

# SH-8EPS48A8LB2S - Cable connector



1621537  
<https://www.phoenixcontact.com/us/products/1621537>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



M23, Cable connector, series: SH, straight long, shielded: yes, SPEEDCON, No. of pos.: 8+4+PE, contact connection type: Pin, Crimp connection, cable diameter range: 12 mm ... 15 mm, coding: N, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1244433

## Your advantages

- All housing can be fitted with pin or socket contacts
- A total of eight contacts are available for signal transmission
- 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                          | 1621537             |
| Packing unit                         | 1 pc                |
| Minimum order quantity               | 1 pc                |
| Sales key                            | AB33                |
| Product key                          | ABRCDB              |
| Catalog page                         | Page 118 (C-2-2019) |
| GTIN                                 | 4046356936606       |
| Weight per piece (including packing) | 136.5 g             |
| Weight per piece (excluding packing) | 111.11 g            |
| Customs tariff number                | 85366990            |
| Country of origin                    | DE                  |

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

## Technical data

### Notes

#### 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](https://www.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](https://www.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).

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

## Product properties

|              |                                 |
|--------------|---------------------------------|
| Product type | Circular connector (cable-side) |
|--------------|---------------------------------|

## Connector

### Insulating body

|                                                     |                                                                             |
|-----------------------------------------------------|-----------------------------------------------------------------------------|
| Note                                                | Order information: Crimp contacts, 8 x Ø 1 mm, 5 x Ø 2 mm, order separately |
| Protection against electric shock                   | IEC 61984 and VDE 0623                                                      |
| Coding                                              | N                                                                           |
| Insulation body material                            | PA 6.6                                                                      |
| Insertion/withdrawal cycles                         | 100                                                                         |
| Connection method                                   | Crimp connection                                                            |
| Contact switching type                              | Pin                                                                         |
| Application                                         | Hybrid                                                                      |
| Number of positions                                 | 13                                                                          |
| Connection profile                                  | 8+4+PE                                                                      |
| Contact diameter <b>Power contacts</b>              | 2 mm                                                                        |
| Litz wire cross-section <b>Power contacts</b> min.  | 0.25 mm <sup>2</sup>                                                        |
| Litz wire cross-section <b>Power contacts</b> max.  | 4 mm <sup>2</sup>                                                           |
| Rated current <b>Power contacts</b>                 | 30 A                                                                        |
| Rated surge voltage                                 | 6 kV                                                                        |
| Rated voltage (II/3) power contact                  | 850 V DC                                                                    |
| Rated voltage (III/3) power contact                 | 630 V AC                                                                    |
| Contact diameter <b>Signal contacts</b>             | 1 mm                                                                        |
| Litz wire cross-section <b>Signal contacts</b> min. | 0.06 mm <sup>2</sup>                                                        |
| Litz wire cross-section <b>Signal contacts</b> max. | 1 mm <sup>2</sup>                                                           |
| Nominal current per signal contact                  | 8 A                                                                         |
| Note                                                | for max. connection cross section                                           |
| Rated surge voltage                                 | 1.5 kV                                                                      |
| 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. |
| Housing material                  | Metal                                                                                              |
| Type of locking                   | SPEEDCON                                                                                           |
| Pg screw connection               | none                                                                                               |
| Degree of protection (plugged in) | IP67                                                                                               |
|                                   | IP68                                                                                               |
|                                   | IP69K                                                                                              |

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

|             |     |
|-------------|-----|
| Thread type | M23 |
|-------------|-----|

## Seal

|                         |                 |
|-------------------------|-----------------|
| External cable diameter | 12 mm ... 15 mm |
|-------------------------|-----------------|

## Environmental and real-life conditions

### Ambient conditions

|                                          |                                        |
|------------------------------------------|----------------------------------------|
| Ambient temperature (operation)          | -40 °C ... 115 °C (see derating curve) |
| Ambient temperature (storage/transport)  | 15 °C ... 25 °C                        |
| Permissible humidity (storage/transport) | 50 % ... 65 %                          |

