

SAC-8P-M12MS-M12FS SH/.../...

Order No.: 1523007



Sensor/Actuator cable, 8-position, shielded, Plug, straight M12, A-coded, on Socket, straight M12, A-coded, Cable length: Free input (0.2 ... 40.0 m)

Commercial data

Note	Made-to-order
Pack	1
Customs tariff	85444290
Catalog page information	Page 95 (PC-2009)

Product notes

WEEE/RoHS-compliant since:
2005-06-01



Technical data

General data

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Volume resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Length of cable	Free input (0.2 ... 40.0 m)

General characteristics

Standards/regulations	M12 connector IEC 61076-2-101
Coding	A - standard
Surge voltage category	II
Pollution degree	3
Degree of protection	IP65/IP67/IP69K
Contact material	CuZn
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
Status display	No

Line characteristics

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.
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PVC black [PVC]

Cable type	PVC black
Cable type (abbreviation)	PVC
Conductor cross section	0.25 mm ²
Conductor structure signal line	32 x 0.10 mm
Core diameter including insulation	1.5 mm ±0.05 mm
Thickness, insulation	≥ 0.38 mm (Core insulation)
	≥ 0.76 mm (Outer cable sheath)
External cable diameter	7.70 mm
Wire colors	white, brown, green, yellow, gray, pink, blue, red
External sheath, color	Black RAL 9005
Insulation resistance	≥ 10 GΩ*km
Conductor resistance	≤ 78 Ω/km
Nominal voltage, conductor	300 V
Test voltage, conductor	3000 V
Overall twist	8 wires around filler to the core, twisted in with additional Cu litz in the wire outer godet
Shielding	Tinned copper braided shield
Optical shield covering	85 %

Outer sheath, material	PVC
Material, filler	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Cable weight	85 kg/km

PUR halogen-free black [PUR]

Cable type	PUR halogen-free black
Cable type (abbreviation)	PUR
Cable abbreviation	Li9YVI-C-VI-11Y
Conductor cross section	0.25 mm ²
AWG signal line	24
Conductor structure signal line	32 x 0.10 mm
Core diameter including insulation	1.17 mm ±0.02 mm
Thickness, insulation	≥ 0.21 mm (Core insulation)
	Approx. 0.6 mm (Outer cable sheath)
External cable diameter	5.9 mm ±0.15 mm
Wire colors	Brown, white, green, yellow, gray, pink, blue, red
External sheath, color	Black-gray RAL 7021
Insulation resistance	≥ 100 MΩ*km (at 20°C)
Conductor resistance	max. 78 Ω/km (at 20°C)
Nominal voltage, conductor	≤ 300 V
Test voltage, conductor	≥ 3000 V
Overall twist	8 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
Outer sheath, material	PUR
Material, filler	PE
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Cable weight	54 kg/km
Smallest bending radius, fixed installation	59 mm
Smallest bending radius, movable installation	59 mm
Number of bending cycles	4000000
Bending radius	59 mm
Traversing path	10 m

Traversing rate	3 m/s
Acceleration	10 m/s ²
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)
Special properties	Flexible cable conduit capable
	Silicone-free
	Free of substances which would hinder coating with paint or varnish
Flame resistance	in accordance with DIN UL-Style 20549
Halogen-free	in accordance with DIN VDE 0472 part 815
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents
	hydrolysis and microbe resistant

PUR halogen-free gray [280]

Cable type	PUR halogen-free gray
Cable type (abbreviation)	280
Cable abbreviation	LIY-FC11Y
Conductor cross section	0.25 mm ²
AWG signal line	24
Conductor structure signal line	32 x 0.10 mm
Core diameter including insulation	1.15 mm ±0.05 mm
Thickness, insulation	Approx. 0.2 mm (Core insulation)
	Approx. 0.6 mm (Outer cable sheath)
External cable diameter	5.90 mm
Wire colors	Brown, white, green, yellow, gray, pink, blue, red
External sheath, color	Gray RAL 7001
Conductor resistance	max. 79.9 Ω/m
Nominal voltage, conductor	300 V
Test voltage, conductor	1200 V
Overall twist	5 wires around filler to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
Outer sheath, material	PUR
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires

Cable weight	59 kg/km
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)

Certificates



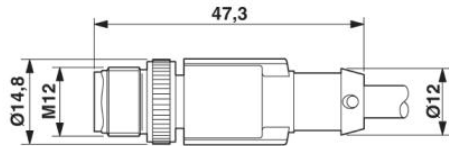
Certification CUL Listed, UL Listed

Configuration options

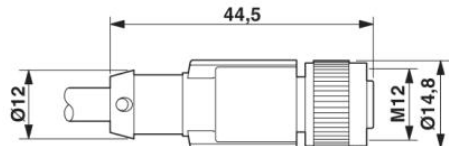
Cable type	PUR halogen-free black [PUR] PVC black [PVC] PUR halogen-free gray [280]
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Drawings

Dimensioned drawing

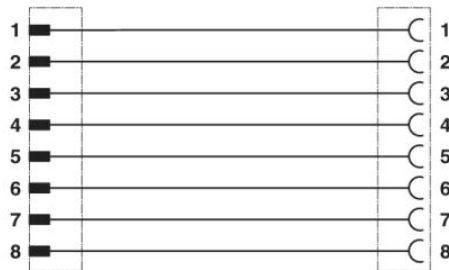


M12 x 1 male connector, straight, shielded



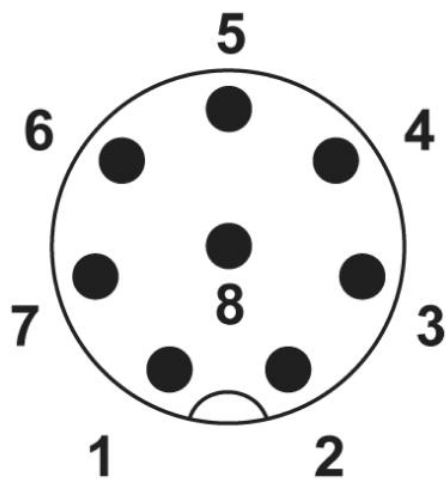
M12 x 1 female connector, straight, shielded

Circuit diagram

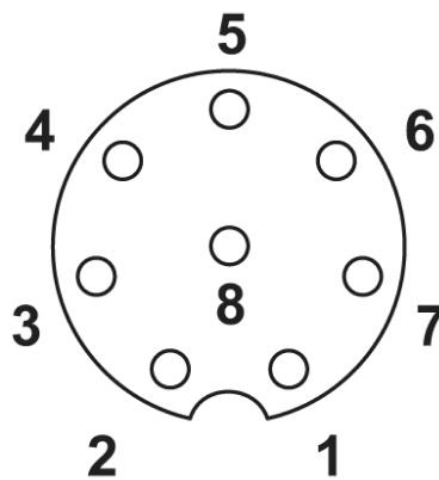


Contact assignment of the M12 plug and the M12 socket

Schematic diagram



Pin assignment M12 plug, 8-pos., view
plug side



Pin assignment M12 socket, 8-pos., A-
coded, view female side