

## Bus system cable - VS-FSDBPS-IP20-93G-LI/2,0 - 1419146

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>)



Assembled EtherCAT<sup>®</sup> cable, shielded, star quad, AWG 22 stranded (7-wire), RAL 6018 (yellow-green), M12 flush-type socket, SPEEDCON, 4-pos. on RJ45 connector/IP20, length: 2 m



### Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356540704
Weight per Piece (excluding packing)	173.600 g
Custom tariff number	85444210
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	2 m
-----------------	-----

#### Ambient conditions

Degree of protection	IP20 (RJ45 connector)
	IP67 (M12 connector)

#### General

Number of positions	4
Signal type/category	EtherCAT <sup>®</sup> , 100 Mbps
Insertion/withdrawal cycles	≥ 100

#### Material

Flammability rating according to UL 94	V0
--	----

#### Standards and Regulations

Flammability rating according to UL 94	V0
--	----

## Bus system cable - VS-FSDBPS-IP20-93G-LI/2,0 - 1419146

### Technical data

#### Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
Cable abbreviation	2YY(ST)CY
UL AWM style	21694
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	1.55 mm
Wire colors	White, yellow, blue, orange
Overall twist	Star quad
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	green RAL 6018
Outer sheath thickness	approx. 0.9 mm
External cable diameter D	6.5 mm ±0.2 mm
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Cable weight	67 kg/km
Outer sheath, material	PVC
Material, inner sheath	PVC
Material conductor insulation	PE
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 120.00 Ω/km
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
	76 dB (at 4 MHz)
	70 dB (at 10 MHz)
	65 dB (at 16 MHz)
	63 dB (at 20 MHz)
	60 dB (at 31.25 MHz)
	55 dB (at 62.5 MHz)
	50 dB (at 100 MHz)
Attenuation	2.1 dB (with 1 MHz)
	4 dB (at 4 MHz)
	6.3 dB (at 10 MHz)
	8 dB (at 16 MHz)
	9 dB (at 20 MHz)
	11.4 dB (at 31.25 MHz)

# Bus system cable - VS-FSDBPS-IP20-93G-LI/2,0 - 1419146

## Technical data

### Cable

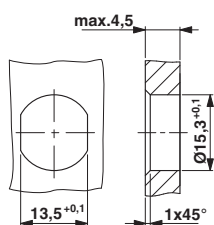
	16.5 dB (at 62.5 MHz)
	21.3 dB (at 100 MHz)
Signal speed	0.66 c
Signal runtime	5.3 ns/m
Coupling resistance	≤ 20.00 mΩ/m (at 10 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	According to UL 1685 (CSA FT 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)

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Dimensional drawing



Cable cross section

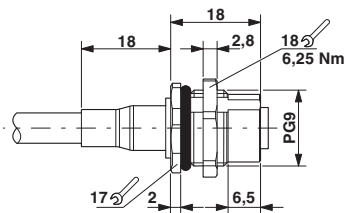


Housing cutout for Pg9 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

PROFINET PVC stranded CAT5 [93B]

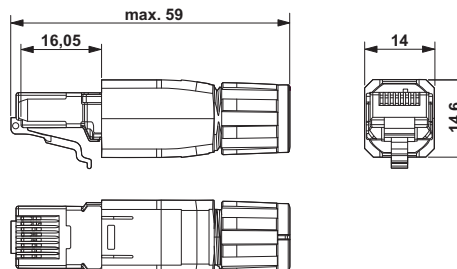
# Bus system cable - VS-FSDBPS-IP20-93G-LI/2,0 - 1419146

Dimensional drawing



M12 panel feed-through

Dimensional drawing



RJ45 connector

## Classifications

### eCl@ss

eCl@ss 4.0	27060307
eCl@ss 4.1	27060307
eCl@ss 5.0	27061801
eCl@ss 5.1	27060300
eCl@ss 6.0	27279200
eCl@ss 7.0	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC000830
ETIM 4.0	EC002599
ETIM 5.0	EC002061
ETIM 6.0	EC002061

### UNSPSC

UNSPSC 6.01	26121616
UNSPSC 7.0901	26121616
UNSPSC 11	26121604
UNSPSC 12.01	26121616
UNSPSC 13.2	39121413

## Approvals

### Approvals

## Bus system cable - VS-FSDBPS-IP20-93G-LI/2,0 - 1419146

### Approvals

Approvals


EAC

---

Ex Approvals

---

### Approval details

EAC		B.00767
-----	---	---------

---