M23-12P1N8AA500S - Device connector front mounting

1628498

https://www.phoenixcontact.com/us/products/1628498

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M23, Device connector front mounting, series: M23 PRO Signal, angled rotatable, for standard and ONECLICK fast locking system, No. of pos.: 12, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, flange dimensions: 26 mm x 26 mm, coding: N, 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	1628498
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB34
Product key	ABRABM
Catalog page	Page 77 (C-2-2019)
GTIN	4055626622132
Weight per piece (including packing)	117.5 g
Weight per piece (excluding packing)	100.77 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

General	Order 12 x 1 mm crimp contacts separately
General	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.
	• 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

	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)

Material specifications

Flammability rating according to UL 94	V0

Connector

Insulating body

Note	Order information: Order crimp contacts Ø 1 mm separately
Coding	N
Insulation body material	PA 6.6
Insertion/withdrawal cycles	100
Connection method	Crimp connection
Contact switching type	Pin
Application	Signal
Number of positions	12
Direction of rotation	Standard
Connection profile	12
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
Rated surge voltage	2.5 kV
Overvoltage category	III
Degree of pollution	3
Installation height	2000 m

Housing

Housing material	GD-Zn
Flange dimensions	26 mm x 26 mm
Type of locking	for standard and ONECLICK fast locking system
Pg screw connection	none
Degree of protection (plugged in)	IP66 / IP68 (2 m / 24 h)
Thread type	M23

