SAC-5P-15,0-900/M12FSB - Bus system cable

1507146

https://www.phoenixcontact.com/us/products/1507146

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Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded (Braided copper wires), free cable end, on Socket straight M12, coding: B, cable length: 15 m

Commercial data

Item number	1507146
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF04
Product key	BF1CKB
Catalog page	Page 428 (C-2-2019)
GTIN	4017918900007
Weight per piece (including packing)	1,055.6 g
Weight per piece (excluding packing)	1,027.7 g
Customs tariff number	85444290
Country of origin	PL

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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
Application	Standard
Sensor type	INTERBUS
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	B

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	INTERBUS
Signal type/category	INTERBUS, 16 Mbps

Signaling

Status display	No
Status display present	No

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Transmission medium	Copper

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Material specifications

Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au

Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

Connection data

Pin assignment

Contact | Color (signal designation) | Contact (optional)	1 (Socket) | YE (DO)
	2 (Socket) | GN (DO)
	3 (Socket) | GY (DI)
	4 (Socket) | PK (DI)
	5 (Socket) | BN (GND)

Connector

Connection 1

Type	free cable end
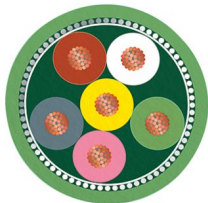
Connection 2

Type	free cable end

Cable/line

Cable length	15 m

INTERBUS [900]

Dimensional drawing	

Cable weight	70 kg/km
Number of positions	6
Shielded	yes
Cable type	INTERBUS [900]
Conductor structure	3 x 2 x 0.22 mm²
Signal speed	0.66 c
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 2x 0.22 mm²
External cable diameter	8.00 mm
Outer sheath, material	PUR
External sheath, color	may green RAL 6017
Conductor material	Bare Cu litz wires
Material wire insulation	PE

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Single wire, color	green-yellow, white-brown, gray-pink
Twisted pairs	2 cores to the pair
Overall twist	3 pairs to the core
Insulation resistance	≥ 5 GΩ*km
Coupling resistance	< 250.00 mΩ/m (at 30 MHz)
Loop resistance	≤ 159.80 Ω/km
Wave impedance	120 Ω ±20 % (at 64 kHz)
	100 Ω ±15 % (with 1 MHz)
Cable capacity	≤ 60 nF/km (At 800 Hz)
Nominal voltage, cable	250 V (Peak value, not for high-power applications)
Test voltage Core/Core	1500 V_{rms}
Test voltage Core/Shield	1000.00 V_{rms}
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	15 x D
Smallest bending radius, fixed installation	60 mm
Smallest bending radius, movable installation	120 mm
Max. bending cycles	5000000
Near end crosstalk attenuation (NEXT)	≥ 61 dB (at 772 kHz)
	≥ 59 dB (with 1 MHz)
	≥ 55 dB (at 2 MHz)
	≥ 50 dB (at 4 MHz)
	≥ 46 dB (at 8 MHz)
	≥ 44 dB (at 10 MHz)
	≥ 41 dB (at 16 MHz)
	≥ 40 dB (at 20 MHz)
Shield attenuation	≤ 15 dB/km (at 256 kHz)
	≤ 24 dB/km (at 772 kHz)
	≤ 27 dB/km (with 1 MHz)
	≤ 52 dB/km (at 4 MHz)
	≤ 84 dB/km (at 10 MHz)
	≤ 112 dB/km (at 16 MHz)
	≤ 119 dB/km (at 20 MHz)
Flame resistance	according to VDE 0472, Part 4, test type B
	according to IEC 60332-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

