1627077

https://www.phoenixcontact.com/us/products/1627077

PHŒNIX CONTACT

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M23, Cable connector, series: SH, straight long, shielded: yes, SPEEDCON, No. of pos.: 4+4+PE / 3+N+PE, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, cable diameter range: 7.5 mm ... 18 mm, coding: N, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245430

Your advantages

- Reduced connection time with optional SPEEDCON fast locking system
- · Safe use in the field, thanks to high degree of protection
- · Consistent EMC protection for reliable connection solutions in the industrial environment

Commercial data

Item number	1627077
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB35
Product key	ABRCDB
GTIN	4055626310671
Weight per piece (including packing)	142.3 g
Weight per piece (excluding packing)	126.8 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper u 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 operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basi electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indica that only personnel familiar with electrical engineering are allowed to install and operate the product.
	 The products are suitable for applications in plant, controlle and electrical device engineering.
	 When operating the connectors in outdoor applications, the must be separately protected against environmental influence
	 Assembled products may not be manipulated or improperly opened.
	 Only use mating connectors that are specified in the technidata of the standards listed (e.g. the ones listed in the produces 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 are applicable when combining several circuits in a cable and 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 o ambient conditions, the surface of the connector can continu warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

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Product properties

Product properties	
Product type	Circular connector (cable-side)
Connector	
Insulating body	
Note	Order information: Crimp contacts, 4 x Ø1 mm, 5 x Ø2 mm, order separately
Coding	Ν
Insertion/withdrawal cycles	100
Connection method	Crimp connection
Contact switching type	Pin
Application	Hybrid
Number of positions	9
Direction of rotation	Standard
Connection profile	4+4+PE / 3+N+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 AC
Rated surge voltage	6 kV
Overvoltage category	111
Degree of pollution	3
Rated voltage (II/3) power contact	850 V DC
Rated voltage (III/3) power contact	630 V AC
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	8 A
Note	for max. connection cross section
Rated voltage Signal contact	50 V
Rated surge voltage	1.5 kV
Overvoltage category	III
Degree of pollution	3
Rated voltage (III/3) signal contact	50 V
Installation height	2000 m

Housing

Notes on operation

The suitability for assembly must be checked when fully assigned with maximum wire cross sections.



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Housing material	Metal	
Type of locking	SPEEDCON	
Pg screw connection	none	
Degree of protection (plugged in)	IP67	
	IP68	
	IP69K	
Thread type	M23	
al		
External cable diameter	7.5 mm 18 mm	
ironmental and real-life conditions		

Ambient conditions

Ambient temperature (operation)

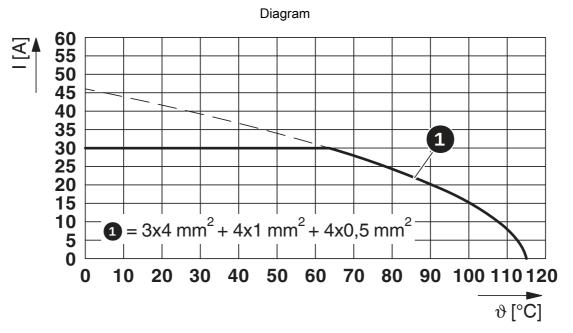
-40 °C ... 115 °C (see derating curve)



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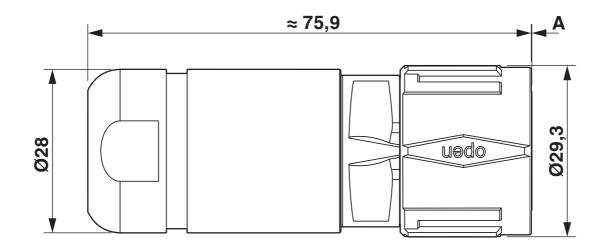
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Drawings



I = current strength, ϑ = ambient temperature, power contacts A-C: 3 x up to 30 A, signal contacts: 4 x 2 A constant, data contacts: 4 x 1 A constant

