SB-8EPCD8AWT00S - Device connector front mounting

1623728

https://www.phoenixcontact.com/us/products/1623728

PHŒNIX CONTACT

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M40, Device connector front mounting, series: SB, straight, shielded: yes, for standard and SPEEDCON interlock, No. of pos.: 4+4+4+PE / 3+N+PE, contact connection type: Pin, Crimp connection, Axial O-ring, flange dimensions: 40 mm x 40 mm, coding: CAT5, coding 2, this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

Your advantages

- Transmission of signals, data, and power in just a single connector
- CAT5 data interface for up to 100 Mbps
- Reduced connection time with SPEEDCON fast locking system
- Mechanical coding reliably prevents incorrect connections
- 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	1623728
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	AB33
Product key	ABRCEL
GTIN	4055626195315
Weight per piece (including packing)	212.6 g
Weight per piece (excluding packing)	136.92 g
Customs tariff number	85366990
Country of origin	DE

Technical data

Notes

Order information:	Crimp contacts, 4 x Ø 0.8 mm, 4 x Ø 1 mm, 5 x Ø 3.6 mm, order 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
	• 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
	• Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the 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.
	• Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	• 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)

Connector

Insulating body

Data rate	100 Mbps
Coding	CAT5, coding 2
Connection method	Crimp connection
Contact switching type	Pin
Application	Hybrid
Number of positions	13
Connection profile	4+4+4+PE / 3+N+PE
Installation height	2000 m (4000 m at 300 V system voltage in accordance with DIN EN 606664-1)
Number Contact (Power contacts)	5
Diameter Contact (Power contacts)	3.6 mm
Litz wire cross-section min. Contact (Power contacts)	2.5 mm²
Litz wire cross-section max. Contact (Power contacts)	16 mm²
Rated current Contact (Power contacts)	70 A (for max. connection cross section)
Rated voltage Contact (Power contacts)	630 V AC (Overvoltage category III/3)
	850 V DC (Overvoltage category II/3)
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3
Number Contact (Data contacts)	4
Diameter Contact (Data contacts)	0.8 mm
Litz wire cross-section min. Contact (Data contacts)	0.08 mm²
Litz wire cross-section max. Contact (Data contacts)	0.5 mm²
Rated current Contact (Data contacts)	3.6 A (for max. connection cross section)
Rated voltage Contact (Data contacts)	50 V AC/DC (Contact 5 ... 8)
Rated surge voltage	1.5 kV
Overvoltage category	II, III
Degree of pollution	3
Number Contact (Signal contacts)	4
Diameter Contact (Signal contacts)	1 mm
Litz wire cross-section min. Contact (Signal contacts)	0.06 mm²

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Litz wire cross-section max. Contact (Signal contacts)	1.5 mm²
Rated current Contact (Signal contacts)	8 A (for max. connection cross section)
Rated voltage Contact (Signal contacts)	500 V AC/DC (Contact 1 ... 4)
Rated surge voltage	6 kV
Overvoltage category	III
Degree of pollution	3

Housing

Type	Flange housing
Thread type	M40
Design	straight
Type of locking	for standard and SPEEDCON interlock
Pg screw connection	none
Mounting type	Front mounting/square flange (4x Ø 4,2 mm)
Flange dimensions	40 mm x 40 mm
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn)
Material for screw connection	CuZn
Degree of protection (plugged in)	IP68/IP69K
Seal for the device	Axial O-ring

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-40 °C ... 115 °C (see derating curve)

