

Connecting cables for valves, socket type B, industry standard

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Connecting cables for valves, socket type B, industry standard

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 |
| Z4 | Socket connection pattern ZC, metric screw |
| Z3 | Socket connection pattern ZC, self-tapping screw |
| M8 | Socket M8x1 A-coded, EN 61076-2-104 |
| M12 | Socket M12x1 A-coded, EN 61076-2-101 |
| S1 | Sub-D socket |
| S7 | Sub-D HD socket |
| H1 | Socket connection pattern H |
| Q7 | Port pattern Q7 socket |
| HS | Socket connection pattern S |

| | |
|------------|--------------------------|
| 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 |
| M | Alternative material |
| N | Leads |
| D | Double cable |

| | |
|------------|-------------------------|
| 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 |
| 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 |
| LE | Open end |

| | |
|------------|-------------|
| 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 |

Type codes – Connecting cable with PVC cable sheath

| 001 | Series |
|------------|---|
| KMF | Connecting cable for valves, socket type B to industry standard 11 mm |

| 002 | Variant |
|----------|-----------|
| 1 | Variant 1 |

| 003 | Rated operating voltage |
|--------------|-------------------------|
| 24 | 24 V DC |
| 24DC | 24 V DC |
| 230AC | 230 V AC |

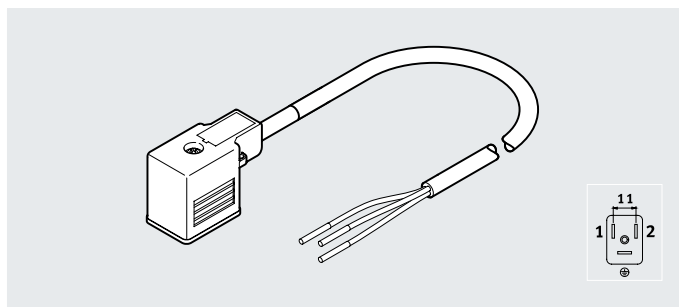
| 004 | Cable length [m] |
|------------|------------------|
| 2.5 | 2.5 |
| 5 | 5 |
| 10 | 10 |

| 005 | Display |
|------------|-----------------------|
| | No display |
| LED | LED signal status, DC |

Datasheet – Connecting cable with PUR cable sheath

Connecting cable NEBV-B2W3

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



| General technical data | | |
|-------------------------|--|--|
| Type | NEBV-B2W3F... -LE3 | NEBV-B2W3F... -M12W3 |
| Electrical connection 1 | | |
| Function | Field device side | |
| Connection type | Socket | |
| Cable outlet | Angled | |
| Design | Rectangular | |
| Connection technology | Plug pattern type B, to industry standard, 11 mm | |
| Number of pins/wires | 3 | |
| Assigned pins/wires | 3 | |
| Type of mounting | On solenoid valve with 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/wires | 3 | 5 |
| Assigned pins/wires | 3 | 3 |
| Type of mounting | – | Screw locking with spanner size 13 (hexagon) |

| Technical data – Electrics | | | | |
|---------------------------------|--------|--------------------------------------|-------------|-------------|
| 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 |
| Acceptable current load at 40°C | [A] | 4 | 1 | 10 |
| Pollution degree | | 3 | 3 | 3 |
| Display | | Yellow LED, signal status indication | – | – |
| Additional functions | | Protective circuit | – | – |
| Protective earth connection | | Available | Available | Available |

| Technical data – Cable | | |
|--------------------------|--------------------|----------------------------------|
| Cable composition | [mm ²] | 3x 0.75 |
| Cable diameter | [mm] | 5.9 |
| Cable diameter tolerance | [mm] | ±0.3 |
| Cable characteristic | | Standard |
| Cable test conditions | | Test conditions on request |
| Cable designation | | 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 |

