

1414867

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Power cable, 5-position, PUR halogen-free, orange RAL 2003, shielded, Advanced Shielding Technology, Plug straight M12, coding: K, on free cable end, cable length: 1.5 m, for AC current up to 16 A/690 V

Your advantages

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

Commercial data

Item number	1414867
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF05
Product key	BF1CDQ
Catalog page	Page 292 (C-2-2019)
GTIN	4055626034997
Weight per piece (including packing)	344.53 g
Weight per piece (excluding packing)	344.53 g
Customs tariff number	85444290
Country of origin	US



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Technical data

Product properties

Power cable
Power supply
5
1
yes
K
III
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	16 A

Mechanical properties

Mec	han	ical	data

Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

Туре	Plug straight M12
Coding type	K (Power)

Connection 2

Туре	free cable end

Cable/line

Cable length	1.5 m

PUR halogen-free orange [PUR]



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Cable weight 209 kg/km UL AWM Style 22078 / 11560 (90 °C / 1000 V) Number of positions 5 Shielded yes Cable type PUR halogen-free orange [PUR] Conductor cross section 5x 2.5 mm² Wire diameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 10.30 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, green/yellow Thickness, insulation 2.0 36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance \$ 1 GD °km (at 20 °C) Nominal voitage, cable \$ 1 GD °km (at 20 °C) Test voltage \$ 1 0000 V AC Test voltage \$ 1 0000 V AC Test voltage \$ 1 0000 V AC Smallest bending radius, fixed installation \$ 5 X D Minimum bending radius, fixed installation \$ 2 mm Smallest bending radius, fixed installation<	Dimensional drawing	
Number of positions 5 Shielded yes Cable type PUR halogen-free orange [PUR] Conductor cross section \$x 2.5 mm² Wire diameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 10.30 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, green/yellow Thickness, insulation PP Max. conductor resistance \$ 8 0.km (et 20 °C) Max. conductor resistance \$ 16 G0° km (et 20 °C) Nominal voltage, cable \$ 10000 V AC Test voltage \$ 10000 V AC Test voltage \$ 10000 V AC Minimum bending radius, fixed installation \$ 5 x D Minimum bending radius, fixed installation \$ 2 mm Smallest bending radius, fixed installation \$ 20 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 File part of th	Cable weight	209 kg/km
Shielded yes Cable type PUR halogen-free orange [PUR] Conductor cross section 5x 2.5 mm² Wire diameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 1.0.30 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, green/yellow Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 0.36 mm Max. conductor resistance ≤ 1 GΩ*km (at 20 °C) Insulation resistance ≤ 1 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 10000 V AC Test voltage ≥ 1 GΩ*km (at 20 °C) Minimum bending radius, fixed installation 10 x D Smallest bending radius, fixed installation 10 x D Smallest bending radius, fixed installation 103 mm Max. bending oycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in according to UL 758/1581 (Cable Flame) <	UL AWM Style	22078 / 11560 (90 °C / 1000 V)
Cable type PUR halogen-free orange [PUR] Conductor cross section 5x 2.5 mm² Wire diameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 10.30 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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, insulation approx. 1.15 mm Max. conductor resistance ≤ 8 0/km (at 20 °C) Insulation resistance ≥ 1 GΩ*km (at 20 °C) Insulation resistance ≥ 1000 V AC Nominal voltage, cable ≤ 10000 V AC (Spark test) Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 10 x D Smallest bending radius, fixed installation 10 x D Smallest bending radius, movable installation 10 x D Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 Flame resistance	Number of positions	5
Conductor cross section 5x 2.5 mm² Wire diameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 10.30 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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≥ 1 6Ω*km (at 20 °C) Insulation resistance ≥ 1 6Ω*km (at 20 °C) Nominal voltage, cable ≤ 10000 V AC Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 52 mm Smallest bending radius, fixed installation 52 mm Smallest bending radius, movable installation 103 mm Max. bending radius, movable installation 103 mm Max. bending radius, movable installation 102 mm Accordance with DIN VDE 0472 part 815 in accordance with DIN VDE 0472 part 815	Shielded	yes
Wire dameter incl. insulation 2.8 mm ±0.1 mm External cable diameter 10.30 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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 0/km (at 20 °C) Insulation resistance ≥ 1 GΩ*km (at 20 °C) Nominal voltage, cable ≥ 10000 ∨ AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 52 mm Smallest bending radius, fixed installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 Filame 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 60332-1-2 Resistance to oil according to DIN EN 6081	Cable type	PUR halogen-free orange [PUR]
External cable diameter 10.30 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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, insulation approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN Exp 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame) according to DIN Exp 60332-1-2 according to DIN Exp 60332-1-2 Resistance to oil daccording to DIN Exp 60332-1-2 Other resistan	Conductor cross section	5x 2.5 mm²
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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 0/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN Exp 50267-2-1 1 Flame resistance According to UL 758/1581 (Cable Flame) according to DIN Exp 60332-1-2 according to DIN Exp 60332-1-2 Resistance to oil According to DIN Exp 60311-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as	Wire diameter incl. insulation	2.8 mm ±0.1 mm
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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ²km (at 20 °C) Nominal voltage, cable ≤ 1000 ∨ AC Test voltage ≥ 10000 ∨ AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, fixed installation 10 x D Smallest bending radius, fixed installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 Flame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 (Tolle Flame) according to UL 758/1581 (Cable Flame) According to DIN EN 60332-1-2 According to DIN EN 60331-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant R	External cable diameter	10.30 mm ±0.3 mm
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, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*km (at 20 °C) Insulation resistance ≥ 1000 V AC 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 52 mm Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 Flame resistance According to UL 758/1581 (Cable Flame) According to UL 758/1581 (Cable Flame) according to UI N EN 60332-1-2 Resistance to oil according to DIN EN 60331-404, 168 h at 100 °C Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion	Outer sheath, material	
Material wire insulation PP Single wire, color black 1, black 2, black 3, black 4, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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 52 mm Smallest bending radius, fixed installation 103 mm Max. bending cycles 2000000 Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 4 ccording 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 4 ccording 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 Resistant to salt water Ambient temperat	External sheath, color	orange RAL 2003
