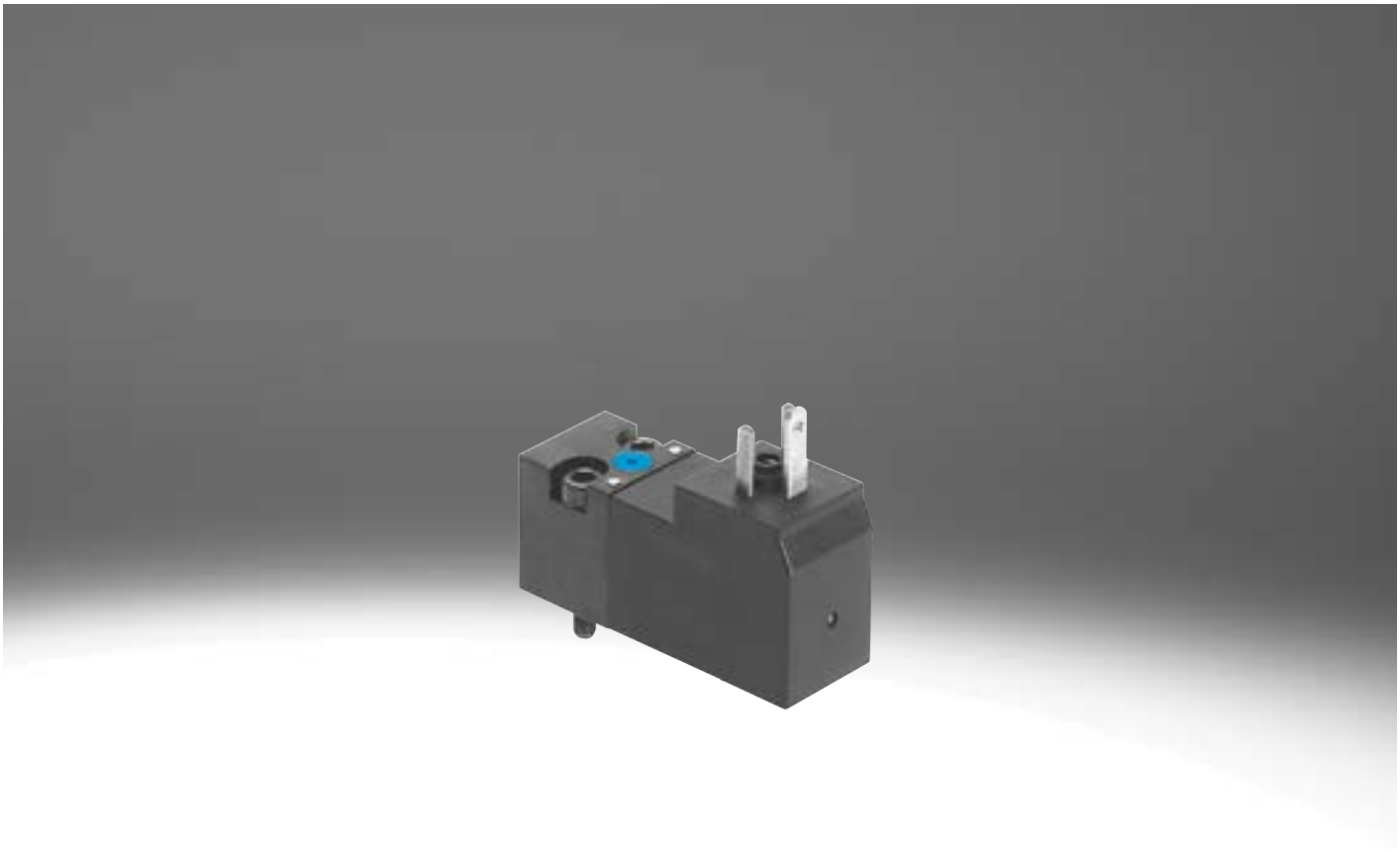
Standard valves to ISO 15218

FESTO



Product range overview

Function	Electrical connection		Voltage	Manual override	→ Page/Internet
Pilot valve to ISO 15218	**Width 15 mm**				
	Plug type C, to EN 175301-803	–	12 V DC	Non-detenting	4
				Non-detenting/detenting	4
			24 V DC	Non-detenting	4
				Non-detenting/detenting	4
			24 V AC	Non-detenting	4
				Non-detenting/detenting	4
		With PE conductor	110 V AC	Non-detenting	4
				Non-detenting/detenting	4
			230 V AC	Non-detenting	4
				Non-detenting/detenting	4
	M12 plug to IEC 61076-2-101	–	24 V DC	Non-detenting	8
				Non-detenting/detenting	8
	Width 30 mm				
	Plug type A, to EN 175301-803	–	24 V DC/42 V AC	Non-detenting	11
			24 V DC/48 V AC	Non-detenting	11
			110 V AC	Non-detenting	11
			230 V AC	Non-detenting	11

