

# Connecting cables for valves, Sub-D

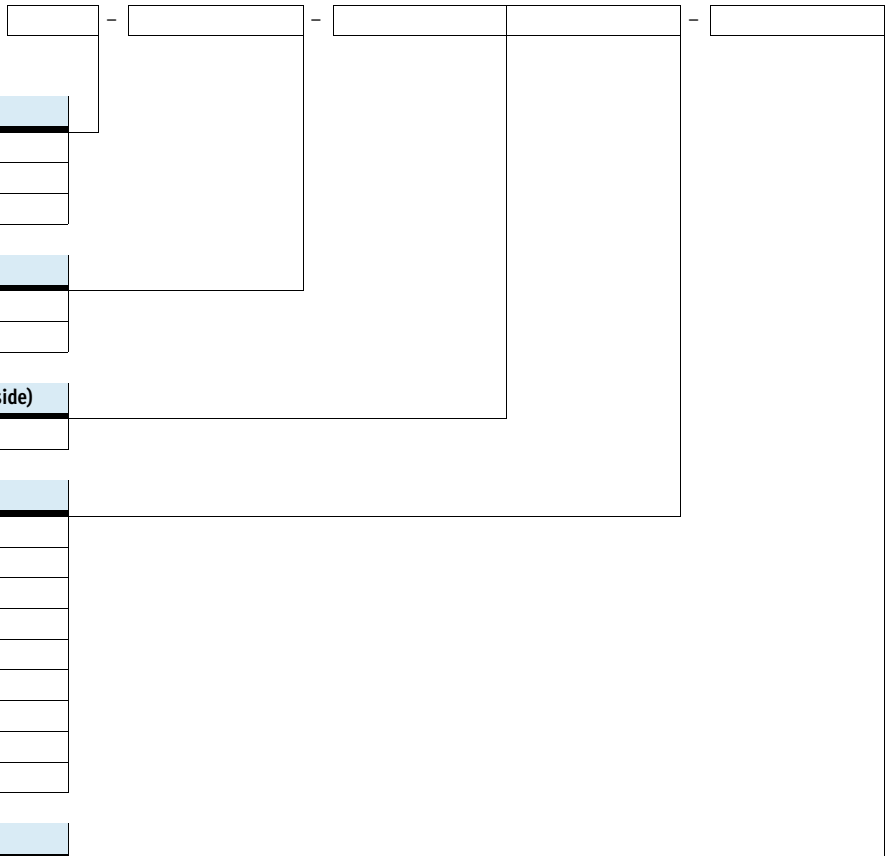
Product range overview

Function	Version	Type code	Connection technology (Electrical connection 2)	Cable properties	Length	→ Page/ Internet
Electrical connection 1: socket	<b>Standard fastening Sub-D</b>					
	9-pin	KMP6	Open cable end	Standard	2.5 m 5 m 10 m	8
	15-pin	KMP6	Open cable end	Standard	2.5 m 5 m 10 m	11
	25-pin	NEBV-S1 NEBV-C-S1 KMP6	Open cable end	Standard	2.5 m 5 m 10 m	14
	26-pin	KMP6	Open cable end	Standard	2.5 m 5 m 10 m	20
	44-pin	NEBV-S1 NEBV-C-S1 NEBV-C-S7	Open cable end	Standard	2 m 5 m 10 m	23
	<b>Cover for valve terminal MPA</b>					
	25-pin	VMPA-KMS	Open cable end	–	2.5 m 5 m 10 m	28
	<b>Cover for valve terminal MPA-L</b>					
	25-pin	VMPAL-KM	Open cable end	Standard Suitable for energy chains	2.5 m 5 m 10 m 0.5 ... 30 m	31
	44-pin	VMPAL-KM	Open cable end	Standard	2.5 m 5 m 10 m 0.5 ... 30 m	33
	<b>Cover for valve terminal VTSA/VTSA-F</b>					
	37-pin	NEBV-S1W37	Open cable end	Standard Suitable for energy chains	2.5 m 5 m 10 m	35
	<b>Cover for valve terminal CPV</b>					
	9-pin	KMP3-9P KMP4-9P	Open cable end	Standard Suitable for energy chains	5 m 10 m 1 ... 99 m	39
	25-pin	KMP3-25P KMP4-25P	Open cable end	Standard Suitable for energy chains	5 m 10 m 1 ... 99 m	42
	<b>Cover for multi-pin plug distributor MPV</b>					
	15-pin	KMPV-SUB-D	Open cable end	–	5 m 10 m	46



# Connecting cables for valves, Sub-D

Type code



Cable length	
2.5	2.5 m
5	5 m
10	10 m

Cable identification	
-	With label holder
N	Without label holder

Connection technology on the right (controller side)	
LE	Open end

Number of pins/wires on the right	
10	10-pin
15	15-pin
25	25-pin
26	26-pin
27	27-pin
36	36-pin
37	37-pin
39	39-pin
44	44-pin

Degree of protection, electrical system	
-	Standard
S6	IP40
S9	IP65/IP67
S10	IP65/IP67/IP69K

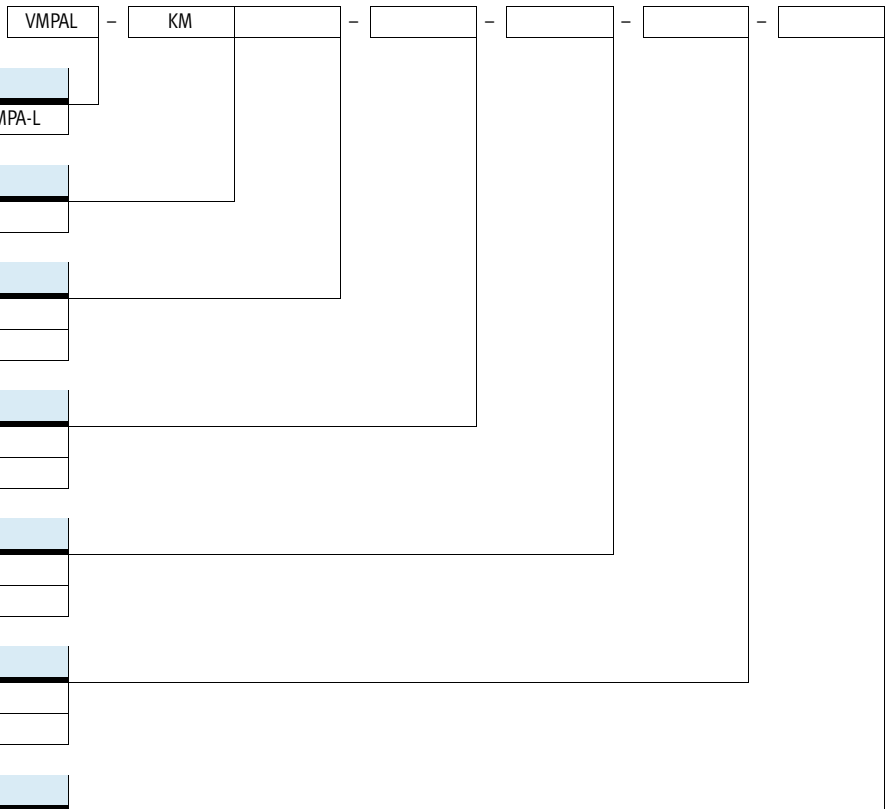
# Connecting cables for valves, Sub-D

Type code

		VMPA	-	KMS	-		-		-		-	
<b>Function</b>												
VMPA	Connecting cable for valve terminal MPA-S											
<b>Usage</b>												
KMS	Cable for multi-pin plug connection											
<b>Material of cable sheath</b>												
1	PVC											
2	PUR											
<b>Electrical connection 2, number of pins/wires</b>												
8	10-pin											
24	25-pin											
<b>Cable length</b>												
2.5	2.5 m											
5	5 m											
10	10 m											
<b>Material of cable sheath</b>												
-	PVC											
PUR	PUR											

# Connecting cables for valves, Sub-D

Type code



**Function**

VMPAL	Connecting cable for valve terminal MPA-L
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**Usage**

KM	Cable for multi-pin plug connection
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**Cable property**

-	Standard
SK	Suitable for energy chains

**Cable outlet**

V	Front
S	Side

**Electrical connection 1, number of pins/wires**

SD25	25-pin
SD44	44-pin

**Degree of protection, electrical system**

-	Standard
IP67	IP67

**Cable length**

2.5	2.5 m
5	5 m
10	10 m
-	0.5 ... 30 m

# Connecting cables for valves, Sub-D

Type code

		K	MP		-		-		-		-	
<b>Function</b>												
K	Connecting cable											
<b>Connection technology on the left (field device side)</b>												
MP	Sub-D socket											
<b>Mounting</b>												
3	Cover for valve terminal CPV, nominal cross section of conductor 0.34 mm <sup>2</sup>											
4	Cover for valve terminal CPV, nominal cross section of conductor 0.25 mm <sup>2</sup>											
6	Standard fastening: Sub-D											
<b>Number of pins/wires on the left</b>												
9P	9-pin											
15P	15-pin											
25P	25-pin											
26P	26-pin											
<b>Number of pins/wires on the right</b>												
-	Same number as number of pins/wires on the left											
8	9-pin											
08	10-pin											
12	15-pin											
16	18-pin with KMP3 20-pin with KMP6											
20	25-pin											
22	24-pin											
<b>Cable length</b>												
2.5	2.5 m											
5	5 m											
10	10 m											
X	1 ... 99 m											
<b>Material of cable sheath</b>												
-	PVC											
PVC	PVC											
PUR	TPE-U(PUR)											

# Connecting cables for valves, Sub-D

Type code

K MPV - SUB - D - 15 -

**Function**

K	Connecting cable
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**Usage**

MPV	For multi-pin plug distributor
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**Connection technology on the left (field device side)**

SUB	Sub-D
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**Connection technology on the left, connection type**

D	Socket
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**Number of pins/wires on the left**

15	15-pin
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**Cable length**

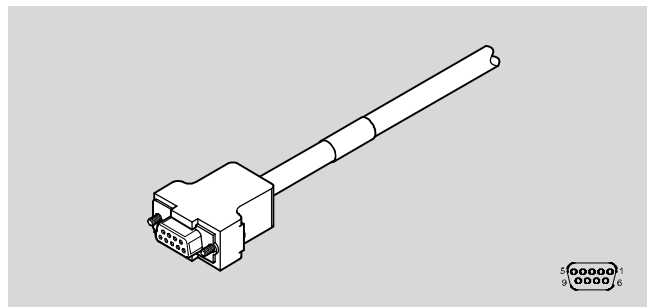
5	5 m
10	10 m

# Connecting cables for valves, standard mounting via Sub-D, 9-pin

Technical data

## Connecting cable KMP6

- Connecting cable for multi-pin plug connection
- Pre-assembled at one end
- Straight socket
- Cable lengths 2.5 m, 5 m or 10 m
- 9 wires
- Sub-D, 9-pin



General technical data	
Based on standard	DIN 41652
Cable designation	Without label holder
Contact durability	50

Technical data – Electrical connection 1	
Function	Field device side
Connection type	Socket
Cable outlet	Straight
Design	Angular
Connection technology	Sub-D
Number of pins/wires	9
Assigned pins/wires	9
Type of mounting	2x screw 4-40 UNC

Technical data – Electrical connection 2	
Function	Controller side
Connection type	Cable
Connection technology	Open end
Number of pins/wires	9
Assigned pins/wires	9
Wire ends	Cut off bluntly

Technical data – Electrical components		
Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	2.8
Surge resistance	[kV]	1
Contamination level		2



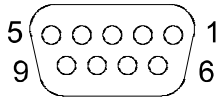
# Connecting cables for valves, standard mounting via Sub-D, 9-pin

Technical data

Technical data – Cable		
Cable diameter	[mm]	7.6
Cable diameter tolerance	[mm]	±0.25
Cable characteristic		Standard
Cable test conditions		Test conditions on request
Bending radius, fixed cable installation	[mm]	≥76
Bending radius, flexible cable installation	[mm]	≥114
Cable composition	[mm <sup>2</sup> ]	8x0.34 + 1x0.5
Conductor nominal cross section	[mm <sup>2</sup> ]	0.34
	[mm <sup>2</sup> ]	0.5

