

1404198

https://www.phoenixcontact.com/us/products/1404198

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 8-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, coding: A, on Socket straight M8, coding: A, cable length: 0.6 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components
- · Save space with high-pos. connectors

Commercial data

Item number	1404198
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	AF1BGA
GTIN	4046356681186
Weight per piece (including packing)	29.8 g
Weight per piece (excluding packing)	30 g
Customs tariff number	85444290
Country of origin	PL



1404198

https://www.phoenixcontact.com/us/products/1404198

Technical data

Product properties

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

Material specifications

Flammability rating according to UL 94	НВ
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	≥ 100 MΩ
Nominal voltage U _N	30 V AC
	30 V DC
Nominal current I _N	1.5 A

Mechanical properties

Mac	han	ical	data

Insertion/withdrawal cycles	≥ 100
-----------------------------	-------

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.2 Nm (M8 connectors)
-------------------	------------------------

Connector

Connection 1

Туре	Plug straight M8
Number of positions	8



1404198

https://www.phoenixcontact.com/us/products/1404198

Coding type	A
onnection 2	
Туре	Socket straight M8
Number of positions	8
Coding type	A
ole/line	
Cable length	0.6 m
UR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	31.4 kg/km
UL AWM Style	20549
Number of positions	8
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	18x 0.10 mm
AWG signal line	26
Conductor cross section	8x 0.14 mm² (Signal line)
Wire diameter incl. insulation	1 mm ±0.02 mm (Signal line)
External cable diameter	5.10 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material, filler	PE
Material wire insulation	PP
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.21 mm (Signal line)
	≥ 0.38 mm (Outer cable sheath)
Overall twist	8 wires around filler to the core
Length of twist, overall twist	58 mm
Max. conductor resistance	139 Ω/km (at 20 °C)
Insulation resistance	1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Minimum bending radius, fixed installation	5 x D



1404198

https://www.phoenixcontact.com/us/products/1404198

Smallest bending radius, fixed installation	25.5 mm
Smallest bending radius, movable installation	51 mm
Dynamic load capacity (bending)	Max. bending cycles: 4000000, Bending radius: 51 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	Low adhesion
	abrasion-resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
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
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C 85 °C (Plug / socket)

Standards and regulations

M8

Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

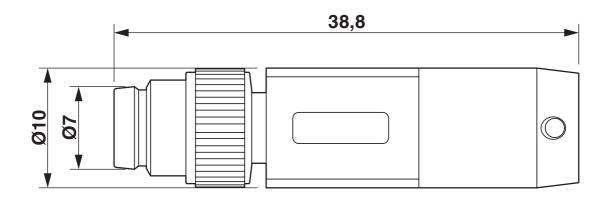


1404198

https://www.phoenixcontact.com/us/products/1404198

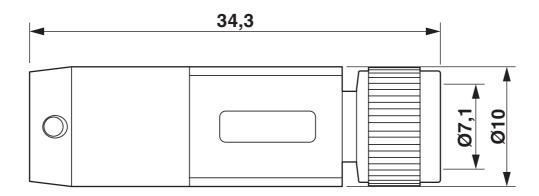
Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Dimensional drawing



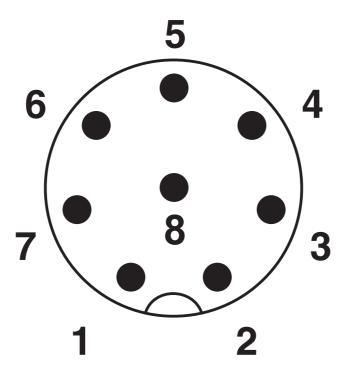
Socket M8 x 1, straight



1404198

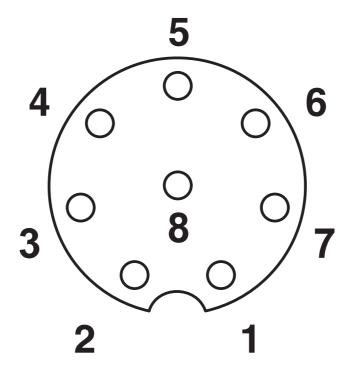
https://www.phoenixcontact.com/us/products/1404198

Schematic diagram



M8 plug pin assignment, 8-pos., view of pin side

Schematic diagram



Connector pin assignment of M8 socket, 8-pos., view of socket side



1404198

https://www.phoenixcontact.com/us/products/1404198

Circuit diagram



Contact assignment of M8 plugs/sockets



1404198

https://www.phoenixcontact.com/us/products/1404198

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1404198

UL Listed Approval ID: FILE E 22147	74			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	30 V	1.5 A	-	-

cUL Listed Approval ID: FILE E 221	474			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	30 V	1.5 A	-	-

ERC			
-----	--	--	--



1404198

https://www.phoenixcontact.com/us/products/1404198

Classifications

ECLASS

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



1404198

https://www.phoenixcontact.com/us/products/1404198

Environmental product compliance

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	1.371 kg CO2e

Phoenix Contact 2025 @ - all rights reserved https://www.phoenixcontact.com

Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com