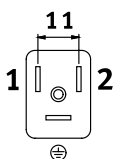
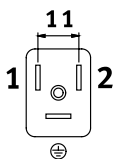
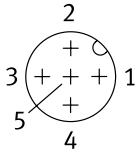
| Operating and environmental conditions | | | | |
|--|------|-----------------------------|-----------------------------|-----------------------------|
| Nominal operating voltage | | 24 V AC/DC | 110 V AC/DC | 230 V AC/DC |
| Ambient temperature | [°C] | –25 ... +80 | –25 ... +80 | –25 ... +80 |
| Ambient temperature with flexible cable installation | [°C] | –25 ... +80 | –25 ... +80 | –25 ... +80 |
| CE marking (see declaration of conformity) ¹⁾ | – | To EU Low Voltage Directive | To EU Low Voltage Directive | To EU Low Voltage Directive |
| | – | To EU RoHS 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 assembled state | In assembled state | In assembled state |
| Corrosion resistance class CRC ²⁾ | – | 2 | 2 | 2 |

1) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/nebv → Support/Downloads.

If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

2) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

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

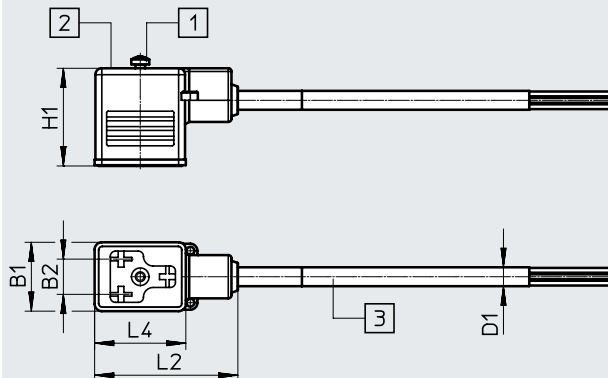
1) To IEC 757

Datasheet – Connecting cable with PUR cable sheath

Dimensions

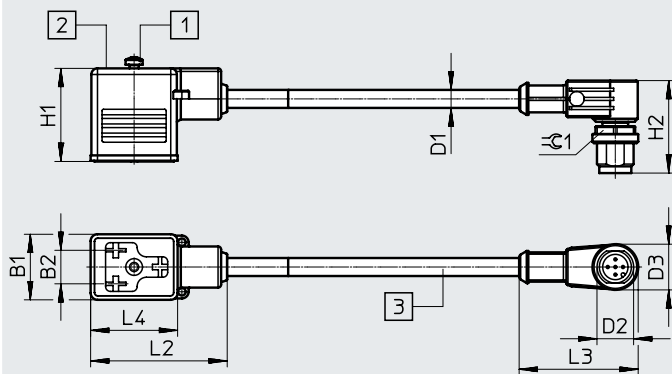
Download CAD data → www.festo.com

Electrical connection 2, connection technology open end



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

Electrical connection 2, connection technology plug M12x1



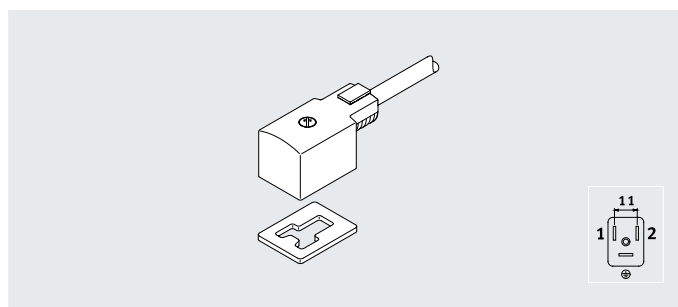
- [1] Mounting screw M3
- [2] Signal status indication for version P
- [3] Cable, length depending on the order

| Type | B1 | B2 | D1 ∅ | D2 | D3 ∅ | H1 | H2 | L2 | L3 | L4 | ≅ |
|---------------------|------|----|---------|-------|---------|------|----|----|----|----|----|
| NEBV-B2W3-...-LE3 | 21.5 | 11 | 5.9 | – | – | 30.5 | – | 45 | – | 29 | – |
| NEBV-B2W3-...-M12W3 | 21.5 | 11 | 5.9 | M12x1 | 15 | 30.5 | 31 | 45 | 39 | 29 | 13 |

Datasheet – Connecting cable with PVC cable sheath

Connecting cable KMF

- Connecting cable
- Pre-assembled at one end
- For connecting valves



General technical data

Electrical connection 1

| | |
|-----------------------|--|
| Function | Field device side |
| Connection type | Socket |
| Cable outlet | Angled |
| Design | Rectangular |
| Connection technology | Plug pattern type B, to industry standard, 11 mm |
| Number of pins/wires | 3 |
| Assigned pins/wires | 3 |
| Type of mounting | On solenoid valve with M3 central screw |
| Mounting position | Any |

