

Patch cable - VS-IP20-IP20-93G-LI/2,0 - 1419145

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® cable, shielded, star quad, AWG 22 stranded (7-wire), RAL 6018 (yellow-green), RJ45 connector/IP20, 4-pos. on RJ45 connector/IP20, length: 2 m



Key Commercial Data

Packing unit	1 STK
GTIN	
GTIN	4046356540698

Technical data

Dimensions

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

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-10 °C ... 60 °C (cable, fixed installation)
	-10 °C ... 60 °C (cable, flexible installation)

General data

Number of positions	4
Degree of pollution	1
Rated voltage (III/3)	50 V
Connection method	IDC fast connection

Standards and Regulations

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

Cable

Cable type	PROFINET PVC stranded CAT5
Cable type (abbreviation)	93B
UL AWM style	21694

Patch cable - VS-IP20-IP20-93G-LI/2,0 - 1419145

Technical data

Cable

Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
	EtherCAT® CAT5 (IEC 11801), 100 Mbps
Cable structure	1x4xAWG22/7; SF/TQ
Conductor cross section	4x 0.34 mm²
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)
	16.5 dB (at 62.5 MHz)
	21.3 dB (at 100 MHz)

Patch cable - VS-IP20-IP20-93G-LI/2,0 - 1419145

Technical data

Cable

Signal speed	0.66 c
Signal runtime	5.3 ns/m
Coupling resistance	$\leq 20.00 \text{ m}\Omega/\text{m}$ (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)
Ambient temperature (installation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-50 °C ... 70 °C

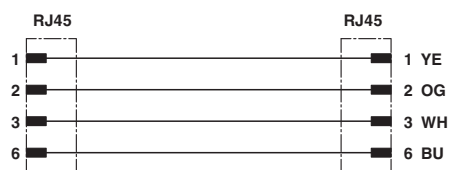
Drawings

Cable cross section

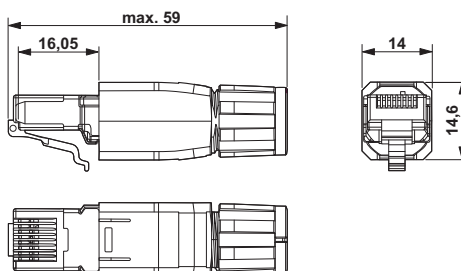


PROFINET PVC stranded CAT5 [93B]

Circuit diagram



Dimensional drawing



RJ45 connector, IP20

Approvals

Approvals

Patch cable - VS-IP20-IP20-93G-LI/2,0 - 1419145

Approvals

Approvals

EAC

Ex Approvals

Approval details

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

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>