chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

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, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12, coding: B, on Socket straight M12, coding: B, cable length: 15 m

Commercial Data

Item number	1507405
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF1CKC
Product Key	BF1CKC
Catalog Page	Page 429 (C-2-2019)
GTIN	4017918900229
Weight per Piece (including packing)	883 g
Weight per Piece (excluding packing)	880 g
Customs tariff number	85444290
Country of origin	PL

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Technical Data

Notes

General	Further products with variable cable lengths can be found in the accessories section

Product properties

Product type	Data cable preassembled
Number of positions	2
Application	Standard
No. of cable outlets	1
Shielded	yes
Coding	B - inverse

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Interfaces

Bus system	PROFIBUS
Signal type/category	PROFIBUS, 12 Mbps (max. 100 m)

LED signaling

Status display	No
Status display present	No

Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Transmission medium	Copper

Material specifications

Sealing 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 (plug), TPU GF (socket)
Cable gland material	Zinc die-cast, nickel-plated

Connection data

Pin assignment

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Contact | Color (signal designation) | Contact (optional)	2 (Plug) = GN (A cable) = 2 (Socket) 4 (Plug) = RD (B cable) = 4 (Socket)

Connector

Insertion/withdrawal cycles	≥ 100

Header 1

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

Head 2

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

Cable / line

Cable length	15 m
Cable weight	90 kg/km
UL AWM Style	21198 (80°C/300 V)
Number of positions	2
Shielded	yes
Cable type	PROFIBUS [910]
Conductor structure signal line	19x 0.13 mm
AWG signal line	24
Conductor cross section	2x 0.25 mm² (Signal line)
Wire diameter incl. insulation	2.55 mm ±0.07 mm
External cable diameter	7.8 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001
Conductor material	Tin-plated Cu litz wires
Material wire insulation	Foam-Skin PP
Single wire, color	Red, green
Overall twist	2 cores with 2 fillers to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 78.6 Ω/km
Insulation resistance	≥ 5 GΩ*km
Wave impedance	150 Ω ±10 % (3 MHz ... 20 MHz)
Cable capacity	nom. 30 pF/m
Nominal voltage, cable	300 V
Test voltage Core/Core	1500 V (50 Hz, 1 min.)
Test voltage Core/Shield	1500 V (50 Hz, 1 min.)
Smallest bending radius, fixed installation	40 mm

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Smallest bending radius, movable installation	65 mm
Max. bending cycles	4000000
	5000000
Shield attenuation	≤ 0.049 dB/m (at 16 MHz)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Flame resistance	UL 1581, Section 1060 and UL 2556, Section 9.3 (FT1)
	UL 1581, Section 1100 and UL 2556, Section 9.1 (HFT/FT2)
	IEC 60332-1-2
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 70 °C (Cable, flexible installation)
	-20 °C ... 60 °C (for installation)
	-20 °C ... 60 °C (cable, drag chain applications)

Cable structure

Cable type	PROFIBUS
Signal type/category	PROFIBUS, 12 Mbps (max. 100 m)
Outer sheath, material	PUR
External sheath, color	red lilac RAL 4001

Ambient conditions

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

chanhvinh.com

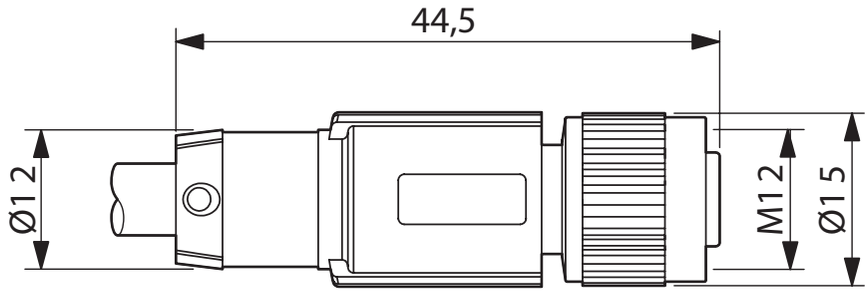
Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