Drawings

Dimensional drawing

Installation dimensions

Dimensional drawing

A-A

-0,3

Rz16

Ø32$^{\pm 0,1}$

A

4xM4

⊕ Ø 0,1 A

□40$^{\pm 0,5}$

area for Rz16

A

A

□ 30
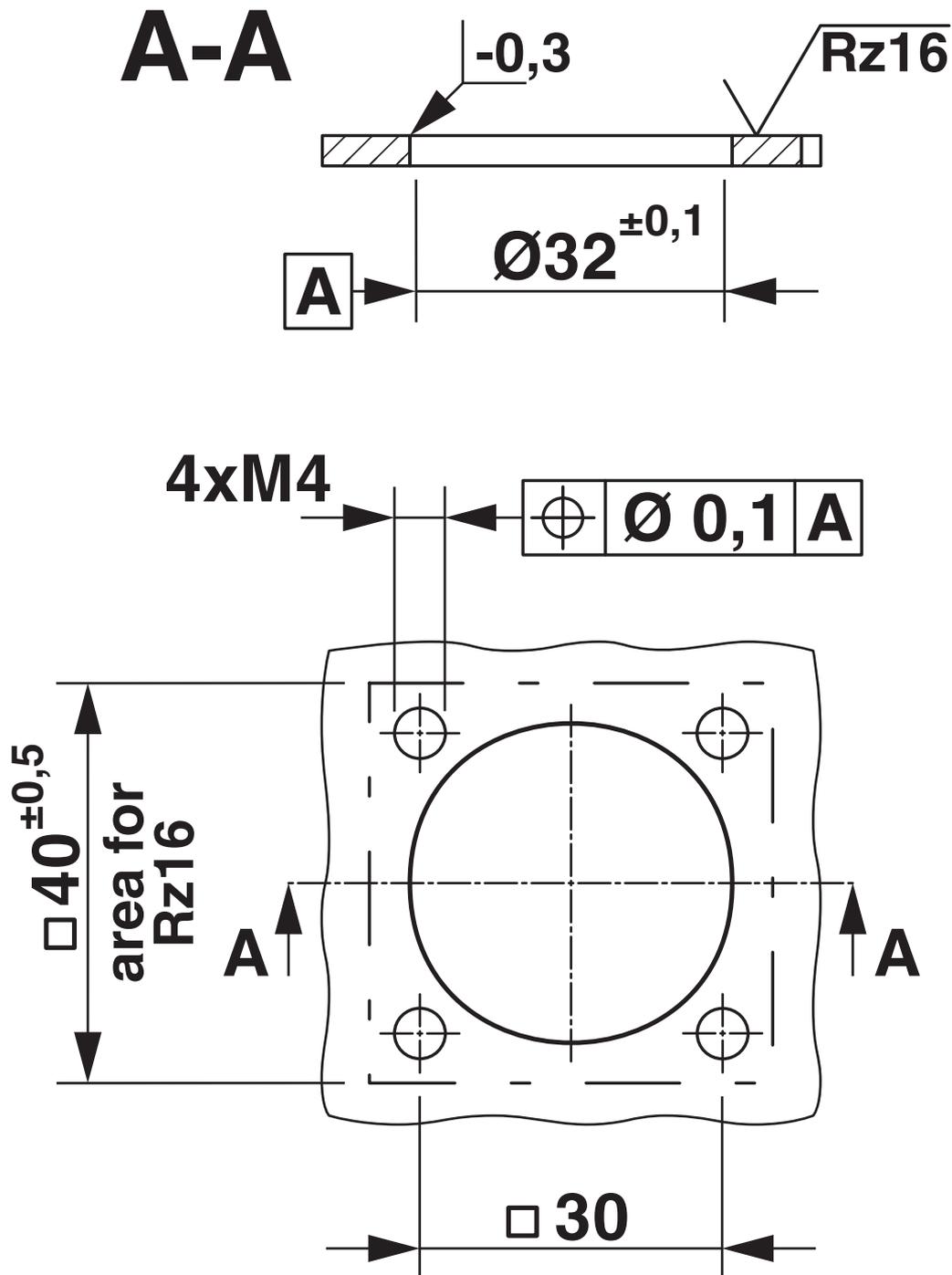
