

# Connector in molded plastic on both sides - K-7E-M23 M9/2,0-D03/M23 F8



1620412

<https://www.phoenixcontact.com/pc/products/1620412>

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Connector in molded plastic on both sides, length: 2 m, color of outer sheath: orange RAL 2003



## Your advantages

- Our standard: robust halogen-free PUR cable
- Simple and safe: 100% electrically tested and assembled ready for use
- Designs with pre-assembled cables on one or both sides
- High flexibility: customer-specific assemblies and cable lengths can be supplied

## Commercial Data

Item number	1620412
Packing unit	1 pc
Minimum order quantity	2 pc
Note	Made to Order (non-returnable)
Product Key	ABRDFE
Catalog Page	Page 222 (C-2-2019)
GTIN	4046356831697
Weight per Piece (including packing)	808 g
Weight per Piece (excluding packing)	780 g
Customs tariff number	85444290
Country of origin	DE

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## Technical Data

### Notes

Notes on operation	Observe derating curve.
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### Safety note

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	<ul style="list-style-type: none"><li>• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.</li></ul>
	<ul style="list-style-type: none"><li>• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.</li></ul>
	<ul style="list-style-type: none"><li>• The products are suitable for applications in plant, controller, and electrical device engineering.</li></ul>
	<ul style="list-style-type: none"><li>• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li></ul>
	<ul style="list-style-type: none"><li>• Assembled products may not be manipulated or improperly opened.</li></ul>
	<ul style="list-style-type: none"><li>• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li></ul>
	<ul style="list-style-type: none"><li>• When using the product in direct connection with third-party manufacturers, the user is responsible.</li></ul>
	<ul style="list-style-type: none"><li>• For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li></ul>
	<ul style="list-style-type: none"><li>• Ensure that the protective or functional ground has been properly connected.</li></ul>
	<ul style="list-style-type: none"><li>• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector</li></ul>
	<ul style="list-style-type: none"><li>• Only use tools recommended by Phoenix Contact</li></ul>
	<ul style="list-style-type: none"><li>• The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li></ul>
	<ul style="list-style-type: none"><li>• Operate the connector only when it is fully plugged in and interlocked.</li></ul>
<ul style="list-style-type: none"><li>• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li></ul>	
<ul style="list-style-type: none"><li>• Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li></ul>	
<ul style="list-style-type: none"><li>• The connector warms up in normal operation. Depending on the</li></ul>	

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ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

## Product properties

Product type	Signal and power cable
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## Connector

### Connector specifications

Type	straight
Thread type	M23
Type of locking	Screw locking
Degree of protection	IP67, when in locked state
No. of pos.	4+3+PE
Direction of rotation	Standard
Contact type	Socket
Insertion/withdrawal cycles	50
Contact resistance	< 0.3 mΩ
Max. current	30 A
Voltage	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV
Ambient temperature (operation)	-40 °C ... 105 °C

### Cable specifications

Cable type	PSLC11Y-J
Shielded	yes
Cable structure	4 x 2.5 mm <sup>2</sup> + 2 x 2 x 1.0 mm <sup>2</sup> StC
External cable diameter	13.5 mm ±0.4 mm
Outer sheath, material	PUR
Material wire insulation	TPM
External sheath, color	orange RAL 2003
Nominal voltage, cable	1000 V
Test voltage	4 kV (2 kV signal)
Smallest bending radius, movable installation	135 mm
Max. bending cycles	10000000
Bending radius	135 mm
Traversing path	6 m
Acceleration	5 m/s <sup>2</sup>
Ambient temperature (operation) for fixed installation	-40 °C ... 80 °C
Ambient temperature (operation) for flexible installation	-20 °C ... 60 °C
Special properties	Flexible cable conduit capable

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Flame resistance	IEC 332-1
Halogen-free	DIN VDE 0472

## Connector specifications (second page)

Type	straight plastic-sheathed
Housing material	Zinc die-cast
Thread type	M23
Degree of protection	IP67, when in locked state
No. of pos.	4+3+PE
Direction of rotation	Standard
Contact type	Pin
Insertion/withdrawal cycles	50
Contact resistance	< 0.3 mΩ
Max. current	30 A
Voltage	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV
Ambient temperature (operation)	-40 °C ... 105 °C

## Cable / line

Cable length	2 m
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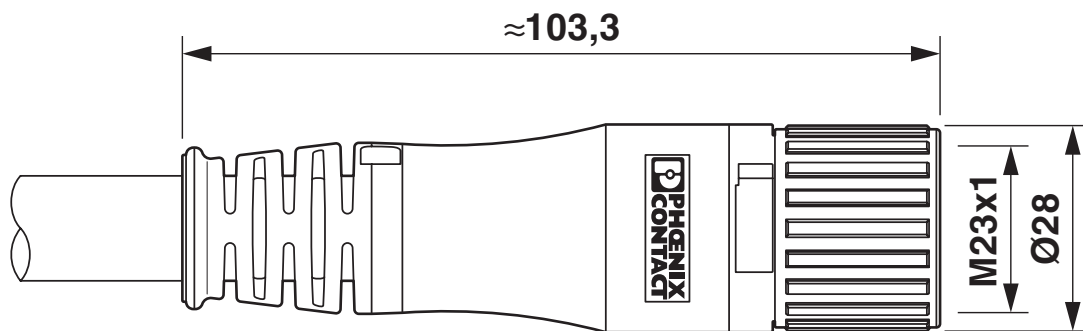


