

1684014

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Master cable, application: Sensor/actuator box, number of positions: 12, slot assignment: single, status display: no; master cable connection: M23 plug connection, PUR/PVC, cable length: 5 m, shielding: no, this item is expected to be lead-free from Q4 2025 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Commercial data

Item number	1684014
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB34
Product key	ABRDCA
GTIN	4017918172107
Weight per piece (including packing)	608.9 g
Weight per piece (excluding packing)	589.144 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

Notes on operation	The master cable is earmarked for use on the sensor/actuator
	boxes with an M23 plug-in connection.

Product properties

Product type	Master cable, assembled
Application	Sensor/actuator box
Number of positions	12

Electrical properties

Nominal voltage U _N	48 V AC
	60 V DC

Connection data

Connection method	Fixed connection

Signaling

Material specifications

Material Housing	PUR
Material of contact, master cable side	CU alloy
Material of the contact carrier on the master cable side	PA
Material of contact surface, master cable side	gold-plated

Connector

Connection 1

Head design	Socket
Head cable outlet	straight

Cable/line

	Cable length	5 m
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PUR/PVC black [PUR]

Dimensional drawing





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Cable weight	107.4 kg/km
UL AWM Style	20549 (80°C/300 V)
Number of positions	11
Shielded	no
Cable type	PUR/PVC black [PUR]
Conductor structure signal line	19x 0.15 mm
AWG signal line	22
Conductor structure, voltage supply	42x 0.15 mm
AWG power supply	18
Conductor cross section	8x 0.34 mm² (Signal line)
	3x 0.75 mm² (power line)
Wire diameter incl. insulation	1.3 mm ±0.1 mm (Signal line)
	1.8 mm ±0.1 mm (power line)
External cable diameter	8.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, green/yellow, white, green, yellow, gray, pink, red black, violet
Inner sheath thickness	≥ 0.15 mm
Thickness, outer sheath	≥ 0.38 mm
Overall twist	Wires twisted in layers
Max. conductor resistance	≤ 53 Ω/km (Signal line)
	≤ 26 Ω/km (power line)
Insulation resistance	≥ 5 MΩ*km
Nominal voltage, cable	300 V AC
Test voltage Core/Core	2000 V (50 Hz, 5 min.)
Minimum bending radius, fixed installation	7.5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	64 mm
Smallest bending radius, movable installation	85 mm
Dynamic load capacity (bending)	Max. bending cycles: 1500000, Bending radius: 10 x D, Traversing path: 2 m, Traversing rate: 2 m/s
Flame resistance	DIN EN 50265
Resistance to oil	according to VDE 0472 Part 803
Other resistance	Highly resistant to acids, alkaline solutions and solvents
Special properties	Silicone-free
Ambient temperature (operation)	-40 °C 90 °C (cable, fixed installation)
	-5 °C 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65



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	IP67
Ambient temperature (operation) (male connector/female connector)	-40 °C 125 °C (Plug / socket)

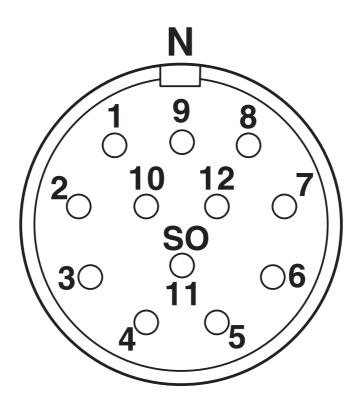


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Drawings

Schematic diagram



Pin assignment M23 socket, 12-pos., female side view



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1684014



EAC

Approval ID: 19060508



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Classifications

ECLASS

	ECLASS-13.0	27060311	
	ECLASS-15.0	27060311	
ETIM			
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
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	bee313b4-9706-40e0-a0a0-9505008a1b4f

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