

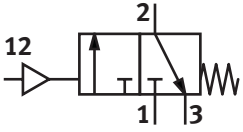
On/off valve, pneumatic HEP

FESTO



Characteristics

At a glance



Pneumatically actuated on/off valve for pressurising and exhausting pneumatic systems.
The valve can be used as an individual device or in combination with other modules from the D series.

Version

[D] D series, metal

Sturdy in full metal design for the specific requirements of the process automation industry

Type code

001	Series
HEP	On/off valve

002	Pneumatic connection
	None
1/8	Female thread G1/8
1/4	Female thread G1/4
3/8	Female thread G3/8
1/2	Female thread G1/2
3/4	Female thread G3/4
1	Female thread G1

003	Version
D	D series, metal

004	Size
MINI	Grid dimension 40 mm (without connecting plates)
MIDI	Grid dimension 55 mm (without connecting plates)
MAXI	Grid dimension 66 mm (without connecting plates)

Datasheet

General technical data

Size	Grid dimension 40 mm (without connecting plates)	Grid dimension 55 mm (without connecting plates)	Grid dimension 66 mm (without connecting plates)
Pneumatic connection, port 1 ¹⁾	G1/8, G1/4, G3/8	G1/4, G3/8, G1/2, G3/4	G1/2, G3/4, G1
Pneumatic connection, port 2 ²⁾	G1/8, G1/4, G3/8	G1/4, G3/8, G1/2, G3/4	G1/2, G3/4, G1
Pneumatic connection, port 3	G1/8	G1/4	G3/8
Pilot air port 12	G1/8		
Design	Piston gate valve		
Type of actuation	Pneumatic		
Type of mounting	In-line installation With accessories		
Mounting position	optional		
Air purity class at output	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gases		
Valve function	3/2-way, closed, monostable		
Exhaust-air function	Without flow control option		
Type of reset	Mechanical spring		
Manual override	None		
Sealing principle	Soft		
Flow direction	Non-reversible		

Characteristic flow rate

Pneumatic connection, port 1	G1/8		G1/4		G3/8		G1/2		G3/4		G1	
Pneumatic connection, port 3	G1/8		G1/4		G1/8		G1/4		G3/8		G1/4	G3/8
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	1,000 l/min	1,500 l/min	2,600 l/min	1,600 l/min	3,500 l/min	3,900 l/min	5,600 l/min	4,100 l/min	6,000 l/min	6,500 l/min		
C value	4.3 l/sbar	7.2 l/sbar	10.1 l/sbar	7.7 l/sbar	15.5 l/sbar	16.6 l/sbar	24.2 l/sbar	16.2 l/sbar	28 l/sbar	27.6 l/sbar		
b value	0.48	0.34	0.46	0.3	0.33	0.4	0.3	0.47	0.32			

1) Measured at p₁ = 6 bar and p₂ = 5 bar, Δp = 1 bar.

Operating and environmental conditions

Operating pressure	0 ... 1.6 MPa
Operating pressure	0 ... 16 bar
Pilot pressure	3 ... 16 bar
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gases
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)
Ambient temperature	-10 ... 60°C
Media temperature	-10 ... 60°C
Corrosion resistance class CRC ¹⁾	2 - Moderate corrosion stress

