FESTO



Key features











Innovative

- Small and compact for a wide range of pneumatic applications
- Numerous selectable valve functions: 3/2-way and 5/2-way functions
- Flow rates up to 1200 l/min
- Outstanding pneumatic performance for a wide range of applications
- Light weight
- Minimal actuating forces

Versatile

- Flexibility of the pneumatic working ports provides a practical solution to different requirements
- Round silencer for ducted exhaust air
- Suitable for vacuum in some cases
- Reverse operation possible in some cases
- Actuation: direct and piloted
- Available pressure range from vacuum to 10 bar.
- Design:
 - Stem actuated valve
 - Roller lever valve
 - Roller lever valve with idle return

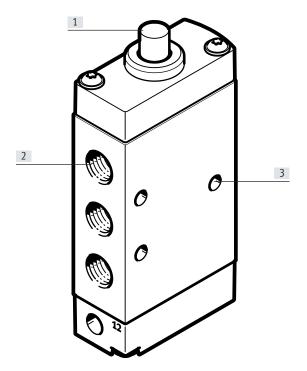
Reliable

- Durable thanks to tried-and-tested piston slide and poppet valves
- Sturdy thanks to metal housing and connecting thread or connector

Easy to install

- Mounted via through-holes (stem actuated valves are also suitable for front panel mounting)
- Can be precisely adjusted using mounting kit

Key features



- [1] Stem as actuator
- [2] Practical connection: via threaded connection or connector
- [3] Fast mounting: screwed directly via through-hole, front panel mounting possible

Equipment options

3/2-way valve, monostable

- Normally open/closed
- · Mechanical spring
- Vacuum operation possible
- Directly controlled and pneumatically piloted
- Reversible
- Ducted exhaust air

5/2-way valve, monostable

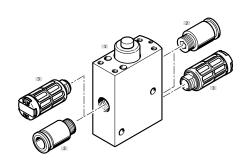
- Pneumatic spring/mechanical spring
- Vacuum operation possible
- Reversible in some cases
- Pneumatically piloted
- Ducted exhaust air

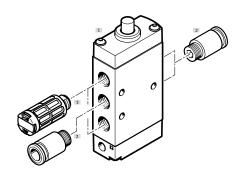
Peripherals overview

Valves, mechanically actuated

Stem actuated valve, 3/2-way valve

Stem actuated valve, 5/2-way valve

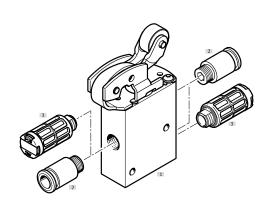


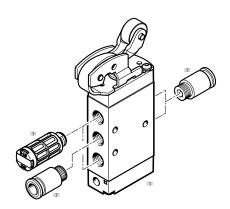


		Brief description	→ Page/Internet
[1]	3/2-way valve	Stem actuated valve	4
	5/2-way valve	Stem actuated valve	4
[2]	Fitting	For supply air/exhaust ports (1, 3, 5) and working ports (2, 4)	4
[3]	Silencers	For exhaust ports (3, 5)	4

Roller lever valve, 3/2-way valve

Roller lever valve, 5/2-way valve





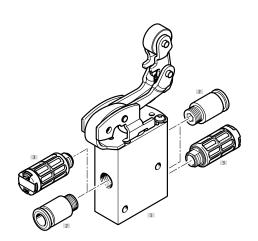
		Brief description	→ Page/Internet
[1]	3/2-way valve	Stem actuated valve with roller lever attachment	4
	5/2-way valve	Stem actuated valve with roller lever attachment	4
[2]	Fitting	For supply air/exhaust ports (1, 3, 5) and working ports (2, 4)	4
[3]	Silencers	For exhaust ports (3, 5)	4

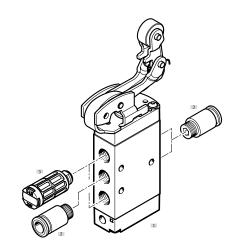
Peripherals overview

Valves, mechanically actuated

Roller lever valve with idle return, 3/2-way valve

Roller lever valve with idle return, 5/2-way valve





		Brief description	→ Page/Internet
[1]	3/2-way valve	Stem actuated valve with idle return roller lever attachment	5
	5/2-way valve	Stem actuated valve with idle return roller lever attachment	5
[2]	Fitting	For supply air/exhaust ports (1, 3, 5) and working ports (2, 4)	5
[3]	Silencers	For exhaust ports (3, 5)	5

Key features – Pneumatic components

Mechanically actuated valves

Mechanically actuated valves are often used as "signal valves", and return a pneumatic signal to the controller. This signal, e.g. "end position reached", is transmitted via a stem or a roller actuated valve.

This application sounds simple; it is used in smaller machines and in conveyor systems, e.g. to control simple clamping and locking processes in semi-automatic assembly and manufacturing.

