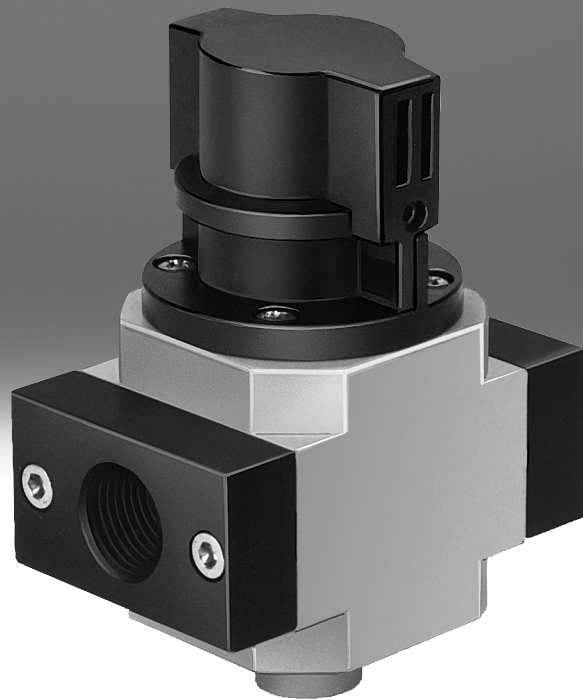


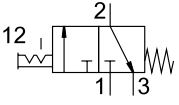
On/off valve HE

FESTO



Characteristics

At a glance



3/2-way manual shut-off valve

- The system is exhausted when switched off
- Ducted exhaust air is possible via a threaded connection
- The switching position is recognisable
- Commercially available padlock for security

Version

[D] D series, metal

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

Type code

001	Series
HE	On/off-exhaust 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, 1/8 NPT, 1/4 NPT, 3/8 NPT	G1/4, G3/8, G1/2, G3/4, 3/8 NPT, 1/2 NPT, 3/4 NPT	G1/2, G3/4, G1, 3/4 NPT, 1 NPT
Pneumatic connection, port 2 ²⁾	G1/8, G1/4, G3/8, 1/8 NPT, 1/4 NPT, 3/8 NPT	G1/4, G3/8, G1/2, G3/4, 3/8 NPT, 1/2 NPT, 3/4 NPT	G1/2, G3/4, G1, 3/4 NPT, 1 NPT
Pneumatic connection, port 3	G1/8	G1/4	G3/8
Design	Piston gate valve		
Type of actuation	Manual		
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 double solenoid		
Exhaust-air function	Without flow control option		
Manual override	None		
Sealing principle	Soft		
Flow direction	Non-reversible		

1) NPT thread for North America only

2) Via sub-base [AG...]: G1/8, G1/4 or G3/8; [AQ...]: 1/8 NPT, 1/4 NPT or 3/8 NPT

Flow characteristics

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	3,200 l/min	3,600 l/min	5,600 l/min	3,800 l/min	6,000 l/min	6,500 l/min	
C value	4.4 l/sbar	7.2 l/sbar	9.9 l/sbar	7.5 l/sbar	15.7 l/sbar	17 l/sbar	23.7 l/sbar	17.3 l/sbar	26.8 l/sbar	25.9 l/sbar	
b value	0.44	0.28	0.45	0.27	0.3		0.32	0.42	0.35	0.37	

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

Characteristic flow rate – NPT thread (only for North America)

Pneumatic connection, port 1	1/8 NPT	1/4 NPT	3/8 NPT		1/2 NPT	3/4 NPT		1 NPT	
Pneumatic connection, port 3	G1/8		G1/4		G3/8		G1/2		G1
Standard nominal flow rate (standardised to DIN 1343) ¹⁾	1,000 l/min	1,500 l/min	1,600 l/min	3,200 l/min	3,600 l/min	3,800 l/min	6,000 l/min	6,500 l/min	
C value	4.4 l/sbar	7.2 l/sbar	7.5 l/sbar	15.7 l/sbar	17 l/sbar	17.3 l/sbar	26.8 l/sbar	25.9 l/sbar	
b value	0.44	0.28	0.27	0.3		0.42	0.35	0.37	

