

M23-7ES198AW600S - Device connector front mounting



1628831

<https://www.phoenixcontact.com/us/products/1628831>

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M23, Device connector front mounting, series: M23 PRO, straight, shielded: yes, for standard and ONECLICK fast locking system, No. of pos.: 4+3+PE, contact connection type: Socket, Crimp connection, 4x Ø 3.2, flange dimensions: 28 mm x 28 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
- Modern, consistent design for highly convenient operation
- Crimping connection: vibration- and temperature-resistant assembly
- All housing can be fitted with pin or socket contacts
- Safe use in the field, thanks to high degree of protection

Commercial data

Item number	1628831
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB30
Product key	ABRBBL
GTIN	4055626763354
Weight per piece (including packing)	55.5 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	DE

M23-7ES198AW600S - Device connector front mounting



1628831

<https://www.phoenixcontact.com/us/products/1628831>

Technical data

Notes

Order information:	Order crimp contacts 4 x Ø 1 mm, 4 x Ø 2 mm separately
Notes on operation	Please observe the derating curve.

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.
	• 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.
	• 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/or 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.

Safety note	• 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

M23-7ES198AW600S - Device connector front mounting



1628831

<https://www.phoenixcontact.com/us/products/1628831>

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	Circular connectors (device side)
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Data management status

Article revision	04
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Material specifications

Flammability rating according to UL 94	V0
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Connector

Insulating body

Note	Order information: Order crimp contacts 4 x Ø 1 mm, 4 x Ø 2 mm separately
Insulation body material	PA 6.6
Insertion/withdrawal cycles	100
Connection method	Crimp connection
Contact switching type	Socket
Application	Power
Number of positions	8
Connection profile	4+3+PE
Contact diameter Power contacts	2 mm
Litz wire cross-section Power contacts min.	0.25 mm ²
Litz wire cross-section Power contacts max.	4 mm ²
Rated current Power contacts	30 A
Note	for max. connection cross section
Rated voltage	630 V
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3
Contact diameter Signal contacts	1 mm
Litz wire cross-section Signal contacts min.	0.06 mm ²
Litz wire cross-section Signal contacts max.	1 mm ²
Nominal current per signal contact	9 A
Note	for max. connection cross section
Rated voltage Signal contact	250 V
Rated surge voltage	4 kV
Overvoltage category	III
Degree of pollution	3
Installation height	3000 m

M23-7ES198AW600S - Device connector front mounting



1628831

<https://www.phoenixcontact.com/us/products/1628831>

Housing

Housing material	GD-Zn
Flange dimensions	28 mm x 28 mm
Type of locking	for standard and ONECLICK fast locking system
Degree of protection (plugged in)	IP66 / IP68 (2m / 24h) / IP69K
Thread type	M23

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP68
Ambient temperature (operation)	-40 °C ... 105 °C (see to derating)
Altitude	2000 m
Permanent temperature	125 °C (DIN EN 60512-9-2 / 1000 h)

