

1407349

https://www.phoenixcontact.com/us/products/1407349

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 (100 Mbps), PROFINET (100 Mbps), EtherCAT® (100 Mbps), 4-position, PVC/PVC, green RAL 6018, shielded (Aluminum-coated foil, tinned copper braided shield), Plug straight M8, coding: A / IP67, on Plug straight M8, coding: A / IP67, cable length: 2 m

#### Commercial data

Item number	1407349
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF02
Product key	BF1BJI
Catalog page	Page 394 (C-2-2019)
GTIN	4046356774772
Weight per piece (including packing)	152.3 g
Weight per piece (excluding packing)	152.3 g
Customs tariff number	85444290
Country of origin	PL



1407349

https://www.phoenixcontact.com/us/products/1407349

### 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	4
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	A

#### Interfaces

Bus system	Ethernet
Signal type/category	Ethernet, 100 Mbps
	PROFINET, 100 Mbps
	EtherCAT <sup>®</sup> , 100 Mbps

### Signaling

Status display	No
Status display present	No

### Electrical properties

Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	4 A
Transmission medium	Copper

#### Connector

#### Connection 1

Туре	Plug straight M8 / IP67
Number of positions	4
Coding type	A (Standard)
Handle color	black
Material	CuSn (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



1407349

https://www.phoenixcontact.com/us/products/1407349

Tightening torque	0.2 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C 90 °C
Connection 2	
Туре	Plug straight M8 / IP67
Number of positions	4
Coding type	A (Standard)
Handle color	black
Material	CuSn (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
Tightening torque	0.2 Nm
Degree of protection	IP67
Ambient temperature (operation)	-25 °C 90 °C

#### Cable/line

Cable length	2 m
--------------	-----

#### PROFINET PVC stranded CAT5 [93B]

Dimensional drawing



Cable weight	67 kg/km
UL AWM Style	21694
Number of positions	4
Shielded	yes
Cable type	PROFINET PVC stranded CAT5 [93B]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Signal speed	0.66 c
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm²
Wire diameter incl. insulation	1.55 mm
External cable diameter	6.50 mm ±0.2 mm