Installation dimensions

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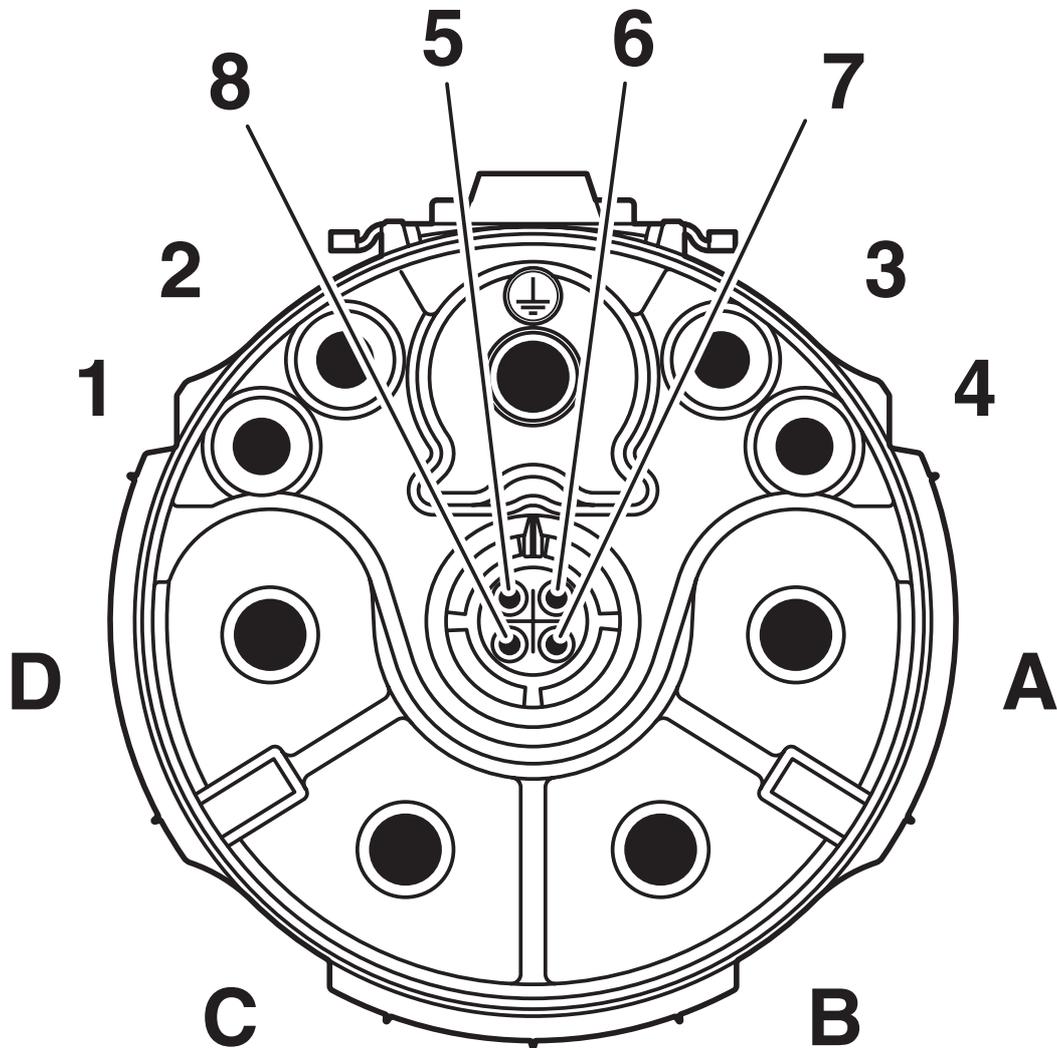
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Schematic diagram

