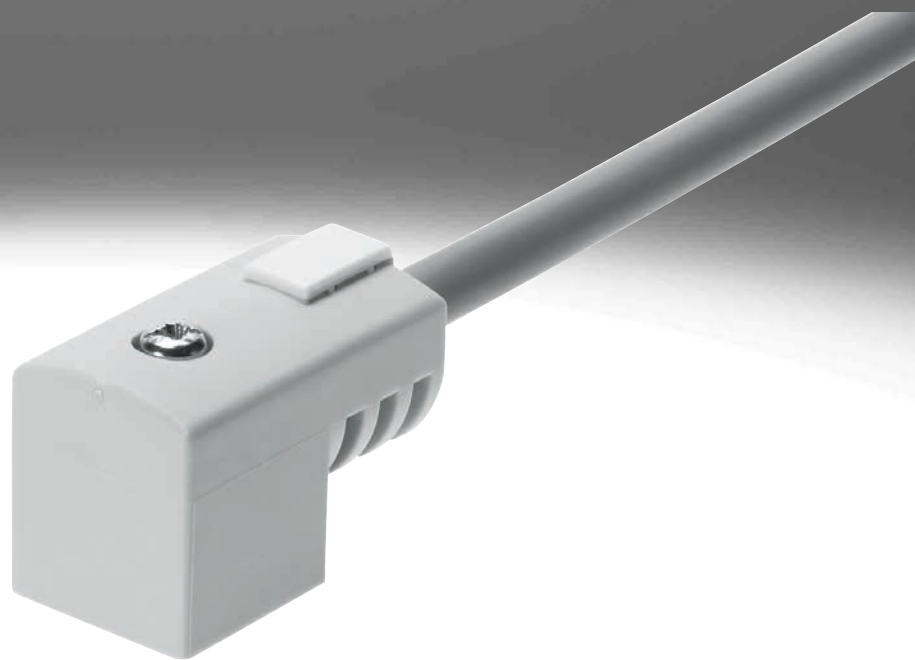


## Connecting cables for valves, socket type B, industry standard

**FESTO**



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With the Festo Core Range, we have selected the most important products and functions from our broad product catalogue, and added the quickest delivery.

Worldwide: Quickest delivery – wherever, whenever  
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Just look  
for the  
star!

## Type codes – Connecting cable with PUR cable sheath

<b>001</b>	<b>Series</b>
<b>NEBV</b>	Connecting cable for valves

<b>002</b>	<b>Product version</b>
	Standard
<b>C</b>	Easy-to-clean design

<b>003</b>	<b>Connection technology left, field device side</b>
<b>A1</b>	Socket type A, EN 175301-803
<b>B2</b>	Socket type B, industry standard, 11 mm
<b>C1S</b>	Socket type C, narrow design
<b>Z4</b>	Socket connection pattern ZC, metric screw
<b>Z3</b>	Socket connection pattern ZC, self-tapping screw
<b>M8</b>	Socket M8x1 A-coded, EN 61076-2-104
<b>M12</b>	Socket M12x1 A-coded, EN 61076-2-101
<b>S1</b>	Sub-D socket
<b>S7</b>	Sub-D HD socket
<b>H1</b>	Socket connection pattern H
<b>Q7</b>	Port pattern Q7 socket
<b>HS</b>	Socket connection pattern S

<b>004</b>	<b>Cable outlet left</b>
	None
<b>G</b>	Straight
<b>W</b>	Angled
<b>WA</b>	Angled 45°

<b>005</b>	<b>Number of pins/wires on the left</b>
<b>2</b>	2
<b>3</b>	3
<b>4</b>	4
<b>8</b>	8
<b>9</b>	9
<b>15</b>	15
<b>25</b>	25
<b>37</b>	37
<b>44</b>	44

<b>006</b>	<b>Display</b>
	None
<b>F</b>	LED signal status, AC
<b>L</b>	LED signal status, DC
<b>N</b>	LED switching state, NPN
<b>P</b>	LED switching state, PNP
<b>U</b>	LED, UC

<b>007</b>	<b>Additional socket functions</b>
	None
<b>HL</b>	Hood for MPA-L
<b>HM</b>	Hood for MPA-S
<b>HS</b>	With seal

<b>008</b>	<b>Circuitry</b>
	None
<b>P</b>	Protective circuit
<b>R</b>	Holding current reduction with integrated protective circuit

<b>009</b>	<b>Cable characteristic</b>
<b>P</b>	Basic
<b>K</b>	Standard
<b>E</b>	Suitable for energy chains
<b>F</b>	Food-safe to standard

