

## Type codes – Connecting cable with PUR cable sheath

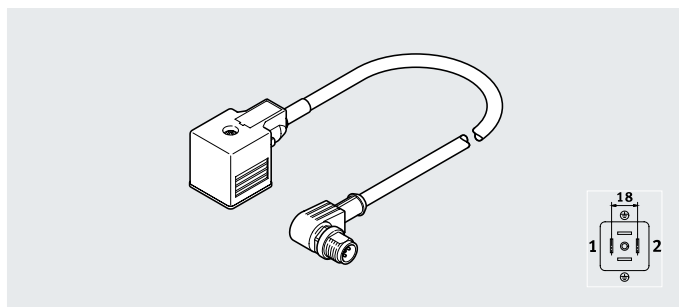
| 001 Series  |  |
|---|--|
| NEBV  | Connecting cable for valves                                  |
| 002 Product version                               |  |
|   | Standard   |
| C   | Easy-to-clean design   |
| 003 Connection technology left, field device side |  |
| A1  | Socket type A, EN 175301-803                                 |
| B2  | Socket type B, industry standard, 11 mm                      |
| C1S   | Socket type C, narrow design                                 |
| H1  | Socket connection pattern H                                  |
| M8  | Socket M8x1 A-coded, EN 61076-2-104                          |
| M12   | Socket M12x1 A-coded, EN 61076-2-101                         |
| Z3  | Socket connection pattern ZC, self-tapping screw             |
| Z4  | Socket connection pattern ZC, metric screw                   |
| S1  | Sub-D socket   |
| S7  | Sub-D HD socket  |
| Q7  | Port pattern Q7 socket                                       |
| HS  | Socket connection pattern S                                  |
| HP  | Socket connection pattern HP                                 |
| 004 Cable outlet left                             |  |
|   | None   |
| G   | Straight   |
| W   | Angled   |
| WA  | Angled 45°   |
| 005 Number of pins/wires on the left              |  |
| 2   | 2  |
| 3   | 3  |
| 4   | 4  |
| 8   | 8  |
| 9   | 9  |
| 15  | 15   |
| 25  | 25   |
| 37  | 37   |
| 44  | 44   |
| 006 Display                                       |  |
|   | None   |
| F   | LED signal status, AC  |
| L   | LED signal status, DC  |
| N   | LED switching state, NPN                                     |
| P   | LED switching state, PNP                                     |
| U   | LED, UC  |
| 007 Additional socket functions                   |  |
|   | None   |
| HL  | Hood for MPA-L   |
| HM  | Hood for MPA-S   |
| HS  | With seal  |
| 008 Circuitry                                     |  |
|   | None   |
| P   | Protective circuit   |
| R   | Holding current reduction with integrated protective circuit |

| 009 Cable characteristic                         |  |
|--|--|
| P  | Basic                                    |
| K  | Standard                                 |
| E  | Suitable for energy chains               |
| F  | Food-safe to standard                    |
| 010 Cable design                                 |  |
|  | Standard                                 |
| D  | Double cable                             |
| M  | Alternative material                     |
| N  | Leads                                    |
| 011 Cable length [m]                             |  |
| 0.1  | 0.1                                      |
| 0.2  | 0.2                                      |
| 0.3  | 0.3                                      |
| 0.5  | 0.5                                      |
| 0.6  | 0.6                                      |
| 1  | 1  |
| 2  | 2  |
| 2.5  | 2.5                                      |
| 3  | 3  |
| 5  | 5  |
| 10   | 10                                       |
| 012 Cable identification                         |  |
|  | With label holder                        |
| N  | Without label holder                     |
| 013 Connection technology right, controller side |  |
| LE   | Open end                                 |
| M8   | Plug M8x1 A-coded, EN 61076-2-104        |
| M12  | Plug M12x1 A-coded, EN 61076-2-101       |
| Z1   | Port pattern ZB plug, self-tapping screw |
| 014 Plug   |  |
|  | None                                     |
| G  | Straight                                 |
| W  | Angled                                   |
| 015 Number of pins/wires on the right            |  |
| 2  | 2  |
| 3  | 3  |
| 4  | 4  |
| 5  | 5  |
| 10   | 10                                       |
| 15   | 15                                       |
| 25   | 25                                       |
| 26   | 26                                       |
| 27   | 27                                       |
| 36   | 36                                       |
| 37   | 37                                       |
| 39   | 39                                       |
| 44   | 44                                       |
| 016 Degree of protection, electrical system      |  |
|  | Standard                                 |
| S6   | IP40                                     |
| S1   | IP65                                     |
| S9   | IP65/IP67                                |
| S10  | IP65/IP67/IP69K                          |

