

Sensor/actuator cable - SAC-4P-M12FR/.../...



1696989

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Sensor/actuator cable, 4-position, Variable cable type, free cable end, on Socket angled M12, coding: A, cable length: Free input (0.2 ... 40.0 m)

Your advantages

- Easy and safe: 100% electrically tested plug-in components

Sensor/actuator cable - SAC-4P-M12FR/.../...



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Commercial Data

Item number	1696989
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C1 - Sensor-Aktor-Kabel
Product Key	BF1CCA
Catalog Page	Page 194 (C-2-2019)
Customs tariff number	85444290
Country of origin	PL

Technical Data

Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Standard Robots and drag chains
No. of cable outlets	1
Shielded	no
Coding	A - standard

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

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

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V AC 250 V DC
Nominal current I_N	4 A
Protective circuit	unwired

Connection data

Conductor connection

Tightening torque	0.4 NmM12 connector
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Connector

Insertion/withdrawal cycles	≥ 100
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Header 1

Head design	free cable end
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Header 2

Head design	Socket
Head cable outlet	angled

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Head thread type	M12
Coding	A

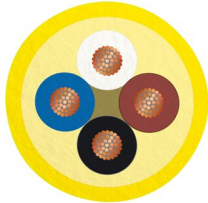
LED signaling

Status display	No
Status display present	No

Cable / line

Cable length	Free input (0.2 ... 40.0 m)
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PUR/PVC yellow [140]

Dimensional drawing	
Shielded	no
UL AWM Style	20549
Cable weight	39 kg/km
Cable type	PUR/PVC yellow
Short symbol	LiYY-11Y
Cable type (abbreviation)	140
External cable diameter	5.2 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	yellow
Material, inner sheath	PVC
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	0.34 mm ²
Material wire insulation	PVC
Thickness, insulation	approx. 0.3 mm (Core insulation)
Wire diameter incl. insulation	1.5 mm ±0.05 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 58 Ω/km (at 20 °C)
Cable insulation resistance	≥ 1 GΩ*km (at 20 °C)
Smallest bending radius, fixed installation	52 mm
Smallest bending radius, movable installation	52 mm

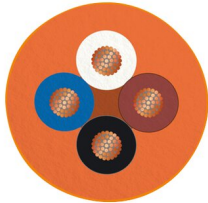
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Number of bending cycles	2000000
Bending radius	52 mm
Traversing path	5 m
Traversing rate	3 m/s
Flame resistance	in accordance with DIN UL-Style 20549
Ambient temperature (operation)	-5 °C ... 80 °C (Cable, flexible installation) -25 °C ... 80 °C (cable, fixed installation)

PUR irradiated halogen-free orange [150]

Dimensional drawing	
Shielded	no
Cable type	PUR irradiated halogen-free orange
Short symbol	D12YSL11X-OB
Cable type (abbreviation)	150
External cable diameter	5.2 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Material wire insulation	PE
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	27 mm
Nominal voltage, cable	320 V (AC)
Test voltage, cable	2500 V (50 Hz, 5 minutes)
Conductor resistance	max. 57 Ω/km
Smallest bending radius, fixed installation	min. 15 mm
Smallest bending radius, movable installation	min. 30 mm
Number of bending cycles	5000000
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Torsion force	± 360 °/m
Halogen-free	The cable is halogen-free

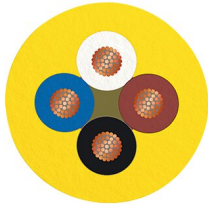
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Other resistance	hydrolysis and microbe resistant
	Resistant to welding splashes
Special properties	Silicone-free
	Irradiated
Ambient temperature (operation)	-40 °C ... 105 °C (Cable, flexible installation)
	-50 °C ... 105 °C (cable, fixed installation)

PUR irradiated halogen-free yellow [160]

