

Data sheet

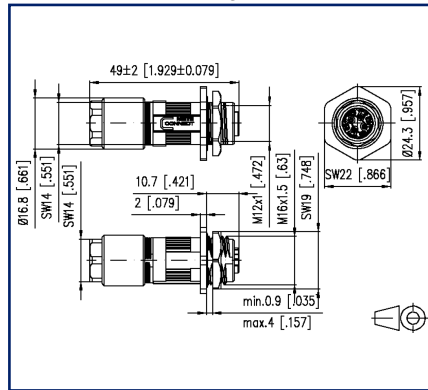
M12 Jack D-coded IP67

Cat. 5, Ø 6-9.7 mm, field assembly with flange

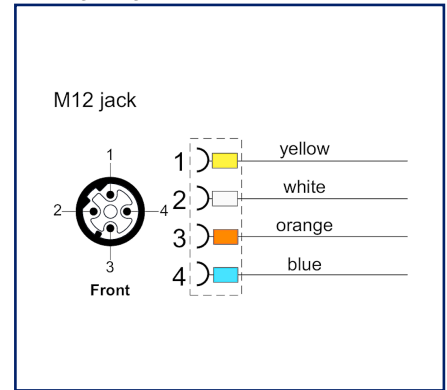
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

- 4-pole jack for field assembly Cat.5e
- M12 connector following to DIN EN 61076-2-101:2012 with flange
- suitable for 100 MBit Fast Ethernet as per IEEE 802.3an
- AWG 26/1 to 22/1, AWG 26/7 to 22/7 can be connected
- solid copper wire diameter 0.41 to 0.64 mm
- stranded copper wire diameter 0.48 to 0.76 mm
- wire diameter with isolation up to 1.6 mm
- cable jacket from 6.0 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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Cat. 5, Ø 6-9.7 mm, field assembly with flange

P/N

MMF881A115-0001

EAN 4251394625256

2023/10/25

Version: P

Technical Data

General Data

Electromagnetic measurement according to MICE	E2
Design	Jack
Mounting style	back side
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)	5e
Category (TIA)	5e
Remote Powering	yes
PoE	IEEE 802.3af
PoE plus	IEEE 802.3at

Connections/interfaces

Connector technology interface 1	IDC-connection
Connector technology interface 2	M12-jack
Coding interface 2	D-coded
Number of ports interface 2	1
Number of ports interface 2 equipped	1
Number of positions/contacts interface 1	4
Number of positions/contacts interface 2	4

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Connections/interfaces

Termination data, solid wire (min. - max.)

Conductor cross section, solid wire	AWG 26/1 - AWG 22/1
Conductor cross section, solid wire	0.128 mm ² - 0.324 mm ²
Conductor diameter, solid wire (bare copper)	0.409 mm - 0.643 mm
Conductor diameter, solid wire (bare copper)	0.016 in. - 0.025 in.

Termination data, stranded wire (min. - max.)

Conductor cross section, stranded wire	AWG 26/7 - AWG 22/7
Conductor cross section, stranded wire	0.141 mm ² - 0.355 mm ²
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	6 mm - 9.7 mm
Cable sheath diameter	0.236 in. - 0.382 in.

Cable access/outlet

straight M12

Electrical characteristics

Current carrying capacity at 40 °C	max. 4 A
Rated voltage	48 V AC / 60 V DC
Note for contact resistance	plug / jack
Contact resistance	max. 5 mOhm
Insulation resistance	min. 100 MOhm

Mechanical data

Mounting method	screwable
Insertion and withdrawal force	10 N / 15 N
Life - Number of mating cycles	min. 100

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Materials and material properties

Material - Housing	GD-Zn (zinc die-cast)
Material - Contact	CuZnPb (brass)
Material - Contact finish	Ni + Au (nickel-gold)
Material - Contact carriers	PA UL94 V0
Material - Shield	CuSn (tin bronze)
Material - Shield finish	Sn (tin)
Material - Stuffer cap	PA UL94-V0
Material - Finish	Ni (nickel)
RoHS	compliant