Single wire, color black 1, black 2, black 3, black 4, green/yellow Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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 52 mm Smallest bending radius, fixed installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 (Cable Flame) 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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Conductor material	Bare Cu litz wires
Thickness, insulation ≥ 0.36 mm Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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 52 mm Smallest bending radius, fixed installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame) according to UL 758/1581 (Cable Flame) 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 Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Material wire insulation	PP
Thickness, outer sheath approx. 1.15 mm Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 6Ω°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, flexible installation 10 x D Smallest bending radius, fixed installation 52 mm Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 4 Flame resistance According to UL 758/1581 (Cable Flame) 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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Single wire, color	black 1, black 2, black 3, black 4, green/yellow
Max. conductor resistance ≤ 8 Ω/km (at 20 °C) Insulation resistance ≥ 1 GΩ*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 Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 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 DIN EN 60332-1-2 Resistance to oil according to DIN EN 60311-404, 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 Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Thickness, insulation	≥ 0.36 mm
Insulation resistance ≥ 1 GΩ*km (at 20 °C) Nominal voltage, cable ≤ 10000 V AC Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, flexible installation 10 x D Smallest bending radius, fixed installation 52 mm Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame) 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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Thickness, outer sheath	approx. 1.15 mm
Nominal voltage, cable ≤ 1000 V AC Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, flexible installation 10 x D Smallest bending radius, fixed installation 52 mm Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 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 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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Max. conductor resistance	≤ 8 Ω/km (at 20 °C)
Test voltage ≥ 10000 V AC (Spark test) Minimum bending radius, fixed installation 5 x D Minimum bending radius, flexible installation 10 x D Smallest bending radius, fixed installation 52 mm Smallest bending radius, movable installation 103 mm Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 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 DIN EN 60332-1-2 Resistance to oil accordance 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 Ambient temperature (operation) 5 °C 90 °C (cable, fixed installation)	Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Minimum bending radius, fixed installation5 x DMinimum bending radius, flexible installation10 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, movable installation103 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815in accordance with DIN EN 50267-2-1Flame 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-resistantabrasion-resistantResistant to salt waterAmbient temperature (operation)-50 °C 90 °C (cable, fixed installation)	Nominal voltage, cable	≤ 1000 V AC
Minimum bending radius, flexible installation10 x DSmallest bending radius, fixed installation52 mmSmallest bending radius, movable installation103 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 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 10 Low adhesion abrasion-resistant Resistant to salt waterAmbient temperature (operation)-50 °C 90 °C (cable, fixed installation)	Test voltage	≥ 10000 V AC (Spark test)
Smallest bending radius, fixed installation52 mmSmallest bending radius, movable installation103 mmMax. bending cycles2000000Halogen-freein accordance with DIN VDE 0472 part 815Flame 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-resistantAmbient temperature (operation)-50 °C 90 °C (cable, fixed installation)	Minimum bending radius, fixed installation	5 x D
Smallest bending radius, movable installation Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 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 DIN EN 60332-1-2 Resistance to oil Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Minimum bending radius, flexible installation	10 x D
Max. bending cycles 2000000 Halogen-free in accordance with DIN VDE 0472 part 815 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 DIN EN 60332-1-2 Resistance to oil according to DIN EN 60332-1-2 Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Smallest bending radius, fixed installation	52 mm
Halogen-free in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1 Flame resistance According to UL 758/1581 (Cable Flame)	Smallest bending radius, movable installation	103 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 DIN EN 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 abrasion-resistant Resistant to salt water Ambient temperature (operation) in accordance with DIN EN 50267-2-1 According to UL 758/1581 FT1 According to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-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 DIN EN 60332-1-2 Resistance to oil Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water Ambient temperature (operation) According to UL 758/1581 (Cable Flame) according to UL 758/1581 (Flame) according to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant according to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 100 °C According to DIN EN 60811-404, 168 h at 10	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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)		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 Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Flame resistance	According to UL 758/1581 (Cable Flame)
Resistance to oil Other resistance Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water Ambient temperature (operation) according to DIN EN 60811-404, 168 h at 100 °C Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant 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 Ambient temperature (operation) Hydrolysis and microbe resistant as per VDE 0282 section 10 Low adhesion abrasion-resistant Resistant to salt water		According to DIN EN 60332-1-2
Low adhesion abrasion-resistant Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Resistance to oil	according to DIN EN 60811-404, 168 h at 100 °C
abrasion-resistant Resistant to salt water Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)	Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
Ambient temperature (operation) Resistant to salt water -50 °C 90 °C (cable, fixed installation)		Low adhesion
Ambient temperature (operation) -50 °C 90 °C (cable, fixed installation)		abrasion-resistant
		Resistant to salt water
-30 °C 90 °C (Cable, flexible installation)	Ambient temperature (operation)	-50 °C 90 °C (cable, fixed installation)
		-30 °C 90 °C (Cable, flexible installation)