Materials	
Housing	PBT-reinforced
Housing colour	Grey
Screw-type lock	Nickel-plated brass
Pin contacts	Gold-plated copper alloy
Cable sheath	PVC
Cable sheath colour	Grey
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature	[°C]	-25 ... +70
Ambient temperature with flexible cable installation	[°C]	-5 ... +70
Storage temperature	[°C]	-25 ... +75
Degree of protection		IP40
Note on degree of protection		In assembled state

Circuitry (socket view)		
	Pin	Wire colour <sup>1)</sup>
	1	WH
	2	BN
	3	GN
	4	YE
	5	GY
	6	PK
	7	BU
	8	RD
	9	BK
		Conductor nominal cross section 0.5 mm <sup>2</sup>

1) To IEC 757

# Connecting cables for valves, standard mounting via Sub-D, 9-pin

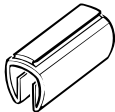
Technical data

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

1 Sub-D socket, 9-pin

Type	B1	D1	H1	L1	L2
KMP6-09P-8-2,5	16	7.6	31.2	34.5	2500
KMP6-09P-8-5					5000
KMP6-09P-8-10					10000

Ordering data					
Electrical connection	Cable length [m]	Weight [g]	Part no.	Type	
Sub-D socket, 9-pin	2.5	248	<b>531184</b>	<b>KMP6-09P-8-2,5</b>	
	5	454	<b>531185</b>	<b>KMP6-09P-8-5</b>	
	10	864	<b>531186</b>	<b>KMP6-09P-8-10</b>	

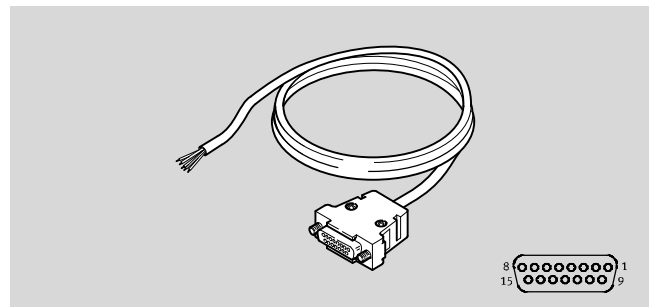
Ordering data – Accessories					
		Part no.	Type		
	Inscription labels for placing on a cable <ul style="list-style-type: none"> <li>• Suitable for cable diameters 5 ... 8 mm</li> <li>• Labelling area 5x20 mm</li> </ul>	<b>33361</b>	<b>KM-BZ</b>		

# Connecting cables for valves, standard mounting via Sub-D, 15-pin

Technical data

## Connecting cable KMP6

- Connecting cable for multi-pin plug connection
- Pre-assembled at one end
- Straight socket
- Cable lengths 2.5 m, 5 m or 10 m
- 15 wires
- Sub-D, 15-pin



General technical data	
Conforms to standard	DIN 41652
Cable designation	Without inscription label holder
Contact durability	50

Technical data – Electrical connection 1	
Function	Field device side
Connection type	Socket
Cable outlet	Straight
Design	Angular
Connection technology	Sub-D
Number of pins/wires	15
Assigned pins/wires	15
Type of mounting	2x screw 4-40 UNC

Technical data – Electrical connection 2	
Function	Controller side
Connection type	Cable
Connection technology	Open end
Number of pins/wires	15
Assigned pins/wires	15
Wire ends	Cut off bluntly

Technical data – Electrical components		
Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	2.8
Surge resistance	[kV]	1
Contamination level		2

# Connecting cables for valves, standard mounting via Sub-D, 15-pin

Technical data

Technical data – Cable		
Cable diameter	[mm]	8.6
Cable diameter tolerance	[mm]	±0.25
Cable characteristic		Standard
Cable test conditions		Test conditions on request
Bending radius, fixed cable installation	[mm]	≥86
Bending radius, flexible cable installation	[mm]	≥129
Cable composition	[mm <sup>2</sup> ]	15x0.34
Conductor nominal cross section	[mm <sup>2</sup> ]	0.34

Materials	
Housing	PBT-reinforced
Housing colour	Grey
Screw-type lock	Nickel-plated brass
Pin contacts	Gold-plated copper alloy
Cable sheath	PVC
Cable sheath colour	Grey
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature	[°C]	-25 ... +70
Ambient temperature with flexible cable installation	[°C]	-5 ... +70
Storage temperature	[°C]	-20 ... +75
Degree of protection		IP40
Note on degree of protection		In assembled state

Circuitry (socket view)		
	Pin	Wire colour <sup>1)</sup>
	1	WH
	2	BN
	3	GN
	4	YE
	5	GY
	6	PK
	7	BU
	8	RD
	9	BK
	10	VT
	11	GY PK
	12	RD BU
	13	GN WH
	14	BN GN
	15	YE WH

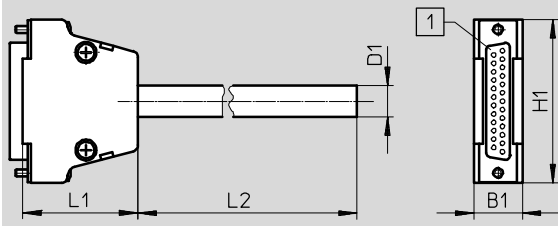
1) To IEC 757

# Connecting cables for valves, standard mounting via Sub-D, 15-pin

Technical data

**Dimensions**

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



1 Sub-D socket, 15-pin

Type	B1	D1	H1	L1	L2
KMP6-15P-12-2,5	16	8.5	40	34.5	2500
KMP6-15P-12-5					5000
KMP6-15P-12-10					10000

**Ordering data**

Electrical connection	Cable length [m]	Weight [g]	Part no.	Type
Socket Sub-D, 15-pin	2.5	293	<b>527543</b>	<b>KMP6-15P-12-2,5</b>
	5	585	<b>527544</b>	<b>KMP6-15P-12-5</b>
	10	1134	<b>527545</b>	<b>KMP6-15P-12-10</b>

# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

**Connecting cable**

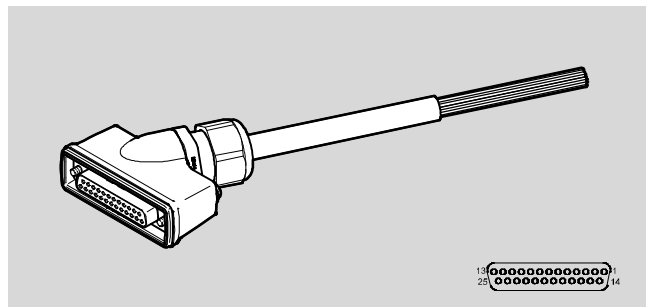
**NEBV-S1G25**

**NEBV-S1WA25**

**NEBV-C-S1WA25**

**KMP6**

- Connecting cable for multi-pin plug connection
- Pre-assembled at one end
- Straight or angled socket
- Cable lengths 2.5 m, 5 m or 10 m
- 15, 20 or 25 wires
- Sub-D, 25-pin



General technical data					
Type	KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Based on standard	–	–	DIN 47100	DIN 47100	DIN 47100
Conforms to standard	DIN 41652	–	–	–	–
Cable designation	Without label holder	–	Without label holder	Without label holder	Without label holder
Special characteristics	–	–	–	–	Easy to clean
Contact durability	50	–	50	50	50

Technical data – Electrical connection 1					
Type	KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Function	Field device side	–	Field device side	Field device side	Field device side
Connection type	Socket	Socket	Socket	Socket	Socket
Cable outlet	Straight	–	Straight	Angled	Angled
Design	Angular	–	Angular	Angular	Angular
Connection technology	Sub-D	Sub-D	Sub-D	Sub-D	Sub-D
Number of pins/wires	25	25	25	25	25
Assigned pins/wires	15, 25	–	25	25	25
Type of mounting	2x screw 4-40 UNC	2x screw 4-40 UNC	2x screw 4-40 UNC	2x screw 4-40 UNC	2x screw 4-40 UNC
	–	–	–	–	With seal

Technical data – Electrical connection 2					
Type	KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Function	Controller side	Controller side	Controller side	Controller side	Controller side
Connection type	Cable	Cable	Cable	Cable	Cable
Connection technology	Open end	Open end	Open end	Open end	Open end
Number of pins/wires	15, 25	15, 25	25	25	25
Assigned pins/wires	15, 25	–	25	25	–
Wire ends	Cut off bluntly	–	Cut off bluntly	Cut off bluntly	–

Technical data – Electrical components					
Type	KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Nominal operating voltage [V DC]	24	24	–	–	–
Operating voltage range [V DC]	0 ... 30	–	0 ... 30	0 ... 30	0 ... 30
Current rating at 40 °C [A]	2.8	–	2.6	2.6	2.6
Surge resistance [kV]	1	–	2.4	2.4	–
Reverse polarity protection	–	–	Yes	Yes	–
Protective earth connection	–	–	–	–	Not available
Contamination level	2	–	2	3	3

# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

Technical data – Cable					
Type		KMP6-25P-12	NEBV-S1G25 ... LE15	KMP6-25P-20	NEBV-S1G25 ... LE25
Cable diameter	[mm]	8.6	9	10.3	10.5
Cable diameter tolerance	[mm]	±0.25	–	±0.25	–
Cable characteristic		Standard	Standard	Standard	Standard
Cable test conditions		Test conditions on request	–	Test conditions on request	–
Minimum cable bending radius	[mm]	–	90	–	105
Bending radius, fixed cable installation	[mm]	≥86	–	≥103	–
Bending radius, flexible cable installation	[mm]	≥129	–	≥103	–
Cable composition	[mm <sup>2</sup> ]	15x0.34	15x0.34	20x0.25 + 5x0.34	20x0.25 + 5x0.34
Conductor nominal cross section	[mm <sup>2</sup> ]	0.34	–	0.25	–
	[mm <sup>2</sup> ]	–	–	0.34	–

Technical data – Cable				
Type		NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Cable diameter	[mm]	10.2	10.2	10.2
Cable connector		–	M20x1.5	–
Cable diameter tolerance	[mm]	±0.25	±0.25	±0.25
Cable characteristic		Standard	Standard	Standard
Cable test conditions		Test conditions on request	Test conditions on request	–
Minimum cable bending radius	[mm]	–	–	–
Bending radius, fixed cable installation	[mm]	≥42	≥42	≥41
Bending radius, flexible cable installation	[mm]	≥126	≥126	≥122
Cable composition	[mm <sup>2</sup> ]	25x0.34	25x0.34	25x0.34
Conductor nominal cross section	[mm <sup>2</sup> ]	0.34	0.34	0.34

Materials						
Type		KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Housing		PBT-reinforced	PBT	PC-reinforced	PA66-GF30	PA-reinforced
Housing colour		Grey	–	Black	Black	Grey
Union nut		–	PA	–	–	–
Screw-type lock		Nickel-plated brass	–	–	–	–
Screws		–	–	Nickel-plated brass	Steel	Stainless steel
Seals		–	TPE-O	–	NBR	EPDM
Pin contacts		Gold-plated copper alloy	–	Gold-plated bronze	Gold-plated bronze	Gold-plated bronze
Cable sheath		PVC	PVC	PVC	PVC	PVC
Cable sheath colour		Grey	–	Grey	Grey	Grey
Insulating sheath		–	–	PVC	PVC	PVC
Note on materials		RoHS-compliant	RoHS-compliant	RoHS-compliant	RoHS-compliant	RoHS-compliant

# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

Operating and environmental conditions					
Type	KMP6	NEBV-S1G25	NEBV-S1G25 ... S6	NEBV-S1WA25	NEBV-C-S1WA25HS
Ambient temperature [°C]	-25 ... +70	-	-35 ... +80	-35 ... +80	-5 ... +60
Ambient temperature with flexible cable installation [°C]	-5 ... +70	-5 ... +50	-5 ... +80	-5 ... +80	-5 ... +60
Storage temperature [°C]	-25 ... +75	-	-25 ... +75	-35 ... +80	-20 ... +40
Corrosion resistance class CRC <sup>1)</sup>	-	2	0	2	3
Degree of protection	IP40	IP65	IP40	IP65	IP65
	-	IP67	-	IP67	IP67
	-	-	-	-	IP69K
Note on degree of protection	In assembled state	In assembled state	In assembled state	In assembled state	In assembled state

- 1) Corrosion resistance class CRC 0 to Festo standard FN 940070  
 No corrosion stress. Applies to small, optically irrelevant standard parts such as threaded pins, circlips and clamping sleeves which are usually only available in a phosphated or burnished version (and possibly oiled) as well as to ball bearings (for components < CRC 3) and plain bearings.  
 Corrosion resistance class CRC 2 to Festo standard FN 940070  
 Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.  
 Corrosion resistance class CRC 3 to Festo standard FN 940070  
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.

