

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308


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Bus system cable, PROFIBUS (12 Mbps), 2-position, PUR halogen-free, violet RAL 4001, shielded, free cable end, on Socket straight M12, coding: B, cable length: 5 m



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 900137
GTIN	4017918900137

### Technical data

#### Dimensions

Length of cable	5 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

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

#### General

Note	Further products with variable cable lengths can be found in the accessories section
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	2
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Status display	No
Overvoltage category	II

# Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

## Technical data

### General

Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

### Material

Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Cable

Cable type	PROFIBUS
Cable type (abbreviation)	910
UL AWM style	21198 (80°C/300 V)
Cable structure	1x2xAWG24/19
Conductor cross section	2x 0.25 mm <sup>2</sup> (Signal line)
AWG signal line	24
Conductor structure signal line	19x 0.13 mm
Core diameter including insulation	2.55 mm ±0.07 mm
Wire colors	Red, green
Overall twist	2 cores with 2 fillers to the core
Shielding	Plastic-coated aluminum foil, tinned copper braided shield
Optical shield covering	85 %
External sheath, color	violet RAL 4001
External cable diameter D	7.8 mm ±0.2 mm
Smallest bending radius, fixed installation	40 mm
Smallest bending radius, movable installation	65 mm
Number of bending cycles	4000000
Bending radius	65 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Number of bending cycles	5000000
Bending radius	80 mm
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s <sup>2</sup>
Cable weight	90 kg/km
Outer sheath, material	PUR
Material, filler	PP

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Technical data

#### Cable

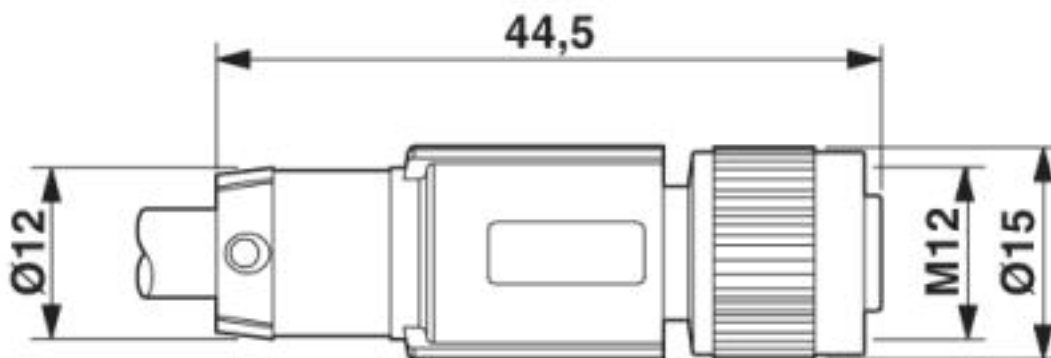
Material conductor insulation	Foam-Skin PP
Conductor material	Tin-plated Cu litz wires
Insulation resistance	$\geq 5 \text{ G}\Omega \cdot \text{km}$
Conductor resistance	$\leq 78.6 \text{ }\Omega/\text{km}$
Cable capacity	nom. 30 pF/m
Wave impedance	$150 \text{ }\Omega \pm 10 \%$ (3 MHz ... 20 MHz)
Attenuation	$\leq 0.049 \text{ dB/m}$ (at 16 MHz)
Nominal voltage, cable	30 V
Test voltage Core/Core	1500 V (50 Hz, 1 min.)
Test voltage Core/Shield	1500 V (50 Hz, 1 min.)
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1-2
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-30 °C ... 80 °C (cable, flexible installation)
	$\leq 70 \text{ }^\circ\text{C}$ (cable, drag chain applications)