Environmental and real-life conditions

Ambient conditions

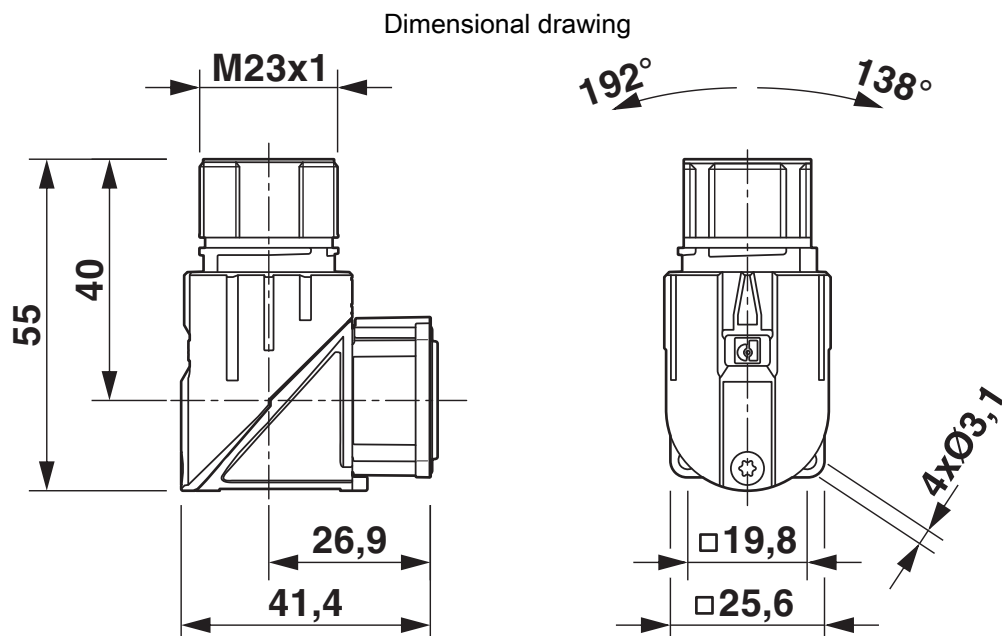| Degree of protection	IP68

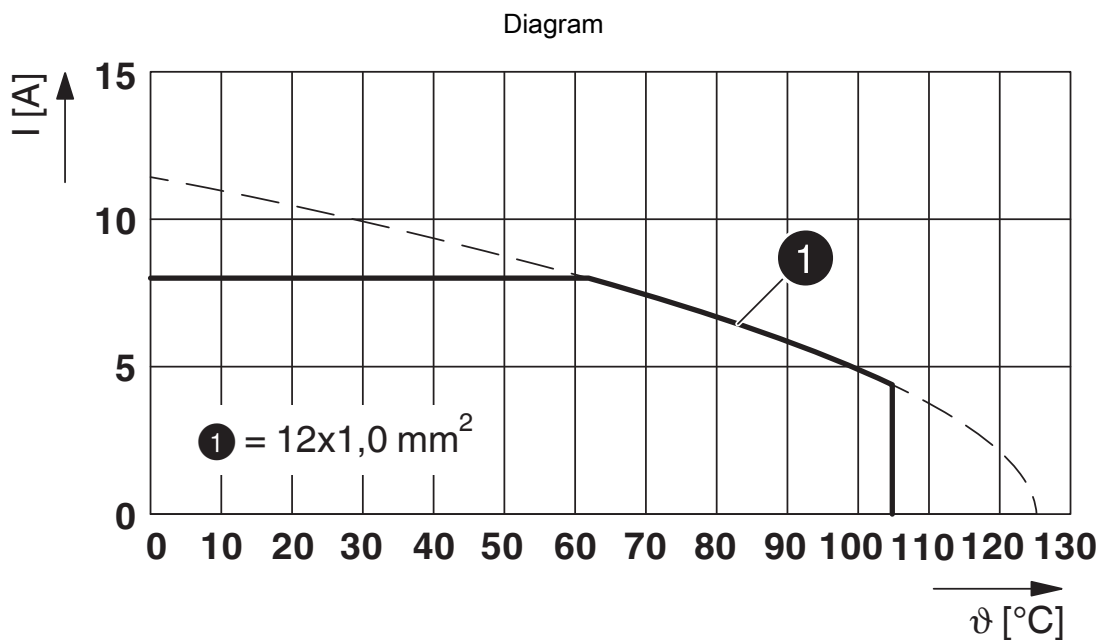| Ambient temperature (operation)	-40 °C ... 105 °C (see to derating)
Permanent temperature	125 °C (DIN EN 60512-9-2 / 1000 h)

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1628498

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Drawings

Dimensional drawing

M23x1

40

55

26,9

41,4

192°   138°

4xØ3,1

☐19,8

☐25,6

Technical drawings can be found under Downloads

Diagram

I [A]

15

10

5

0

1

1 = 12x1,0 mm^2

0 10 20 30 40 50 60 70 80 90 100 110 120 130

ϑ [°C]

