

Quick exhaust valve VBQF

FESTO



Characteristics

At a glance

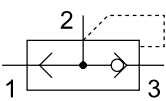
The quick exhaust valves VBQF can be used to achieve higher piston speeds during the return stroke of single-acting and double-acting drives. The compressed air flows from the control valve to the drive via the VBQF. When the pressure at port 1 drops, exhaust flow is from port 2 to port 3.

In order to enable quick and complete exhausting, the VBQF must be mounted directly on the supply port of the drive. The VBQF can be mounted in any position and can also be turned during installation (however, continuous rotation of the connection during operation must be avoided).

- Minimal height
- High flow rate
- Low noise emission
- Available with or without silencer

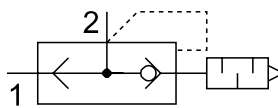
Exhaust

[D] Ducted



With ducted exhaust air, without silencer

[U] Silencer



With unfiltered exhaust air, with silencer

Type code

001	Series	
VBQF	Quick exhaust valve	
002	Exhaust	
D	Ducted	
U	Silencer	

003	Pneumatic connection 2	
G14	G1/4	
G18	G1/8	
004	Pneumatic connection 1	
E	Same size as connection 2	
Q6	Push-in connector 6 mm	
Q8	Push-in connector 8 mm	

Datasheet

General technical data

Valve function	Quick exhaust			
Pneumatic connection, port 1	G1/8	G1/4	QS-6	QS-8
Pneumatic connection, port 2	G1/8	G1/4	G1/8	G1/4
Type of mounting	Screw-in			
Mounting position	optional			
Sound pressure level	75 dB(A)			

Operating and environmental conditions

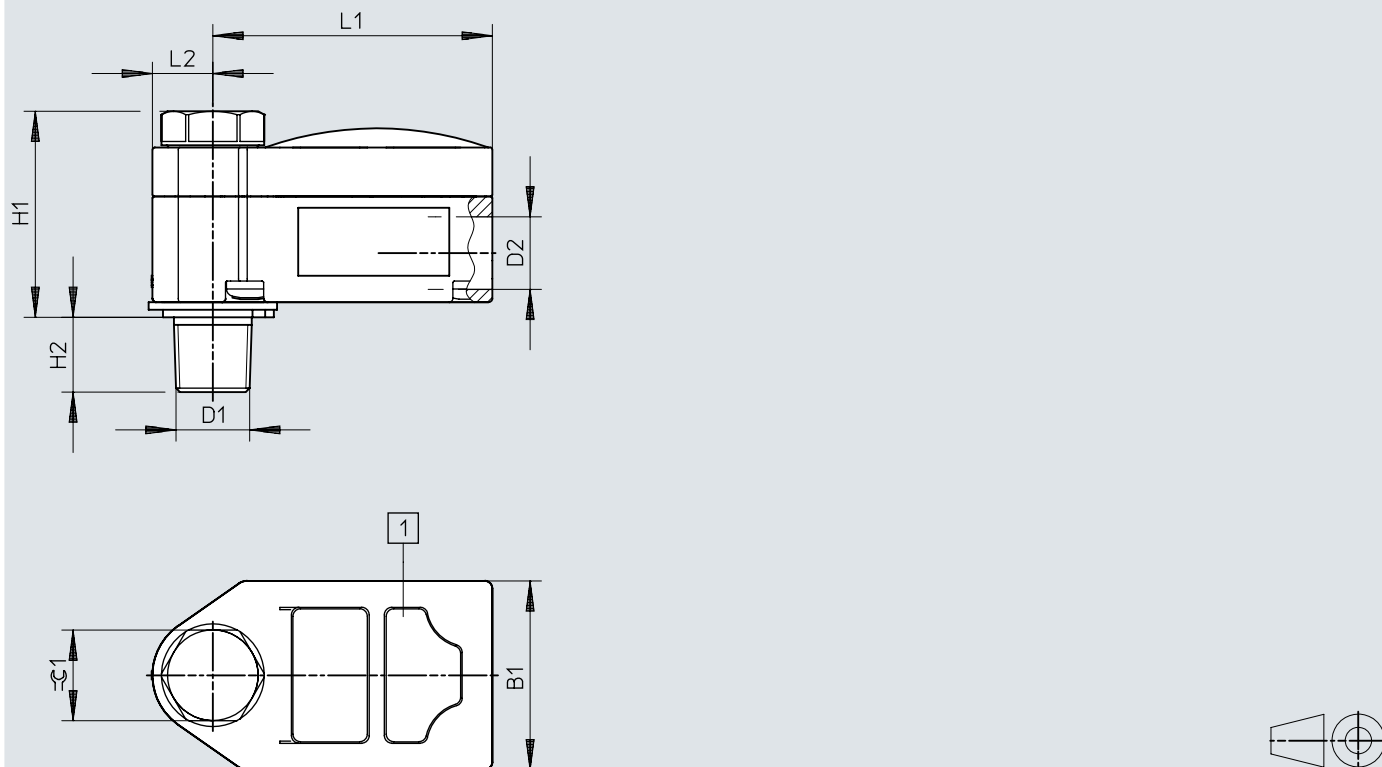
Pneumatic connection, port 1	G1/8	G1/4	QS-6	QS-8
Operating pressure	0.5 ... 10 bar		0.2 ... 10 bar	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4]			
Note on operating and pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)			
Ambient temperature	-20 ... 80°C		-10 ... 60°C	
Media temperature	-20 ... 80°C		-10 ... 60°C	
Standard nominal flow rate, exhaust 0.6->0 MPa (6->0 bar, 87->0 psi)	1,300 l/min	2,500 l/min	1,300 l/min	2,500 l/min
Standard nominal flow rate, air flow 0.6->0,5 MPa (6->5 bar, 87->72.5 psi)	350 l/min	960 l/min	350 l/min	800 l/min
Corrosion resistance class CRC	1 - Low corrosion stress			

