M23-12P1N8A80DU - Cable connector

1629208

https://www.phoenixcontact.com/us/products/1629208

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M23, Cable connector, series: M23 PRO, straight, shielded: yes, Screw locking mechanism, No. of pos.: 12, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, cable diameter range: 3 mm ... 15 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
- 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	1629208
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB30
Product key	ABRABA
Catalog page	Page 76 (C-2-2019)
GTIN	4055626618418
Weight per piece (including packing)	117.9 g
Weight per piece (excluding packing)	97.76 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Order information:	Order 12 x 1 mm crimp contacts separately

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 connector (cable-side)

Data management status

Article revision	06

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
Type of locking	Screw locking mechanism
Pg screw connection	none
Degree of protection (plugged in)	IP66 / IP68 (2m / 24h) / IP69K
Thread type	M23

Seal

External cable diameter	3 mm ... 15 mm (Universal gasket)
Seal material	FKM

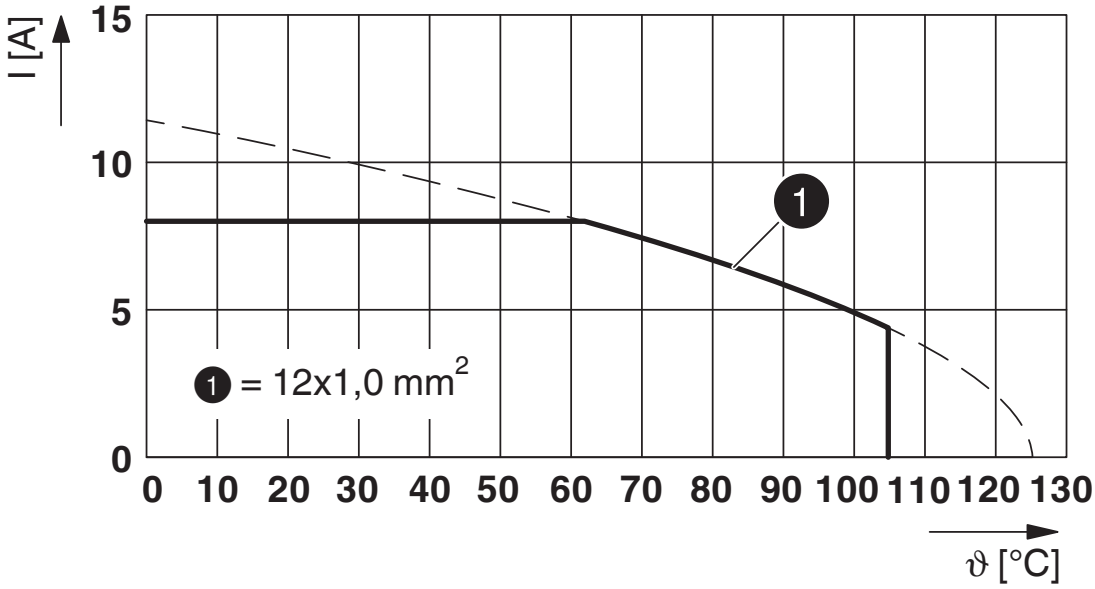
Environmental and real-life conditions

Ambient conditions

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

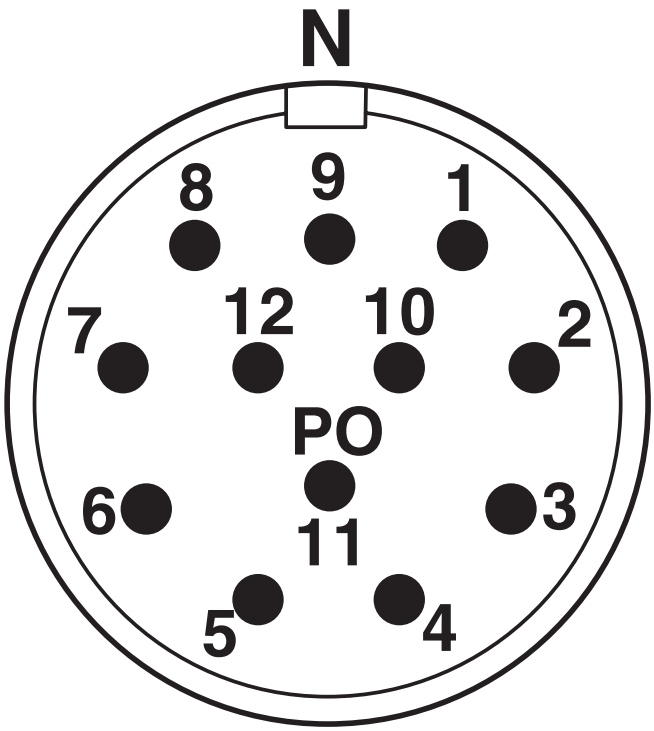
Drawings

Diagram



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

Schematic diagram



Connector pin assignment

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1629208

cUL Recognized
Approval ID: E335019-20141210

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cULus Recognized

Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

ETIM 9.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

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%

Accessories

SF-Z0028 - Torque screwdriver

1607456

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



Torque screwdriver, series: RC, UC, SH, SF

SF-Z0027 - Hook wrench

1607455

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



Hook wrench, series: RC, UC, RF, SF

RF-Z0007 - Special wrench

1614347

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

Special wrench, series: RF



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, Contact release tool not necessary for the 12- and 17-pos. crimp versions of the M23-PRO series, 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, Contact release tool not necessary for the 12- and 17-pos. crimp versions of the M23-PRO series, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1240882

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, Contact release tool not necessary for the 12- and 17-pos. crimp versions of the M23-PRO series, 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 %)

RC-22P2300 - Crimp contact

1603324

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



Crimp contact, Pin, rolled, Taped product, 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 product, 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 %)

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 product, number of pieces per reel: 500, contact diameter: 1 mm, crimp range: 0.08 mm^2 ... 0.22 mm^2

RC-21P2400 - Crimp contact

1611637

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



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

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

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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