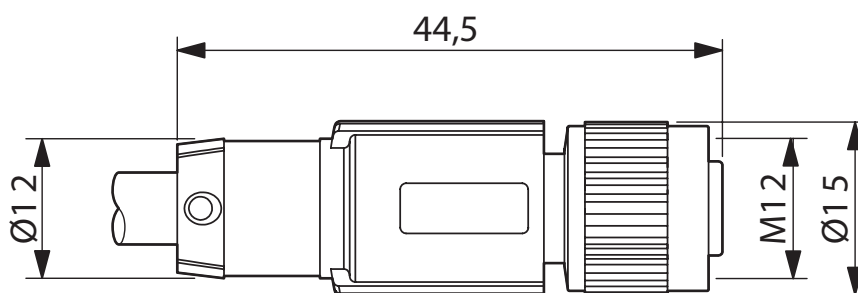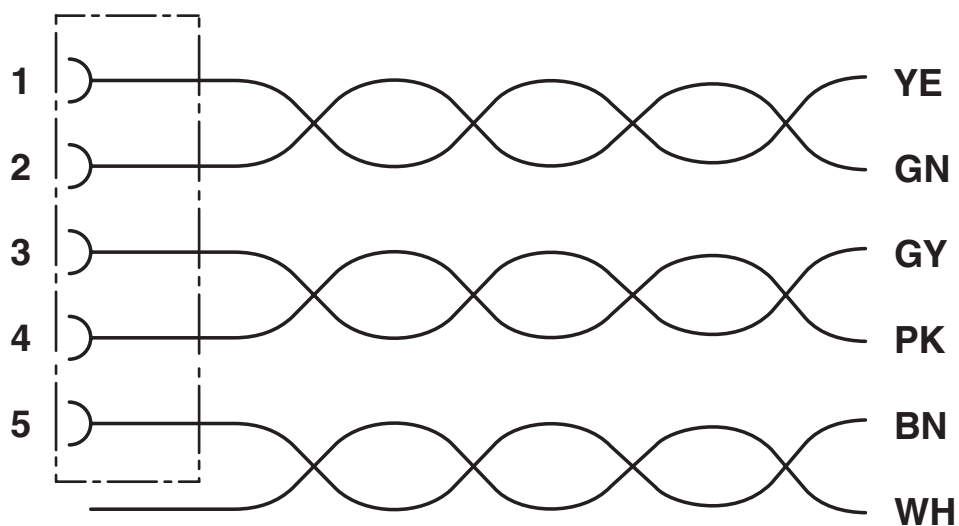|	
Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

SAC-5P-15,0-900/M12FSB - Bus system cable

Drawings

Dimensional drawing

44,5

Ø12   M12   Ø15

M12 x 1 socket, straight, shielded

Circuit diagram

1		YE
2		GN
3		GY
4		PK
5		BN
		WH

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Schematic diagram
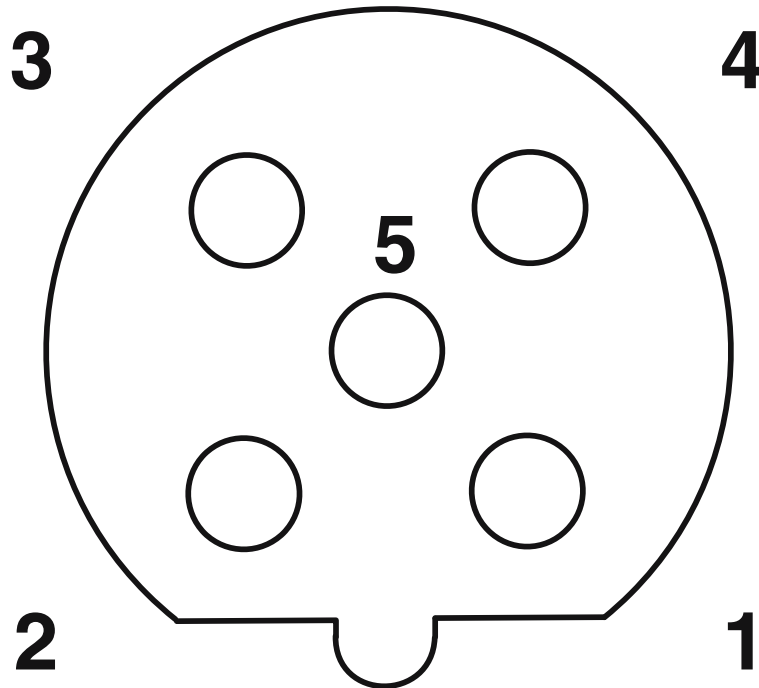
Pin assignment M12 socket, 5-pos., B-coded, female side

Approvals

☆ To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1507146

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

SAC-5P-15,0-900/M12FSB - Bus system cable

Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-12.0	27060307
ECLASS-13.0	27060307

ETIM

ETIM 9.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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

SAC-5P-M12MSB/900/... - Bus system cable

1537983

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Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded (Braided copper wires), Plug straight M12, coding: B, on free cable end, cable length: Free input (0.2 ... 40.0 m)

