Connecting cables for valves, plug pattern ZC, metric screw

Datasheet

Connecting cable NEBV-Z4WA2

- Connecting cable
- Pre-assembled at both ends
- 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 ZC, metric screw		
Number of pins/wires	2		
Assigned pins/wires	2		
Type of mounting	On solenoid valve with M2 central screw		
Electrical connection 2			
Function	Controller side		
Connection type	Cable	Plug	Plug
Cable outlet	-	Straight	Angled
Design	-	Round	Rectangular
Connection technology	Open end	M8x1, A-coded to EN 61076-2-104	Plug pattern ZB, self-tapping screw
Number of pins/wires	2	3	2
Assigned pins/wires	2	2	2
Type of mounting	-	-	On solenoid valve via self-tapping screw

Technical data – Electrics

Nominal operating voltage	[V DC]	24
Operating voltage range	[V DC]	20.4 26.4
Surge resistance	[kV]	2.4
Pollution degree		3
Contact durability		50
Reverse polarity protection		Bipolar
Protective earth connection		Not provided

Technical data – Cable

Cable composition	[mm ²]	2x 0.14
Cable diameter	[mm]	2.9
Cable diameter tolerance	[%]	±0.1
Nominal conductor cross section	[mm ²]	0.14
Cable characteristic		Suitable for energy chains
Cable test conditions		Test conditions on request
Bending radius, flexible cable	[mm]	>29
installation		
Cable designation		Without inscription label holder

Datasheet

Materials

Electrical connection 2	Connection technology		
	Open end	M8x1, A-coded to EN 61076-2-104	Plug pattern ZB, self-tapping screw
Housing	TPE-U(PU)	TPE-U(PU)	TPE-U(PU)
Housing colour	Black	Black	Black
Union nut	-	Nickel-plated brass	-
Insulating sheath	PP	PP	PP
Screws	Stainless steel	Stainless steel	Stainless steel
Pin contacts	Tin-plated copper alloy	Tin-plated copper alloy	Tin-plated copper alloy
	-	Gold-plated brass	-
Cable sheath	TPE-U(PUR)	TPE-U(PUR)	TPE-U(PUR)
Cable sheath colour	Grey	Grey	Grey
Note on materials	RoHS-compliant	RoHS-compliant	RoHS-compliant

Operating and environmental conditions

Additional functions	With holding current reduction, with protective circuit	Without holding current reduction, with protective circuit	Without holding current reduction, without protective circuit
Ambient temperature [°C]	-10 +50	-10 +50	-10 +50
Corrosion resistance class CRC ¹⁾	3	3	3
CE marking (see declaration of conformity) ³⁾	To EU EMC Directive ²⁾	-	To EU EMC Directive ²⁾
	To EU RoHS Directive	To EU RoHS Directive	To EU RoHS Directive
Degree of protection	IP65	IP65	IP65
Note on degree of protection	In assembled state	In assembled state	In assembled state

1) Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/NEBV -> Support/Downloads.

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

3) Additional information: www.festo.com/catalogue/NEBV \rightarrow Support/Downloads.

Circuitry (socket/plug view)				
Electrical connection 1	Pin	Wire colour ¹⁾	Pin	Electrical connection 2
Electrical connection 2, connect	ion techn	ology open end		
	1	ВК	-	Open end
2 I 1	2	ВК	-	
Electrical connection 2, connect	ion techn	ology M8x1, A-coded to EN 61076-2-104		
	1	ВК	3	4
2 1	2	ВК	4	+++3
Electrical connection 2, connect	ion techn	ology plug pattern ZB, self-tapping screw		
\frown	1	ВК	1	4
2 I 1	2	ВК	2	

1) To IEC 757

T

Datasheet



Open end

Plug M8x1

9.7

9.7

2.9

2.9

M8x1

10

12.35

12.35

17.5

17.5

26.9

26.9

19

19

50

41.1

8.4

8.4

9

Connecting cables for valves, plug pattern ZC, metric screw

Datasheet

Dimensions Electrical connection 2 – Plug, plug pattern ZB, self-tapping screw

Download CAD data → <u>www.festo.com</u>









[1] Retaining screw

[3] Cable, length depending on the

order

	B1	B2	B3	D1 Ø	H1	H2	H3	L1	L2	L3	L4	L5	L6
Plug, plug pattern ZB	9.7	9.7	5.4	2.9	12.35	13	17.5	26.9	19	27	17	8.4	12.5

