

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

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.



M12 panel feed-through, rear mounting

Device connector rear mounting, Ethernet hybrid CAT5 (IEC 11801:2002) (100 Mbps) CAT5 (100 Mbps), 8-position, Socket, straight, M12-SPEEDCON, Y-coding, on free cable end, Hybrid cable, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239507

## 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	1425374
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	ABQDGI
GTIN	4055626399096
Weight per piece (including packing)	904.6 g
Weight per piece (excluding packing)	904.264 g
Country of origin	DE

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

## 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.
--------------------	--

### Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	• 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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> ).
	• 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"><li>o On the product</li><li>o On the packing label</li><li>o In the supplied documentation</li><li>o Online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> under the product</li></ul>
	• 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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

	<ul style="list-style-type: none"> <li>• Ensure that the protective or functional ground has been properly connected.</li> <li>• 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</li> <li>• The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).</li> </ul>
--	---

## Mounting

Mounting type	Rear mounting
Tightening torque	2 Nm ... 3 Nm (Installation-side)

## Product properties

Product type	Circular connectors (device side)
Number of positions	8
Coding	Y

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

## Material specifications

Material	Zinc die-cast (nickel-plated)
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

## Electrical properties

Nominal voltage $U_N$	48 V AC (Power and data)
	50 V DC (Power and data)
Nominal current $I_N$	0.5 A (Data)
	6 A (Power)
Transmission medium	Copper
Transmission speed	100 Mbps
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

## Connection data

### Conductor connection

Connection method	Hybrid cable
Tightening torque	2 Nm ... 3 Nm (Installation-side)

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

## Mechanical properties

### Mechanical data

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

## Connector

### Connection 1

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

### Connection 2

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

## Cable/line

### Ethernet hybrid [94H]

Cable weight	87 kg/km
UL AWM Style	21815 (80°C/300 V)
Number of positions	8
Shielded	yes
Cable type	Ethernet hybrid [94H]
Conductor structure	1x4xAWG26 + 1x4xAWG20
Conductor structure signal line	19x 0.10 mm
AWG signal line	26
Conductor structure, voltage supply	19x 0.20 mm
AWG power supply	20
Conductor cross-section	4x 0.15 mm <sup>2</sup> (Data) 4x 0.6 mm <sup>2</sup> (Power)
Wire diameter incl. insulation	1.05 mm (Data) 1.4 mm (Power)
External cable diameter	7.60 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PP (Data) PP (Power)
Single wire, color	white/orange, orange, white/green, green, white, blue, brown, black
Overall twist	1 star quad and 4 wires with 2 fillers
Optical shield covering	85 %

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

Insulation resistance	≥ 5 GΩ*km
Loop resistance	≤ 280.00 Ω/km (Data)
	≤ 34.60 Ω/km (Power)
Wave impedance	100 Ω ±15 Ω (4 MHz ... 100 MHz)
Working capacitance	nom. 50 nF (per kilometer)
Differential impedance	100 Ω ±5 % (at 100 MHz)
Nominal voltage, cable	≤ 300 V (Peak value, not for high-power applications)
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	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	38 mm
Smallest bending radius, movable installation	76 mm
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Traversing path: 4.5 m, Traversing rate: 3 m/s, Acceleration: 4 m/s <sup>2</sup>
Tensile strength	70 N (in accordance with DIN EN 50565-1 for flexible installation)
	240 N (in accordance with DIN EN 50565-1 for fixed installation)
Near end crosstalk attenuation (NEXT)	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
	38.4 dB (at 62.5 MHz)
	35.3 dB (at 100 MHz)
Shield attenuation	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.5 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
	≥ 80.00 dB (30 MHz ... 125 MHz)
Halogen-free	according to IEC 60754
	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 2556, Section 9.1 and UL 1581, Section 1100
	in accordance with UL 2556, Section 9.3 and UL 1581, Section 1060
Resistance to oil	in accordance with IEC 60811-404
	According to DIN EN 50363-10-2
Other resistance	Low adhesion
Special properties	Free of substances which would hinder coating with paint or varnish
	Silicone-free

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
	IP65/IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 80 °C (Plug / socket)
	-40 °C ... 80 °C (without mechanical actuation)

## Standards and regulations

### M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-113

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

## Drawings



Pin assignment of socket, 8-pos., Y-coded, socket side view



I = current strength, T = ambient temperature

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting

1425374

<https://www.phoenixcontact.com/us/products/1425374>

Circuit diagram



Contact assignment of the M12 connector

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

## Classifications

### ECLASS

ECLASS-13.0	27060311
-------------	----------

### UNSPSC

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

# VS-FSBPYS-OE-94H/10,0 SCO - Device connector rear mounting



1425374

<https://www.phoenixcontact.com/us/products/1425374>

## 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	b9fd551d-5297-4f3f-8a64-6ec8a78f92d6

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](mailto:info@phoenixcon.com)