

Quick exhaust valves SE/SEU

FESTO



Key features and product range overview

Key features

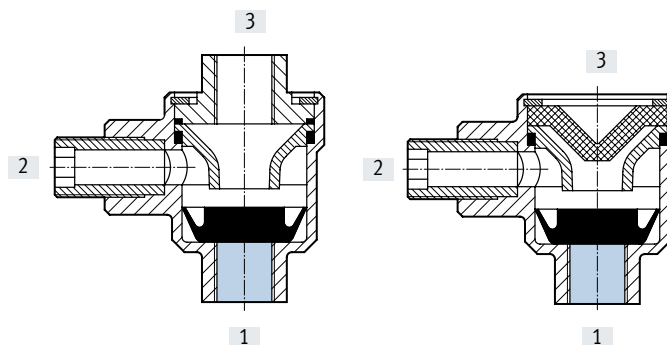
Function

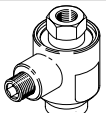

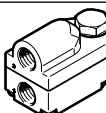
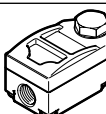
These elements can be used to achieve higher piston speeds during the return stroke of single-acting and double-acting cylinders.

Compressed air flows from the control valve and via the quick-exhaust valve to the cylinder. This closes exhaust port 3. If the pressure at 1 drops, exhausting is from 2 to 3. To ensure

quick and complete exhausting, the valve must be mounted directly on the cylinder's air port.

The quick exhaust valve SEU has a silencer to reduce the exhaust noise.



Product range overview						
Function	Design	Type	Pneumatic connection		→ Page/Internet	
			1	2		
Quick exhaust valves	Compact design					
		SE	Without silencer	G1/8, G1/4, G3/8, G1/2, G3/4	G1/8, G1/4, G3/8, G1/2, G3/4	4
		SEU	With silencer	G1/8, G1/4, G3/8, G1/2	G1/8, G1/4, G3/8, G1/2	7
	Flat design					
		VBQF-D	Without silencer	G1/8	G1/8, QS-6	vbqf
				G1/4	G1/4	
	VBQF-U	With silencer	G1/8	G1/8, QS-6	vbqf	
			G1/4	G1/4, QS-8		

Type codes

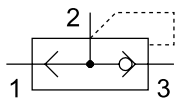
Type codes




001	Series	
SE	Quick exhaust valve	
SEU	Quick exhaust valve with silencer	

003	Generation	
	None	
B	Series B	

002	Pneumatic connection	
1/8	G1/8	
1/4	G1/4	
3/8	G3/8	
1/2	G1/2	
3/4	G3/4	

Datasheet



-  - Flow rate
300 ... 4560 l/min
-  - Temperature range
-20 ... +75°C
-  - Operating pressure
0.2 ... 10 bar

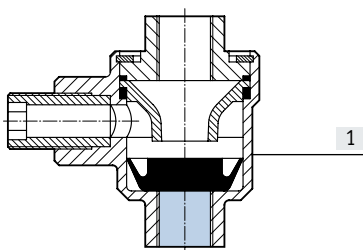


General technical data					
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 3	G1/8	G1/4	G3/8	G1/2	G3/4
Nominal width [mm]	5	7	11	15	19
Valve function	Quick exhaust				
Type of mounting	Screw-in				Via through-hole
Mounting position	Any				
Sound pressure level [dB(A)]	100	-			

Operating and environmental conditions					
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2	G3/4
Operating pressure [bar]	0.5 ... 10	0.5 ... 10	0.2 ... 10	0.3 ... 10	0.5 ... 10
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	Compressed air to ISO 8573-1:2010 [7:-:-]			Compressed air to ISO 8573-1:2010 [7:4:4]
Note on the operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature [°C]	-20 ... +75				
Temperature of medium [°C]	-20 ... +75				

