

## Cable connector - M23-09P1N8A8003 - 1629218

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Cable connector, M23 PRO, straight, shielded: yes, Screw locking, M23, No. of pos.: 8+1, type of contact: Pin, Crimp connection, cable diameter range: 6 mm ... 10 mm

### Your advantages

- ✓ Solutions with cross-manufacturer compatibility for standard and fast locking systems
- ✓ Reliable under the harshest conditions: cable connectors with vibration brake
- ✓ Modern, consistent design for highly convenient operation
- ✓ Easy, cost-effective cable assembly: uniform shielding of M17 to M40



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 618517
GTIN	4055626618517

### Technical data

#### Temperature range

Ambient temperature	-40 °C ... 125 °C
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#### Standards and Regulations

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.
	• 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.
	• 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.

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## Technical data

### Standards and Regulations

	<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>

### Data of the insulating body

Note	Order information: Order crimp contacts 8 x Ø 1 mm, 1 x Ø 2 mm separately
Coding	N
Insulator material	PA 6.6
Contact connection method	Crimp connection
Type of contacts	Pin
Application	Signal
Number of positions	9
Direction of rotation	Standard
Contact diameter of power contacts	2 mm
Litz wire cross section of power contacts min.	0.5 mm <sup>2</sup>
Litz wire cross section of power contacts max.	2.5 mm <sup>2</sup>
Rated current for power contacts	20 A
Note	for max. connection cross section
Rated voltage of power contact	300 V
Rated surge voltage	2.5 kV

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### Technical data

#### Data of the insulating body

Overvoltage category	II
Degree of pollution	3
Contact diameter of signal contacts	1 mm
Litz wire cross section of signal contacts min.	0.08 mm <sup>2</sup>
Litz wire cross section of signal contacts max.	1 mm <sup>2</sup>
Nominal current per signal contact	8 A
Note	for max. connection cross section
Rated voltage of signal contact	300 V
Rated surge voltage	2.5 kV
Overvoltage category	II
Degree of pollution	3
Note	for max. connection cross section

#### Housing data

Housing material	GD-Zn
Type of locking	Screw locking
Degree of protection (when plugged in)	IP66 / IP68 (2 m / 24 h)
Thread type	M23

#### Cable seal data

Cable diameter	6 mm ... 10 mm
Sealing material	FKM

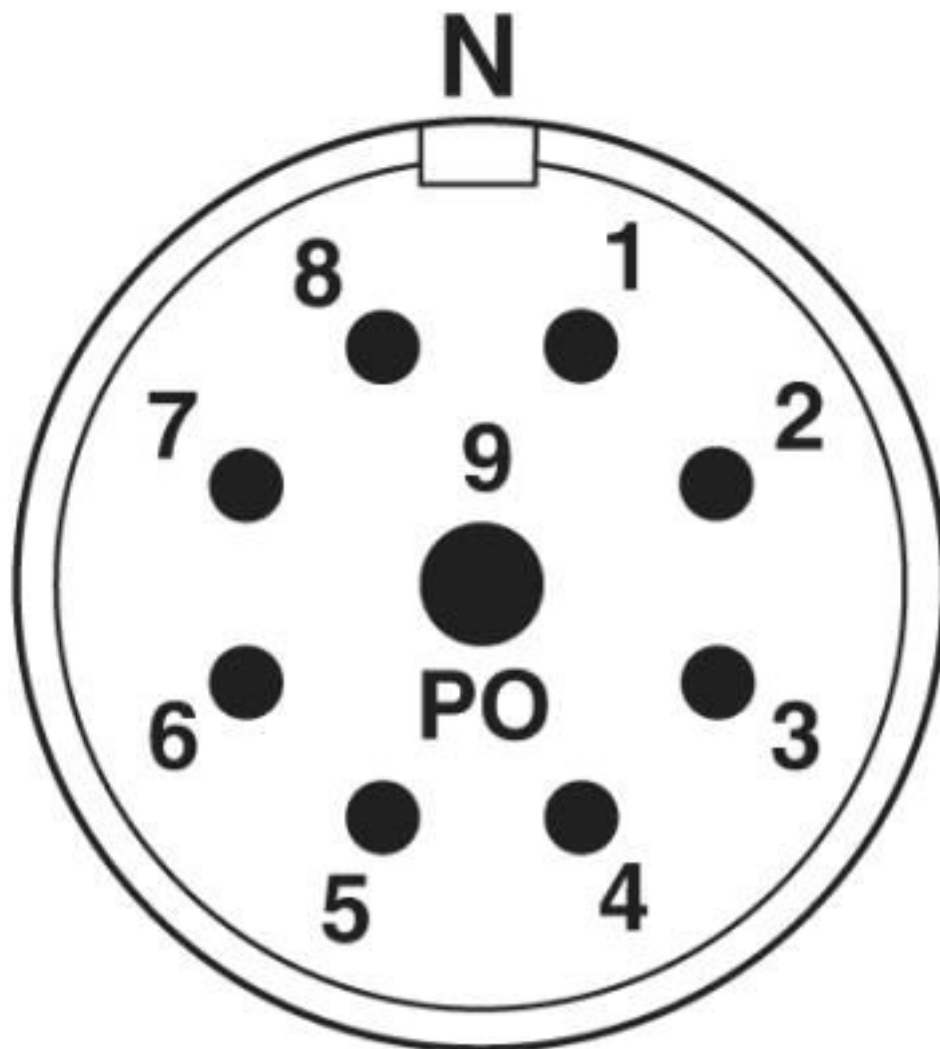
#### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