Type codes

001	Series	
VSCS	Standards-based valve to ISO 15218	

002	Directional control valve type	
B	Sub-base valve	

003	Valve function	
M32	3/2-way solenoid valve	

004	Reset method for monostable/single solenoid valves	
M	Mechanical spring	

005	Manual override	
D	Non-detenting, detenting	
H	Non-detenting	

006	Pneumatic connection	
WA	CNOMO interface, small	

007	Nominal operating voltage	
1	24 V DC	
1A	24 V AC/50-60 Hz	
2A	110 V AC/50-60 Hz	
3A	230 V AC/50-60 Hz	
5	12 V DC	

008	Electrical connection	
C1	Plug pattern type C, to EN 175301-803	

009	Pressure range [MPa]	
	0 ... 1	
8	0.15 ... 0.8	

Data sheet

Standard valve with plug type C
VSCS-B-M32-...C1

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection to EN 175301-803, type C

General technical data				
Operating pressure		0.15 ... 0.8 MPa	0 ... 1 MPa	
Electrical connection		Plug type C (without PE conductor), to EN 175301-803		
Valve function		3/2-way single solenoid valve, normally closed		
Sealing principle		Soft		
Actuation type		Electrical		
Reset method		Mechanical spring		
Type of control		Direct		
Flow direction		Non-reversible		
Overlap		Negative overlap		
Width	[mm]	15		
Mounting position		Any		
Mounting		Screwed to valve body or sub-base (2x M3)		
Standard nominal flow rate	[l/min]	13.5	18	
Duty cycle	[%]	100		
Degree of protection to EN 60529		IP65 (in combination with plug socket)		
Conforms to standard		ISO 15218		

Characteristic coil data – Operating pressure 0.15 ... 0.8 MPa							
Operating voltage			12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Frequency		[Hz]	–	–	50/60	50/60	50/60
Power		[W]	1.3	1.3	–	–	–
Pick-up power		[VA]	–	–	2.1	2.0	1.9
Holding power		[VA]	–	–	1.6	1.5	1.3
Switching time	On	[ms]	8	8	9	8	8
	Off	[ms]	6	6	30	20	35
Permissible voltage fluctuation		[%]	–10/+10	–10/+10	–10/+10	–10/+10	–10/+10

Characteristic coil data – Operating pressure 0 ... 1 MPa							
Operating voltage			12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Frequency		[Hz]	–	–	50/60	50/60	50/60
Power		[W]	1.8	1.8	–	–	–
Pick-up power		[VA]	–	–	3.1	2.9	2.9
Holding power		[VA]	–	–	2.3	2.1	2.1
Switching time	On	[ms]	6	6	6	6	6
	Off	[ms]	6	6	6	6	6
Permissible voltage fluctuation		[%]	–15/+10	–15/+10	–15/+10	–15/+10	–15/+10

Materials	
Seals	NBR
Note on materials	RoHS-compliant

Data sheet

Safety data – Operating pressure 0.15 ... 0.8 MPa						
Operating voltage		12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Note on forced checking procedure		Switching frequency min. 1/week				
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27				
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6				

Safety data – Operating pressure 0 ... 1 MPa						
Operating voltage		12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Note on forced checking procedure		Switching frequency min. 1/week				
Maximum positive test pulse with 0 signal	[µs]	–	1800	–	–	–
Maximum negative test pulse with 1 signal	[µs]	–	800	–	–	–
Shock resistance		Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27				
Vibration resistance		Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6				

Operating and environmental conditions – Operating pressure 0.15 ... 0.8 MPa						
Operating voltage		12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)				
Operating pressure	[bar]	1.5 ... 8				
Ambient temperature	[°C]	–5 ... +50				
Temperature of medium	[°C]	–5 ... +50				
Corrosion resistance class CRC[1]		2				
CE marking (see declaration of conformity)[2]		–	–	–	To EU Low Voltage Directive	

1) 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.
2) Additional information: www.festo.com/catalogue/... ➔ Support/Downloads.

