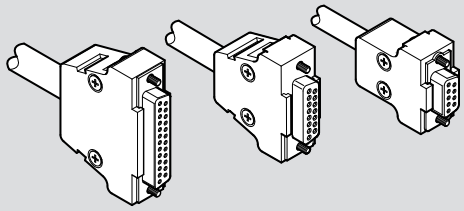
# KMP6-...P
## Connecting cable



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Assembly instructions

8212625
2025-01b
[8212627]

8212625

Original instructions

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### 1 Applicable documents

All available documents for the product ➔ www.festo.com/sp.

### 2 Safety

#### 2.1 Safety instructions

- Before starting work on the product: set connected devices to a safe condition.
- Before working on the product: Switch off the power supply, ensure that it is off and secure it against being switched on again.

#### 2.2 Intended use

The connecting cable connects the valve terminal CPV-SC to a higher-level controller.

#### 2.3 Training of qualified personnel

Work on the product may only be carried out by qualified personnel who can evaluate the work and detect dangers. The qualified personnel are trained in electrical engineering.

### 3 Design

#### 3.1 Product design

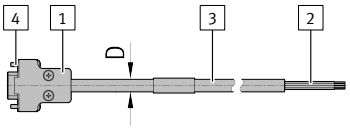



Fig. 1: KMP6-9P-8...

1 Sub-D socket
2 Wire ends (9x)
3 Cables
4 Screw (2x)

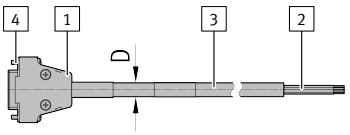



Fig. 2: KMP6-15P-12...

1 Sub-D socket
2 Wire end (15x)
3 Cables
4 Screw (2x)

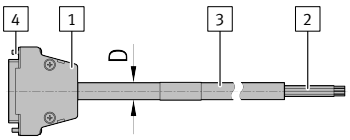



Fig. 3: KMP6-25P-12...

1 Sub-D socket
2 Wire end (15x)
3 Cables
4 Screw (2x)

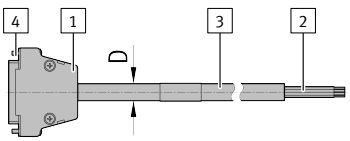



Fig. 4: KMP6-25P-20...

1 Sub-D socket
2 Wire end (25x)
3 Cables
4 Screw (2x)

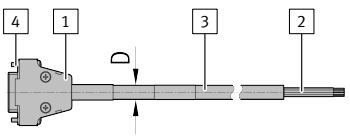



Fig. 5: KMP6-26P-16...

1 Sub-D socket
2 Wire end (20x)
3 Cables
4 Screw (2x)

#### 3.2 Contact assignment

| Electrical connection 1 Field device side | | | | | Electrical connection 2 Controller side |
|---|---|---|---|---|---|
| 1 Socket Pin | | | | | 2 Wire ends Wire colour[1] |
|  |  |  |  | | |
| KMP6-9P-8... | KMP6-15P-12... | KMP6-25P-12... | KMP6-25P-20... | KMP6-26P-16... | |
| 1 | 1 | 1 | 1 | 1 | WH |
| 2 | 2 | 2 | 2 | 2 | BN |
| 3 | 3 | 3 | 3 | 3 | GN |
| 4 | 4 | 4 | 4 | 4 | YE |
| 5 | 5 | 5 | 5 | 5 | GY |
| 6 | 6 | 6 | 6 | 6 | PK |
| 7 | 7 | 7 | 7 | 7 | BU |
| 8 | 8 | 8 | 8 | 8 | RD |
| 9 | 9 | 9 | 9 | 9 | BK |
| – | 10 | 10 | 10 | 10 | VT |
| – | 11 | 11 | 11 | 11 | GYPK |
| – | 12 | 12 | 12 | 12 | RDBU |
| – | 13 | 23 | 13 | 13 | GNWH |
| – | 14 | 24 | 14 | 14 | BNGN |
| – | 15 | 25 | 15 | 15 | YEWH |
| – | – | – | 16 | 16 | BNYE |
| – | – | – | 17 | 23 | GYWH |
| – | – | – | 18 | 24 | BNGY |
| – | – | – | 19 | 25 | WHPK |
| – | – | – | 20 | 26 | BNPK |
| – | – | – | 21 | – | BUWH |
| – | – | – | 22 | – | BNBU |
| – | – | – | 23 | – | RDWH |
| – | – | – | 24 | – | BNRD |
| – | – | – | 25 | – | BKWH |

1) Colour code in accordance with IEC 60757:2021-06

Tab. 1: Contact assignment

### 4 Mounting

#### 4.1 Mounting of Electrical Connection 1

1. Align socket 1 to match plug.
2. Connect socket 1 to the plug.
3. Tighten screws 4. Tightening torque: 0.6 Nm ± 20 %

#### 4.2 Mounting electrical connection 2

1. Shorten and pre-assemble cable sheath and wire ends as needed.
2. Connect the cores in accordance with the contact assignment.

#### 4.3 Strain relief for electrical connection 2

- Fix the cable sheath in the area in front of the wire ends.
  - No strain on the wires.

#### 4.4 Wiring

| Characteristics | Cable characteristics | Wiring |
|---|---|---|
| KMP6 | Standard | Flexible (freely movable, unguided wiring)<br>The cable can be dynamically bent, but not for robots or energy chains. |

Tab. 2: Wiring

## 5 Technical data

| KMP6 -... | | | 9P-8... | 15P-12... | 25P-12... | 25P-20... | 26P-16... |
|---|---|---|---|---|---|---|---|
| Certificates, declaration of conformity | | | ➔ www.festo.com/sp | | | | |
| Cable characteristic | | | Standard | | | | |
| Cable composition | | [mm²] | 8x0.34 + 1x 0.5 | 15x0.34 | 15x0.34 | 20x0.25 + 5x 0.34 | 20x0.25 |
| Cable diameter | D | [mm] | 7.6 | 8.6 | 8.6 | 10.3 | 8.8 |
| Current rating at 40 °C | | [A] | 2.8 | | | | |
| Surge resistance | | [kV] | 1 | | | | |
| Operating voltage range | | | | | | | |
| DC | $U_B$ | [V] | 0 ... 30 | | | | |
| Bending radius | | | | | | | |
| Fixed cable installation | R | [mm] | ≥ 76 | ≥ 86 | ≥ 86 | ≥ 103 | ≥ 88 |
| Flexible cable installation | R | [mm] | ≥ 114 | ≥ 129 | ≥ 129 | ≥ 103 | ≥ 132 |
| Ambient temperature | | | | | | | |
| Fixed cable installation | | [°C] | –25 ... +70 | | | | |
| Flexible cable installation | | [°C] | –5 ... +70 | | | | |
| Material | | | | | | | |
| Cable sheath | | | PVC | | | | |
| Electrical connection 1 | | | | | | | |
| Function | | | Field device side | | | | |
| Connection type | | | Socket | | | | |
| Connection technology | | | Sub-D | | | | |
| Type of mounting | | | 2x screw 4-40 UNC | | | | |
| Degree of protection In assembled state | | | IP40 | | | | |
| Pollution degree | | | 2 | | | | |
| Electrical connection 2 | | | | | | | |
| Function | | | Controller side | | | | |
| Connection type | | | Cable | | | | |
| Connection technology | | | Open end | | | | |
| Wire ends | | | Cut off bluntly | | | | |

Tab. 3: Technical data