1414950

https://www.phoenixcontact.com/us/products/1414950

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.



Power cable, 6-position, PUR halogen-free, orange RAL 2003, Advanced Shielding Technology, Plug straight M12, coding: M, on free cable end, cable length: 1.5 m, for AC current up to 8 A/690 V

Your advantages

- · Easy and safe: 100 % electrically tested plug-in components
- · Protection against mismatching, thanks to special M-coding
- Shield power reliably 360° shielding to reduce electromagnetic loads
- Our standard: robust halogen-free PUR cable

Commercial data

Item number	1414950
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	BF1CGP
Catalog page	Page 298 (C-2-2019)
GTIN	4055626035772
Weight per piece (including packing)	301.26 g
Weight per piece (excluding packing)	301.26 g
Customs tariff number	85444290
Country of origin	PL



https://www.phoenixcontact.com/us/products/1414950

Technical data

Product properties

Product type	Power cable	
Application	Power supply	
Number of positions	6	
No. of cable outlets	1	
Shielded	yes	
Coding	Μ	
Insulation characteristics		
Overvoltage category	III	
Degree of pollution	3	
Material specifications		

Flammability rating according to UL 94	V0
Material of grip body	PP
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	690 V AC
Nominal current I _N	8 A

Connector

Connection 1	
Туре	Plug straight M12
Coding type	M (Power)
Connection 2	
Туре	free cable end
Cable/line	
Cable length	1.5 m
PUR halogen-free orange shielded [PUR]	