<b>010</b>	<b>Cable design</b>
	Standard
<b>M</b>	Alternative material
<b>N</b>	Leads
<b>D</b>	Double cable

<b>011</b>	<b>Cable length [m]</b>
<b>0.1</b>	0.1
<b>0.2</b>	0.2
<b>0.3</b>	0.3
<b>0.5</b>	0.5
<b>0.6</b>	0.6
<b>1</b>	1
<b>2</b>	2
<b>2.5</b>	2.5
<b>3</b>	3
<b>5</b>	5
<b>10</b>	10

<b>012</b>	<b>Cable identification</b>
	With label holder
<b>N</b>	Without label holder

<b>013</b>	<b>Connection technology right, controller side</b>
<b>M8</b>	Plug M8x1 A-coded, EN 61076-2-104
<b>M12</b>	Plug M12x1 A-coded, EN 61076-2-101
<b>Z1</b>	Port pattern ZB plug, self-tapping screw
<b>LE</b>	Open end

<b>014</b>	<b>Plug</b>
	None
<b>G</b>	Straight
<b>W</b>	Angled

<b>015</b>	<b>Number of pins/wires on the right</b>
<b>2</b>	2
<b>3</b>	3
<b>4</b>	4
<b>5</b>	5
<b>10</b>	10
<b>15</b>	15
<b>25</b>	25
<b>26</b>	26
<b>27</b>	27
<b>36</b>	36
<b>37</b>	37
<b>39</b>	39
<b>44</b>	44

<b>016</b>	<b>Degree of protection, electrical system</b>
	Standard
<b>S6</b>	IP40
<b>S1</b>	IP65
<b>S9</b>	IP65/IP67
<b>S10</b>	IP65/IP67/IP69K

## Type codes – Connecting cable with PVC cable sheath

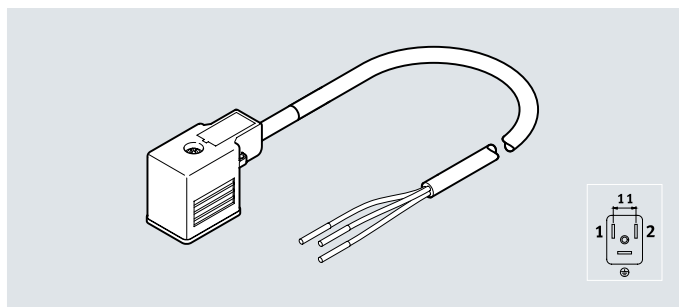
001	Series
<b>KMF</b>	Connecting cable for valves, socket type B to industry standard 11 mm
002	Variant
<b>1</b>	Variant 1
003	Rated operating voltage
<b>24</b>	24 V DC
<b>24DC</b>	24 V DC
<b>230AC</b>	230 V AC

004	Cable length [m]
<b>2.5</b>	2.5
<b>5</b>	5
<b>10</b>	10
005	Display
	No display
<b>LED</b>	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		NEBV-B2W3F... -LE3	NEBV-B2W3F... -M12W3
Type			
<b>Electrical connection 1</b>			
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		
<b>Electrical connection 2</b>			
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 <sup>2</sup> ]	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	M12x1, A-coded to EN 61076-2-101
	Open end	
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

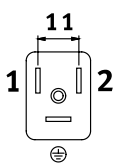
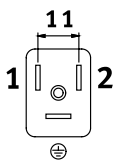
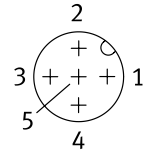
Operating and environmental conditions			
Nominal operating voltage	24 V AC/DC	110 V AC/DC	230 V AC/DC
Ambient temperature [°C]	–25 ... +80	–25 ... +80	–25 ... +80
Ambient temperature with flexible cable installation [°C]	–25 ... +80	–25 ... +80	–25 ... +80
CE marking (see declaration of conformity) <sup>1)</sup>	–	To EU Low Voltage Directive	To EU Low Voltage Directive
	To EU RoHS Directive	To EU RoHS Directive	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 <sup>2)</sup>	2	2	2

1) For information about the area of use, see the EC declaration of conformity at: [www.festo.com/catalogue/nebv](http://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 <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	GNYE	–	Open end
<b>Electrical connection 2, connection technology M12x1, A-coded to EN 61076-2-101</b>				
	1	BK	3	
	2	BK	4	
	GND	GNYE	5	

