

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

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.



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

Commercial Data

Item number	1507094
Packing unit	1 pc
Minimum order quantity	1 pc
Product Key	BF1CKB
Catalog Page	Page 428 (C-2-2019)
GTIN	4017918899967
Weight per Piece (including packing)	1,050 g
Weight per Piece (excluding packing)	1,050 g
Customs tariff number	85444290
Country of origin	PL

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

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
Number of positions	5
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	B - inverse

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	INTERBUS
Signal type/category	INTERBUS, 16 Mbps

LED signaling

Status display	No
Status display present	No

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
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
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Material for screw connection	Zinc die-cast, nickel-plated
-------------------------------	------------------------------

Connection data

Pin assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) = YE (<u>DO</u>)
	2 (Plug) = GN (<u>DO</u>)
	3 (Plug) = GY (DI)
	4 (Plug) = PK (<u>DI</u>)
	5 (Plug) = BN (GND)

Connector

Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	B


Connection 2

Head design	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 mm ²
Signal speed	0.66 c
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	3x 2x 0.22 mm ²
External cable diameter	8 mm
Outer sheath, material	PUR
External sheath, color	may green RAL 6017

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Conductor material	Bare Cu litz wires
Material wire insulation	PE
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	$\geq 5 \text{ G}\Omega \cdot \text{km}$
Coupling resistance	$< 250.00 \text{ m}\Omega/\text{m}$ (at 30 MHz)
Loop resistance	$\leq 159.80 \text{ }\Omega/\text{km}$
Wave impedance	$120 \text{ }\Omega \pm 20 \%$ (at 64 kHz)
	$100 \text{ }\Omega \pm 15 \%$ (with 1 MHz)
Cable capacity	$\leq 60 \text{ nF/km}$ (At 800 Hz)
Nominal voltage, cable	250 V (Peak value, not for high-power applications)
Test voltage Core/Core	$1500 \text{ V}_{\text{rms}}$
Test voltage Core/Shield	$1000 \text{ V}_{\text{rms}}$
Minimum bending radius, fixed installation	$7.5 \times D$
Minimum bending radius, flexible installation	$15 \times D$
Max. bending cycles	5000000
Near end crosstalk attenuation (NEXT)	$\geq 61 \text{ dB}$ (at 772 kHz)
	$\geq 59 \text{ dB}$ (with 1 MHz)
	$\geq 55 \text{ dB}$ (at 2 MHz)
	$\geq 50 \text{ dB}$ (at 4 MHz)
	$\geq 46 \text{ dB}$ (at 8 MHz)
	$\geq 44 \text{ dB}$ (at 10 MHz)
	$\geq 41 \text{ dB}$ (at 16 MHz)
	$\geq 40 \text{ dB}$ (at 20 MHz)
Shield attenuation	$\leq 15 \text{ dB/km}$ (at 256 kHz)
	$\leq 24 \text{ dB/km}$ (at 772 kHz)
	$\leq 27 \text{ dB/km}$ (with 1 MHz)
	$\leq 52 \text{ dB/km}$ (at 4 MHz)
	$\leq 84 \text{ dB/km}$ (at 10 MHz)
	$\leq 112 \text{ dB/km}$ (at 16 MHz)
Flame resistance	according to VDE 0472, Part 4, test type B
	according to IEC 60332-1
Ambient temperature (operation)	$-40 \text{ }^\circ\text{C} \dots 80 \text{ }^\circ\text{C}$ (cable, fixed installation)
	$-30 \text{ }^\circ\text{C} \dots 70 \text{ }^\circ\text{C}$ (Cable, flexible installation)