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

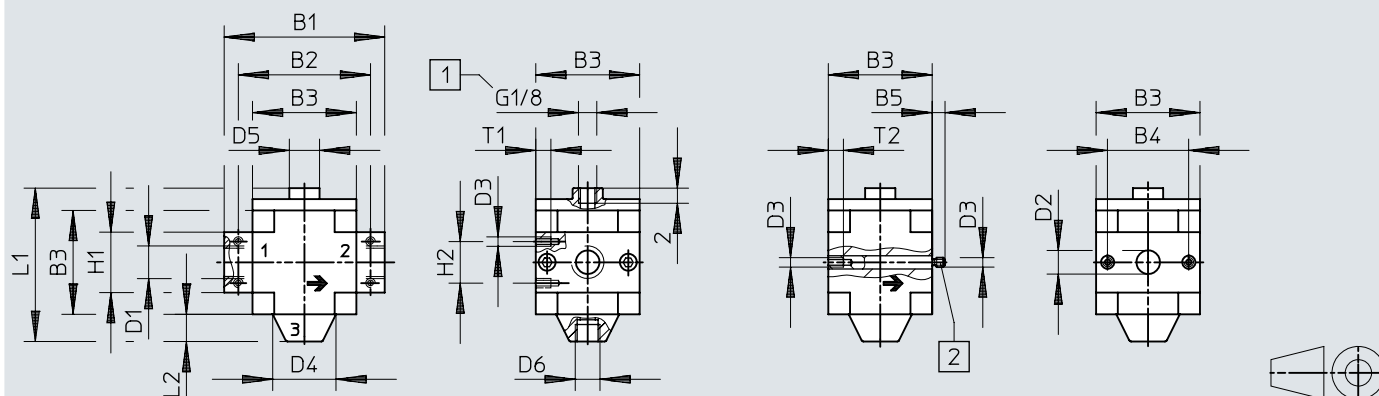
Materials

Material housing	Die-cast aluminium
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWS) conformity	VDMA24364-B1/B2-L

Dimensions

Dimensions – With sub-bases with threaded connection, without sub-bases

Download CAD data www.festo.com



[1] Threaded connection for auxiliary pilot air (12)

[2] Threaded bolt (exchangeable)

	B1	B2	B3	B4	B5	D1	D2 ∅	D3	D4 ∅	D5	D6	H1	H2	L1	L2	T1	T2
HEP-1/8-D-MINI	64	52	40	30	-	G1/8	-	M4	24	16	G1/8	20	11	73,8	11	7	-
HEP-1/4-D-MINI						G1/4											
HEP-3/8-D-MINI	70					G3/8											
HEP-D-MINI	-	-			5,8	-	11					-	-			-	10
HEP-1/4-D-MIDI	85	70	55	43	-	G1/4	-	M5	34	32	G1/4	32	22	94,6	14	8	-
HEP-3/8-D-MIDI						G3/8											
HEP-1/2-D-MIDI						G1/2											
HEP-3/4-D-MIDI						G3/4											
HEP-D-MIDI	-	-			6,8	-	24					-	-			-	11
HEP-1/2-D-MAXI	96	80	66	46	-	G1/2	-	M5	38	16	G3/8	32	22	95,6	16	8	-
HEP-3/4-D-MAXI						G3/4											
HEP-1-D-MAXI	116	91				G1						40					
HEP-D-MAXI	-	-			6,8	-	30					-	-			-	11

1) Note: This product complies with ISO 1179-1 and ISO 228-1.

Ordering data

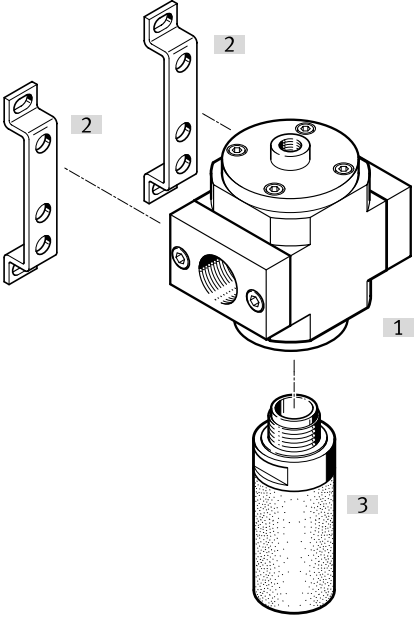
Ordering data						
Size	Pneumatic connection, port 1 ¹⁾	Pneumatic connection, port 2 ²⁾	Pneumatic connection, port 3	Product weight	Part no.	Type
Grid dimension 40 mm (without connecting plates)			G1/8	223 g	193242	HEP-D-MINI
	G1/8	G1/8			193243	HEP-1/8-D-MINI
	G1/4	G1/4			193244	HEP-1/4-D-MINI
	G3/8	G3/8			193245	HEP-3/8-D-MINI
Grid dimension 55 mm (without connecting plates)			G1/4	500 g	193249	HEP-D-MIDI
	G1/4	G1/4			193250	HEP-1/4-D-MIDI
	G3/8	G3/8			193251	HEP-3/8-D-MIDI
	G1/2	G1/2			193252	HEP-1/2-D-MIDI
Grid dimension 66 mm (without connecting plates)			G3/8	800 g	193253	HEP-3/4-D-MIDI
	G1/2	G1/2			193257	HEP-D-MAXI
	G3/4	G3/4			193258	HEP-1/2-D-MAXI
	G1	G1			193259	HEP-3/4-D-MAXI
					193260	HEP-1-D-MAXI