Materials

Sectional view



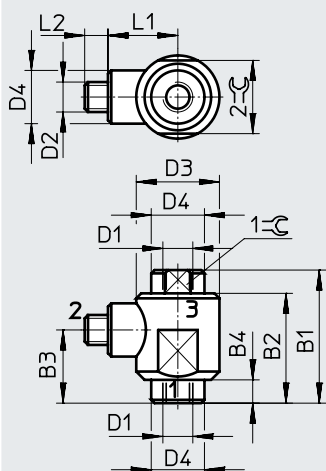
Quick exhaust valve		
[1] Housing	G1/8, G1/4	Die-cast zinc
	G3/8, G1/2	Die-cast aluminium
	G3/4	Anodised wrought aluminium alloy
- Seals	NBR	
Note on materials	G3/8, G3/4	RoHS-compliant

Datasheet

Dimensions

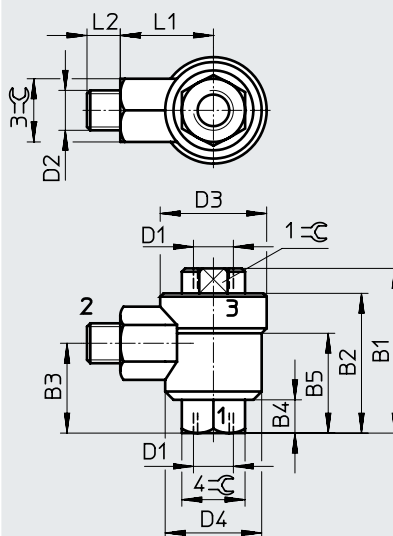
Download CAD data → www.festo.com

Pneumatic connection G1/8



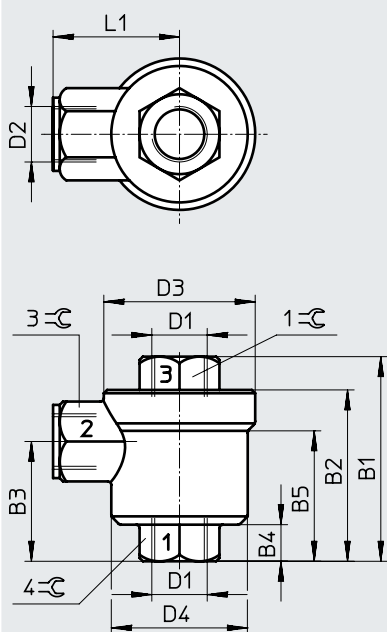
1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G1/4



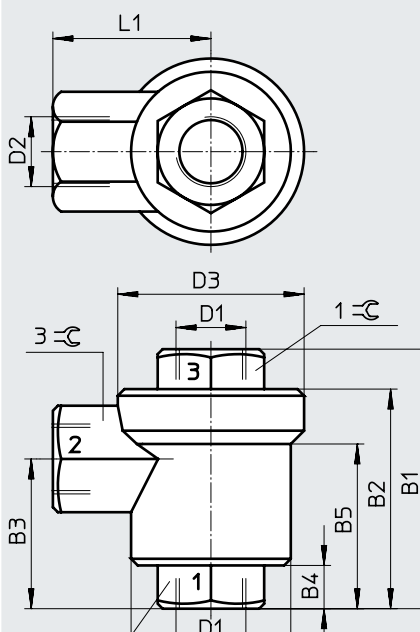
1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G3/8



1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G1/2



1 = Input 2 = Output 3 = Exhaust

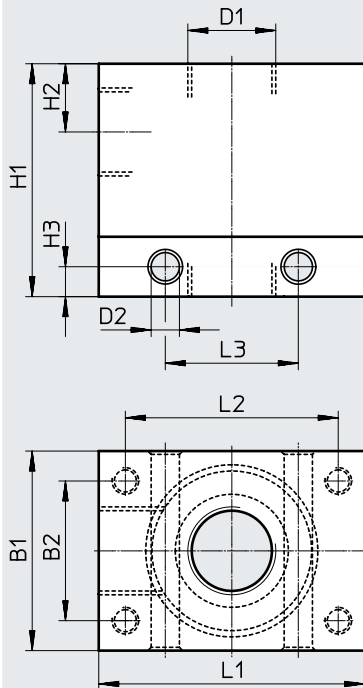
Type	Connection		B1	B2	B3	B4	B5	D3 ø	D4 ø	L1	L2	1-C	2-C	3-C	4-C
	D1	D2													
SE-1/8-B	G1/8	G1/8	40	33	22	7	-	25	16	21	7	14	22	-	-
SE-1/4-B	G1/4	G1/4	49.5	42	27	10	30	33	29	28	10	17	-	19	19
SE-3/8-B	G3/8	G3/8	61.5	51.5	36	11	39.2	45.5	41	38	-	24	-	24	24
SE-1/2-B	G1/2	G1/2	78	66	45	13	49.5	56.5	48	47.5	-	30	-	32	32