PHŒNIX



1414950

https://www.phoenixcontact.com/us/products/1414950

Dimensional drawing



UL AWM Style 20234 / 10492 (80°C/1000 V) Number of positions 6 Shielded yes Cable type PUR halogen-free orage shielded [PUR] Conductor cross section 6:1.5 mm² Wire diameter incl. insulation 2:35 mm 40.05 mm Duter sheath, material PUR Conductor rots section 0:40 mm ±0.3 mm Outer sheath, naterial PUR Steined sheath, color orange RAL 2003 Conductor material Barce U litz wires Matchal wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Thickness, insulation \$15 Q/m (at 20 °C) Norminal voltage, cable \$16 Q/m (at 20 °C) Norminal voltage, cable \$1000 V AC (Spark test) Minimum bending radius, fixed installation \$5 Z mm Smallest bending radius, movable installation 10 x D Max. bending radius, movable installation \$2 mm Smallest bending radius, movable installation \$2 mm Smallest bending radius, movable installation \$2 mm Max. bending radius, movable installation<			
Number of positions 6 Shielded yes Cable type PUR halogen-free orange shielded [PUR] Conductor cross section 6x 1.5 mm² Wire diameter incl. insulation 2.35 mm ±0.05 mm External cable diameter 10.40 mm ±0.3 mm Outer sheath, material PUR Conductor material Bare Cu litz wires Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Single wire, color 20.36 mm Thickness, insulation 20.36 mm Material wire insulation 20.36 mm Thickness, outer sheath approx.1.15 mm Max. conductor resistance \$15 G/m (at 20 °C) Insulation resistance \$1000 V AC Nominum bending radius, fixed installation 52 D Minimum bending radius, fixed installation 52 mm Smallest bending radius, fixed installation 52 mm Material partial strutter 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50	Cable weight	144 kg/km	
Shielded yes Cable type PUR halogen-free orange shielded [PUR] Conductor cross section 6x 1.5 mm ² Wire diameter incl. insulation 2.35 mm ±0.05 mm External cable diameter 10.40 mm ±0.3 mm Outer sheath, material PUR External sheath, color orange RAL 2003 Conductor material Bare Cu litz wires Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 15 Ω/m (at 20 °C) Insulation \$2 NB Cmm Minimum bending radius, fixed installation \$2 ND VAC Strate voltage \$2 1000 V AC Smallest bending radius, fixed installation \$2 ND Minimum bending radius, fixed installation \$2 ND Smallest bending radius, fixed installation \$2 ND Maxerian Cording to UI, 758/1581 (Cable Flame) according to UI, 758/1581 (Cable Flame) Minimum bending radius, fixed installation 104 mm Max. bending cycles 2000000 Halogen-f	UL AWM Style	20234 / 10492 (80°C/1000 V)	
Cable type PUR halogen-free orange shielded [PUR] Conductor cross section 6x 1.5 mm ³ Wire diameter incl. insulation 2.35 mm ±0.05 mm External cable diameter 10.40 mm ±0.3 mm Outer sheath, material PUR Conductor and sheath, color orange RAL 2003 Conductor material Bare Cu litz wires Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Yein Kinkness, insulation PD Thickness, outer sheath approx. 1.15 mm Max. conductor resistance \$ 15 0/m (at 20 °C) Insulation resistance \$ 1000 V AC Nominal voltage, cable \$ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 10 x D Smallest bending radius, movable installation 10 x D Smallest bending radius, fixed installation 10 x D Max. bending radius, movable installation 10 x D Smallest bending radius, fixed installation 10 x D Max. bending radius, fixed installation 10 x D	Number of positions	6	
Conductor cross section 6x 1.5 mm³ Wire diameter incl. insulation 2.35 mm ±0.05 mm External cable diameter 10.40 mm ±0.3 mm Outer sheath, material PUR External sheath, color orange RAL 2003 Conductor material Bare Cu litz wires Material Wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Yetrike insulation PD Thickness, insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Yetrike insulation \$15 D/m (at 20 °C) Insulation resistance \$16 O/m (at 20 °C) Nominal voltage, cable \$10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 10 x D Smallest bending radius, movable installation 10 x D Smallest bending radius, movable installation 10 x D Max. bending radius, movable installation 10 x D Max. bending radius, fixed installation 10 x D Smallest bending radius, movable installation 10 x D	Shielded	yes	
Wire diameter incl. insulation 2.35 mm ±0.05 mm External cable diameter 10.40 mm ±0.3 mm Outer sheath, material PUR Conductor material gare Cu litz wires Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Thickness, outer sheath 20.36 mm Max. conductor resistance ≤ 15 Ω/m (at 20 °C) Insulation resistance ≤ 1000 V AC Nominal voltage, cable ≤ 10000 V AC Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 10 x D Minimum bending radius, fixed installation 10 x D Max. bending voltage, cable 200000 Halogen-free in accordance with DIN VDE 0472 part 815 in acc	Cable type	PUR halogen-free orange shielded [PUR]	
External cable diameter10.40 mm ±0.3 mmOuter sheath, materialPURExternal sheath, colororange RAL 2003Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorblack 1, black 2, black 3, black 4, black 5, green/yellowThickness, insulation≥ 0.36 mmThickness, outer sheathapprox.1.15 mmMax. conductor resistance≤ 15 Ω/m (at 20 °C)Insulation resistance≥ 1000 V AC (Spark test)Nominal voltage, cable≤ 10000 V AC (Spark test)Minimum bending radius, fixed installation5x DSmallest bending radius, fixed installation104 mmMax. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 par	Conductor cross section	6x 1.5 mm ²	