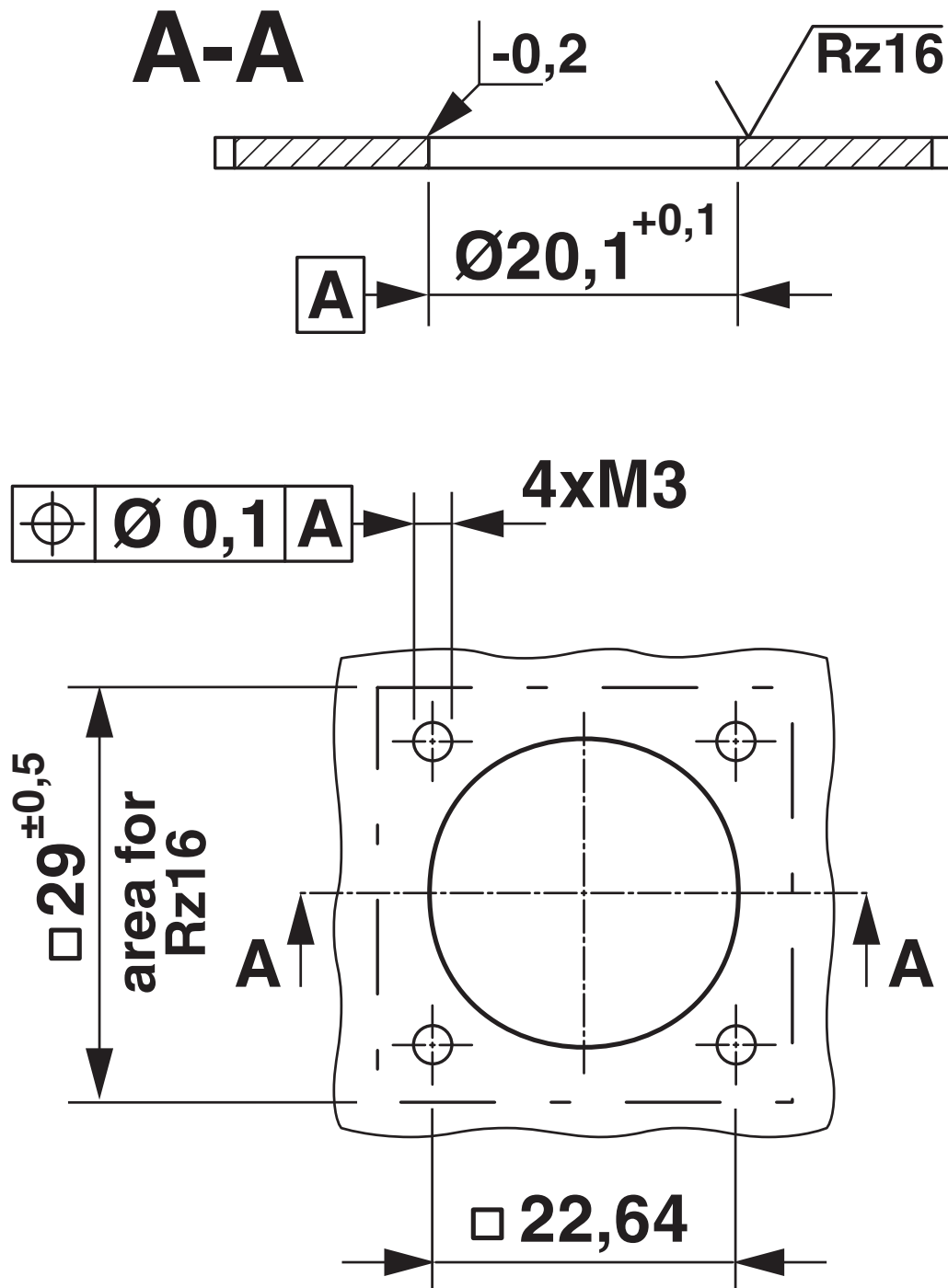
M23-7ES198AW600S - Device connector front mounting