Datasheet

Dimensions

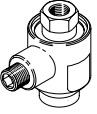
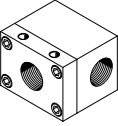
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Pneumatic connection G3/4

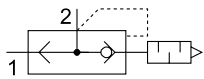





Type	Connection D1	B1	B2	D2 ∅	H1	H2	H3	L1	L2	L3
SE-3/4	G3/4	60	42	8.5	70	20.5	9	80	64	40

Ordering data

	Pneumatic connection			Standard nominal flow rate q _{nN} at 6 bar > 5 bar		Weight [g]	Part no.	Type
				Pressurisation 1 → 2	Exhausting 2 → 3			
	1	2	3	[l/min]	[l/min]			
	G1/8	G1/8	G1/8	300	660	75	9685	SE-1/8-B
	G1/4	G1/4	G1/4	960	1200	100	9686	SE-1/4-B
	G3/8	G3/8	G3/8	2880	2760	125	9687	SE-3/8-B
	G1/2	G1/2	G1/2	4560	6480	200	9688	SE-1/2-B
	G3/4	G3/4	G3/4	2500	7500	710	2280	SE-3/4

Datasheet



-  - Flow rate
300 ... 4560 l/min
-  - Temperature range
-20 ... +75°C
-  - Operating pressure
0.2 ... 10 bar

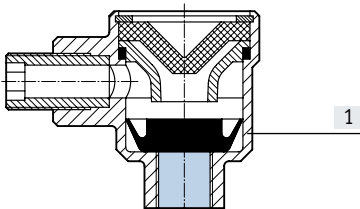


General technical data				
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2
Nominal width [mm]	5	7	11	15
Valve function	Quick exhaust			
Type of mounting	Screw-in			
Mounting position	Any			
Sound pressure level [dB(A)]	85	95	83	86

Operating and environmental conditions				
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2
Operating pressure [bar]	0.5 ... 10	0.5 ... 10	0.2 ... 10	0.3 ... 10
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]	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)			
Ambient temperature [°C]	-20 ... +75			
Temperature of medium [°C]	-20 ... +75			

Materials

Sectional view



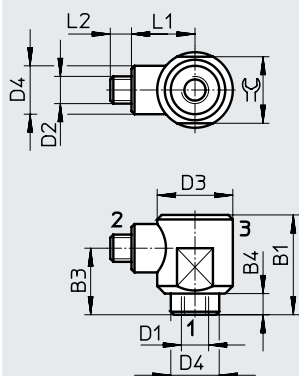
Quick exhaust valve			
[1]	Housing	G1/8, G1/4 G3/8, G1/2	Die-cast zinc Die-cast aluminium
-	Seals		NBR

Datasheet

Dimensions

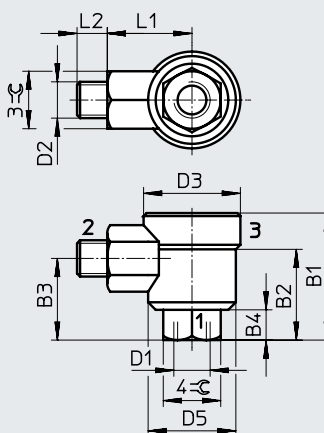
Download CAD data → www.festo.com

Pneumatic connection G1/8



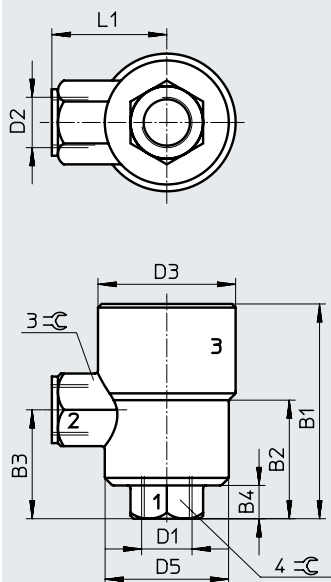
1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G1/4