Outer sheath, materialPURExternal sheath, colororange RAL 2003Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorblack 1, black 2, black 3, black 4, black 5, green/yellowThickness, insulation≥ 0.36 mmThickness, outer sheathapprox. 1.15 mmMax. conductor resistance≤ 1 G 0/m (at 20 °C)Insulation resistance≥ 1 G0/m (at 20 °C)Insulation resistance≥ 10000 V AC (Spark test)Mominal voltage, cable≤ 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DSmallest bending radius, fixed installation104 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN NDE 0567-2-1Flame resistanceAccording to UL 758/1581 FT1 According to UL 758/1581 FT1 According to UL 758/1581 FT1 According to DIN EN 6032-1-2Resistance to oilaccording to DIN EN 6081-1404, 168 h at 100 °COther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistantConding to Line sectionaccording to alt water	Wire diameter incl. insulation	2.35 mm ±0.05 mm	
External sheath, colororange RAL 2003Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorblack 1, black 2, black 3, black 4, black 5, green/yellowThickness, insulation> 0.36 mmThickness, outer sheathapprox. 1.15 mmMax. conductor resistance\$ 15 Q/m (at 20 °C)Insulation resistance> 1000 V ACNominal voltage, cable> 1000 V AC (Spark test)Minimum bending radius, fixed installation5 x DSmallest bending radius, fixed installation10 x DSmallest bending radius, fixed installation10 x DMax. condance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN NE 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to UL 758/1581 (Cable Flame)Resistance to oilaccording to DIN EN 6032-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistantOther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant	External cable diameter	10.40 mm ±0.3 mm	
Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorblack 1, black 2, black 3, black 4, black 5, green/yellowThickness, insulation> 0.36 mmThickness, outer sheathapprox. 1.15 mmMax. conductor resistance> 15 Q/m (at 20 °C)Insulation resistance> 1000 V ACNominal voltage, cable> 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DMinimum bending radius, fixed installation52 mmSmallest bending radius, fixed installation104 mmMax. bending cycles2000000Halogen-free2000000Fame resistanceAccordance with DIN VDE 0472 part 815 in accordance with DIN NDE 0472 part 815 in accordance with DIN NDE 0472 part 815 in according to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to DIN EN 6032-1-2Resistance to oilAccording to DIN EN 6032-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low achesion abrain-resistant Evasion-resistant abrain-resistant According to UI T58/1581 FT1 According to DIN EN 60811-404, 168 h at 100 °COther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low achesion abrain-resistant Barsiant to sait water	Outer sheath, material	PUR	
Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, black 5, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≥ 15 Ω/r (at 20 °C) Insulation resistance ≥ 1000 V AC Nominal voltage, cable ≥ 10000 V AC (Spark test) Test voltage ≥ 0000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Smallest bending radius, fixed installation 10 x D Smallest bending radius, movable installation 104 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 In accordance with DIN VDE 0472 part 815 in accordance with DIN NE 050267-2-1 Fame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 (Cable Flame) according to UL 758/1581 (Cable Flame) According to UN EN 60332-1-2 According to UN FN 60332-1-2 Resistance to oil according to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasin-resistant	External sheath, color	orange RAL 2003	
Single wire, colorblack 1, black 2, black 3, black 4, black 5, green/yellowThickness, insulation≥ 0.36 mmThickness, outer sheathapprox. 1.15 mmMax. conductor resistance≤ 15 Ω/m (at 20 °C)Insulation resistance≥ 1000 V ACNominal voltage, cable≤ 1000 V AC (Spark test)Test voltage≥ 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DMinimum bending radius, fixed installation10 x DSmallest bending radius, fixed installation104 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) according to DIN EN 60322-1-2Resistance to oilaccording to DIN EN 60321-12Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water	Conductor material	Bare Cu litz wires	
Thickness, insulation≥ 0.36 mmThickness, outer sheathapprox.1.15 mmMax. conductor resistance≤ 15 Ω/m (at 20 °C)Insulation resistance≥ 1 GΩ*km (at 20 °C)Nominal voltage, cable≤ 1000 V ACTest voltage≥ 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, fixed installation52 mmMax. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in according to UL 758/1581 (Cable Flame)Resistance to oilAccording to DIN EN 6032-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesionOther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesionAccording to DIN EN 60811-404, 168 h at 100 °CHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesionApricesistantapricesistant apricesistant Baistant to sait water	Material wire insulation	PP	
Thickness, outer sheathapprox. 1.15 mmMax. conductor resistance≤ 15 Ω/m (at 20 °C)Insulation resistance≥ 1 GΩ*km (at 20 °C)Nominal voltage, cable≤ 1000 V ACTest voltage≥ 10000 V AC (Spark test)Minimu bending radius, fixed installation5 x DMinimu bending radius, fixed installation10 x DSmallest bending radius, fixed installation52 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to UL 758/1581 FT1 According to DIN EN 60332-1-2Resistance to oilaccording to DIN EN 60332-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Bariani, resistant Bariani, resistant to salt water	Single wire, color	black 1, black 2, black 3, black 4, black 5, green/yellow	
Max. conductor resistance≤ 15 Ω/m (at 20 °C)Insulation resistance≥ 1 GΩ*km (at 20 °C)Nominal voltage, cable≤ 1000 V ACTest voltage≥ 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DMinimum bending radius, fixed installation10 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, movable installation104 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) According to DIN EN 60332-1-2Resistance to oilaccording to DIN EN 60332-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Barasion-resistant Resistant to salt water	Thickness, insulation	≥ 0.36 mm	