## Datasheet – Connecting cable with PUR cable sheath

### Connecting cable NEBV-A1W3

- Connecting cable
- Pre-assembled at one or both ends
- For connecting valves



| General technical data  |  |  |
|-------------------------|--|--|
| Type                    | NEBV-A1W3F...-LE3                          | NEBV-A1W3F...-M12W3r                   |
| Electrical connection 1 |  |  |
| Function                | Field device side                          |  |
| Connection type         | Socket                                     |  |
| Cable outlet            | Angled                                     |  |
| Design                  | Square                                     |  |
| Connection technology   | Plug pattern type A based on EN 175301-803 |  |
| Number of pins/cores    | 4  |  |
| Assigned pins/cores     | 4  |  |
| Type of mounting        | On solenoid valve via M3 central screw     |  |
| Electrical connection 2 |  |  |
| Function                | Controller side                            |  |
| Connection type         | Cable                                      | Plug                                   |
| Cable outlet            | –  | Angled                                 |
| Design                  | –  | Round                                  |
| Connection technology   | Open end                                   | M12x1, A-coded, to EN 61076-2-101      |
| Number of pins/cores    | 3  | 5                                      |
| Assigned pins/cores     | 3  | 3                                      |
| Type of mounting        | –  | Screw-type lock with hexagon A/F 13 mm |

| Technical data – Electrical |        |                    |             |             |
|-----------------------------|--------|--------------------|-------------|-------------|
| Nominal operating voltage   |        | 24 V AC/DC         | 110 V AC/DC | 230 V AC/DC |
| Operating voltage range     | [V AC] | 18 ... 30          | 0 ... 110   | 0 ... 230   |
|                             | [V DC] | 18 ... 30          | 0 ... 110   | 0 ... 230   |
| Surge resistance            | [kV]   | 0.8                | 1.5         | 4           |
| Current rating at 40 °C     | [A]    | 4                  | 1           | 10          |
| Pollution degree            |        | 3                  | 3           | 3           |
| Switching status indication |        | Yellow LED         | –           | –           |
| Additional functions        |        | Protective circuit | –           | –           |
| Protective earth connection |        | Available          | Available   | Available   |

| Technical data – Cable   |                    |                                  |
|--------------------------|--------------------|----------------------------------|
| Cable composition        | [mm <sup>2</sup> ] | 3x 0.75                          |
| Cable diameter           | [mm]               | 5.9                              |
| Cable diameter tolerance | [mm]               | ±0.3                             |
| Cable characteristic     |                    | Standard                         |
| Test conditions, cable   |                    | Test conditions on request       |
| Cable identification     |                    | Without inscription label holder |

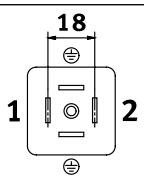
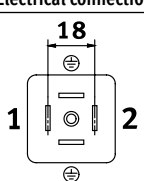
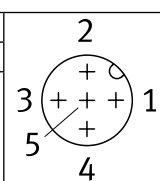
## Datasheet – Connecting cable with PUR cable sheath

| Materials               |  |  |
|-------------------------|--|--|
| Electrical connection 2 | Connection technology                        |  |
|                         | Open end                                     | M12x1, A-coded, to EN 61076-2-101            |
| Housing                 | TPE-U(PUR)                                   | TPE-U(PUR)                                   |
| Housing colour          | Black  | Black  |
| Union nut               | –  | Nickel-plated die-cast zinc                  |
| Insulating sheath       | PP   | PP   |
| Cable sheath            | TPE-U(PUR)                                   | TPE-U(PUR)                                   |
| Cable sheath colour     | Grey   | Grey   |
| Note on materials       | RoHS-compliant                               | RoHS-compliant                               |
|                         | Contains paint-wetting impairment substances | Contains paint-wetting impairment substances |

| Operating and environmental conditions                    |                  |                             |                             |
|---|------------------|-----------------------------|-----------------------------|
| Nominal operating voltage                                 | 24 V AC/DC       | 110 V AC/DC                 | 230 V AC/DC                 |
| Ambient temperature [°C]                                  | –25 ... +80      | –25 ... +80                 | –25 ... +80                 |
| Ambient temperature with flexible cable installation [°C] | –25 ... +80      | –25 ... +80                 | –25 ... +80                 |
| CE marking (see declaration of conformity) <sup>1)</sup>  | –                | To EU Low Voltage Directive | To EU Low Voltage Directive |
|   | –                | To EU RoHS Directive        | To EU RoHS Directive        |
| Certification   | c CSA us (OL)    | c CSA us (OL)               | c CSA us (OL)               |
| Degree of protection                                      | IP67             | IP67                        | IP67                        |
| Note on degree of protection                              | In mounted state | In mounted state            | In mounted state            |
| Corrosion resistance class CRC2)                          | 2                | 2                           | 2                           |

 1) More information [www.festo.com/catalogue/...](http://www.festo.com/catalogue/...) → Support/Downloads.

