

Bus system cable - SAC-4P-M12MSD/ 5,0-933 - 1524310

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Bus system cable, PROFINET CAT5 (100 Mbps), 4-position, PVC, green RAL 6018, shielded, Plug straight M12, D-coded, on free cable end, Cable length: 5 m



Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	380.000 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	5 m
Stripping length of the free conductor end	50 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
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	4 A
Rated voltage	250 V
Number of positions	4
Insulation resistance	≥ 100 MΩ

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Technical data

General

Coding	D - data
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated

Standards and Regulations

Flammability rating according to UL 94	V0
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Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
Cable abbreviation	2YY(ST)CY
UL AWM style	21694
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm ²
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	1.55 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Cable weight	67 kg/km
Outer sheath, material	PVC

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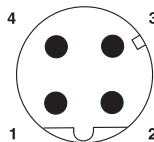
Technical data

Cable

Material, inner sheath	PVC
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq 500 \text{ M}\Omega \cdot \text{km}$
Loop resistance	$\leq 120 \text{ }\Omega \text{ (per km)}$
Wave impedance	$100 \text{ }\Omega \pm 15 \text{ }\Omega \text{ (at 100 MHz)}$
Signal speed	0.66 c
Signal runtime	5.3 ns/m
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m} \text{ (At 10 MHz)}$
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	According to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant According to UL 1581, Section 1200
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-40 °C ... 70 °C (cable, flexible installation)

Drawings

Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

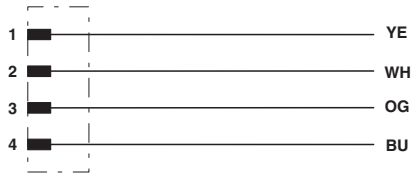
Cable cross section



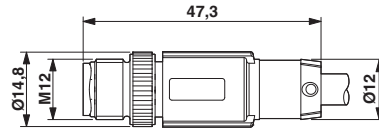
PROFINET PVC stranded CAT5 [93B]

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Circuit diagram



Dimensional drawing



Contact assignment of the M12 connector

Plug, M12 x 1, straight, shielded

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501