Insulation resistance ≥ 1 GQ*km (at 20 °C) Nominal voltage, cable ≤ 1000 V AC Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 10 x D Smallest bending radius, fixed installation 52 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 In accordance with DIN VDE 0472 part 815 in accordance with DIN NDE 05067-2-1 Flame resistance According to UL 758/1581 (Cable Flame) According to UL 758/1581 T1 According to DIN EN 60332-1-2 Resistance to oil according to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Average According to DIN EN 60811-404, 168 h at 100 °C It was adhesion According to DIN EN 60811-404, 168 h at 100 °C Average Hydrolysis and microbe resistant as per VDE 0282 section 10 It was adhesion According to salt water	Thickness, outer sheath	approx. 1.15 mm	
Nominal voltage, cable< 1000 V ACTest voltage> 10000 V AC (Spark test)Minimum bending radius, fixed installation5 x DMinimum bending radius, fixed installation10 x DSmallest bending radius, movable installation52 mmSmallest bending radius, movable installation104 mmMax. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to DIN EN 60332-1-2Resistance to oilaccording to DIN EN 60311-404, 168 h at 100 °COther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water	Max. conductor resistance	≤ 15 Ω/m (at 20 °C)	
Test voltage<	Insulation resistance	≥ 1 GΩ*km (at 20 °C)	
Minimum bending radius, fixed installation5 x DMinimum bending radius, fixed installation10 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, movable installation104 mmMax. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815Flame resistanceAccording to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to DIN EN 60332-1-2Resistance to oilaccording to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Brasion-resistant exercise and microbe resistant as per VDE 0282 section 10	Nominal voltage, cable	≤ 1000 V AC	
Minimum bending radius, flexible installation10 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, movable installation104 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815Flame resistanceAccording to UL 758/1581 (Cable Flame)Resistance to oilaccording to UL 758/1581 FT1Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10Lever and microbe resistant as per VDE 0282 section 10Low adhesionBesistant to salt wateracsording to salt water	Test voltage	≥ 10000 V AC (Spark test)	
Smallest bending radius, fixed installation52 mmSmallest bending radius, movable installation104 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to UL 758/1581 FT1Resistance to oilaccording to DIN EN 60332-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Brasion-resistantConstant to salt wateraccording to according to acc	Minimum bending radius, fixed installation	5 x D	
Smallest bending radius, movable installation104 mmMax. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815In accordance with DIN EN 50267-2-1in according to UL 758/1581 (Cable Flame)Flame resistanceAccording to UL 758/1581 (Cable Flame)According to UL 758/1581 FT1According to DIN EN 60332-1-2Resistance to oilaccording to DIN EN 60811-404, 168 h at 100 °COther resistanceHydrolysis and microbe resistant as per VDE 0282 section 10Low adhesionabrasion-resistantResistant to salt waterAccording to salt water	Minimum bending radius, flexible installation	10 x D	
Max. bending cycles200000Halogen-freein accordance with DIN VDE 0472 part 815In accordance with DIN EN 50267-2-1in accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame)according to UL 758/1581 FT1according to UL 758/1581 FT1Resistance to oilAccording to DIN EN 60332-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10Low adhesionacasion-resistantBasion-resistantAcasion-resistantResistant to salt waterAcasi mage and mage	Smallest bending radius, fixed installation	52 mm	
Halogen-freein accordance with DIN VDE 0472 part 815Halogen-freein accordance with DIN EN 50267-2-1Flame resistanceAccording to UL 758/1581 (Cable Flame)according to UL 758/1581 FT1according to UL 758/1581 FT1Resistance to oilAccording to DIN EN 60332-1-2Other resistanceHydrolysis and microbe resistant as per VDE 0282 section 10Low adhesionabrasion-resistantBesistant to salt water	Smallest bending radius, movable installation	104 mm	
In accordance with DIN EN 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to UL 758/1581 FT1 According to DIN EN 60332-1-2 According to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Barsaion-resistant Resistant to salt water	Max. bending cycles	2000000	
Flame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 FT1 According to UL 758/1581 FT1 According to DIN EN 60332-1-2 According to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant abrasion-resistant Resistant to salt water	Halogen-free	in accordance with DIN VDE 0472 part 815	
according to UL 758/1581 FT1 According to DIN EN 60332-1-2 Resistance to oil according to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant abrasion-resistant Resistant to salt water		in accordance with DIN EN 50267-2-1	
According to DIN EN 60332-1-2 Resistance to oil according to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant abrasion-resistant to salt water Resistant to salt water	Flame resistance	According to UL 758/1581 (Cable Flame)	
Resistance to oil according to DIN EN 60811-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant resistant to salt water Resistant to salt water		according to UL 758/1581 FT1	
Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water Resistant to salt water		According to DIN EN 60332-1-2	
Low adhesion abrasion-resistant Resistant to salt water	Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C	
abrasion-resistant Resistant to salt water	Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10	
Resistant to salt water		Low adhesion	
		abrasion-resistant	
Ambient temperature (operation) -50 °C 80 °C (cable, fixed installation)		Resistant to salt water	
	Ambient temperature (operation)	-50 °C 80 °C (cable, fixed installation)	
-30 °C 80 °C (Cable, flexible installation)			