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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

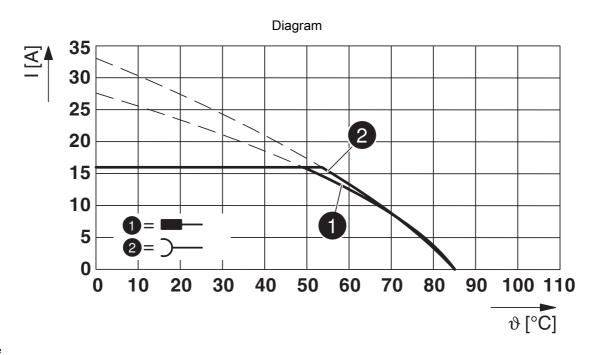
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-111



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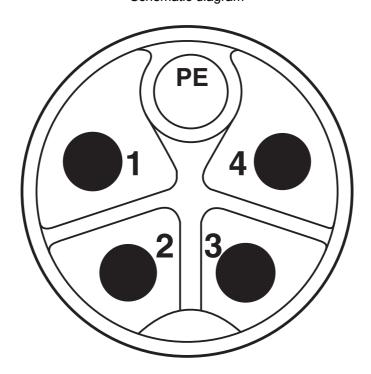
https://www.phoenixcontact.com/us/products/1414867

Drawings



Base curve

Schematic diagram

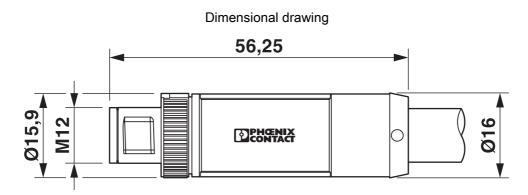


Connector pin assignment of M12 plug, 5-pos., K-coded, pin side view



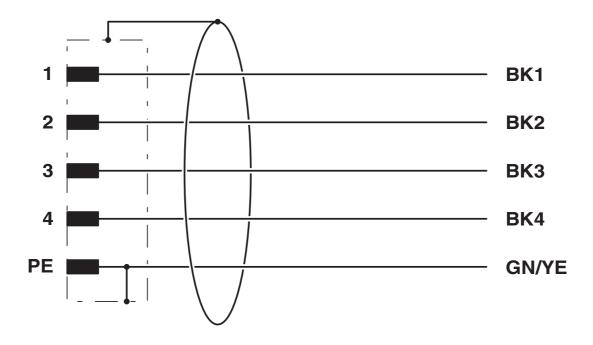
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Plug, M12 x 1, straight, shielded

Circuit diagram





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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1414867

D	UL Listed Approval ID: E468743				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	16 A	-	- 14

• <u>®</u>	cUL Listed Approval ID: E468743				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		600 V	16 A	- 14	-

rnr	EAC-RoHS
EAC	Approval ID: RU D-DE.HB35.B.00387

cULus Listed



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Classifications

UNSPSC 21.0

ECLASS

ECLASS-11.0	27060311			
ECLASS-12.0	27060311			
ECLASS-13.0	27060327			
ETIM				
ETIM 9.0	EC001855			
UNSPSC				

26121600



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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%				



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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: 23×4 mm, Number of individual labels: 30



1414867

https://www.phoenixcontact.com/us/products/1414867

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



1414867

https://www.phoenixcontact.com/us/products/1414867

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

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





1414867

https://www.phoenixcontact.com/us/products/1414867

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: 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



1414867

https://www.phoenixcontact.com/us/products/1414867

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



1414867

https://www.phoenixcontact.com/us/products/1414867

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 Nm



1414867

https://www.phoenixcontact.com/us/products/1414867

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 mm



1414867

https://www.phoenixcontact.com/us/products/1414867

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 \varnothing 4 - 16 mm



1414867

https://www.phoenixcontact.com/us/products/1414867

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

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