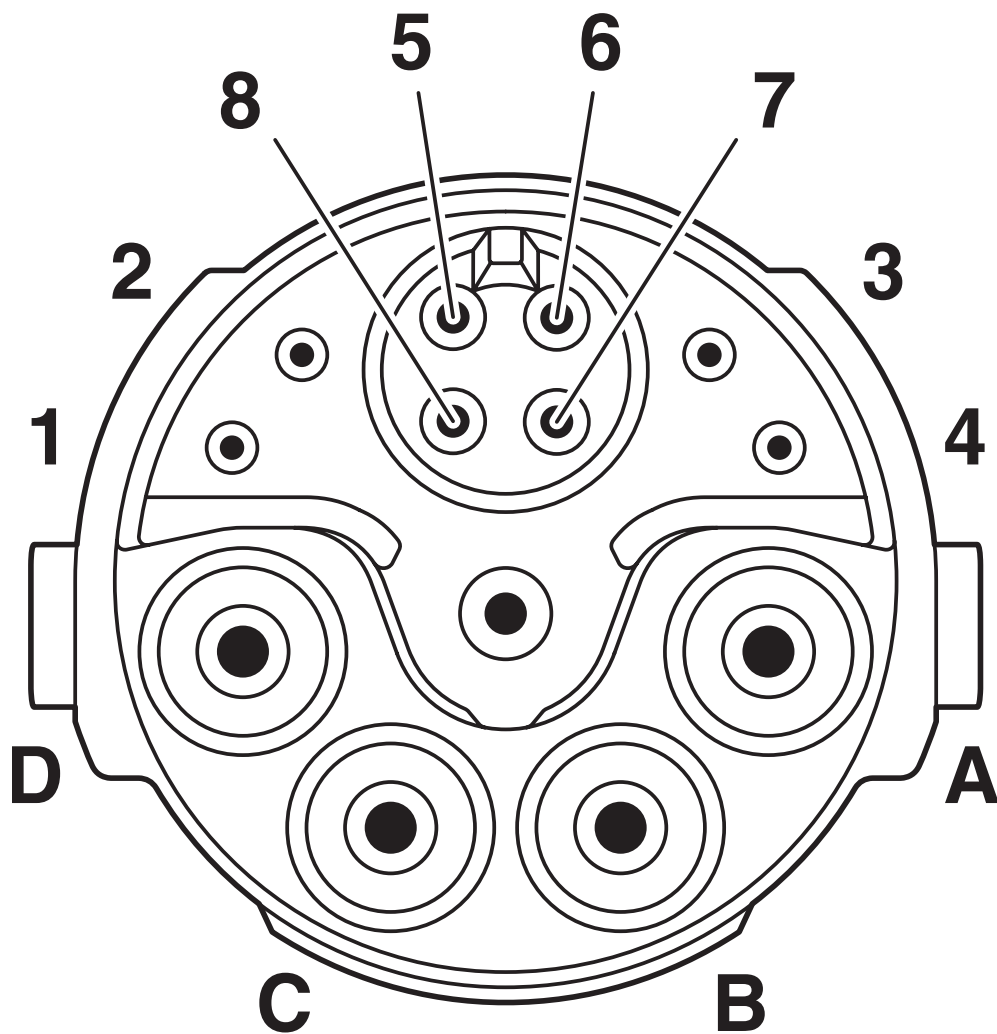
# SH-8EPS48A8LB2S - Cable connector

1621537

<https://www.phoenixcontact.com/us/products/1621537>

## Drawings

Schematic diagram



Pin assignment of pin, signal

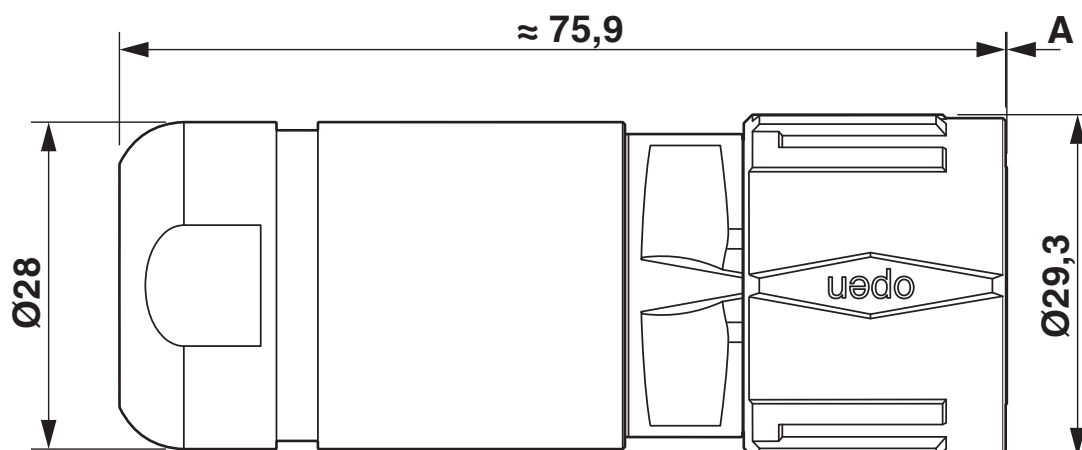
# SH-8EPS48A8LB2S - Cable connector



1621537

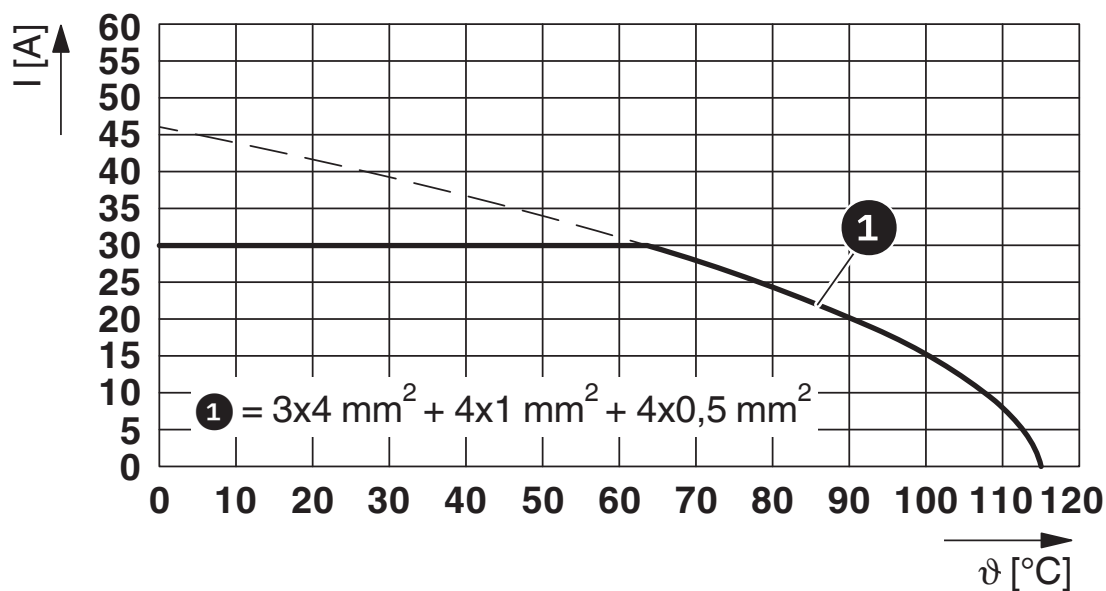
<https://www.phoenixcontact.com/us/products/1621537>

Dimensional drawing



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

Diagram



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

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

## Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1621537>



**cUL Recognized**

Approval ID: E153698-20181206



**UL Recognized**

Approval ID: E153698-20181206

**cULus Recognized**

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

## Classifications

### ECLASS

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

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC002635 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121400 |
|-------------|----------|

# SH-8EPS48A8LB2S - Cable connector



1621537

<https://www.phoenixcontact.com/us/products/1621537>

## 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" |

Phoenix Contact 2024 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)