Dimensional drawing	
Shielded	no
Cable type	PUR irradiated halogen-free yellow
Short symbol	D12YSL11X-OB
Cable type (abbreviation)	160
External cable diameter	5.2 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Material wire insulation	PE
Wire diameter incl. insulation	1.05 mm ±0.05 mm (Signal line)
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	27 mm
Nominal voltage, cable	320 V AC
Test voltage, cable	2500 V AC (50 Hz, 5 minutes)
Conductor resistance	≤ 57 Ω/km
Smallest bending radius, fixed installation	min. 15 mm
Smallest bending radius, movable installation	min. 30 mm
Number of bending cycles	5000000
Bending radius	52 mm
Traversing path	10 m
Traversing rate	3 m/s
Torsion force	360 °/m
Halogen-free	The cable is halogen-free
Flame resistance	DIN VDE 0472 part 804, test type B

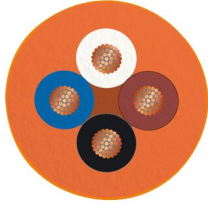
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Other resistance	hydrolysis and microbe resistant
Special properties	Silicone-free
	Irradiated
Ambient temperature (operation)	-40 °C ... 105 °C (Cable, flexible installation)
	-50 °C ... 105 °C (cable, fixed installation)

PUR halogen-free orange [180]

Dimensional drawing	
Shielded	no
UL AWM Style	20549
Cable weight	30 kg/km
Cable type	PUR halogen-free orange
Short symbol	Li9Y-11Y
Cable type (abbreviation)	180
External cable diameter	4.7 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Material wire insulation	PP
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire diameter incl. insulation	1.27 mm ±0.02 mm (Signal line)
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 58 Ω/km (at 20 °C)
Cable insulation resistance	≥ 1 GΩ*km (at 20 °C)
Number of bending cycles	4000000
Bending radius	47 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1

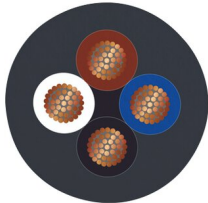
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Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	in accordance with UL 758/1581 FT2
Other resistance	Resistant to salt water hydrolysis and microbe resistant
Special properties	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PUR POWER 0.75 mm² black [186]

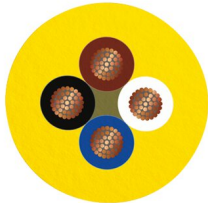
Dimensional drawing	
Shielded	no
UL AWM Style	20549 / 1061 (80°C/300 V)
Cable weight	57 kg/km
Cable type	PUR POWER 0.75 mm ² black
Short symbol	LiY11Y
Cable type (abbreviation)	186
External cable diameter	5.9 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.15 mm
AWG signal line	18
Conductor cross section	4x 0.75 mm ² (power line)
Material wire insulation	PVC
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire diameter incl. insulation	1.75 mm ±0.05 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 26 Ω/km (at 20 °C)
Cable insulation resistance	≥ 1 MΩ*km (at 20 °C)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	2000000
Bending radius	59 mm

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Traversing path	5 m
Traversing rate	3 m/s
Acceleration	5 m/s ²
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Flame resistance	according to UL 758/1581 (horizontal) in accordance with UL 758/1581 FT2
Other resistance	hydrolysis and microbe resistant Low adhesion abrasion-resistant Resistant to salt water
Ambient temperature (operation)	-5 °C ... 80 °C (Cable, flexible installation) -25 °C ... 80 °C (cable, fixed installation)

PUR halogen-free yellow [240]

Dimensional drawing	
Shielded	no
Cable weight	30 kg/km
Cable type	PUR halogen-free yellow
Short symbol	Li9Y11Y
Cable type (abbreviation)	240
External cable diameter	4.7 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Material wire insulation	PP
Thickness, insulation	≥ 0.21 mm (Core insulation)
Wire diameter incl. insulation	1.27 mm ±0.02 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Length of twist, overall twist	49.5 mm
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 58 Ω/km (at 20 °C)
Cable insulation resistance	≥ 1 GΩ*km (at 20 °C)

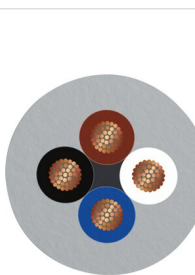
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Smallest bending radius, fixed installation	23.5 mm
Smallest bending radius, movable installation	47 mm
Number of bending cycles	4000000
Bending radius	47 mm
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	in accordance with DIN UL-Style 20549 in accordance with FT1 as per UL 758
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PUR halogen-free gray [280]