Benefits of mechanically actuated valves:

- No electronic controller required
- No expensive programming
- Easy to set up and connect
- Can be controlled and measured using sensors

Valve functions	l Time	Description
Circuit symbol	Туре	Description
Stem actuated valve 2 12 13	VMEF-ST-M32-M	3/2-way valve, monostable • Normally closed (1> 2) • Normally open (3> 2) • Mechanical spring return • Suitable for vacuum • Reversible
12 2 1 1 3	VMEF-STC-M32-M	3/2-way valve, monostable • Normally closed (1 → 2) • Normally open (3 → 2) • Mechanical spring return • Pneumatically piloted, internal pilot air • Reversible
12 1 3	VMEF-STCZ-M32-M	3/2-way valve, monostable • Normally closed (1 → 2) • Normally open (3 → 2) • Mechanical spring return • Pneumatically piloted, external pilot air • Reversible
14 2 12 5 1 3 12	VMEF-S-M52-E	5/2-way valve, monostable Reset via (external) pneumatic spring Suitable for vacuum Reversible
14 2 3 5 1 3	VMEF-S-M52-M	5/2-way valve, monostable Mechanical spring return Suitable for vacuum Reversible
14 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VMEF-SCZ-M52-E	5/2-way valve, monostable Pneumatically piloted, external pilot air Pneumatic spring return Suitable for vacuum Reversible
14 2 T T T T T T T T T T T T T T T T T T	VMEF-SCZ-M52-M	5/2-way valve, monostable Pneumatically piloted, external pilot air Mechanical spring return Suitable for vacuum Reversible
14 2 T T T T T T T T T T T T T T T T T T	VMEF-SC-M52-M	 5/2-way valve, monostable Pneumatically piloted, internal pilot air Mechanical spring return

Key features – Pneumatic components

Valve functions		
Circuit symbol	Туре	Description
Roller lever valve		
12 2 1 1 3 W	VMEF-RT-M32-M	3/2-way valve, monostable • Normally closed (1
14 2 1 1 1 3 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 1 3 1 3 1 1 3 1 3 1 1 3	VMEF-R-M52-M	5/2-way valve, monostable • Mechanical spring return • Directly actuated • Suitable for vacuum • Reversible
14 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	VMEF-R-M52-E	5/2-way valve, monostable Reset via (external) pneumatic spring Directly actuated Suitable for vacuum Reversible
Roller lever valve with idle return		
12 2	VMEF-KT-M32-M	3/2-way valve, monostable • Normally closed (1> 2) • Normally open (3> 2) • Mechanical spring return • Directly actuated • Suitable for vacuum • Reversible
14 2 5 1 3	VMEF-K-M52-M	5/2-way valve, monostable • Mechanical spring return • Directly actuated • Suitable for vacuum • Reversible



A filter must be installed upstream of valves operated in vacuum mode. This prevents any foreign matter in the intake air getting into the valve (e.g. when operating a suction cup with connector).

Type codes

001	Series	
VMEF	Mechanically actuated valve	
002	Actuation type	
S	Stem actuated valve	
R	Roller lever valve	
K	Roller lever valve with idle return	
003	Design principle	
	Piston spool	
T	Poppet valve	
004	Type of control	
	Directly actuated	
С	Indirectly actuated	

005	Pilot air		
	Internal		
Z	External		
006	006 Valve function		
M32	3/2-way valve, normally closed or open		
M52	5/2-way valve, single solenoid/monostable		
ı	Reset method for monostable/single solenoid valves		
007	Reset method for monostable/single solenoid valves		
007 E	Reset method for monostable/single solenoid valves Pneumatic spring, external		
E	Pneumatic spring, external		
E M	Pneumatic spring, external Mechanical spring		
E M	Pneumatic spring, external Mechanical spring Pneumatic connection		
E M 008 G18	Pneumatic spring, external Mechanical spring Pneumatic connection G1/8		



750 ... 1200 l/min



- **L** - Pressure

−0.095 ... 1 MPa

−0.95 ... 10 bar



- l - Temperature range

−10 ... +60°C



General technical data		
Design		Stem actuated valve
Width	[mm]	20
Type of control	,	Directly actuated or piloted
Max. actuating speed	,	
Directly actuated	[m/s]	0.6
Piloted	[m/s]	0.3
Application information		Do not use as mechanical stop
Actuation type		Mechanical
Mounting		Via through-hole
Sealing principle		Soft
Flow direction		Reversible
Mounting position		Any
Max. switching frequency	[Hz]	3

echnical data – Poppet valve						
Туре			VMEF-ST-M32 18	VMEF-STCM32 18	VMEF-ST-M32 14	VMEF-STCM32 14
Design			Poppet valve			
Standard nominal flow rate	1 2	[l/min]	750	750	870	870
	3 2	[l/min]	665	665	750	750
Valve function			3/2-way valve, monostable			
Overlap			Zero overlap			
Type of control	-		Directly actuated	Piloted	Directly actuated	Piloted
Reset method	-		Mechanical spring			
Pneumatic connection 1, 2, 3	-		G1/8	G1/8	G1/4	G1/4
Pilot air port 1 2/14	-		-	M5	-	M5
Pilot air supply			-	Internal or external	-	Internal or external
Nominal width		[mm]	5.6	5.6	6.0	6.0
Actuating force at 6 bar						
 normally closed 		[N]	46	14	46	14
normally open		[N]	82	14	82	14

Technical data – Piston spool valve					
Туре		VMEF-S-M52-E 18	VMEF-S-M52-M 18	VMEF-S-M52-E 14	VMEF-S-M52-M 14
Design		Piston spool valve			
Standard nominal flow rate 1> 2	2 [l/min]	750	750	1200	1200
Valve function		5/2-way valve, monostable	•		
Overlap		Positive overlap			
Type of control		Directly actuated			
Reset method		Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring
Pneumatic connection 1, 2, 3, 4, 5		G1/8	G1/8	G1/4	G1/4
Pilot air port 1 2/14		M5	-	M5	-
Nominal width	[mm]	5.2	5.2	7.0	7.0
Actuating force at 6 bar	[N]	28	34	48	43

