

Quick exhaust valves SE/SEU



Quick exhaust valves SE/SEU

Key features, product range overview and type codes



Features		SE	SEU
Function			
<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>		

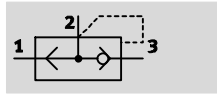
Product range overview						
Function	Version	Type	Pneumatic connection		→ Page/Internet	
			1	2		
Quick exhaust valves	Compact design					
		SE	Without silencer	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂ , G ³ / ₄	3
		SEU	With silencer	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	G ¹ / ₈ , G ¹ / ₄ , G ³ / ₈ , G ¹ / ₂	6
	Flat design					
		VBQF-D	Without silencer	G ¹ / ₈	G ¹ / ₈ , QS-6	vbqf
				G ¹ / ₄	G ¹ / ₄	
	VBQF-U	With silencer	G ¹ / ₈	G ¹ / ₈ , QS-6	vbqf	
			G ¹ / ₄	G ¹ / ₄ , QS-8		




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

Quick exhaust valves SE

Technical data

Function



-  Flow rate
300 ... 4,560 l/min
-  Temperature range
-20 ... +75 °C
-  Operating pressure
0.2 ... 10 bar

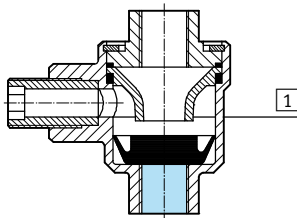


General technical data					
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2	G3/4
Pneumatic connection 3	G1/8	G1/4	G3/8	G1/2	G3/4
Nominal size [mm]	5	7	11	15	19
Valve function	Quick exhaust				
Type of mounting	Screw-in				Via through-hole
Mounting position	Any				
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	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	Compressed air in accordance with ISO 8573-1:2010 [7:-:-]			Compressed air in accordance with ISO 8573-1:2010 [7:4:4]
Note on operating/pilot medium	Operation with lubricated medium 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 G3/4	Die-cast zinc Die-cast aluminium Anodised wrought aluminium alloy
	-	Seals	NBR
	Note on materials	G3/8, G3/4	RoHS-compliant

Quick exhaust valves SE

Technical data

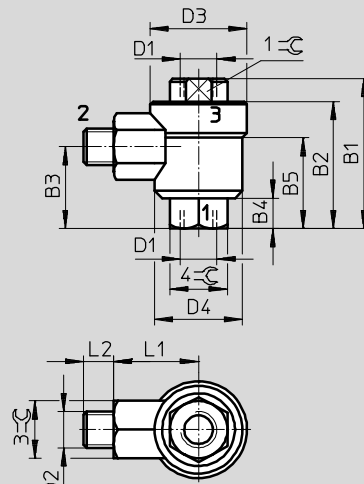
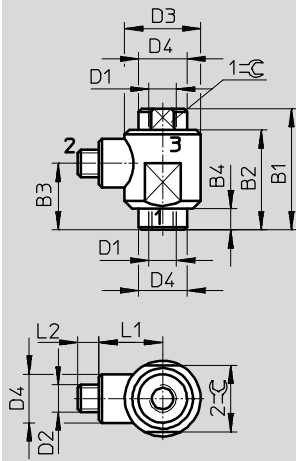
FESTO

Dimensions

Download CAD data → www.festo.com

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

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



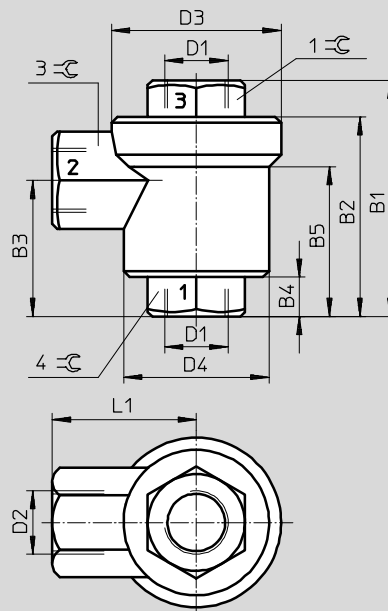
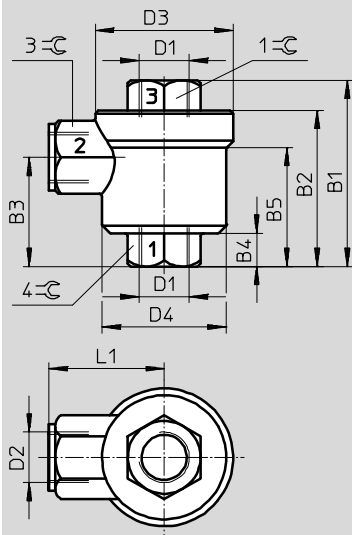
1 = Inlet port

