

Data sheet

M12 Jack D-coded IP67

Cat. 5, Ø 6-9.7 mm, field assembly

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P/N

MMF881A115

EAN 4251394625249

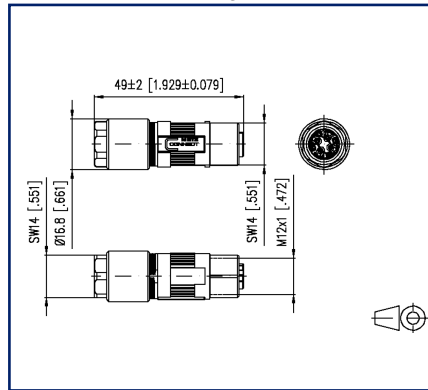
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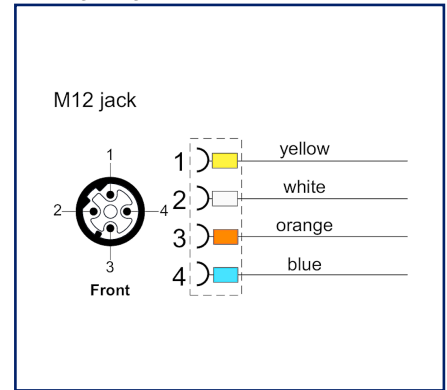
Illustrations



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
- 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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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)	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
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.

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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 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

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)



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Materials and material properties

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

Standards/Regulations

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

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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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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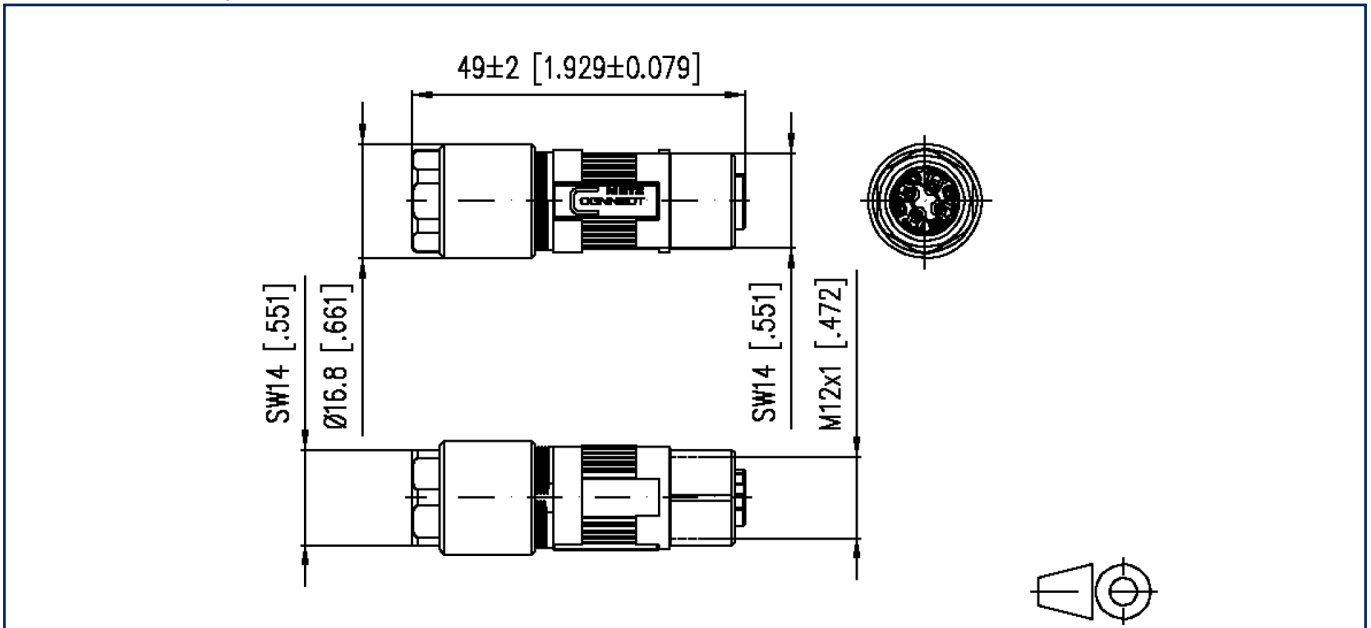
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