I = current strength, ϑ = ambient temperature, 12x 8 A

Dimensional drawing

A-A   -0,2 $\sqrt{}$ **Rz16**

$\boxed{A}$ **Ø20,1$^{+0,1}$**

$\boxed{\oplus \quad Ø\ 0,1 \quad A}$ **4xM3**

$\boxed{27}^{±0,5}$ area for Rz16

A   **A**

□ 19,8
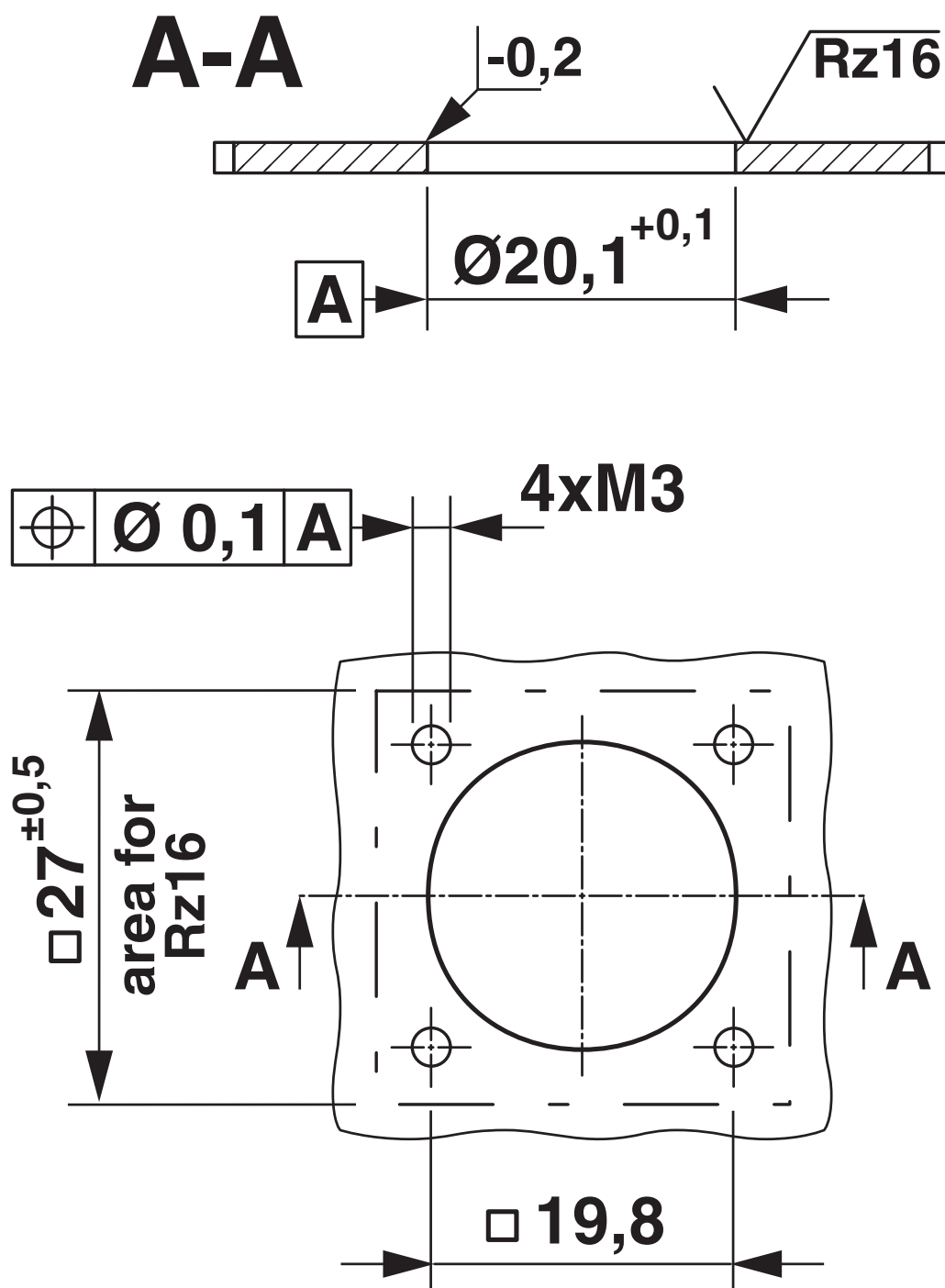
Installation dimensions

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1628498

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Schematic diagram

M23-12P1N8AA500S - Device connector front mounting
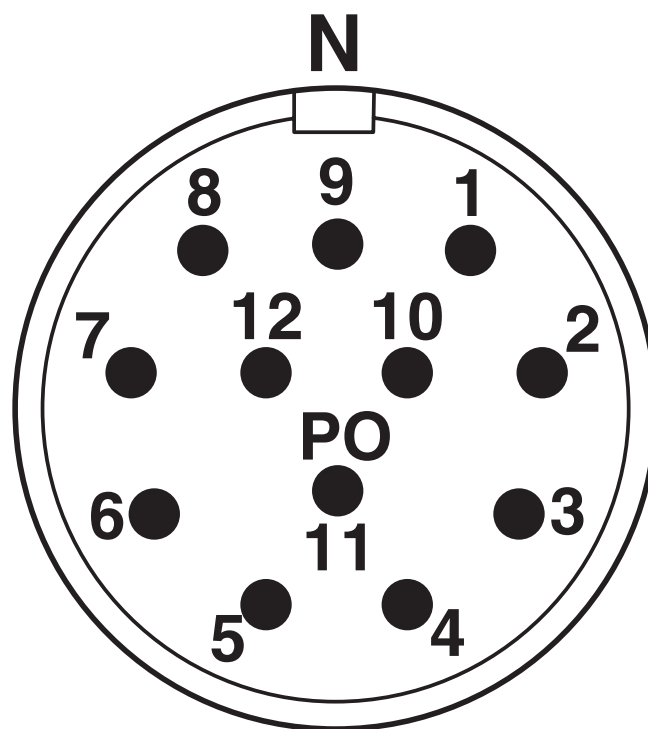
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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1628498