https://www.phoenixcontact.com/us/products/1414950

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67 (without preloading, as additional test in accordance with IEC 60529)
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
Standards and regulations	

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111

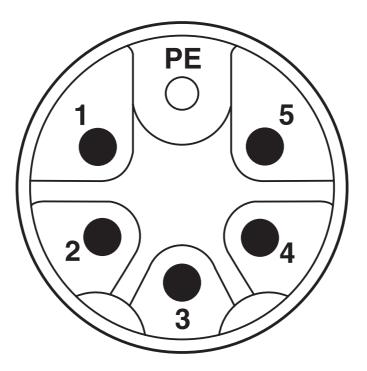


1414950

https://www.phoenixcontact.com/us/products/1414950

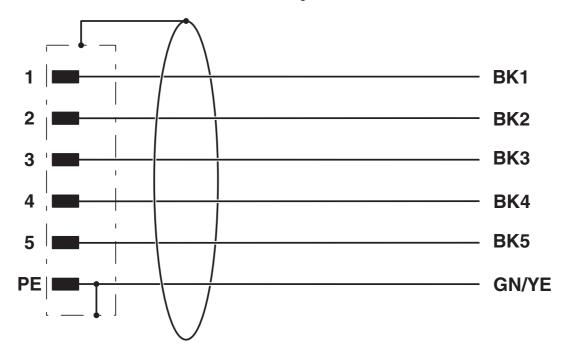
Drawings

Schematic diagram



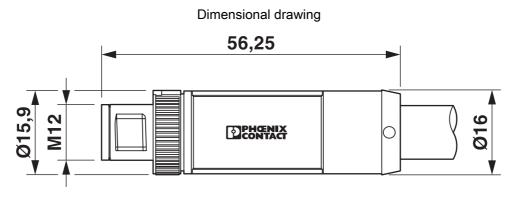
Pin assignment of M12 connector, 6-pos., M-coded, pin side view

Circuit diagram

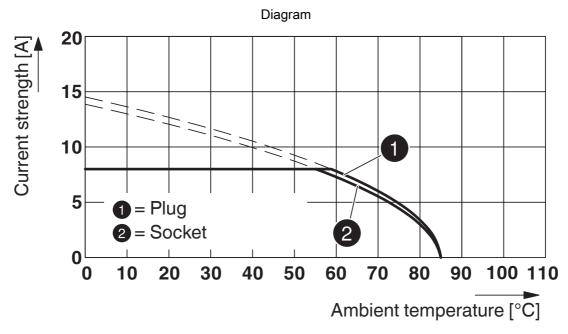




https://www.phoenixcontact.com/us/products/1414950



Plug, M12 x 1, straight, shielded



Derating diagram



1414950

https://www.phoenixcontact.com/us/products/1414950

Approvals

²♥[€] To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1414950

	UL Listed Approval ID: E468743				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	10 A	-	- 16
٩	CUL Listed Approval ID: E468743				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	10 A	- 16	-
ERC	EAC-RoHS Approval ID: RU D-DE.HB	35.B.00387			