Circuitry (socket view)					
	Open end, 15-wire		Open end, 25-wire		
	Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>	
				KMP6	NEBV
	1	WH	1	WH	WH
	2	BN	2	GN	BN
	3	GN	3	YE	GN
	4	YE	4	GY	YE
	5	GY	5	PK	GY
	6	PK	6	BU	PK
	7	BU	7	RD	BU
	8	RD	8	VT	RD
	9	BK	9	GY PK	BK
	10	VT	10	RD BU	VT
	11	GY PK	11	GN WH	GY PK
	12	RD BU	12	BN GN	RD BU
	13	-	13	YE WH	GN WH
	14	-	14	BN YE	BN GN
	15	-	15	GY WH	YE WH
	16	-	16	BN GY	BN YE
	17	-	17	WH PK	GY WH
	18	-	18	BN PK	BN GY
	19	-	19	BU WH	WH PK
	20	-	20	BN BU	BN PK
	21	-	21	RD WH <sup>2)</sup>	BU WH
	22	-	22	BN RD <sup>2)</sup>	BN BU
	23	GN WH	23	BK WH <sup>2)</sup>	RD WH
	24	BN GN	24	BN <sup>2)</sup>	BN RD
	25	YE WH	25	BK <sup>2)</sup>	BK WH

1) To IEC 757  
 2) Conductor nominal cross section 0.5 mm<sup>2</sup>

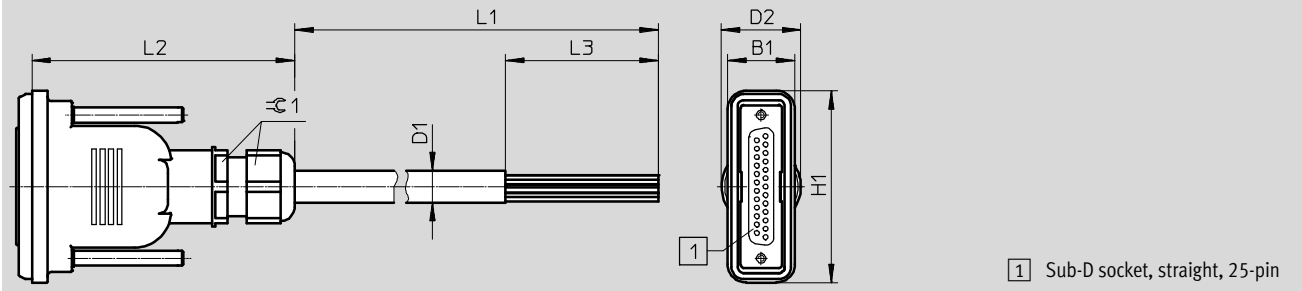


# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

## Dimensions

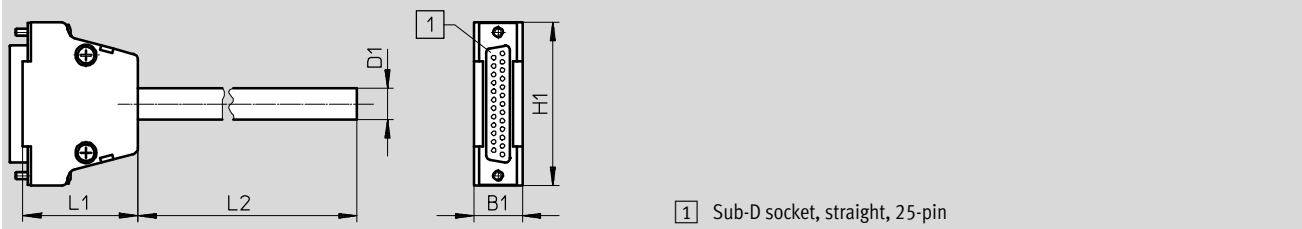
Download CAD data → [www.festo.com](http://www.festo.com)



Type	B1	D1 ∅	D2 ∅	H1	L1	L2	L3	≈C1
NEBV-S1G25-K-2,5-N-LE15	22	9	26	62.8	2500	86±0.5	60	24
NEBV-S1G25-K-5-N-LE15					5000			
NEBV-S1G25-K-10-N-LE15					10000			
NEBV-S1G25-K-2.5-N-LE25	22	10.5	26	62.8	2500	86±0.5	50	24
NEBV-S1G25-K-5-N-LE25					5000			
NEBV-S1G25-K-10-N-LE25					10000			

## Dimensions

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

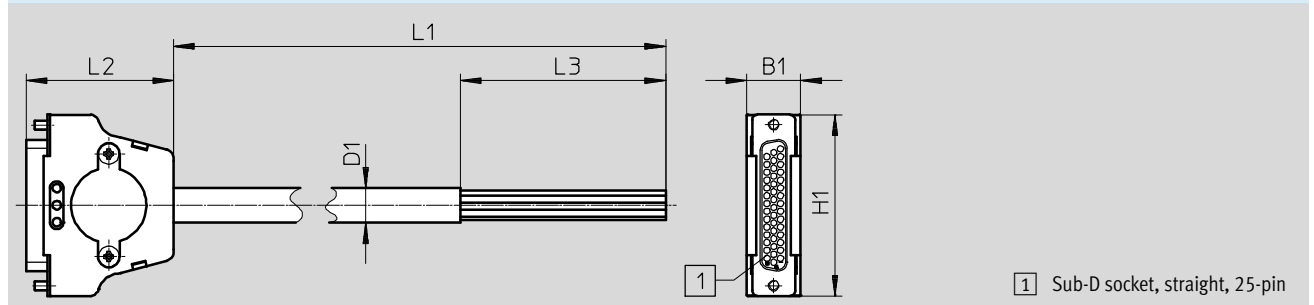


Type	B1	D1 ∅	H1	L1	L2
KMP6-25P-12-2,5	16	8.5	53.4	2500	37.7
KMP6-25P-12-5				5000	
KMP6-25P-12-10				10000	
KMP6-25P-20-2,5	16	10.3	53.4	2500	37.7
KMP6-25P-20-5				5000	
KMP6-25P-20-10				10000	

# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

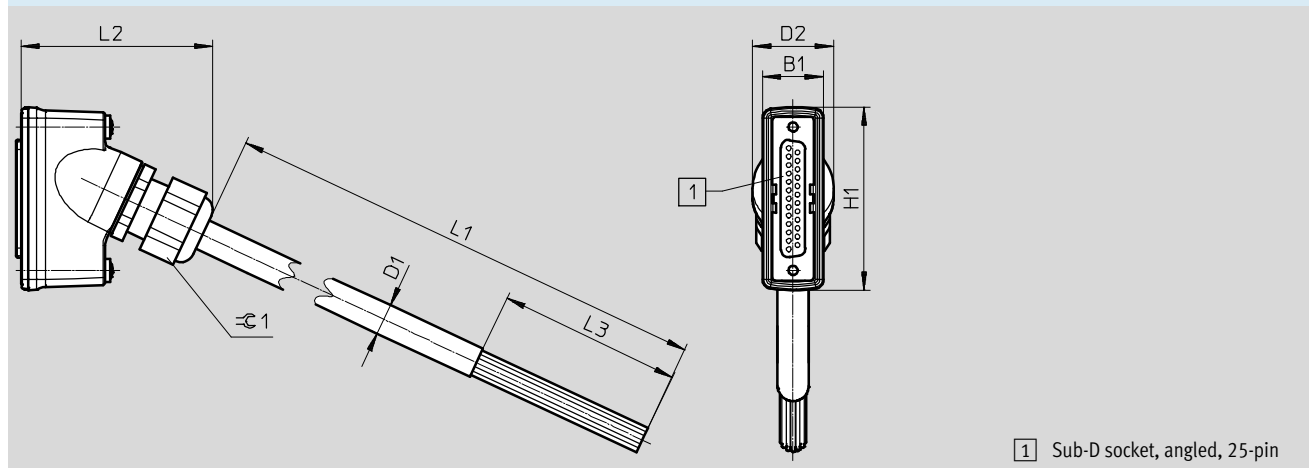
Dimensions Download CAD data → [www.festo.com](http://www.festo.com)



1 Sub-D socket, straight, 25-pin

Type	B1	D1 Ø	H1	L1	L2	L3
NEBV-S1G25-K-2.5-N-LE25-S6	15.8	10.2	53	2500	43.1	60
NEBV-S1G25-K-5-N-LE25-S6				5000		
NEBV-S1G25-K-10-N-LE25-S6				10000		

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

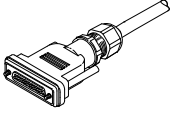
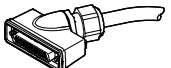


1 Sub-D socket, angled, 25-pin

Type	B1	D1 Ø	D2 Ø	H1	L1	L2	L3	∠C1
NEBV-S1WA25-K-2.5-N-LE25-S9	20	10.2	26.5	60	2500	60	60	24
NEBV-S1WA25-K-5-N-LE25-S9					5000			
NEBV-S1WA25-K-10-N-LE25-S9					10000			
NEBV-C-S1WA25HS-K-2.5-N-LE25-S10	20	10.2	26.5	60	2500	60	60	24
NEBV-C-S1WA25HS-K-5-N-LE25-S10					5000			
NEBV-C-S1WA25HS-K-10-N-LE25-S10					10000			

# Connecting cables for valves, standard mounting via Sub-D, 25-pin

Technical data

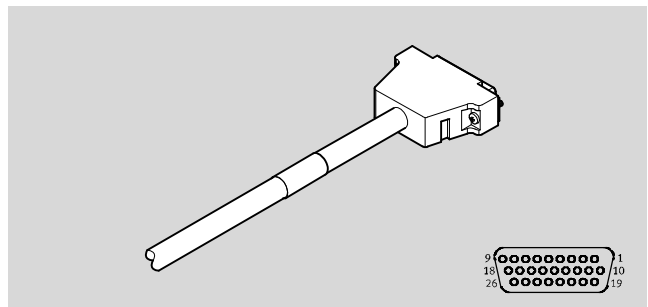
Ordering data							
		Cable composition [mm <sup>2</sup> ]	Degree of protection	Cable length [m]	Weight [g]	Part no.	Type
<b>Straight socket</b>							
	Open end, 15-wire	15x 0.34	IP40	2.5	329	<b>530049</b>	<b>KMP6-25P-12-2,5</b>
				5	590	<b>530050</b>	<b>KMP6-25P-12-5</b>
				10	1140	<b>530051</b>	<b>KMP6-25P-12-10</b>
			IP65, IP67	2.5	370	<b>538222</b>	<b>NEBV-S1G25-K-2.5-N-LE15</b>
				5	670	<b>538223</b>	<b>NEBV-S1G25-K-5-N-LE15</b>
				10	1270	<b>538224</b>	<b>NEBV-S1G25-K-10-N-LE15</b>
	Open end, 25-wire	25x 0.34	IP40	2.5	490	<b>575417</b>	<b>NEBV-S1G25-K-2.5-N-LE25-S6</b>
				5	930	<b>575418</b>	<b>NEBV-S1G25-K-5-N-LE25-S6</b>
				10	1820	<b>575419</b>	<b>NEBV-S1G25-K-10-N-LE25-S6</b>
		20x 0.25 5x 0.34	IP40	2.5	432	<b>530046</b>	<b>KMP6-25P-20-2,5</b>
				5	814	<b>530047</b>	<b>KMP6-25P-20-5</b>
				10	1600	<b>530048</b>	<b>KMP6-25P-20-10</b>
		20x 0.25 5x 0.34	IP65, IP67	2.5	490	<b>538225</b>	<b>NEBV-S1G25-K-2.5-N-LE25</b>
				5	910	<b>538226</b>	<b>NEBV-S1G25-K-5-N-LE25</b>
				10	1750	<b>538227</b>	<b>NEBV-S1G25-K-10-N-LE25</b>
<b>Angled socket</b>							
	Open end, 25-wire	25x 0.34	IP65, IP67	2.5	510	<b>575423</b>	<b>NEBV-S1WA25-K-2.5-N-LE25-S9</b>
				5	950	<b>575424</b>	<b>NEBV-S1WA25-K-5-N-LE25-S9</b>
				10	1850	<b>575425</b>	<b>NEBV-S1WA25-K-10-N-LE25-S9</b>
			IP65, IP67, IP69K	2.5	460	<b>2265131</b>	<b>NEBV-C-S1WA25HS-K-2.5-N-LE25-S10</b>
				5	860	<b>2265132</b>	<b>NEBV-C-S1WA25HS-K-5-N-LE25-S10</b>
				10	1660	<b>2265133</b>	<b>NEBV-C-S1WA25HS-K-10-N-LE25-S10</b>

