

SAC-5P-5,0-500/M12FR-3L FB - Sensor/actuator cable



1421008

<https://www.phoenixcontact.com/us/products/1421008>

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Sensor/actuator cable, 5-position, PVC, gray RAL 7001, free cable end, on Socket angled M12, coding: A, with 3 LEDs, cable length: 5 m, with high-grade steel knurl

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Contamination can be detected quickly – thanks to the light color

Commercial data

Item number	1421008
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	BF1CDA
GTIN	4055626250380
Weight per piece (including packing)	224.89 g
Weight per piece (excluding packing)	215.85 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Food processing industry
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Material of grip body	PP
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PP
Material for screw connection	Stainless steel

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	24 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Signaling

Status display	3 LEDs
Status display present	Yes

Connector

Connection 1

Type	free cable end
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Connection 2

Type	Socket angled M12
Number of positions	5
Coding type	A

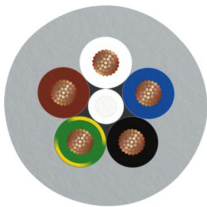
Cable/line

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Cable length	5 m
PVC gray [500]	
Dimensional drawing	
Cable weight	51 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	5
Shielded	no
Cable type	PVC gray [500]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	5x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
External cable diameter	5.00 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black, green-yellow
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	5 wires around filler to the core
Max. conductor resistance	max. 57 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	25 mm
Smallest bending radius, movable installation	50 mm
Flame resistance	As per UL-Style 2464
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

IP65

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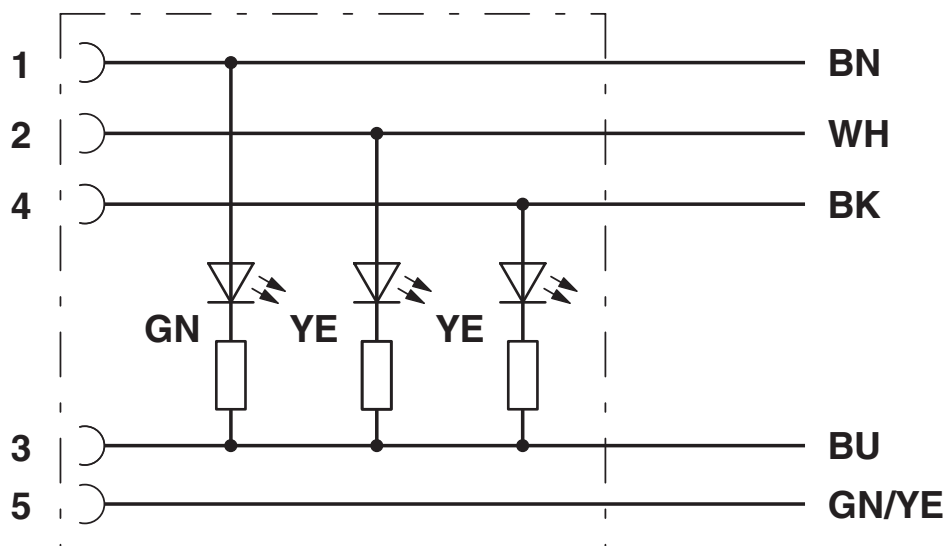
Degree of protection	IP67
	IP68
	IP69K
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

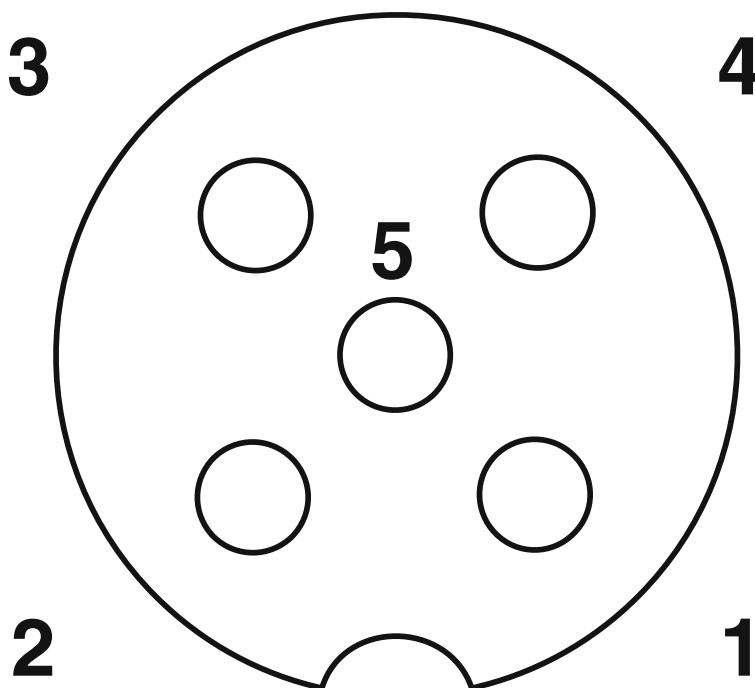
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

Drawings

Circuit diagram



Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

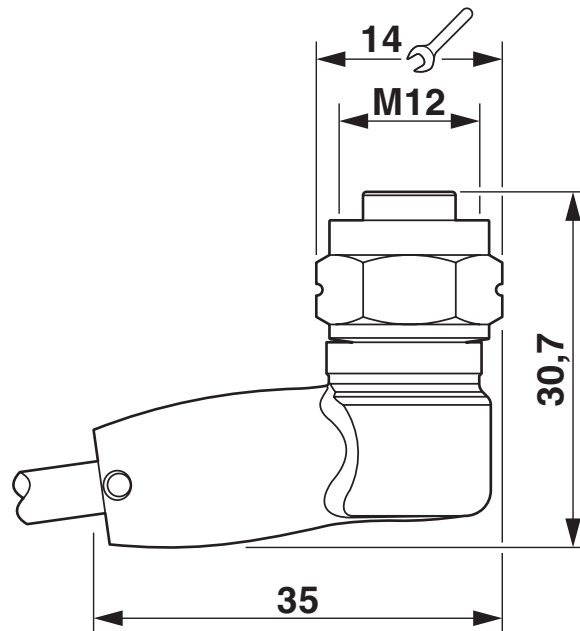
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Dimensional drawing



M12 x 1 male plug, angled

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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 8.0	EC001855
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UNSPSC

UNSPSC 21.0	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.)	1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus" TM)(CAS: n/a)
SCIP	543bebd7-87c0-474c-8634-0c273dcb59e4

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Accessories

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

WIREFOX SAC - Stripping tool

1212623

<https://www.phoenixcontact.com/us/products/1212623>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

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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 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

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

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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

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

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SAC BIT M12-W14 - Tool

1212513

<https://www.phoenixcontact.com/us/products/1212513>

Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a hexagonal knurl wrench size of 14 mm, with 4 mm hexagonal drive



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