Technical data – Piston spool valve					
Туре	VMEF-SC M52-E 18	VMEF-SM52-M 18	VMEF-SC M52-E 14	VMEF-SM52-M 14	
Design	Piston spool valve				
Standard nominal flow rate 1 2 [l/min	750	750	1200	1200	
Valve function	5/2-way valve, monostable				
Overlap	Positive overlap	Positive overlap			
Type of control	Piloted	Piloted			
Reset method	Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring	
Pneumatic connection 1, 2, 3, 4, 5	G1/8	G1/8	G1/4	G1/4	
Pilot air port 1 2/14	M5	M5	M5	M5	
Pilot air supply	External	Internal or external	External	Internal or external	
Nominal width [mm]	5.2	5.2	7.0	7.0	
Actuating force at 6 bar [N]	14	14	14	14	

Materials	
Housing	Anodised wrought aluminium alloy
Cover	Reinforced PA (VMEF-STCM32-, VMEFM52-)
Seal	NBR
Note on materials	RoHS-compliant
PWIS conformity	VDMA24364-B1/B2-L

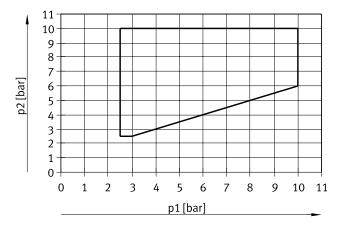
Operating and environmental conditions							
Туре		VMEF-ST-M32		VMEF-STC-M32		VMEF-S-M52	VMEF-SC-M52
		VMEF-STCZ-M3:	2			VMEF-SCZ-M52	
Operating medium		Compressed ai	r to ISO 8573-1:	2010 [7:-:-]			
Note on the operating/pilot medium		Lubricated ope	ration possible (in which case l	ubricated operat	ion will always be required)	
Operating pressure	[MPa]	-0.095 1		0.35 1		-0.095 1	0.25 1
	[bar]	-0.95 10		3.5 10		-0.95 10	2.5 10
With internal/external pilot air		Internal	External	Internal	External	-	_
NC valves	[bar]	3.5 10	3.0 10	3.0 10	2.5 10		
NO valves	[bar]	3.5 10	3.0 10	3.5 10	2.5 10	_	-
Pilot pressure	[bar]	_		3.5 10		2.5 10	2.5 10
Temperature of medium	[°C]	-10 +60					
Ambient temperature	[°C]	-10 +60					
Corrosion resistance class CRC ¹⁾		2					

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.

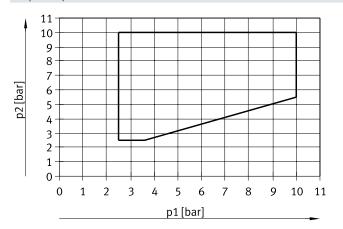
Pilot pressure p2 as a function of external pneumatic spring pressure p1

For piston spool valves VMEF-...-M52...18



The framed area shows the operating area for internal and external pilot air.

For piston spool valves VMEF-...-M52...14

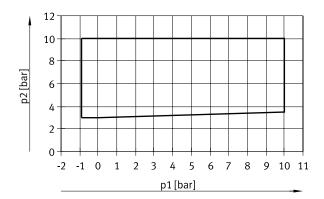


The framed area shows the operating area for internal and external pilot air.

Pilot pressure p2 as a function of working pressure p1

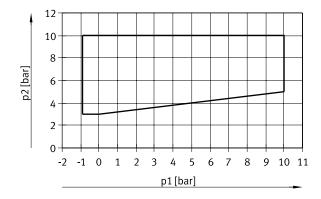
For poppet valves VMEF-...-M32...

(normally closed)

