

Standards-based 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	5	
				Non-detenting/detenting	5	
				24 V DC	Non-detenting	5
					Non-detenting/detenting	5
				24 V AC	Non-detenting	5
					Non-detenting/detenting	5
			With PE conductor	110 V AC	Non-detenting	5
				230 V AC	Non-detenting/detenting	5
			230 V AC	Non-detenting	5	
				Non-detenting/detenting	5	
	Plug type C to industry standard, 9.4 mm	–	24 V AC	Non-detenting	10	
				Non-detenting/detenting	10	
	M12 plug to IEC 61076-2-101	–	24 V DC	Non-detenting	12	
				Non-detenting/detenting	12	
	Width 30 mm					
	Plug type A, to EN 175301-803	–	24 V DC/42 V AC	Non-detenting	14	
24 V DC/48 V AC				Non-detenting	14	
110 V AC				Non-detenting	14	
230 V AC				Non-detenting	14	

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	Sub-base size 15 mm to ISO 15218 (CNOMO)
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
R3	Individual plug M12, to EN 61076-2-101
E1	Plug pattern type C, industry standard
009	Pressure range [MPa]
	0 ... 1
8	0.15 ... 0.8

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

Datasheet

Standards-based valve with plug type C to EN 175301-803 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	Type C to DIN 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	Not reversible	
Overlap	Negative overlap	
Width [mm]	15	
Mounting position	Any	
Standard nominal flow rate [l/min]	13.5	18
Duty cycle [%]	100	
Degree of protection	IP65	
Conforms to	ISO 15218	
Pneumatic connection 1	Sub-base	
Pneumatic connection 2	Sub-base	
Pneumatic connection 3	Sub-base	

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 fluctuations [%]		–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 fluctuations [%]		–15/+10	–15/+10	–15/+10	–15/+10	–15/+10

Materials	
Seals	NBR
Note on materials	RoHS-compliant

Datasheet

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 resistant	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 resistant	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				
[psi]	21.75 ... 116				
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	
UKCA marking (see declaration of conformity) ²⁾	–			To UK regulations for electrical equipment	

1) More information www.festo.com/x/topic/crc

2) More 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	
Manual override	Non-detenting	Non-detenting/de-tenting	Non-detenting	Non-detenting/de-tenting	Non-detenting	Non-detenting/de-tenting	Non-detenting	Non-detenting/de-tenting	Non-detenting	Non-detenting/de-tenting
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									
[psi]	0 ... 145						–	0 ... 145		
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			
UKCA marking (see declaration of conformity) ²⁾	–						To UK regulations for electrical equipment			
Certification	–		c UL us - Recognized (OL)		–		–			