Ambient conditions

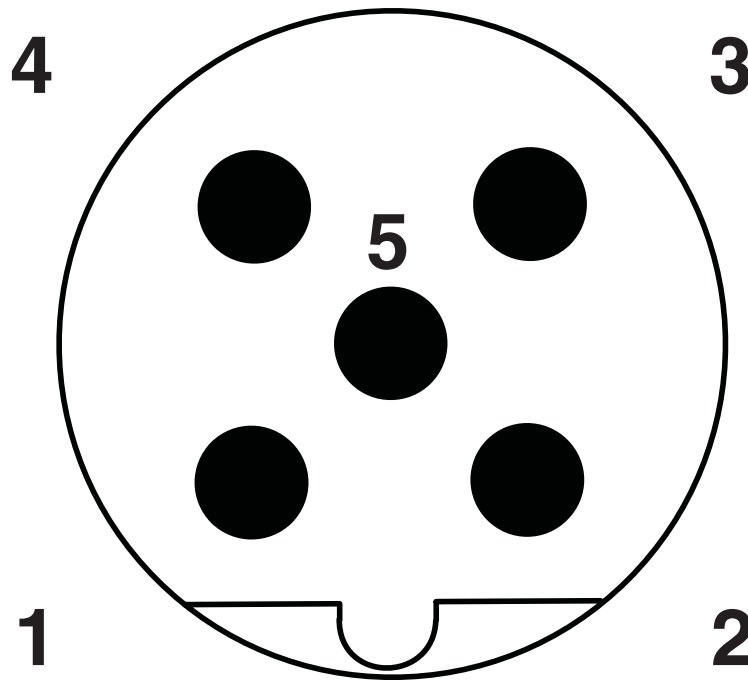
Degree of protection	IP65
	IP67
Ambient temperature (operation)	$-25 \text{ }^\circ\text{C} \dots 90 \text{ }^\circ\text{C}$ (Plug / socket)

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

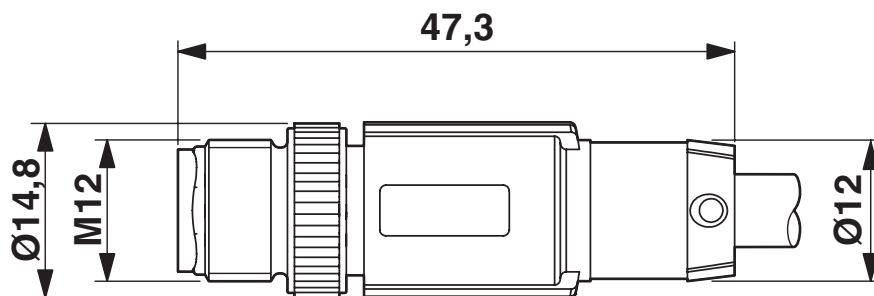
Drawings

Schematic diagram



Pin assignment M12 male connector, 5-pos., B-coded, male side

Dimensional drawing



Plug, M12 x 1, straight, shielded

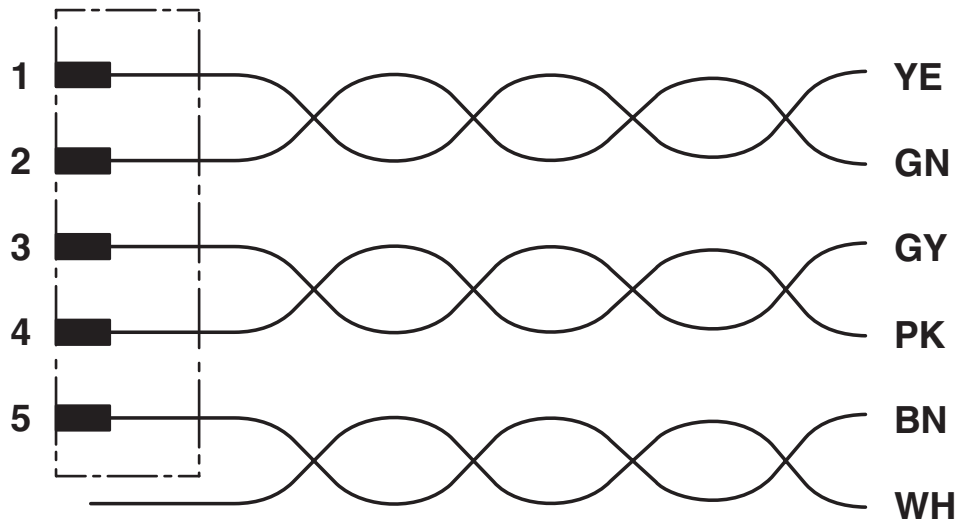
Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>



Circuit diagram



Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



EAC

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

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Classifications

ECLASS

ECLASS-9.0	27060308
ECLASS-10.0.1	27060308
ECLASS-11.0	27060307

ETIM

ETIM 8.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	26121600
-------------	----------

