

1407405

https://www.phoenixcontact.com/us/products/1407405

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.



Network cable, Ethernet CAT5 (1 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded (Aluminum-coated foil, tinned copper braided shield), Plug straight M12 SPEEDCON, coding: A / IP67, on free cable end, cable length: 2 m

Commercial data

Item number	1407405
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	BF1CMI
Catalog page	Page 401 (C-2-2019)
GTIN	4046356775335
Weight per piece (including packing)	122 g
Weight per piece (excluding packing)	89.98 g
Customs tariff number	85444210
Country of origin	PL



1407405

https://www.phoenixcontact.com/us/products/1407405

Technical data

Notes

General	Further products with variable cable type and variable cable
	length can be found in the accessories section

Product properties

Product type	Data cable preassembled
Sensor type	Ethernet
Number of positions	8
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	A

Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5 (based on IEC 11801), 1 Gbps

Signaling

Status display	No
Status display present	No

Electrical properties

Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	2 A
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

Connector

Connection 1

Туре	Plug straight M12 SPEEDCON / IP67
Number of positions	8
Locking type	SPEEDCON
Coding type	A (Standard)
Handle color	black
Material	CuZn (Contact)
	Ni/Au (Contact surface)
	TPU GF (Contact carriers)
	TPU, hardly inflammable, self-extinguishing (Grip)
	Zinc die-cast, nickel-plated (Screw connection)
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ



1407405

https://www.phoenixcontact.com/us/products/1407405

Tightening torque	0.4 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C 90 °C
onnection 2	
Туре	free cable end
le/line	
Cable length	2 m
hernet 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
Conductor cross section	4x 2x 0.14 mm²
Wire diameter incl. insulation	0.96 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
	water blue RAL 5021
External sheath, color	Water blue IVAL 302 I
	Bare Cu litz wires
Conductor material	
Conductor material Material wire insulation	Bare Cu litz wires
Conductor material Material wire insulation Single wire, color	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green,
Conductor material Material wire insulation Single wire, color Thickness, outer sheath	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Single wire, color Thickness, outer sheath Twisted pairs	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown 1.05 mm
Conductor material Material wire insulation Single wire, color Thickness, outer sheath Twisted pairs Overall twist	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown 1.05 mm 2 cores to the pair
Conductor material Material wire insulation Single wire, color Thickness, outer sheath Twisted pairs Overall twist Optical shield covering	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown 1.05 mm 2 cores to the pair 4 pairs for core
Conductor material Material wire insulation Single wire, color Thickness, outer sheath Twisted pairs Overall twist Optical shield covering	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown 1.05 mm 2 cores to the pair 4 pairs for core 70 %
Conductor material Material wire insulation Single wire, color Thickness, outer sheath Twisted pairs Overall twist Optical shield covering Insulation resistance	Bare Cu litz wires Foamed PE white/blue-blue, white/orange-orange, white/green-green, white/brown-brown 1.05 mm 2 cores to the pair 4 pairs for core 70 % ≥ 5 GΩ*km



1407405

https://www.phoenixcontact.com/us/products/1407405

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)
Return attenuation (RL)	23 dB (at 4 MHz)
	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)
	24.8 dB (at 62.5 MHz) 32 dB (at 100 MHz)
Halogen-free	
Halogen-free Flame resistance	32 dB (at 100 MHz)



1407405

https://www.phoenixcontact.com/us/products/1407405

Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-20 °C 80 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C 80 °C

Er

Ambient conditions

Degree of protection	IP65
	IP67
	IP65/IP67

Standards and regulations

M12

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



1407405

https://www.phoenixcontact.com/us/products/1407405

Classifications

ECLASS

	ECLASS-11.0	27060307	
	ECLASS-12.0	27060307	
	ECLASS-13.0	27060307	
ETIM			
	ETIM 9.0	EC001855	
UNSPSC			
	UNSPSC 21.0	26121600	



1407405

https://www.phoenixcontact.com/us/products/1407405

Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Phoenix Contact 2024 © - 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