#### Environmental Product Compliance

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

### Drawings

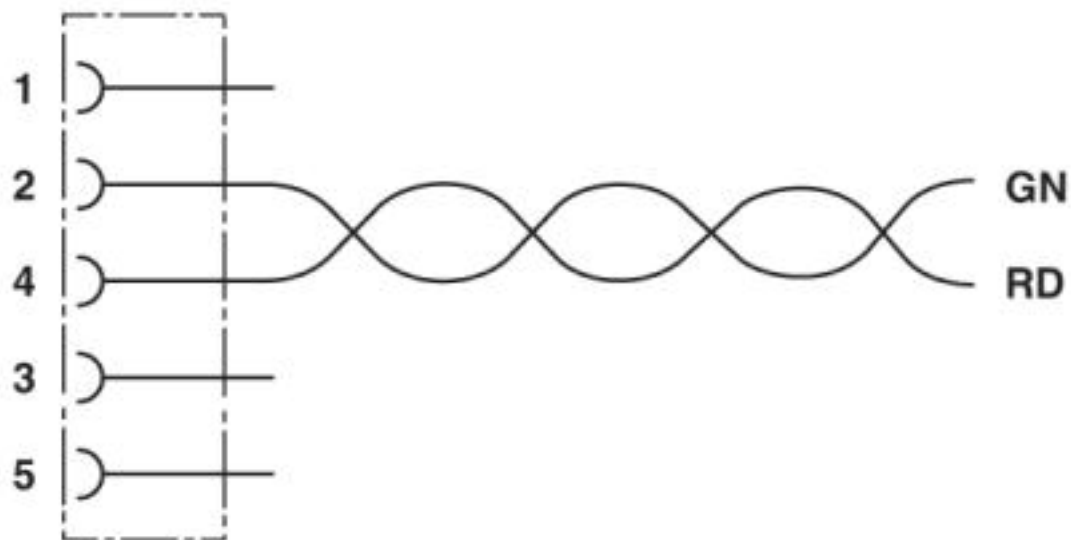
Dimensional drawing



M12 x 1 socket, straight, shielded

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

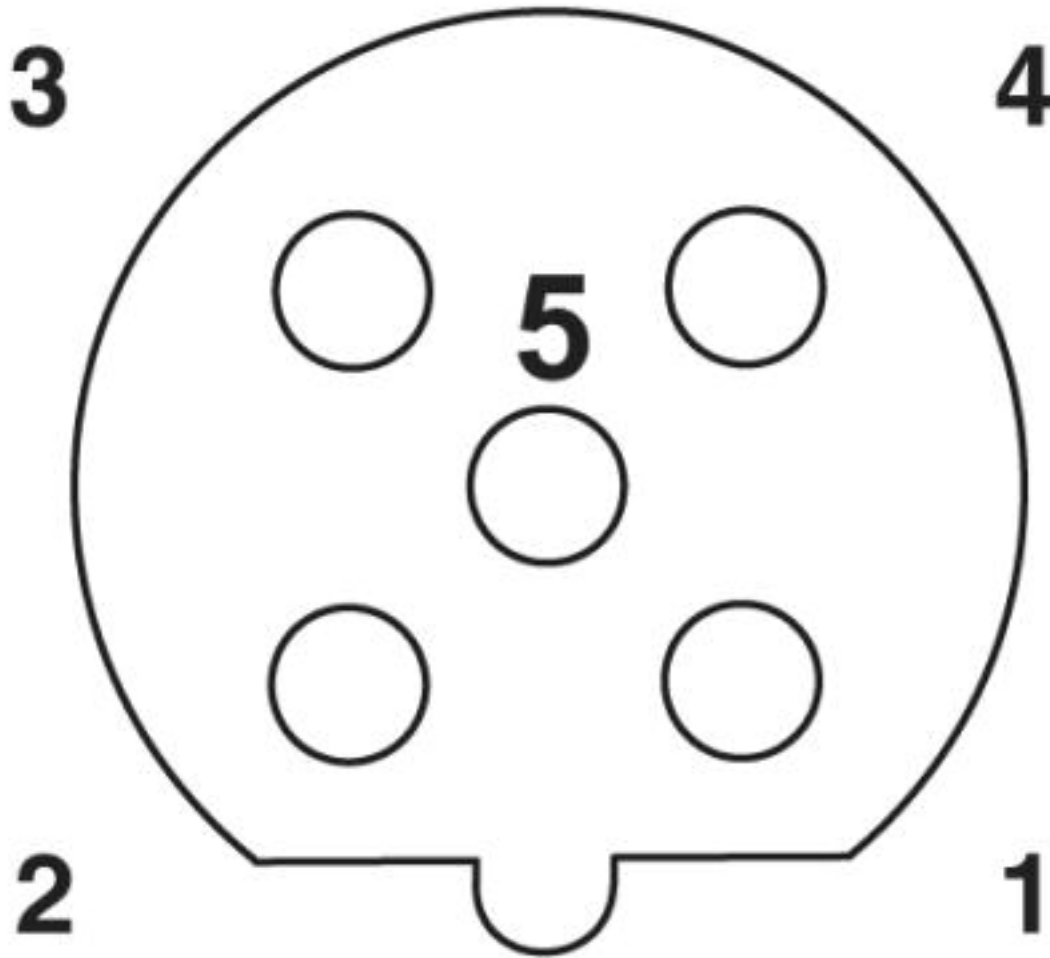
Circuit diagram



Contact assignment of the M12 socket

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

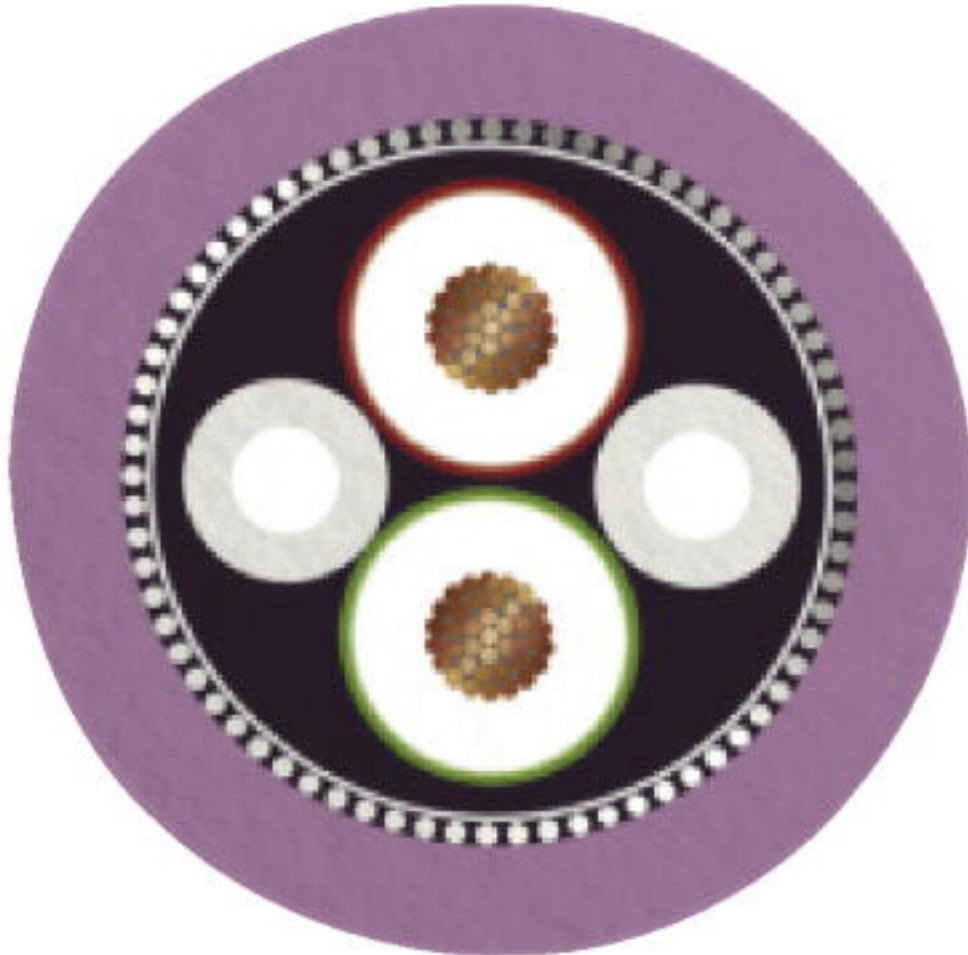
Schematic diagram



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

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

Cable cross section



PROFIBUS [910]

### Classifications

eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060308

# Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

## Classifications

### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC002599
ETIM 6.0	EC001262
ETIM 7.0	EC001262

### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 18.0	26121604
UNSPSC 19.0	26121604
UNSPSC 20.0	26121604
UNSPSC 21.0	26121604

## Approvals

### Approvals

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Approvals

null / null / null

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Ex Approvals

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### Approval details

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## Accessories

### Accessories

Circular connector (cable-side)

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

Bus system connector - SACC-M12FSB-2PL SH PB - 1424680



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Socket straight M12, Coding: B, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12MSB-2PL SH PB - 1424678



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Plug straight M12, Coding: B, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12FRB-2PL SH PB - 1424681



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Socket angled M12, Coding: B, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12MRB-2PL SH PB - 1424679



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Plug angled M12, Coding: B, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-FSB-2QO SH PB SCO - 1413932



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Socket straight M12 SPEEDCON, Coding: B, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm



## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

Bus system connector - SACC-MSB-2QO SH PB SCO - 1413931



Bus system connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Plug straight M12 SPEEDCON, Coding: B, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

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Bus system connector - SACC-M12FSB-5CON-PG9 SH AU - 1507777



Bus system 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

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Bus system connector - SACC-M12MSB-5CON-PG9 SH AU - 1507764



Bus system 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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Bus system connector - SACC-M12FRB-5CON-PG 9-SH - 1430420



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Socket angled M12, Coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

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Bus system connector - SACC-M12MRB-5CON-PG 9-SH - 1430417



Bus system connector, PROFIBUS, INTERBUS, 5-position, shielded, Plug angled M12, Coding: B, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

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### Corrugated pipe

