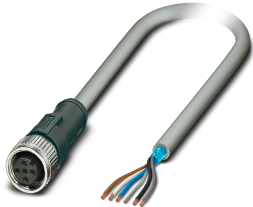


Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959


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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 929101
GTIN	4055626929101
Weight per Piece (excluding packing)	940.000 g
Country of origin	United States

Technical data

Dimensions

Length of cable	20 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67
	IP68

General

Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Technical data

General

Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	HB
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

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Flammability rating according to UL 94	HB

Cable

Cable type	PVC, gray, 105°C
Cable type (abbreviation)	680
UL AWM style	2517 (105 °C / 300 V)
AWG signal line	22
Core diameter including insulation	1.27 mm ±0.03 mm
Wire colors	Brown, white, blue, black, gray
Type of pair shielding	Plastic-coated aluminum foil, aluminum side inside
Overall twist	Conductors, fillers, and drain wire are twisted with left-hand lay
Shielding	Plastic-coated aluminum foil connection with a drain wire
External sheath, color	gray
External cable diameter D	5.44 mm ±0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	46.03 kg/km
Outer sheath, material	PVC

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Technical data

Cable

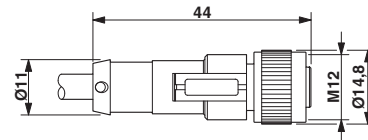
Material conductor insulation	PVC (Signal line)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Conductor resistance	max. 51.1 Ω/km (20 °C)
Nominal voltage, cable	300 V
Special properties	UL standards PLTC and ITC
Other resistance	UV resistant
Flame resistance	FT4
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

Drawings

Circuit diagram



Dimensional drawing



M12 x 1 socket, straight

Contact assignment of the M12 plug and the M12 socket

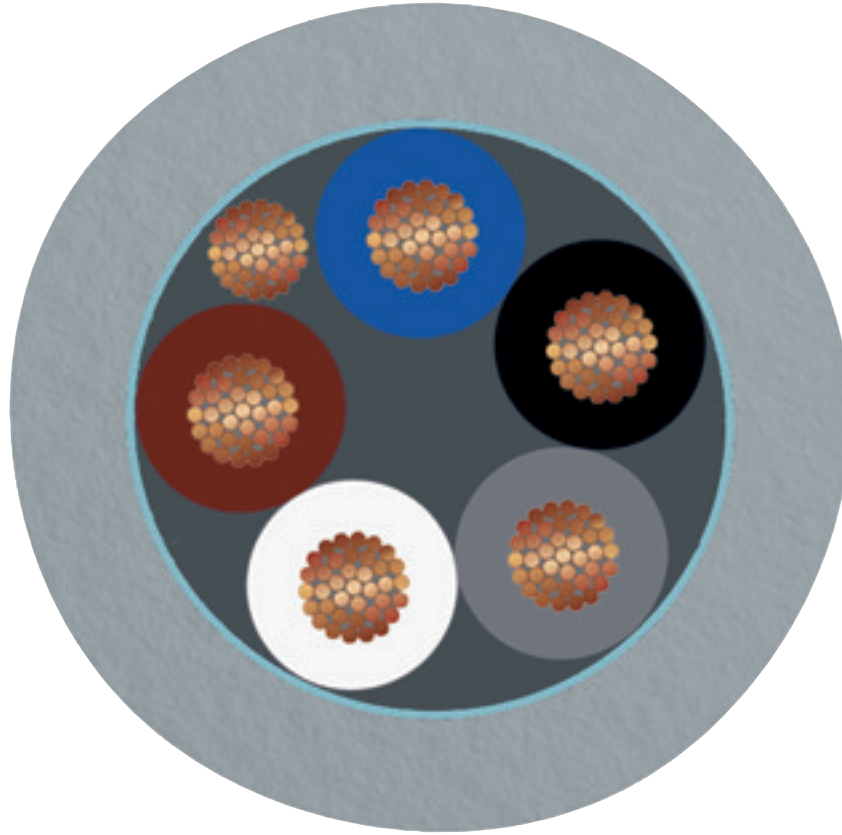
Schematic diagram



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

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Cable cross section



PVC, gray, 105°C [680]

Classifications

eCl@ss

eCl@ss 10.0.1	27060311
eCl@ss 11.0	27060311
eCl@ss 9.0	27060311

Approvals

Approvals

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		125 V	
Nominal current IN		4 A	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN		125 V	
Nominal current IN		4 A	

cULus Listed			
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Accessories

Accessories

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



Protective cap

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Accessories

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

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



Safety locking

Locking clip - SAC-M12-EXCLIP-M - 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

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

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

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

Sensor/actuator cable - SAC-5P-20,0-680/M12FS FDN - 1095959

Accessories

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

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



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