

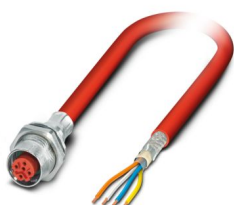
VS-FSDBPS-OE-93K-LI/2,0 - Device connector rear mounting



1419156

<https://www.phoenixcontact.com/pc/products/1419156>

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Device connector rear mounting, PROFINET CAT5 (100 Mbps) CAT5 (100 Mbps), 4-position, PVC halogen-free, green RAL 6018, shielded, Socket, straight, M12-SPEEDCON, coding: D, on free cable end, Rear mounting, Cable connection, cable length: 2 m, PROFINET, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239235

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	1419156
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	ABQDGI
Catalog page	Page 317 (PC-2011)
GTIN	4046356541022
Weight per piece (including packing)	173.2 g
Weight per piece (excluding packing)	161.8 g
Customs tariff number	85444290
Country of origin	DE

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Technical data

Notes

General	Contact connection method: Crimp connection
Safety note	
Safety note	<p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <ul style="list-style-type: none">• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.• The products are suitable for applications in plant, controller, and electrical device engineering.• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.• Assembled products may not be manipulated or improperly opened.• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).• When using the product in direct connection with third-party manufacturers, the user is responsible.• For operating voltages > 50 V AC, conductive connector housings must be grounded• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.• Observe the corresponding technical data. You will find information:<ul style="list-style-type: none">o On the producto On the packing labelo In the supplied documentationo Online at phoenixcontact.com/products under the product• Only use tools recommended by Phoenix Contact• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products• Ensure that the protective or functional ground has been properly connected.• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to

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warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Product properties

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

Data management status

Article revision	10
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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	250 V
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 characteristics (category)	CAT5

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Material specifications

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

Connection data

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Connection technology

Connection method	Cable connection
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Conductor connection

Contact connection type	Socket
Connection method	Cable connection
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

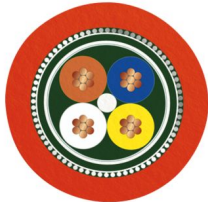
Connection 2

Head design	free cable end
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Cable/line

Cable length	2 m
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Sercos III [93K]

Dimensional drawing	
Cable weight	68 kg/km
UL AWM Style	21694 (60 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Sercos III [93K]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	approx. 1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC

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External sheath, color	signal red RAL 3020
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	Star quad
Max. conductor resistance	$\leq 120 \Omega/\text{km}$
Insulation resistance	$\geq 0.5 \text{ G}\Omega \cdot \text{km}$
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (at 10 Hz)
Wave impedance	$100 \Omega \pm 15 \Omega$ (at 100 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
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)
Ambient temperature (installation)	-20 °C ... 60 °C

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65/IP67
Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket) -40 °C ... 85 °C (without mechanical actuation)

Standards and regulations

M12

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

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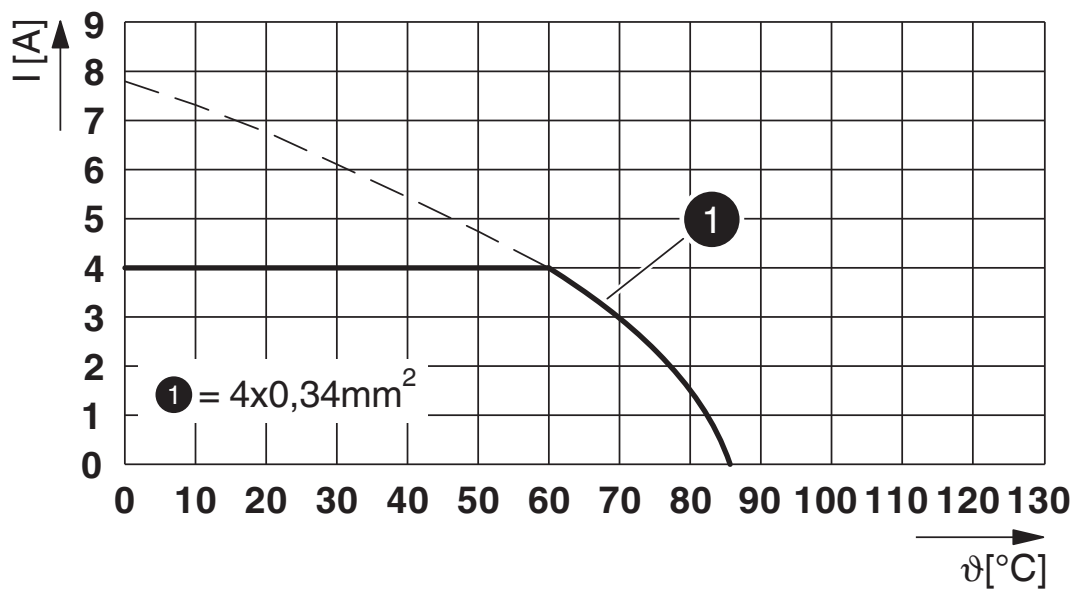


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Drawings

Diagram



I = current strength, T = ambient temperature

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Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/pc/products/1419156>



EAC

Approval ID: 19060508

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Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

ETIM 9.0	EC002635
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UNSPSC

UNSPSC 21.0	39121400
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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	3de8cb93-5879-46eb-b61a-1cf4dffbc009

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