cUL Recognized
Approval ID: E335019-20141210

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Classifications

ECLASS

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

ETIM

ETIM 8.0	EC003569

UNSPSC

UNSPSC 21.0	39121400

Environmental product compliance

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

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Accessories

M23-Z0001 - Screw

1035117

https://www.phoenixcontact.com/us/products/1035117

Anchor screw, self-tapping, for M23-PRO series angled device connectors

UNIFOX-RT M23 12 - Contact removal tool

1247862

https://www.phoenixcontact.com/us/products/1247862

Removal tool for the M23 PRO series 12-position signal contact carrier

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RC-11P2000 - Crimp contact

1596770

https://www.phoenixcontact.com/us/products/1596770

Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 0.08 mm^2 ... 0.22 mm^2, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1240882

RC-12P2000 - Crimp contact

1597862

https://www.phoenixcontact.com/us/products/1597862

Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 0.14 mm^2 ... 0.56 mm^2, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1240882

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1628498

https://www.phoenixcontact.com/us/products/1628498

RC-1KP2000 - Crimp contact

1602996

https://www.phoenixcontact.com/us/products/1602996

Crimp contact, Pin, turned, Single contact, contact diameter: 1 mm, crimp range: 0.5 mm^2 ... 1 mm^2, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1241571

RC-22P2000 - Crimp contact

1603321

https://www.phoenixcontact.com/us/products/1603321

Crimp contact, Pin, rolled, Single contact, contact diameter: 1 mm, crimp range: 0.22 mm^2 ... 0.56 mm^2, Single contact, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

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RC-22P2300 - Crimp contact

1603324

https://www.phoenixcontact.com/us/products/1603324

Crimp contact, Pin, rolled, Taped articles, number of pieces per reel: 500, contact diameter: 1 mm, crimp range: 0.22 mm^2 ... 0.56 mm^2, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

RC-22P2400 - Crimp contact

1603325

https://www.phoenixcontact.com/us/products/1603325

Crimp contact, Pin, rolled, Taped articles, number of pieces per reel: 10000, contact diameter: 1 mm, crimp range: 0.22 mm^2 ... 0.56 mm^2, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

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1628498

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RC-21P2000 - Crimp contact

1603310

https://www.phoenixcontact.com/us/products/1603310

Crimp contact, Pin, rolled, Single contact, contact diameter: 1 mm, crimp range: 0.08 mm^2 ... 0.22 mm^2, Single contact

RC-21P2300 - Crimp contact

1603313

https://www.phoenixcontact.com/us/products/1603313

Crimp contact, Pin, rolled, Taped articles, number of pieces per reel: 500, contact diameter: 1 mm, crimp range: 0.08 mm^2 ... 0.22 mm^2

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1628498

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RC-21P2400 - Crimp contact

1611637

https://www.phoenixcontact.com/us/products/1611637

Crimp contact, Pin, rolled, Taped articles, number of pieces per reel: 10000, contact diameter: 1 mm, crimp range: 0.08 mm^2 ... 0.22 mm^2

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

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1628498

https://www.phoenixcontact.com/us/products/1628498

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-OR - Sealing ring

1521137

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

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

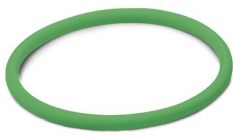# M23-12P1N8AA500S - Device connector front mounting
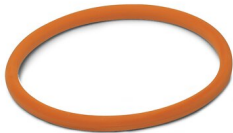
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https://www.phoenixcontact.com/us/products/1628498

M23PRO-VIB-ORING-GN - Sealing ring

1521138

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

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