1) More information www.festo.com/x/topic/crc

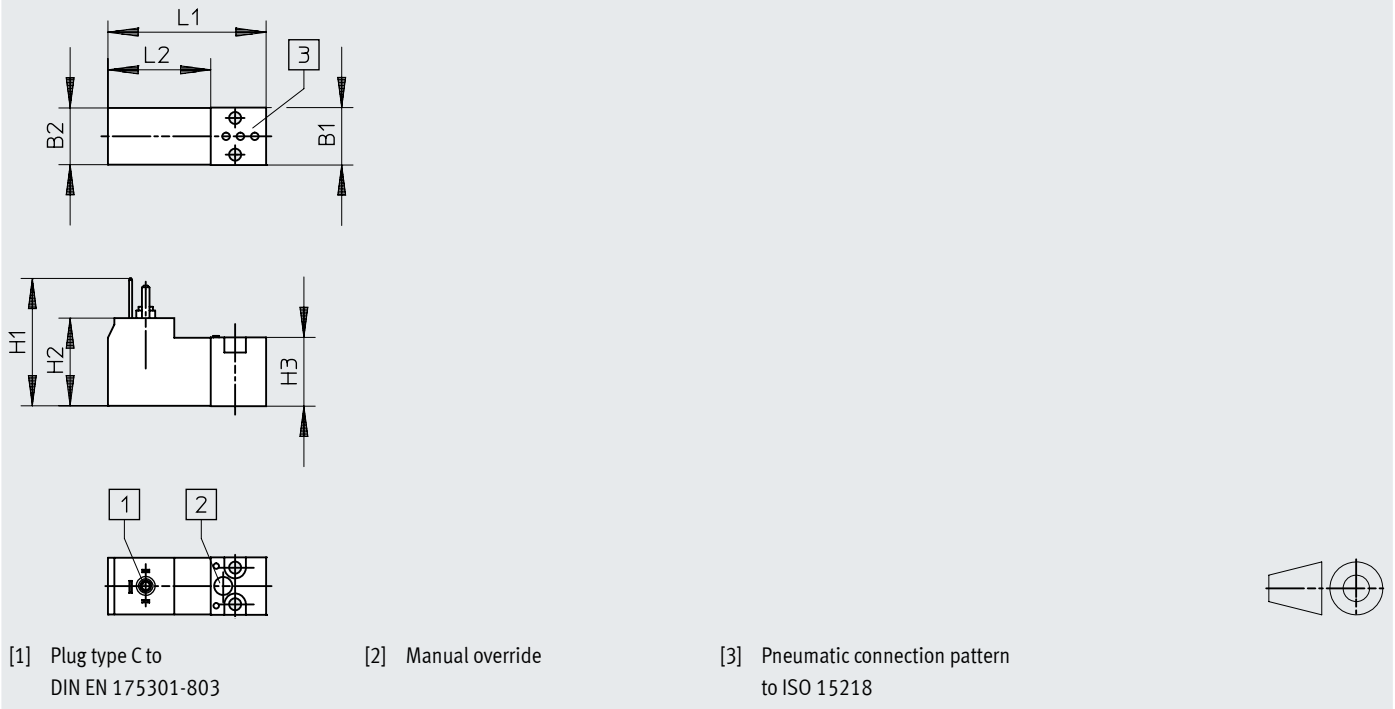
2) More information: www.festo.com/catalogue/... → Support/Downloads.

Datasheet

Dimensions

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Operating voltage 12 V DC, 24 V DC and 24 V AC



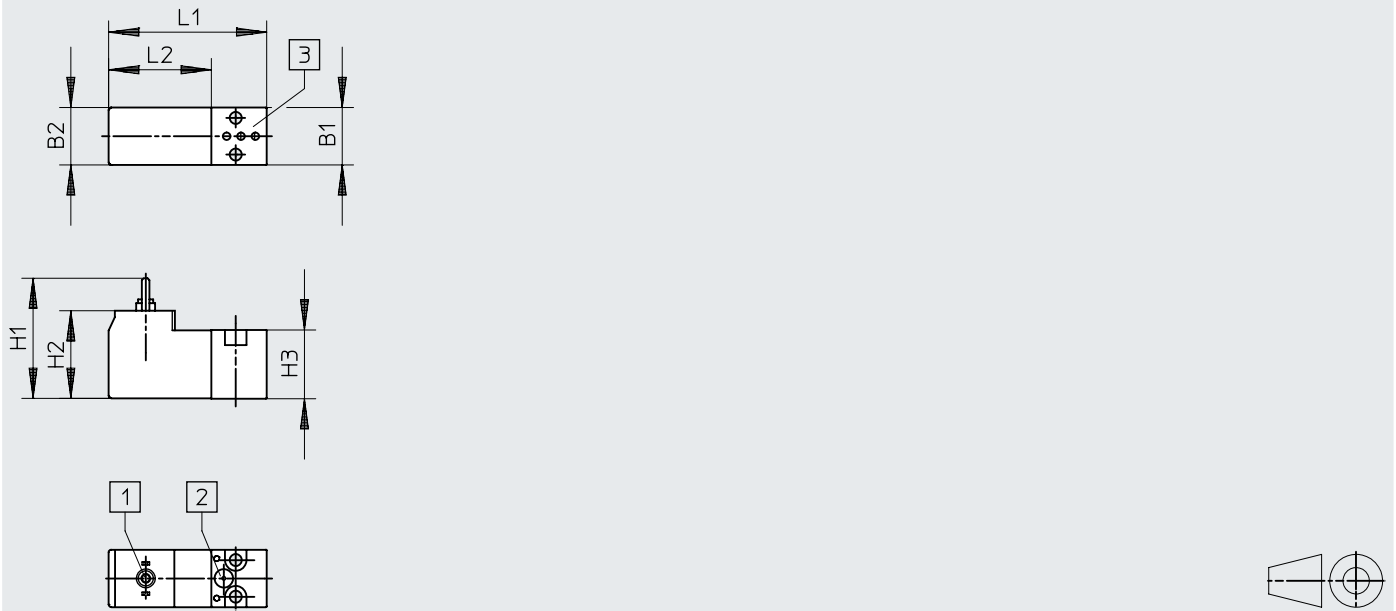
Type	B1	B2	H1	H2	H3	L1	L2
VSCS-...-5C1	15.2	15	33.7	23.2	18.2	41.9	27.2
VSCS-...-1C1							
VSCS-...-1AC1							

