

1629151

https://www.phoenixcontact.com/us/products/1629151

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.



M23, Cable connector, series: M23 PRO, straight, shielded: yes, ONECLICK fast locking system, No. of pos.: 16+2+PE, Direction of rotation: Standard, contact connection type: Socket, Crimp connection, cable diameter range: 4 mm ... 8.5 mm, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

### Your advantages

- · Solutions with cross-manufacturer compatibility for standard and fast locking systems
- ONECLICK fast locking system with an optically, haptically, and acoustically clear locking position
- · 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

### Commercial data

Item number	1629151
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB30
Product key	ABRABB
GTIN	4055626617848
Weight per piece (including packing)	96.67 g
Weight per piece (excluding packing)	96.67 g
Customs tariff number	85366990
Country of origin	DE



1629151

https://www.phoenixcontact.com/us/products/1629151

### Technical data

N I	- 4
1/1	OTO C

MARNING: 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 property 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 an operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basis: electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.  • The products are suitable for applications in plant, controller, and electrical device engineering.  • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  • Assembled products may not be manipulated or improperty opened.  • Only use mating connectors that are specified in the technical data of the standards islated (e.g., the ones listed in the product accessories online at phoenixcontact.com/products).  • When using the product in direct connection with third-party manufacturers, the user is responsible.  • For operating voltages > 50 V AC, conductive connector housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • VDE 01001.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1. are applicable when combining several circuits in a cable analyconnector  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standa		
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. They must observe the following safety notes. The qualified personnel must be familiar with the basis: electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with the basis: electrical engineering. The relevant symbol on the packaging indicate that only personnel familiar with the lectrical engineering are allowed to install and operate the product.  • The products are suitable for applications in plant, controller, and electrical device engineering.  • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  • Assembled products may not be manipulated or improperly opened.  • 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 phoenixcontact.com/products).  • When using the product in direct connection with third-party manufacturers, the user is responsible.  • For operating voltages > 50 V AC, conductive connector housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1: are applicable when combining several circuits in a cable and/o connector.  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and inte	General	Order crimp contacts 16 x Ø 1 mm, 3 x Ø 1.5 mm separately
disconnected under load. Ignoring the warning or improper use may damage persons and/or property.  • WARNING: Commission property 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 ar operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.  • The products are suitable for applications in plant, controller, and electrical device engineering.  • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  • Assembled products may not be manipulated or improperty opened.  • 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 phoenixcontact.com/products).  • When using the product in direct connection with third-party manufacturers, the user is responsible.  • For operating voltages > 50 v Ac, conductive connector housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1: are applicable when combining several circuits in a cable and/connector for this product.  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.	afety note	
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 ar operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.  • The products are suitable for applications in plant, controller, and electrical device engineering.  • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  • Assembled products may not be manipulated or improperly opened.  • 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 phoenixcontact comyproducts).  • When using the product in direct connection with third-party manufacturers, the user is responsible.  • For operating voltages > 50 V AC, conductive connector housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1. are applicable when combining several circuits in a cable and/o connector  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenix contact comproducts must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  • Observe the minimum bending radius of the cable. Lay the cable without twisting it.  • The connector warms up in normal operation. Depending on it ambient conditions, the surface of the connector ca	Safety note	disconnected under load. Ignoring the warning or improper use
operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicate that only personnel familiar with electrical engineering are allowed to install and operate the product.  • The products are suitable for applications in plant, controller, and electrical device engineering.  • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  • Assembled products may not be manipulated or improperly opened.  • 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 phoenixcontact.com/products).  • When using the product in direct connection with third-party manufacturers, the user is responsible.  • For operating voltages > 50 V AC, conductive connector housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • 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/o connector  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  • Observe the minimum bending radius of the cable. Lay the cable without twisting it.  • The connector warms up in normal operation. Depending on t ambient conditions, the surface of the connector can continue to		The products must be regularly inspected for damage.  Decommission defective products immediately. Replace
and electrical device engineering.  When operating the connectors in outdoor applications, they must be separately protected against environmental influences.  Assembled products may not be manipulated or improperly opened.  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 phoenixcontact.com/products).  When using the product in direct connection with third-party manufacturers, the user is responsible.  For operating voltages > 50 V AC, conductive connector housings must be grounded  Ensure that the protective or functional ground has been properly connected.  VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1. are applicable when combining several circuits in a cable and/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.		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
must be separately protected against environmental influences.  Assembled products may not be manipulated or improperly opened.  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 phoenixcontact.com/products).  When using the product in direct connection with third-party manufacturers, the user is responsible.  For operating voltages > 50 v Ac, conductive connector housings must be grounded  Ensure that the protective or functional ground has been properly connected.  VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1. are applicable when combining several circuits in a cable and/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.  The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to appear to the surface of the connector can continue to appear to the cable.		· · · · · · · · · · · · · · · · · · ·
opened.  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 phoenixcontact.com/products).  When using the product in direct connection with third-party manufacturers, the user is responsible.  For operating voltages > 50 V AC, conductive connector housings must be grounded  Ensure that the protective or functional ground has been properly connected.  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/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.  The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		<ul> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>
data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).  When using the product in direct connection with third-party manufacturers, the user is responsible.  For operating voltages > 50 V AC, conductive connector housings must be grounded  Ensure that the protective or functional ground has been properly connected.  VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1. are applicable when combining several circuits in a cable and/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.		· · · · · · · · · · · · · · · · · · ·
manufacturers, the user is responsible.  For operating voltages > 50 V AC, conductive connector housings must be grounded  Ensure that the protective or functional ground has been properly connected.  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/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.		
housings must be grounded  • Ensure that the protective or functional ground has been properly connected.  • 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/o connector  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  • Observe the minimum bending radius of the cable. Lay the cable without twisting it.  • The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		
properly connected.  • 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/o connector  • Only use tools recommended by Phoenix Contact  • The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  • Operate the connector only when it is fully plugged in and interlocked.  • Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  • Observe the minimum bending radius of the cable. Lay the cable without twisting it.  • The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		, · · · ·
are applicable when combining several circuits in a cable and/o connector  Only use tools recommended by Phoenix Contact  The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.  The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		· · · · · · · · · · · · · · · · · · ·
<ul> <li>The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.</li> <li>Operate the connector only when it is fully plugged in and interlocked.</li> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> <li>The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to</li> </ul>		<ul> <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>
download page at phoenixcontact.com/products must be observed for this product.  Operate the connector only when it is fully plugged in and interlocked.  Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.  The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		Only use tools recommended by Phoenix Contact
<ul> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> <li>The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to</li> </ul>		download page at phoenixcontact.com/products must be
connectors does not exceed the upper limit specified in the standards.  Observe the minimum bending radius of the cable. Lay the cable without twisting it.  The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		
cable without twisting it.  • The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to		connectors does not exceed the upper limit specified in the
ambient conditions, the surface of the connector can continue to		
		<ul> <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</li> </ul>



