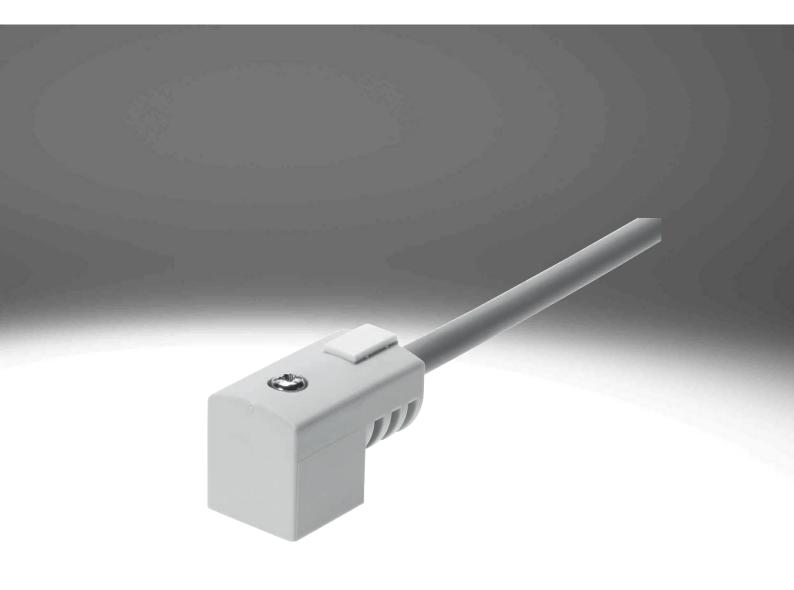
# Connecting cables for valves, socket type B, industry standard





★ Festo Core Range

Solves the majority of your automation tasks

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Worldwide: Quickest delivery – wherever, whenever Simply good: Expected high Festo quality Fast: Easy and fast to select

The Core Range offers you the best value for your automation tasks.

With the Festo Core Range, we have selected

the most important products and functions from our broad product catalogue, and added



# Type codes – Connecting cable with PUR cable sheath

001	Series	
NEBV	Connecting cable for valves	
	1	'
002	Product version	
	Standard	
С	Easy-to-clean design	
002	Connection technology left field device side	
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 S1	Socket M12x1 A-coded, EN 61076-2-101 Sub-D socket	
S7 H1	Sub-D HD socket  Socket connection pattern H	
Q7	Port pattern Q7 socket	
HS	Socket connection pattern S	
113	Socket connection pattern 5	
004	Cable outlet left	
	None	
G	Straight	
W	Angled	
WA	Angled 45°	
<u> </u>	0 12	
005	Number of pins/wires on the left	
2	2	
3	3	
4	4	
8	8	
9	8 9	
9	9	
9 15	9 15	
9 15 25	9 15 25	
9 15 25 37 44	9 15 25 37 44	
9 15 25 37 44	9 15 25 37 44 Display	
9 15 25 37 44	9 15 25 37 44 Display	
9 15 25 37 44 006	9 15 25 37 44  Display  None  LED signal status, AC	
9 15 25 37 44 006	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC	
9 15 25 37 44 006	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN	
9 15 25 37 44 006 F L N	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP	
9 15 25 37 44 006 F L	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN	
9 15 25 37 44 006 F L N	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP	
9 15 25 37 44 006 F L N P	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions	
9 15 25 37 44 006 F L N P	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None	
9 15 25 37 44 0006 F L N P U 0007	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L	
9 15 25 37 44 006 F L N P U	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L  Hood for MPA-S	
9 15 25 37 44 0006 F L N P U 0007	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L	
9 15 25 37 44 006 F L N P U	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L  Hood for MPA-S	
9 15 25 37 44 006 F L N P U	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L  Hood for MPA-S  With seal  Circuitry	
9 15 25 37 44 006 F L N P U 007	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, PNP  LED, UC  Additional socket functions  None  Hood for MPA-L  Hood for MPA-S  With seal	
9 15 25 37 44 006 F L N P U 007 HL HM HS	9 15 25 37 44  Display  None  LED signal status, AC  LED signal status, DC  LED switching state, NPN  LED switching state, NPN  LED, UC  Additional socket functions  None  Hood for MPA-L  Hood for MPA-S  With seal  Circuitry  None	

009	Cobbs described	
	Cable characteristic	
Р	Basic	
K	Standard	
E	Suitable for energy chains	
F	Food-safe to standard	
010	Cable design	
	Standard	
М	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	
012	With label holder	
N	Without label holder	
04.2	Terror to the section of the section	
013 M8	Connection technology right, controller side  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	
		<u> </u>
014	Plug	
	None	
G	Straight	
W	Angled	
04.5		
015	Number of pins/wires on the right	
2	Number of pins/wires on the right	
015 2 3 4	Number of pins/wires on the right 2	
2	Number of pins/wires on the right 2 3	
2 3 4	Number of pins/wires on the right  2  3  4	
2 3 4 5 10	Number of pins/wires on the right  2  3  4  5	
2 3 4 5 10 15 25	Number of pins/wires on the right   2   3   4   5   10   15   25	
2 3 4 5 10	Number of pins/wires on the right  2  3  4  5  10  15	
2 3 4 5 10 15 25 26 27	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27	
3 4 5 10 15 25 26 27 36	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36	
2 3 4 5 10 15 25 26 27 36 37	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36  37	
2 3 4 5 10 15 25 26 27 36	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36	
2 3 4 5 10 15 25 26 27 36 37	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36  37	
2 3 4 5 10 15 25 26 27 36 37 39	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36  37  39	
2 3 4 5 10 15 25 26 27 36 37 39 44	Number of pins/wires on the right  2  3  4  5  10  15  25  26  27  36  37  39  44	
2 3 4 5 10 15 25 26 27 36 37 39 44	Number of pins/wires on the right   2   3   4   5   5   10   15   25   26   27   36   37   39   44     Degree of protection, electrical system	
2 3 4 5 10 15 25 26 27 36 37 39 44	Number of pins/wires on the right   2   3   4   5   5   10   15   25   26   27   36   37   39   44     Degree of protection, electrical system   Standard   Standar	