Datasheet

Dimensions

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Operating voltage 110 V AC and 230 V AC



[1] Plug type C to
DIN EN 175301-803

[2] Manual override

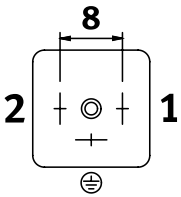
[3] Pneumatic connection pattern
to ISO 15218

Type	B1	B2	H1	H2	H3	L1	L2
VSCS-...-2AC1	15.2	15	31.8	23.2	18.2	41.9	27.2
VSCS-...-3AC1							

Datasheet

Electrical connection

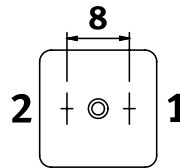
With earth connection



Operating voltage:

- 12 V DC
- 24 V DC
- 24 V AC

Without earth connection



Operating voltage:

- 110 V AC
- 230 V AC

Ordering data

	Operating voltage	Manual override	LABS (PWIS) conformity	Part no.	Type
Operating pressure 0.15 ... 0.8 MPa					
	12 V DC	Non-detenting	VDMA24364-C1-L	8040565	VSCS-B-M32-MH-WA-5C1-8
		Non-detenting/detenting	VDMA24364-C1-L	8040571	VSCS-B-M32-MD-WA-5C1-8
	24 V DC	Non-detenting	VDMA24364-C1-L	8040564	VSCS-B-M32-MH-WA-1C1-8
		Non-detenting/detenting	VDMA24364-C1-L	8040570	VSCS-B-M32-MD-WA-1C1-8
	24 V AC	Non-detenting	VDMA24364-C1-L	8040566	VSCS-B-M32-MH-WA-1AC1-8
		Non-detenting/detenting	VDMA24364-C1-L	8040572	VSCS-B-M32-MD-WA-1AC1-8
	110 V AC	Non-detenting	VDMA24364-C1-L	8040567	VSCS-B-M32-MH-WA-2AC1-8
		Non-detenting/detenting	VDMA24364-C1-L	8040573	VSCS-B-M32-MD-WA-2AC1-8
	230 V AC	Non-detenting	VDMA24364-C1-L	8040568	VSCS-B-M32-MH-WA-3AC1-8
		Non-detenting/detenting	VDMA24364-C1-L	8040574	VSCS-B-M32-MD-WA-3AC1-8
Operating pressure 0 ... 1 MPa					
	12 V DC	Non-detenting	VDMA24364-C1-L	546257	VSCS-B-M32-MH-WA-5C1
		Non-detenting/detenting	VDMA24364-C1-L	571062	VSCS-B-M32-MD-WA-5C1
	24 V DC	Non-detenting	VDMA24364-C1-L	546256	VSCS-B-M32-MH-WA-1C1
		Non-detenting/detenting	VDMA24364-C1-L	571061	VSCS-B-M32-MD-WA-1C1
	24 V AC	Non-detenting	VDMA24364-C1-L	546258	VSCS-B-M32-MH-WA-1AC1
		Non-detenting/detenting	VDMA24364-C1-L	571063	VSCS-B-M32-MD-WA-1AC1
	110 V AC	Non-detenting	VDMA24364-B1/B2-L	546259	VSCS-B-M32-MH-WA-2AC1
		Non-detenting/detenting	VDMA24364-C1-L	571064	VSCS-B-M32-MD-WA-2AC1
	230 V AC	Non-detenting	VDMA24364-C1-L	546260	VSCS-B-M32-MH-WA-3AC1
		Non-detenting/detenting	VDMA24364-C1-L	571065	VSCS-B-M32-MD-WA-3AC1