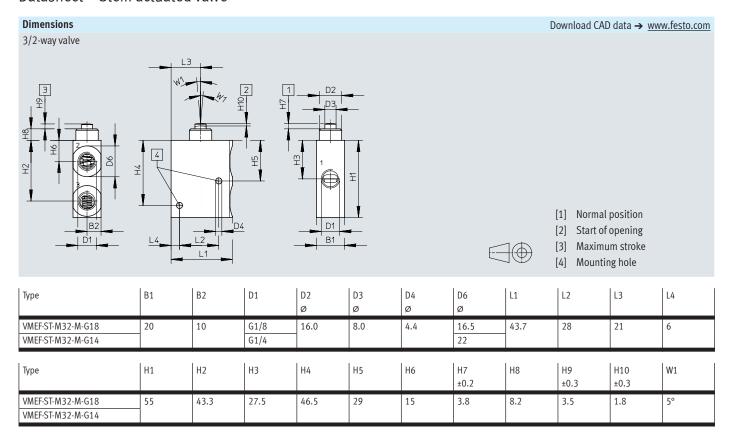


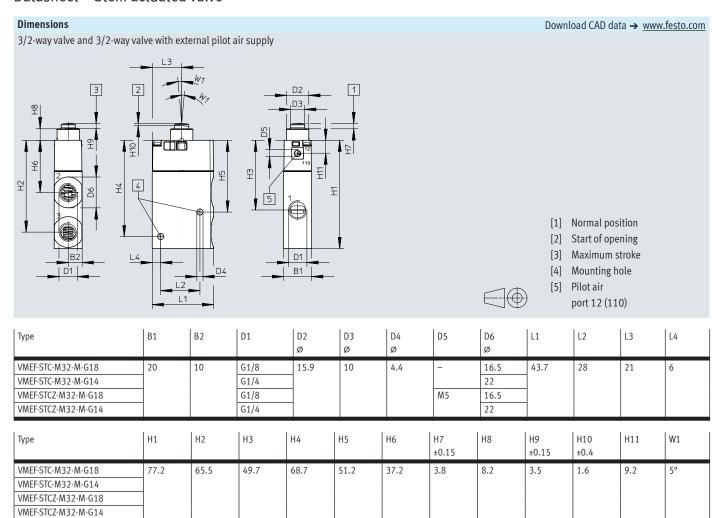
The framed area shows the operating area for external pilot air.

For poppet valves VMEF-...-M32... (normally open)

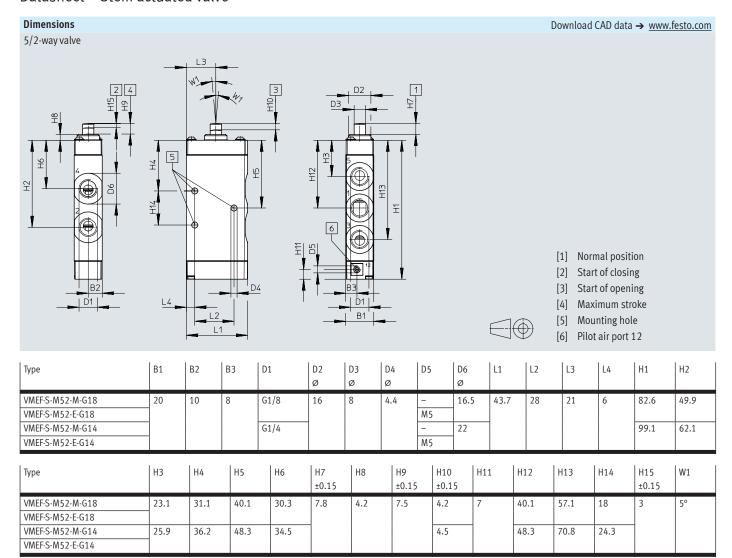


The framed area shows the operating area for external pilot air.





Dimensions Download CAD data → www.festo.com 5/2-way valve and 5/2-way valve with external pilot air supply 3 4 윈 7 ΞŦ £ HZ H14 Ξ 6 [1] Normal position Start of opening [2] Maximum stroke b1 j ı [4] Mounting hole В1 Pilot air port 14 [5] [6] Pilot air port 12 В1 D3 D5 Туре В2 В3 D1 D2 D4 D6 L1 L2 L4 L3 VMEF-SC-M52-M-G18 20 10 8 G1/8 15.9 10 4.4 16.5 43.7 28 21 6 M5 VMEF-SCZ-M52-M-G18 G1/8 VMEF-SCZ-M52-E-G18 G1/8 VMEF-SC-M52-M-G14 G1/4 22 M5 VMEF-SCZ-M52-M-G14 G1/4 VMEF-SCZ-M52-E-G14 G1/4 Н1 Н2 Н3 Н4 Н5 Н6 Н7 Н8 Н9 H10 H11 H12 H13 H14 H15 W1 Туре ±0.15 ±0.15 ±0.4 VMEF-SC-M52-M-G18 94.1 61.4 34.6 42.6 51.6 41.8 3.8 8.2 3.5 1.6 9.2 51.6 68.6 18 5° VMEF-SCZ-M52-M-G18 VMEF-SCZ-M52-E-G18 VMEF-SC-M52-M-G14 110.6 37.4 47.7 59.8 46 59.8 82.3 24.3 VMEF-SCZ-M52-M-G14 VMEF-SCZ-M52-E-G14



Directly actuated stem actuated valves VMEF-S-... can be extended with the actuator attachment VAOM-R4-20-... to form a roller lever valve or roller lever valve with idle return. Actuator attachments are available for 3/2-way and 5/2-way valves.

The valve can be moved in the actuation direction with the mounting kit VAME-R4-20-PA. This enables the correct switching point to be set. \rightarrow Page 15

→ Page 15



- When screwing the actuator attachment VAOM-R4-20-... onto the valve, ensure that the prescribed torque of 1.5 Nm ± 10% is observed.
- A new actuator attachment VAOM-R4-20-... can only be mounted on a directly actuated basic valve three times.