# Connecting cables for valves, standard mounting via Sub-D, 26-pin

Technical data

## Connecting cable KMP6

- Connecting cable for multi-pin plug connection
- Pre-assembled at one end
- Straight socket
- Cable lengths 2.5 m, 5 m or 10 m
- 20 wires
- Sub-D, 26-pin



General technical data	
Conforms to standard	DIN 41652
Cable designation	Without label holder
Contact durability	50

Technical data – Electrical connection 1	
Function	Field device side
Connection type	Socket
Cable outlet	Straight
Design	Angular
Connection technology	Sub-D
Number of pins/wires	26
Assigned pins/wires	20
Type of mounting	2x screw 4-40 UNC

Technical data – Electrical connection 2	
Function	Controller side
Connection type	Cable
Connection technology	Open end
Number of pins/wires	20
Assigned pins/wires	20
Wire ends	Cut off bluntly

Technical data – Electrical components		
Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	2.5
Surge resistance	[kV]	1
Contamination level		2

Technical data – Cable		
Cable diameter	[mm]	8.8
Cable diameter tolerance	[mm]	±0.25
Cable characteristic		Standard
Cable test conditions		Test conditions on request
Bending radius, fixed cable installation	[mm]	≥88
Bending radius, flexible cable installation	[mm]	≥132
Cable composition	[mm <sup>2</sup> ]	20x0.25
Conductor nominal cross section	[mm <sup>2</sup> ]	0.25

# Connecting cables for valves, standard mounting via Sub-D, 26-pin

Technical data

Materials	
Housing	PBT-reinforced
Housing colour	Grey
Screw-type lock	Nickel-plated brass
Pin contacts	Gold-plated copper alloy
Cable sheath	PVC
Cable sheath colour	Grey
Note on materials	RoHS-compliant

Operating and environmental conditions		
Ambient temperature	[°C]	-25 ... +70
Ambient temperature with flexible cable installation	[°C]	-5 ... +70
Storage temperature	[°C]	-20 ... +75
Degree of protection		IP40
Note on degree of protection		In assembled state

Circuitry (socket view)		Pin	Wire colour <sup>1)</sup>
	1	WH	
	2	BN	
	3	GN	
	4	YE	
	5	GY	
	6	PK	
	7	BU	
	8	RD	
	9	BK	
	10	VT	
	11	GY PK	
	12	RD BU	
	13	GN WH	
	14	BN GN	
	15	YE WH	
	16	BN YE	
	17	-	
	18	-	
	19	-	
	20	-	
	21	-	
	22	-	
	23	GY WH	
	24	BN GY	
	25	WH PK	
	26	BN PK	

1) To IEC 757

# Connecting cables for valves, standard mounting via Sub-D, 26-pin

Technical data

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

1 Sub-D socket, 26-pin

Type	B1	D1	H1	L1	L2
KMP6-26P-16-2,5	16	8.6	40	34.5	2500
KMP6-26P-16-5					5000
KMP6-26P-16-10					10000

Ordering data					
Electrical connection	Cable length [m]	Weight [g]	Part no.	Type	
Sub-D socket, 26-pin	2.5	280	<b>527546</b>	<b>KMP6-26P-16-2,5</b>	
	5	570	<b>527547</b>	<b>KMP6-26P-16-5</b>	
	10	1145	<b>527548</b>	<b>KMP6-26P-16-10</b>	

# Connecting cables for valves, standard mounting via Sub-D, 44-pin

Technical data

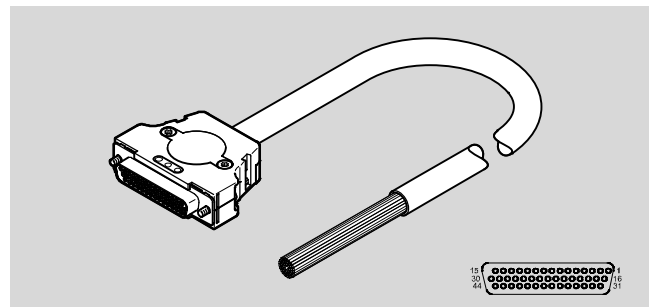
**Connecting cable**

**NEBV-S1G44**

**NEBV-S1WA44**

**NEBV-C-S7WA44HS**

- Connecting cable for multi-pin plug connection
- Pre-assembled at one end
- Straight or angled socket
- Cable lengths 2.5 m, 5 m or 10 m
- 36, 39 or 44 wires
- Sub-D, 44-pin



General technical data				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Based on standard	–	DIN 47100	DIN 47100	DIN 47100
Cable designation	–	Without label holder	Without label holder	Without label holder
Special characteristics	–	–	–	Easy to clean
Contact durability	–	50	50	50

Technical data – Electrical connection 1				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Function	Field device side	Field device side	Field device side	Field device side
Connection type	Socket	Socket	Socket	Socket
Cable outlet	–	Straight	Angled	Angled
Design	–	Angular	Angular	Angular
Connection technology	Sub-D	Sub-D	Sub-D	Sub-D
Number of pins/wires	44	44	44	44
Assigned pins/wires	–	44	44	36
Type of mounting	2x screw 4-40 UNC	2x screw 4-40 UNC	2x screw 4-40 UNC	2x screw 4-40 UNC
	–	–	–	With seal

Technical data – Electrical connection 2				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Function	–	Controller side	Controller side	Controller side
Connection type	–	Cable	Cable	Cable
Connection technology	–	Open end	Open end	Open end
Number of pins/wires	–	44	44	36
Assigned pins/wires	–	44	44	–
Wire ends	–	Cut off bluntly	Cut off bluntly	–

Technical data – Electrical components				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Operating voltage range [V DC]	≤30	0 ... 30	0 ... 30	0 ... 30
Current rating at 40°C [A]	0.86	0.86	0.86	0.86
Surge resistance [kV]	–	2.4	2.4	–
Reverse polarity protection	–	Yes	Yes	–
Protective earth connection	–	–	–	Not available
Contamination level	–	2	3	3

# Connecting cables for valves, standard mounting via Sub-D, 44-pin

Technical data

Technical data – Cable				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Cable diameter [mm]	9.6	10.2	10.2	9.6
Cable connector	–	–	M20x1.5	–
Cable diameter tolerance [mm]	±0.5	±0.3	±0.3	±0.2
Cable characteristic	Standard	Standard	Standard	Standard
Cable test conditions	–	Test conditions on request	Test conditions on request	–
Minimum cable bending radius [mm]	95	–	–	–
Bending radius, fixed cable installation [mm]	–	≥42	≥42	≥39
Bending radius, flexible cable installation [mm]	–	≥126	≥126	≥115
Cable composition [mm <sup>2</sup> ]	40x0.14	44x0.14	44x0.14	36x0.25
Connection cross section [mm <sup>2</sup> ]	–	–	–	0.25
Conductor nominal cross section [mm <sup>2</sup> ]	–	0.14	0.14	–

Materials				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Housing	PBT	PC-reinforced	PA66-GF30	PA-reinforced
Housing colour	–	Black	Black	Grey
Screws	–	Nickel-plated brass	Steel	Stainless steel
Seals	–	–	NBR	EPDM
Pin contacts	Gold-plated bronze	Gold-plated bronze	Gold-plated bronze	Gold-plated bronze
Cable sheath	PVC	PVC	PVC	PVC
Cable sheath colour	–	Grey	Grey	Grey
Insulating sheath	–	PVC	PVC	PVC
Note on materials	RoHS-compliant	RoHS-compliant	RoHS-compliant	RoHS-compliant

Operating and environmental conditions				
Type	NEBV-S1G44	NEBV-S1G44 ... S6	NEBV-S1WA44	NEBV-C-S7WA44HS
Ambient temperature [°C]	–5 ... +60	–35 ... +80	–35 ... +80	–5 ... +60
Ambient temperature with flexible cable installation [°C]	–	–5 ... +80	–5 ... +80	–5 ... +60
Storage temperature [°C]	–	–25 ... +75	–35 ... +80	–20 ... +40
Corrosion resistance class CRC <sup>1)</sup>	2	0	2	3
Degree of protection	IP65	IP40	IP65	IP65
	IP67	–	IP67	IP67
	–	–	–	IP69K
Note on degree of protection	In assembled state	In assembled state	In assembled state	In assembled state

1) Corrosion resistance class CRC 0 to Festo standard FN 940070  
 No corrosion stress. Applies to small, optically irrelevant standard parts such as threaded pins, circlips and clamping sleeves which are usually only available in a phosphated or burnished version (and possibly oiled) as well as to ball bearings (for components < CRC 3) and plain bearings.  
 Corrosion resistance class CRC 2 to Festo standard FN 940070  
 Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.  
 Corrosion resistance class CRC 3 to Festo standard FN 940070  
 High corrosion stress. Outdoor exposure under moderate corrosive conditions. External visible parts with primarily functional requirements for the surface and which are in direct contact with a normal industrial environment.