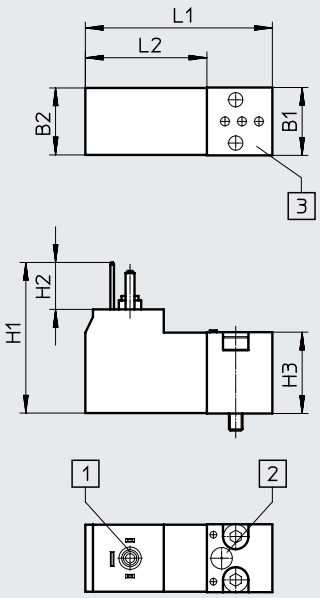
Operating and environmental conditions – Operating pressure 0 ... 1 MPa						
Operating voltage		12 V DC	24 V DC	24 V AC	110 V AC	230 V AC
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]				
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)				
Operating pressure	[bar]	0 ... 10				
Ambient temperature	[°C]	–10 ... +50				
Temperature of medium	[°C]	–10 ... +50				
Corrosion resistance class CRC[1]		2				
CE marking (see declaration of conformity)[2]		–	–	–	To EU Low Voltage Directive	
Certification		–	c UL us - Recognized (OL)	–	–	–

1) 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.
2) Additional information: www.festo.com/catalogue/... ➔ Support/Downloads.

Data sheet

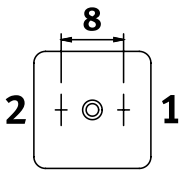
Dimensions Download CAD data ➔ www.festo.com

VSCS-...C1

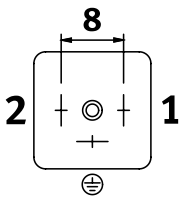


[1] Plug type C, to EN 175301-803
[2] Manual override
[3] Pneumatic port pattern to ISO 15218

Electrical connection



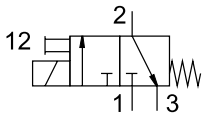
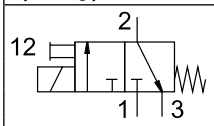
Operating voltage:
- 12 V DC
- 24 V DC
- 24 V AC



Operating voltage:
- 110 V AC
- 230 V AC

Type	B1	B2	H1	H2	H3	L1	L2
VSCS-...C1	15.2	15	33.7	10.5	18.2	41.9	14.7

Ordering data

	Operating voltage	Manual override	Part no.	Type
Operating pressure 0.15 ... 0.8 MPa				
	12 V DC	Non-detenting	**8040565**	**VSCS-B-M32-MH-WA-5C1-8**
		Non-detenting/detenting	**8040571**	**VSCS-B-M32-MD-WA-5C1-8**
	24 V DC	Non-detenting	**8040564**	**VSCS-B-M32-MH-WA-1C1-8**
		Non-detenting/detenting	**8040570**	**VSCS-B-M32-MD-WA-1C1-8**
	24 V AC	Non-detenting	**8040566**	**VSCS-B-M32-MH-WA-1AC1-8**
		Non-detenting/detenting	**8040572**	**VSCS-B-M32-MD-WA-1AC1-8**
	110 V AC	Non-detenting	**8040567**	**VSCS-B-M32-MH-WA-2AC1-8**
		Non-detenting/detenting	**8040573**	**VSCS-B-M32-MD-WA-2AC1-8**
	230 V AC	Non-detenting	**8040568**	**VSCS-B-M32-MH-WA-3AC1-8**
		Non-detenting/detenting	**8040574**	**VSCS-B-M32-MD-WA-3AC1-8**
Operating pressure 0 ... 1 MPa				
	12 V DC	Non-detenting	**546257**	**VSCS-B-M32-MH-WA-5C1**
		Non-detenting/detenting	**571062**	**VSCS-B-M32-MD-WA-5C1**
	24 V DC	Non-detenting	**546256**	**VSCS-B-M32-MH-WA-1C1**
		Non-detenting/detenting	**571061**	**VSCS-B-M32-MD-WA-1C1**
	24 V AC	Non-detenting	**546258**	**VSCS-B-M32-MH-WA-1AC1**
		Non-detenting/detenting	**571063**	**VSCS-B-M32-MD-WA-1AC1**
	110 V AC	Non-detenting	**546259**	**VSCS-B-M32-MH-WA-2AC1**
		Non-detenting/detenting	**571064**	**VSCS-B-M32-MD-WA-2AC1**
	230 V AC	Non-detenting	**546260**	**VSCS-B-M32-MH-WA-3AC1**
		Non-detenting/detenting	**571065**	**VSCS-B-M32-MD-WA-3AC1**