1407349

https://www.phoenixcontact.com/us/products/1407349

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           Overall livist         Star quad           Optical shield covering         85 %           Insulation resistance         ≥ 500 MΩ*m           Coupling resistance         ≤ 20.00 mΩ*m           Wave impedance         100 Ω ±15 Ω (at 100 MHz)           Worninal 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, fixed installation         7 x D           Smallest bending radius, fixed installation         46 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           76 dB (at 4 MHz)         76 dB (at 4 MHz)           65 dB (at 100 MHz)         65 dB (at 100 MHz)           Shield attenuation         2.1 dB (with 1 MHz)           4 dB (at 100 MHz)         4 dB (at 100 MHz)           8 dB (at 100 MHz)         14 dB (at 3.25 MHz) <th>Outer sheath, material</th> <th>PVC</th>	Outer sheath, material	PVC
Material wire insulation         PE           Single wire, color         white, yellow, blue, orange           Thickness, outer sheath         approx. 0.90 mm           Overall twist         Star quad           Optical shield covering         85 %           Insulation resistance         ≥ 500 MΩ*km           Coupling resistance         ≤ 20.00 mΩ*m           Loop resistance         ≤ 120.00 Ω/km           Wave impedance         100 Ω ± 15 Ω (at 100 MHz)           Nominal voltage, cable         600 V           Test voltage Core/Core         2000 V (50 Hz, 1 min.)           Test voltage Core/Core         2000 v (50 Hz, 1 min.)           Test voltage Core/Shield         2000 v (50 Hz, 1 min.)           Minimum bending radius, fixed installation         3 x D           Minimum bending radius, fixed installation         7 x D           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         76 dB (at 4 MHz)           70 dB (at 10 MHz)         65 dB (at 16 MHz)           65 dB (at 10 MHz)         65 dB (at 10 MHz)           55 dB (at 62.5 MHz)         65 dB (at 10 MHz)           61 dB (at 10 MHz)         4 dB (at 16 MHz)           62 dB (at 10 MHz)         11 dB (at 10 MHz)	External sheath, color	green RAL 6018
Single wire, color         white, yellow, blue, orange           Thickness, outer sheath         approx. 0.90 mm           Overall West         Star quad           Optical shield covering         85 %           Insulation resistance         ≥ 500 MΩ*km           Coupling resistance         ≤ 20.00 mΩ/m (at 10 MHz)           Loop resistance         ≤ 120.00 Ω/km           Wave impedance         100 Ω ±15 Ω (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, fixed installation         20 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           76 dB (at 4 MHz)         65 dB (at 16 MHz)           65 dB (at 20 MHz)         60 dB (at 31.25 MHz)           55 dB (at 62.5 MHz)         60 dB (at 100 MHz)           Shield attenuation         21 dB (with 1 MHz)           4 dB (at 4 MHz)         6.3 dB (at 20 MHz)           11 d dB (at 12.25 MHz)         6.3 dB (at 100 MHz)           4 dB (at 4 MHz)         6.3 dB (at 20 MHz)	Conductor material	Tin-plated Cu litz wires
Thickness, outer sheath Overall twist Star quad Optical shield covering Bas 5% Star quad Optical shield covering Bas 5% Coupling resistance \$ 500 MΩ*km  Coupling resistance \$ 500 MΩ*km  Coupling resistance \$ 120.00 Ω/km  Wave impedance 100 Ω ± 15 Ω (at 100 MHz)  Nominal voltage, cable  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, fixed installation 7 x D  Smallest bending radius, fixed installation  Smallest bending radius, fixed installation  Near end crosstalk attenuation (NEXT)  80 dB (with 1 MHz) 76 dB (at 4 MHz) 76 dB (at 10 MHz) 65 dB (at 10 MHz) 65 dB (at 100 MHz)  Shield attenuation  Shield attenuation  Ad (at 100 MHz)  Shield attenuation  Ad (at 100 MHz)  4 dB (at 4 MHz)  6.3 dB (at 100 MHz)  11.4 dB (at 31.25 MHz)  6.3 dB (at 10 MHz)  8 dB (at 10 MHz)  11.4 dB (at 31.25 MHz)  11.5 dB (at 62.5 MHz)  11.5 dB (at 64.5 MHz)  11.5 dB (at 62.5 MHz)  11.5 dB (at 62.	Material wire insulation	PE
Overall twist         Star quad           Optical shield covering         85 %           Insulation resistance         ≥ 500 MΩ*km           Coupling resistance         ≤ 120.00 mΩ/m (at 10 MHz)           Loop resistance         ≤ 120.00 mΩ/m (at 10 MHz)           Wave impedance         100 Ω±15 Ω (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           Smallest bending radius, fixed installation         7 x D           Smallest bending radius, fixed installation         20 mm           Smallest thending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           76 dB (at 10 MHz)         65 dB (at 10 MHz)           65 dB (at 10 MHz)         65 dB (at 10 MHz)           65 dB (at 10 MHz)         65 dB (at 10 MHz)           56 dB (at 10 MHz)         63 dB (at 10 MHz)           61 dB (at 10 MHz)         63 dB (at 10 MHz)           62 dB (at 20 MHz)         63 dB (at 10 MHz)           63 dB (at 10 MHz)         63 dB (at 20 MHz)           64 dB (at 3 MHz)         63 dB (at 10 MHz)	Single wire, color	white, yellow, blue, orange
