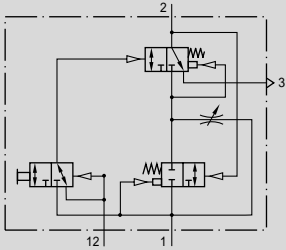


Valves for Special Applications

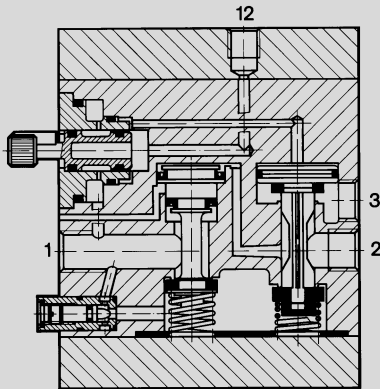
3/2 - 3 Way, 2 Position Valves, G 1/4 to G 1/2

Single - Pilot "Soft-Start" Valve Type VLHE-3-...



Festo "Soft-start" valves are designed to provide slow pressure build-up in pneumatic systems preventing sudden, high pressure air surges during start-up. Manual override is built in.

Example: Type VLHE-3-1/2



Features

Compact, corrosion resistant "soft-start" valves combine 3 components in a single unit: 3-way valve, "OR" valve and flow control valve. Adjustable metering screw varies the start-up air flow relative to the size and number of cylinders or volume downstream.

Applying an air signal at port 12 (Z) initiates slow pressurization of the air system. Cylinders extend slowly to end position, preventing slamming at the end of stroke. When downstream pressure reaches 50% of operating pressure, the valve switches to full flow.

The manual override will actuate the slow pressurization function of the valve. It will remain actuated until manually reset, or an air-pilot signal is applied. The manual override stem is keyed to prevent accidental actuation.

Accessory: Mounting bracket

Order No. 150258 HR-1/4-S-B

150259 HR-3/8-S-B

150260 HR-1/2-S-B

See page 715 for dimensions.

- 1 (P) = Supply
- 2 (A) = Outlet
- 3 (A) = Exhaust
- 12 (Z) = Control

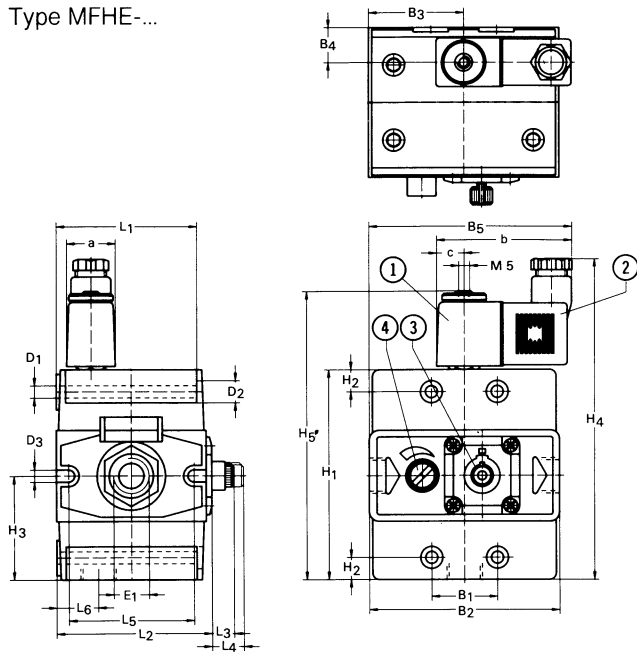
Order Number	Part No./Type	14330 VLHE-3-1/4-B	12909 VLHE-3-3/8	10420 VLHE-3-1/2
Medium		Compressed air (filtered, lubricated or unlubricated)		
Design		Poppet valve with return spring		
Mounting		4 through-holes in housing, attachment to service units (S series)		
Connection	Working Port	G 1/4 ISO	G 3/8 ISO	G 1/2 ISO
	Control Port	G 1/8 ISO		
Orifice Size		0.315 in / 8 mm	0.354 in / 9 mm	0.472 in / 12 mm
Flow Rate (1 → 2)	Full Flow	31.8 SCFM / 900 l/min	77.0 SCFM / 2200 l/min	105.9 SCFM / 3000 l/min
	Throttled	Max. 3.2 SCFM / 90 l/min	Max. 15.9 SCFM / 450 l/min	
Operating Pressure Range		30-180 psi / 2-12 bar		
Response Time at Full Flow		On: 14 ms. Off: 21 ms	On: 8.5 ms. Off: 19.5 ms	On: 25 ms. Off: 39 ms
Temperature Range		14 to 140°F / -10 to +60°C		
Materials		Housing: Glass fiber reinforced plastic; Seals: Buna N.		
Weight		0.948 lb / 0.430 kg	1.742 lb / 0.790 kg	2.161 lb / 0.980 kg

Valves for Special Applications

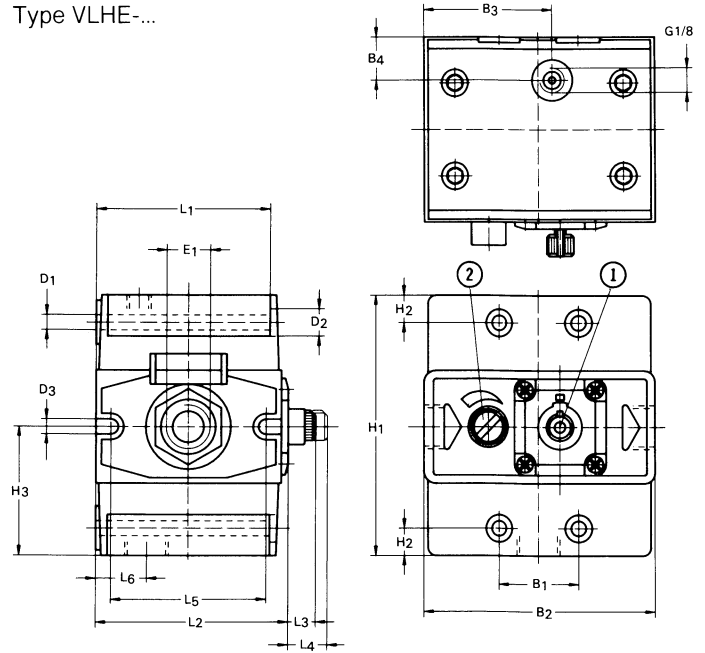
3/2 - 3 Way, 2 Position Valves G 1/4 to G 1/2

FESTO

Type MFHE-...