Datasheet

Standards-based valve with plug type C to industry standard, 9.4 mm VSCS-B-M32-...E1

- Valve actuator for electrical actuation of valve bodies
- Pneumatic connection: to ISO 15218 (CNOMO)
- Electrical connection to industry standard, 9.4 mm, type C



General technical data

Electrical connection	Plug pattern type C to industry standard, 9.4 mm
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	Not reversible
Overlap	Negative overlap
Width [mm]	15
Mounting position	Any
Standard nominal flow rate [l/min]	13.5
Duty cycle [%]	100
Degree of protection	IP65
Conforms to	ISO 15218
Pneumatic connection 1	Sub-base
Pneumatic connection 2	Sub-base
Pneumatic connection 3	Sub-base

Characteristic coil data

Operating voltage [V DC]	24
Power [W]	1.3
Switching time On [ms]	8
Switching time Off [ms]	6
Permissible voltage fluctuations [%]	-10/+10

Materials

Seals	NBR
Note on materials	RoHS-compliant

Safety data

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 resistant	Transport application test with severity level 1 to FN 942017-4 and EN 60068-2-6

Operating and environmental conditions

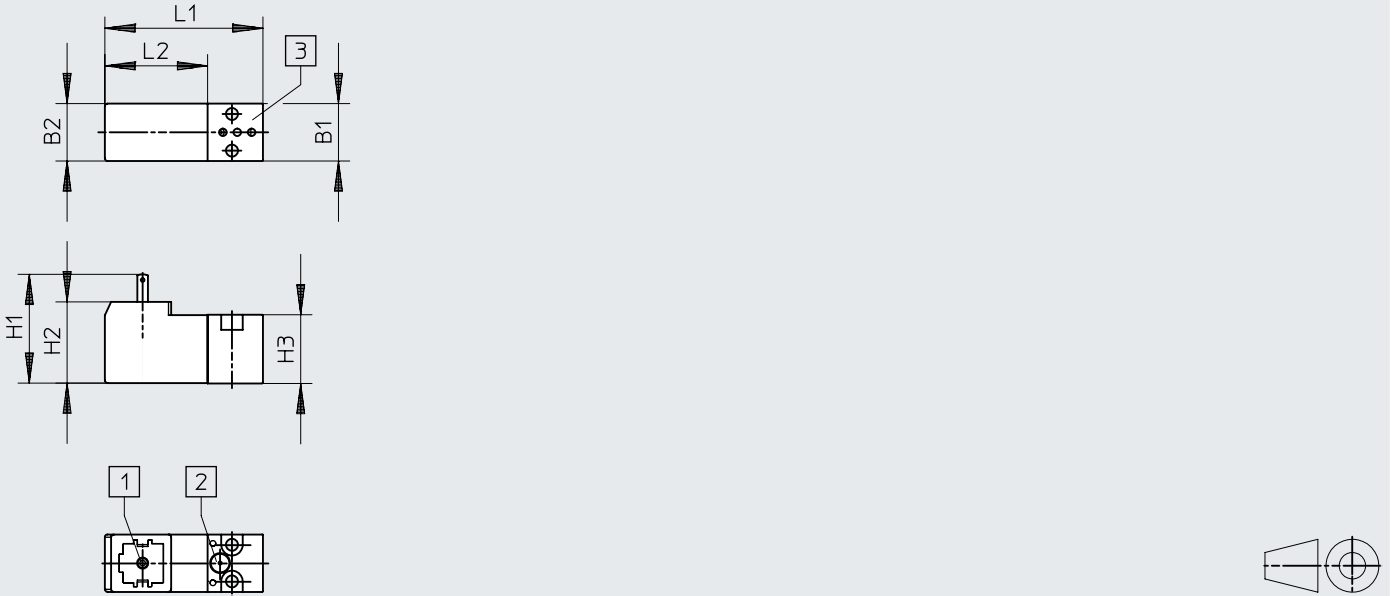
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Operating pressure [MPa]	0.15 ... 0.8
[bar]	1.5 ... 8
[psi]	21.75 ... 116
Ambient temperature [°C]	-5 ... +50
Temperature of medium [°C]	-5 ... +50
Corrosion resistance class CRC ¹⁾	2