Type codes

001	Series	
VSCS	Standards-based valve to ISO 15218	

002	Directional control valve type	
B	Sub-base valve	

003	Valve function	
M32	3/2-way solenoid valve	

004	Reset method for monostable/single solenoid valves	
M	Mechanical spring	

005	Manual override	
D	Non-detenting, detenting	
H	Non-detenting	

006	Pneumatic connection	
WA	CNOMO interface, small	

007	Nominal operating voltage	
1	24 V DC	

008	Electrical connection	
R3	Individual plug M12, to EN 61076-2-101	

009	Pressure range [MPa]	
	0 ... 1	
8	0.15 ... 0.8	

Data sheet

Standard valve with round plug
VSCS-B-M32 ... 1R3

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection M12x1 to IEC 61076-2-101

General technical data				
Operating pressure			0.15 ... 0.8 MPa	0 ... 1 MPa
Electrical connection			Plug M12x1, to IEC 61076-2-101	
Valve function			3/2-way single solenoid valve, normally closed	
Sealing principle			Soft	
Actuation type			Electrical	
Reset method			Mechanical spring	
Type of control			Direct	
Flow direction			Non-reversible	
Overlap			Negative overlap	
Width		[mm]	15	
Mounting position			Any	
Mounting			Screwed to valve body or sub-base (2x M3)	
Standard nominal flow rate		[l/min]	13.5	18
Duty cycle		[%]	100	
Degree of protection to EN 60529			IP65 (in combination with plug socket)	
Conforms to standard			ISO 15218	

Characteristic coil data				
Operating pressure			0.15 ... 0.8 MPa	0 ... 1 MPa
Operating voltage		[V DC]	24	24
Power		[W]	1.3	1.8
Switching time	On	[ms]	8	6
	Off	[ms]	6	6
Permissible voltage fluctuation		[%]	–10/+10	–15/+10

Materials	
Seals	NBR
Note on materials	RoHS-compliant

Safety characteristics			
Operating pressure		0.15 ... 0.8 MPa	0 ... 1 MPa
Note on forced checking procedure		Switching frequency min. 1/week	Switching frequency min. 1/week
Max. positive test pulse with 0 signal	[µs]	–	1800
Max. negative test pulse with 1 signal	[µs]	–	800
Shock resistance		Shock test with severity level 1 to FN 942017-5 and EN 60068-2-27	Shock test with severity level 2 to FN 942017-5 and EN 60068-2-27
Vibration resistance		Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6	Transport application test with severity level 2 to FN 942017-4 and EN 60068-2-6

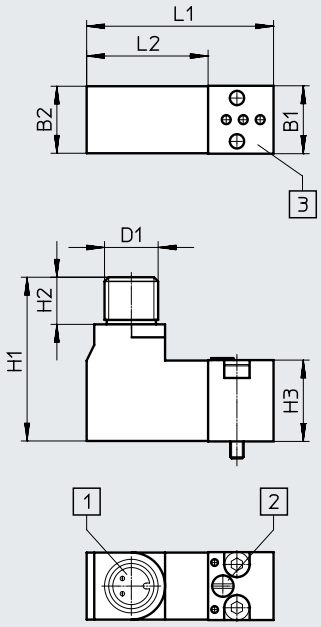
Data sheet

Operating and environmental conditions			
Operating pressure		0.15 ... 0.8 MPa	0 ... 1 MPa
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]	
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)	
Operating pressure	[bar]	1.5 ... 8	0 ... 10
Ambient temperature	[°C]	–5 ... +50	–10 ... +50
Temperature of medium	[°C]	–5 ... +50	–10 ... +50
Corrosion resistance class CRC[1)]		2	2
Certification		–	c UL us - Recognized (OL)

1) 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.

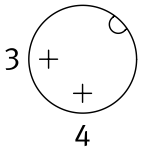
Dimensions Download CAD data ➔ www.festo.com

VSCS-...1R3



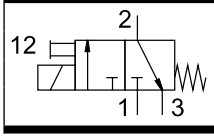
[1] Plug M12x1, to IEC 61076-2-101
[2] Manual override
[3] Pneumatic port pattern to ISO 15218