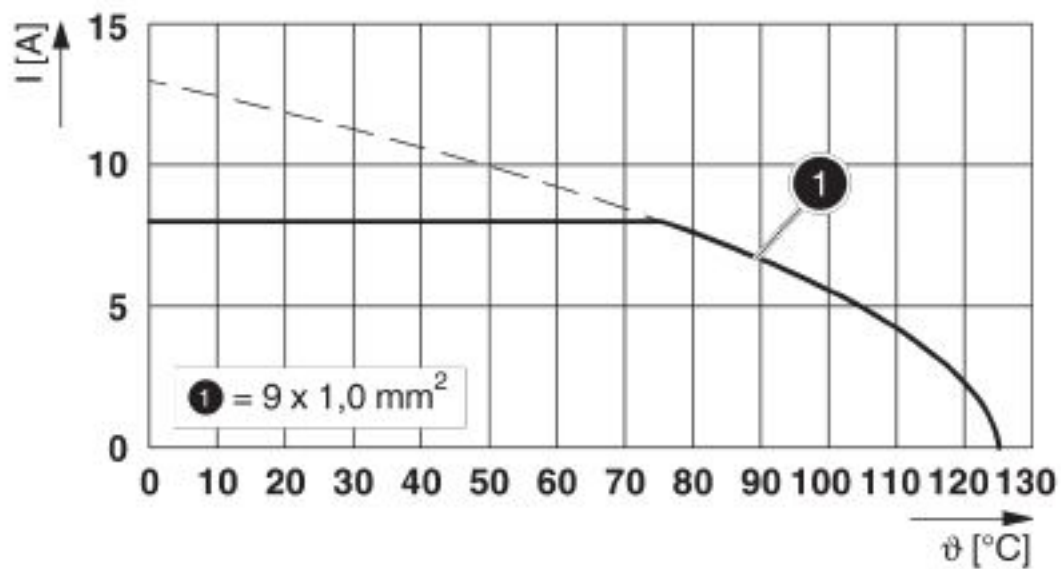
## Cable connector - M23-09P1N8A8003 - 1629218