Electrical connection 2

| | |
|-----------------------|-----------------|
| Function | Controller side |
| Connection type | Cable |
| Connection technology | Open end |
| Number of pins/wires | 3 |
| Assigned pins/wires | 3 |

Technical data – Electrics

| | | |
|---------------------------------|--------------------------------------|---------------|
| Nominal operating voltage | 24 V DC | 230 V AC |
| Operating voltage range | [V AC] | – |
| | [V DC] | 20.4 ... 27.6 |
| Acceptable current load at 40°C | [A] | 4 |
| Pollution degree | | 3 |
| Display | Yellow LED, signal status indication | – |
| Protective earth connection | Available | Available |

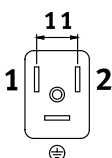
Technical data – Cable

| | | |
|-----------------------|--------------------|----------------------------------|
| Cable composition | [mm ²] | 3x 0.75 |
| Cable diameter | [mm] | 6 |
| Cable characteristic | | Standard |
| Cable test conditions | | Test conditions on request |
| Cable designation | | Without inscription label holder |

Datasheet – Connecting cable with PVC cable sheath

| Materials | | |
|--|-------------------------|--|
| Housing | PC, POM | |
| Cable sheath | PVC | |
| Pin contacts | Bronze | |
| PWIS conformity | VDMA24364-B2-L | |
| Operating and environmental conditions | | |
| Nominal operating voltage | 24 V DC | 230 V AC |
| Ambient temperature [°C] | -20 ... +80 | -20 ... +80 |
| CE marking (see declaration of conformity) ¹⁾ | - | To EU Low Voltage Directive |
| | To EU RoHS Directive | To EU RoHS Directive |
| UKCA marking (see declaration of conformity) ¹⁾ | - | To UK regulations for electrical equipment |
| | To UK RoHS instructions | To UK RoHS instructions |
| Degree of protection to IEC 60529 | IP67 | IP67 |
| Note on degree of protection | In assembled state | In assembled state |

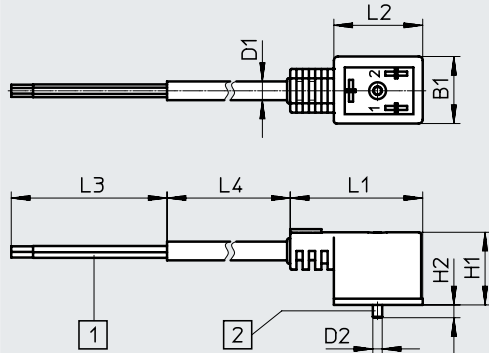
- 1) For information about the area of use, see the declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

| Circuitry (socket/plug view) | | | | |
|--|-----|---------------------------|-----|-------------------------|
| Electrical connection 1 | Pin | Wire colour ¹⁾ | Pin | Electrical connection 2 |
| Electrical connection 2, connection technology open end | | | | |
|  | 1 | BK | - | Open end |
| | 2 | BK | - | Open end |
| | GND | GNYE | - | Open end |

- 1) To IEC 757

Dimensions

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

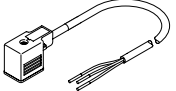


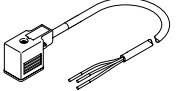
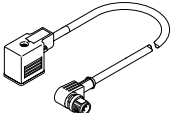
[1] Cable, 3-wire
[2] M3 screw

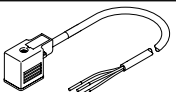
| Type | B1 | D1 ∅ | D2 | H1 | H2 | L1 | L2 | L3 | L4 |
|---------------|----|---------|----|----|----|----|----|----|-------|
| KMF-1-...-2,5 | 21 | 6 | M3 | 23 | 6 | 43 | 28 | 50 | 2500 |
| KMF-1-...-5 | | | | | | | | | 5000 |
| KMF-1-...-10 | | | | | | | | | 10000 |