1) More information www.festo.com/x/topic/crc

Datasheet

Dimensions

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[1] Plug type C to industry standard, 9.4 mm

[2] Manual override

[3] Pneumatic connection pattern to ISO 15218

Type	B1	B2	H1	H2	H3	L1	L2
VSCS-...1E1	15.2	15.2	28.8	21.5	18.2	41.9	27.2

Ordering data	Operating voltage	Manual override	LABS (PWIS) conformity	Part no.	Type
	24 V DC	Non-detenting	VDMA24364-C1-L	8137327	VSCS-B-M32-MH-WA-1E1-8
		Non-detenting/detenting	VDMA24364-C1-L	8137328	VSCS-B-M32-MD-WA-1E1-8

Datasheet

Standards-based 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	Not 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	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
	Off [ms]	6
Permissible voltage fluctuations [%]	-10/+10	-15/+10

Materials	
Seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-C1-L

Safety data		
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 logic 0 [μs]	-	1800
Max. negative test pulse with logic 1 [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 resistant	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

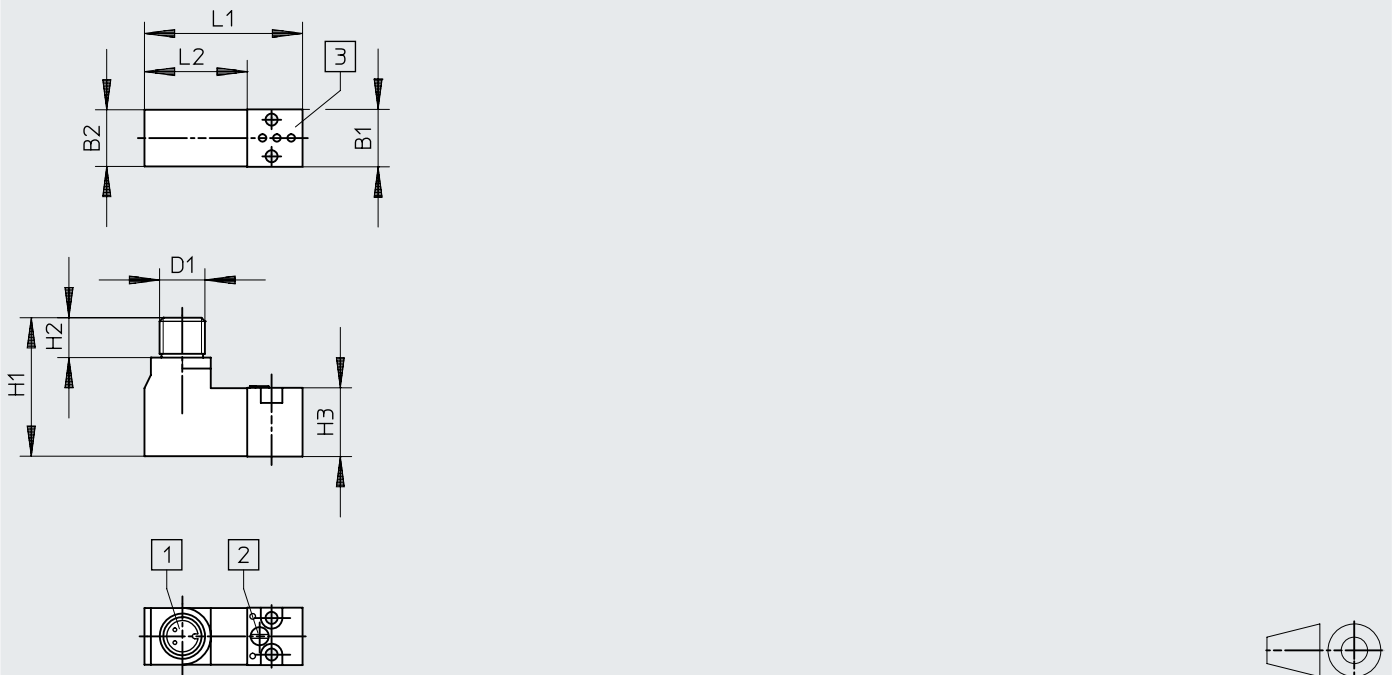
Datasheet

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
	[psi]	21.75 ... 116
Ambient temperature	[°C]	-5 ... +50
Temperature of medium	[°C]	-5 ... +50
Corrosion resistance class CRC ¹⁾	2	
Certification	c UL us - Recognized (OL)	

1) More information www.festo.com/x/topic/crc

Dimensions

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[1] Plug M12x1, to IEC 61076-2-101

