

**MSUD valve plug BI-11mm 180° with cable**

PVC 3x0.75 gy 10m

Art.No.: 7000-11081-2161000

Weight: 0.59

Country of origin: CZ

Model designation: MSUDK-KB1Z-216\_10.0

MSUD

Form BI (11 mm)

24 V AC ±20% / DC ±25%

LED and suppression

PE opposite cable entry (180°)

Attention: Contact carrier turned to 180°!

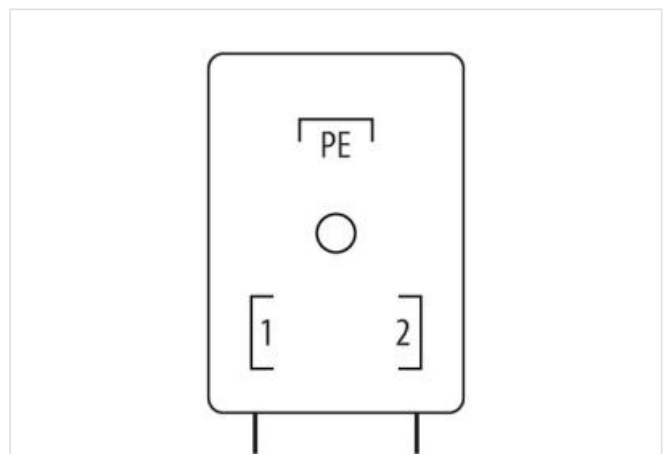
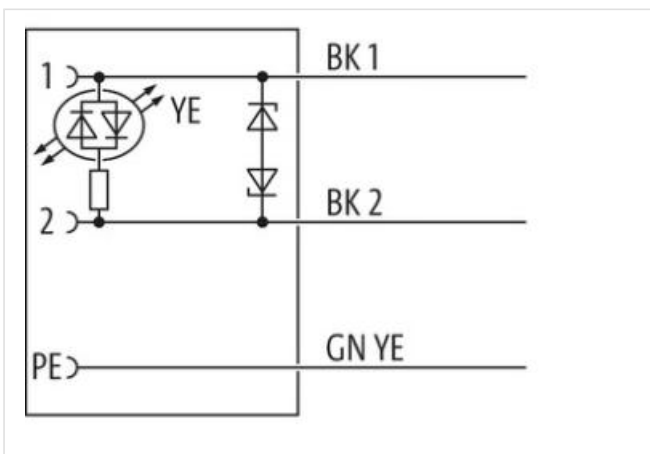
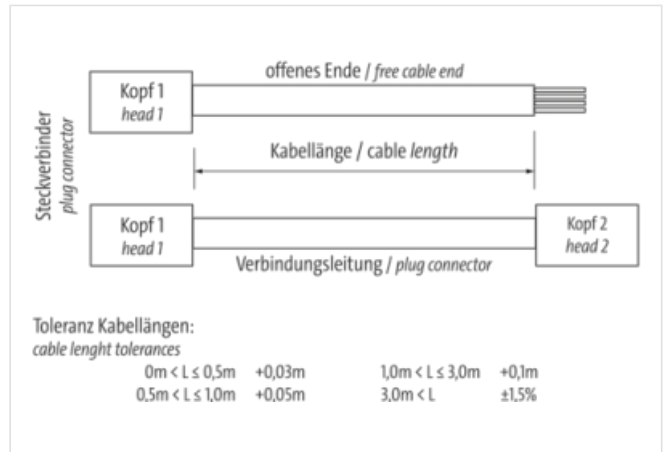
Further cable lengths on request.

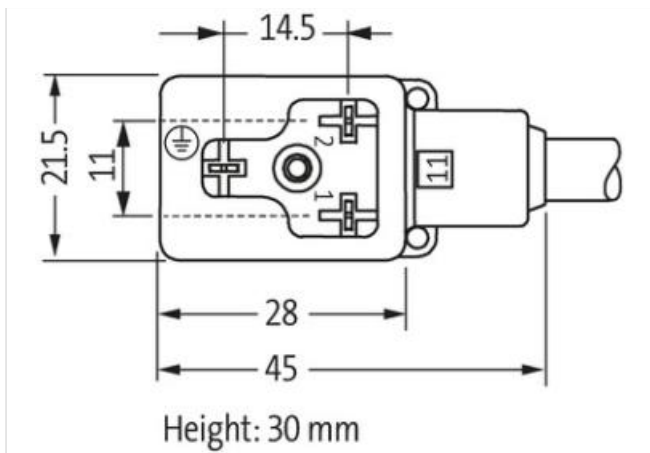
Plastic housings with good resistance against chemicals and oils.

The resistance to aggressive media should be individually tested for your application. Further details on request.

[Link to Product](#)

**Illustration**





Product may differ from Image



Cable length 10 m

**Side 1**

|                                     |                   |
|-------------------------------------|-------------------|
| Tightening torque                   | 0,4 Nm            |
| Mounting method                     | inserted, screwed |
| Family construction form            | MSUD BI           |
| Thread                              | M3                |
| Material                            | PBT               |
| Degree of protection (EN IEC 60529) | IP67              |

**Commercial data**

|                       |               |
|-----------------------|---------------|
| ECLASS-6.0            | 27279218      |
| ECLASS-6.1            | 27279218      |
| ECLASS-7.0            | 27279218      |
| ECLASS-8.0            | 27279218      |
| ECLASS-9.0            | 27060312      |
| ECLASS-10.1           | 27060312      |
| ECLASS-11.1           | 27060312      |
| ECLASS-12.0           | 27060312      |
| ETIM-5.0              | EC001855      |
| customs tariff number | 85444290      |
| customs tariff number | 85444290      |
| EAN                   | 4048879220323 |
| EAN                   | 4048879220323 |
| Packaging unit        | 1             |
| Packaging unit        | 1             |