# Connecting cables for valves, standard mounting via Sub-D, 44-pin

Technical data

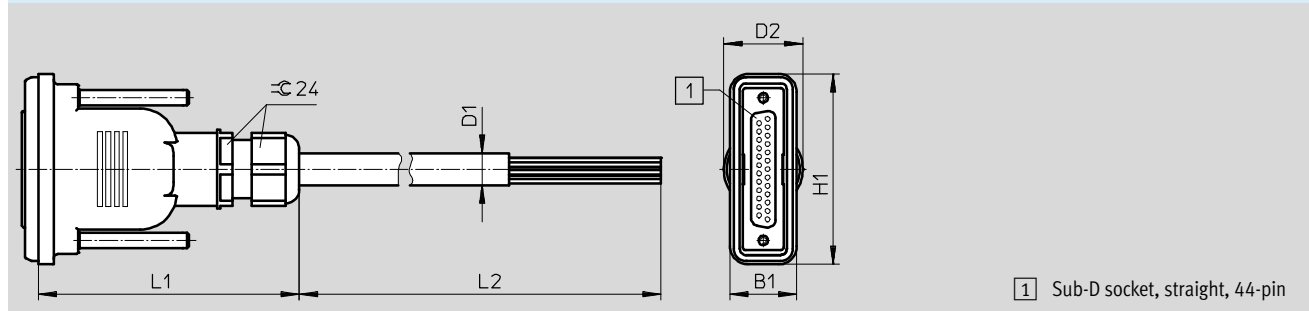
Circuitry (socket view)		Open end, 36-wire		Open end, 39-wire		Open end, 44-wire	
		Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>
	1	WH	1	WH	1	WH	
	2	BN	2	BN	2	BN	
	3	GN	3	GN	3	GN	
	4	YE	4	YE	4	YE	
	5	GY	5	GY	5	GY	
	6	PK	6	PK	6	PK	
	7	BU	7	BU	7	BU	
	8	RD	8	RD	8	RD	
	9	BK	9	BK	9	BK	
	10	VT	10	VT	10	VT	
	11	GY PK	11	GY PK	11	GY PK	
	12	RD BU	12	RD BU	12	RD BU	
	13	GN WH	13	GN WH	13	GN WH	
	14	BN GN	14	BN GN	14	BN GN	
	15	YE WH	15	YE WH	15	YE WH	
	16	BN YE	16	BN YE	16	BN YE	
	17	GY WH	17	GY WH	17	GY WH	
	18	BN GY	18	BN GY	18	BN GY	
	19	WH PK	19	WH PK	19	WH PK	
	20	BN PK	20	BN PK	20	BN PK	
	21	BU WH	21	BU WH	21	BU WH	
	22	BN BU	22	BN BU	22	BN BU	
	23	RD WH	23	RD WH	23	RD WH	
	24	BN RD	24	BN RD	24	BN RD	
	25	BK WH	25	BK WH	25	BK WH	
	26	BK BN	26	BK BN	26	BK BN	
	27	GN GY	27	GN GY	27	GN GY	
	28	YE GY	28	YE GY	28	YE GY	
	29	GN PK	29	GN PK	29	GN PK	
	30	YE PK	30	YE PK	30	YE PK	
	31	GN BU	31	GN BU	31	GN BU	
	32	YE BU	32	YE BU	32	YE BU	
	33	-	33	RD GN	33	RD GN	
	34	-	34	RD YE	34	RD YE	
	35	-	35	BK GN	35	BK GN	
	36	-	36	-	36	BK YE	
	37	-	37	-	37	BU GY	
	38	-	38	-	38	BU PK	
	39	-	39	-	39	RD GY	
	40	-	40	-	40	RD PK	
	41	RD GN	41	BK YE	41	BK GY	
	42	RD YE	42	BU GY	42	BK PK	
	43	BK GN	43	BU PK	43	BK BU	
	44	BK YE	44	RD GY	44	BK RD	

1) To IEC 757

# Connecting cables for valves, standard mounting via Sub-D, 44-pin

Technical data

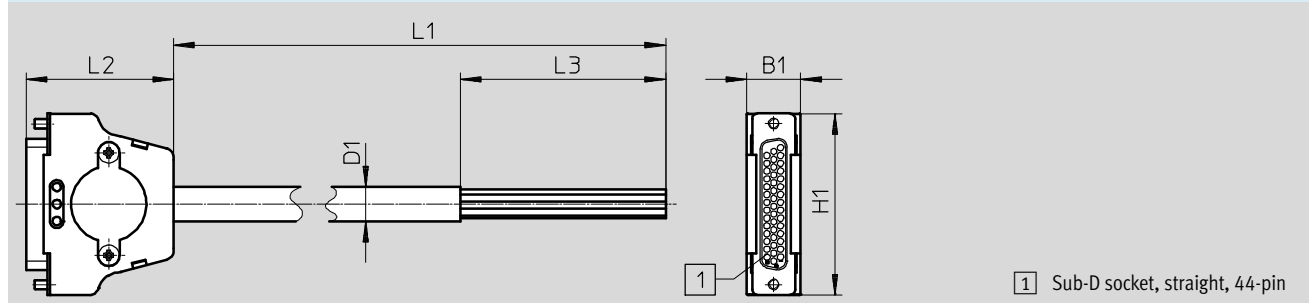
Dimensions Download CAD data → [www.festo.com](http://www.festo.com)



1 Sub-D socket, straight, 44-pin

Type	B1	D1 Ø	D2 Ø	H1	L1	L2
NEBV-S1G44-K-2.5-N-LE39	22	9.6	26	62.8	85±5	2500
NEBV-S1G44-K-5-N-LE39						5000
NEBV-S1G44-K-10-N-LE39						10000

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

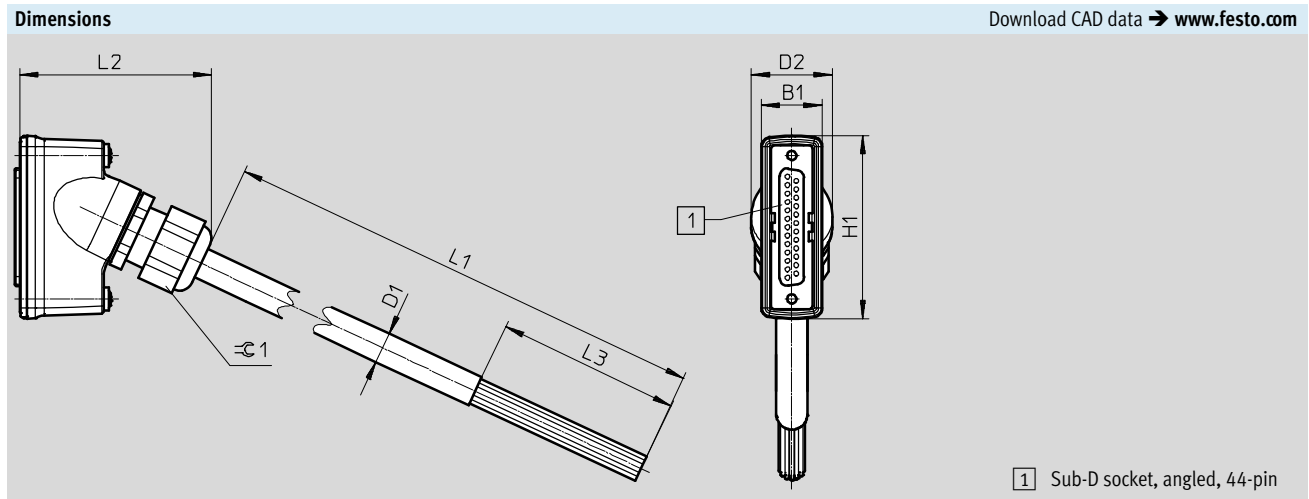


1 Sub-D socket, straight, 44-pin

Type	B1	D1 Ø	H1	L1	L2	L3
NEBV-S1G44-K-2.5-N-LE44-S6	15.8	10.2	53	2500	43.1	60
NEBV-S1G44-K-5-N-LE44-S6				5000		
NEBV-S1G44-K-10-N-LE44-S6				10000		

# Connecting cables for valves, standard mounting via Sub-D, 44-pin

Technical data



Type	B1	D1 Ø	D2 Ø	H1	L1	L2	L3	∅C1
NEBV-C-S7WA44HS-K-2.5-N-LE36-S10	20	9.6	27	60	2500	60	60	-
NEBV-C-S7WA44HS-K-5-N-LE36-S10					5000			
NEBV-C-S7WA44HS-K-10-N-LE36-S10					10000			
NEBV-S1WA44-K-2.5-N-LE44-S9	20	10.2	26.5	60	2500	60	60	24
NEBV-S1WA44-K-5-N-LE44-S9					5000			
NEBV-S1WA44-K-10-N-LE44-S9					10000			

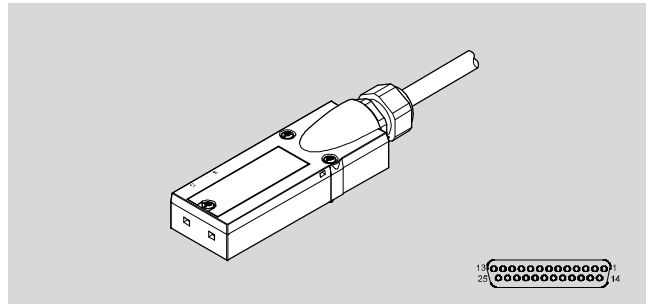
Ordering data							
		Cable composition [mm <sup>2</sup> ]	Degree of protection	Cable length [m]	Weight [g]	Part no.	Type
<b>Straight socket</b>							
	Open end, 39-wire	40x 0.14	IP65, IP67	2.5	389	<b>565289</b>	<b>NEBV-S1G44-K-2.5-N-LE39</b>
				5	737	<b>565290</b>	<b>NEBV-S1G44-K-5-N-LE39</b>
				10	1432	<b>565291</b>	<b>NEBV-S1G44-K-10-N-LE39</b>
	Open end, 44-wire	44x 0.14	IP40	2.5	455	<b>575113</b>	<b>NEBV-S1G44-K-2.5-N-LE44-S6</b>
				5	830	<b>575114</b>	<b>NEBV-S1G44-K-5-N-LE44-S6</b>
				10	1620	<b>575115</b>	<b>NEBV-S1G44-K-10-N-LE44-S6</b>
<b>Angled socket</b>							
	Open end, 36-wire	36x 0.25	IP65, IP67, IP69K	2.5	500	<b>577376</b>	<b>NEBV-C-S7WA44HS-K-2.5-N-LE36-S10</b>
				5	900	<b>577377</b>	<b>NEBV-C-S7WA44HS-K-5-N-LE36-S10</b>
				10	1800	<b>577378</b>	<b>NEBV-C-S7WA44HS-K-10-N-LE36-S10</b>
	Open end, 44-wire	44x 0.14	IP65, IP67	2.5	460	<b>575420</b>	<b>NEBV-S1WA44-K-2.5-N-LE44-S9</b>
				5	860	<b>575421</b>	<b>NEBV-S1WA44-K-5-N-LE44-S9</b>
				10	1660	<b>575422</b>	<b>NEBV-S1WA44-K-10-N-LE44-S9</b>

# Connecting cables for valves, cover for valve terminal MPA-S

Technical data

## Connecting cable VMPA-KMS

- Connecting cable for multi-pin plug connection of valve terminal MPA-S
- Pre-assembled at one end
- Cable lengths 2.5 m, 5 m or 10 m
- 10 or 25 wires
- Sub-D, 25-pin



Technical data – Electrical connection 1	
Electrical connection	Cable with plug connector

Technical data – Cables					
Type code		VMPA-KMS1-8-...	VMPA-KMS1-25-...	VMPA-KMS2-8-...	VMPA-KMS2-25-...
Cable diameter	[mm]	6.9	11.4	7.7	10.8
Minimum cable bending radius	[mm]	82.8	171	54	38.5
Cable design	[mm <sup>2</sup> ]	10 x 0.34	25 x 0.34	10 x 0.25	25x 0.25

Materials		
Type code	VMPA-KMS1-...	VMPA-KMS2-...
Cable sheath	PVC	PUR

Operating and environmental conditions					
Type code		VMPA-KMS1-8-...	VMPA-KMS1-25-...	VMPA-KMS2-8-...	VMPA-KMS2-25-...
Ambient temperature with flexible cable installation	[°C]	0 ... +80	0 ... +70	-40 ... +70	-40 ... +70
Degree of protection		IP65 To IEC 60529			

# Connecting cables for valves, cover for valve terminal MPA-S

Technical data

Circuitry (view of socket)		Open end, 10-wire		Open end, 25-wire	
		Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>
	1	WH	1	WH	
	2	GN	2	GN	
	3	YE	3	YE	
	4	GY	4	GY	
	5	PK	5	PK	
	6	BU	6	BU	
	7	RD	7	RD	
	8	VT	8	VT	
	9	-	9	GY PK	
	10	-	10	RD BU	
	11	-	11	GN WH	
	12	-	12	BN GN	
	13	-	13	YE WH	
	14	-	14	BN YE	
	15	-	15	GY WH	
	16	-	16	BN GY	
	17	-	17	WH PK	
	18	-	18	BN PK	
	19	-	19	BU WH	
	20	-	20	BN BU	
	21	-	21	RD WH	
	22	-	22	BN RD	
	23	-	23	BK WH	
	24	-	24	BN	
	25	BK	25	BK	

1) To IEC 757

# Connecting cables for valves, cover for valve terminal MPA-S

Technical data

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

L1 Length according to type  
(2.5 m, 5 m or 10 m)

D1 Diameter according to type  
(6.9 mm, 7.7 mm, 10.8 mm or 11.4 mm)