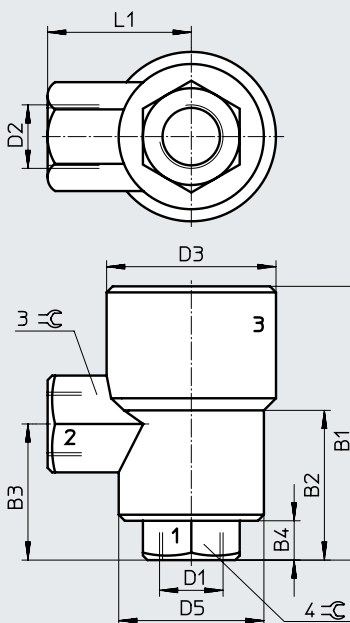
1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G3/8



1 = Input 2 = Output 3 = Exhaust

Pneumatic connection G1/2



1 = Input 2 = Output 3 = Exhaust

Type	Connection		B1	B2	B3	B4	D3	D4	D5	L1	L2	φ	3-φ	4-φ
	D1	D2					∅	∅	∅					
SEU-1/8	G1/8	G1/8	33	-	22	7	25	16	-	21	7	22	-	-
SEU-1/4	G1/4	G1/4	42.5	30	27	9.5	33	-	29	28	10	-	19	19
SEU-3/8	G3/8	G3/8	71	39	36	11	45.5	-	41	38	-	-	24	24
SEU-1/2	G1/2	G1/2	90.5	49.5	45	13	56.5	-	48	47.5	-	-	32	32

Ordering data

	Pneumatic connection		Standard nominal flow rate q _N at 6 bar → 5 bar		Standard flow rate q _N at 6 bar → 0 bar	Weight	Part no.	Type
			Pressurisation 1 → 2	Exhausting 2 → 3				
	1	2	[l/min]	[l/min]	[l/min]	[g]		
	G1/8	G1/8	300	550	1000	65	4616	SEU-1/8
	G1/4	G1/4	960	1100	2300	120	6753	SEU-1/4
	G3/8	G3/8	2880	2280	4680	160	6755	SEU-3/8
	G1/2	G1/2	4560	4020	6500	320	6822	SEU-1/2

Accessories

Mounting bracket HSE

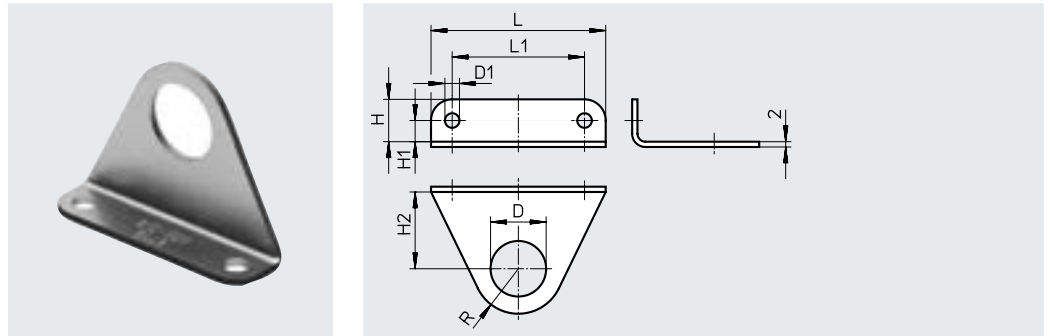
For attaching quick exhaust valve SE/SEU, irrespective of the cylinder.

Material:

Anodised wrought aluminium alloy

Note on materials:

RoHS-compliant



Dimensions and ordering data											
For connecting thread	D ∅	D1 ∅	H	H1	H2	L	L1	R	Weight [g]	Part no.	Type
G1/8	10	4.5	11	6	13.5	40	30	10	5.1	8710	HSE-1/8
G1/4	13.2	4.5	11	6	17	42	32	14	6.4	8711	HSE-1/4
G3/8	16.8	5.5	13	7	23.5	54	42	13	9	8712	HSE-3/8
G1/2	21	5.5	16	8	29	66	50	17	14	8713	HSE-1/2