

1415644

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Sensor/actuator cable, 4-position, PVC, black RAL 9005, Plug angled M12, coding: A, on Socket angled M12, coding: A, cable length: 1.5 m

Your advantages

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

Commercial data

Item number	1415644
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF03
Product key	AF1CCA
Catalog page	Page 196 (C-2-2019)
GTIN	4055626050126
Weight per piece (including packing)	71.6 g
Weight per piece (excluding packing)	61.92 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	4
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
Seal material	NBR
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 10 MΩ
Nominal voltage U _N	250 V AC
	250 V DC
Nominal current I _N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm
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Connector

Connection 1



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Туре	Plug angled M12
Number of positions	4
Coding type	A
Connection 2	
Connection 2 Type	Socket angled M12
	Socket angled M12

Cable/line

Cable length	1.5 m
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PVC black [PVC]

Dimensional drawing



Cable weight	40 kg/km
UL AWM Style	2464 / 1729 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PVC black [PVC]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm² (Signal line)
Wire diameter incl. insulation	1.26 mm ±0.05 mm
External cable diameter	4.70 mm ±0.15 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, white, blue, black
Thickness, insulation	≥ 0.23 mm (Core insulation)
Thickness, outer sheath	≥ 0.76 mm
Overall twist	4 wires, twisted
Max. conductor resistance	≤ 57 Ω/km (at 20 °C)
Insulation resistance	≥ 200 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D



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Smallest bending radius, fixed installation	24 mm
Smallest bending radius, movable installation	47 mm
Flame resistance	As per UL-Style 2464
Resistance to oil	according to DIN EN 60811-2-1, 168 h at 60 °C
Ambient temperature (operation)	-25 °C 80 °C (cable, fixed installation)
	-10 °C 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

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

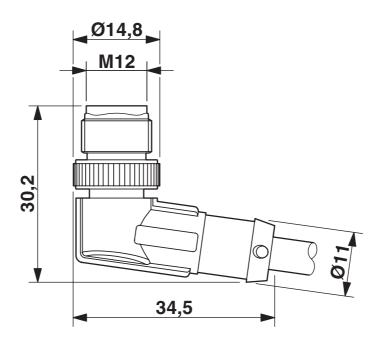


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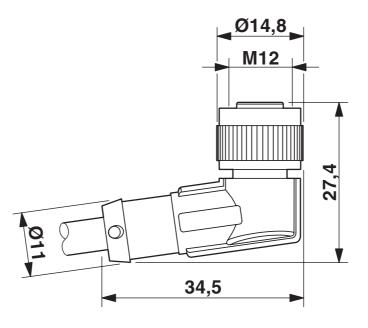
Drawings

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



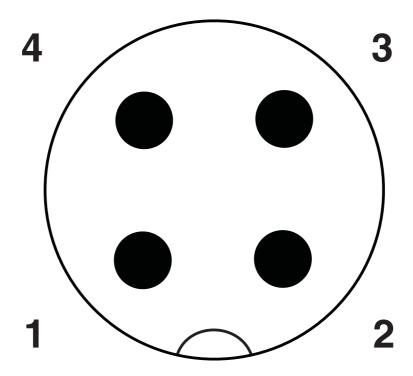
M12 x 1 socket, angled



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Schematic diagram



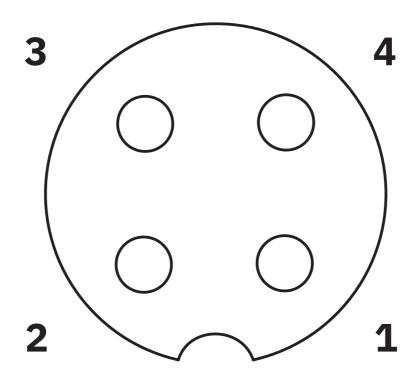
Pin assignment M12 plug, 4-pos., A-coded, view plug side



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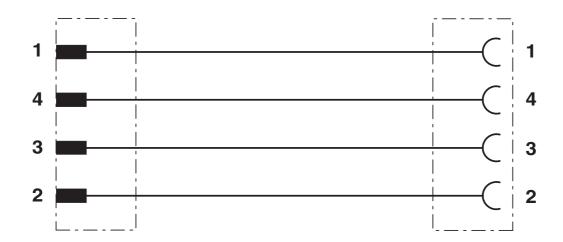
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Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plug and the M12 socket



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1415644

UL Listed Approval ID: FILE E 221474					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		125 V	4 A	-	-

• <u>®</u>	cUL Listed Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		125 V	4 A	-	-

EHE	EAC-RoHS	
LIIL	Approval ID: RU D-DE HB35 B 00387	



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Classifications

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	ECLASS-13.0	27060311	
Εī	ГІМ		
	ETIM 9.0	EC001855	
UNSPSC			
	UNSPSC 21.0	26121600	



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Environmental product compliance

FH	RoHS
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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%
EF3.0 Climate Change	
CO2e kg	0.614 kg CO2e

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