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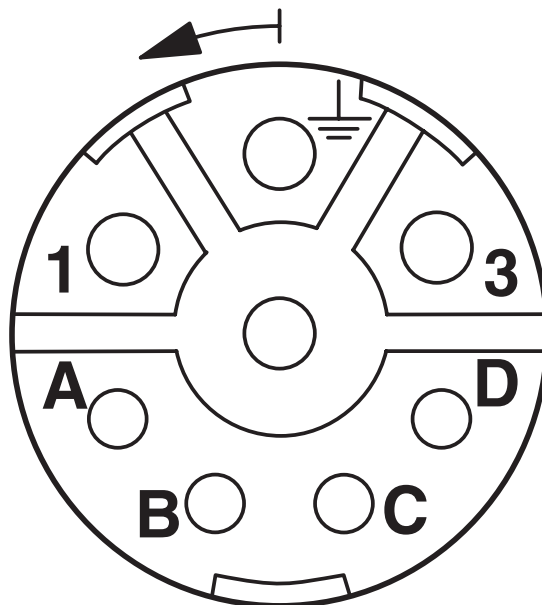
## Drawings

Dimensional drawing



On the female side

Schematic diagram



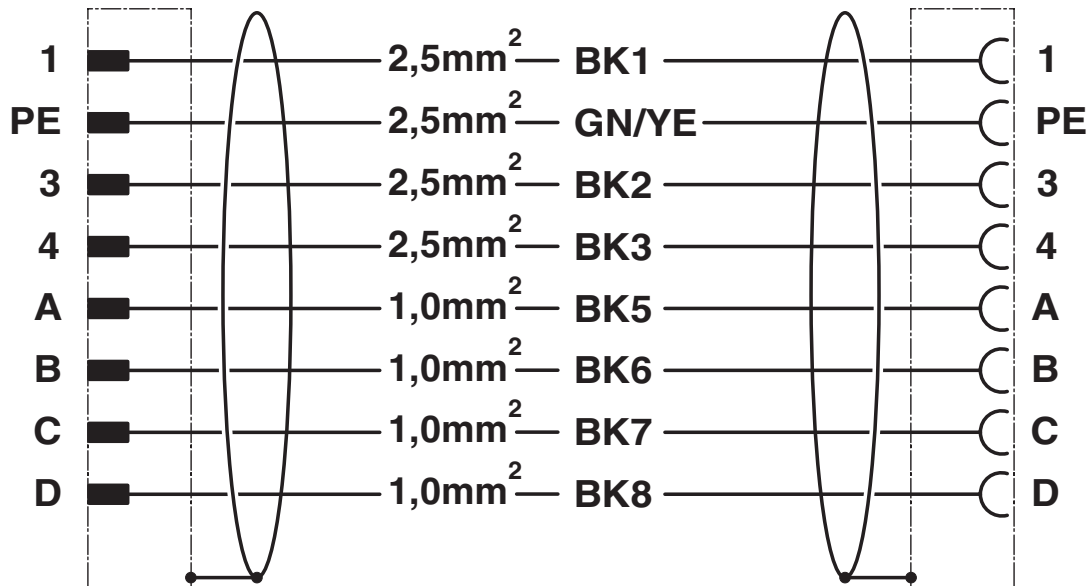
Socket pin assignment

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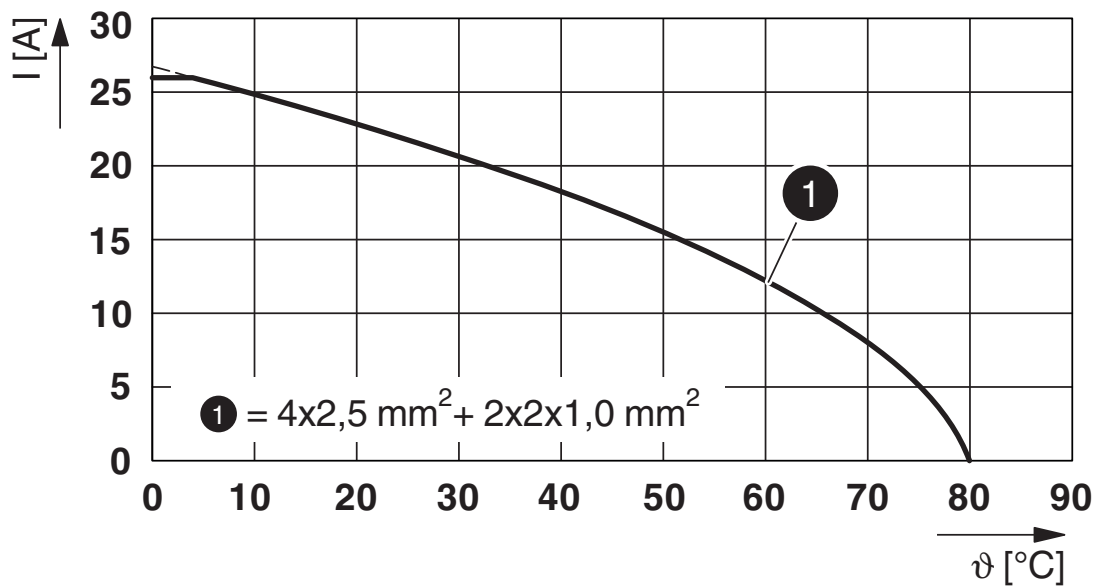
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Circuit diagram



Diagram



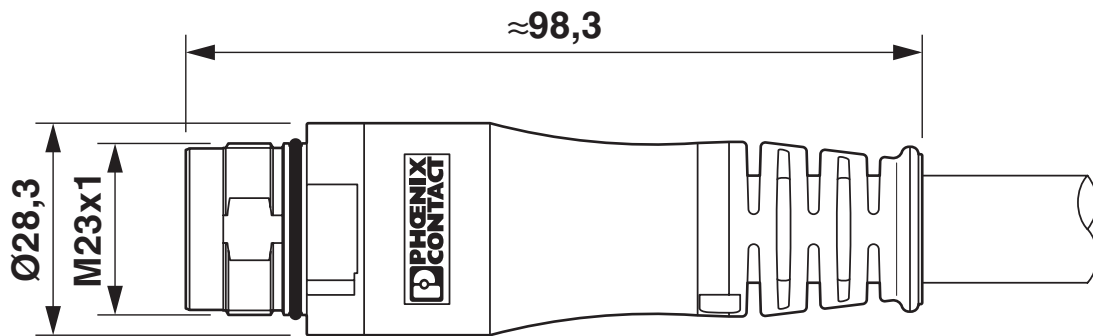
I = current strength, T = ambient temperature

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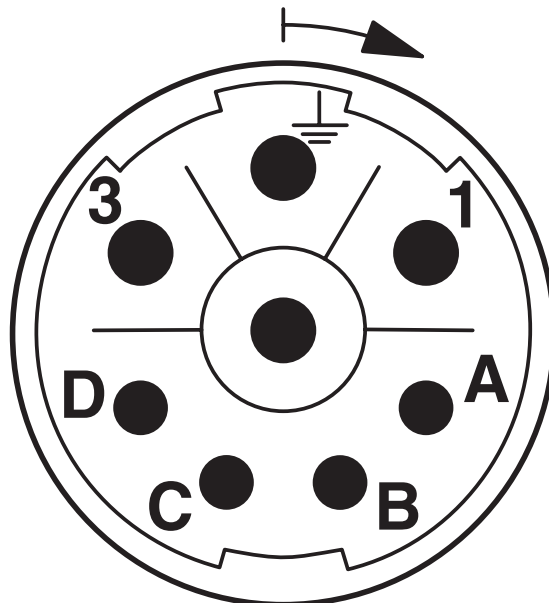
<https://www.phoenixcontact.com/pc/products/1620412>

Dimensional drawing



Pin side

Schematic diagram



Pin assignment of pin

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## Approvals



**EAC**

Approval ID: B.00286/19

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## Classifications

### ECLASS

ECLASS-9.0	27062011
ECLASS-10.0.1	27060106
ECLASS-11.0	27060106

### ETIM

ETIM 8.0	EC003250
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### UNSPSC

UNSPSC 21.0	26121600
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## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Accessories

### Insert label

Insert label - PABA WH/15 - 1013151

<https://www.phoenixcontact.com/pc/products/1013151>



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

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### Insert label

Insert label - PABA YE/15 - 1013698

<https://www.phoenixcontact.com/pc/products/1013698>



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

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## Insert label

Insert label - PABA RD/15 - 1013944

<https://www.phoenixcontact.com/pc/products/1013944>



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 0.6 ... 50 mm, lettering field size: 15 x 4 mm, Number of individual labels: 20

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## Marker pen

Marker pen - B-STIFT - 1051993

<https://www.phoenixcontact.com/pc/products/1051993>



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

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## Diagonal cutter

Diagonal cutter - CUTFOX-S VDE - 1212207

<https://www.phoenixcontact.com/pc/products/1212207>



Diagonal cutter for hard (piano wire) and soft wires, VDE 1000 V AC/1500 V DC tested

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