1629151

https://www.phoenixcontact.com/us/products/1629151

	warnings (e.g. DIN EN ISO 13732-1:2008-12).
duct properties	
Product type	Circular connector (cable-side)
nnector	
Connection 1	
Head design	Socket
nsulating body	
Note	Order information: Order crimp contacts 16 x $\varnothing$ 1 mm, 3 x $\varnothing$ 1.5 mm separately
Insulation body material	PA 6.6
Insertion/withdrawal cycles	100
Connection method	Crimp connection
Contact switching type	Socket
Application	Signal
Number of positions	19
Direction of rotation	Standard
Connection profile	16+2+PE
Contact diameter Power contacts	1.5 mm
Litz wire cross-section Power contacts min.	0.08 mm²
Litz wire cross-section Power contacts max.	1 mm²
Rated current Power contacts	10 A
Note	for max. connection cross section
Rated voltage	150 V
Rated surge voltage	1.5 kV
Overvoltage category	II
Degree of pollution	3
Contact diameter Signal contacts	1 mm
Litz wire cross-section Signal contacts min.	0.08 mm²
Litz wire cross-section Signal contacts max.	1 mm²
Nominal current per signal contact	8 A
Note	for max. connection cross section
Rated voltage Signal contact	150 V
Overvoltage category	II
Degree of pollution	3
Installation height	2000 m
Housing	
Housing material	GD-Zn
Type of locking	ONECLICK fast locking system



1629151

https://www.phoenixcontact.com/us/products/1629151

Pg screw connection	none
Degree of protection (plugged in)	IP66 / IP68 (2m / 24h) / IP69K
Thread type	M23
Seal	
Seal External cable diameter	4 mm 8.5 mm

#### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (operation)	-40 °C 105 °C (see to derating)
Permanent temperature	125 °C (DIN EN 60512-9-2 / 1000 h)

