

## Quick exhaust valves SE/SEU

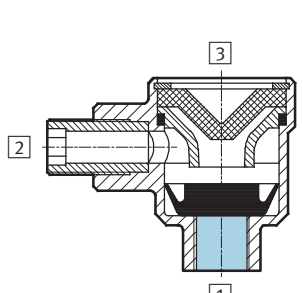
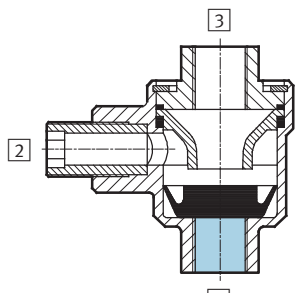
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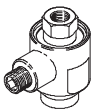

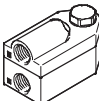
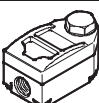


# Quick exhaust valves SE/SEU

Key features, product range overview and type codes

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Features		
Function	SE	SEU
<p>These components allow higher piston speeds to be achieved on the return stroke of single and double-acting cylinders.</p> <p>Compressed air flows from the pilot valve and via the quick exhaust valve to the cylinder. The exhaust port 3 is closed at this time. When the pressure at 1 falls, exhaust flow occurs from 2 to 3.</p>	<p>In order to achieve the full benefit of the quick exhaust function, the valve must be connected directly to the port of the cylinder.</p> <p>In the quick exhaust valve SEU the exhaust noise is reduced by a silencer.</p>	 

Product range overview						
Function	Version	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	3
		SEU	With silencer	G1/8, G1/4, G3/8, G1/2	G1/8, G1/4, G3/8, G1/2	6
	Flat design					
		VBQF-D	Without silencer	G1/8	G1/8, QS-6	vbqf
	VBQF-U	With silencer	G1/8	G1/8, QS-6	vbqf	

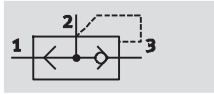
Type codes			
		SE	1/8 B
Type			
SE	Quick exhaust valve		
SEU	Quick exhaust valve with silencer		
Pneumatic connection			
1/8	G1/8		
1/4	G1/4		
3/8	G3/8		
1/2	G1/2		
3/4	G3/4		
Generation			
	Series A		
B	Series B		

# Quick exhaust valves SE

Technical data

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Function



Flow rate

300 ... 4,560 l/min

Temperature range

–20 ... +75 °C

Pressure

0.2 ... 10 bar

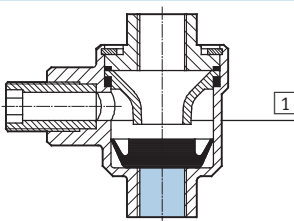


General technical data					
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 3	G1/8	G1/4	G3/8	G1/2	G3/4
Nominal size [mm]	5	7	11	15	19
Valve function	Quick exhaust				
Type of mounting	Screw-in				Via through-hole
Mounting position	Any				
Noise 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	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm				
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 G3/4
		Die-cast zinc Die-cast aluminium Anodised wrought aluminium alloy
	–	Seals
		NBR

# Quick exhaust valves SE

Technical data

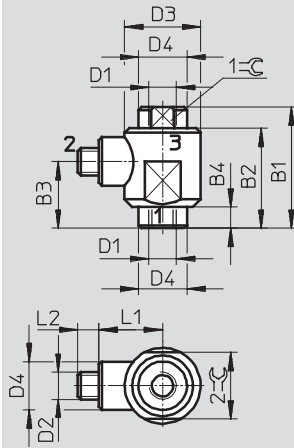
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## Dimensions

