

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

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, degree of protection: IP65/IP67, cable length: 5 m, number of positions: 8, 1 Gbps, CAT5, connection method: Cable connection, Ethernet, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1238757

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	1407877
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	ABQ
Product key	ABQDGI
Catalog page	Page 401 (C-2-2019)
GTIN	4046356475402
Weight per piece (including packing)	271.4 g
Weight per piece (excluding packing)	261.11 g
Customs tariff number	85444290
Country of origin	DE

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Technical data

Notes

Notes on operation	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
--------------------	--

Product properties

Product type	Data cable preassembled
Application	Data
	On the device side
Sensor type	Ethernet
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Thread type	M12

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	$\leq 3 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
Nominal current I_N	2 A
Transmission medium	Copper
Wave impedance	100 Ω

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
Outer sheath, material	PUR

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Conductor material	Bare Cu litz wires
--------------------	--------------------

Connection data

Connection technology	
Connection method	Cable connection

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

Connector


Connection 1	
Type	Flush-type female connector straight M12
Locking type	SPEEDCON
Coding type	A (Standard)
Insertion/withdrawal cycles	≥ 100
Degree of protection	IP67

Connection 2	
Type	free cable end

Cable/line

Cable length	5.00 m
--------------	--------

Ethernet flexible CAT5, 4-pair [94B]

Dimensional drawing	
Cable weight	47 kg/km
UL AWM Style	20963 (80°C/30 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet flexible CAT5, 4-pair [94B]
Conductor structure	4x2xAWG26/7, SF/UTP
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.16 mm
AWG signal line	26

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Conductor cross section	4x 2x 0.14 mm ²
Wire diameter incl. insulation	0.96 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Thickness, outer sheath	1.05 mm
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Optical shield covering	70 %
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	48 nF/km (at 1 kHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	≤ 100 N
Near end crosstalk attenuation (NEXT)	71.3 dB (with 1 MHz)
	62.3 dB (at 4 MHz)
	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
	23 dB (at 4 MHz)

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Return attenuation (RL)	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Shield attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
Resistance to oil	in accordance with EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)
	IP65/IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
	-25 °C ... 85 °C (Cable, flexible installation)

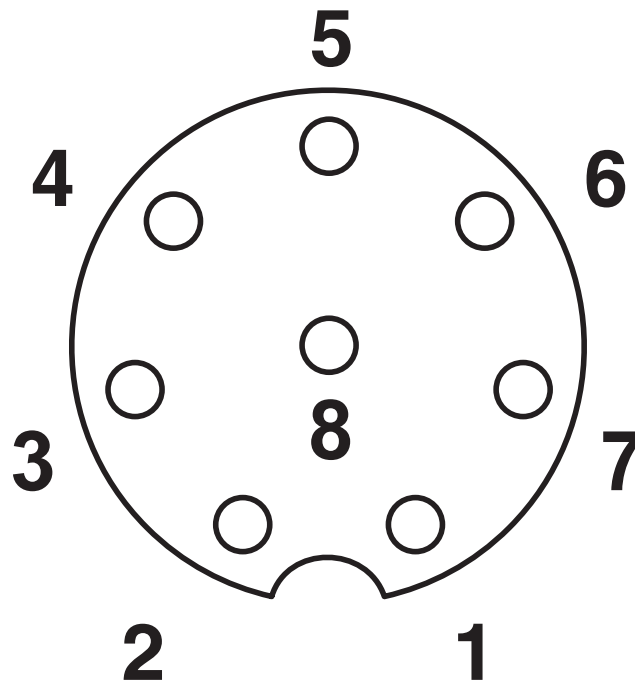
VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting

1407877

<https://www.phoenixcontact.com/in/products/1407877>

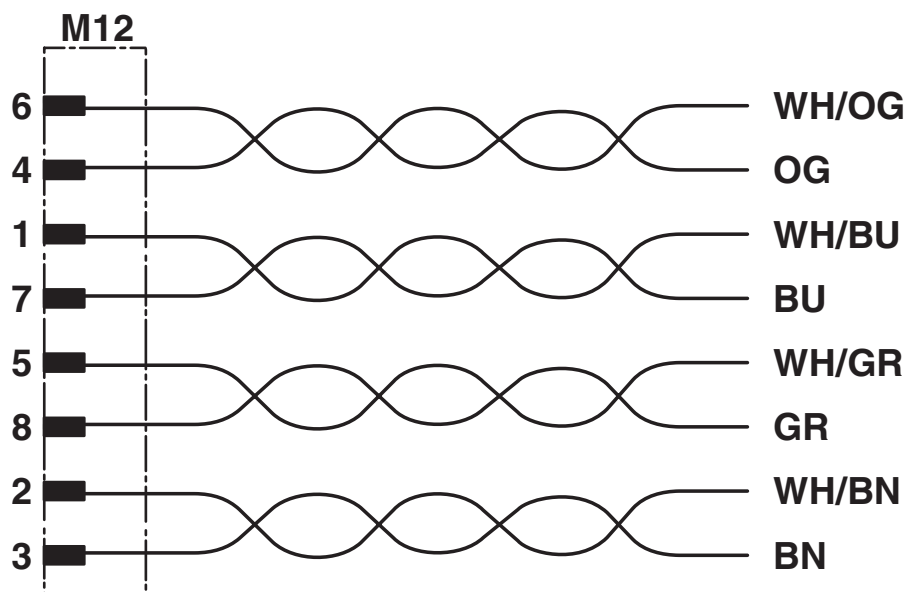
Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Approvals