[2] Manual override

[3] Pneumatic connection pattern to ISO 15218

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	

Datasheet

Standards-based 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	Not reversible		
Overlap	Negative overlap		
Width	[mm]	30	
Mounting position	Any		
Mounting	Screwed to 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	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 fluctuations	[%]	–10/+10	–10/+10	–10/+10	–10/+10
Permissible frequency fluctuations	[%]	–10/+10	–	–10/+10	–10/+10

Materials

Seals	FPM
Note on materials	RoHS-compliant

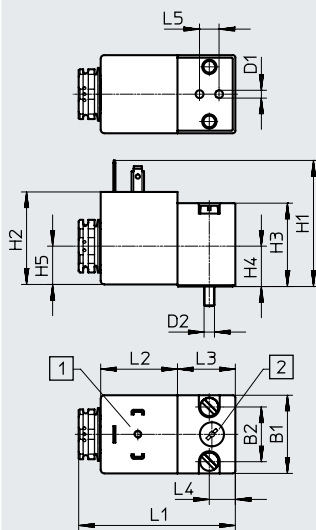
Datasheet

Operating and environmental conditions		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	[MPa]	0.1 ... 1.6			
	[bar]	1 ... 16			
	[psi]	14.5 ... 232			
Ambient temperature	[°C]	-10 ... +50		-15 ... +50	
Temperature of medium	[°C]	-10 ... +80		-15 ... +80	
Corrosion resistance class CRC ¹⁾		2			
CE marking (see declaration of conformity) ²⁾		-		To EU Low Voltage Directive	
UKCA marking (see declaration of conformity) ²⁾		-		To UK regulations for electrical equipment	
LABS (PWIS) conformity		VDMA24364-B2-L		VDMA24364-B2-L	

1) More information www.festo.com/x/topic/crc2) More information: www.festo.com/catalogue/... → Support/Downloads.

Dimensions

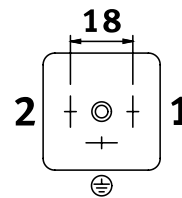
MDH-3/2 ...



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

[2] Manual override

Electrical connection

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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	