Dimensional drawing	
Shielded	no
UL AWM Style	20549 / 10493 (80°C/300 V)
Cable weight	30 kg/km
Cable type	PUR halogen-free gray
Short symbol	Li9Y11Y-HF
Cable type (abbreviation)	280
External cable diameter	4.2 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	gray RAL 7001
Thickness, outer sheath	approx. 0.5 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²

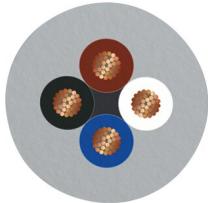
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Material wire insulation	PP
Thickness, insulation	≥ 0.21 mm
Wire diameter incl. insulation	1.27 mm ±0.02 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	≤ 58 Ω/km
Cable insulation resistance	≥ 1 GΩ*km
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	10000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant in accordance with DIN EN ISO 4892-2-A Low adhesion abrasion-resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PVC gray [500]

Dimensional drawing	
Shielded	no

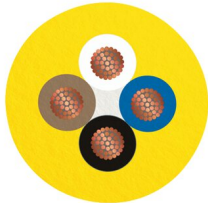
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UL AWM Style	2464 / 1729 (80°C/300 V)
Cable weight	40 kg/km
Cable type	PVC gray
Short symbol	LiYY
Cable type (abbreviation)	500
External cable diameter	4.7 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	gray RAL 7001
Thickness, outer sheath	≥ 0.76 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Material wire insulation	PVC
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 57 Ω/km (at 20 °C)
Cable insulation resistance	≥ 200 MΩ*km (at 20 °C)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PVC yellow [540]

Dimensional drawing	
Shielded	no
Cable weight	40 kg/km
Cable type	PVC yellow
Short symbol	LiYY
Cable type (abbreviation)	540
External cable diameter	5.2 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	yellow

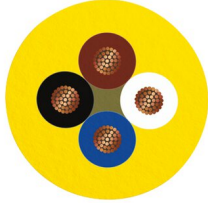
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Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	0.34 mm ²
Material wire insulation	PVC
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire diameter incl. insulation	1.45 mm ±0.05 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V (AC)
Test voltage, cable	≥ 3000 V
Conductor resistance	max. 58 Ω/km (at 20 °C)
Cable insulation resistance	≥ 1 GΩ*km (at 20 °C)
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	As per UL-Style 2464 according to UL 758/1581 FT1
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PVC yellow 105 °C [542]

Dimensional drawing	
Shielded	no
Cable weight	43 kg/km
Cable type	PVC yellow 105 °C
Short symbol	LiYY
Cable type (abbreviation)	542
External cable diameter	5.5 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	yellow
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	0.34 mm ²
Material wire insulation	PVC
Thickness, insulation	≥ 0.38 mm (Core insulation)
Wire diameter incl. insulation	1.55 mm ±0.05 mm
Single wire, color	brown, white, blue, black

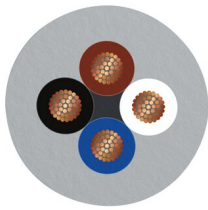
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Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	≤ 58 Ω/km (at 20 °C)
Cable insulation resistance	≥ 100 MΩ*km (at 20 °C)
Flame resistance	in accordance with UL-Style 2517 in acc. to UL VW1
Ambient temperature (operation)	-25 °C ... 105 °C (cable, fixed installation)

Gray, highly flexible PUR [800]

Dimensional drawing	
Note	Due to the extremely robust outer sheath, this cable should only be stripped in 5 cm increments.
Shielded	no
UL AWM Style	20549
Cable weight	33.5 kg/km
Cable type	Gray, highly flexible PUR
Short symbol	LiF9Y11Y
Cable type (abbreviation)	800
External cable diameter	4.8 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	gray RAL 7001
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Material wire insulation	PP
Wire diameter incl. insulation	1.3 mm ±0.05 mm (Signal line)
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	300 V
Test voltage, cable	2000 V
Conductor resistance	approx. 53 Ω/km
Cable insulation resistance	≥ 20 MΩ*km
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	7.5 x D
Number of bending cycles	10000000