📄 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/1407877>



EAC

Approval ID: 19060508

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Classifications

ECLASS

ECLASS-11.0	27060308
ECLASS-12.0	27060308
ECLASS-13.0	27060308

ETIM

ETIM 9.0	EC001262
----------	----------

UNSPSC

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

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

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	f51de71f-3cad-4d7a-8eea-e22d1c914f60

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

Accessories

WP-CTA POM 13,0 BK - Protective hose adapter

1422884

<https://www.phoenixcontact.com/in/products/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

WP-PA HF 13,0 BK - Protective hose

3240681

<https://www.phoenixcontact.com/in/products/3240681>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inside diameter: 10 mm, Total length: 50 m

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

WP-PA HF-HB 13,0 BK - Protective hose

3240839

<https://www.phoenixcontact.com/in/products/3240839>



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inside diameter: 10 mm, Total length: 50 m

SACC-M12MS-8QO SH ETH - Data connector

1421679

<https://www.phoenixcontact.com/in/products/1421679>



Data connector, Ethernet CAT5 (1 Gbps), 8-position, halogen-free, shielded, Plug straight M12, coding: A, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

SACC-M12MR-8Q SH - Data connector

1553653

<https://www.phoenixcontact.com/in/products/1553653>



Data connector, Ethernet CAT5 (1 Gbps), 8-position, shielded, Plug angled M12, coding: A, Insulation displacement connection, knurl material: Brass, nickel-plated, external cable diameter 4 mm ... 8 mm

SACC-M12FS-8QO SH ETH - Data connector

1421680

<https://www.phoenixcontact.com/in/products/1421680>



Data connector, Ethernet CAT5 (1 Gbps), 8-position, halogen-free, shielded, Socket straight M12, coding: A, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

SACC-M12FR-8Q SH - Data connector

1553666

<https://www.phoenixcontact.com/in/products/1553666>



Data connector, Ethernet CAT5 (1 Gbps), 8-position, shielded, Socket angled M12, coding: A, Insulation displacement connection, knurl material: Brass, nickel-plated, external cable diameter 4 mm ... 8 mm

VS-08-RJ45-5-Q/IP20 - RJ45 connector

1656725

<https://www.phoenixcontact.com/in/products/1656725>



RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Plastic, connection method: Insulation displacement connection, connection cross section: AWG 26- 23, cable outlet: straight, color: traffic grey A RAL 7042, Ethernet

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

VS-08-RJ45-5-Q/IP20 BK - RJ45 connector

1658008

<https://www.phoenixcontact.com/in/products/1658008>



RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Plastic, connection method: Insulation displacement connection, connection cross section: AWG 26- 23, cable outlet: straight, color: black, Ethernet

CUC-IND-C1ZNI-S/R4IE8 - RJ45 connector

1421607

<https://www.phoenixcontact.com/in/products/1421607>



RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: Insulation displacement connection, connection cross section: AWG 26- 24, cable outlet: straight, color: green, Ethernet

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

CUC-IND-C1ZNI-T/R4IE8 - RJ45 connector

1421877

<https://www.phoenixcontact.com/in/products/1421877>



RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: Insulation displacement connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet

CUC-IND-C1ZNI-B/R4IE8 - RJ45 connector

1421876

<https://www.phoenixcontact.com/in/products/1421876>



RJ45 connector, design: RJ45, degree of protection: IP20, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: Insulation displacement connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

CUC-V06-C1PGY-S/R4CE8:1 - RJ45 connector

1414383

<https://www.phoenixcontact.com/in/products/1414383>



RJ45 connector, design: RJ45, degree of protection: IP67, number of positions: 8, 1 Gbps, CAT6, material: Plastic, connection method: Crimp connection, connection cross section: AWG 27- 24, cable outlet: straight, color: gray, Ethernet/PROFINET

CUC-V06-C1PBK-S/R4CE8:1 - RJ45 connector

1414408

<https://www.phoenixcontact.com/in/products/1414408>



RJ45 connector, design: RJ45, degree of protection: IP67, number of positions: 8, 1 Gbps, CAT6, material: Plastic, connection method: Crimp connection, connection cross section: AWG 24- 27, cable outlet: straight, color: black, Ethernet/PROFINET

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

CUC-V14-C1ZNI-S/R4E8 - RJ45 connector

1422661

<https://www.phoenixcontact.com/in/products/1422661>



RJ45 connector, degree of protection: IP65/IP67, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: straight, Ethernet

CUC-V14-C1ZNI-T/R4E8 - RJ45 connector

1422663

<https://www.phoenixcontact.com/in/products/1422663>



RJ45 connector, degree of protection: IP65/IP67, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet

VS-M12FSBP-OE-94B-LI/5,0 - Device connector rear mounting



1407877

<https://www.phoenixcontact.com/in/products/1407877>

CUC-V14-C1ZNI-B/R4E8 - RJ45 connector

1422662

<https://www.phoenixcontact.com/in/products/1422662>



RJ45 connector, degree of protection: IP65/IP67, number of positions: 8, 1 Gbps, CAT5, material: Metal, connection method: IDC fast connection, connection cross section: AWG 26- 24, cable outlet: angled, Ethernet

VS-PPC-C1-RJ45-POBK-PG9-8Q5 - RJ45 connector

1657834

<https://www.phoenixcontact.com/in/products/1657834>



RJ45 connector, degree of protection: IP65/IP67, number of positions: 8, 1 Gbps, CAT5 (IEC 11801:2002), material: Plastic, connection method: IDC fast connection, connection cross section: AWG 26- 22, cable outlet: straight, color: black, Ethernet

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in