

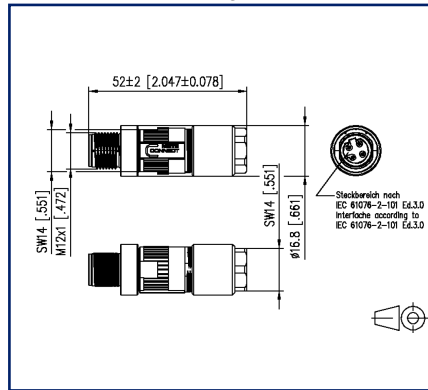
## Data sheet

**M12 plug, D-coded, IP67**  
**Cat. 5, field assembly, straight**

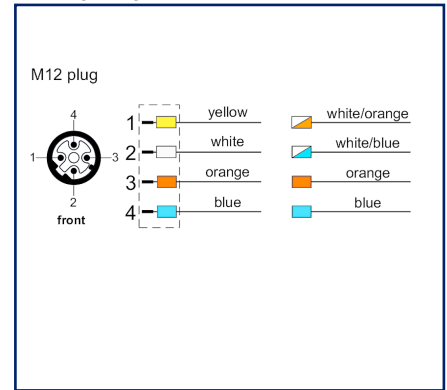
### Illustrations



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 6.0 to 9.7 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

# P | Cabling

Data sheet

Page 2/8

**M12 plug, D-coded, IP67**  
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P/N  
**MNF881A115**  
**EAN 4250184190318**  
 2023/05/02  
 Version: N

## 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 <sup>2</sup> - 0.324 mm <sup>2</sup>
Conductor diameter, solid wire (bare copper)	0.511 mm - 0.643 mm
Conductor diameter, solid wire (bare copper)	0.02 in. - 0.025 in.

# P | Cabling

Data sheet

Page 3/8

**M12 plug, D-coded, IP67**  
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P/N  
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 2023/05/02  
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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 mm <sup>2</sup> - 0.355 mm <sup>2</sup>
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	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 (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
Material - Finish	Ni (nickel)
RoHS	compliant

# P | Cabling

Data sheet

Page 4/8

**M12 plug, D-coded, IP67**  
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**P/N**  
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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
Particulate ingress	IP6X when plugged in
Liquid ingress/immersion	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 <sup>2</sup>

### 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	
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 R24 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)

# P | Cabling

Data sheet

**M12 plug, D-coded, IP67****Cat. 5, field assembly, straight**

Page 5/8

P/N

MNF881A115

EAN 4250184190318

2023/05/02

Version: N

## Technical Data

### Classifications

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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Data sheet

**M12 plug, D-coded, IP67**

**Cat. 5, field assembly, straight**

Page 6/8

P/N

**MNF881A115**

**EAN 4250184190318**

2023/05/02

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## Accessories

P/N	Designation
700669	M12 plug protection cap IP54



# P | Cabling

Data sheet

**M12 plug, D-coded, IP67**

**Cat. 5, field assembly, straight**

Page 7/8

P/N

**MNF881A115**

**EAN 4250184190318**

2023/05/02

Version: N

## 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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Page 8/8

P/N

MNF881A115

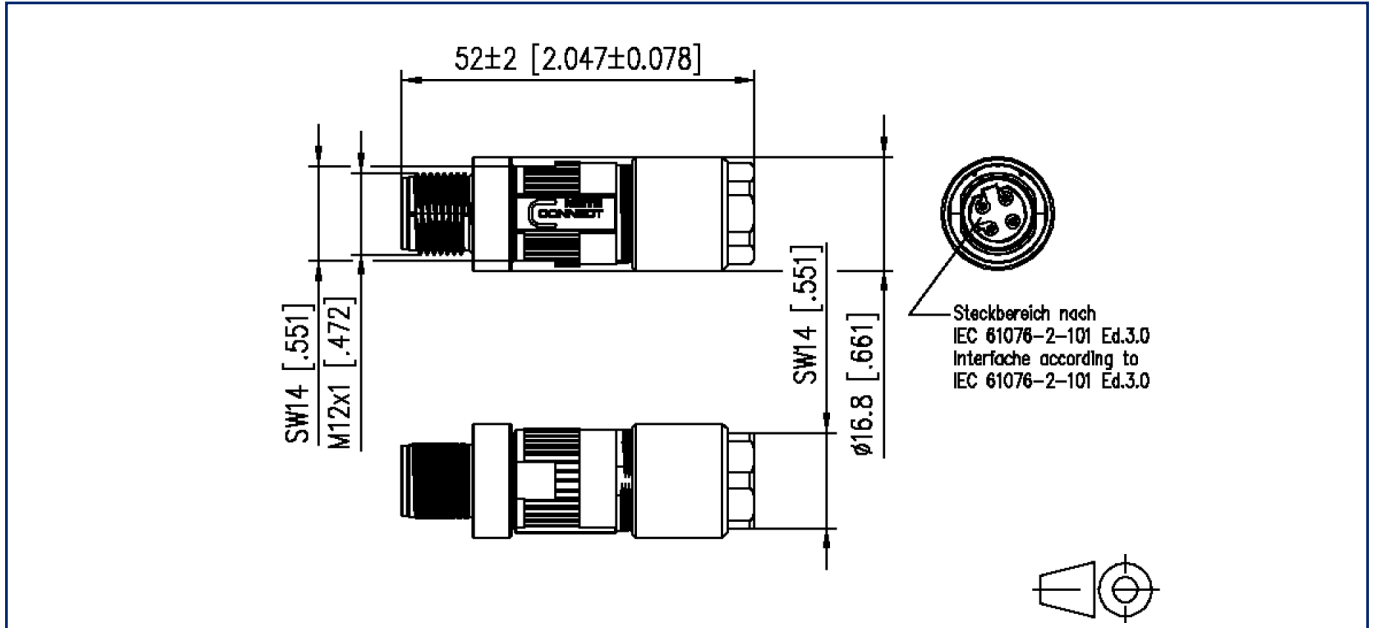
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Wiring diagram

