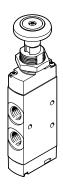
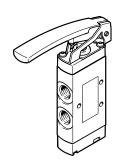
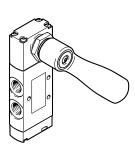
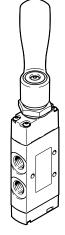
Key features

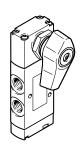


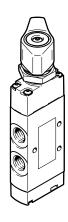












Innovative

- Small and compact for a wide range of pneumatic applications
- Numerous selectable valve functions: 3/2-way and 5/2-way functions
- With flow rates of up to 1200 l/min, the valves VHEF offer 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
- The 3/2-way valve can be used as normally closed (NC) or normally open (NO)
- Round silencer or ducted exhaust air
- Suitable for vacuum
- Reverse operation possible
- Pressure range from vacuum to 10 bar possible
- Design:
 - Pushbutton valve
 - Toggle lever valve
 - Finger lever valve
 - Hand lever valve, sideways
 - Hand lever valve
 - Selector valve, sideways
 - Selector valve

Operational safety

- Durable with tried-and-tested piston spool valves and poppet valves
- Robust design: basic valve made from metal with plastic cover

Easy to install

- Mounted using mounting holes
- Front-panel mounting possible for nearly all valves (not possible for finger lever valve)

Type codes

001	Series					
VHEF	Manually actuated valve					
002	Actuation type					
E	Selector switch					
ES	Selector switch, on the side					
Н	Hand lever, top					
HS	Hand lever, on the side					
L	Finger lever					
P	Pushbutton					
V	Toggle lever, top					
003	Design principle					
	Piston spool					
T	Poppet valve					
004	Type of control					
	Directly actuated					
С	Indirectly actuated					
005 Pilot air						
	Internal					
Z	External					

006	Valve function			
M32	3/2-way valve, normally closed or open			
B32	3/2-way valve, double solenoid/bistable			
M52	5/2-way valve, single solenoid/monostable			
B52	5/2-way valve, double solenoid/bistable			
P53E	5/3-way valve, mid-position exhaustedl			
B53E	5/3-way valve, detenting, mid-position exhausted			
P53C	5/3-way valve, mid-position closed			
B53C	5/3-way valve, detenting, mid-position closed			

007	Reset method for monostable/single solenoid valves	
	None	
E	Pneumatic spring, external	
M	Mechanical spring	

008	Pneumatic connection
G18	G1/8
G14	G1/4
N18	1/8 NPT
N14	1/4 NPT

Manually actuated valves VHEF

Datasheet - Pushbutton valve

- 11 -

Flow rate

750 ... 1200 l/min



Pressure

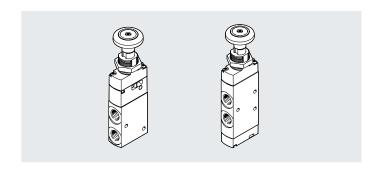
−0.095 ... 1 MPa

-0.95 ... 10 bar



Temperature range

−10 ... +60°C



General technical data				
Design		Pushbutton valve		
Width [mm]		20		
Application information		Manual actuation only		
Actuation type		Manual		
Type of mounting		Via through-hole or front panel using retaining nut		
Sealing principle		Soft		
Flow direction		Reversible		
Exhaust function		Can be throttled		
Mounting position		Any		
Max. switching frequency	[Hz]	0.5		

Technical data – 3/2-way valve						
Туре			VHEFB3218	VHEFB3214	VHEFM3218	VHEFM3214
Design			Poppet valve			
Standard nominal	1 2	[l/min]	750	870	750	870
flow rate	3} 2	[l/min]	665	750	665	750
Valve function			3/2-way valve, bistable		3/2-way valve, open/closed, monostable	
Overlap			Zero overlap		Zero overlap	
Reset method			-		Mechanical spring	
Type of control			Piloted		Piloted	
Pilot air supply			Internal, external only PTCZ types		Internal, external only PTCZ types	
Manual override			Detenting		-	
Actuating force at 6 bar [N]		[N]	20	20	24.5	24.5
Release force at 6 bar [N]		25	25	-	-	
Pneumatic port		G1/8	G1/4	G1/8	G1/4	
1, 2, 3						
Pilot air port 12			-	_	M5 ¹⁾	M5 ¹⁾
Nominal width [mm]		5.6	6	5.6	6	
Product weight [g]		168	161	168	161	

¹⁾ Only for PTCZ types (external pilot air)



Note

- An axial torque greater than 3 Nm on the pushbutton is to be avoided. This could overload it and cause it to break.
- The max. operating force exerted on the pushbutton must not exceed 200 N in all directions. This could overload it and cause it to break.