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

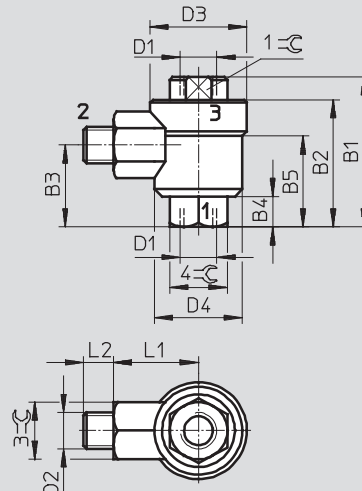
Pneumatic connection G $\frac{1}{8}$

Pneumatic connection G $\frac{1}{4}$



1 = Inlet port

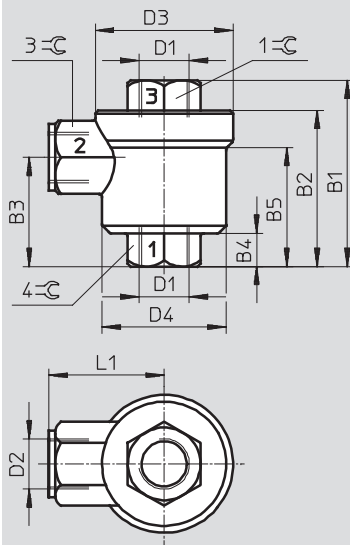
2 = Outlet port



3 = Exhaust port

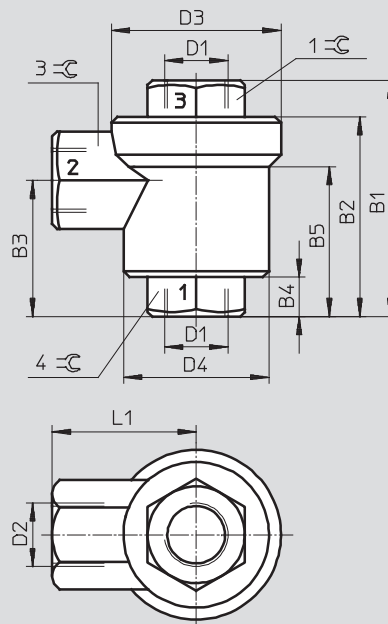
Pneumatic connection G $\frac{3}{8}$

Pneumatic connection G $\frac{1}{2}$



1 = Inlet port

2 = Outlet port



3 = Exhaust port

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

# Quick exhaust valves SE

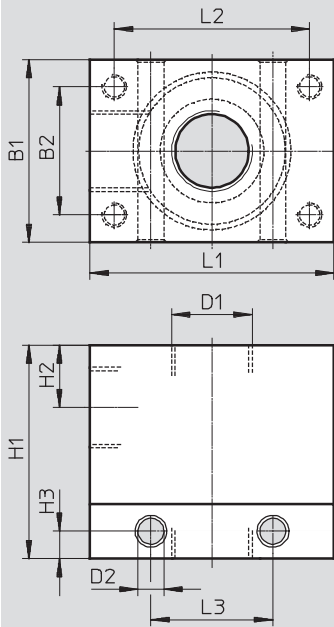
Technical data

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## Dimensions

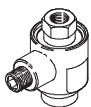
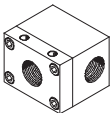
Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

Pneumatic connection G $\frac{3}{4}$



Type	Connection D1	B1	B2	D2 Ø	H1	H2	H3	L1	L2	L3
SE- $\frac{3}{4}$	G $\frac{3}{4}$	60	42	8.5	70	20.5	9	80	64	40

## Ordering data

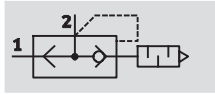
	Pneumatic connection			Standard nominal flow rate qnN at 6 → 5 bar		Weight [g]	Part No.	Type
				Pressurisation 1 → 2	Exhausting 2 → 3			
	1	2	3	[l/min]	[l/min]			
	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	300	660	75	9685	SE- $\frac{1}{8}$ -B
	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	960	1,200	100	9686	SE- $\frac{1}{4}$ -B
	G $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	2,880	2,760	125	9687	SE- $\frac{3}{8}$ -B
	G $\frac{1}{2}$	G $\frac{1}{2}$	G $\frac{1}{2}$	4,560	6,480	200	9688	SE- $\frac{1}{2}$ -B
	G $\frac{3}{4}$	G $\frac{3}{4}$	G $\frac{3}{4}$	2,500	7,500	710	2280	SE- $\frac{3}{4}$

# Quick exhaust valves SEU

Technical data

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Function



Flow rate

300 ... 4,560 l/min

Temperature range

–20 ... +75 °C

Pressure

0.2 ... 10 bar

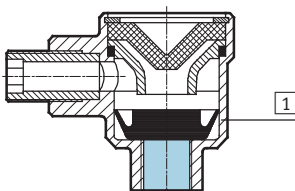


General technical data				
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2
Nominal size [mm]	5	7	11	15
Valve function	Quick exhaust			
Type of mounting	Screw-in			
Mounting position	Any			
Noise level [dB(A)]	85	85	83	86

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	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 µm			
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
–	Seals	NBR