 2) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

| Circuitry (socket/plug view)   |     |                           |     |   |
|--|-----|---------------------------|-----|---|
| Electrical connection 1  | Pin | Wire colour <sup>1)</sup> | Pin | Electrical connection 2   |
| <b>Electrical connection 2, connection technology open end</b>                         |     |                           |     |   |
|     | 1   | BK                        | –   | Open end  |
|  | 2   | BK                        | –   | Open end  |
|  | GND | GN YE                     | –   | Open end  |
| <b>Electrical connection 2, connection technology M12x1, A-coded to EN 61076-2-101</b> |     |                           |     |   |
|     | 1   | BK                        | 3   |  |
|  | 2   | BK                        | 4   |   |
|  | GND | GN YE                     | 5   |   |

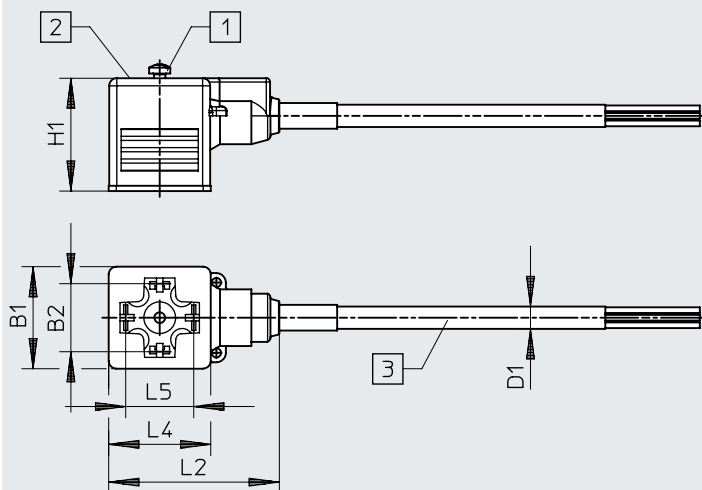
1) To IEC 757

## Datasheet – Connecting cable with PUR cable sheath

### Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

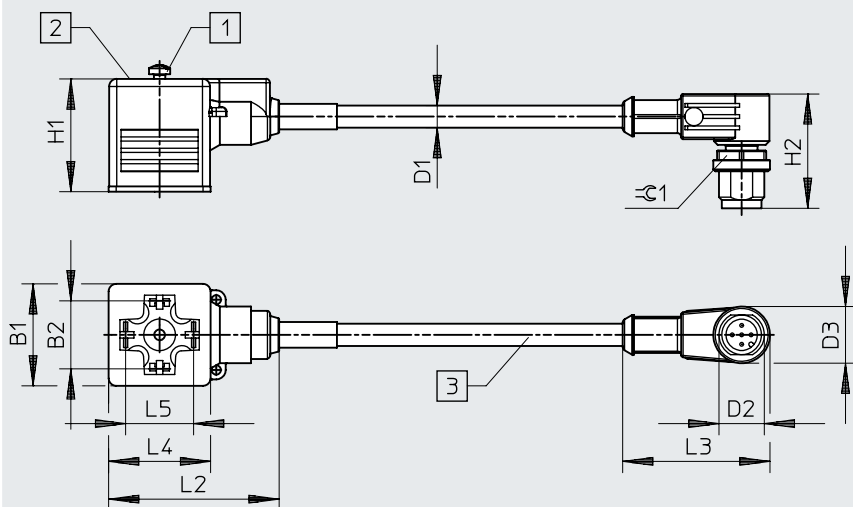
Electrical connection 2, connection technology open end



- [1] Retaining screw M3      [2] Signal status indication for version P      [3] Cable, length depending on the order



Electrical connection 2, connection technology plug M12x1

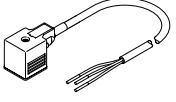
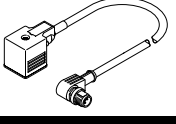
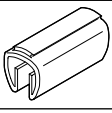
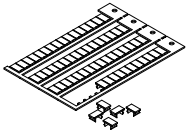


