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Data sheet

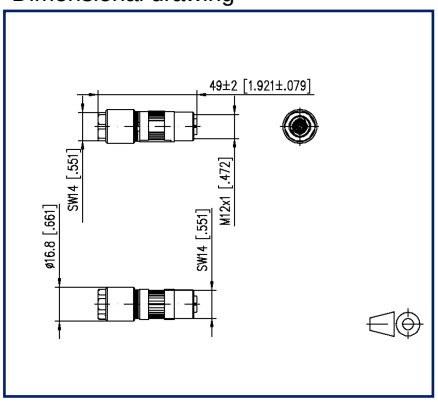
M12 Jack X-coded IP67, field assembly

P/N
MMF881A315
EAN 4250184171089
2022/06/22
Version: AT

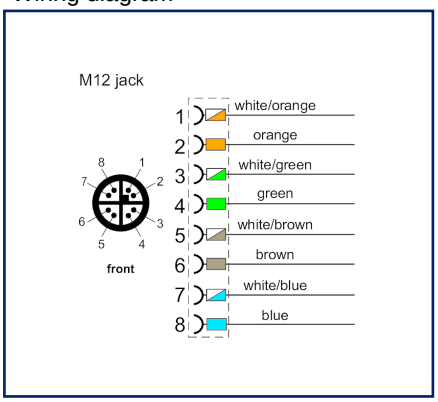
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

- 8-pole M12 jack for field assembly Cat.6_A
- per IEC/PAS 61076-2-109
- suitable for 10 GBit as per IEEE 802.3an
- AWG 26/1 - 22/1, AWG 26/7 - 22/7 can be connected
- solid copper wire diameter 0.4 to 0.64 mm
- stranded copper wire diameter 0.48 to 0.76 mm
- wire diameter with isolation up to 1.6 mm
- overall cable diameter from 5.0 to 9.7 mm
- jack consists of only two parts
- easy assembly without special tools
- industry-compatible zinc die-cast housing
- suitable for applications in the railway industry according to data sheet

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Weitere Dokumentation siehe / additional documentation see / documentation supplémentaire voir www.metz-connect.com

Data sheet

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Technical Data

General Data	
Electromagnetic measurement according to MICE	E2
Design	Jack
Shielding	shielded
Transmission technology	Copper
Dimensions	
Dimension (L x W x H)	49 mm x 16.8 mm x 16.8 mm
Dimension (L x W x H)	1.929 in. x 0.661 in. x 0.661 in.
Field assembly ability	yes
Labeling option	on housing

Transmission characteristics	
Category (ISO)	6_A
Category (TIA)	6A
Transmission rate up to 10 GBit	IEEE 802.3an

Connections/interfaces	
Connector technology interface 1	IDC-connection
Connector technology interface 2	M12-jack
Coding interface 2	X-coded
Number of ports interface 2	1
Number of ports interface 2 equipped	1
Number of positions/contacts interface 1	8
Number of positions/contacts interface 2	8
Termination data, solid wire (min. - max.)	
Conductor cross section, solid wire	AWG 26/1 - AWG 22/1
Conductor cross section, solid wire	0.128 mm² - 0.324 mm²
Conductor diameter, solid wire (bare copper)	0.409 mm - 0.643 mm
Conductor diameter, solid wire (bare copper)	0.016 in. - 0.025 in.

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Technical Data

Connections/interfaces	
Termination data, stranded wire (min. - max.)	
Conductor cross section, stranded wire	AWG 26/7 - AWG 22/7
Conductor cross section, stranded wire	0.141 mm² - 0.355 mm²
Conductor diameter, stranded wire (bare copper)	0.483 mm - 0.762 mm
Conductor diameter, stranded wire (bare copper)	0.019 in. - 0.03 in.
Aderdurchmesser (min.-max.)	
Core diameter (conductor with insulation)	0.85 mm - 1.6 mm
Core diameter (conductor with insulation)	0.033 in. - 0.063 in.
Cable sheath diameter (min. - max.)	
Cable sheath diameter	5 mm - 9.70
Cable sheath diameter	0.197 in. - 0.382
Cable access/outlet	straight M12
Electrical characteristics	
Current carrying capacity	0.5 A
Rated voltage	50 V AC / 60 V DC
Through resistance	max. 5 mOhm
Insulation resistance	min. 100 MOhm
Mechanical data	
Mounting method	screwable
Insertion and withdrawal force	max. 30 N
Life - Number of mating cycles	min. 100
Materials and material properties	
Material - Housing	GD-Zn (zinc die-cast)
Material - Contact	CuZnPb (brass)
Material - Contact finish	Ni + Au (nickel-gold)
Material - Shield	CuSn (tin bronze)
Material - Shield finish	Sn (tin)
Material - Stuffer cap	PA UL94-V0
Halogen free	yes
Silicone free	no paint wetting interfering substances (LaBS) in the process chain