cULus Listed



https://www.phoenixcontact.com/us/products/1414950

Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060327

ETIM

	ETIM 9.0	EC001855
UN	ISPSC	
	UNSPSC 21.0	26121600

https://www.phoenixcontact.com/us/products/1414950

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions			
China RoHS				
Environment friendly use period (EFUP)	EFUP-E			
	No hazardous substances above the limits			
EU REACH SVHC				
REACH candidate substance (CAS No.)	No substance above 0.1 wt%			

PHŒNIX CONTACT

1414950

https://www.phoenixcontact.com/us/products/1414950



Accessories

PROT-M12 FS - Sealing cap

1560251 https://www.phoenixcontact.com/us/products/1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

UCT-WMT (23X4) - Conductor marker

0801453 https://www.phoenixcontact.com/us/products/0801453



Conductor marker, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 30

1414950

https://www.phoenixcontact.com/us/products/1414950



UC-WMT (23X4) - Conductor marker

0819411

https://www.phoenixcontact.com/us/products/0819411

Conductor marker, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 24

US-WMT (23X4) - Cable marker

0828769 https://www.phoenixcontact.com/us/products/0828769



Cable marker, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 56

1414950

https://www.phoenixcontact.com/us/products/1414950



WMTW (23X4)R - Cable marker

0831004

https://www.phoenixcontact.com/us/products/0831004



Cable marker, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: insert, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 3000

PROT-M12 FS-PA-CHAIN - Sealing cap

1430873 https://www.phoenixcontact.com/us/products/1430873

 $\mathsf{M12}$ sealing cap made of plastic with fixing band, for sensor cables, for free $\mathsf{M12}$ plugs



1414950

https://www.phoenixcontact.com/us/products/1414950

WP-EC TPE HF 13,0 BK - Transition sleeve from hose to cable

3240975

https://www.phoenixcontact.com/us/products/3240975



Transition sleeve from hose to cable, material: TPE, color: black, flammability rating in acc. with UL 94: ${\rm HB}$

WP-PA HF 13,0 BK - Protective hose

3240681 https://www.phoenixcontact.com/us/products/3240681



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

HŒR

1414950

https://www.phoenixcontact.com/us/products/1414950



WP-PA HF-HB 13,0 BK - Protective hose

3240839

https://www.phoenixcontact.com/us/products/3240839



Protective hose, material: PA 6, UV-resistant: yes, flexible, degree of protection: IP68, color: black, flammability rating in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

SAC BIT M12-D16 - Tool

1200305 https://www.phoenixcontact.com/us/products/1200305



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive

1414950

https://www.phoenixcontact.com/us/products/1414950



TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224 https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 $\rm Nm$

1414950

https://www.phoenixcontact.com/us/products/1414950

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

B-STIFT - Marker pen

1051993 https://www.phoenixcontact.com/us/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 $\rm mm$

1414950

https://www.phoenixcontact.com/us/products/1414950



CUTFOX-S VDE - Diagonal cutter

1212207

https://www.phoenixcontact.com/us/products/1212207



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

WIREFOX-D 16 - Stripping tool

1212173 https://www.phoenixcontact.com/us/products/1212173



Stripping tool, for stripping lines (specially for fiber optics lines) of Ø 4 - 16 mm

1414950

https://www.phoenixcontact.com/us/products/1414950



WIREFOX-D 40 - Stripping tool

1212161

https://www.phoenixcontact.com/us/products/1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

WIREFOX 10 - Stripping tool

1212150 https://www.phoenixcontact.com/us/products/1212150



Stripping tool, for cables and conductors from 0.02 - 10 mm², self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm² stranded/1.5 mm² solid, replaceable stripping blade

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