**Electrical data**

Drop-out delay time max. 20 ms

**Electrical data | Supply**

|                           |        |
|---------------------------|--------|
| Operating voltage AC      | 24 V   |
| Operating voltage AC min. | 19,2 V |
| Operating voltage AC max. | 28,8 V |
| Operating voltage DC      | 24 V   |
| Operating voltage DC min. | 18 V   |

|                                    |       |
|------------------------------------|-------|
| Operating voltage DC max.          | 30 V  |
| Cut-off peak voltage max.          | 55 V  |
| Current operating per contact max. | 4 A   |
| Current consumption max.           | 15 mA |

#### Diagnostics

|                       |        |
|-----------------------|--------|
| Status indication LED | yellow |
|-----------------------|--------|

#### Installation | Connection

|              |    |
|--------------|----|
| Mounting set | M3 |
|--------------|----|

#### Device protection | Electrical

|                                        |                   |
|----------------------------------------|-------------------|
| Additional condition protection degree | inserted, screwed |
| Pollution Degree                       | 3                 |
| Rated surge voltage                    | 0,8 kV            |
| Material group (IEC 60664-1)           | I                 |
| Additional suppressor                  | Diode, Z-Diode    |

#### Mechanical data | Material data

|                           |            |
|---------------------------|------------|
| Color housing             | black      |
| Coating locking           | galvanized |
| Coating of fitting        | galvanized |
| Material gasket           | PUR        |
| Locking material          | Steel      |
| Material screw connection | Steel      |

#### Mechanical data | Mounting data

|                 |                   |
|-----------------|-------------------|
| Mounting method | inserted, screwed |
|-----------------|-------------------|

#### Environmental characteristics | Climatic

|                                        |                            |
|----------------------------------------|----------------------------|
| Operating temperature min.             | -25 °C                     |
| Operating temperature max.             | 85 °C                      |
| Additional condition temperature range | depending on cable quality |

#### Important installation notes

|                        |                                                                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note on strain relief  | Protect the connectors by suitable measures from mechanical loads, e.g. by the usage of cable ties.                                                   |
| Note on bending radius | <b>Attention:</b> Observe the permissible bending radii when laying cables, as the IP protection class can be endangered by excessive bending forces. |

#### Installation | Cable

|                                          |                                                  |
|------------------------------------------|--------------------------------------------------|
| wire arrangement                         | black 1, black 2, green-yellow                   |
| Cable identification                     | 216                                              |
| Cable Type                               | 1                                                |
| Printing color of wire insulation        | white (isolation black)                          |
| Jacket Color                             | gray                                             |
| Amount stranding                         | 1                                                |
| Stranding                                | 3 wires twisted                                  |
| wire arrangement                         | black 1, black 2, green-yellow                   |
| Cable weight                             | 63,8 g/m                                         |
| Material jacket                          | PVC                                              |
| Shore hardness jacket                    | 80 ± 5 Shore A                                   |
| Freedom from ingredients (jacket)        | lead-free, cadmium-free, CFC-free, silicone-free |
| Outer-diameter (jacket)                  | 5,9 mm                                           |
| Tolerance outer diameter (sheath)        | ± 5 %                                            |
| Material wire insulation                 | PVC                                              |
| Amount wires                             | 3                                                |
| Outer diameter insulation                | 1,8 mm                                           |
| Outer diameter tolerance core insulation | ± 5 %                                            |
| Shore hardness wire insulation           | 43 ± 5 Shore D                                   |

|                                                   |                                                      |
|---------------------------------------------------|------------------------------------------------------|
| Material properties wire insulation               | good machinability                                   |
| Ingredient freeness wire insulation               | lead-free, cadmium-free, CFC-free, silicone-free     |
| Printing color of wire insulation                 | white (isolation black)                              |
| Amount strands (wire)                             | 24                                                   |
| Diameter of single wires                          | 0,2 mm                                               |
| Conductor crosssection (wire)                     | 0,75 mm <sup>2</sup>                                 |
| Material conductor wire                           | Stranded copper wire, bare                           |
| Conductor type (wire)                             | Strand class 5                                       |
| Max. rated voltage (conductor - conductor)        | 500 V                                                |
| Max. rated voltage (conductor - ground)           | 300 V                                                |
| Current load capacity (standard)                  | to DIN VDE 0298-4                                    |
| Current load capacity min. wire                   | 12 A                                                 |
| Electrical resistance line constant wire          | 26 Ω/km @ 20 °C                                      |
| AC withstand voltage (wire - wire)                | 3 kV @ 60 s                                          |
| Power frequency withstand voltage (wire - jacket) | 3 kV @ 60 s                                          |
| Min. operating temperature (static)               | -30 °C                                               |
| Max. operating temperature (fixed)                | 70 °C                                                |
| Operating temperature min. (dynamic)              | -5 °C                                                |
| Operating temperature max. (dynamic)              | 70 °C                                                |
| Flame resistance                                  | UL 1581 § 1090   IEC 60332-2-2   UL 1581 § 1100 FT2  |
| chemical resistance                               | Good, application-related testing                    |
| Gasoline resistance                               | Good, application-related testing                    |
| Oil resistance                                    | Good, application-related testing   DIN EN 60811-404 |
| Bending radius (fixed)                            | 5 x Outer diameter                                   |
| Bending radius (dynamic)                          | 10 x Outer diameter                                  |