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Technical Data

Materials and material properties	
LaBS Note	subsequent contamination possible due to handling and possible storage in your company
Material - Finish	Ni (nickel)
RoHS	compliant
REACH	compliant
REACH - substance (SVHC)	Lead / 7439-92-1
Environmental conditions	
Temperature (min. - max.)	
Temperature - Storage °C	-40 °C - 85 °C
Temperature - Storage °F	-40 °F - 185 °F
Temperature - Operating °C	-40 °C - 85 °C
Temperature - Operating °F	-40 °F - 185 °F
Particulate ingress interface 2	IP6X when plugged in
Liquid ingress/immersion interface 2	IPX5 when plugged in, IPX7 when plugged in
Overvoltage category	III
Degree of pollution	2
Shock	490 m/s²
Approvals	
UL listed (file no.)	DUXR.E178484
Standards/Regulations	
Connectors for electronic equipment	
circular connector	DIN EN 61076-2-109:2010-08
Railway applications	
Electronic equipment used on rolling stock	following to DIN EN 50155
Fire protection on railway vehicles	following to DIN EN 45545-2
Contact holder	Thermoplastic HL3 according to R22 EN 45545-2
Stuffer cap	Thermoplastic HL3 according to R22 EN 45545-2
Sealings	Elastomer
Shock and vibration	DIN EN 50155:2018-05, DIN EN 61373:2011-04 Class 1 Category B
Salt spray	DIN EN 50155:2018-05, (DIN EN 60068-2-11:2000-02/ 48h test KA)

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Technical Data

Classifications

ETIM 5.0	EC001121
ETIM 6.0	EC001121
ETIM 7.0	EC002635
ETIM 8.0	EC002635

Packing details

Type of packaging	10 pc(s) / box

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Accessories

P/N	Designation
130670-E	KAPRi plus cable and installation tester
130674-E	KAPRi plus extension set M12 X-coded

