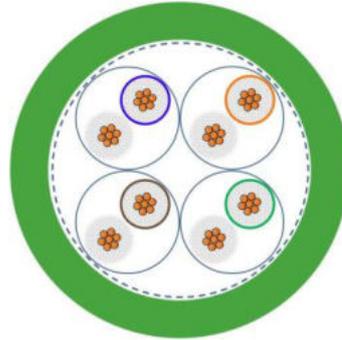
Flammability class according to UL 94

 Contact, material
 Housing & insert, material
 2K-boot, plug protection, material
 2K-boot, bend protection, material

PC → V0
 TPE → HB
 CuSn, gold plated
 PC, crystal clear
 TPE, black
 TPE, 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

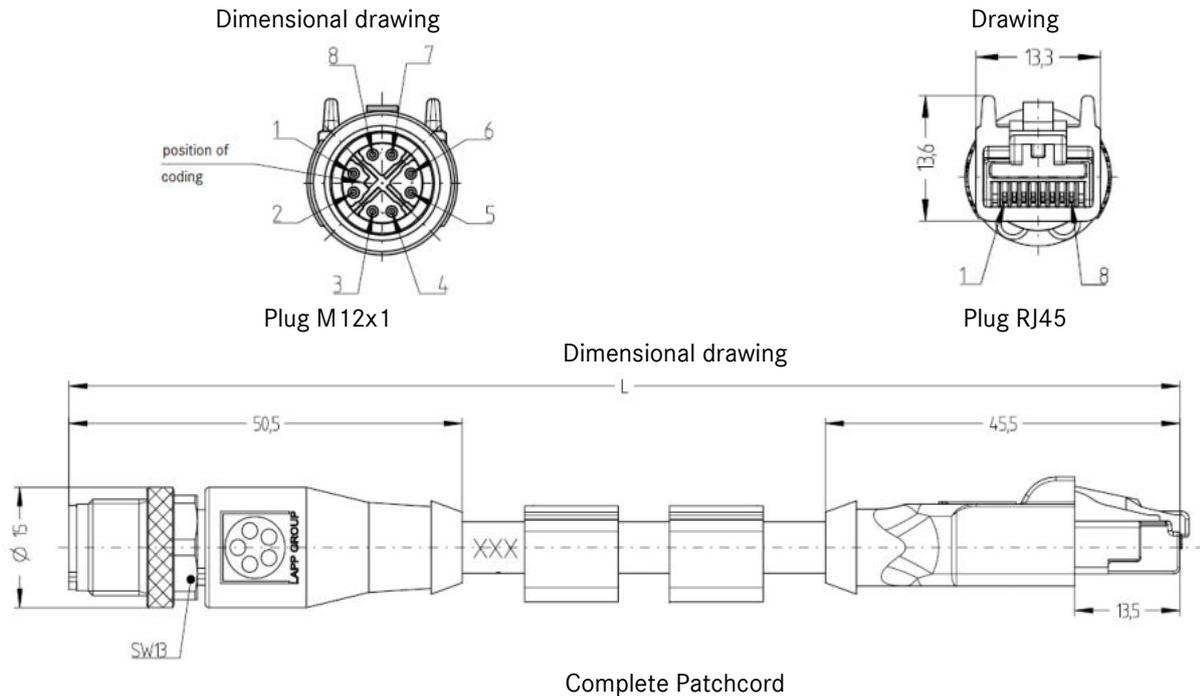
Minimum bending radius	fixed: 4 × outer diameter occasional flexing: 10 × outer diameter
Temperature range	fixed: -50 °C up to +80 °C occasional flexing: -40 °C up to +80 °C UL/CSA: 80 °C
Flammability	flame retardant acc. to IEC 60332-1-2 resp. EN 60332-1-2 HFT acc. to UL 1581 §1090
Halogen free	acc. 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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Standards / Approvals

Product standard, RJ45-connector	IEC 60603-7-51
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.