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Drawings

Dimensional drawing



Installation dimensions

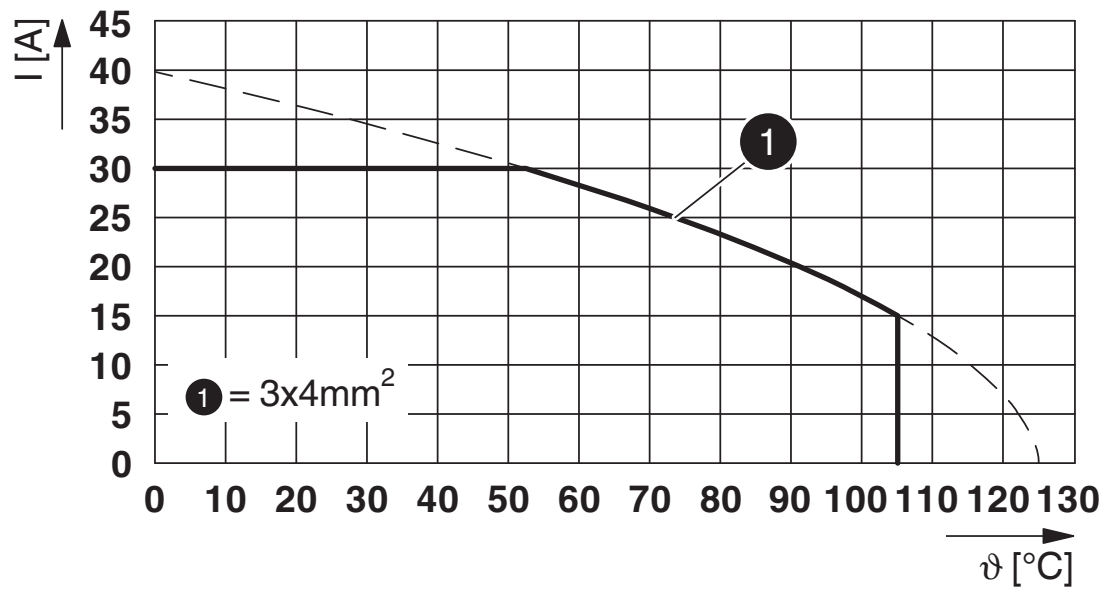
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Diagram



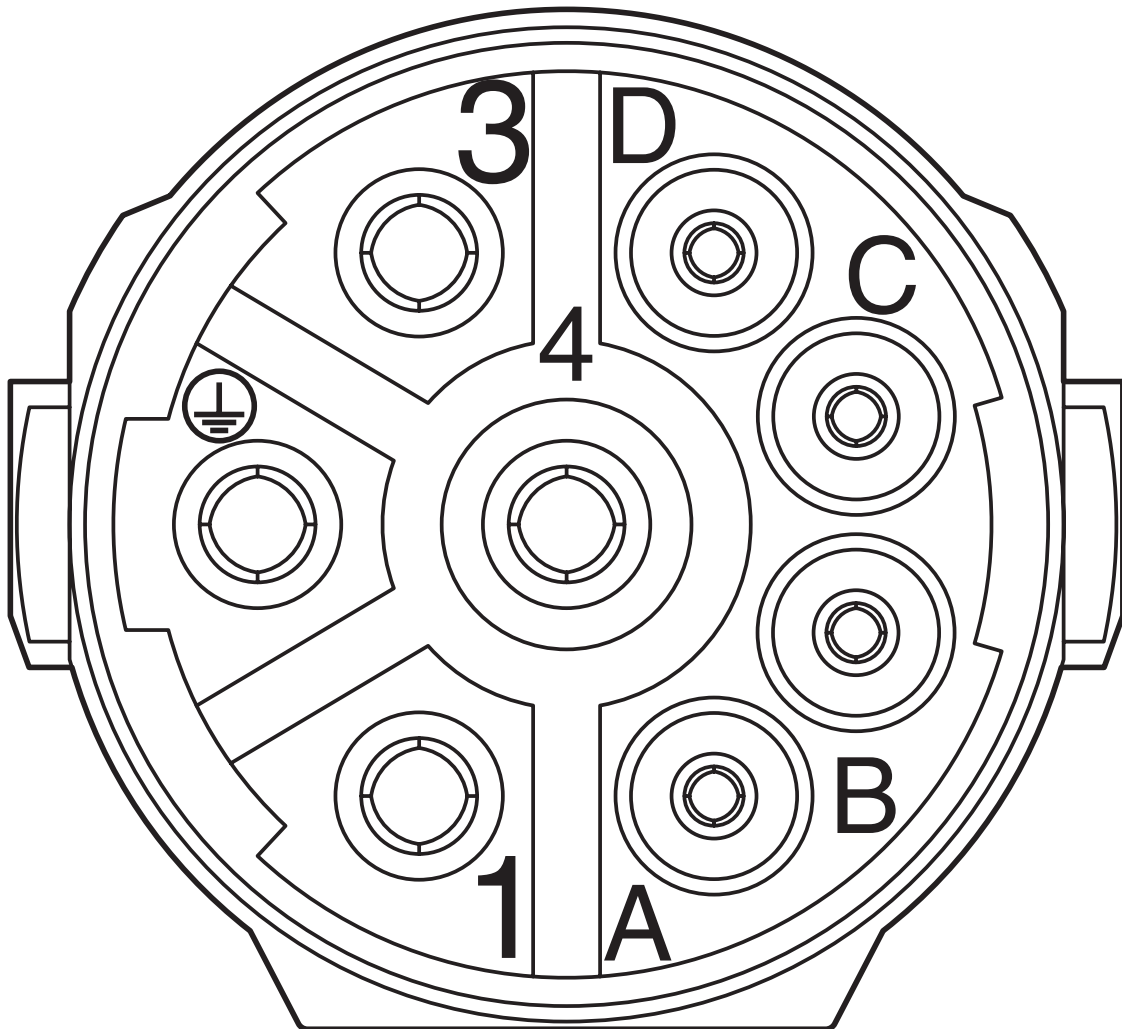
I = current strength, θ = ambient temperature, 3 x 30 A + 2 x 1 A constant