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=C	2=C	3=C	4=C
	D1	D2													
SE- $\frac{1}{8}$ -B	G $\frac{1}{8}$	G $\frac{1}{8}$	40	33	22	7	-	25	16	21	7	14	22	-	-
SE- $\frac{1}{4}$ -B	G $\frac{1}{4}$	G $\frac{1}{4}$	49.5	42	27	10	30	33	29	28	10	17	-	19	19
SE- $\frac{3}{8}$ -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- $\frac{1}{2}$ -B	G $\frac{1}{2}$	G $\frac{1}{2}$	78	66	45	13	49.5	56.5	48	47.5	-	30	-	32	32

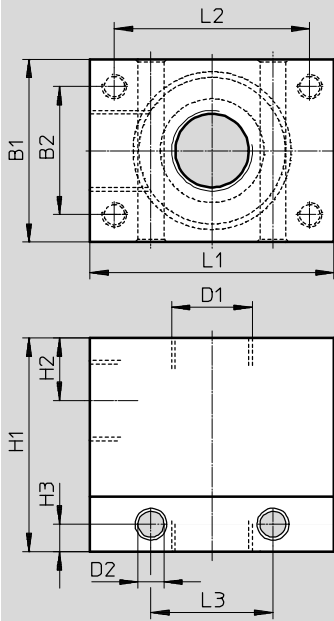
Quick exhaust valves SE

Technical data

Dimensions

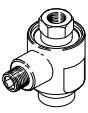
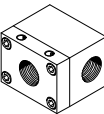
Download CAD data → www.festo.com

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

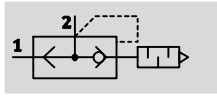
	Pneumatic connection			Standard nominal flow rate q _n at 6 → 5 bar		Weight [g]	Part No.	Type
				Pressurisation 1 → 2	Exhausting 2 → 3			
	1	2	3	[l/min]	[l/min]			
	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	300	660	75	9685	SE- $\frac{1}{8}$ -B
	G $\frac{1}{4}$	G $\frac{1}{4}$	G $\frac{1}{4}$	960	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

FESTO

Function



-  - Flow rate
300 ... 4,560 l/min
-  - Temperature range
-20 ... +75 °C
-  - Operating pressure
0.2 ... 10 bar

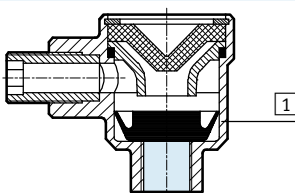


General technical data				
Pneumatic connection 1	G1/8	G1/4	G3/8	G1/2
Pneumatic connection 2	G1/8	G1/4	G3/8	G1/2
Nominal size [mm]	5	7	11	15
Valve function	Quick exhaust			
Type of mounting	Screw-in			
Mounting position	Any			
Noise level [dB(A)]	85	85	83	86

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	Compressed air in accordance with ISO 8573-1:2010 [7:4:4]	Compressed air in accordance with ISO 8573-1:2010 [7:-:-]		
Note on operating/pilot medium	Operation with lubricated medium 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
-	Seals	NBR
		Die-cast zinc Die-cast aluminium

Quick exhaust valves SEU

Technical data

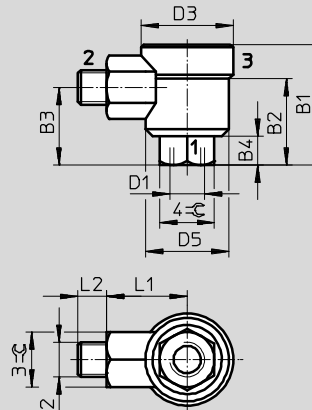
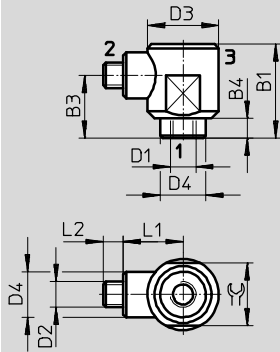
FESTO