Pin assignment of pin CAT5, coding 2

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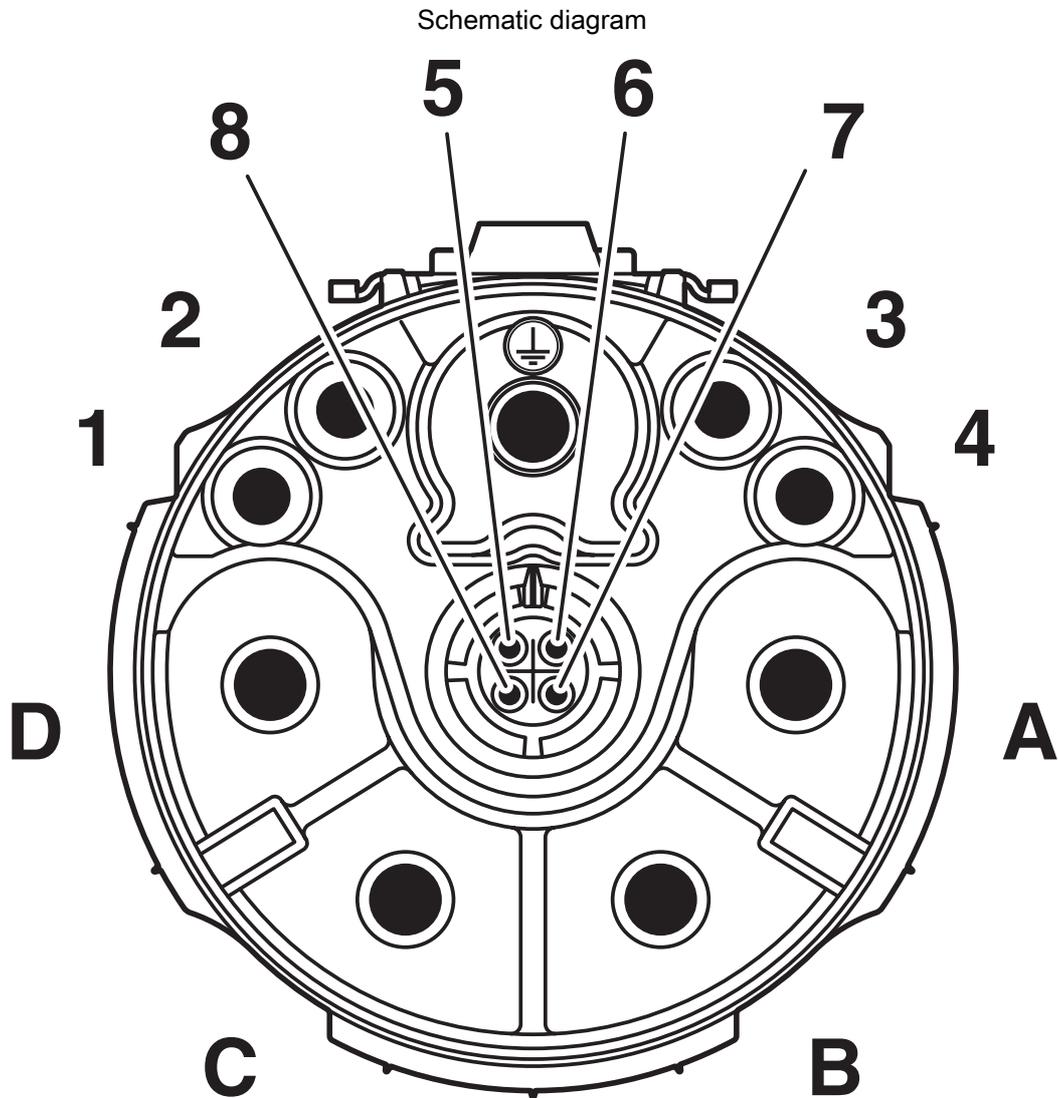
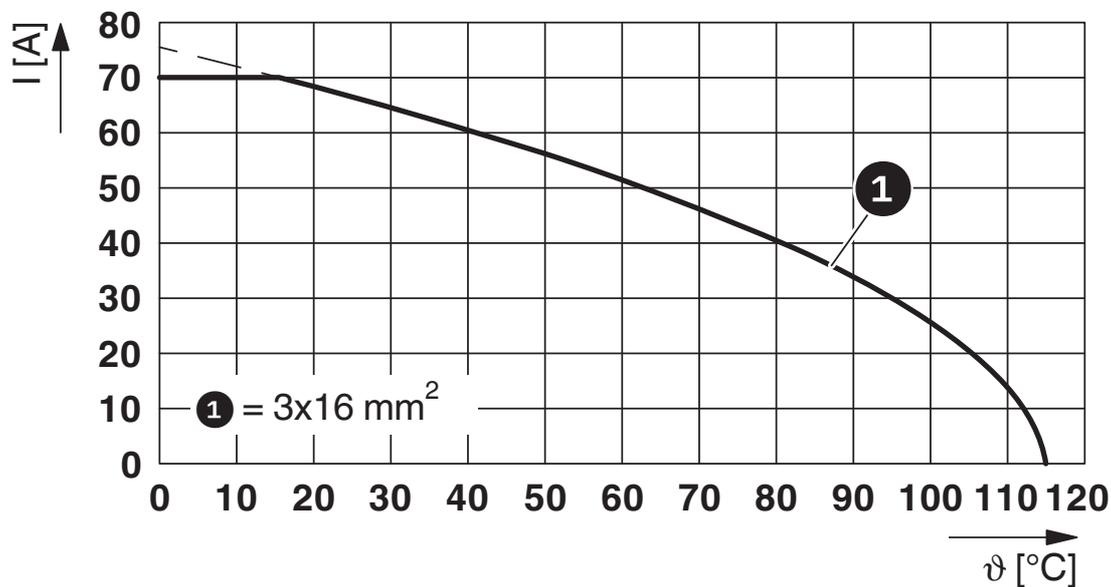
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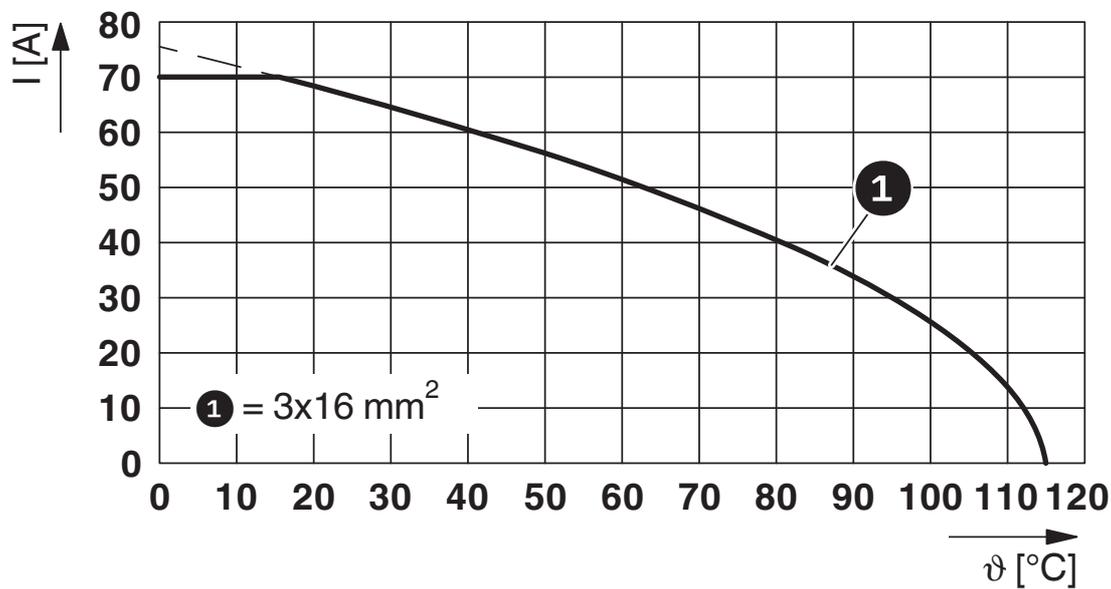
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Diagram

I = current strength, ϑ = ambient temperature, power contacts A–C: 3x up to 70 A, signal contacts: 4x 2 A constant, data contacts: no load

Diagram

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1623728

cUL Recognized
Approval ID: E468743-20170914

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	42 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized
Approval ID: E468743-20170914

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	50 A	- 6	-
Signal	500 V	4 A	- 16	-
Data	30 V	1 A	- 22	-

UL Recognized
Approval ID: E153698-20190718

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	70 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-

cUL Recognized
Approval ID: E153698-20190718

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
Power	600 V	28 A	-	-
Signal	500 V	4 A	-	-
Data	50 V	1 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27440109
ECLASS-15.0	27440109

ETIM

ETIM 9.0	EC003569

UNSPSC

UNSPSC 21.0	39121400

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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	f48eb6f2-609d-4736-93a2-01b4a82d4866