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
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

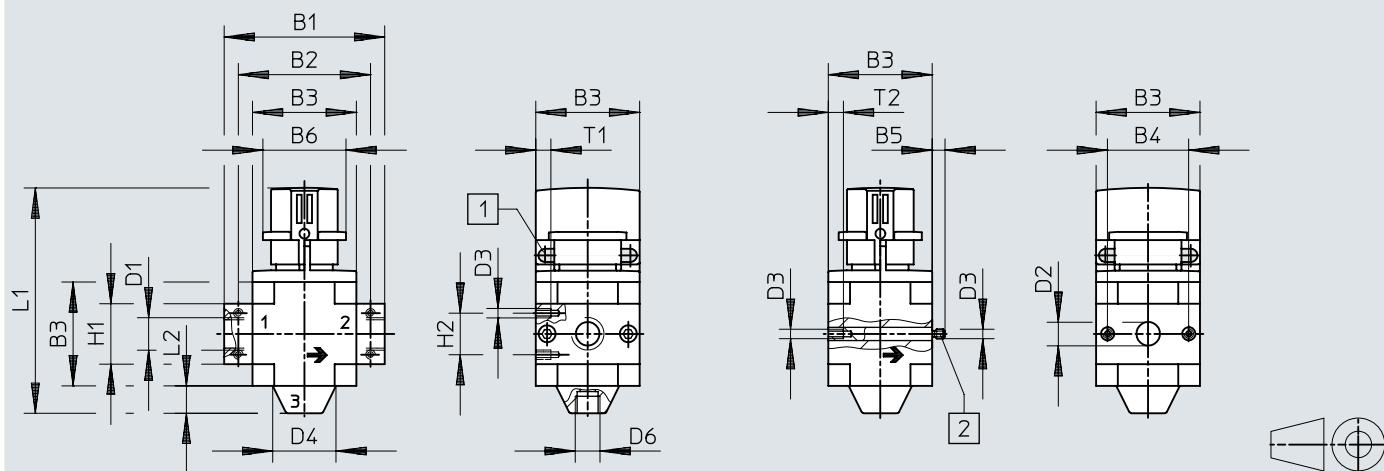
Materials

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

Dimensions

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

Download CAD data www.festo.com



- [1] Drilled hole for locking with padlock
- [2] Threaded bolt (exchangeable)

	B1	B2	B3	B4	B5	B6	D1	D2 ∅	D3	D4 ∅	D6	H1	H2	L1	L2	T1	T2	
HE-1/8-D-MINI	64	52	40	30	-	32	G1/8	-	M4	24	G1/8	20	11	100	11	7	-	
HE-1/4-D-MINI							G1/4											
HE-3/8-D-MINI	70						G3/8											
HE-D-MINI	-	-			5,8		-	11				-	-			-	10	
HE-1/4-D-MIDI	85	70	55	43	-	44	G1/4	-	M5	34	G1/4	32	22	121	14	8	-	
HE-3/8-D-MIDI							G3/8											
HE-1/2-D-MIDI							G1/2											
HE-3/4-D-MIDI							G3/4											
HE-D-MIDI	-	-			6,8		-	24				-	-			-	11	
HE-1/2-D-MAXI	96	80	66	46	-	44	G1/2	-	M5	38	G3/8	32	22	134	16	8	-	
HE-3/4-D-MAXI							G3/4											
HE-1-D-MAXI	116	91					G1					40						
HE-D-MAXI	-	-			6,8		-	30				-	-			-	11	

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

Ordering data

Ordering data – metric threads						
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	192 g	170681	HE-D-MINI
	G1/8	G1/8			162806	HE-1/8-D-MINI
	G1/4	G1/4			162807	HE-1/4-D-MINI
	G3/8	G3/8			162808	HE-3/8-D-MINI
Grid dimension 55 mm (without connecting plates)			G1/4	511 g	170682	HE-D-MIDI
	G1/4	G1/4			186513	HE-1/4-D-MIDI
	G3/8	G3/8			162809	HE-3/8-D-MIDI
	G1/2	G1/2			162810	HE-1/2-D-MIDI
		G3/4		162811	HE-3/4-D-MIDI	
Grid dimension 66 mm (without connecting plates)			G3/8	796 g	170683	HE-D-MAXI
	G1/2	G1/2			186514	HE-1/2-D-MAXI
	G3/4	G3/4			162812	HE-3/4-D-MAXI
	G1	G1			162813	HE-1-D-MAXI