Optical shield covering         85 %           Insulation resistance         ≥ 500 MΩ¹km           Coupling resistance         ≤ 20.00 mΩ/m (at 10 MHz)           Loop resistance         ≤ 120.00 Ω/km           Wave impedance         100 Ω ±15 Ω (at 100 MHz)           Nominal voltage, cable         600 V           Test voltage Core/Core         2000 0 V (50 Hz, 1 min.)           Test voltage Core/Shield         200.00 V (50 Hz, 1 min.)           Minimum bending radius, fixed installation         3 x D           Minimum bending radius, fixed installation         7 x D           Smallest bending radius, fixed installation         20 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           7 dB (at 4 MHz)         70 dB (at 10 MHz)           65 dB (at 16 MHz)         63 dB (at 10 MHz)           65 dB (at 100 MHz)         63 dB (at 100 MHz)           Shield attenuation         21 dB (with 1 MHz)           4 dB (at 4 MHz)         63 dB (at 10 MHz)           63 dB (at 10 MHz)         63 dB (at 10 MHz)           61 dB (at 31 25 MHz)         63 dB (at 10 MHz)           61 dB (at 31 25 MHz)         63 dB (at 20 MHz)           61 dB (at 31 25 MHz)         63 dB (at 10 M	Thickness, outer sheath	approx. 0.90 mm
Section   Se	Overall twist	Star quad
Coupling resistance         ≤ 20.00 mΩ/m (at 10 MHz)           Loop resistance         ≤ 120.00 Ω/km           Wave impedance         100 Ω ±15 Ω (at 100 MHz)           Nominal voltage, cable         600 V           Test voltage Core/Core         2000.00 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, fixed installation         20 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           70 dB (at 10 MHz)         65 dB (at 16 MHz)           65 dB (at 16 MHz)         65 dB (at 25 MHz)           65 dB (at 20 MHz)         60 dB (at 31.25 MHz)           55 dB (at 62.5 MHz)         63 dB (at 10 MHz)           8 dB (at 10 MHz)         63 dB (at 10 MHz)           9 dB (at 20 MHz)         11.4 dB (at 31.25 MHz)           11.4 dB (at 31.25 MHz)         11.4 dB (at 31.25 MHz)           11.4 dB (at 31.25 MHz)         21.3 dB (at 10 MHz)           9 dB (at 20 MHz)         11.4 dB (at 31.25 MHz)           11.5 dB (at 62.5 MHz)         21.3 dB (at 10 MHz)           16.5 dB (at 62.5 MHz)         21.3 dB (at 10 MHz)           18 dB (at 10 MHz) <td>Optical shield covering</td> <td>85 %</td>	Optical shield covering	85 %
Loop resistance         ≤ 120.00 Ω/km           Wave impedance         100 Ω ±15 Ω (at 100 MHz)           Nominal voltage, cable         600 ∨           Test voltage Core/Core         2000 ∨ (50 Hz, 1 min.)           Test voltage Core/Shield         2000.00 ∨ (50 Hz, 1 min.)           Minimum bending radius, fixed installation         3 x D           Minimum bending radius, fixed installation         20 mm           Smallest bending radius, fixed installation         46 mm           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)         4 dB (at 4 MHz)           63 dB (at 10 MHz)         4 dB (at 16 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)           15.5 dB (at 62.5 MHz)         11.4 dB (at 31.25 MHz)           16.5 dB (at 62.5 MHz)         21.3 dB (at 100 MHz)           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)	Insulation resistance	≥ 500 MΩ*km
Wave impedance         100 Ω ± 15 Ω (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, fixed installation         7 x D           Smallest bending radius, fixed installation         20 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           7 dB (at 4 MHz)         70 dB (at 10 MHz)           65 dB (at 20 MHz)         63 dB (at 20 MHz)           60 dB (at 31.25 MHz)         55 dB (at 62.5 MHz)           50 dB (at 40 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 4 MHz)           6.3 dB (at 10 MHz)         4 dB (at 3.25 MHz)           1.1 dB (at 31.25 MHz)         1.1 dB (at 31.25 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         2000.00 V (50 Hz, 1 min.)           Minimum bending radius, fixed installation         3 x D           Minimum bending radius, fixed installation         20 mm           Smallest bending radius, fixed installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           7 dB (at 4 MHz)         70 dB (at 10 MHz)           65 dB (at 16 MHz)         63 dB (at 20 MHz)           60 dB (at 3.1.25 MHz)         55 dB (at 62.5 MHz)           50 dB (at 400 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)           6.3 dB (at 10 MHz)         4d B (at 4 MHz)	Loop resistance	≤ 120.00 Ω/km
