

1406360

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Network cable, Ethernet CAT5 (100 Mbps), 4-position, PUR halogen-free, water blue RAL 5021, Plug straight M12, on Plug straight RJ45 Clip locking, cable length: 2 m

#### Commercial data

Item number	1406360
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	BF1CJI
Catalog page	Page 299 (PC-2011)
GTIN	4046356476096
Weight per piece (including packing)	128.3 g
Weight per piece (excluding packing)	128.3 g
Country of origin	PL



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### Technical data

### Product properties

Product type	Data cable preassembled
Application	Standard
Sensor type	Ethernet
Number of positions	4
No. of cable outlets	1
Number of slots	1
Shielded	yes
Insulation characteristics	

Degree of pollution	3
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#### Interfaces

Bus system	Ethernet
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps

#### Electrical properties

Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Transmission medium	Copper
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

#### Mechanical properties

#### Mechanical data

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#### Material specifications

Flammability rating according to UL 94	V2

#### Connector

#### Connection 1

Dimensional drawing	Pin assignment M12 male connector, 4-pos., D-coded, male side
Туре	M12 Plug, straight, 4-position, shielded (Advanced Shielding Technology), Keying: D
Number of positions	4
Shielded	yes



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Shielding	Advanced Shielding Technology
Signal type/category	Ethernet CAT5 (IEC 11801), 100 Mbps
Insertion/withdrawal cycles	≥ 100
Insulation resistance	≥ 100 MΩ
Overvoltage category	II
Degree of pollution	3
Tightening torque	0.4 Nm
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Seal material	FKM
Flammability rating according to UL 94	V0
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C 85 °C
Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101

#### Connection 2

Туре	Plug straight RJ45 Clip locking
Locking type	Clip locking
Handle color	black

#### Cable/line

Cable length	2 m

#### Ethernet flexible CAT5, 2-pair [93E]

Dimensional drawing



Cable weight	42 kg/km
UL AWM Style	20963 (80°C/30 V)
Wiring standards/regulations	Electrical requirements EN 50288-2-2
Number of positions	4
Shielded	yes
Cable type	Ethernet flexible CAT5, 2-pair [93E]
Conductor structure	2x2xAWG26/7, SF/UTP
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.16 mm



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AWG signal line	26
Conductor cross section	2x 2x 0.14 mm²
Wire diameter incl. insulation	0.98 mm
External cable diameter	6.40 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	water blue RAL 5021
Conductor material	Bare Cu litz wires
Material wire insulation	Foamed PE
Single wire, color	white/orange-orange, white/green-green
Thickness, outer sheath	1.20 mm
Twisted pairs	2 cores to the pair
Overall twist	Two pairs with two fillers to the core
Optical shield covering	70 %
Insulation resistance	≥ 500 MΩ*km
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Loop resistance	≤ 290.00 Ω/km
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Cable capacity	approx. 45 nF/km (at 1 kHz)
Nominal voltage, cable	≤ 100 V (Peak value, not for high-power applications)
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700.00 V (50 Hz, 1 min.)
Current carrying capacity of cable	2.00 A (according to DIN VDE 0891-1)
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	52 mm
Tensile strength	≤ 80 N
Near end crosstalk attenuation (NEXT)	65.3 dB (with 1 MHz)
	56.3 dB (at 4 MHz)
	50.3 dB (at 10 MHz)
	47.2 dB (at 16 MHz)
	45.8 dB (at 20 MHz)
	42.9 dB (at 31.25 MHz)
	38.4 dB (at 62.5 MHz)
	35.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
	23 dB (at 4 MHz)



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Return attenuation (RL)	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Shield attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Halogen-free	according to IEC 60754-1
Flame resistance	according to IEC 60332-1-2
	in acc. to UL VW1
	in accordance with UN ECE-R 118.03
Resistance to oil	in accordance with EN 60811-2-1
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-20 °C 80 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C 80 °C

#### Environmental and real-life conditions

#### Ambient conditions

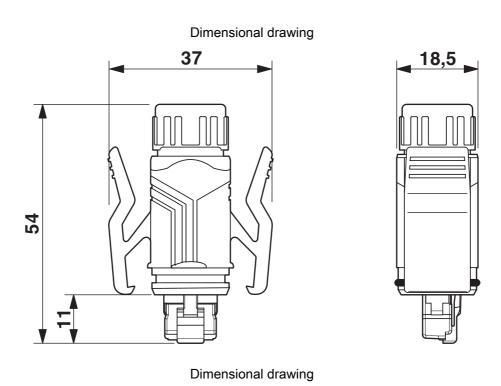
Degree of protection	IP65 (M12 connector)
	IP67 (RJ45 connector)

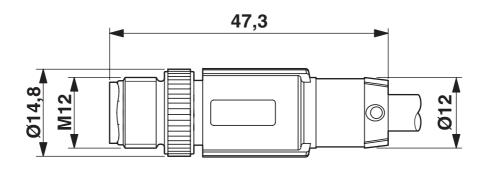


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### Drawings





Plug, M12 x 1, straight, shielded



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### Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27060307		
ECLASS-12.0	27060307		
ECLASS-13.0	27060307		
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.)	6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol(CAS: 119-47-1)
SCIP	9bac2730-9f44-48a1-99d8-b83cb89f9f11

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