

# SAC-5P-3,0-600/M12FR-3L HD - Sensor/actuator cable



1404059

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Sensor/actuator cable, 5-position, PP-EPDM halogen-free, gray RAL 7035, free cable end, on Socket angled M12, coding: A, with 3 LEDs, cable length: 3 m, Hygienic design, with high-grade steel knurl

## Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- Stainless steel type 1.4404 used to provide corrosion protection for all exposed metal parts
- Contamination can be detected quickly – thanks to the light color
- Convenient: increased machine availability thanks to quick and easy diagnostics

## Commercial data

Item number	1404059
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CDA
GTIN	4046356677967
Weight per piece (including packing)	112.9 g
Weight per piece (excluding packing)	103.4 g
Customs tariff number	85444290
Country of origin	PL

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## 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

Seal material	FKM
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	$\geq 100$
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### Signaling

Status display	3 LEDs
Status display present	yes

### Connection data

#### Conductor connection

Tightening torque	0.4 Nm (M12 connector)
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### 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

Cable length	3 m
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## Halogen-free PP gray [600]

Dimensional drawing	
Cable weight	34 kg/km
Number of positions	5
Shielded	no
Cable type	Halogen-free PP gray [600]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	5x 0.34 mm <sup>2</sup> (Signal line)
Wire diameter incl. insulation	1.27 mm ±0.02 mm (Signal line)
External cable diameter	5.00 mm ±0.15 mm
Outer sheath, material	PP-EPDM
External sheath, color	gray RAL 7035
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black, gray
Thickness, insulation	≥ 0.21 mm (Core insulation)
Thickness, outer sheath	approx. 0.70 mm
Overall twist	5 cores, twisted
Length of twist, overall twist	55 mm
Max. conductor resistance	58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC
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
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10

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	m/s <sup>2</sup>
Dynamic load capacity (torsion)	Torsion: $\pm 270$ °/m, Torsion cycles: $\geq 4000000$ , Torsional frequency: max.25 Torsion cycles/min
Halogen-free	in accordance with DIN VDE 0472 part 815
Other resistance	Resistant to cold bending and cold impacts (according to DIN EN 60811-1-4 (-40 °C))
Special properties	FDA compliant according to FDA 21 CFR 177.2600
	highly flexible
	Flexible cable conduit capable
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)
	-25 °C ... 105 °C (Cable, flexible installation)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
	IP68
	IP69K
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 105 °C (Plug / socket)

## Standards and regulations

### M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Material conformance
Standards/specifications	FDA 21 CFR 177.2600

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## Drawings

Dimensional drawing



Socket M12 x 1, angled, with LED

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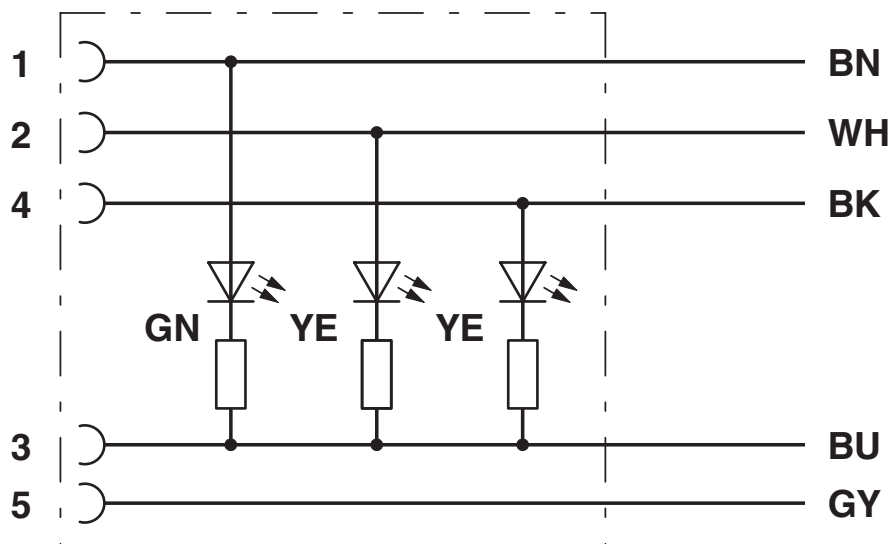
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Schematic diagram



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

Circuit diagram



Contact assignment of M12 sockets with LED

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## Classifications

### ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

### 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-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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