S9

S10

IP65/IP67

IP65/IP67/IP69K

# Type codes – Connecting cable with PVC cable sheath

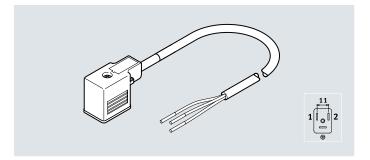
001	Series	
KMF	Connecting cable for valves, socket type B to industry standard 11 mm	
002	Variant	
1	Variant 1	
003	Rated operating voltage	
24	24 V DC	
24DC	24 V DC	
230AC	230 V AC	

Cable length [m]						
2.5	2.5					
5						
10						
Display						
No display						
LED signal status, DC						
	2.5   5   10   Display   No display					

# 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							
Туре	NEBV-B2W3FLE3	NEBV-B2W3FM12W3					
Electrical connection 1							
Function	Field device side						
Connection type	Socket						
Cable outlet	Angled						
Design	Rectangular						
Connection technology	Plug pattern type B, to industry standard, 1:	1 mm					
Number of pins/wires	3						
Assigned pins/wires	3	3					
Type of mounting	On solenoid valve with M3 central screw	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 <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					
	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 [°C]	-25 +80	-25 +80	-25 +80		
cable installation					
CE marking (see	-	To EU Low Voltage Directive	To EU Low Voltage Directive		
declaration of conformity) <sup>1)</sup>	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		

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

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			
Electrical connection 2, connection technology open end							
11	1	BK	-	Open end			
	2	ВК	-	Open end			
1 2	GND	GNYE	_	Open end			
Electrical connection 2, connection	n techno	ology M12x1, A-coded to EN 61076-2-101					
11	1	ВК	3	2			
	2	ВК	4	+			
<b>1</b>	GND	GN YE	5	3 (+ + +) 1			

<sup>1)</sup> To IEC 757

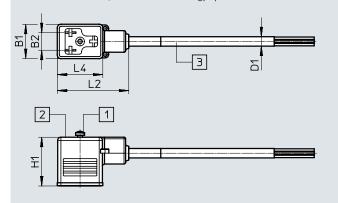
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

<sup>2)</sup> Corrosion resistance class CRC 2 to Festo standard FN 940070

## Datasheet – Connecting cable with PUR cable sheath

#### Dimensions

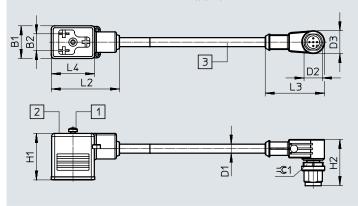
Electrical connection 2, connection technology open end



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





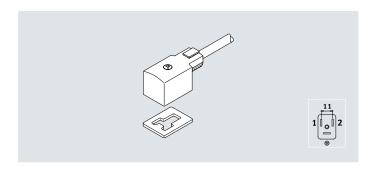
- [1] Mounting screw M3
- [2] Signal status indication for version P
- [3] Cable, length depending on the order

Туре	B1	B2	D1 Ø	D2	D3 Ø	H1	H2	L2	L3	L4	<b>=</b> ©
NEBV-B2W3LE3	21.5	11	5.9	-	_	30.5	_	45	-	29	-
NEBV-B2W3M12W3	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	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]	-	230 254.5
	[V DC]	20.4 27.6	-
Acceptable current load at 40°C	[A]	4	4
Pollution degree		3	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

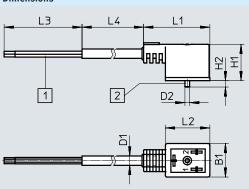
Materials	
Housing	PC, POM
Cable sheath	PVC
Pin contacts	Bronze
PWIS conformity	VDMA24364-B2-L

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) <sup>1)</sup>	_	To EU Low Voltage Directive
	To EU RoHS Directive	To EU RoHS Directive
UKCA marking (see declaration of conformity) <sup>1)</sup>	-	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

Circuitry (socket/plug view)						
Electrical connection 1	Pin	Wire colour <sup>1)</sup>	Pin	Electrical connection 2		
Electrical connection 2, conn	Electrical connection 2, connection technology open end					
11	1	ВК	_	Open end		
	2	ВК	_	Open end		
1 2	GND	GNYE	-	Open end		

1) To IEC 757





Download CAD data → www.festo.com

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

Туре	B1	D1 Ø	D2	H1	H2	L1	L2	L3	L4
KMF-12.5	21	6	М3	23	6	43	28	50	2500
KMF-15									5000
KMF-110									10000

## Ordering data

## ★ Core Range

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

Ordering data – Connect	ing cable with PUR cable sheath					
	Nominal operating voltage		Cable length	Weight	Part no.	Туре
	[V]		[m]	[g]		
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	0.3	60	3679773	NEBV-B2W3F-P-K-0.3-N-M12W3
		Protective circuit	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 – Connecti	ng cable with PVC cable sheath					
	Nominal operating voltage		Cable length	Weight	Part no.	Туре
	[V]		[m]	[g]		
Electrical connection 2, o	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 – Accessor	ies			
			Part no.	Туре
	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

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

# 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, fi side	eld device	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,		Open end		-LE	
controller side		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

<sup>[1] -0.3,</sup> W Only with connection technology on the right, M12

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