Dimensions

Download CAD data → www.festo.com

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

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



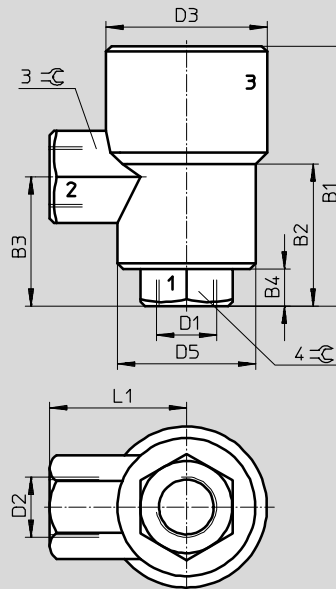
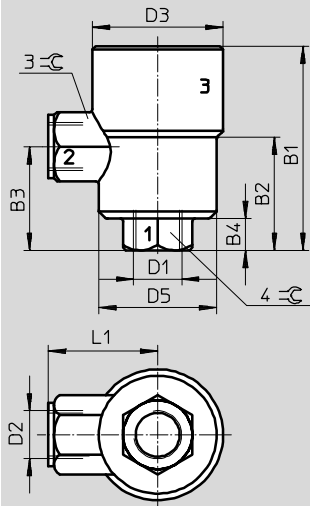
1 = Inlet port

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	D3	D4	D5	L1	L2	3°	4°	5°
	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

	Pneumatic connection		Standard nominal flow rate q _{nN} 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	Exhausting 2 → 3			
	1	2	[l/min]	[l/min]	[l/min]	[g]		
	G $\frac{1}{8}$	G $\frac{1}{8}$	300	550	1,000	65	4616	SEU- $\frac{1}{8}$
	G $\frac{1}{4}$	G $\frac{1}{4}$	960	1,100	2,300	120	6753	SEU- $\frac{1}{4}$
	G $\frac{3}{8}$	G $\frac{3}{8}$	2,880	2,280	4,680	160	6755	SEU- $\frac{3}{8}$
	G $\frac{1}{2}$	G $\frac{1}{2}$	4,560	4,020	6,500	320	6822	SEU- $\frac{1}{2}$

Quick exhaust valves SE/SEU

Accessories

FESTO

Mounting bracket HSE

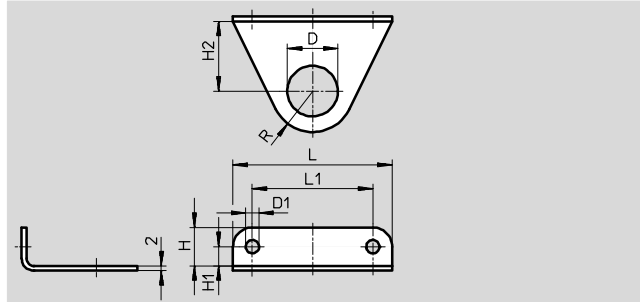
For attachment of quick exhaust valve SE/SEU, irrespective of cylinder.

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

Product Range and Company Overview

A Complete Suite and Company Overview

Our experienced engineers provide complete support at every stage of your development process, including: conceptualization, analysis, engineering, design, assembly, documentation, validation, and production.



Custom Automation Components
Complete custom engineered solutions



Custom Control Cabinets
Comprehensive engineering support and on-site services



Complete Systems
Shipment, stocking and storage services

The Broadest Range of Automation Components

With a comprehensive line of more than 30,000 automation components, Festo is capable of solving the most complex automation requirements.



Electromechanical
Electromechanical actuators, motors, controllers & drivers



Pneumatics
Pneumatic linear and rotary actuators, valves, and air supply



PLCs and I/O Devices
PLC's, operator interfaces, sensors and I/O devices

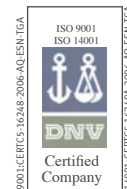
Supporting Advanced Automation... As No One Else Can!

Festo is a leading global manufacturer of pneumatic and electromechanical systems, components and controls for industrial automation, with more than 16,000 employees in 60 national headquarters serving more than 180 countries. For more than 80 years, Festo has continuously elevated the state of manufacturing with innovations and optimized motion control solutions that deliver higher performing, more profitable automated manufacturing and processing equipment. Our dedication to the advancement of automation extends beyond technology to the education and development of current and future automation and robotics designers with simulation tools, teaching programs, and on-site services.

Quality Assurance, ISO 9001 and ISO 14001 Certifications

Festo Corporation is committed to supply all Festo products and services that will meet or exceed our customers' requirements in product quality, delivery, customer service and satisfaction.

To meet this commitment, we strive to ensure a consistent, integrated, and systematic approach to management that will meet or exceed the requirements of the ISO 9001 standard for Quality Management and the ISO 14001 standard for Environmental Management.