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, fixed installation 7 x D  Smallest bending radius, fixed installation 20 mm  Smallest bending radius, movable installation 46 mm  Near end crosstalk attenuation (NEXT) 80 dB (with 1 MHz)  76 dB (at 4 MHz)  70 dB (at 10 MHz)  65 dB (at 10 MHz)  65 dB (at 10 MHz)  55 dB (at 62.5 MHz)  50 dB (at 100 MHz)  Shield attenuation 48 dB (with 1 MHz)  4 dB (at 4 MHz)  50 dB (at 100 MHz)  Shield attenuation 49 dB (at 20 MHz)  63 dB (at 20 MHz)  61 dB (at 31.25 MHz)  50 dB (at 100 MHz)  8 dB (at 16 MHz)  9 dB (at 20 MHz)  11.4 dB (at 31.25 MHz)  11.4 dB (at 31.25 MHz)  11.4 dB (at 31.25 MHz)  11.5 dB (at 62.5 MHz)  21.3 dB (at 100 MHz)  Flame resistance according to UL 1685 (CSA FT 4)  Resistance to oil Resistant to oil to a limited extent  UV resistant (According to UL 1581, Section 1200)  Ambient temperature (operation)  40 °C 70 °C (Cable, fixed installation)  40 °C 70 °C (Cable, fixed installation)	Wave impedance	100 $\Omega$ ±15 $\Omega$ (at 100 MHz)
Test voltage Core/Shield         2000.00 V (50 Hz, 1 min.)           Minimum bending radius, fixed installation         3 x D           Minimum bending radius, fixed installation         7 x D           Smallest bending radius, movable installation         20 mm           Smallest bending radius, movable installation         46 mm           Near end crosstalk attenuation (NEXT)         80 dB (with 1 MHz)           76 dB (at 4 MHz)         70 dB (at 10 MHz)           65 dB (at 10 MHz)         63 dB (at 20 MHz)           60 dB (at 31.25 MHz)         55 dB (at 62.5 MHz)           50 dB (at 100 MHz)         4 dB (at 4 MHz)           50 dB (at 100 MHz)         4 dB (at 4 MHz)           63 dB (at 20 MHz)         4 dB (at 16 MHz)           9 dB (at 20 MHz)         11.4 dB (at 15 MHz)           14 dB (at 16 MHz)         9 dB (at 20 MHz)           11.4 dB (at 16 MHz)         9 dB (at 20 MHz)           11.4 dB (at 16 MHz)         9 dB (at 20 MHz)           11.4 dB (at 16 MHz)         9 dB (at 20 MHz)           11.4 dB (at 16 MHz)         9 dB (at 20 MHz)           11.4 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)         16.5 dB (at 62.5 MHz)           12.3 dB (at 100 MHz)	Nominal voltage, cable	600 V
Minimum bending radius, fixed installation       3 x D         Minimum bending radius, fixed installation       20 mm         Smallest bending radius, fixed installation       46 mm         Near end crosstalk attenuation (NEXT)       80 dB (with 1 MHz)         76 dB (at 4 MHz)       70 dB (at 10 MHz)         65 dB (at 10 MHz)       63 dB (at 20 MHz)         60 dB (at 31.25 MHz)       55 dB (at 62.5 MHz)         50 dB (at 100 MHz)       4 dB (at 4 MHz)         4 dB (at 4 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)         11.4 dB (at 31.25 MHz)       11.4 dB (at 31.25 MHz)         15.5 dB (at 62.5 MHz)       21.3 dB (at 10 MHz)         16.5 dB (at 62.5 MHz)       21.3 dB (at 100 MHz)         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, lexible installation)	Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Minimum bending radius, flexible installation       7 x D         Smallest bending radius, fixed installation       20 mm         Smallest bending radius, movable installation       46 mm         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)         55 dB (at 62.5 MHz)       50 dB (at 100 MHz)         Shield 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 16 MHz)         9 dB (at 10 MHz)       11.4 dB (at 31.25 MHz)         11.4 dB (at 31.25 MHz)       16.5 dB (at 62.5 MHz)         11.4 dB (at 31.25 MHz)       16.5 dB (at 62.5 MHz)         21.3 dB (at 100 MHz)       11.4 dB (at 31.25 MHz)         16.5 dB (at 62.5 MHz)       21.3 dB (at 100 MHz)         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)	Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Smallest bending radius, fixed installation         20 mm           Smallest bending radius, movable installation         46 mm           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)         65 dB (at 20 MHz)           60 dB (at 31.25 MHz)         55 dB (at 62.5 MHz)           50 dB (at 100 MHz)         50 dB (at 100 MHz)           Shield 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)         11.4 dB (at 31.25 MHz)           11.5 dB (at 62.5 MHz)         21.3 dB (at 100 MHz)           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, fixed installation)	Minimum bending radius, fixed installation	3 x D
Smallest bending radius, movable installation       46 mm         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)       50 dB (at 100 MHz)         Shield 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)       11.4 dB (at 31.25 MHz)         16.5 dB (at 62.5 MHz)       21.3 dB (at 100 MHz)         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)	Minimum bending radius, flexible installation	7 x D