1) Connecting plates

2) Connecting plates

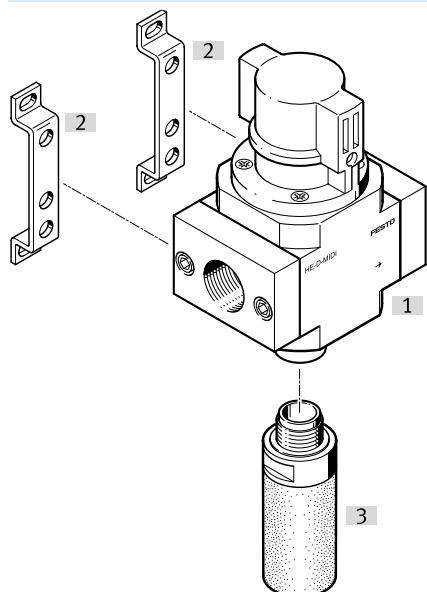
Ordering data – NPT thread (only for North America)						
Size	Pneumatic connection, port 1 ¹⁾	Pneumatic connection, port 2 ²⁾	Pneumatic connection, port 3	Product weight	Part no.	Type
Grid dimension 40 mm (without connecting plates)	1/8 NPT	1/8 NPT	G1/8	192 g	173892	HE-1/8-D-MINI-NPT
	1/4 NPT	1/4 NPT			173893	HE-1/4-D-MINI-NPT
	3/8 NPT	3/8 NPT			173894	HE-3/8-D-MINI-NPT
Grid dimension 55 mm (without connecting plates)			G1/4	511 g	173895	HE-3/8-D-MIDI-NPT
	1/2 NPT	1/2 NPT			173896	HE-1/2-D-MIDI-NPT
	3/4 NPT	3/4 NPT			173897	HE-3/4-D-MIDI-NPT
Grid dimension 66 mm (without connecting plates)			G3/8	796 g	173898	HE-3/4-D-MAXI-NPT
	1 NPT	1 NPT			173899	HE-1-D-MAXI-NPT

1) Connecting plates

2) Connecting plates

Peripherals

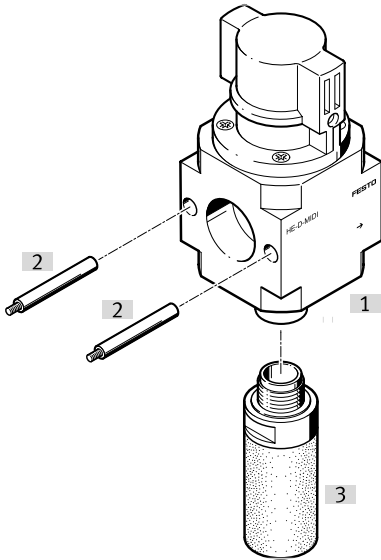
Individual unit with connecting plates



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

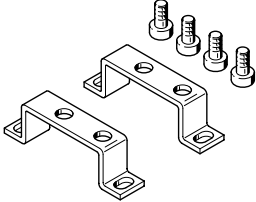
Peripherals

Individual unit without connecting plates, for service unit combination

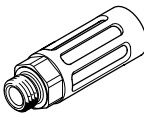


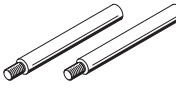
Accessories		→ Link
Type/order code	Description	
[1] On/off valve HE		he-d
[2] Threaded bolt FRB	Included in the scope of delivery	9
[3] Silencer U		9

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		17 g	6842	U-1/4-B
	G3/8	5,800 l/min	81 dB(A)	37 g	6843	U-3/8-B
	G1/2	7,500 l/min		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