Type VLHE-...



Dimensions

- a 0.87 in / 22 mm
- b 2.40 in / 61 mm
- c 0.49 in / 12.5 mm

- ① Rotatable solenoid
- ② Plug can be rotated 180°
- ③ Manual override
- ④ Adjustable metering screw

Wear Parts Kit

For Type	Part Number
MFHE/VLHE-3-1/4-B	115079
MFHE/VLHE-3-3/8	115584
MFHE/VLHE-3-1/2	115585

*B₃ - VLHE, see separate listing in table below
 ** - VLHE-3-1/4-B = 0.66 in / 17 mm
 *** - VLHE-3-3/8-B = 2.50 in / 63.4 mm

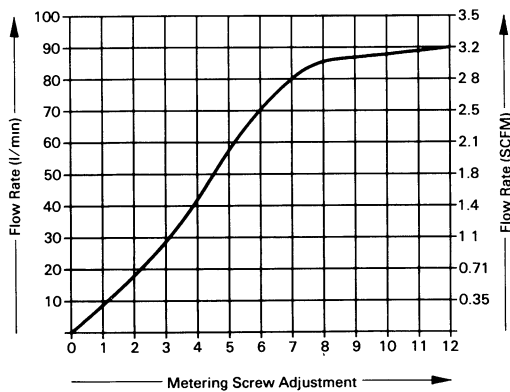
Dimensions

Type MFHE/VLHE	B ₁ in / mm	B ₂ in / mm	*B ₃ (MFHE) in / mm	B ₄ in / mm	B ₅ in / mm	D ₁ dia. in / mm	D ₂ dia. in / mm
3-1/4-B	1.06 / 27	2.80 / 71	1.40 / 35.5	0.65 / 16.4**	3.31 / 84	0.22 / 5.5	0.39 / 10
3-3/8	1.17 / 29.7	3.39 / 86	1.69 / 43	0.62 / 15.7	3.60 / 91.5	0.22 / 5.5	0.39 / 10
3-1/2	1.17 / 29.7	3.57 / 90.7	1.78 / 45.3	0.80 / 20.2	3.70 / 94	0.26 / 6.5	0.43 / 11
Type MFHE/VLHE	D ₃ in / mm	E ₁	H ₁ in / mm	H ₂ in / mm	H ₃ in / mm	H ₄ in / mm	H ₅ in / mm
3-1/4-B	0.22 / 5.5	G 1/4 ISO	3.23 / 82	0.39 / 10	1.58 / 40	5.59 / 142	4.95 / 125.8
3-3/8	0.22 / 5.5	G 3/8 ISO	3.74 / 95	0.39 / 10	1.85 / 47	5.71 / 145	5.07 / 128.8
3 1/2	0.26 / 6.5	G 1/2 ISO	3.87 / 98.2	0.40 / 10.1	1.84 / 46.7	5.83 / 148	5.28 / 134
Type MFHE/VLHE	L ₁ in / mm	L ₂ in / mm	L ₃ in / mm	L ₄ in / mm	L ₅ in / mm	L ₆ in / mm	*B ₃ (VLHE) in / mm
3-1/4-B	2.19 / 55.6	2.53 / 64.3	0.39 / 10	0.56 / 14.3	1.86 / 47.2	0.65 / 16.5	1.56 / 39.8
3-3/8	2.53 / 64.2***	2.76 / 70.1	0.39 / 10	0.56 / 14.3	2.23 / 56.6	0.74 / 18.7	1.90 / 48.2
3-1/2	2.82 / 71.6	2.99 / 76	0.39 / 10	0.58 / 14.7	2.51 / 63.7	0.90 / 22.9	2.0 / 51

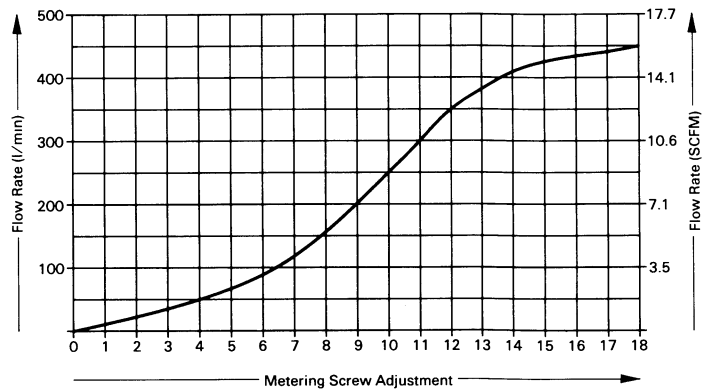
*VLHE, see separate B₃ listing at bottom right in table.

Flow rate versus metering screw adjustment

Type MFHE-1/4-B
VLHE-1/4-B



Type MFHE-3/8, VLHE-3/8
MFHE-1/2, VLHE-1/2



Subject to change