Additional functions	Signal status	Cable length	Weight	Part no.	Туре
	indication	[m]	[g]		
, connection technology open end					
Protective circuit	Yellow LED	2.5	50	8047671	NEBV-Z4WA2L-P-E-2.5-N-LE2-S1
		5	90	8047672	NEBV-Z4WA2L-P-E-5-N-LE2-S1
		10	170	8047670	NEBV-Z4WA2L-P-E-10-N-LE2-S1
Holding current reduction, protective circuit	Yellow LED	2.5	50	8047679	NEBV-Z4WA2L-R-E-2.5-N-LE2-S1
		5	90	8047680	NEBV-Z4WA2L-R-E-5-N-LE2-S1
		10	170	8047678	NEBV-Z4WA2L-R-E-10-N-LE2-S1
, connection technology plug M8x1, A-coded to I	N 61076-2-104				
Protective circuit	Yellow LED	0.5	18	8047673	NEBV-Z4WA2L-P-E-0.5-N-M8G3-S1
		2.5	54	8047674	NEBV-Z4WA2L-P-E-2.5-N-M8G3-S1
Holding current reduction, protective circuit	Yellow LED	0.5	18	8047683	NEBV-Z4WA2L-R-E-0.5-N-M8G3-S1
		2.5	54	8047684	NEBV-Z4WA2L-R-E-2.5-N-M8G3-S1
	connection technology open end Protective circuit Holding current reduction, protective circuit connection technology plug M8x1, A-coded to B Protective circuit	indication , connection technology open end Protective circuit Yellow LED Holding current reduction, protective circuit Yellow LED , connection technology plug M8x1, A-coded to EN 61076-2-104 Protective circuit Yellow LED	indication [m] connection technology open end 2.5 Protective circuit Yellow LED 2.5 Holding current reduction, protective circuit Yellow LED 2.5 total 5 10 Holding current reduction, protective circuit Yellow LED 2.5 f 10 10 protective circuit Yellow LED 5 Holding current reduction, protective circuit Yellow LED 0.5 Holding current reduction, protective circuit Yellow LED 0.5	indication [m] [g] , connection technology open end [g] Protective circuit Yellow LED 2.5 50 5 90 10 170 Holding current reduction, protective circuit Yellow LED 2.5 50 5 90 10 170 Holding current reduction, protective circuit Yellow LED 2.5 50 5 90 10 170 Protective circuit Yellow LED 0.5 18 2.5 54 0.5 18 Holding current reduction, protective circuit Yellow LED 0.5 18	indication [m] [g] , connection technology open end 2.5 50 8047671 Protective circuit Yellow LED 2.5 50 8047672 10 170 8047670 Holding current reduction, protective circuit Yellow LED 2.5 50 8047679 5 90 8047680 10 170 8047678 onnection technology plug M8x1, A-coded to EN 61076-2-104 70 8047673 Protective circuit Yellow LED 0.5 18 8047674 Holding current reduction, protective circuit Yellow LED 0.5 18 8047674

Electrical connection 2, connection technology plug, plug pattern ZB, self-tapping screw

,						
	Operating voltage range 0 30 V DC, without	-	0.2	18	8047681	NEBV-Z4WA2-E-0.2-N-Z1W2-S1
	holding current reduction, without protective					
	circuit					
	Holding current reduction, protective circuit	Yellow LED	0.2	18	8047682	NEBV-Z4WA2L-R-E-0.2-N-Z1W2-S1
578						

Ordering data – Modular product system

Ordering table		Conditions	Code	Enter
				code
Module no.	8003577			
Connecting cable	Connecting cables for valves		NEBV	NEBV
Connection technology on the left, field device side	Socket, plug pattern ZC, metric screw		-Z4	-Z4
Cable outlet on the left	Angled 45°		WA	WA
Number of pins/wires on the left	2-pin		2	2
Display	None			
	Signal status LED		L	
Circuitry	None	[1]		
	Integrated protective circuit	[2]	-P	
	Holding current reduction with integrated protective circuit		-R	
Cable characteristic	Suitable for energy chains		-E	-E
Cable length	0.2 m	[1]	-0.2	
	0.5 m	[3]	-0.5	
	2.5 m	[2]	-2.5	
	5 m	[4]	-5	
	10 m	[4]	-10	
Cable designation	Without inscription label holder		-N	-N
Connection technology on the right,	Open end		-LE	
controller side	Plug M8x1, A-coded, EN 61076-2-104		-M8	
	Plug, plug pattern ZB, self-tapping screw		-Z1	
Cable outlet on the right	None			
	Straight		G	
	Angled		W	
Number of pins/wires on the right	2-pin		2	
	3-pin	[3]	3	
Degree of protection, electrical system	IP65		-S1	-S1

Only with connection technology on the right Z1

Not with connection technology on the right Z1 Only with connection technology on the right M8 Only with connection technology on the right LE

[1] -0.2 [2] -P, -2.5 [3] -0.5, 3 [4] -5, -10