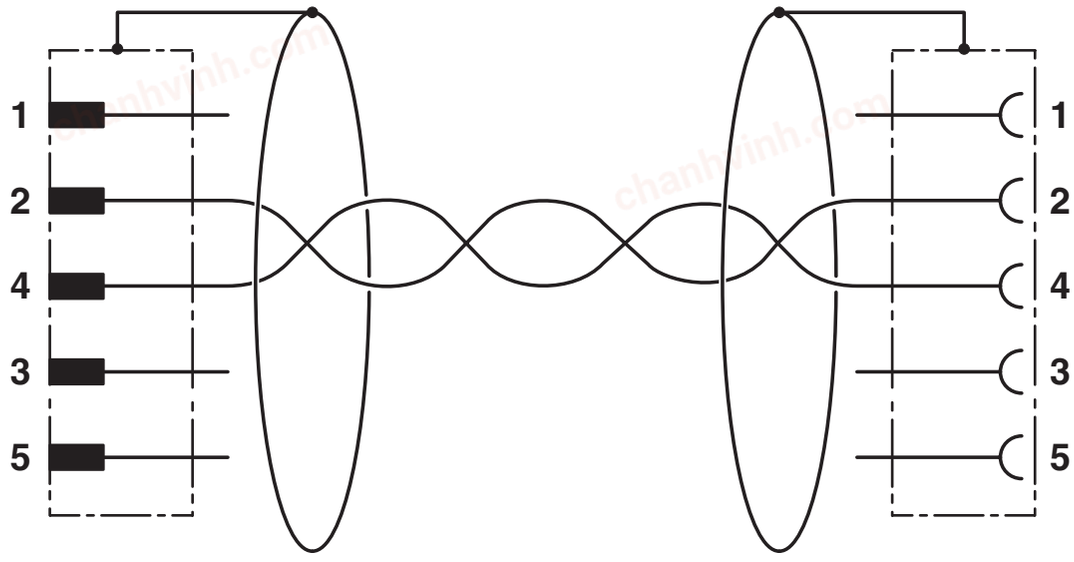
Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Circuit diagram



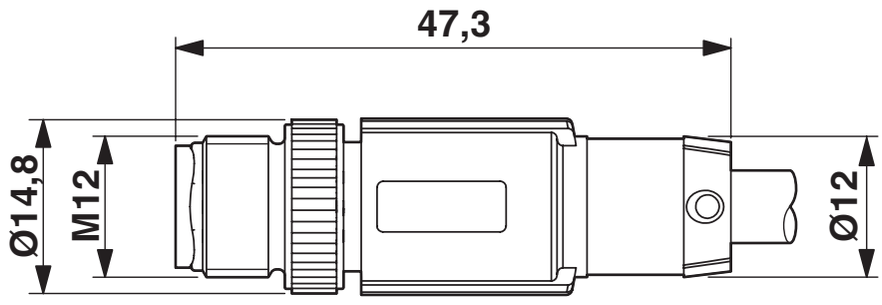
chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

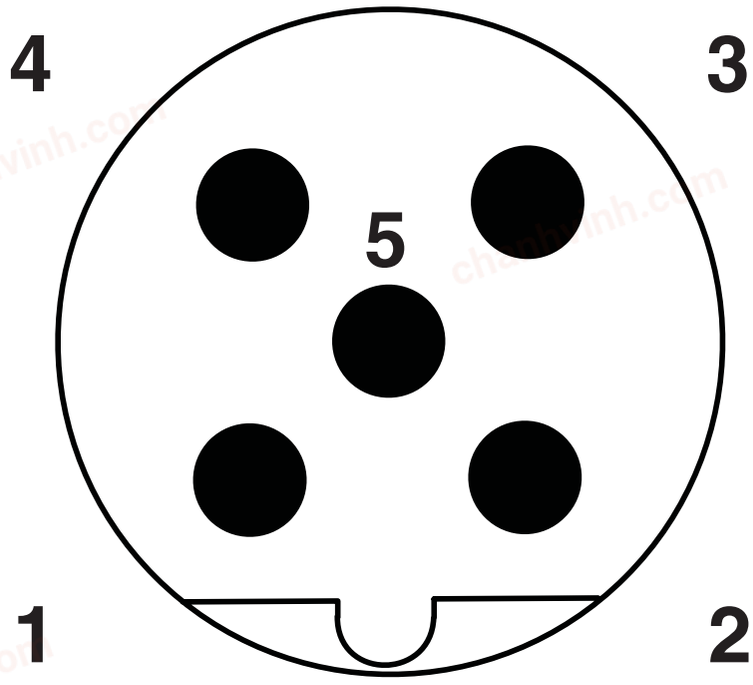
https://www.phoenixcontact.com/gb/products/1507405