Datasheet – Stem actuated valve

Ordering data						
Type of control	Pilot air	Reset	Flow rate	Weight	Part no.	Туре
			[l/min]	[g]		
3/2-way valves						
Direct	-	Mechanical	750	116	8031295	VMEF-ST-M32-M-G18
			870	110	8031300	VMEF-ST-M32-M-G14
Piloted	Internal	Mechanical	750	131	8031331	VMEF-STC-M32-M-G18
			870	124	8031332	VMEF-STC-M32-M-G14
	External	Mechanical	750	131	8031335	VMEF-STCZ-M32-M-G18
			870	124	8031336	VMEF-STCZ-M32-M-G14
5/2-way valves						
Direct	-	Mechanical	750	145	8031297	VMEF-S-M52-M-G18
		Pneumatic	750	144	8031299	VMEF-S-M52-E-G18
		Mechanical	1200	178	8031302	VMEF-S-M52-M-G14
		Pneumatic	1200	177	8031304	VMEF-S-M52-E-G14
Piloted	Internal	Mechanical	1200	184	8031319	VMEF-SC-M52-M-G14
			750	151	8031320	VMEF-SC-M52-M-G18
	External	Pneumatic	1200	183	8031323	VMEF-SCZ-M52-E-G14
			750	150	8031324	VMEF-SCZ-M52-E-G18
		Mechanical	1200	184	8031327	VMEF-SCZ-M52-M-G14
			750	151	8031328	VMEF-SCZ-M52-M-G18

Datasheet – Roller lever valve

- N - Flow rate

750 ... 1200 l/min



- **-** Pressure

−0.095 ... 1 MPa

−0.95 ... 10 bar



- l - Temperature range

−10 ... +60°C



General technical data		
Design		Roller lever
Width	[mm]	20
Type of control		Directly actuated
Application information		Risk of pinching
Actuation type		Mechanical
Mounting		Via through-hole
Sealing principle		Soft
Flow direction		Reversible
Mounting position		Any
Max. switching frequency	[Hz]	3
9 .	[m/s]	1.4
Cam angle in angular degrees		30

Technical data – Poppet valve	Fechnical data – Poppet valve				
Туре		VMEF-RT-M3218	VMEF-RT-M3214		
Design		Poppet valve			
Standard nominal flow rate 1 2	[l/min]	750	870		
Valve function		3/2-way valve, monostable			
Overlap		Zero overlap			
Reset method		Mechanical spring			
Pneumatic connection 1, 2, 3		G1/8	G1/4		
Nominal width	[mm]	5.6	6		
Max. stroke limit (hard)	[mm]	6.3			
Actuating force	[N]	35.2			

Technical data — Piston spool valve					
Туре		VMEF-R-M52-E18	VMEF-R-M52-M18	VMEF-R-M52-E14	VMEF-R-M52-M14
Design		Piston spool valve			
Standard nominal flow rate 1 2	[l/min]	750		1200	
Valve function		5/2-way valve, monostable			
Overlap		Positive overlap			
Reset method		Pneumatic spring	Mechanical spring	Pneumatic spring	Mechanical spring
Max. switching frequency	[Hz]	3			
Pneumatic connection 1, 2, 3		G1/8	G1/8	G1/4	G1/4
Nominal width	[mm]	5.2	5.2	7	7
Max. stroke limit (hard)	[mm]	11.6			
Actuating force	[N]	38			

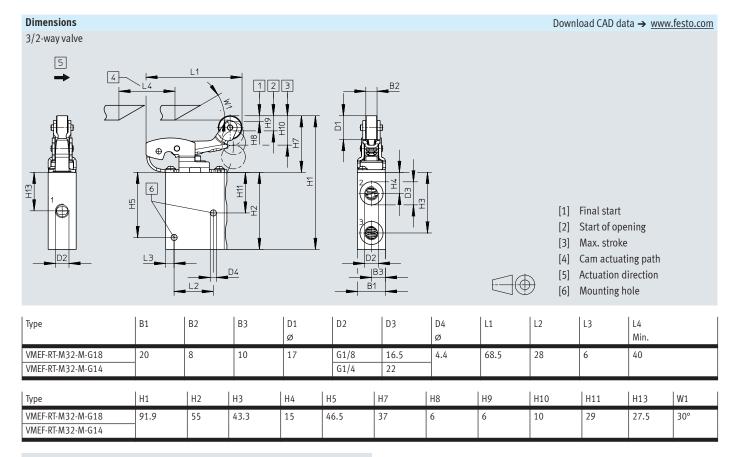
Datasheet – Roller lever valve

Materials	
Housing	Anodised wrought aluminium alloy
Cover	Reinforced PA (VMEFM52-)
Actuator attachment	Galvanised steel
Seal	NBR
Note on materials	RoHS-compliant
PWIS conformity	VDMA24364-B1/B2-L

Operating and environmental conditions				
Operating medium		Compressed air to ISO 8573-1:2010 [7:-:-]		
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)		
Operating pressure	[MPa]	-0.095 1		
	[bar]	-0.95 10		
Temperature of medium	[°C]	-10 +60		
Ambient temperature	[°C]	-10 +60		
Note on ambient temperature		Influence of heat on wear		
Corrosion resistance class CRC ¹⁾		1		

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts which are covered in the application (e.g. drive trunnions).

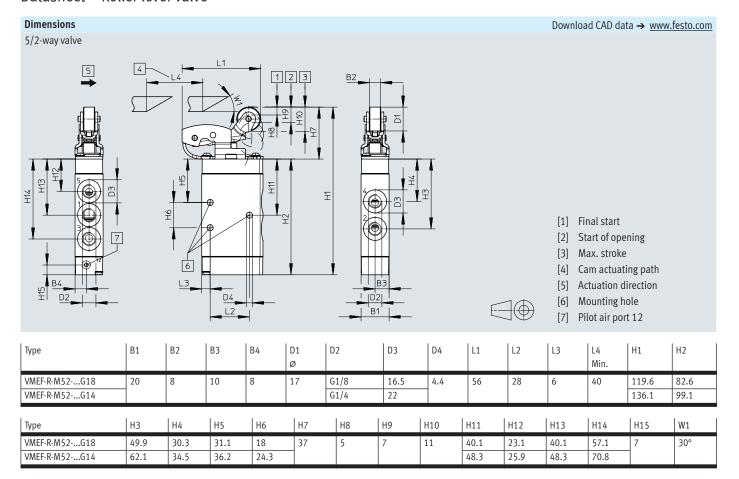
Datasheet - Roller lever valve





Roller lever valves can be actuated by a cam from either side, i.e. from the left (forward movement) or from the right (backward movement).