SAC-5P-M12FSB/900/... - Bus system cable

1538005

https://www.phoenixcontact.com/us/products/1538005

Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded (Braided copper wires), free cable end, on Socket straight M12, coding: B, cable length: Free input (0.2 ... 40.0 m)

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SAC-5P-M12MSB-M12FSB/900/... - Bus system cable

1538021

https://www.phoenixcontact.com/us/products/1538021

Bus system cable, INTERBUS (16 Mbps), 5-position, PUR halogen-free, may green RAL 6017, shielded (Braided copper wires), Plug straight M12, coding: B, on Socket straight M12, coding: B, cable length: Free input (0.2 ... 40.0 m)

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

https://www.phoenixcontact.com/us/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets

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SAC-M12-EXCLIP-F - Locking clip

1558991

https://www.phoenixcontact.com/us/products/1558991

Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

WP-CTA POM 13,0 BK - Protective hose adapter

1422884

https://www.phoenixcontact.com/us/products/1422884

Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

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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

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

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SACC-M12FSB-5PL SH IB - Data connector

1424676

https://www.phoenixcontact.com/us/products/1424676

Data connector, INTERBUS (500 kbps), 5-position, shielded, Socket straight M12, coding: B, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

SACC-M12MSB-5PL SH IB - Data connector

1424674

https://www.phoenixcontact.com/us/products/1424674

Data connector, INTERBUS (500 kbps), 5-position, shielded, Plug straight M12, coding: B, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

SAC-5P-15,0-900/M12FSB - Bus system cable

1507146

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SACC-M12FRB-5PL SH IB - Data connector

1424677

https://www.phoenixcontact.com/us/products/1424677

Data connector, INTERBUS (500 kbps), 5-position, shielded, Socket angled M12, coding: B, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

SACC-M12MRB-5PL SH IB - Data connector

1424675

https://www.phoenixcontact.com/us/products/1424675

Data connector, INTERBUS (500 kbps), 5-position, shielded, Plug angled M12, coding: B, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

SAC-5P-15,0-900/M12FSB - Bus system cable

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SACC-M12FSB-5CON-PG9 SH AU - Data connector

1507777

https://www.phoenixcontact.com/us/products/1507777

Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket straight M12, coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

SACC-M12MSB-5CON-PG9 SH AU - Data connector

1507764

https://www.phoenixcontact.com/us/products/1507764

Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug straight M12, coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6.5 mm ... 8.5 mm

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SACC-M12FRB-5CON-PG 9-SH - Data connector

1430420

https://www.phoenixcontact.com/us/products/1430420

Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket angled M12, coding: B, Screw connection, knurl material: Brass, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

SACC-M12MRB-5CON-PG 9-SH - Data connector

1430417

https://www.phoenixcontact.com/us/products/1430417

Data connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug angled M12, coding: B, Screw connection, knurl material: Brass, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

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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

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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

SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/us/products/1208432

Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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CUTFOX 12 - Cable-cutting tool

1212128

https://www.phoenixcontact.com/us/products/1212128

Cable cutter, for copper and aluminum up to 12 mm diameter (up to 35 mm^2)

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

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VS-CABLE-STRIP-VARIO - Stripping tool

1657407

https://www.phoenixcontact.com/us/products/1657407

Stripping tool, for the multi-level stripping of shielded cables

MICROFOX-SP-1 - Diagonal cutter

1212487

https://www.phoenixcontact.com/us/products/1212487

Electronic diagonal cutter, tapered head, without chamfer, with opening spring, non-reflective phosphate-treated surface, punched version

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WIREFOX 4 - Stripping tool

1212156

https://www.phoenixcontact.com/us/products/1212156

Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 mm^2, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm^2 stranded/1.5 mm^2 solid, replaceable stripping blade

WIREFOX-E 4 - Stripping tool

1212704

https://www.phoenixcontact.com/us/products/1212704

Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 mm^2, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm^2 stranded/1.5 mm^2 solid, replaceable stripping blade

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WIREFOX 10 - Stripping tool

1212150

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

Stripping tool, for cables and conductors from 0.02 - 10 mm^2, self-adjusting, stripping length of up to 18 mm, cutting capacity of up to 10 mm^2 stranded/1.5 mm^2 solid, replaceable stripping blade

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