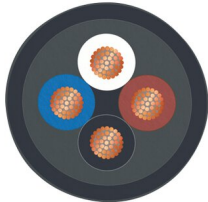
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Minimum bending radius, drag chain applications	7,5 x D
Traversing path	5 m
Traversing rate	3.3 m/s
Acceleration	5 m/s ²
Number of bending cycles	15000000
Traversing path	0.9 m
Traversing rate	5 m/s
Acceleration	30 m/s ²
Torsion force	± 360 °/m
Torsion cycles	1000000
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	in accordance with UL 758/1581 FT2
Other resistance	Highly resistant to acids, alkaline solutions and solvents Silicone-free
Special properties	Cable jacket is welding spark-resistant, recyclable, matt, low-adhesion, abrasion-resistant, flame-retardant, and self-extinguishing Free from silicone and cadmium Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PUR halogen-free black [PUR]

Dimensional drawing	
Shielded	no
UL AWM Style	20549 / 10493 (80°C/300 V)
Cable weight	30 kg/km
Cable type	PUR halogen-free black
Short symbol	Li9Y11Y-HF
Cable type (abbreviation)	PUR
External cable diameter	4.2 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Thickness, outer sheath	approx. 0.5 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	42x 0.10 mm

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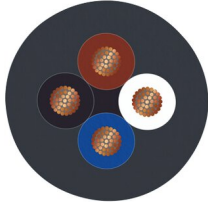
AWG signal line	22
Conductor cross section	4x 0.34 mm ²
Material wire insulation	PP
Thickness, insulation	≥ 0.21 mm
Wire diameter incl. insulation	1.27 mm ±0.02 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	≤ 58 Ω/km
Cable insulation resistance	≥ 1 GΩ*km
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	10000000
Minimum bending radius, drag chain applications	10 x D
Traversing path	10 m
Traversing rate	3 m/s
Acceleration	10 m/s ²
Halogen-free	in accordance with DIN VDE 0472 part 815 in accordance with DIN EN 50267-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Flame resistance	in accordance with UL 758/1581 FT2 DIN EN 60332-2-2 (20 s)
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant in accordance with DIN EN ISO 4892-2-A Low adhesion abrasion-resistant
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish flexible
Ambient temperature (operation)	-25 °C ... 80 °C (Cable, flexible installation) -40 °C ... 80 °C (cable, fixed installation)

PVC black [PVC]

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Dimensional drawing	
Shielded	no
UL AWM Style	2464 / 1729 (80°C/300 V)
Cable weight	40 kg/km
Cable type	PVC black
Short symbol	LiYY
Cable type (abbreviation)	PVC
External cable diameter	4.7 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Thickness, outer sheath	≥ 0.76 mm
Conductor material	Bare Cu litz wires
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ² (Signal line)
Material wire insulation	PVC
Thickness, insulation	≥ 0.23 mm (Core insulation)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Conductor resistance	≤ 57 Ω/km (at 20 °C)
Cable insulation resistance	≥ 200 MΩ*km (at 20 °C)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Resistance to oil	according to DIN EN 60811-2-1, 168 h at 60 °C
Flame resistance	As per UL-Style 2464
Ambient temperature (operation)	-10 °C ... 80 °C (Cable, flexible installation) -25 °C ... 80 °C (cable, fixed installation)
Note	This item is a sensor/actuator cable with a freely selectable cable type. The technical data for all possible cable types is listed in the table below.

Cable structure

Cable type	Gray, highly flexible PUR
	PVC black
	PUR/PVC gray

Sensor/actuator cable - SAC-4P-M12FR/.../...