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

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



Polyamide protective hose, inflammability class V0, UV resistant

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



Polyamide protective hose, inflammability class HB, UV resistant

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### Cutting tools

Cable-cutting tool - CUTFOX 12 - 1212128



Cable cutter, for copper and aluminum up to 12 mm diameter (up to 35 mm<sup>2</sup>)

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Diagonal cutter - CUTFOX-S VDE - 1212207



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

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### Data cable preassembled

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



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

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## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

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



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

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



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

### Electronics pliers

Diagonal cutter - MICROFOX-SP-1 - 1212487



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

### Plug for cable screw gland

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

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



### Safety locking

Locking clip - SAC-M12-EXCLIP-F - 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

### Screwdriver tools

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

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



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

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Tool - SAC BIT M12-D15 - 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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### Stripping tool

Stripping tool - WIREFOX 4 - 1212156



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

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Stripping tool - WIREFOX-E 4 - 1212704



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

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Stripping tool - WIREFOX 10 - 1212150



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

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### T-distributor

## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

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

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T distributor - SAC-5PT-FB/MB-MBF PBDP SH - 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, Thread M12 plug input not rotatable

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### Terminal resistor

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



Terminating resistor PROFIBUS M12

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### Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



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

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



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

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## Bus system cable - SAC-2P- 5,0-910/M12FSB - 1507308

### Accessories

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



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

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



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

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