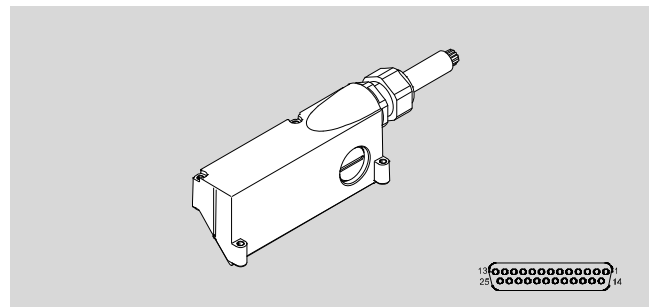
Ordering data					
Electrical connection 1	Material of cable sheath	Electrical connection 2 Number of pins/wires	Cable length [m]	Part no.	Type
Angled socket, D-Sub	PUR	10	2.5	533504	VMPA-KMS2-8-2,5-PUR
			5	533505	VMPA-KMS2-8-5-PUR
			10	533506	VMPA-KMS2-8-10-PUR
		25	2.5	533501	VMPA-KMS2-24-2,5-PUR
			5	533502	VMPA-KMS2-24-5-PUR
			10	533503	VMPA-KMS2-24-10-PUR
	PVC	10	2.5	533195	VMPA-KMS1-8-2,5
			5	533196	VMPA-KMS1-8-5
			10	533197	VMPA-KMS1-8-10
		25	2.5	533192	VMPA-KMS1-24-2,5
			5	533193	VMPA-KMS1-24-5
			10	533194	VMPA-KMS1-24-10

# Connecting cables for valves, cover for valve terminal MPA-L 25-pin

Technical data

## Connecting cable VMPAL-KM

- Connecting cable for multi-pin plug connection of valve terminal MPA-L
- Pre-assembled at one end
- Cable outlet angled to the side or front
- Cable lengths 2.5 m, 5 m, 10 m or any length from 0.5 ... 30 mm
- 25 wires
- Sub-D, 25-pin



Technical data – Electrical connection 1	
Electrical connection	Cable with plug

Technical data – Cables				
Type code	VMPAL-KM-...-SD25-...	VMPAL-KM-...-SD25-IP67-	VMPAL-KMSK-...-SD25-...	VMPAL-KMSK-V-SD25-IP67-
Cable diameter [mm]	10.2	11.2	12.5	12.5
Cable property	standard	Standard	Suitable for use with energy chains	Standard
Minimum cable bending radius [mm]	122	84	63	63
Cable design [mm <sup>2</sup> ]	25 x 0.34	25 x 0.34	25 x 0.34	25 x 0.34

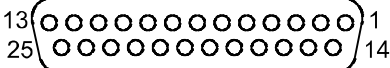
Materials		
Type code	VMPAL-KM-...	VMPAL-KMSK-...
Cable sheath	PVC	TPE-U(PUR)
Note on materials	RoHS-compliant	

Operating and environmental conditions	
Ambient temperature with flexible cable installation [°C]	-5 ... +80
Corrosion resistance class CRC <sup>1)</sup>	2
Degree of protection	IP67 According to IEC 60529

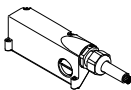

1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

# Connecting cables for valves, cover for valve terminal MPA-L 25-pin

Technical data

Circuitry (view of socket)		Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>
	1	WH	14	BN YE	
	2	GN	15	GY WH	
	3	YE	16	BN GY	
	4	GY	17	WH PK	
	5	PK	18	BN PK	
	6	BU	19	BU WH	
	7	RD	20	BN BU	
	8	VT	21	RD WH	
	9	GY PK	22	BN RD	
	10	RD BU	23	BK WH	
	11	GN WH	24	BN	
	12	BN GN	25	BK	
	13	YE WH			

1) To IEC 757

Ordering data						
	Electrical connection 1		Material of cable sheath	Cable length [m]	Part no.	Type
	Angled socket, Sub-D	Cable outlet to front	TPE-U(PUR)	2.5	560410	VMPAL-KMSK-V-SD25-IP67-2,5
				5	560411	VMPAL-KMSK-V-SD25-IP67-5
				10	560412	VMPAL-KMSK-V-SD25-IP67-10
				0.5 ... 30	562391	VMPAL-KMSK-V-SD25-IP67-
			PVC	2.5	560416	VMPAL-KM-V-SD25-IP67-2,5
				5	560417	VMPAL-KM-V-SD25-IP67-5
				10	560418	VMPAL-KM-V-SD25-IP67-10
				0.5 ... 30	562389	VMPAL-KM-V-SD25-IP67-
	Angled socket, Sub-D	Cable outlet to side	TPE-U(PUR)	2.5	560413	VMPAL-KMSK-S-SD25-IP67-2.5
				5	560414	VMPAL-KMSK-S-SD25-IP67-5
				10	560415	VMPAL-KMSK-S-SD25-IP67-10
				0.5 ... 30	562394	VMPAL-KMSK-S-SD25-IP67-
			PVC	2.5	560419	VMPAL-KM-S-SD25-IP67-2.5
				5	560420	VMPAL-KM-S-SD25-IP67-5
				10	560421	VMPAL-KM-S-SD25-IP67-10
				0.5 ... 30	562392	VMPAL-KM-S-SD25-IP67-

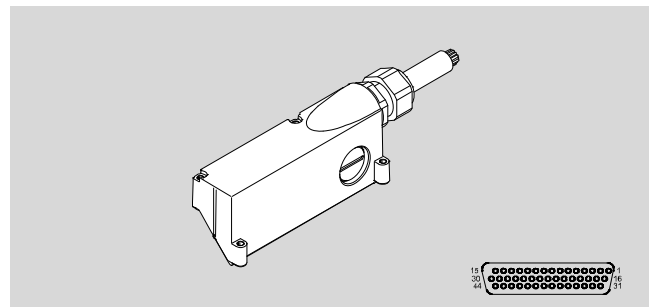


# Connecting cables for valves, cover for valve terminal MPA-L 44-pin

Technical data

## Connecting cable VMPAL-KM

- Connecting cable for multi-pin plug connection of valve terminal MPA-L
- Pre-assembled at one end
- Cable outlet angled to the side or front
- Cable lengths 2.5 m, 5 m, 10 m or any length from 0.5 ... 30 mm
- 36 wires
- Sub-D, 44-pin



Technical data – Electrical connection 1	
Electrical connection	Cable with plug

Technical data – Cables		
Cable diameter	[mm]	9.6
Cable property		Standard
Minimum cable bending radius	[mm]	115
Cable design	[mm <sup>2</sup> ]	36x 0.25

Materials	
Cable sheath	PVC
Note on materials	RoHS-compliant

Operating and environmental conditions	
Ambient temperature with flexible cable installation	[°C] -5 ... +80
Corrosion resistance class CRC <sup>1)</sup>	2
Degree of protection	IP67
	According to IEC 60529

1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
 Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

# Connecting cables for valves, cover for valve terminal MPA-L 44-pin

Technical data

Circuitry (view of socket)		Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>
	1	WH	18	BN PK	35	n.c.	
	2	GN	19	BU WH	36	n.c.	
	3	YE	20	BN BU	37	n.c.	
	4	GY	21	RD WH	38	n.c.	
	5	PK	22	BN RD	39	n.c.	
	6	BU	23	BK WH	40	n.c.	
	7	RD	24	BN	41	RD YE	
	8	VT	25	BK BN	42	BK GN	
	9	GY PK	26	GN GY	43	BK YE	
	10	RD BU	27	YE GY	44	BK	
	11	GN WH	28	GN PK			
	12	BN GN	29	YE PK			
	13	YE WH	30	GN BU			
	14	BN YE	31	YE BU			
	15	GY WH	32	RD GN			
	16	BN GY	33	n.c.			
	17	WH PK	34	n.c.			

1) According to IEC 757

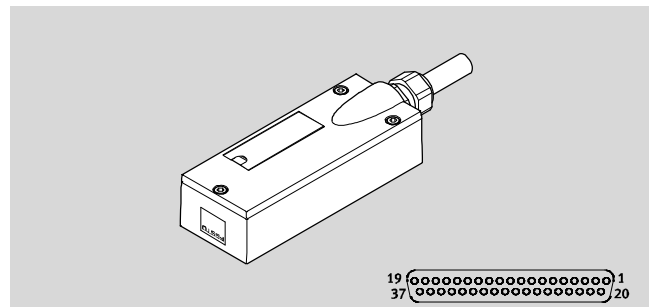
Ordering data					
	Electrical connection 1		Cable length [m]	Part no.	Type
	Angled socket, Sub-D	Cable outlet to front	2.5	560422	VMPAL-KM-V-SD44-IP67-2,5
			5	560423	VMPAL-KM-V-SD44-IP67-5
			10	560424	VMPAL-KM-V-SD44-IP67-10
			0.5 ... 30	562390	VMPAL-KM-V-SD44-IP67-
	Angled socket, Sub-D	Cable outlet to side	2.5	560425	VMPAL-KM-S-SD44-IP67-2.5
			5	560426	VMPAL-KM-S-SD44-IP67-5
			10	560427	VMPAL-KM-S-SD44-IP67-10
			0.5 ... 30	562393	VMPAL-KM-S-SD44-IP67-

# Connecting cables for valves, cover for valve terminal VTSA/VTSA-F

Technical data

## Connecting cable NEBV-S1W37

- Connecting cable for multi-pin plug connection of valve terminal VTSA/VTSA-F
- Pre-assembled at one end
- Cable lengths 2.5 m, 5 m or 10 m
- 10, 26, 27 or 37 wires
- Sub-D, 37-pin



General technical data	
Conforms to standard	DIN 47100
Cable designation	With inscription label holder
Area of application	Only for multi-pin plug connection for valve terminal VTSA/VTSA-F

Technical data – Electrical connection 1				
Type code	NEBV-...-LE10	NEBV-...-LE26	NEBV-...-LE27	NEBV-...-LE37
Function	Field device side			
Connection type	Socket			
Cable outlet	Angled			
Design	Square			
Connection technology	Sub-D			
Number of pins/wires	37			
Assigned pins/wires	10	26	27	37
Type of mounting	3x screw M4			

Technical data – Electrical connection 2				
Type code	NEBV-...-LE10	NEBV-...-LE26	NEBV-...-LE27	NEBV-...-LE37
Function	Controller side			
Connection type	Cable			
Connection technology	Open end			
Number of pins/wires	10	26	27	37
Assigned pins/wires	10	26	27	37

Technical data – Electrical		
Type	NEBV-C-S7WA44HS	
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	2
Surge voltage resistance	[kV]	1

# Connecting cables for valves, cover for valve terminal VTSA/VTSA-F

Technical data

Technical data – Cable						
Type code	NEBV-...-LE10	NEBV-...-KM-...-LE10	NEBV-...-LE26	NEBV-...-LE27	NEBV-...-LE37	NEBV-...-KM-...-LE37
Cable diameter [mm]	7.4	7.2	10.4	10.9	12.8	12.4
Cable property	Suitable for use with energy chains	Standard	Suitable for use with energy chains	Standard	Standard	Standard
Cable test conditions	Test conditions on request					
Bending radius, fixed cable installation [mm]	≥30	≥29	≥42	≥44	≥51	≥50
Bending radius, flexible cable installation [mm]	≥74	≥54	≥104	≥82	≥128	≥93
Cable design [mm <sup>2</sup> ]	10 x 0.34	10 x 0.34	26 x 0.34	27 x 0.34	37 x 0.34	37x 0.34
Nominal conductor cross section [mm <sup>2</sup> ]	0.34					

Materials			
Type code	NEBV-...-E-...	NEBV-...-K-...	NEBV-...-KM-...
Housing	PA	PA	PA
Cable sheath	PVC	PVC	TPE-U(PUR)
Cable sheath colour	grey	grey	grey
Insulating sheath	PVC	PVC	PVC

Operating and environmental conditions	
Ambient temperature [°C]	-5 ... +50
Corrosion resistance class CRC <sup>1)</sup>	2
Degree of protection	IP65 NEMA 4
Note on degree of protection	In assembled state

