



Automatización Eléctrica
Especialistas en Automatización

At the end of this document you will find links to products related to this catalog. You can go directly to our shop by clicking [HERE](#). [HERE](#)

Network cable - VS-M12MSD/5,0-93X/M12MSDOD - 1454244

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Network cable, PROFINET CAT5 (100 Mbps), Ethernet CAT5 (100 Mbps), 4-position, RADOX® GKW S halogen-free, black-gray RAL 7021, shielded, Plug straight M12 / IP69K, Coding: D, on Plug straight M12 / IP69K, Coding: D, Cable length: 5 m, for outdoor applications, With high-grade steel knurl



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 568852

Technical data

Dimensions

Length of cable	5 m
-----------------	-----

Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C
	-40 °C ... 85 °C (On sudden changes in temperature (according to IEC 60512-11-4))
Degree of protection	IP65
	IP67
	IP68
	IP69K

General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Coding	D - data
Standards/regulations	M12 connector IEC 61076-2-101
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	Ethernet CAT5 (IEC 11801), 100 Mbps
Status display	No
Degree of pollution	3

Network cable - VS-M12MSD/5,0-93X/M12MSDOD - 1454244

Technical data

General

Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material of grip body	PP
Material, knurls	High-grade steel
Sealing material	FPM

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	V0

Cable

Cable type	PROFINET outdoors
Cable type (abbreviation)	93X
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	1.95 mm
Wire colors	white-blue, orange-yellow
Overall twist	Star quad
Shielding	Plastic-coated aluminum foil, tinned copper braided shield
Optical shield covering	100 %
External sheath, color	black RAL 9005
Outer sheath thickness	≥ 0.8 mm
External cable diameter D	7.25 mm ±0,3 mm
Minimum bending radius, fixed installation	6 x D
Minimum bending radius, flexible installation	10 x D
Cable weight	81 g/m
Outer sheath, material	RADOX® GKW S
Material conductor insulation	RADOX® Com
Conductor material	silver-plated Cu litz wires
Conductor resistance	≤ 54.4 Ω/km
Working capacitance	≤ 65 pF (core-core)
	≤ 100 pF (core-shield)
Wave impedance	100 Ω ±5 Ω (f = 100 MHz)

Network cable - VS-M12MSD/5,0-93X/M12MSDOD - 1454244

Technical data

Cable

Signal speed	66 c
Shield attenuation	40 dB (30 MHz ≤ f ≤ 100 MHz)
Coupling resistance	200.00 mΩ/m (f ≤ 30 MHz)
Nominal voltage, cable	300 V AC
Test voltage, cable	2000 V AC (50 Hz, 5 minutes)
Special properties	Fire protection in rail vehicles as per DIN 5510-2 Fire protection level 1, 2, 3, 4
	Fire protection in rail vehicles as per BS 6853 Cables inside and outside the vehicle, Cat. Ia, Ib, II
	manufactured as per EN 50288-2-2 multi-strand metallic data and control cables
	Fire protection in rail vehicles according to CEI 11170
	Fire protection in rail vehicles EN 45545-2 Risk level HL1 - HL3
Resistance to oil	acc. to EN 50306-3 section 4.8
Other resistance	Resistance to fuels acc. to EN 50306-3 section 4.9
	Resistance to acids and alkalis acc. to EN 50306-3 section 4.10
Ambient temperature (operation)	-50 °C ... 90 °C (cable, fixed installation)
	-40 °C ... 90 °C (cable, flexible installation)

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	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

ETIM

ETIM 3.0	EC000830
ETIM 4.0	EC000830
ETIM 5.0	EC001855

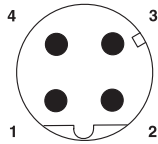
UNSPSC

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
UNSPSC 13.2	31261501

Network cable - VS-M12MSD/5,0-93X/M12MSDOD - 1454244

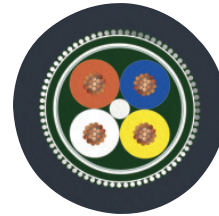
Drawings

Schematic diagram



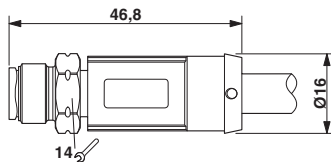
Pin assignment M12 male connector, 4-pos., D-coded, male side

Cable cross section



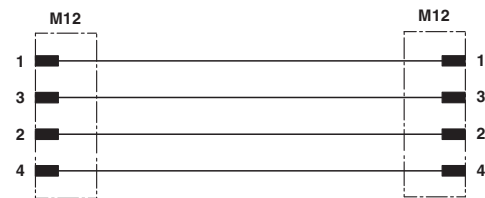
PROFINET outdoors [93X]

Dimensional drawing



M12 x 1 plug, straight

Circuit diagram



Contact assignment of the M12 plugs

Phoenix Contact 2016 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>



Below is a list of articles with direct links to our shop Electric Automation Network where you can see:

- Quote per purchase volume in real time.
- Online documentation and datasheets of all products.
- Estimated delivery time enquiry in real time.
- Logistics systems for the shipment of materials almost anywhere in the world.
- Purchasing management, order record and tracking of shipments.

To access the product, [click on the green button.](#)

Product	Code	Reference	Product link
Network cable, PROFINET CAT5 (100 Mbps), Ethernet CAT5 (100 Mbps), 4-position, RADOX® GKW S halogen-free, black-gray RAL 7021, shielded, Plug straight M12 / IP69K, Coding: D, on Plug straight M12 / IP69K, Coding: D, Cable length: 5 m, for outdoor applications, With high-grade steel knurl	1454244	VS-M12MSD/5,0-93X/M12MSDOD	Buy on EAN