Datasheet - Roller lever valve



If required, actuator attachments VAOM-R4-20-... can be used as spare parts for existing directly actuated roller lever valves. \rightarrow Page 20

The valve can be moved in the actuation direction with the mounting kit VAME-R4-20-PA. This enables the correct switching point to be set. → Page 20



When screwing the actuator attachment VAOM-R4-20-... onto the valve, ensure that the prescribed torque of $1.5\ \text{Nm} \pm 10\%$ is observed.

Ordering data					
Type of control	Reset	Flow rate	Weight	Part no.	Туре
		[l/min]	[g]		
3/2-way valves					
Direct	Mechanical	750	209	8049239	VMEF-RT-M32-M-G18
		870	204	8047095	VMEF-RT-M32-M-G14
5/2-way valves					
Direct	Pneumatic	750	240	8047092	VMEF-R-M52-E-G18
	Mechanical	750	240	8049238	VMEF-R-M52-M-G18
	Pneumatic	1200	272	8047093	VMEF-R-M52-E-G14
	Mechanical	1200	272	8047094	VMEF-R-M52-M-G14

Datasheet – Roller lever valve

- N - Flow rate

750 ... 1200 l/min



- **-** Pressure

−0.095 ... 1 MPa

−0.95 ... 10 bar



- l - Temperature range

−10 ... +60°C



General technical data		
Design		Roller lever with idle return
Width [m	nm]	20
Type of control		Directly actuated
Application information		Risk of pinching
Actuation type		Mechanical
Mounting		Via through-hole
Sealing principle		Soft
Flow direction		Reversible
Mounting position		Any
Max. switching frequency [H	lz]	3
Max. actuating speed for side actuation [m	n/s]	0.7
Cam angle in angular degrees		30

Technical data – Poppet valve	Technical data – Poppet valve				
Туре		VMEF-KT-M3218	VMEF-KT-M3214		
Design		Poppet valve			
Standard nominal flow rate 1 2	[l/min]	750	870		
Valve function		3/2-way valve, monostable			
Overlap		Zero overlap			
Reset method		Mechanical spring			
Pneumatic connection 1, 2, 3		G1/8	G1/4		
Nominal width	[mm]	5.6	6		
Max. stroke limit (hard)	[mm]	11			
Actuating force	[N]	32.7			

Technical data – Piston spool valve				
Туре		VMEF-K-M52-M18	VMEF-K-M52-M14	
Design		Piston spool valve		
Standard nominal flow rate 1 2	[l/min]	750	1200	
Valve function		5/2-way valve, monostable		
Overlap		Positive overlap		
Reset method		Mechanical spring		
Pneumatic connection 1, 2, 3		G1/8	G1/4	
Nominal width	[mm]	5.2	7	
Max. stroke limit (hard)	[mm]	11.8		
Actuating force	[N]	23.5		

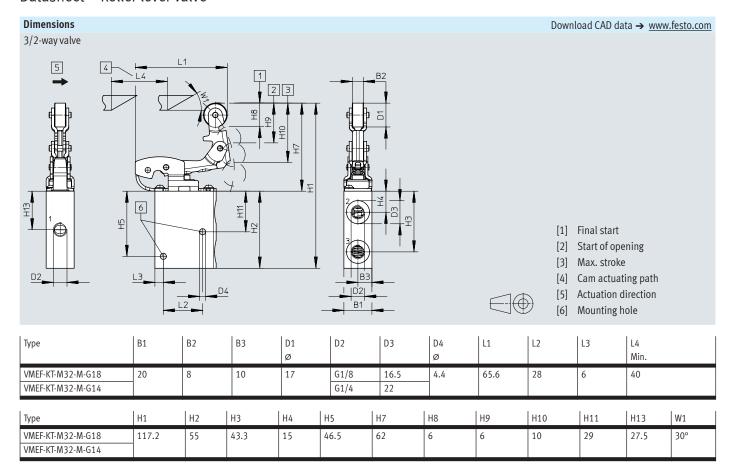
Datasheet – Roller lever valve

Materials	
Housing	Anodised wrought aluminium alloy
Cover	Reinforced PA (VMEFM52-)
Actuator attachment	Galvanised steel
Seal	NBR
Note on materials	RoHS-compliant
PWIS conformity	VDMA24364-B1/B2-L

Operating and environmental conditions				
Operating medium		Compressed air to ISO 8573-1:2010 [7:-:-]		
Note on the operating/pilot medium		Lubricated operation possible (in which case lubricated operation will always be required)		
Operating pressure	[MPa]	-0.095 1		
	[bar]	-0.95 10		
Temperature of medium	[°C]	-10 +60		
Ambient temperature	[°C]	-10 +60		
Note on ambient temperature		Influence of heat on wear		
Corrosion resistance class CRC ¹⁾		1		

¹⁾ Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts which are covered in the application (e.g. drive trunnions).