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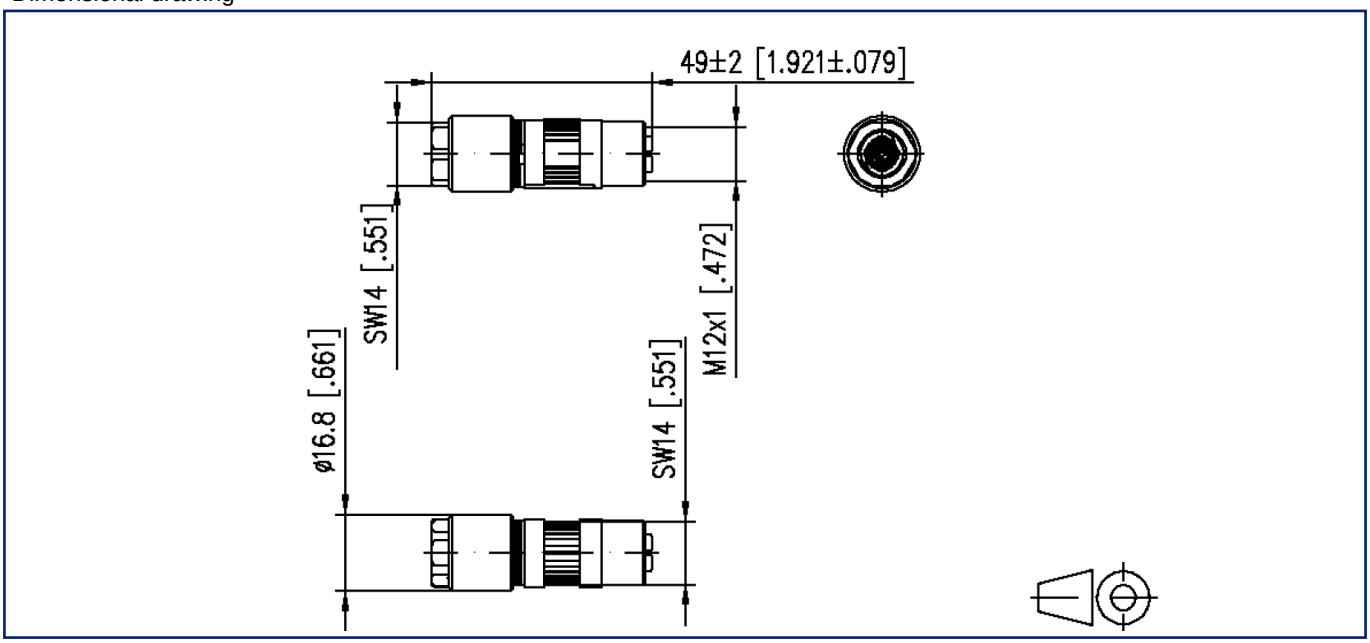
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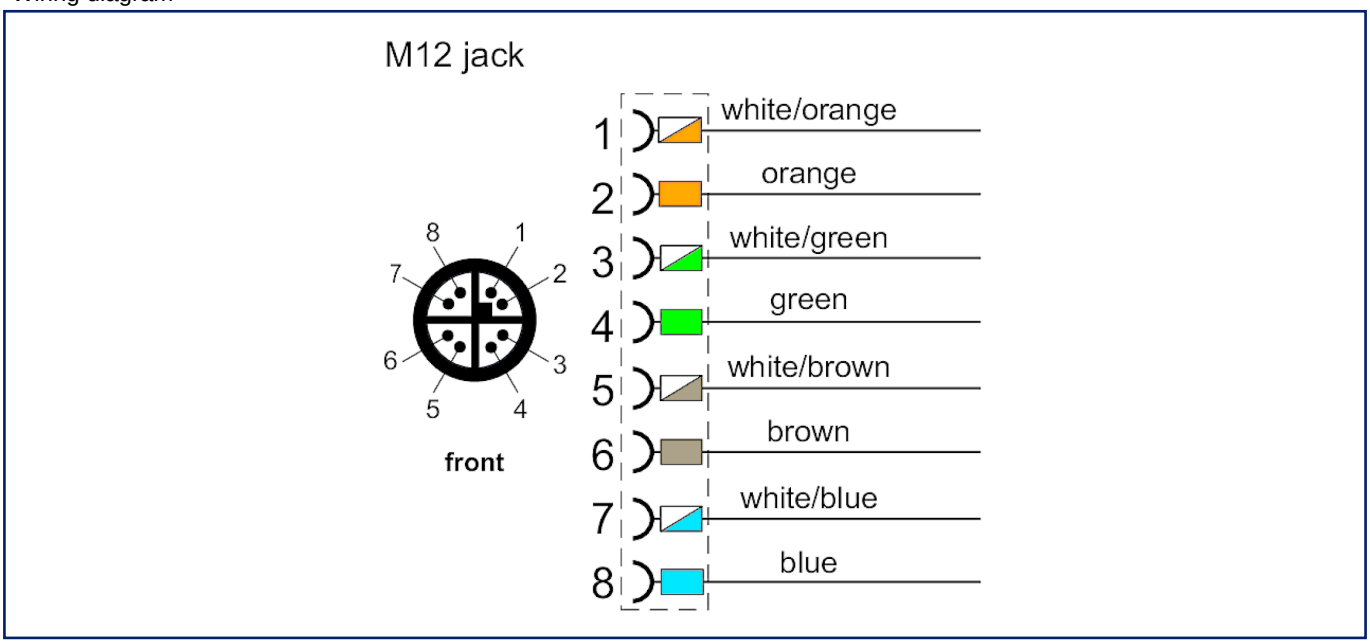
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