

## Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Connector in molded plastic on both sides, length: 5 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

**RoHS**

### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	2 pc
GTIN	 4 046356 831659
GTIN	4046356831659
Weight per Piece (excluding packing)	1,320.000 g
Custom tariff number	85444290
Country of origin	Germany

### Technical data

Conductor length	5 m
------------------	-----

### Standards and Regulations

# Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

## Technical data

### Standards and Regulations

Safety note	<p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p>
	<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 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).</li></ul>

### Connector specifications

Type	straight plastic-sheathed
Thread type	M23

# Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

## Technical data

### Connector specifications

Locking type	Screw locking
Degree of protection	IP67, when in locked state
Number of positions	4+3+PE
Direction of rotation	Standard
Type of contact	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

Type of cable	PSLC11Y-J
Shielded	yes
Cable structure	4 x 1.5 mm <sup>2</sup> + 2 x 2 x 0.75 mm <sup>2</sup> StC
Cable structure (AWG)	16 AWG/4c + 19 AWG/2pr
External cable diameter	11.7 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)
Rated current	18 A
Smallest bending radius, movable installation	117 mm
Ambient temperature for fixed installation	-40 °C ... 80 °C
Ambient temperature for flexible installation	-20 °C ... 60 °C

### Connector specifications (second page)

Type	straight plastic-sheathed
Housing material	Zinc die-cast
Thread type	M23
Degree of protection	IP67, when in locked state
Number of positions	4+3+PE
Direction of rotation	Standard

# Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

## Technical data

### Connector specifications (second page)

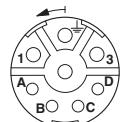
Type of contact	Pin
Insertion/withdrawal cycles	50
Contact resistance	< 0.3 mΩ
Max. current	30 A
Voltage	630 V
Overshoot category	III
Degree of pollution	3
Rated surge voltage	6 kV
Ambient temperature (operation)	-40 °C ... 105 °C

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

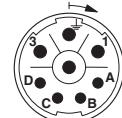
## Drawings

Schematic diagram



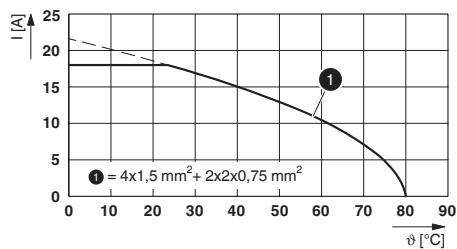
Socket pin assignment

Schematic diagram



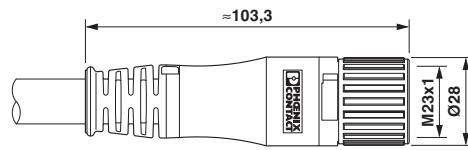
Pin assignment of pin

Diagram



I = current strength, T = ambient temperature

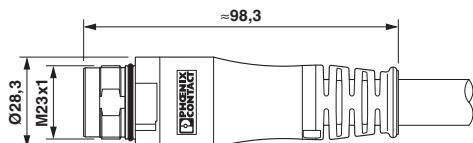
Dimensional drawing



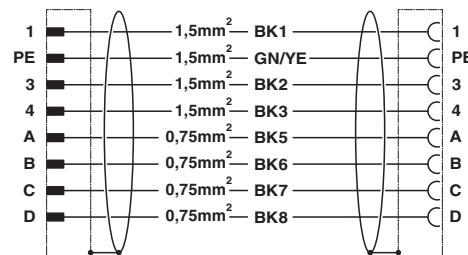
Dimensional drawing

## Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

Dimensional drawing



Circuit diagram



Dimensional drawing

Contact assignment of M23 plugs/sockets

### Classifications

eCl@ss

eCl@ss 10.0.1	27060106
eCl@ss 11.0	27060106
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27062000
eCl@ss 7.0	27062011
eCl@ss 9.0	27062011

### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC001855
ETIM 6.0	EC001578
ETIM 7.0	EC003250

### UNSPSC

UNSPSC 6.01	26121604
UNSPSC 7.0901	26121604
UNSPSC 11	26121604
UNSPSC 12.01	26121604
UNSPSC 13.2	26121604
UNSPSC 18.0	39121465
UNSPSC 19.0	39121465
UNSPSC 20.0	39121465
UNSPSC 21.0	39121465

## Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

### Approvals

#### Approvals

---

#### Approvals

#### EAC

---

#### Ex Approvals

---

### Approval details

EAC



B.00286/19

### Accessories

#### Accessories

#### Conductor marking

#### Insert label - PABA WH/15 - 1013151



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

---

#### Insert label - PABA YE/15 - 1013698



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

## Connector in molded plastic on both sides - K-7E-M23 M9/5,0-D02/M23 F8 - 1620410

### Accessories

Insert label - PABA RD/15 - 1013944



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

### Cutting tools

Diagonal cutter - CUTFOX-S VDE - 1212207



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

### Marker pen

Marker pen - B-STIFT - 1051993



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