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Network cable - VS-OE-M12MS-93R-LI/2,0 - 1416251

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Bus system cable, PROFINET, 4-pos., green PVC, shielded, straight M12 D-coded plug on the free conductor end, length: 2 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 473415

Technical data

Dimensions

Length of cable	2 m
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Ambient conditions

Degree of protection	IP65
	IP67

General data

Number of positions	4
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps

Characteristics head 1

Head type	Plug straight M12
No. of positions (pin connector pattern)	4

Characteristics head 2

Head type	free cable end
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Cable

Cable type	PROFINET robot CAT5
Cable type (abbreviation)	93R
UL AWM style	20233 (80°C/300 V)
Cable structure	1x4xAWG22/19; S/TQ
Conductor cross section	4x 0.34 mm ²

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Technical data

Cable

AWG signal line	22
Conductor structure signal line	19x 0.15 mm
Core diameter including insulation	1.5 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 1 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	5 x D
Torsion force	± 180 °/m (1,000,000 torsion cycles)
Cable weight	55 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Conductor resistance	≤ 120 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Signal runtime	4.8 ns/m
Nominal voltage, cable	300 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 IEC 60332-1-2
Halogen-free	According to IEC 60754-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	UV resistant According to UL 1581, Section 1200
Ambient temperature (operation)	-40 °C ... 80 °C
	-40 °C ... 80 °C
Ambient temperature (installation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C

Classifications

eCl@ss

eCl@ss 4.0	272607xx
eCl@ss 4.1	27260701
eCl@ss 5.0	27260701
eCl@ss 5.1	27060307
eCl@ss 6.0	27060390

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Classifications

eCl@ss

eCl@ss 7.0	27060390
eCl@ss 8.0	27279218

ETIM

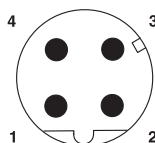
ETIM 4.0	EC002599
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	31261501
UNSPSC 13.2	26121616

Drawings

Schematic diagram



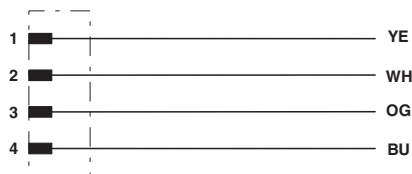
Pin assignment M12 male connector, 4-pos., D-coded, male side

Cable cross section



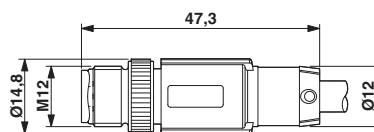
PROFINET robot CAT5 [93R]

Circuit diagram



Contact assignment of the M12 connector

Dimensional drawing



Plug, M12 x 1, straight, shielded

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Product	Code	Reference	Product link
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