1) Connecting plates

2) Connecting plates

Peripherals

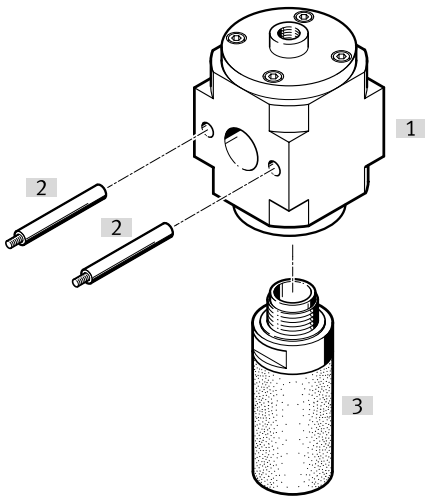
Individual unit with connecting plates



Accessories			→ Link
Type/order code	Description		
[1] On/off valve HEP			hep-d
[2] Mounting bracket HFOE			9
[3] Silencer U			9

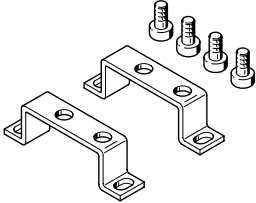
Peripherals

Individual unit without connecting plates, for service unit combination

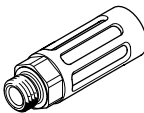


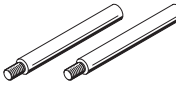
Accessories			→ Link
Type/order code	Description		
[1] On/off valve HEP			hep-d
[2] Threaded bolt FRB	Included in the scope of delivery		9
[3] Silencer U			9

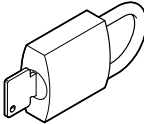
Accessories

Mounting bracket HFOE						
	Corrosion resistance class CRC ¹⁾	LABS (PWIS) conformity	Part no.	Type		
	2 - Moderate corrosion stress	VDMA24364-B2-L	159593	HFOE-D-MIDI/MAXI		
		VDMA24364-B1/B2-L	159638	HFOE-D-MINI		

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

Silencer U						
	Pneumatic connection	Flow rate to atmosphere	Sound pressure level	Product weight	Part no.	Type
	G1/8	1,340 l/min	74 dB(A)	8 g	6841	U-1/8-B
	G1/4	2,440 l/min	80 dB(A)	17 g	6842	U-1/4-B
	G3/8	5,800 l/min		37 g	6843	U-3/8-B
	G1/2	7,500 l/min	81 dB(A)	75 g	6844	U-1/2-B
	G3/4	10,000 l/min	83 dB(A)	120 g	6845	U-3/4-B
	G1	17,500 l/min	85 dB(A)	233 g	151990	U-1-B

Threaded bolt FRB			
	Size	Part no.	Type
	Grid dimension 40 mm (without sub-bases)	159642	FRB-D-MINI
	Grid dimension 55 mm (without sub-bases)	159595	FRB-D-MIDI
	Grid dimension 66 mm (without sub-bases)	159643	FRB-D-MAXI

Padlock LRVS-D						
	Corrosion resistance class CRC ¹⁾	LABS (PWIS) conformity	Note on materials	Product weight	Part no.	Type
	2 - Moderate corrosion stress	VDMA24364-B1/B2-L	RoHS-compliant	120 g	193786	LRVS-D

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