M23-7ES198AW600S - Device connector front mounting

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Schematic diagram



Connector pin assignment

M23-7ES198AW600S - Device connector front mounting



1628831
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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1628831>



UL Listed
Approval ID: E468743-20190627



cUL Listed
Approval ID: E468743-20190627

cULus Listed

M23-7ES198AW600S - Device connector front mounting



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Classifications

ECLASS

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109

ETIM

ETIM 9.0	EC003569
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UNSPSC

UNSPSC 21.0	39121400
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M23-7ES198AW600S - Device connector front mounting



1628831
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

M23-7ES198AW600S - Device connector front mounting



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Accessories

SF-20KS021 - Crimp contact

1621576

<https://www.phoenixcontact.com/us/products/1621576>



Crimp contact, Socket, turned, contact diameter: 2 mm, crimp range: 0.25 mm² .. 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244461

SF-20KS022 - Crimp contact

1621577

<https://www.phoenixcontact.com/us/products/1621577>



Crimp contact, Socket, turned, contact diameter: 2 mm, crimp range: 1.5 mm² ... 2.5 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244461

M23-7ES198AW600S - Device connector front mounting



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SF-20KS023 - Crimp contact

1621578

<https://www.phoenixcontact.com/us/products/1621578>



Crimp contact, Socket, turned, contact diameter: 2 mm, crimp range: 2.5 mm² ... 4 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244462

ST-10KS010 - Crimp contact

1618239

<https://www.phoenixcontact.com/us/products/1618239>



Crimp contact, Socket, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm² ... 0.25 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243216

M23-7ES198AW600S - Device connector front mounting



1628831

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ST-10KS035 - Crimp contact

1618464

<https://www.phoenixcontact.com/us/products/1618464>



Crimp contact, Socket, turned, contact diameter: 1 mm, crimp range: 0.25 mm² .. 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243216

PROT-M23PRO-OT-IP20 - Plastic protective cap

1055753

<https://www.phoenixcontact.com/us/products/1055753>



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

M23-7ES198AW600S - Device connector front mounting



1628831

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PROT-M23PRO-OT-IP67 - Plastic protective cap

1055749

<https://www.phoenixcontact.com/us/products/1055749>

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

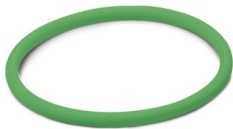


M23PRO-VIB-ORING-GN - Sealing ring

1521138

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Vibration O-ring, optional accessory for M23 PRO device connectors



M23-7ES198AW600S - Device connector front mounting



1628831

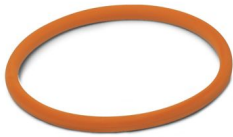
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M23PRO-VIB-ORING-OR - Sealing ring

1521137

<https://www.phoenixcontact.com/us/products/1521137>

Vibration O-ring, optional accessory for M23 PRO device connectors



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