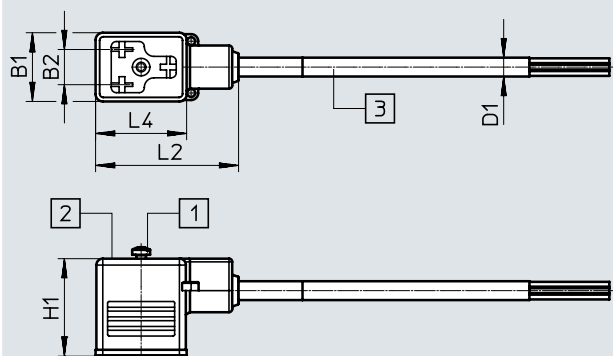
1) To IEC 757

## Datasheet – Connecting cable with PUR cable sheath

### Dimensions

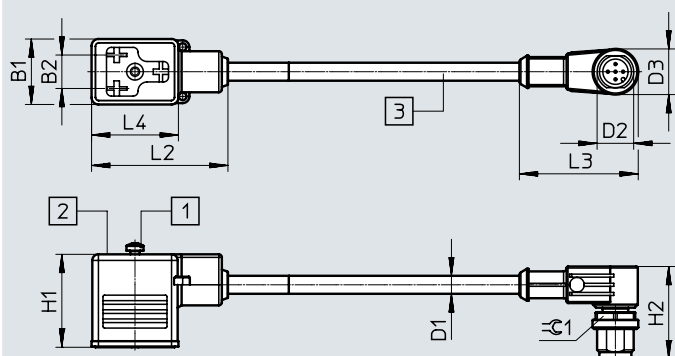
Download CAD data → [www.festo.com](http://www.festo.com)

Electrical connection 2, connection technology open end



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

Electrical connection 2, connection technology plug M12x1



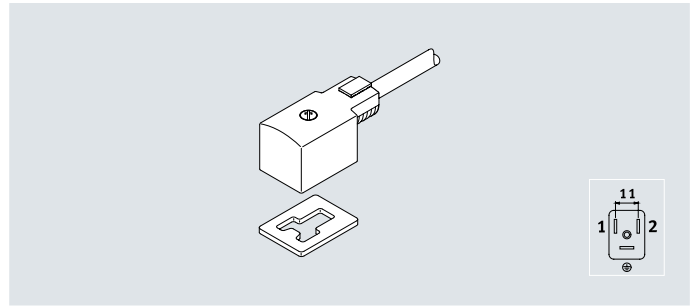
- [1] Mounting screw M3
- [2] Signal status indication for version P
- [3] Cable, length depending on the order

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

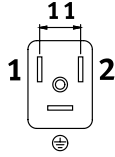
Cable composition	[mm <sup>2</sup> ]	3x 0.75
Cable diameter	[mm]	6
Cable characteristic		Standard
Cable test conditions		Test conditions on request
Cable designation		Without inscription label holder

## Datasheet – Connecting cable with PVC cable sheath

Materials	
Housing	PC, POM
Cable sheath	PVC
Pin contacts	Bronze

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) <sup>1)</sup>	-	To EU Low Voltage Directive
	To EU RoHS Directive	To EU RoHS Directive
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 EC declaration of conformity at: [www.festo.com/catalogue/kmf](http://www.festo.com/catalogue/kmf) → 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 <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	GNYE	-	Open end

- 1) To IEC 757

### Dimensions

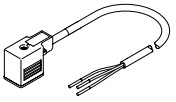
Download CAD data → [www.festo.com](http://www.festo.com)

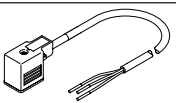
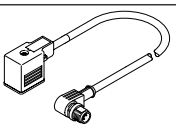
- [1] Cable, 3-wire
- [2] M3 screw

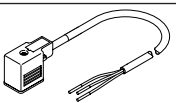
Type	B1	D1 ∅	D2	H1	H2	L1	L2	L3	L4
KMF-1-...-2.5	21	6	M3	23	6	43	28	50	2500
KMF-1-...-5									5000
KMF-1-...-10									10000

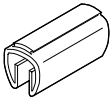
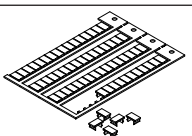
Ordering data

★ Core Range

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	• 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	• 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.	<b>8003577</b>			
Connecting cable	Connecting cables for valves		<b>NEBV</b>	NEBV
Connection technology on the left, field device side	Socket type B to industry standard, 11 mm		<b>-B2</b>	-B2
Cable outlet on the left	Angled		<b>W</b>	W
Number of pins/wires 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 designation	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 on the right	None			
	Angled	[1]	<b>W</b>	
Number of pins/wires on the right	3-pin		<b>3</b>	3

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

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