Environmental conditions

Temperature (min. - max.)	
Note for Temperature - Operating	plug / jack
Temperature - Operating °C	-40 °C - 85 °C
Temperature - Operating °F	-40 °F - 185 °F
Protection category	IP67 when plugged in
Overvoltage category	II
Degree of pollution	3

Approvals

UL listed (file no.)		DUXR.E178484
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Standards/Regulations

Application-specific communications cabling systems	
Profinet	yes
Connectors for electronic equipment	
circular connector	M12 connector following to DIN EN 61076-2-101:2012
Connectors for electronic equipment - Tests and measurements	
Test standard for connectors (engaging and separating connectors under electrical load)	DIN-EN 60512-99-001

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Standards/Regulations

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)

Classifications

ETIM 5.0	EC001121
ETIM 6.0	EC001121
ETIM 7.0	EC002635
ETIM 8.0	EC002635
ETIM 9.0	EC002635

Packing details

Type of packaging	10 pc(s) / box
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Accessories from

P/N	Designation
14040000-E	MCO IP69k protective housing for outdoor use, set for exposed installation
14040010-E	MCO IP69k Protective housing for outdoor use, set with mounting bracket
14040100-E	MCO IP69k Protective housing for outdoor use, set wall/ housing bushing

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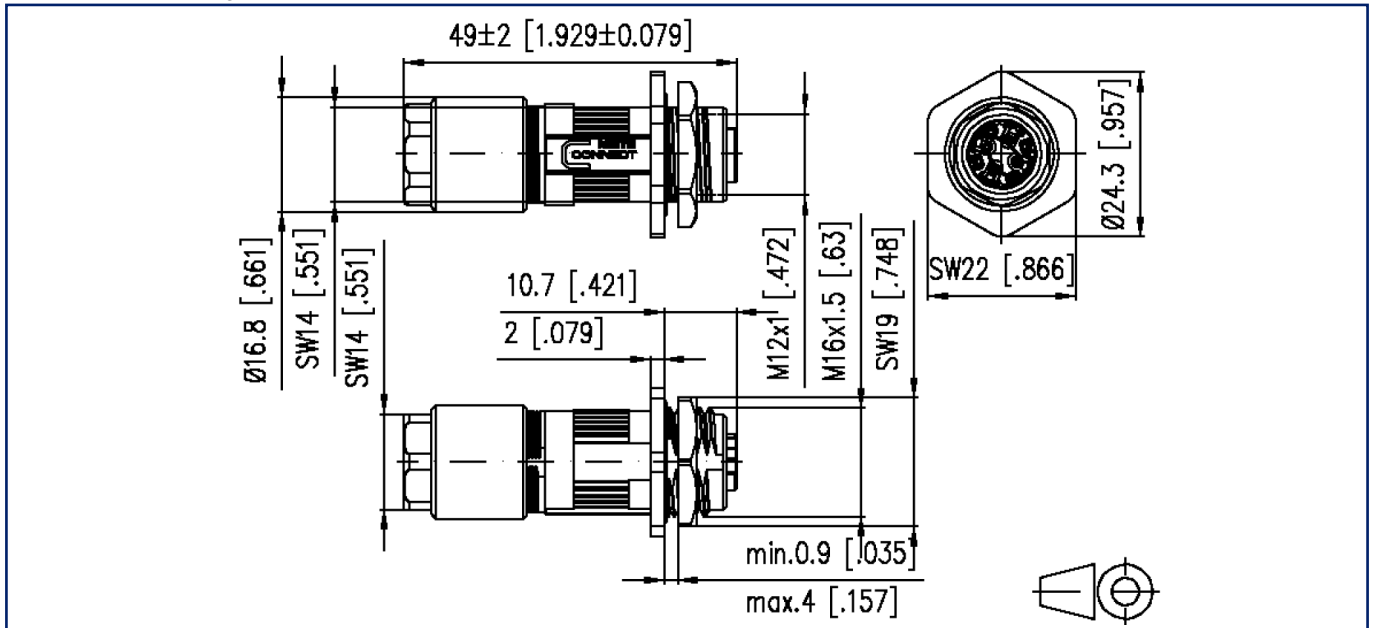
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