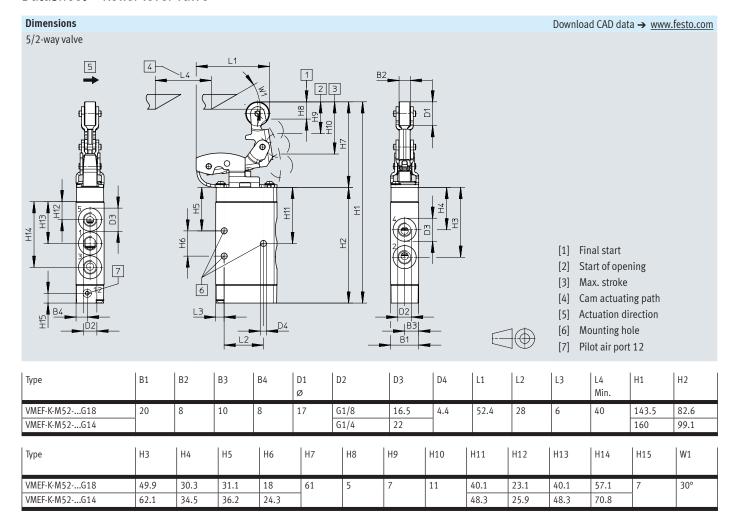
Datasheet - Roller lever valve





Roller lever valves with idle return can only be actuated by a cam from one side, i.e. only in one direction (forward movement). If control is applied from the other direction (backward movement), the valve is not actuated.

Datasheet - Roller lever valve



If required, actuator attachments VAOM-R4-20-... can be used as spare parts for existing directly actuated roller lever valves. \rightarrow Page 24

The valve can be moved in the actuation direction with the mounting kit VAME-R4-20-PA. This enables the correct switching point to be set. → Page 24



When screwing the actuator attachment VAOM-R4-20-... onto the valve, ensure that the prescribed torque of 1.5 Nm \pm 10% is observed.

Ordering data Type of control	Reset	Flow rate [l/min]	Weight [g]	Part no.	Туре
3/2-way valves					
Direct	Mechanical	750	227	8049241	VMEF-KT-M32-M-G18
		870	218	8047103	VMEF-KT-M32-M-G14
5/2-way valves	<u> </u>				
Direct	Mechanical	750	255	8049240	VMEF-K-M52-M-G18
		1200	286	8047102	VMEF-K-M52-M-G14

Datasheet - Actuator attachments

Actuator attachments as replacement or extension option for directly actuated stem actuated valves:

- Roller lever
- Roller lever with idle return



General technical data			!
Туре		VAOM-R4-20-D1	VAOM-R4-20-D2
Design		Roller lever	Roller lever with idle return
Width	[mm]	20	
Type of control		Directly actuated	
Actuation		Mechanical	
Mounting position		Screwed onto the valve, in the movement plane	
Mounting		Screwed with self-tapping screws	
Ambient temperature	[°C]	-10 +60	

Materials	
Actuator attachment	Galvanised steel
Note on materials	RoHS-compliant
Corrosion resistance class CRC ¹⁾	1

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

Low corrosion stress. Dry internal application or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, or parts which are covered in the application (e.g. drive trunnions).

Actuator attachments for valves Stem actuated valves from the series

VMEF can be retrofitted with the actuator attachments VAOM.

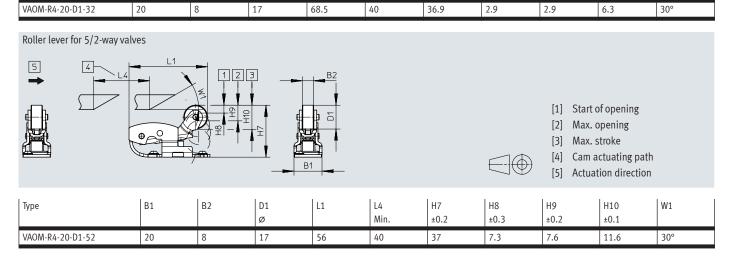
If an actuator attachment VAOM is screwed onto the corresponding stem actuated valve of the VMEF series, it converts it to a roller lever valve or roller lever valve with idle return.

- Roller lever valves can be actuated by a cam from either side, i.e. from the left (forward movement) or from the right (backward movement).
- Roller lever valves with idle return can only be actuated by a cam from one side, i.e. only in one direction (forward movement). If the actuation is applied from the other direction (backward movement), the valve is not actuated.

The actuator attachments VAOM can also be used to replace mechanically worn attachments for roller lever valves or roller lever valves with idle return.

Datasheet - Actuator attachments

Dimensions Download CAD data → www.festo.com Roller lever for 3/2-way valves [1] Start of opening [2] Max. opening [3] Max. stroke Cam actuating path [4] Actuation direction Туре В1 В2 D1 L1 L4 Н7 Н8 Н9 H10 W1 Ø Min. ±0.1 ±0.1 ±0.1 ±0.1



Datasheet - Actuator attachments

20

8

17

65.6

Dimensions Download CAD data → www.festo.com Roller lever with idle return for 3/2-way valves [1] Start of opening Max. opening [2] Max. stroke [3] Cam actuating path [4] [5] Actuation direction В1 B2 D1 L4 Н7 Н8 Н9 H10 W1 Туре Ø Min. ±0.2 ±0.2 ±0.2 ±0.1

