

Data sheet

**M12 plug, D-coded, IP67, Cat.5, Ø 4-6 mm,
field assembly, straight**

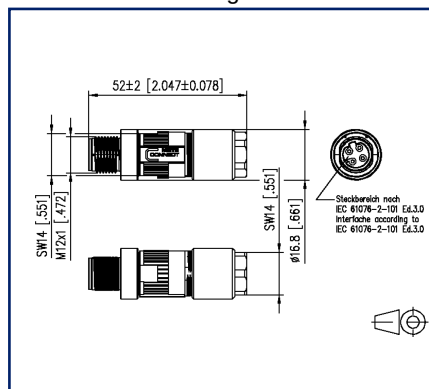
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P/N
MNF891A115
EAN 4251394672793
2026/08/21
Version: O

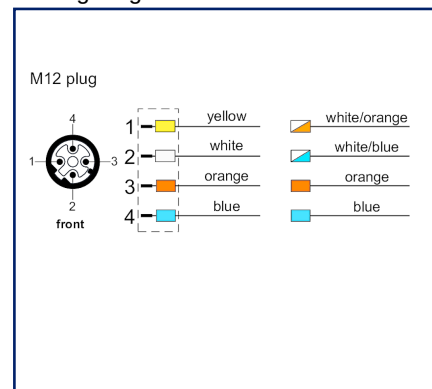
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

- field-attachable M12 plug, Cat.5, D-coded based on DIN EN 61076-2-101
- for a 4 wire cable connection
- connection of AWG 26/7 - 22/7, AWG 24/1 - 22/1 possible
- solid copper wire diameter from 0.4 to 0.64 mm
- stranded copper wire diameter from 0.48 to 0.76 mm
- conductor diameter up to 1.6 mm
- cable jacket from 4.0 to 6.0 mm
- consists of only 2 parts
- easy assembly - connection without special tools
- zinc die-cast housing for industrial use
- 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	plug
Shielding	shielded
Transmission technology	Copper
Dimensions	
Dimension (L x W x H)	52 mm x 16.8 mm x 16.8 mm
Dimension (L x W x H)	2.047 in. x 0.661 in. x 0.661 in.
Field assembly ability	yes
Labeling option	on housing

Transmission characteristics

Category (ISO)	5
Category (TIA)	5

Connections/interfaces

Connector technology interface 1	IDC-connection
Connector technology interface 2	M12-plug
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 24/1 - AWG 22/1
Conductor cross section, solid wire	0.205 mm ² - 0.324 mm ²
Conductor diameter, solid wire (bare copper)	0.511 mm - 0.643 mm
Conductor diameter, solid wire (bare copper)	0.02 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	4 mm - 6 mm
Cable sheath diameter	0.197 in. - 0.382 in.

Cable access/outlet straight M12

Electrical characteristics

Current carrying capacity	max. 1 A
Rated voltage	60 V
Insulation resistance	min. 100 MOhm
Dielectric strength conductor-conductor (secondary)	1400 V DC

Mechanical data

Mounting method	screwable
Life - Number of mating cycles	min. 100

Materials and material properties

Material - Housing	GD-Zn
Material - Contact	CuZnPb (brass)
Material - Contact finish	Ni + Au (nickel-gold)
Material - Contact carriers	PA UL 94 V0
Material - Shield	CuSn
Material - Shield finish	Sn
Material - Stuffer cap	PA UL94-V0
Halogen free	yes
Material - Finish	Ni (nickel)
RoHS	compliant



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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
Protection category	IP65, IP67 when plugged in
Particulate ingress	IP6X when plugged in
Liquid ingress/immersion	IPX5, IPX7 when plugged in
Damp heat	25 °C / +40 °C / 93% RH // 5 cycles
Overvoltage category	III
Degree of pollution	2
Shock	490 m/s ²

Approvals

UL listed (file no.)



DUXR.E178484

Standards/Regulations

Application-specific communications cabling systems	
Profinet	yes
Connectors for electronic equipment	
circular connector	DIN EN 61076-2-101
Railway applications	
Contact holder	Thermoplastic HL1-HL3; R22, R23 according to EN 45545-2:2020+A1:2023
Flammable mass (g)	1.2 g
Stuffer cap	Thermoplastic HL1-HL3; R22, R23 according to EN 45545-2:2020+A1:2023
Flammable mass (g)	0.97 g
Sealings	Elastomer
Flammable mass (g)	2.18 g
Shock and vibration	EN 50155:2021, EN 61373:2010 Class 1 Category B
Salt spray	EN 50155:2021, (DIN EN 60068-2-11:2000-02/ 48-hour KA test)



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Technical Data**Classifications**

ETIM 7.0	EC002635
ETIM 8.0	EC002635
ETIM 9.0	EC002635
ETIM 10.0	EC002635

Packing details

Type of packaging	10 pc(s) / box
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Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way.



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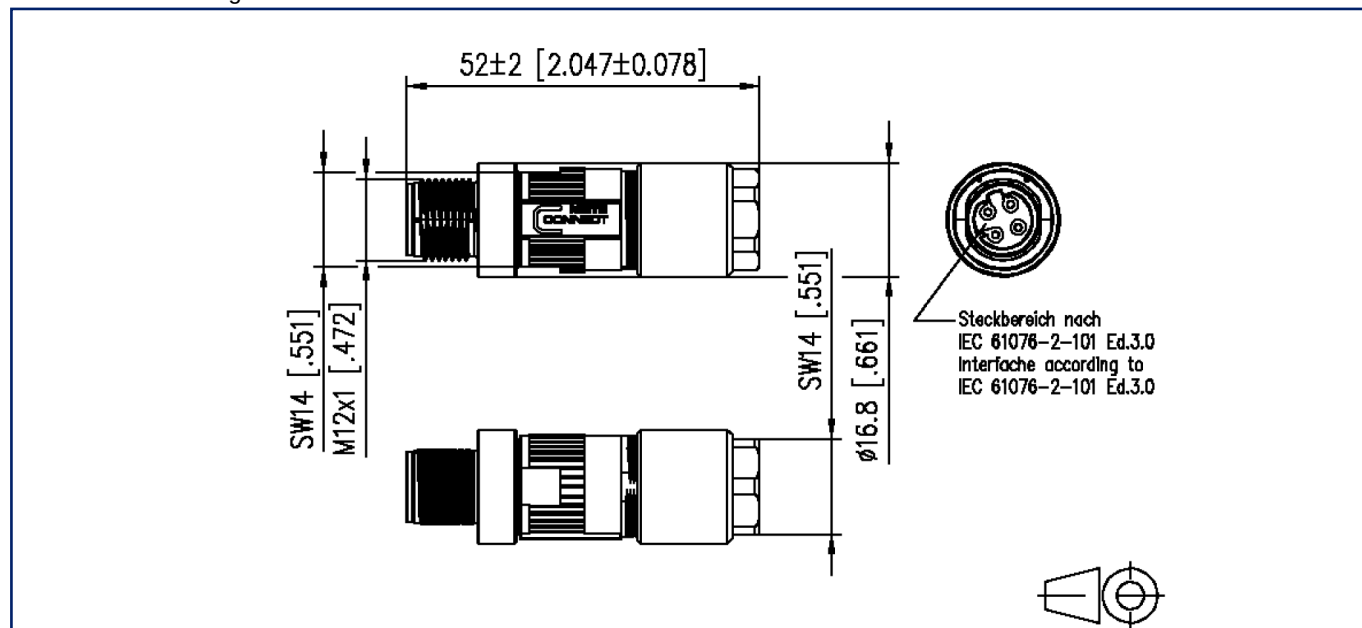
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