

# SAC-3P-MR/A-1L-Z SCO - Valve connector



1458538

<https://www.phoenixcontact.com/us/products/1458538>

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Valve connector, 3-position, Plug angled M12 SPEEDCON, coding: A, on Valve connector A, with 1 LED, Wiring: Z diode

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 1458538       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | BF10          |
| Product key                          | AF1GDA        |
| GTIN                                 | 4046356638982 |
| Weight per piece (including packing) | 30.7 g        |
| Weight per piece (excluding packing) | 30.7 g        |
| Customs tariff number                | 85366990      |
| Country of origin                    | PL            |

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## Technical data

### Product properties

|                      |                         |
|----------------------|-------------------------|
| Product type         | Valve connector adapter |
| Number of positions  | 3                       |
| No. of cable outlets | 1                       |
| Coding               | A                       |

### Insulation characteristics

|                      |    |
|----------------------|----|
| Overtoltage category | II |
| Degree of pollution  | 3  |

### Dimensions

|                     |         |
|---------------------|---------|
| Dimensional drawing |         |
| Width               | 28 mm   |
| Height              | 28.2 mm |
| Length              | 54 mm   |

### Connection data

|                   |                          |
|-------------------|--------------------------|
| Connection method | M12 connector            |
| Tightening torque | 0.6 Nm (Valve connector) |

### Electrical properties

|                       |                            |
|-----------------------|----------------------------|
| Insulation resistance | $\geq 100 \text{ M}\Omega$ |
| Nominal voltage $U_N$ | 24 V AC                    |
| Nominal current $I_N$ | 4 A                        |

### Valve connector characteristics

|                  |   |
|------------------|---|
| Fixing screws    | M3 x 29                                       |
| Pulse power      | 40 W (at 100 $\mu\text{s}$ square-wave pulse) |
| Terminal voltage | 70 V (at 2 mA constant current)               |
| Reverse voltage  | 50 V  |

### Mechanical properties

|                             |                      |
|-----------------------------|----------------------|
| Mechanical data             |                      |
| Insertion/withdrawal cycles | 50 (Valve connector) |

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≥ 100 (M12 connector)

## Material specifications

|  |                              |
|--|------------------------------|
| Flammability rating according to UL 94 | HB                           |
| Seal material                          | TPU                          |
| Material housing valve plug            | TPU                          |
| Contact material                       | CuSn                         |
| Contact surface material               | Ni/Au                        |
| Contact carrier material               | PA 66                        |
| Contact material                       | CuSn                         |
| Valve plug contact insert material     | PA 6.6                       |
| Contact surface material               | Sn                           |
| Material for screw connection          | Zinc die-cast, nickel-plated |

## Signaling

|                        |              |
|------------------------|--------------|
| Status display         | LED (yellow) |
| Status display present | yes          |

## Connector

### Connection 1

|                     |                          |
|---------------------|--------------------------|
| Type                | Plug angled M12 SPEEDCON |
| Number of positions | 3                        |
| Locking type        | SPEEDCON                 |
| Coding type         | A                        |

### Connection 2

|                    |                          |
|--------------------|--------------------------|
| Type               | Valve connector A        |
| Material           | CuSn (Contact)           |
|                    | Sn (Contact surface)     |
|                    | PA 6.6 (Contact carrier) |
|                    | TPU (Housing)            |
| Protective circuit | Z diode                  |

## Environmental and real-life conditions

### Ambient conditions

|   |                                    |
|---|------------------------------------|
| Degree of protection                              | IP65                               |
|   | IP67                               |
| Ambient temperature (operation) (Valve connector) | -25 °C ... 85 °C (Valve connector) |

## Standards and regulations

|                          |                 |
|--------------------------|-----------------|
| M12                      |                 |
| Standard designation     | M12 connector   |
| Standards/specifications | IEC 61076-2-101 |

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## Valve connector

|                          |                 |
|--------------------------|-----------------|
| Standard designation     | Valve connector |
| Standards/specifications | EN 175301-803   |

