

1426042

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Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, on free cable end, cable length: 0.25 m, Free end = 80 mm, wires stripped 5 mm and tin-plated

Your advantages

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

Commercial data

Item number	1426042
Packing unit	1 pc
Minimum order quantity	100 pc
Note	Made to order (non-returnable)
Product key	AF1CFA
GTIN	4055626437316
Weight per piece (including packing)	22.4 g
Weight per piece (excluding packing)	22.4 g
Country of origin	PL



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Technical data

Product properties

Product type	Sensor/actuator cable		
Number of positions	8		
No. of cable outlets	1		
Shielded	no		
Coding	A		
Insulation characteristics			
Overvoltage category	II		
Degree of pollution	3		

Material specifications

Flammability rating according to UL 94	НВ
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	30 V AC
	30 V DC
Nominal current I _N	2 A
Max. conductor resistance	78 Ω/km

Mechanical properties

Mechanical data	
Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connector

Connection 1

Туре	Plug straight M12
Number of positions	8
Coding type	A



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Connection 2

	Туре	free cable end
Ca	able/line	
	Cable length	0.25 m

PUR halogen-free black [PUR]

Dimensional drawing



Cable weight	46 kg/km
JL AWM Style	20549 / 10493 (80°C/300 V)
lumber of positions	8
Shielded	no
Cable type	PUR halogen-free black [PUR]
onductor structure signal line	32x 0.10 mm
WG signal line	24
onductor cross section	8x 0.25 mm² (Signal line)
/ire diameter incl. insulation	1.17 mm ±0.02 mm
xternal cable diameter	5.90 mm ±0.15 mm
uter sheath, material	PUR
xternal sheath, color	black-gray RAL 7021
onductor material	Bare Cu litz wires
aterial, filler	PE
laterial wire insulation	PP
ngle wire, color	white, brown, green, yellow, gray, pink, blue, rec
nickness, insulation	≥ 0.21 mm
ickness, outer sheath	approx. 0.80 mm
verall twist	8 wires around filler to the core
ax. conductor resistance	≤ 78 Ω/km (at 20 °C)
sulation resistance	≥ 1 GΩ*km (at 20 °C)
ave impedance	100 Ω +15 % (with 1 MHz)
able capacity	≤ 70 pF/m
ominal voltage, cable	≤ 300 V
st voltage	≥ 3000 V
nimum bending radius, fixed installation	8 x D
nimum bending radius, flexible installation	10 x D
mallest bending radius, fixed installation	48 mm
mallest bending radius, movable installation	59 mm



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Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 59 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥1000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with UL 758/1581 FT2
	According to DIN EN 60332-2-2 (20 s)
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
	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)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C 80 °C (Cable, flexible installation)

Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

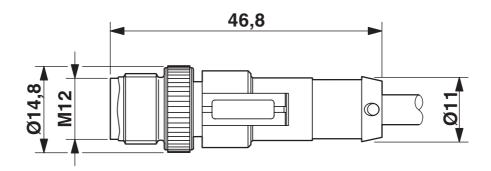


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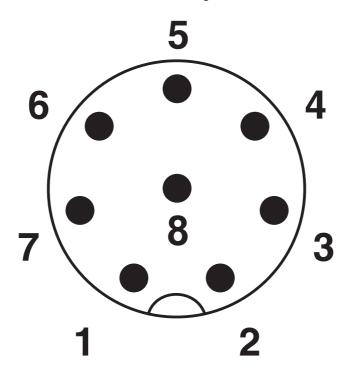
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Schematic diagram



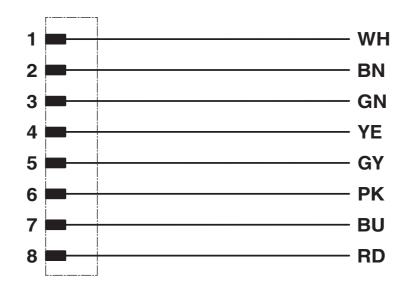
Pin assignment M12 plug, 8-pos., view plug side



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Circuit diagram



Contact assignment of the M12 plug



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Classifications

ECLASS

	ECLASS-13.0	27060311		
	ECLASS-15.0	27060311		
ETIM				
	ETIM 9.0	EC001855		
UNSPSC				
	UNSPSC 21.0	26121600		



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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions		
China RoHS			
Environment friendly use period (EFUP)	EFUP-E		
	No hazardous substances above the limits		
EU REACH SVHC			
REACH candidate substance (CAS No.)	No substance above 0.1 wt%		

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