1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

# Connecting cables for valves, cover for valve terminal VTSA/VTSA-F

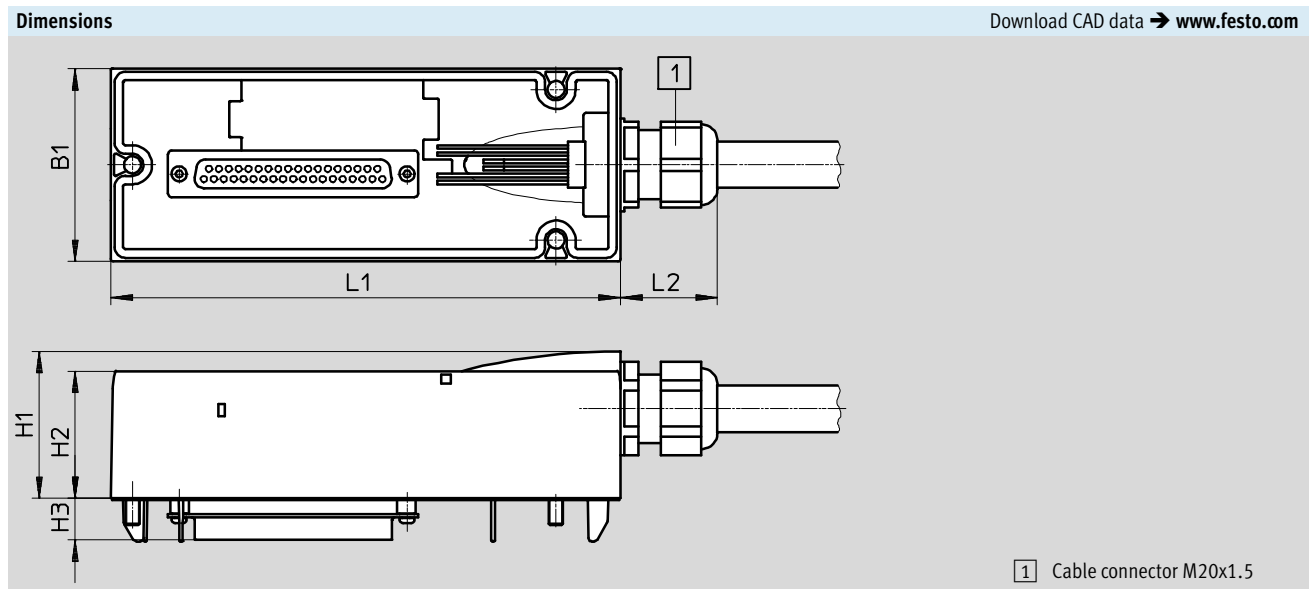
Technical data

Circuitry (view of socket)		Open end, 10-wire		Open end, 26-wire		Open end, 27-wire		Open end, 37-wire	
		Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>	Pin	Wire colour <sup>1)</sup>
	1	WH	1	WH	1	WH	1	WH	
	2	BN	2	BN	2	BN	2	BN	
	3	GN	3	GN	3	GN	3	GN	
	4	YE	4	YE	4	YE	4	YE	
	5	GY	5	GY	5	GY	5	GY	
	6	PK	6	PK	6	PK	6	PK	
	7	BU	7	BU	7	BU	7	BU	
	8	RD	8	RD	8	RD	8	RD	
	9	-	9	GY PK	9	GY PK	9	GY PK	
	10	-	10	RD BU	10	RD BU	10	RD BU	
	11	-	11	WH GN	11	WH GN	11	WH GN	
	12	-	12	BN GN	12	BN GN	12	BN GN	
	13	-	13	WH YE	13	WH YE	13	WH YE	
	14	-	14	YE BN	14	YE BN	14	YE BN	
	15	-	15	WH GY	15	WH GY	15	WH GY	
	16	-	16	GY BN	16	GY BN	16	GY BN	
	17	-	17	WH PK	17	WH PK	17	WH PK	
	18	-	18	PK BN	18	PK BN	18	PK BN	
	19	-	19	WH BU	19	WH BU	19	WH BU	
	20	-	20	BN BU	20	BN BU	20	BN BU	
	21	-	21	WH RD	21	WH RD	21	WH RD	
	22	-	22	BN RD	22	BN RD	22	BN RD	
	23	-	23	-	23	GY GN	23	GY GN	
	24	-	24	-	24	-	24	YE GY	
	25	-	25	-	25	-	25	PK GN	
	26	-	26	-	26	-	26	YE PK	
	27	-	27	-	27	-	27	GN BU	
	28	-	28	-	28	-	28	YE BU	
	29	-	29	-	29	-	29	GN RD	
	30	-	30	-	30	-	30	YE RD	
	31	-	31	-	31	-	31	GN BK	
	32	-	32	-	32	-	32	GY BU	
	33	-	33	-	33	-	33	YE BK	
	34	-	34	WH BK	34	WH BK	34	WH BK	
	35	-	35	BN BK	35	BN BK	35	BN BK	
	36	BK	36	BK	36	BK	36	BK	
	37	VT	37	VT	37	VT	37	VT	

1) According to IEC 757

# Connecting cables for valves, cover for valve terminal VTSA/VTSA-F

Technical data



Type code	B1	H1	H2	H3	L1	L2
NEBV-S1W37	54	41	36	11.6	142	27

Ordering data					
Electrical connection 1	Material of cable sheath	Electrical connection 2 Number of pins/wires	Cable length [m]	Part no.	Type
Angled socket, D-Sub	TPE-U(PUR)	10	2.5	539240	NEBV-S1W37-E-2.5-LE10
			5	539241	NEBV-S1W37-E-5-LE10
			10	539242	NEBV-S1W37-E-10-LE10
		26	2.5	539243	NEBV-S1W37-E-2.5-LE26
			5	539244	NEBV-S1W37-E-5-LE26
			10	539245	NEBV-S1W37-E-10-LE26
		37	2.5	539246	NEBV-S1W37-K-2.5-LE37
			5	539247	NEBV-S1W37-K-5-LE37
			10	539248	NEBV-S1W37-K-10-LE37
	PVC	10	2.5	543271	NEBV-S1W37-KM-2.5-LE10
			5	543272	NEBV-S1W37-KM-5-LE10
			10	543273	NEBV-S1W37-KM-10-LE10
		27	2.5	543274	NEBV-S1W37-KM-2.5-LE27
			5	543275	NEBV-S1W37-KM-5-LE27
			10	543276	NEBV-S1W37-KM-10-LE27
37	2.5	543277	NEBV-S1W37-KM-2.5-LE37		
	5	543278	NEBV-S1W37-KM-5-LE37		
	10	543279	NEBV-S1W37-KM-10-LE37		

# Connecting cables for valves, hood for valve terminal CPV, 9-pin

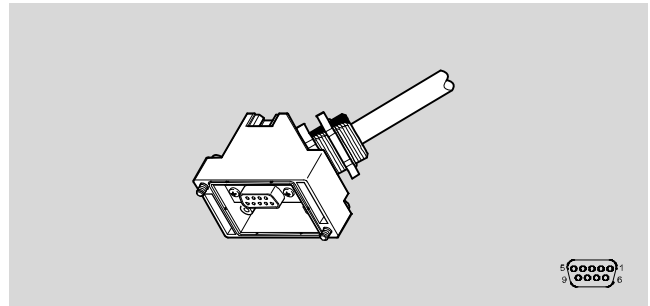
Technical data

**Connecting cable**

**KMP3**

**KMP4**

- Connecting cable for multi-pin plug connection for valve terminal CPV
- Pre-assembled at one end
- Angled socket
- Cable lengths 5 m, 10 m or 1 ... 99 m
- 10 wires
- Sub-D, 9-pin



General technical data	
Based on standard	DIN 41652
Cable designation	With accessories
Contact durability	50

Technical data – Electrical connection 1	
Function	Field device side
Connection type	Socket
Cable outlet	Angled
Design	Angular
Connection technology	Sub-D
Number of pins/wires	9
Assigned pins/wires	9
Type of mounting	2x screw M3

Technical data – Electrical connection 2	
Function	Controller side
Connection type	Cable
Connection technology	Open end
Number of pins/wires	10
Assigned pins/wires	9
Wire ends	Cut off bluntly

Technical data – Electrical components		
Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	3
Surge resistance	[kV]	1
Contamination level		3

# Connecting cables for valves, hood for valve terminal CPV, 9-pin

Technical data

Technical data – Cable				
Type		KMP3	KMP4-...-PVC	KMP4-...-PUR
Cable diameter	[mm]	7.15	7.4	7
Cable diameter tolerance	[mm]	±0.3	±0.4	±0.4
Cable characteristic		Standard	Suitable for energy chains	Suitable for energy chains
Cable test conditions		Test conditions on request	Test conditions on request	Test conditions on request
Bending radius, fixed cable installation	[mm]	≥30	≥24	≥23
Bending radius, flexible cable installation	[mm]	≥75	≥39	≥37
Cable composition	[mm <sup>2</sup> ]	10x0.34	10x0.25	10x0.25
Conductor nominal cross section	[mm <sup>2</sup> ]	0.34	0.25	0.25

Materials				
Type		KMP3	KMP4-...-PVC	KMP4-...-PUR
Housing		PA	PA	PA
Housing colour		–	Black	Black
Seals		NBR	NBR	NBR
Pin contacts		Gold-plated copper alloy	Gold-plated copper alloy	Gold-plated copper alloy
Cable sheath		PVC	PVC	TPE-U(PUR)
Cable sheath colour		Grey	Grey	Grey
Note on materials		RoHS-compliant	RoHS-compliant	RoHS-compliant

Operating and environmental conditions				
Type		KMP3	KMP4-...-PVC	KMP4-...-PUR
Ambient temperature	[°C]	–25 ... +70	–40 ... +70	–40 ... +70
Ambient temperature with flexible cable installation	[°C]	–5 ... +70	–5 ... +70	–40 ... +70
Storage temperature	[°C]	–25 ... +75	–25 ... +75	–25 ... +75
Degree of protection		IP65	IP65	IP65
Note on degree of protection		In assembled state	In assembled state	In assembled state

Circuitry (socket view)		
	Pin	Wire colour <sup>1)</sup>
	1	WH
	2	GN
	3	YE
	4	GY
	5	PK
	6	BU
	7	RD
	8	VT
	9	BK
	–	BN

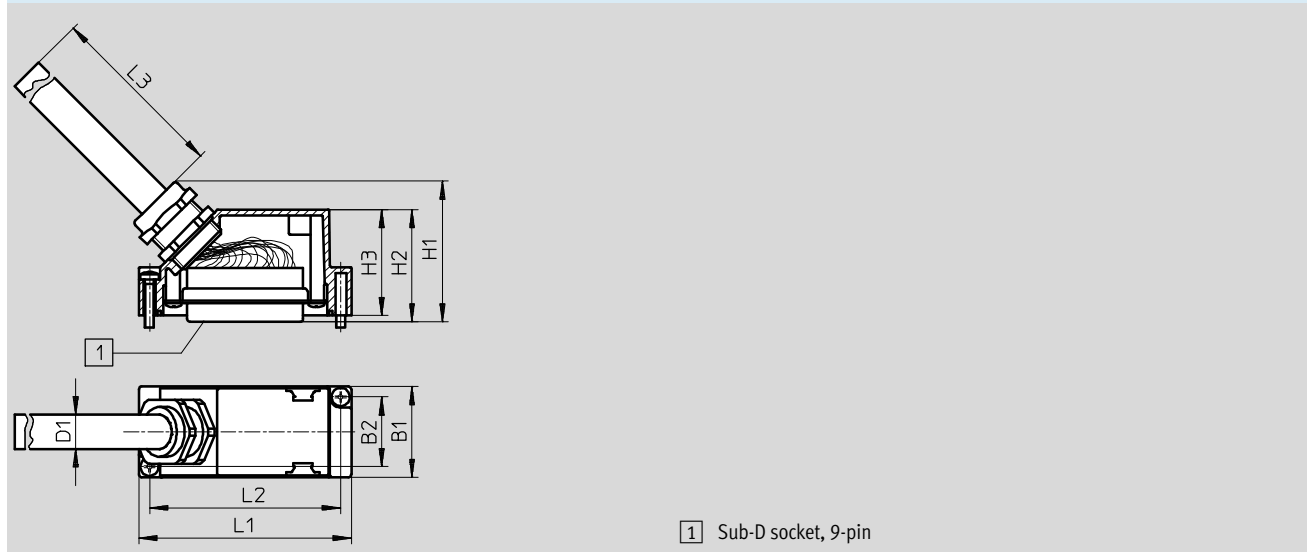
1) To IEC 757



# Connecting cables for valves, hood for valve terminal CPV, 9-pin

Technical data

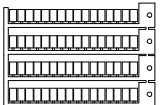
Dimensions Download CAD data → [www.festo.com](http://www.festo.com)