40

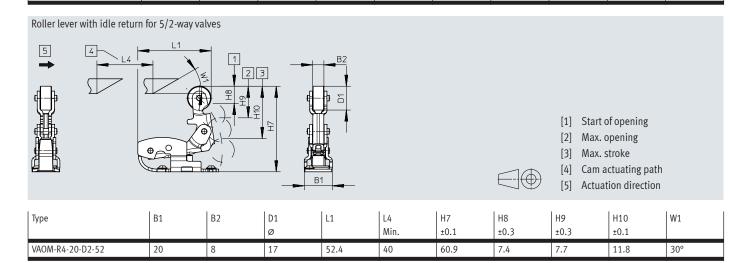
62.2

5.9

5.8

11.1

30°





Note

VAOM-R4-20-D2-32

- When screwing the actuator attachment VAOM-R4-20-... onto the valve, ensure that the prescribed torque of 1.5 Nm ± 10% is observed.
- An actuator attachment VAOM-R4-20-... can only be mounted on a directly actuated basic valve three times.

Datasheet – Actuator attachments

Ordering data				
	Description	Part no.	Туре	PU ¹⁾
Roller lever				
	For 3/2-way valves, with retaining screws	8049235	VAOM-R4-20-D1-32	1
(organization)	For 5/2-way valves, with retaining screws	8049233	VAOM-R4-20-D1-52	1
Roller lever with idle retu				
	For 3/2-way valves, with retaining screws	8049237	VAOM-R4-20-D2-32	1
	For 5/2-way valves, with retaining screws	8049236	VAOM-R4-20-D2-52	1

¹⁾ Packaging unit

Accessories

Ordering data	Description			Part no.	Туре	PU ¹⁾
Push-in fitting, straigh	nt				, , , , , , , , , , , , , , , , , , ,	
<u> </u>	With internal hex	Connecting thread M5 for tubing O.D.	4 mm	153315	QSM-M5-4-I	10
		Connecting thread G1/8 for tubing O.D.	4 mm	186106	QS-G1/8-4-I	10
				133008	QS-G1/8-4-I-100	100
•			6 mm	186107	QS-G1/8-6-I	10
				133009	QS-G1/8-6-I-100	100
			8 mm	186109	QS-G1/8-8-I	10
				133010	QS-G1/8-8-I-100	100
		Connecting thread G1/4 for tubing O.D.	6 mm	186108	QS-G1/4-6-I	10
			8 mm	186110	QS-G1/4-8-I	10
			10 mm	186112	QS-G1/4-10-I	10
-	With external hex	Connecting thread M5 for tubing O.D.	3 mm	153302	QSM-M5-3	10
	THE SACOTION	commonly among my for tasing ordi	4 mm	153304	QSM-M5-4	10
			6 mm	153306	QSM-M5-6	10
		Connecting thread G1/8 for tubing O.D.	4 mm	186095	QS-G1/8-4	10
		Connecting timead 01/0 for tubing 0.b.	6 mm	186096	QS-G1/8-6	10
		Connecting thread G1/4 for tubing O.D.	6 mm		QS-G1/4-6	10
		Connecting timead 61/4 for tubing 0.b.				
			8 mm		QS-G1/4-8	10
			10 mm		QS-G1/4-10	10
			12 mm	186350	QS-G1/4-12	10
Push-in fitting, angled	I		-	-		
<i>✓</i>	With external hex	Connecting thread G1/8 for tubing O.D.	4 mm	186116	QSL-G1/8-4	10
				132048	QSL-G1/8-4-100	100
			6 mm	186117	QSL-G1/8-6	10
				132049	QSL-G1/8-6-100	100
			8 mm	186119	QSL-G1/8-8	10
				132050	QSL-G1/8-8-50	50
		Connecting thread G1/4 for tubing O.D.	8 mm	186120	QSL-G1/4-8	10
					QSL-G1/4-8-50	50
					QSL-G1/4-10	10
					QSL-G1/4-10-50	50
			12 mm		QSL-G1/4-12	10
			12		QSL-G1/4-12-20	20
Push-in fitting, angled		10 10 10 10 10 10	T.		1 2 2 1 2 1 2	
	With external hex	Connecting thread G1/8 for tubing O.D.	4 mm		QSLL-G1/8-4	10
	(5)				QSLL-G1/8-4-100	100
	9		6 mm	132048 186117 132049 186119	QSLL-G1/8-6	10
					QSLL-G1/8-6-100	100
			8 mm	186130	QSLL-G1/8-8	10
				133017	QSLL-G1/8-8-100	100
Silencer						
Shelice!	Polymer	With connecting thread	G1/8	2307	U-1/8	1
	i otymer	mai connecting tineau	31,0		U-1/8-50	50
			G1/4		U-1/4	1
OW			01/4		U-1/4-20	20
~	Metal	With connecting thread	G1/0			
	MELAI	with connecting thread	G1/8 G1/4		U-1/8-B U-1/4-B	1
			61/4	6842	U-1/4-B	1
Mounting kit for switch	hing point adjustment					
A STATE OF THE STA	Mounting kit for valves VMEF comprising:			8060046	VAME-R4-20-PA	1
6/1/2m				11000,0		_
		 1x mounting plate 60 x 70 mm 3x socket head screws to ISO 4762 M4x25 8.8 				
	3x slot nuts					
_ (

¹⁾ Packaging unit

Festo - Your Partner in Automation





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