

SAC-5P-M12MS/20,0-680 FDP - Sensor/actuator cable

1095852

<https://www.phoenixcontact.com/us/products/1095852>



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Sensor/actuator cable, 5-position, PVC, gray, shielded, Plug straight M12, coding: A, on free cable end, cable length: 20 m, Foil shielding plus drain wire



Commercial data

Item number	1095852
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	AF1IEC
GTIN	4055626928036
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	HB
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC

Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection	
Tightening torque	0.4 Nm (M12 connector)

Connector

Connection 1	
Type	Plug straight M12

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Coding type

A

Connection 2

Type

free cable end

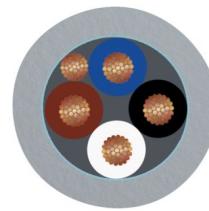
Cable/line

Cable length

20 m

PVC, gray, 105°C [680]

Dimensional drawing



Cable weight

45.42 kg/km

UL AWM Style

2517 (105 °C / 300 V)

Number of positions

4

Shielded

yes

Cable type

PVC, gray, 105°C [680]

AWG signal line

22

Wire diameter incl. insulation

1.27 mm ±0.03 mm

External cable diameter

5.08 mm ±0.2 mm

Outer sheath, material

PVC

External sheath, color

gray

Conductor material

Tin-plated Cu litz wires

Material wire insulation

PVC (Signal line)

Single wire, color

brown, white, blue, black

Type of pair shielding

Plastic-coated aluminum foil, aluminum side inside

Overall twist

Conductors, fillers, and drain wire are twisted with left-hand lay

Max. conductor resistance

max. 51.1 Ω/km (20 °C)

Insulation resistance

≥ (550 M Ohms/m @ 500V)

Nominal voltage, cable

300 V

Minimum bending radius, flexible installation

8 x D

Smallest bending radius, movable installation

41 mm

Flame resistance

FT4

Other resistance

UV resistant

Special properties

UL standards PLTC and ITC

Ambient temperature (operation)

-30 °C ... 105 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

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

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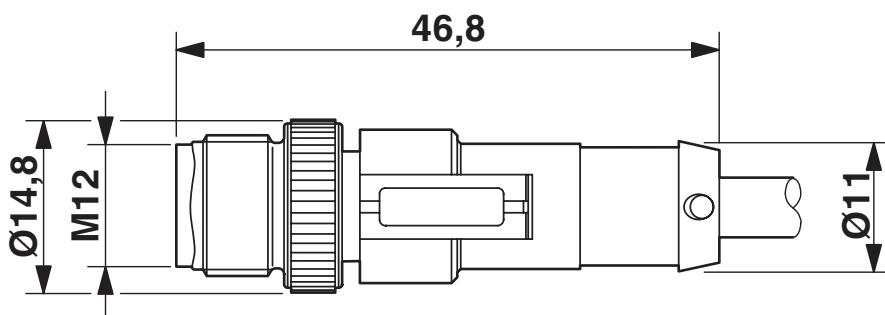
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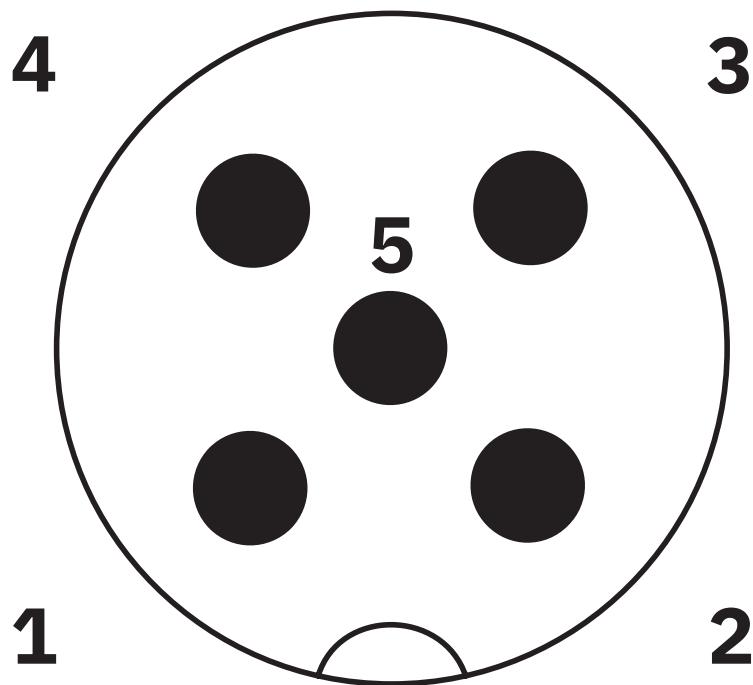
Drawings

Dimensional drawing



Plug, M12 x 1, straight

Schematic diagram



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

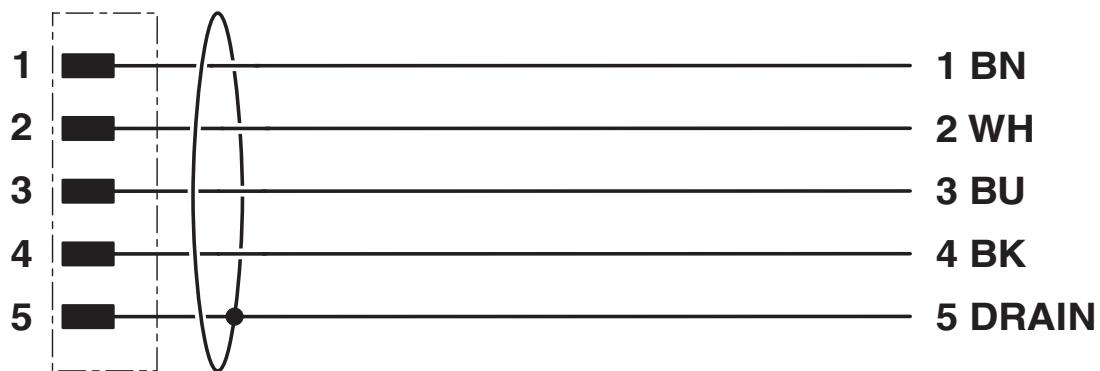
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Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1095852>

UL Listed		Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine					
		125 V	4 A	-	-

cUL Listed		Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine					
		125 V	4 A	-	-

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	31251501
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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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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