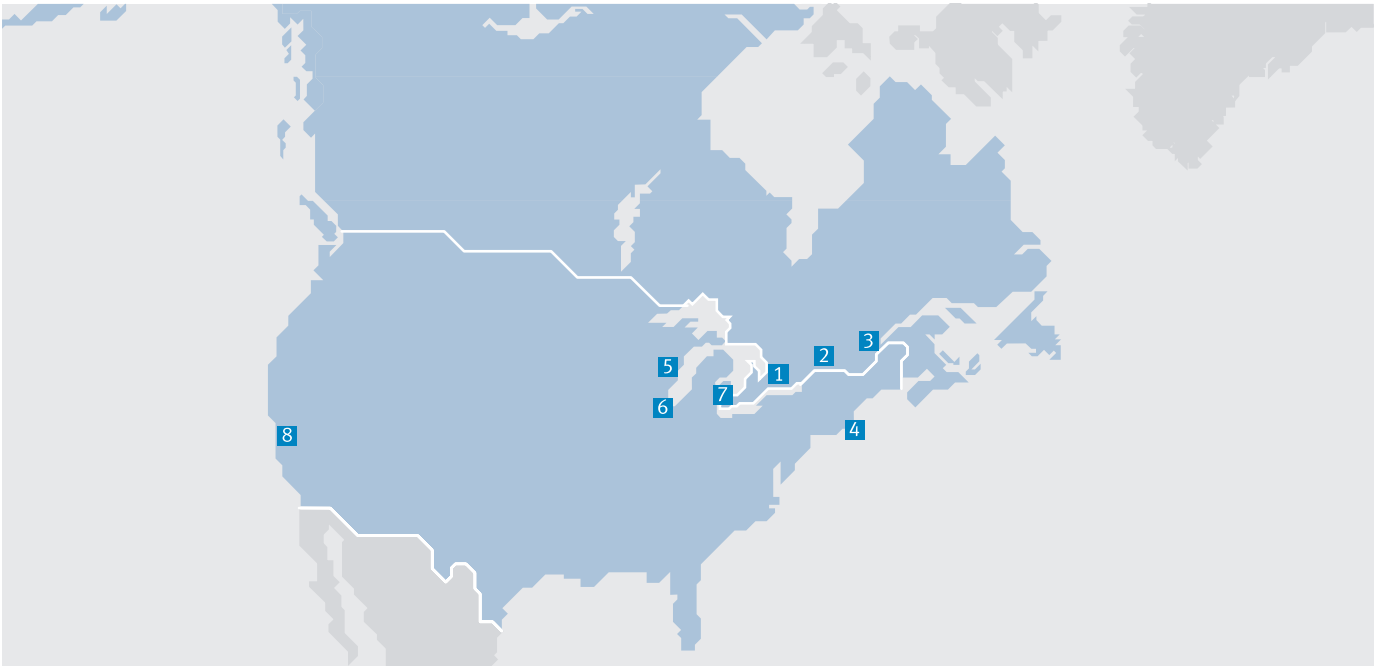


© Copyright 2013, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. For Liability and Warranty conditions, refer to our "Terms and Conditions of Sale", available from your local Festo office. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of Festo. All technical data subject to change according to technical update.



Printed on recycled paper at New Horizon Graphic, Inc., FSC certified as an environmental friendly printing plant.

Festo North America



**1 Festo Canada
Headquarters
Festo Inc.**
5300 Explorer Drive
Mississauga, ON
L4W 5G4

2 Montréal
5600, Trans-Canada
Pointe-Claire, QC
H9R 1B6

3 Québec City
2930, rue Watt#117
Québec, QC
G1X 4G3



**4 Festo United States
Headquarters
Festo Corporation**
395 Moreland Road
Hauppauge, NY
11788

5 Appleton
North 922 Tower View Drive, Suite N
Greenville, WI
54942

7 Detroit
1441 West Long Lake Road
Troy, MI
48098

6 Chicago
85 W Algonquin - Suite 340
Arlington Heights, IL
60005

8 Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA
94550

Festo Regional Contact Center

Canadian Customers

Commercial Support:
Tel: 1 877 GO FESTO (1 877 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: festo.canada@ca.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: technical.support@ca.festo.com

USA Customers

Commercial Support:
Tel: 1 800 99 FESTO (1 800 993 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: customer.service@us.festo.com

Technical Support:
Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: product.support@us.festo.com