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Sensor/Actuator cable, 17-position, PUR halogen-free, black RAL 9005, free cable end, on Socket straight M12 SPEEDCON, A-coded, Cable length: 3 m

Why buy this product

- Our standard: robust halogen-free PUR cable
- Save space with high-pos. connectors





Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 456609
Weight per Piece (excluding packing)	226.2 g
Custom tariff number	85444290
Country of origin	Germany
Product key	BF1CGA
Note	Made to Order (non-returnable)

Technical data

Dimensions

Length of cable	3 m
Stripping length of the free conductor end	35 mm

Ambient conditions

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

General



Technical data

General

Rated current at 40°C	1.5 A
Rated voltage	30 V
Number of positions	17
Contact resistance	$\leq 5~\text{m}\Omega$
Insulation resistance	\geq 100 M Ω
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Pollution degree	3
Torque	0.4 Nm (M12 connector)

Material

Inflammability class according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 66
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Cable

AWG signal line 26 Conductor structure signal line 18x 0.10 mm Core diameter including insulation 1 mm ±0.05 mm (signal line) White, brown, green, yellow, gray, pink, blue, red, black, violet, gray-pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray Overall twist 17 wires twisted in layers External sheath, color black RAL 9005 External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires		I.= 2/
Conductor structure signal line Core diameter including insulation 1 mm ±0.05 mm (signal line) White, brown, green, yellow, gray, pink, blue, red, black, violet, gray-pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray Overall twist 17 wires twisted in layers External sheath, color External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration Outer sheath, material PUR Material conductor insulation PP Conductor material 11 mm ±0.05 mm (signal line) White, brown, green, yellow, gray, pink, blue, red, black, violet, gray-pink, violet, g	Conductor cross section	17x 0.14 mm² (signal line)
Core diameter including insulation 1 mm ±0.05 mm (signal line) White, brown, green, yellow, gray, pink, blue, red, black, violet, gray-pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray Overall twist 17 wires twisted in layers External sheath, color External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	AWG signal line	26
White, brown, green, yellow, gray, pink, blue, red, black, violet, gray-pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray Overall twist 17 wires twisted in layers External sheath, color External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Conductor structure signal line	18x 0.10 mm
Wire colors pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray Overall twist 17 wires twisted in layers External sheath, color External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material pink, red-blue, white-green, brown-green, white-yellow, yellow-brown, white-gray 17 wires twisted in layers black RAL 9005 8 mm 4000000 9 mm 10 m Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Tin-plated Cu litz wires	Core diameter including insulation	1 mm ±0.05 mm (signal line)
External sheath, color External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material Material conductor insulation PP Conductor material black RAL 9005 8 mm 4000000 10 m/s² 10 m/s² Traversing path 10 m/s² Traversing rate 10 m/s² Tin-plated Cu litz wires	Wire colors	pink, red-blue, white-green, brown-green, white-yellow, yellow-brown,
External cable diameter D 8 mm Number of bending cycles 4000000 Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material 8 mm 4000000 8 mm 10 m/s 10 m Traversing path 10 m Traversing rate 3 m/s Traversing rate 10 m/s² Tin-plated Cu litz wires	Overall twist	17 wires twisted in layers
Number of bending cycles Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material 4000000 10 m/s² 10 m/s² Traversing rate 10 m/s² Tin-plated Cu litz wires	External sheath, color	black RAL 9005
Bending radius 60 mm Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	External cable diameter D	8 mm
Traversing path 10 m Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Number of bending cycles	4000000
Traversing rate 3 m/s Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Bending radius	60 mm
Acceleration 10 m/s² Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Traversing path	10 m
Outer sheath, material PUR Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Traversing rate	3 m/s
Material conductor insulation PP Conductor material Tin-plated Cu litz wires	Acceleration	10 m/s²
Conductor material Tin-plated Cu litz wires	Outer sheath, material	PUR
·	Material conductor insulation	PP
Conductor resistance 142 Ω/km	Conductor material	Tin-plated Cu litz wires
	Conductor resistance	142 Ω/km



Technical data

Cable

Special properties	Low adhesion surface
Resistance to oil	DIN VDE 0472 Part 803, test type B
Other resistance	Hydrolysis and microbe resistant as per VDE 0282 section 10
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-5 °C 80 °C (cable, flexible installation)

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

Approvals

Approvals

EAC

Ex Approvals

Approvals submitted



Approvals

Approval details

EAC

Drawings

Schematic diagram



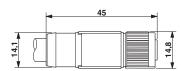
Pin assignment M12, 17-pos., socket side view

Cable cross section



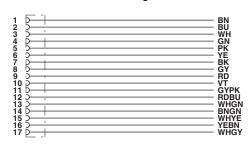
PUR halogen-free black [PUR]

Dimensional drawing



Socket M12-SPEEDCON, straight, shielded

Circuit diagram



Contact assignment of the M12 socket

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