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Connector, PROFINET CAT6_A (10 Gbps), 8-position, halogen-free, shielded, Plug straight M12 SPEEDCON, X-coded, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

Your advantages

- ${\ensuremath{\,^{\scriptstyle\blacksquare}}}$ Safe use in the field, thanks to a high degree of protection
- Flexible: connectors for on-site assembly
- ☑ Insulation displacement connection: innovative and time-saving assembly without stripping the single wire
- Save time, thanks to installation with SPEEDCON fast locking system
- ☑ Reliable signal transmission 360° shielding in environments with electromagnetic interference



Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 997898
GTIN	4046356997898
Weight per Piece (excluding packing)	43.700 g
Custom tariff number	85366990
Country of origin	Germany

Technical data

Dimensions

Wrench size, union nut	15 mm
Diameter housing	19 mm
Length	58 mm
External cable diameter	5 mm 9.7 mm
Stripping length of the sheath ≥ 80 mm	
Ambient conditions	

Ambient conditions

Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
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Technical data

Ambient conditions

Ambient temperature (assembly)	-5 °C 50 °C
Degree of protection	IP65
	IP67

General

Note	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
Rated current at 40°C	0.5 A
Rated voltage	48 V AC
	60 V DC
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	X - data
Standards/regulations	M12 connector IEC 61076-2-109
	Shock, vibration EN 50155:2001
Signal type/category	PROFINET CAT6 _A (IEC 11801), 10 Gbps
Status display	No
Overvoltage category	Ш
Degree of pollution	3
Connection method	Insulation displacement connection
Conductor cross section	0.25 mm² 0.5 mm² (flexible)
	0.25 mm ² 0.5 mm ² (solid)
Conductor cross section AWG	24 20 (flexible)
	24 20 (solid)
Wire diameter including insulation	0.75 mm 2 mm
Frequency of connections between conductors of the same cross section	10
Wire insulation material	PVC / PE / PP / rubber
Structure of individual litz in acc. with VDE 0295 / smallest wire diameter	Class 2-6
Insertion/withdrawal cycles	≥ 100
Torque	M12 knurl
	5 Nm (Pressure nut)

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR



Technical data

Material

Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)	
Standards and Regulations		
Standard designation	M12 connector	
Standards/regulations	IEC 61076-2-109	
Standard designation	Shock, vibration	
Standards/regulations	EN 50155:2001	
Flammability rating according to UL 94 V0		
Environmental Product Compliance		

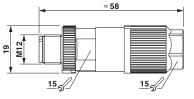
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Schematic diagram



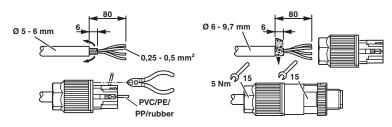
Dimensional drawing



Pin assignment M12 plug, 8-pos., view plug side

Plug, M12 x 1, straight, shielded

Functional drawing



Classifications

eCl@ss

eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102



Classifications

ETIM

ETIM 5.0		EC002635
ETIM 6.0		EC002635
Approvals		
Approvals		
Approvals		
EAC		
Ex Approvals		
Approval details		
EAC	EAC	EAC-Zulassung
Accessories		
Accessories		
Electronics pliers		
Diagonal cutter - MICRO	DFOX-SB - 1212489	
Å		thout chamfer, with opening spring, mirror-polished and oiled, 2-component nedium hard 1.2 mm; hard 0.5 mm diameter

Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



Screwdriver tools



Accessories

Tool - SACC BIT M12-D20 - 1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Stripping tool

Stripping tool - WIREFOX-D 40 - 1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Accessories

Shielding foil - VS-08-RJ45-FOLIEN-SET - 1417184

Shielding foil set, 25 pieces, replacement for RJ45 and M12 Quickon connector



Stripping tool - VS-CABLE-STRIP-VARIO - 1657407



Stripping tool, for the multi-level stripping of shielded cables

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