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)   55 dB (at 100 MHz)   50 dB (at 100 MHz)   63 dB (at 10 MHz)   70 dB (at 20 MHz)   70 dB (at	Smallest bending radius, fixed installation	20 mm
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) 55 dB (at 100 MHz)  Shield attenuation  2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 6.3 dB (at 10 MHz) 8 dB (at 10 MHz) 9 dB (at 10 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.5 dB (at 62.5 MHz) 11.4 dB (at 31.25 MHz) 11.5 dB (at 62.5 MHz) 11.6 dB (at 62.5 MHz) 21.3 dB (at 100 MHz) 8 excording to UL 1685 (CSA FT 4) Resistance to oil 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)	Smallest bending radius, movable installation	46 mm
70 dB (at 10 MHz)	Near end crosstalk attenuation (NEXT)	80 dB (with 1 MHz)
65 dB (at 16 MHz) 63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 55 dB (at 100 MHz)  Shield attenuation  2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 10 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)  Flame resistance according to UL 1685 (CSA FT 4)  Resistance to oil 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)		76 dB (at 4 MHz)
63 dB (at 20 MHz) 60 dB (at 31.25 MHz) 55 dB (at 62.5 MHz) 55 dB (at 62.5 MHz) 50 dB (at 100 MHz)  Shield attenuation  2.1 dB (with 1 MHz) 4 dB (at 4 MHz) 6.3 dB (at 10 MHz) 8 dB (at 10 MHz) 8 dB (at 16 MHz) 9 dB (at 20 MHz) 11.4 dB (at 31.25 MHz) 11.4 dB (at 31.25 MHz) 11.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz)  Flame resistance according to UL 1685 (CSA FT 4)  Resistance to oil Resistance to oil V resistant (According to UL 1581, Section 1200)  Ambient temperature (operation)  40 °C 70 °C (cable, fixed installation) -40 °C 70 °C (Cable, flexible installation)		70 dB (at 10 MHz)
60 dB (at 31.25 MHz)     55 dB (at 62.5 MHz)     50 dB (at 100 MHz)     Shield 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)     11.4 dB (at 31.25 MHz)     16.5 dB (at 62.5 MHz)     21.3 dB (at 100 MHz)     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)		65 dB (at 16 MHz)
55 dB (at 62.5 MHz)		63 dB (at 20 MHz)
Shield attenuation   2.1 dB (with 1 MHz)		60 dB (at 31.25 MHz)
Shield 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)         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)		55 dB (at 62.5 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)  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)		50 dB (at 100 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)  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)	Shield attenuation	2.1 dB (with 1 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)         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)		4 dB (at 4 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)  Flame resistance according to UL 1685 (CSA FT 4)  Resistance to oil Resistant to oil to a limited extent  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)		6.3 dB (at 10 MHz)
11.4 dB (at 31.25 MHz)  16.5 dB (at 62.5 MHz)  21.3 dB (at 100 MHz)  Flame resistance according to UL 1685 (CSA FT 4)  Resistance to oil Resistant to oil to a limited extent  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)		8 dB (at 16 MHz)
16.5 dB (at 62.5 MHz) 21.3 dB (at 100 MHz)  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)		9 dB (at 20 MHz)
21.3 dB (at 100 MHz)  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)		11.4 dB (at 31.25 MHz)
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, flexible installation)		16.5 dB (at 62.5 MHz)
Resistance to oil  Other resistance  UV resistant (According to UL 1581, Section 1200)  -40 °C 70 °C (Cable, flexible installation)		21.3 dB (at 100 MHz)
Other resistance  UV resistant (According to UL 1581, Section 1200)  -40 °C 70 °C (cable, fixed installation)  -40 °C 70 °C (Cable, flexible installation)	Flame resistance	according to UL 1685 (CSA FT 4)
Ambient temperature (operation)  -40 °C 70 °C (cable, fixed installation)  -40 °C 70 °C (Cable, flexible installation)	Resistance to oil	Resistant to oil to a limited extent
Ambient temperature (operation)  -40 °C 70 °C (cable, fixed installation)  -40 °C 70 °C (Cable, flexible installation)	Other resistance	UV resistant (According to UL 1581, Section 1200)
-40 °C 70 °C (Cable, flexible installation)		
	Ambient temperature (installation)	

Environmental and real-life conditions



1407349

https://www.phoenixcontact.com/us/products/1407349

#### Ambient conditions

Degree of protection	IP65
	IP67
	IP65/IP67
Ambient temperature (operation)	-25 °C 90 °C (Plug / socket)

### Standards and regulations

#### M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104



1407349

https://www.phoenixcontact.com/us/products/1407349

### Classifications

#### **ECLASS**

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



1407349

https://www.phoenixcontact.com/us/products/1407349

### 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