Materials

Material housing	Die-cast aluminium, Die-cast zinc
Material seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class	Class 4 according to ISO 14644-1

Dimensions

Dimensions – Unducted extract air VBQF-U

Download CAD data → www.festo.com

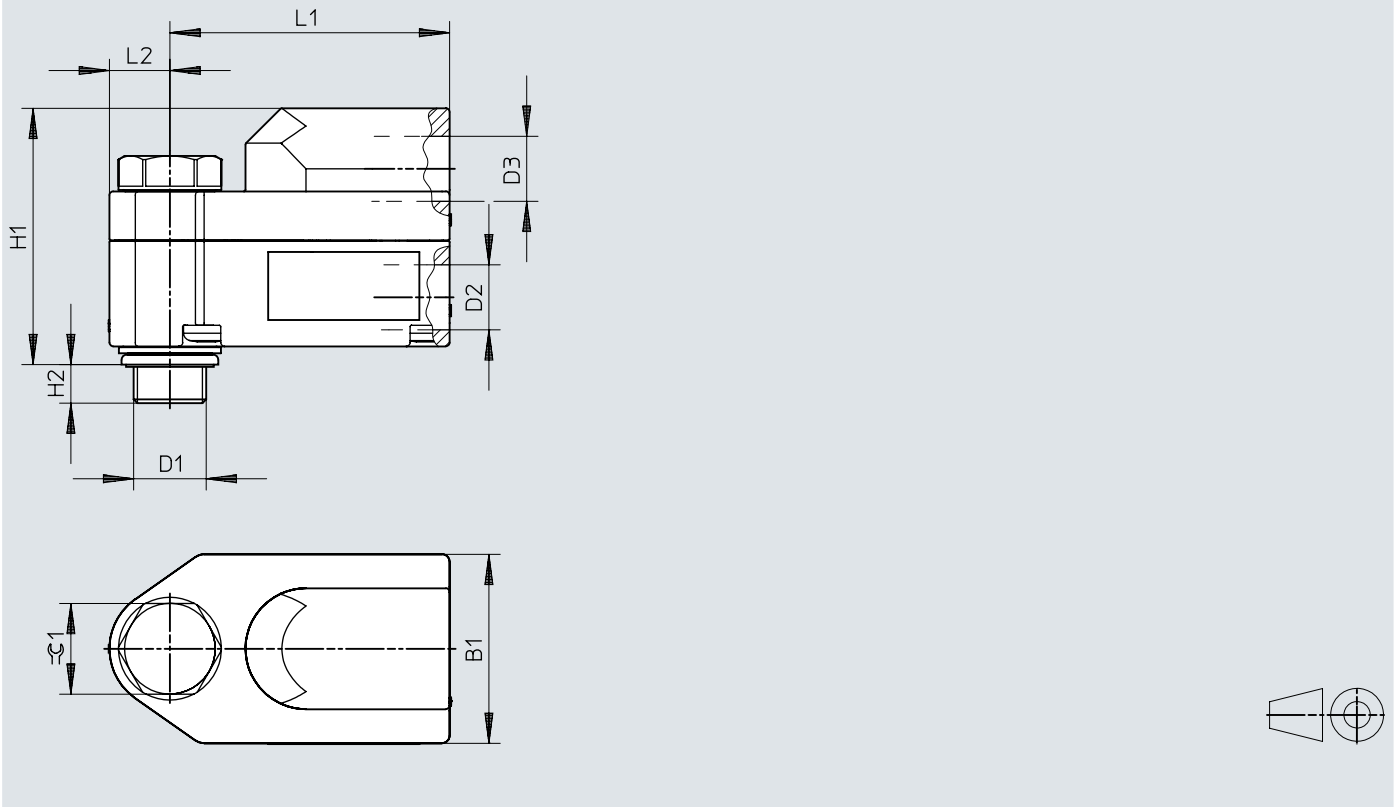
[1] Silencer

	D1	D2	B1	H1	H2	L1	L2	$\varnothing C1$
VBQF-U-G18-E	G1/8	G1/8	25	27,4	5,3	37	8	12
VBQF-U-G18-Q6		QS-6				41		
VBQF-U-G14-E	G1/4	G1/4	32	38	6,2	54	10,5	15
VBQF-U-G14-Q8		QS-8				58		

Dimensions

Dimensions – Ducted exhaust air VBQF-D


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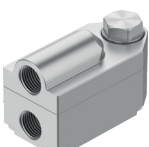
	D1	D2	D3	B1	H1	H2	L1	L2	≅
VBQF-D-G18-E	G1/8	G1/8	G1/8	25	33,9	5,3	37	8	12
VBQF-D-G18-Q6		QS-6	QS-8				41		
VBQF-D-G14-E	G1/4	G1/4	G1/4	32	42	6,2	54	10,5	15

Ordering data

Ordering data – Unducted extract air

	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	G1/8	G1/8	5 mm	84.2 g	547531	VBQF-U-G18-E
	G1/4	G1/4	7 mm	226 g	548001	VBQF-U-G14-E
	QS-6	G1/8	5 mm	85.5 g	547532	VBQF-U-G18-Q6
	QS-8	G1/4	7 mm	232 g	548002	VBQF-U-G14-Q8

Ordering data – Ducted extract air

	Pneumatic connection, port 1	Pneumatic connection, port 2	Nominal size	Product weight	Part no.	Type
	G1/8	G1/8	5 mm	102.5 g	547533	VBQF-D-G18-E
	G1/4	G1/4	7 mm	253 g	548003	VBQF-D-G14-E
	QS-6	G1/8	5 mm	105 g	547534	VBQF-D-G18-Q6