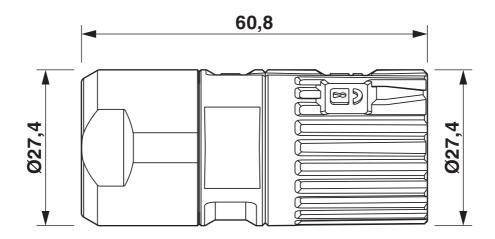


1629151

https://www.phoenixcontact.com/us/products/1629151

## Drawings

### Dimensional drawing



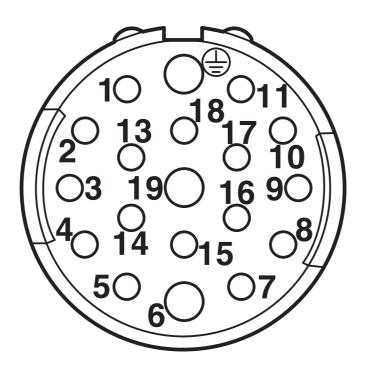
Technical drawings can be found under Downloads



https://www.phoenixcontact.com/us/products/1629151



Schematic diagram

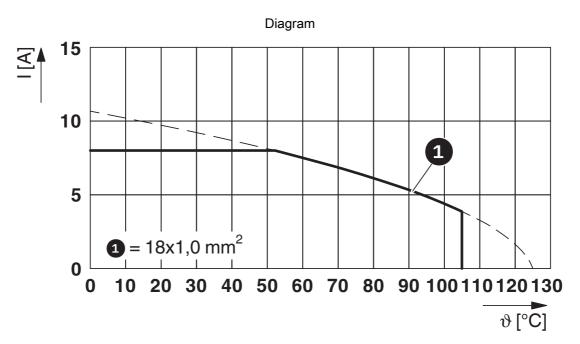


Connector pin assignment



1629151

https://www.phoenixcontact.com/us/products/1629151



I = current strength,  $\vartheta$  = ambient temperature, 18x 8 A



1629151

https://www.phoenixcontact.com/us/products/1629151

### **Approvals**

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1629151



cUL Recognized

Approval ID: E335019-20141210



**UL Recognized**Approval ID: E335019-20141210

cULus Recognized



1629151

https://www.phoenixcontact.com/us/products/1629151

## Classifications

### **ECLASS**

	ECLASS-11.0	27440102
	ECLASS-12.0	27440116
	ECLASS-13.0	27440116
ET	ТІМ	
	ETIM 9.0	EC002635
UN	NSPSC	
	UNSPSC 21.0	39121400



1629151

https://www.phoenixcontact.com/us/products/1629151

## Environmental product compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values



1629151

https://www.phoenixcontact.com/us/products/1629151

### Accessories

SF-Z0028 - Torque screwdriver

1607456

https://www.phoenixcontact.com/us/products/1607456



Torque screwdriver, series: RC

### SF-Z0027 - Hook wrench

1607455

https://www.phoenixcontact.com/us/products/1607455



Hook wrench, series: RC



1629151

https://www.phoenixcontact.com/us/products/1629151

### RF-Z0007 - Special wrench

1614347

https://www.phoenixcontact.com/us/products/1614347

Special wrench, series: RF



### RC-11S2000 - Crimp contact

1596772

https://www.phoenixcontact.com/us/products/1596772



Crimp contact, Socket, turned, Single contact, contact diameter: 1 mm, crimp range:  $0.08~\text{mm}^2$  ...  $0.22~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241093



1629151

https://www.phoenixcontact.com/us/products/1629151

#### RC-12S2000 - Crimp contact

1599600

https://www.phoenixcontact.com/us/products/1599600



Crimp contact, Socket, turned, Single contact, contact diameter: 1 mm, crimp range:  $0.14~\text{mm}^2$  ...  $0.56~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241093

#### RC-1KS2000 - Crimp contact

1602998

https://www.phoenixcontact.com/us/products/1602998



Crimp contact, Socket, turned, Single contact, contact diameter: 1 mm, crimp range:  $0.5~\text{mm}^2~\dots~1~\text{mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241572



1629151

https://www.phoenixcontact.com/us/products/1629151

### RC-15S2000 - Crimp contact

1623775

https://www.phoenixcontact.com/us/products/1623775



Crimp contact, Socket, turned, contact diameter: 1.5 mm, crimp range:  $0.5~\text{mm}^2$  . .. 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244969

#### RC-15S2200 - Crimp contact

1627290

https://www.phoenixcontact.com/us/products/1627290



Crimp contact, Socket, turned, contact diameter: 1.5 mm, crimp range:  $0.08 \text{ mm}^2$  ...  $0.22 \text{ mm}^2$ , Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245474



1629151

https://www.phoenixcontact.com/us/products/1629151

#### PROT-M23PRO-SG-IT-IP20 - Plastic protective cap

1055744

https://www.phoenixcontact.com/us/products/1055744



Plastic protective cap, M23, degree of protection: IP20, series: M23 PRO Signal

### PROT-M23PRO-SG-IT-IP67 - Plastic protective cap

1055745

https://www.phoenixcontact.com/us/products/1055745



Plastic protective cap, M23, degree of protection: IP67, series: M23 PRO Signal

Phoenix Contact 2024 © - 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