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



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

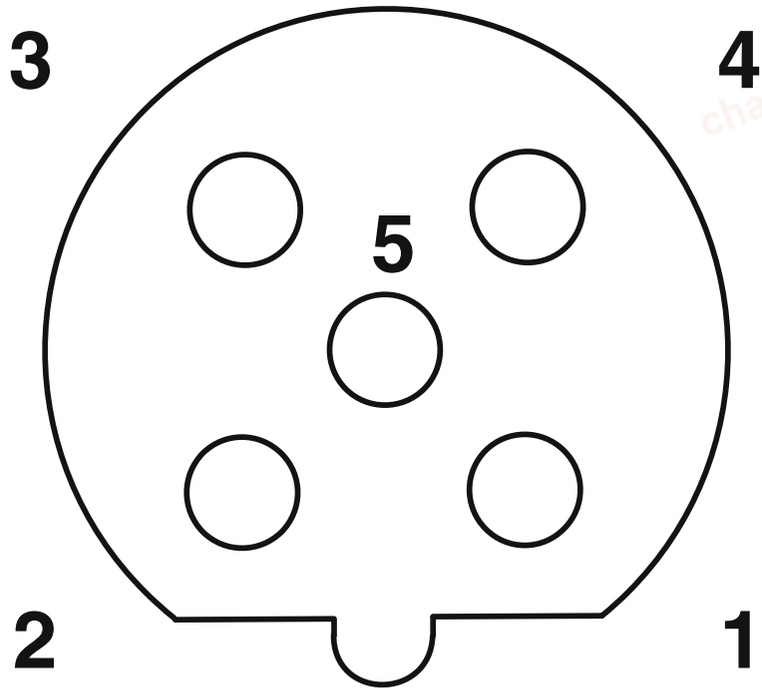
chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Schematic diagram



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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Approvals

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

UL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-

cUL Listed
Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-

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

cULus Listed

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Environmental Product Compliance

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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Accessories

Bus system cable

Bus system cable - SAC-2P-M12MSB/910/... - 1538047

https://www.phoenixcontact.com/gb/products/1538047



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, Plug straight M12, coding: B, on free cable end, cable length: Free input (0.2 ... 40.0 m)

Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

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



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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Bus system cable

Bus system cable - SAC-2P-M12MSB-M12FSB/910/... - 1538089

https://www.phoenixcontact.com/gb/products/1538089



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, 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-M 1,2NM - 1212224

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



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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Bus system cable

Bus system cable - SAC-2P-M12FSB/910/... - 1538063

https://www.phoenixcontact.com/gb/products/1538063



Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, red lilac RAL 4001, shielded, free cable end, on Socket straight M12, coding: B, cable length: Free input (0.2 ... 40.0 m)

Adapter insert

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

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



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

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Tool

Tool - SAC BIT M12-D15 - 1208432

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

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



chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Locking clip

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

https://www.phoenixcontact.com/gb/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

Screw plug

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

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

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



chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

Locking clip

Locking clip - SAC-M12-EXCLIP-F - 1558991

https://www.phoenixcontact.com/gb/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

T distributor

T distributor - SAC-5PT-FB/2XMB PBDP SH - 1424711

https://www.phoenixcontact.com/gb/products/1424711



T distributor, PROFIBUS DP (12 Mbps), 5-position, shielded, Socket straight M12, coding: B, on Plug straight M12, coding: B and Plug straight M12, coding: B

chanhvinh.com

Bus system cable - SAC-2P-M12MSB/15,0-910/M12FSB

1507405

https://www.phoenixcontact.com/gb/products/1507405

T distributor

T distributor - SAC-5PT-FB/MB-MBF PBDP SH - 1424713

https://www.phoenixcontact.com/gb/products/1424713



T distributor, PROFIBUS DP (12 Mbps), 5-position, shielded, Socket straight M12, coding: B, on Plug straight M12, coding: B and Plug straight M12, coding: B, Fixed M12 thread on plug input

Termination resistor

Termination resistor - SAC-5P-M12MS PB TR - 1507803

https://www.phoenixcontact.com/gb/products/1507803



Terminating resistor PROFIBUS M12

Phoenix Contact 2022 © - all rights reserved
https://www.phoenixcontact.com

PHOENIX CONTACT Ltd
Halesfield 13, Telford
Shropshire, TF7 4PG
01952 681700
info@phoenixcontact.co.uk