# Quick exhaust valves SEU

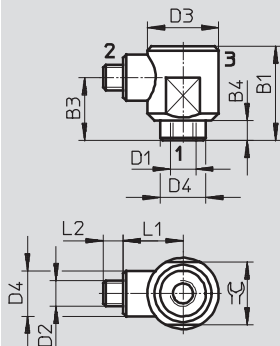
Technical data

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## Dimensions

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

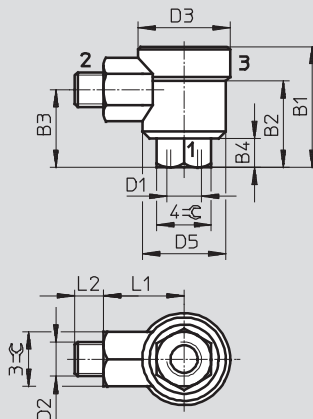
Pneumatic connection G $\frac{1}{8}$



1 = Inlet port

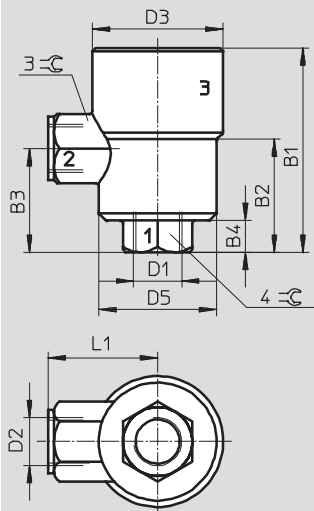
2 = Outlet port

Pneumatic connection G $\frac{1}{4}$



3 = Exhaust port

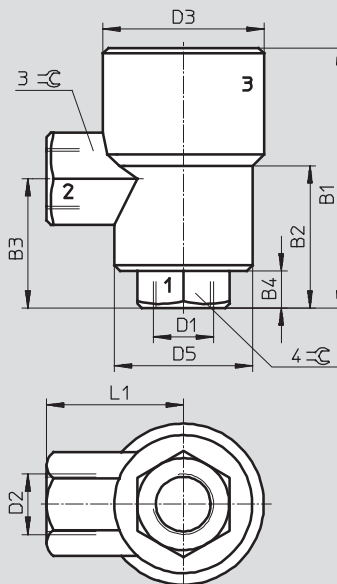
Pneumatic connection G $\frac{3}{8}$



1 = Inlet port

2 = Outlet port


Pneumatic connection G $\frac{1}{2}$



3 = Exhaust port

Type	Connection		B1	B2	B3	B4	D3 Ø	D4 Ø	D5 Ø	L1	L2	≈	3≈	4≈
	D1	D2												
SEU- $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	33	–	22	7	25	16	–	21	7	22	–	–
SEU- $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	42.5	30	27	9.5	33	–	29	28	10	–	19	19
SEU- $\frac{3}{8}$	G $\frac{3}{8}$	G $\frac{3}{8}$	71	39	36	11	45.5	–	41	38	–	–	24	24
SEU- $\frac{1}{2}$	G $\frac{1}{2}$	G $\frac{1}{2}$	90.5	49.5	45	13	56.5	–	48	47.5	–	–	32	32

## Ordering data

Ordering data								
	Pneumatic connection		Standard nominal flow rate q <sub>N</sub> at 6 bar → 5 bar		Standard flow rate q <sub>N</sub> at 6 bar → 0 bar	Weight	Part No.	Type
			Pressurisation 1 → 2	Exhausting 2 → 3	Exhausting 2 → 3			
	1	2	[l/min]	[l/min]	[l/min]			
	G1/8	G1/8	300	550	1,000	65	4616	SEU-1/8
	G1/4	G1/4	960	1,100	2,300	120	6753	SEU-1/4
	G3/8	G3/8	2,880	2,280	4,680	160	6755	SEU-3/8
	G1/2	G1/2	4,560	4,020	6,500	320	6822	SEU-1/2

## Quick exhaust valves SE/SEU

Accessories

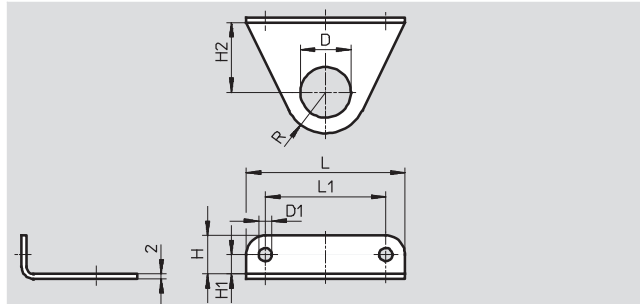
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### Mounting bracket HSE

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

Material:

Anodised wrought aluminium alloy



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



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