# SAC-3P-MR/A-1L-Z SCO - Valve connector

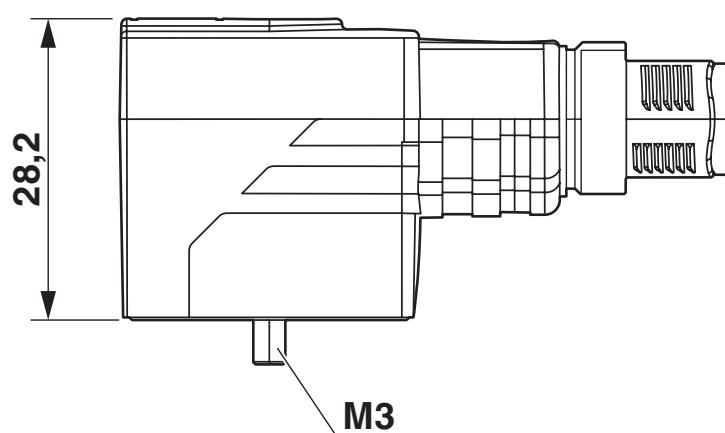
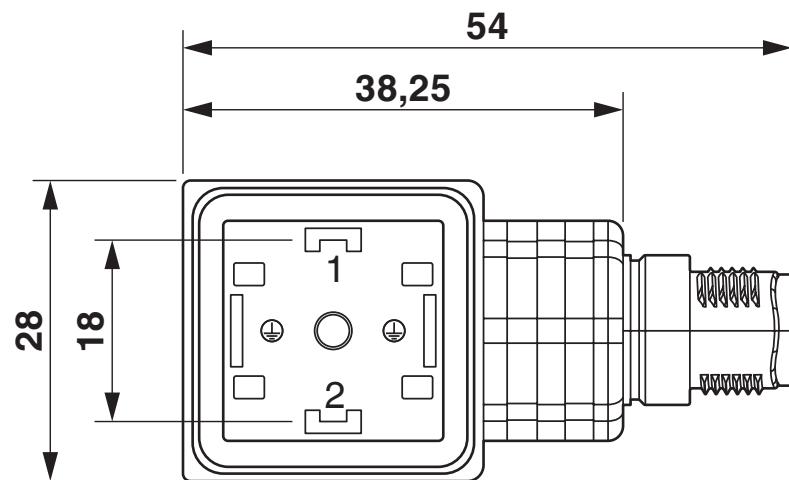
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## Drawings

Dimensional drawing



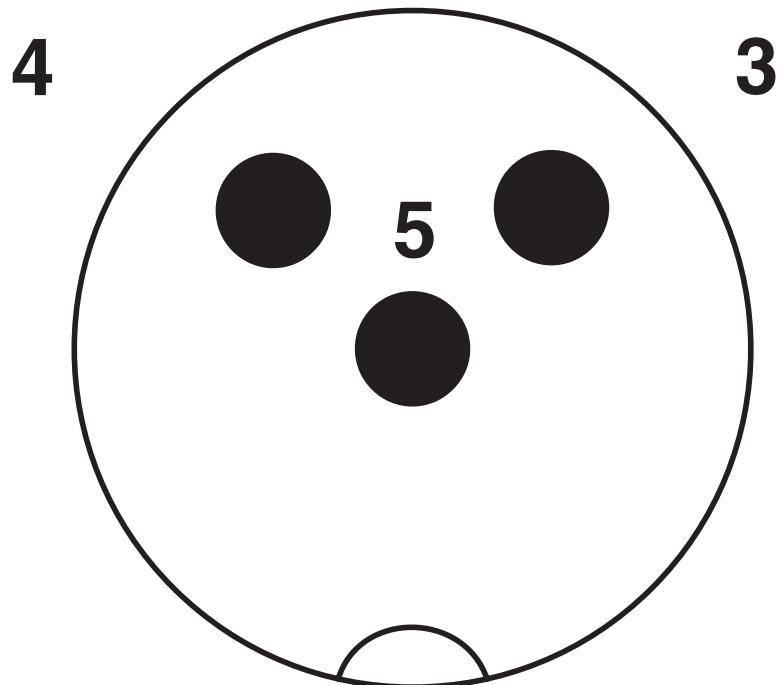
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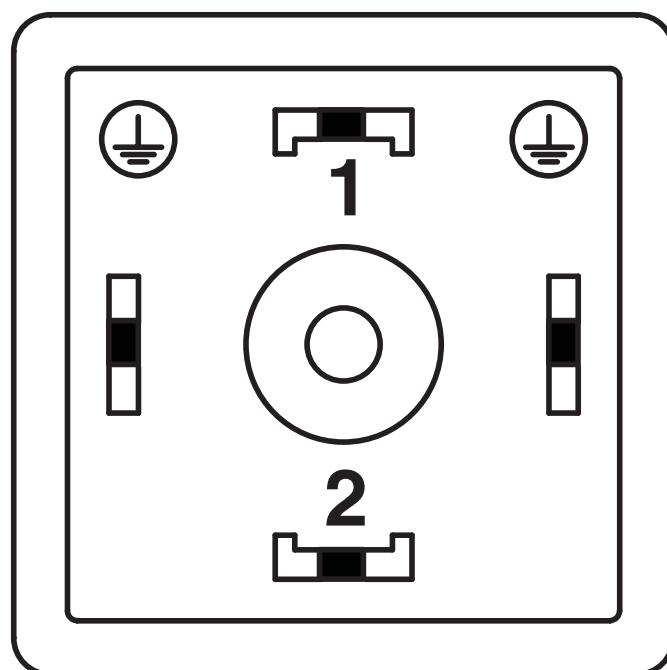


Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



Valve connector pin assignment, type A

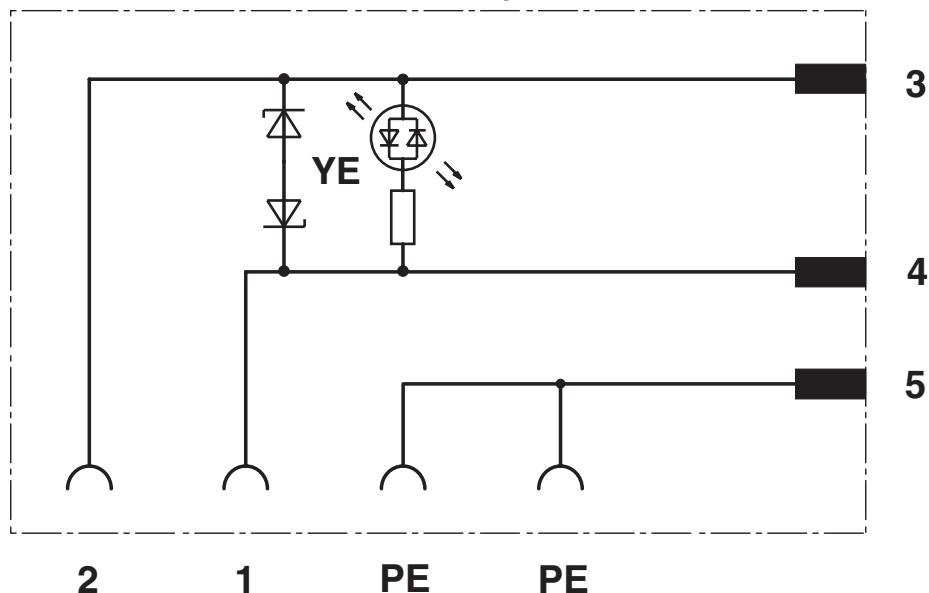
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## Circuit diagram



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## Approvals

ⓘ To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1458538>

**DNV**

Approval ID: TAE00002K4



**EAC**

Approval ID: RU C-DE.AI30.B.01102

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## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27440105 |
| ECLASS-15.0 | 27440105 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC003623 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 31251500 |
|-------------|----------|

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## Environmental product compliance

### EU RoHS

|   |        |
|---|--------|
| Fulfills EU RoHS substance requirements | Yes    |
| Exemption                               | 7(c)-I |

### 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.) | Diboron trioxide(CAS: 1303-86-2)           |
|                                     | Lead monoxide (lead oxide)(CAS: 1317-36-8) |
| SCIP                                | f94a1fbb-1d79-4aec-bedb-3dba08da1bca       |

### EF3.0 Climate Change

|         |               |
|---------|---------------|
| CO2e kg | 0.798 kg CO2e |
|---------|---------------|

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