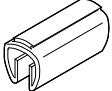
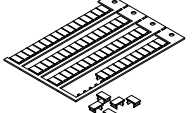
Ordering data

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| Ordering data – Connecting cable with PVC cable sheath | | | | | | |
|---|-------------------------------|--------------------------|------------------|------------|----------|--------------------|
| | Nominal operating voltage [V] | | Cable length [m] | Weight [g] | Part no. | Type |
| Electrical connection 2, connection technology open end | | | | | | |
|  | 24 DC | Signal status indication | 2.5 | 170 | ★ 30935 | KMF-1-24DC-2.5-LED |

| Ordering data – Connecting cable with PUR cable sheath | | | | | | |
|--|-------------------------------|--|------------------|------------|----------|----------------------------|
| | Nominal operating voltage [V] | | Cable length [m] | Weight [g] | Part no. | Type |
| Electrical connection 2, connection technology open end | | | | | | |
|  | 24 AC/DC | <ul style="list-style-type: none"> • Signal status indication • Protective circuit | 0.6 | 80 | 3679778 | NEBV-B2W3F-P-K-0.6-N-LE3 |
| | 230 AC/DC | – | 0.6 | 80 | 3579468 | NEBV-B2W3-K-0.6-N-LE3 |
| Electrical connection 2, connection technology M12x1, A-coded to EN 61076-2-101 | | | | | | |
|  | 24 AC/DC | <ul style="list-style-type: none"> • Signal status indication • Protective circuit | 0.3 | 60 | 3679773 | NEBV-B2W3F-P-K-0.3-N-M12W3 |
| | | | 0.6 | 100 | 3679774 | NEBV-B2W3F-P-K-0.6-N-M12W3 |
| | 110 AC/DC | – | 0.3 | 60 | 3579463 | NEBV-B2W3-K-0.3-N-M12W3 |
| | | | 0.6 | 100 | 3579464 | NEBV-B2W3-K-0.6-N-M12W3 |

| Ordering data – Connecting cable with PVC cable sheath | | | | | | |
|---|-------------------------------|--------------------------|------------------|------------|----------|------------------|
| | Nominal operating voltage [V] | | Cable length [m] | Weight [g] | Part no. | Type |
| Electrical connection 2, connection technology open end | | | | | | |
|  | 24 DC | Signal status indication | 5 | 320 | 30937 | KMF-1-24DC-5-LED |
| | | | 10 | 620 | 193458 | KMF-1-24-10-LED |
| | 230 AC | – | 2.5 | 170 | 30936 | KMF-1-230AC-2.5 |
| | | | 5 | 320 | 30938 | KMF-1-230AC-5 |

| Ordering data – Accessories | | | | | | |
|---|--|--|----------|--|----------|----------|
| | | | | | Part no. | Type |
|  | Inscription labels for attaching to a cable with diameter 5 ... 8 mm | | 11x20 mm | | 33361 | KM-BZ |
|  | Inscription labels for connecting cable KMF, 64 per frame | | 6x10 mm | | 18576 | IBS-6x10 |

Ordering data – Modular product system

| Ordering table | | Conditions | Code | Enter code |
|--|---|------------|-------------|------------|
| Module no. | 8003577 | | | |
| Connecting cable | Connecting cables for valves | | NEBV | NEBV |
| Connection technology on the left, field device side | Socket type B to industry standard, 11 mm | | -B2 | -B2 |
| Cable outlet on the left | Angled | | W | W |
| Number of pins/wires on the left | 3-pin | | 3 | 3 |
| Display | None | | | |
| | Signal status LED | | F | |
| Circuitry | None | | | |
| | Integrated protective circuit | | -P | |
| Cable characteristic | Standard | | -K | -K |
| Cable length | [m] 0.3 | [1] | -0.3 | |
| | [m] 0.6 | | -0.6 | |
| Cable designation | Without inscription label holder | | -N | -N |
| Connection technology on the right, controller side | Open end | | -LE | |
| | Plug M12x1, A-coded, EN 61076-2-101 | | -M12 | |
| Cable outlet on the right | None | | | |
| | Angled | [1] | W | |
| Number of pins/wires on the right | 3-pin | | 3 | 3 |

[1] **-0.3, W** Only with connection technology on the right, M12