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	PUR/PVC yellow
	Yellow PUR irradiated
	PUR halogen-free black
	PUR halogen-free orange
	PUR POWER 0.75 mm ² black
	PUR halogen-free yellow
	PUR halogen-free gray
	PVC gray
	PVC yellow
	PVC yellow 105 °C
	PUR irradiated orange

Ambient conditions

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

Standards and regulations

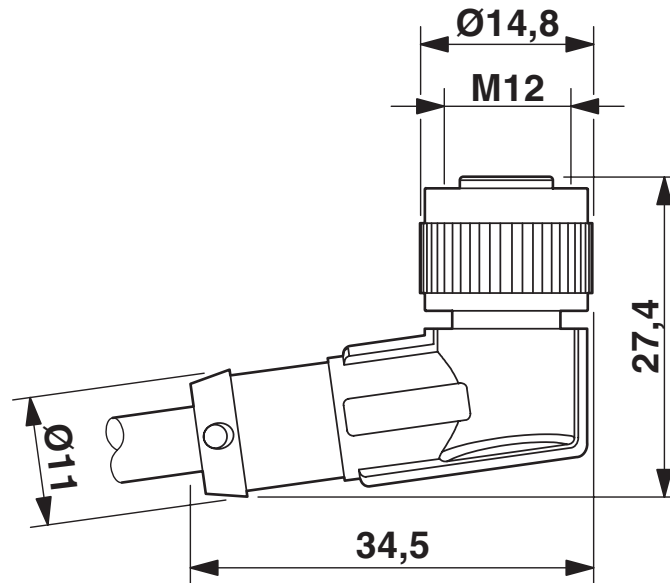
Standards/specifications	IEC 61076-2-101
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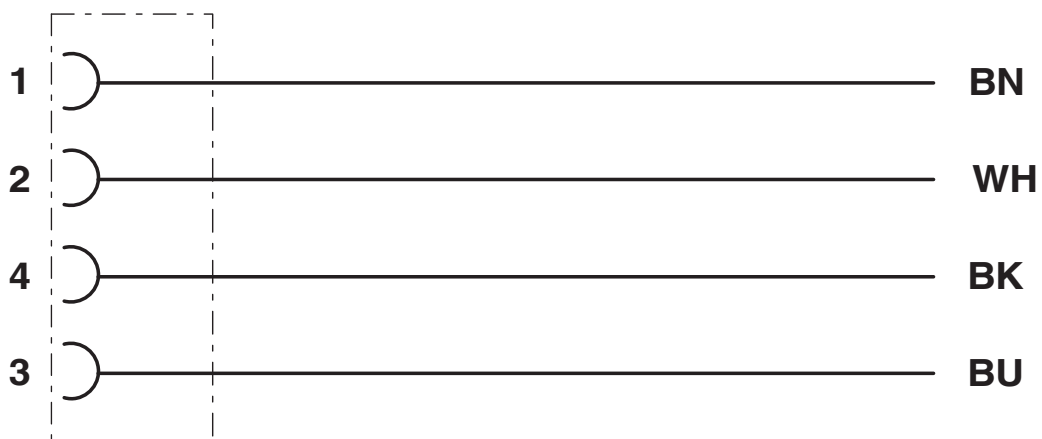
Drawings