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Accessories

Bus system cable

Bus system cable - SAC-5P-M12MSB/900/... - 1537983

<https://www.phoenixcontact.com/pc/products/1537983>



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

Bus system cable

Bus system cable - SAC-5P-M12FSB/900/... - 1538005

<https://www.phoenixcontact.com/pc/products/1538005>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Bus system cable

Bus system cable - SAC-5P-M12MSB-M12FSB/900/... - 1538021

<https://www.phoenixcontact.com/pc/products/1538021>



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

Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/pc/products/1208429>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Torque screwdriver

Torque screwdriver - TSD-M 1,2NM - 1212224

<https://www.phoenixcontact.com/pc/products/1212224>



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

<https://www.phoenixcontact.com/pc/products/1212600>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Tool

Tool - SAC BIT M12-D15 - 1208432

<https://www.phoenixcontact.com/pc/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

Sealing cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

<https://www.phoenixcontact.com/pc/products/1430873>



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

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Locking clip

Locking clip - SAC-M12-EXCLIP-M - 1558988

<https://www.phoenixcontact.com/pc/products/1558988>



Locking clip for the pin 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

Cable-cutting tool

Cable-cutting tool - CUTFOX 12 - 1212128

<https://www.phoenixcontact.com/pc/products/1212128>



Cable cutter, for copper and aluminum up to 12 mm diameter (up to 35 mm²)

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

<https://www.phoenixcontact.com/pc/products/1212207>



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

Stripping tool

Stripping tool - VS-CABLE-STRIP-VARIO - 1657407

<https://www.phoenixcontact.com/pc/products/1657407>

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



Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Diagonal cutter

Diagonal cutter - MICROFOX-SP-1 - 1212487

<https://www.phoenixcontact.com/pc/products/1212487>



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

Stripping tool

Stripping tool - WIREFOX 4 - 1212156

<https://www.phoenixcontact.com/pc/products/1212156>



Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Stripping tool

Stripping tool - WIREFOX-E 4 - 1212704

<https://www.phoenixcontact.com/pc/products/1212704>



Stripping tool, for cables and conductors (especially for rubber and silicone insulations) from 0.1 - 4 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

Stripping tool

Stripping tool - WIREFOX 10 - 1212150

<https://www.phoenixcontact.com/pc/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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Protective hose adapter

Protective hose adapter - WP-CTA POM 13,0 BK - 1422884

<https://www.phoenixcontact.com/pc/products/1422884>



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

Protective hose

Protective hose - WP-PA HF 13,0 BK - 3240681

<https://www.phoenixcontact.com/pc/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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Protective hose

Protective hose - WP-PA HF-HB 13,0 BK - 3240839

<https://www.phoenixcontact.com/pc/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

Data connector

Data connector - SACC-M12FSB-5PL SH IB - 1424676

<https://www.phoenixcontact.com/pc/products/1424676>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Data connector

Data connector - SACC-M12MSB-5PL SH IB - 1424674

<https://www.phoenixcontact.com/pc/products/1424674>



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

Data connector

Data connector - SACC-M12FRB-5PL SH IB - 1424677

<https://www.phoenixcontact.com/pc/products/1424677>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Data connector

Data connector - SACC-M12MRB-5PL SH IB - 1424675

<https://www.phoenixcontact.com/pc/products/1424675>



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

Data connector

Data connector - SACC-M12FSB-5CON-PG9 SH AU - 1507777

<https://www.phoenixcontact.com/pc/products/1507777>



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

Bus system cable - SAC-5P-M12MSB/15,0-900

1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Data connector

Data connector - SACC-M12MSB-5CON-PG9 SH AU - 1507764

<https://www.phoenixcontact.com/pc/products/1507764>



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

Data connector

Data connector - SACC-M12FRB-5CON-PG 9-SH - 1430420

<https://www.phoenixcontact.com/pc/products/1430420>



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

Bus system cable - SAC-5P-M12MSB/15,0-900



1507094

<https://www.phoenixcontact.com/pc/products/1507094>

Data connector

Data connector - SACC-M12MRB-5CON-PG 9-SH - 1430417

<https://www.phoenixcontact.com/pc/products/1430417>

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



Phoenix Contact 2022 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstraße 8

D-32825 Blomberg

+49 (0) 5235-3 00

info@phoenixcontact.com