Schematic diagram



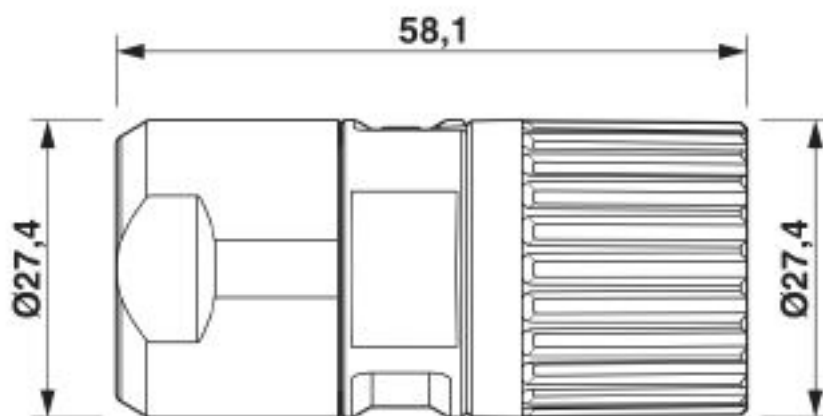
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Diagram



$I$  = current strength,  $\theta$  = ambient temperature, 9x 8 A

Dimensional drawing



Technical drawings can be found under Downloads

### Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 8.0	27440102

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### Classifications

eCl@ss

eCl@ss 9.0	27440102
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ETIM

ETIM 5.0	EC002635
ETIM 6.0	EC002061

### Approvals


#### Approvals


Approvals

UL Recognized / cUL Recognized

Ex Approvals

#### Approval details

UL Recognized  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E335019-20141210	
Nominal voltage UN	300 V
Nominal current IN	6 A
mm²/AWG/kcmil	20

cUL Recognized  <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E335019-20141210	
Nominal voltage UN	300 V
Nominal current IN	4 A
mm²/AWG/kcmil	20

### Accessories

Accessories

Circular connectors (device side)

## Cable connector - M23-09P1N8A8003 - 1629218

### Accessories

Hook wrench - SF-Z0027 - 1607455



Hook wrench

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### Crimp contact

Crimp contact - RC-12P2000 - 1597862



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.14 mm<sup>2</sup> ... 0.56 mm<sup>2</sup>

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Crimp contact - RC-11P2000 - 1596770



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.08 mm<sup>2</sup> ... 0.22 mm<sup>2</sup>

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Crimp contact - RC-1KP2000 - 1602996



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.5 mm<sup>2</sup> ... 1 mm<sup>2</sup>

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Crimp contact - RC-22P2400 - 1603325



Crimp contact, rolled, number of pieces per reel: 10000, contact diameter: 1 mm, crimp range: 0.22 mm<sup>2</sup> ... 0.56 mm<sup>2</sup>

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### Accessories

Crimp contact - RC-22P2000 - 1603321



Crimp contact, rolled, Single contact, contact diameter: 1 mm, crimp range: 0.22 mm<sup>2</sup> ... 0.56 mm<sup>2</sup>

Crimp contact - RC-22P2300 - 1603324



Crimp contact, rolled, Taped articles, number of pieces per reel: 500, contact diameter: 1 mm, crimp range: 0.22 mm<sup>2</sup> ... 0.56 mm<sup>2</sup>

Crimp contact - RC-5SP2000 - 1603529



Crimp contact, turned, contact diameter: 2 mm, crimp range: 0.5 mm<sup>2</sup> ... 0.75 mm<sup>2</sup>

Crimp contact - RC-59P2000 - 1603498



Crimp contact, turned, contact diameter: 2 mm, crimp range: 0.75 mm<sup>2</sup> ... 1 mm<sup>2</sup>

Crimp contact - RC-5CP2000 - 1603513



Crimp contact, turned, contact diameter: 2 mm, crimp range: 1 mm<sup>2</sup> ... 1.5 mm<sup>2</sup>

## Cable connector - M23-09P1N8A8003 - 1629218

### Accessories

Crimp contact - RC-5AP2000 - 1603505



Crimp contact, turned, contact diameter: 2 mm, crimp range: 1.5 mm² ... 2.5 mm²

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### Mounting material

Torque screwdriver - SF-Z0028 - 1607456



Torque screwdriver

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Special wrench - RF-Z0007 - 1614347



Special wrench

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