Electrical connection



Type	B1	B2	D1	H1	H2	H3	L1	L2
VSCS-...1R3	15.2	15	M12	36.7	10.6	18.2	41.9	27.2

Ordering data

	Operating pressure	Manual override	Part no.	Type
	0.15 ... 0.8 MPa	Non-detenting	**8040569**	**VSCS-B-M32-MH-WA-1R3-8**
		Non-detenting/detenting	**8040575**	**VSCS-B-M32-MD-WA-1R3-8**
	0 ... 1 MPa	Non-detenting	**573214**	**VSCS-B-M32-MH-WA-1R3**
		Non-detenting/detenting	**573215**	**VSCS-B-M32-MD-WA-1R3**

Type codes

001	Series	
MDH	Standards-based directional control valve	

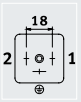
002	Valve function	
3/2	3/2-way valve	

003	Nominal operating voltage	
	24 V DC, 42 V AC 50/60 Hz	
24DC	24 V DC, 48 V AC 50/60 Hz	
110VAC	110 V AC, 50/60 Hz	
230VAC	230 V AC, 50/60 Hz	

Data sheet

Standard valve with plug type A
MDH-3/2 ...

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection, plug type A, to EN 175301-803



General technical data		
Electrical connection		Plug type A, to EN 175301-803
Valve function		3/2-way single solenoid valve, normally closed
Sealing principle		Soft-sealing
Actuation type		Electrical
Reset method		Mechanical spring
Design		Poppet valve
Type of control		Direct
Flow direction		Non-reversible
Overlap		Negative overlap
Width	[mm]	30
Mounting position		Any
Mounting		Screwed to basic valve body or sub-base
Manual override		Non-detenting
Standard nominal flow rate	[l/min]	50
Duty cycle	[%]	100
Degree of protection to EN 60529		IP65 (in combination with plug socket)
Conforms to standard		ISO 15218
Weight	[g]	140

Characteristic coil data					
Operating voltage		42 V AC	48 V AC	110 V AC	230 V AC
Operating voltage	[V AC]	42	48	110	230
	[V DC]	24	24	–	–
	[Hz]	50/60	50/60	50/60	50/60
Power	[W]	8.4	6	–	–
Pick-up power	[VA]	11.5	14.5	12	12
Holding power	[VA]	8.5	9.9	8	8
Switching time on/off	[ms]	11/9	11/9	11/9	11/9
Permissible voltage fluctuation	[%]	–10/+10	–10/+10	–10/+10	–10/+10
Permissible frequency fluctuation	[%]	–10/+10	–	–10/+10	–10/+10

Materials		
Seals		FPM
Note on materials		RoHS-compliant

Data sheet

Operating and environmental conditions					
Operating voltage		42 V AC	48 V AC	110 V AC	230 V AC
Operating medium		Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)			
Operating pressure	[bar]	1 ... 16			
Ambient temperature	[°C]	–10 ... +50		–15 ... +50	
Temperature of medium	[°C]	–15 ... +80		–15 ... +80	
Corrosion resistance class CRC[1]		2		2	
CE marking (see declaration of conformity)[2]		–		To EU Low Voltage Directive	

1) 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.

2) Additional information: www.festo.com/catalogue/... ➔ Support/Downloads.

Dimensions

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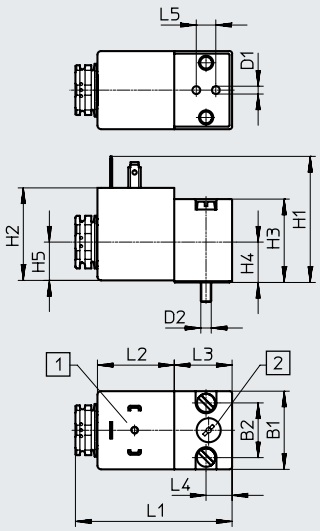
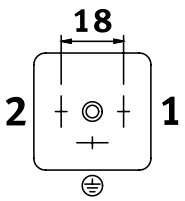
MDH-3/2 ...



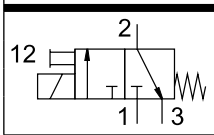
[1] Plug type A, to EN 175301-803
[2] Manual override

Electrical connection



Type	B1	B2	D1	D2	H1	H2	H3	H4	H5	L1	L2	L3	L4	L5
MDH-3/2 ...	30	21	3	M4	48.4	35.5	32	15.5	14.7	60.7	29.5	22	10	7.5

Ordering data

	Operating voltage		Part no.	Type
	24 V DC	42 V AC	**119603**	**MDH-3/2-24VDC/42VAC**
		48 V AC	**119600**	**MDH-3/2-24DC**
	110 V AC		**119601**	**MDH-3/2-110VAC**
	230 V AC		**119602**	**MDH-3/2-230VAC**