Dimensional drawing



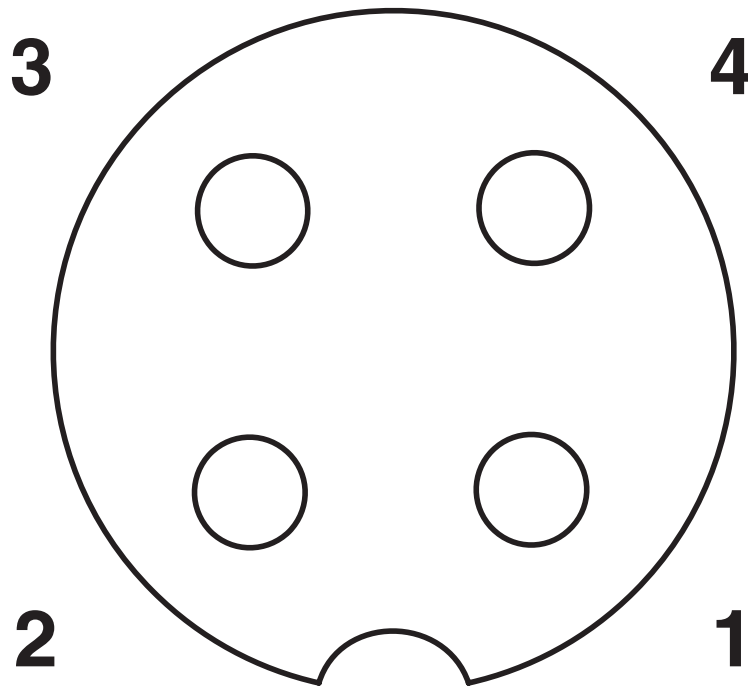
M12 x 1 socket, angled

Circuit diagram



Contact assignment of the M12 socket

Schematic diagram



Pin assignment M12 socket, 4-pos., A-coded, view female side

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Approvals



EAC

Approval ID: RU C-DE.BL08.B.00286



UL Listed

Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-



cUL Listed

Approval ID: FILE E 221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	300 V	4 A	-	-



EAC

Approval ID: RU D-DE.HB35.B.00387

cULus Listed

Sensor/actuator cable - SAC-4P-M12FR/.../...



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Classifications

ECLASS

ECLASS-9.0	27060311
ECLASS-10.0.1	27060311
ECLASS-11.0	27060311

ETIM

ETIM 8.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Sensor/actuator cable - SAC-4P-M12FR/.../...



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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

Insert label

Insert label - PABA WH/23 - 1013779

<https://www.phoenixcontact.com/de/produkte/1013779>



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Insert label

Insert label - PABA YE/23 - 1013782

<https://www.phoenixcontact.com/de/produkte/1013782>



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20

Sensor/actuator cable - SAC-4P-M12FR/.../...

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Marker pen

Marker pen - B-STIFT - 1051993

<https://www.phoenixcontact.com/de/produkte/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

<https://www.phoenixcontact.com/de/produkte/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

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<https://www.phoenixcontact.com/de/produkte/1696989>

Stripping tool

Stripping tool - WIREFOX SAC-1 - 1212757

<https://www.phoenixcontact.com/de/produkte/1212757>



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 3.2 to 4.4 mm, any stripping length

Stripping tool

Stripping tool - WIREFOX SAC - 1212623

<https://www.phoenixcontact.com/de/produkte/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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Stripping tool

Stripping tool - WIREFOX 10 - 1212150

<https://www.phoenixcontact.com/de/produkte/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

Protective hose adapter

Protective hose adapter - WP-CTA POM 13,0 BK - 1422884

<https://www.phoenixcontact.com/de/produkte/1422884>



Protective hose adapter, for corrugated hoses with a nominal size of 13 (10 x 13), corrugated in parallel

Sensor/actuator cable - SAC-4P-M12FR/.../...

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Protective hose

Protective hose - WP-PA HF 13,0 BK - 3240681

<https://www.phoenixcontact.com/de/produkte/3240681>



Protective hose, material: PA 6, filament: without, UV-resistant: yes, flexible, degree of protection: IP68, color: black, inflammability class in acc. with UL 94: V0, inner diameter: 10 mm, Total length: 50 m

Protective hose

Protective hose - WP-PA HF-HB 13,0 BK - 3240839

<https://www.phoenixcontact.com/de/produkte/3240839>



Protective hose, material: PA 6, filament: without, UV-resistant: yes, flexible, degree of protection: IP68, color: black, inflammability class in acc. with UL 94: HB, inner diameter: 10 mm, Total length: 50 m

Sensor/actuator cable - SAC-4P-M12FR/.../...

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<https://www.phoenixcontact.com/de/produkte/1696989>

Screw plug

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

<https://www.phoenixcontact.com/de/produkte/1430899>

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



Locking clip

Locking clip - SAC-M12-EXCLIP-F - 1558991

<https://www.phoenixcontact.com/de/produkte/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



Sensor/actuator cable - SAC-4P-M12FR/.../...

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Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/de/produkte/1208429>



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver

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

<https://www.phoenixcontact.com/de/produkte/1212224>



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

Sensor/actuator cable - SAC-4P-M12FR/.../...

1696989

<https://www.phoenixcontact.com/de/produkte/1696989>

Adapter insert

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

<https://www.phoenixcontact.com/de/produkte/1212600>



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Tool

Tool - SAC BIT M12-D15 - 1208432

<https://www.phoenixcontact.com/de/produkte/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

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