1 Sub-D socket, 9-pin

Type	B1	B2	D1	H1	H2	H3	L1	L2	L3
KMP3-9P-08-5	30	23	9.5	43	37	35	50	43	5000
KMP3-9P-08-10									10000
KMP3-9P-08-X									1000 ... 99000
KMP4-9P-5-PVC			8.3						5000
KMP4-9P-10-PVC									10000
KMP4-9P-5-PUR			7.7						5000
KMP4-9P-10-PUR									10000

Ordering data						
Electrical connection	Cable composition	Cable sheath material	Cable length [m]	Weight [g]	Part no.	Type
Sub-D socket, 9-pin	10x0.34 mm <sup>2</sup>	PVC	5	425	<b>18698</b>	<b>KMP3-9P-08-5</b>
			10	814	<b>18579</b>	<b>KMP3-9P-08-10</b>
			1 ... 99	-	<b>18697</b>	<b>KMP3-9P-08-X</b>
	10x0.25 mm <sup>2</sup>	PVC	5	413	<b>193012</b>	<b>KMP4-9P-5-PVC</b>
			10	791	<b>193013</b>	<b>KMP4-9P-10-PVC</b>
		TPE-U(PUR)	5	378	<b>193014</b>	<b>KMP4-9P-5-PUR</b>
			10	723	<b>193015</b>	<b>KMP4-9P-10-PUR</b>

Ordering data – Accessories			
		Part no.	Type
	Inscription labels in frame, 64 labels	<b>18576</b>	<b>IBS-6x10</b>

# Connecting cables for valves, hood for valve terminal CPV, 25-pin

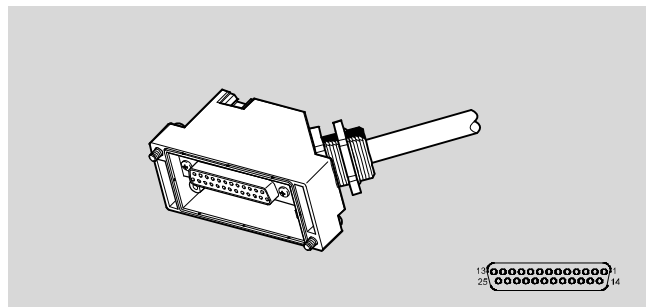
Technical data

**Connecting cable**

**KMP3**

**KMP4**

- Connecting cable for multi-pin plug connection for valve terminal CPV
- Pre-assembled at one end
- Angled socket
- Cable lengths 2.5 m, 5 m or 1 ... 99 m
- 18 and 25 wires
- Sub-D, 25-pin



General technical data	
Based on standard	DIN 41652
Cable designation	With accessories
Contact durability	50

Technical data – Electrical connection 1			
Type	KMP3	KMP4-...-PVC	KMP4-...-PUR
Function	Field device side	Field device side	Field device side
Connection type	Socket	Socket	Socket
Cable outlet	Angled	Angled	Angled
Design	Angular	Angular	Angular
Connection technology	Sub-D	Sub-D	Sub-D
Number of pins/wires	25	25	25
Assigned pins/wires	18	25	25
Type of mounting	2x screw M3	2x screw M3	2x screw M3

Technical data – Electrical connection 2			
Type	KMP3	KMP4-...-PVC	KMP4-...-PUR
Function	Controller side	Controller side	Controller side
Connection type	Cable	Cable	Cable
Connection technology	Open end	Open end	Open end
Number of pins/wires	18	25	25
Assigned pins/wires	18	25	25
Wire ends	Cut off bluntly	Cut off bluntly	Cut off bluntly

Technical data – Electrical components		
Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	0 ... 30
Current rating at 40 °C	[A]	3
Surge resistance	[kV]	1
Contamination level		3

# Connecting cables for valves, hood for valve terminal CPV, 25-pin

Technical data

Technical data – Cable			
Type	KMP3	KMP4-...-PVC	KMP4-...-PUR
Cable diameter [mm]	8.5	10.4	9.8
Cable diameter tolerance [mm]	±0.5	±0.5	±0.4
Cable characteristic	Standard	Suitable for energy chains	Suitable for energy chains
Cable test conditions	Test conditions on request	Test conditions on request	Test conditions on request
Bending radius, fixed cable installation [mm]	≥45	≥33	≥31
Bending radius, flexible cable installation [mm]	≥90	≥55	≥51
Cable composition [mm <sup>2</sup> ]	18x0.34	25x0.25	25x0.25
Conductor nominal cross section [mm <sup>2</sup> ]	0.34	0.25	0.25

Materials			
Type	KMP3	KMP4-...-PVC	KMP4-...-PUR
Housing	PA	PA	PA
Housing colour	–	Black	Black
Seals	NBR	NBR	NBR
Pin contacts	Gold-plated copper alloy	Gold-plated copper alloy	Gold-plated copper alloy
Cable sheath	PVC	PVC	TPE-U(PUR)
Cable sheath colour	Grey	Grey	Grey
Note on materials	RoHS-compliant	RoHS-compliant	RoHS-compliant

Operating and environmental conditions			
Type	KMP3	KMP4-...-PVC	KMP4-...-PUR
Ambient temperature [°C]	–25 ... +70	–40 ... +70	–40 ... +70
Ambient temperature with flexible cable installation [°C]	–5 ... +70	–5 ... +70	–40 ... +70
Storage temperature [°C]	–25 ... +75	–25 ... +75	–25 ... +75
Degree of protection	IP65	IP65	IP65
Note on degree of protection	In assembled state	In assembled state	In assembled state

# Connecting cables for valves, hood for valve terminal CPV, 25-pin

Technical data

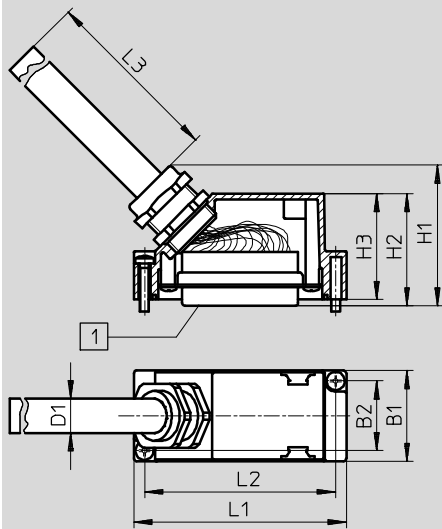
Circuitry (socket view)		Pin	Wire colour <sup>1)</sup>	
			KMP3	KMP4
	1	WH	WH	
	2	GN	GN	
	3	YE	YE	
	4	GY	GY	
	5	PK	PK	
	6	BU	BU	
	7	RD	RD	
	8	VT	VT	
	9	GY PK	GY PK	
	10	RD BU	RD BU	
	11	GN WH	GN WH	
	12	BN GN	BN GN	
	13	YE WH	YE WH	
	14	BN YE	BN YE	
	15	GY WH	GY WH	
	16	BN GY	BN GY	
	17	-	WH PK	
	18	-	BN PK	
	19	-	BU WH	
	20	-	BN BU	
	21	-	RD WH	
	22	-	BN RD	
	23	-	BK WH	
	24	BN	BN	
	25	BK	BK	

1) To IEC 757

# Connecting cables for valves, hood for valve terminal CPV, 25-pin

Technical data

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



1 Sub-D socket, 25-pin

Type	B1	B2	D1	H1	H2	H3	L1	L2	L3
KMP3-25P-16-5	30	23	12	47	37	35	70	63	5000
KMP3-25P-16-10									10000
KMP3-25P-16-X									1000 ... 99000
KMP4-25P-5-PVC			11.2						5000
KMP4-25P-10-PVC									10000
KMP4-25P-5-PUR			10.8						5000
KMP4-25P-10-PUR									10000

Ordering data						
Electrical connection	Cable composition	Cable sheath material	Cable length [m]	Weight [g]	Part no.	Type
Sub-D socket, 25-pin	18x0.34 mm <sup>2</sup>	PVC	5	672	<b>18624</b>	<b>KMP3-25P-16-5</b>
			10	1303	<b>18625</b>	<b>KMP3-25P-16-10</b>
			1 ... 99	-	<b>18699</b>	<b>KMP3-25P-16-X</b>
	25x0.25 mm <sup>2</sup>	PVC	5	854	<b>193016</b>	<b>KMP4-25P-5-PVC</b>
			10	1657	<b>193017</b>	<b>KMP4-25P-10-PVC</b>
		TPE-U(PUR)	5	702	<b>193018</b>	<b>KMP4-25P-5-PUR</b>
			10	1617	<b>193019</b>	<b>KMP4-25P-10-PUR</b>

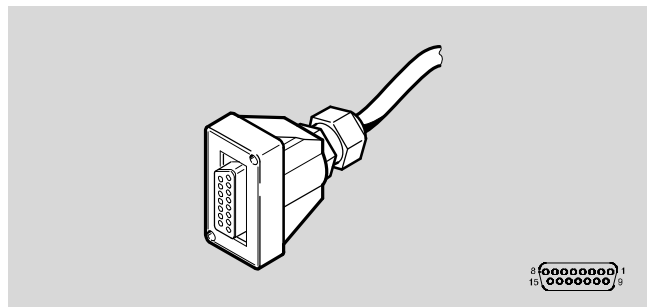
Ordering data – Accessories				
			Part no.	Type
	Inscription labels in frame, 64 labels	6x10mm	<b>18576</b>	<b>IBS-6x10</b>

# Connecting cables for valves, cover for multi-pin plug distributor

Technical data

## Connecting cable KMPV-SUB

- Connecting cable for multi-pin plug distributor MPV-E/A-...-M8
- Pre-assembled at one end
- Straight socket
- Cable lengths 5 m or 10 m
- 15 wires
- Sub-D, 15-pin



Technical data – Electrical connection 1	
Connection type	Socket
Connection technology	Sub-D
Number of pins/wires	15
Type of mounting	Via through-hole

Technical data – Electrical		
Operating voltage range	[V DC]	≤30
Current rating at 40°C	[A]	2.8


Technical data – Cable		
Cable diameter	[mm]	8.2
Cable design	[mm <sup>2</sup> ]	15x0.25

Materials	
Housing	PBT reinforced
Pin contacts	Gold-plated copper alloy
Cable sheath	PUR

Operating and environmental conditions		
Ambient temperature	[°C]	-20 ... +80
Degree of protection		IP65

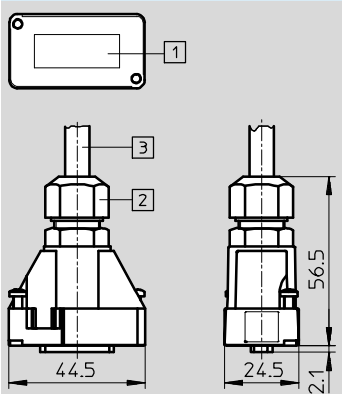
# Connecting cables for valves, cover for multi-pin plug distributor

Technical data

Circuitry (view of socket)		Pin	Wire colour <sup>1)</sup>
	1	WH	
	2	BN	
	3	GN	
	4	YE	
	5	GY	
	6	PK	
	7	BU	
	8	RD	
	9	BK	
	10	VT	
	11	GY PK	
	12	RD BU	
	13	GN WH	
	14	BN GN	
	15	YE WH	

1) According to IEC 757

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



- 1) Socket, Sub-D 15-pin
- 2) Cable connector PG9
- 3) Cable length 5 m or 10 m

Ordering data				
Electrical connection	Cable length [m]	Weight [g]	Part no.	Type
Sub-D socket, 15-pin	5	300	177673	KMPV-SUB-D-15-5
	10	400	177674	KMPV-SUB-D-15-10