Dimensional drawing



Pin version: dimension A = 0.2 mm, socket version: dimension A = 0 mm



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Classifications

ECLASS

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

ETIM

	ETIM 8.0	EC002635
UNSPSC		
	UNSPSC 21.0	39121400



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Environmental product compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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Accessories

SF-Z0028 - Torque screwdriver

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

Torque screwdriver, series: RC



SF-Z0068 - Square mounting flange

1620927

https://www.phoenixcontact.com/us/products/1620927



Square mounting flange, 4xM3, flange dimensions: 38 mm x 38 mm, series: SF, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244326

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KC-88014311/1,00 - Hybrid cable

1623127

https://www.phoenixcontact.com/us/products/1623127



Hybrid cable, series: KSH, M23-Socket, angled, rotatable, -120° left/120° right, number of positions: 4+4+4+PE, Type of locking: SPEEDCON, cable length: 1 m, shielded: yes, color of outer sheath: orange RAL 2003

KC-88014311/100,00 - Hybrid cable

1623039 https://www.phoenixcontact.com/us/products/1623039



Hybrid cable, series: KSH, M23-Socket, angled, rotatable, -120° left/120° right, number of positions: 4+4+4+PE, Type of locking: SPEEDCON, cable length: 100 m, shielded: yes, color of outer sheath: orange RAL 2003

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KC-88014311/20,00 - Hybrid cable

1622080

https://www.phoenixcontact.com/us/products/1622080



Hybrid cable, series: KSH, M23-Socket, straight, number of positions: 4+4+4+PE, Type of locking: SPEEDCON, cable length: 20 m, shielded: yes, color of outer sheath: orange RAL 2003

M23 HYBRID_CONTACT-SAMPLE-SET - Sample set

1623252 https://www.phoenixcontact.com/us/products/1623252



Sample set consisting of 4x Ø 1.0 mm, 4x Ø 0.8 mm, 5x Ø 2.0 mm socket and pin contacts for M23 hybrid connectors. Contacts included: 1621573, 1618464, 1621577, 1621575, 1618458, 1621580

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SH-Z0077 - Metal protective cap

1627226

https://www.phoenixcontact.com/us/products/1627226



Metal protective cap, degree of protection: IP67, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245449

SH-Z2300 - Metal protective cap

1622141 https://www.phoenixcontact.com/us/products/1622141



Metal protective cap, degree of protection: IP67, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244542

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ST-10KP010 - Crimp contact

1618255

https://www.phoenixcontact.com/us/products/1618255



Crimp contact, Pin, 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.: 1243215

ST-10KP035 - Crimp contact

1618458 https://www.phoenixcontact.com/us/products/1618458



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: $0.25 \text{ mm}^2 \dots 1 \text{ mm}^2$, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1243215

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SF-20KP021 - Crimp contact

1621579

https://www.phoenixcontact.com/us/products/1621579



Crimp contact, Pin, 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.: 1244464

SF-20KP022 - Crimp contact

1621580 https://www.phoenixcontact.com/us/products/1621580



Crimp contact, Pin, turned, contact diameter: 2 mm, crimp range: $1.5 \text{ mm}^2 \dots 2.5 \text{ mm}^2$, Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244464

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SF-20KP023 - Crimp contact

1621581

https://www.phoenixcontact.com/us/products/1621581



Crimp contact, Pin, 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.: 1244465

SF-08KP010 - Crimp contact

1621574 https://www.phoenixcontact.com/us/products/1621574



Crimp contact, Pin, turned, contact diameter: 0.8 mm, crimp range: 0.08 mm² ... 0.25 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244458

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SF-08KP020 - Crimp contact

1621575

https://www.phoenixcontact.com/us/products/1621575



Crimp contact, Pin, turned, contact diameter: 0.8 mm, crimp range: 0.34 mm² ... 0.5 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244459

SF-Z0064 - Color-coding

1620585 https://www.phoenixcontact.com/us/products/1620585

Color-coding, color: green



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SF-Z0065 - Color-coding

1620586 https://www.phoenixcontact.com/us/products/1620586

Color-coding, color: orange



SF-Z0066 - Color-coding

1620587 https://www.phoenixcontact.com/us/products/1620587

Color-coding, color: black



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