

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting

1446540

<https://www.phoenixcontact.com/us/products/1446540>

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 documentation. Our general terms of use for downloads are valid.



Device connector rear mounting, PROFINET CAT5 (100 Mbps) CAT5 (100 Mbps), 4-position, Socket, straight, M12-SPEEDCON, D-coding, on free cable end, Bus line, cable length: 4 m, this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Your advantages

- Preassembled with cables in various standard lengths for immediate use
- Customer-specific assemblies and cable lengths can be supplied
- Sealed on the cable side for optimum tightness of seal
- Cable designs for all common networks and fieldbuses
- For high transmission safety: shield connection to the housing with optional EMC nut

Commercial data

Item number	1446540
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGI
GTIN	4046356647434
Weight per piece (including packing)	338.703 g
Weight per piece (excluding packing)	331.473 g
Customs tariff number	85444290
Country of origin	DE

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

Technical data

Product properties

Product type	Data cable preassembled
Application	Data
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Coding	D
Thread type	M12

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	PROFINET
Signal type/category	PROFINET CAT5 (IEC 11801:2002), 100 Mbps

Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC 60 V DC
Nominal current I_N	4 A (Plug/socket in accordance with IEC 61076-2-101, cable technical data is to be observed)
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
-----------------------------	------------

Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Brass, nickel-plated

Connection data

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting

1446540

<https://www.phoenixcontact.com/us/products/1446540>

Connection technology

Connection method	Bus line
-------------------	----------

Conductor connection

Contact connection type	Socket
Connection method	Bus line
Tightening torque	2 Nm ... 3 Nm (Installation-side)

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	D

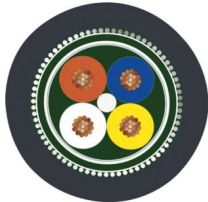
Connection 2

Head design	free cable end
-------------	----------------

Cable/line

Cable length	4 m
--------------	-----

PROFINET RADOX® railway application CAT5 reinforced [936]

Dimensional drawing	
Cable weight	81 g/m
Number of positions	4
Shielded	yes
Cable type	PROFINET RADOX® railway application CAT5 reinforced [936]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal speed	66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm ²
Wire diameter incl. insulation	1.95 mm
External cable diameter	7.25 mm ±0.3 mm
Outer sheath, material	PE-X
External sheath, color	black RAL 9005

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

Conductor material	silver-plated Cu litz wires
Material wire insulation	PE-X
Single wire, color	white-blue, orange-yellow
Thickness, outer sheath	≥ 0.80 mm
Overall twist	Star quad
Optical shield covering	100 %
Max. conductor resistance	≤ 54.4 Ω/km
Coupling resistance	200.00 mΩ/m (f ≤ 30 MHz)
Wave impedance	100 Ω ±5 Ω (f = 100 MHz)
Working capacitance	≤ 65 pF (Line-line)
	≤ 100 pF (Line-shield)
Nominal voltage, cable	300 V AC
Test voltage	2000 V AC (50 Hz, 5 minutes)
Minimum bending radius, fixed installation	6 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	44 mm
Smallest bending radius, movable installation	73 mm
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	67 dB (at 10 MHz)
	60 dB (at 31.5 MHz)
	56 dB (at 62.5 MHz)
	53 dB (at 100 MHz)
Return attenuation (RL)	35 dB (at 4 MHz)
	35 dB (at 10 MHz)
	35 dB (at 31.5 MHz)
	33 dB (at 62.5 MHz)
	33 dB (at 100 MHz)
Remote crosstalk attenuation (FEXT)	80 dB (with 1 MHz)
	70 dB (at 4 MHz)
	65 dB (at 10 MHz)
	58 dB (at 31.5 MHz)
	59 dB (at 62.5 MHz)
	67 dB (at 100 MHz)
Shield attenuation	2 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.5 dB (at 10 MHz)
	10.5 dB (at 31.5 MHz)
	14 dB (at 62.5 MHz)
	18 dB (at 100 MHz)
	40.00 dB (30 MHz ≤ f ≤ 100 MHz)
Halogen-free	in accordance with EN 50267-2-1
Flame resistance	IEC 60332-1-2
	EN 50266

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

	EN 60332-3-25
	NF C32-070, 2.1
	NF C32-070, 2.2
	UL 1685, 12 (FT4)
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Fume corrosiveness	EN 50267-2-2
Fume toxicity	BS 6853 B.1
	EN 50305, 9.2
Concentration of fumes	BS 6853 D.8.7
	EN 61034-2
	UL 1685, 12 (FT4)
Resistance to oil	according to IRM 902, 72 h at 100 °C
Fire protection in rail vehicles	BS 6853 (Category Ia, Ib, II)
	GM/RT 2130 (Category Ia, Ib, II)
	EN 45545 (Risk level HL1 - HL3)
	DIN 5510 (Fire protection level 1, 2, 3, 4)
	NF F16-101 (Category A1, A2, B)
	NF F16-101 (Class C/F0)
	NFPA 130
	UNI CEI 11170 (Risk level LR1 - LR4)
Other resistance	Resistance to fuels (according to IRM 903, 168 h at 70 °C)
Ambient temperature (operation)	-50 °C ... 90 °C (cable, fixed installation)
	-40 °C ... 90 °C (Cable, flexible installation)

Standards and regulations

Standard designation	M12 circular connector
Standards/specifications	according to IEC 61076-2-101

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting

1446540

<https://www.phoenixcontact.com/us/products/1446540>

Drawings

Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1446540>



EAC

Approval ID: 19060508

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

Classifications

ECLASS

ECLASS-13.0	27440103
ECLASS-15.0	27440103

ETIM

ETIM 10.0	EC003570
-----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

VS-M12FSBP-OE-936-4,0 - Device connector rear mounting



1446540

<https://www.phoenixcontact.com/us/products/1446540>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	ca3fe776-e986-47ef-a94b-6b4cd7fe8819

Phoenix Contact 2026 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com