- [1] Retaining screw M3      [2] Signal status indication for version P      [3] Cable, length depending on the order



| Type                | B1 | B2 | D1<br>∅ | D2    | D3<br>∅ | H1 | H2 | L2 | L3 | L4 | L5 | ⊕G1 |
|---------------------|----|----|---------|-------|---------|----|----|----|----|----|----|-----|
| NEBV-A1W3-...-LE3   | 27 | 18 | 5.9     | –     | –       | 30 | –  | 45 | –  | 27 | 18 | –   |
| NEBV-A1W3-...-M12W3 | 27 | 18 | 5.9     | M12x1 | 15      | 30 | 31 | 45 | 39 | 27 | 18 | 13  |

## Ordering data

| Ordering data – Connecting cable with PUR cable sheath                                 |  |   |                     |               |                |                                   |
|--|--|---|---------------------|---------------|----------------|-----------------------------------|
|  | Nominal operating voltage<br>[V]                                     |   | Cable length<br>[m] | Weight<br>[g] | Part no.       | Type                              |
| <b>Electrical connection 2, connection technology open end</b>                         |  |   |                     |               |                |                                   |
|       | 24 AC/DC   | <ul style="list-style-type: none"> <li>Switching status indication</li> <li>Protective circuit</li> </ul> | 0.6                 | 80            | <b>3679776</b> | <b>NEBV-A1W3F-P-K-0.6-N-LE3</b>   |
|  | 230 AC/DC  | –   | 0.6                 | 80            | <b>3579466</b> | <b>NEBV-A1W3-K-0.6-N-LE3</b>      |
| <b>Electrical connection 2, connection technology M12x1, A-coded to EN 61076-2-101</b> |  |   |                     |               |                |                                   |
|       | 24 AC/DC   | <ul style="list-style-type: none"> <li>Switching status indication</li> <li>Protective circuit</li> </ul> | 0.3                 | 60            | <b>3679771</b> | <b>NEBV-A1W3F-P-K-0.3-N-M12W3</b> |
|  |  |   | 0.6                 | 100           | <b>3679772</b> | <b>NEBV-A1W3F-P-K-0.6-N-M12W3</b> |
|  | 110 AC/DC  | –   | 0.3                 | 60            | <b>3579461</b> | <b>NEBV-A1W3-K-0.3-N-M12W3</b>    |
|  |  |   | 0.6                 | 100           | <b>3579462</b> | <b>NEBV-A1W3-K-0.6-N-M12W3</b>    |
| <b>Ordering data – Accessories</b>   |  |   |                     |               |                |                                   |
|       | Inscription labels for attaching to a cable with diameter 5 ... 8 mm |   | 11x20 mm            |               | <b>33361</b>   | <b>KM-BZ</b>                      |
|      | Inscription labels for connecting cable KMF, 64 per frame            |   | 6x10 mm             |               | <b>18576</b>   | <b>IBS-6x10</b>                   |

## Ordering data – Modular product system

| Ordering table                                      |                                     | Conditions | Code        | Enter code |
|---|-------------------------------------|------------|-------------|------------|
| Module no.  | <b>8003577</b>                      |            |             |            |
| Connecting cable                                    | Connecting cables for valves        |            | <b>NEBV</b> | NEBV       |
| Connection technology left, field device side       | Socket type A, EN 175301-803        |            | <b>-A1</b>  | -A1        |
| Cable outlet left                                   | Angled                              |            | <b>W</b>    | W          |
| Number of pins/cores on the left                    | 3-pin                               |            | <b>3</b>    | 3          |
| Display   | None                                |            |             |            |
|   | Signal status LED                   |            | <b>F</b>    |            |
| Circuitry   | None                                |            |             |            |
|   | Integrated protective circuit       |            | <b>-P</b>   |            |
| Cable characteristic                                | Standard                            |            | <b>-K</b>   | -K         |
| Cable length  | [m] 0.3                             | [1]        | <b>-0.3</b> |            |
|   | [m] 0.6                             |            | <b>-0.6</b> |            |
| Cable identification                                | Without inscription label holder    |            | <b>-N</b>   | -N         |
| Connection technology on the right, controller side | Open end                            |            | <b>-LE</b>  |            |
|   | Plug M12x1, A-coded, EN 61076-2-101 |            | <b>-M12</b> |            |
| Cable outlet right                                  | None                                |            |             |            |
|   | Angled                              | [1]        | <b>W</b>    |            |
| Number of pins/cores on the right                   | 3-pin                               |            | <b>3</b>    | 3          |

1) 0.3, W Only with connection technology on the right M12