

Quick exhaust valves VBQF



# Quick exhaust valves VBQF

Product range overview and type codes

## Function

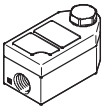
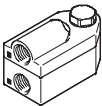

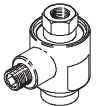
Higher piston speeds can be achieved on the return stroke of single and double-acting drives with the quick exhaust valves VBQF. Compressed air flows from the control

exhaust port 3 is closed at this time. When the pressure at 1 falls, exhaust flow occurs from 2 to 3. In order to implement a quick exhaust, the VBQF must be attached directly to

the supply port of the drive. The VBQF can be mounted in any position and can also be turned. The VBQF is available with or without silencer.

Features:

- Minimal height
- High flow rate
- Improved noise emissions
- Can be rotated (continuous rotation of the connection must, however, be avoided)

Product range overview						
Function	Version	Type	Pneumatic connection		→ Page/Internet	
			1 (valve)	2 (drive)		
Quick exhaust valves	<b>Flat design</b>					
		VBQF-U	With silencer	G <sup>1</sup> / <sub>8</sub> , QS-6	G <sup>1</sup> / <sub>8</sub>	3
		VBQF-D	Without silencer	G <sup>1</sup> / <sub>8</sub> , QS-6	G <sup>1</sup> / <sub>8</sub>	3
	<b>Compact design</b>					
		SEU	With silencer	G <sup>1</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>2</sub>	G <sup>1</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>2</sub>	seu
	SE	Without silencer	G <sup>1</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>2</sub>	G <sup>1</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>4</sub> , G <sup>3</sup> / <sub>8</sub> , G <sup>1</sup> / <sub>2</sub>	se	

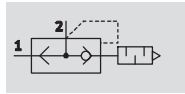
## Type codes

		VBQF	-	U	-	G18	-	E
<b>Type</b>								
VBQF	Quick exhaust valve, flat design							
<b>Exhaust air</b>								
U	Unducted exhaust air							
D	Ducted exhaust air							
<b>Pneumatic connection 2 (drive)</b>								
G18	Thread G <sup>1</sup> / <sub>8</sub>							
<b>Pneumatic connection 1 (valve)</b>								
E	Threaded connection, like pneumatic connection 2 (drive)							
Q6	Push-in connector QS-6							

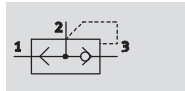
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Technical data

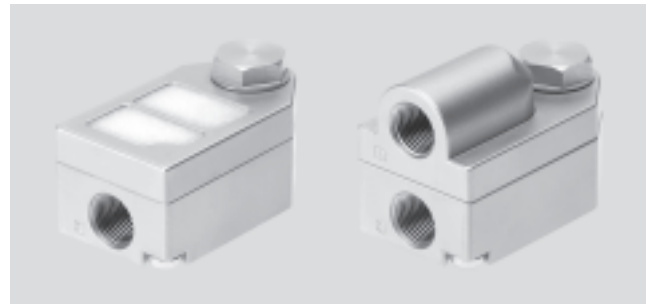
Unducted exhaust air VBQF-U



Ducted exhaust air VBQF-D



-  Flow rate  
1,300 l/min
-  Temperature range  
-20 ... +80 °C
-  Operating pressure  
0.5 ... 10 bar



General technical data				
Exhaust air	Unducted exhaust air VBQF-U		Ducted exhaust air VBQF-D	
Pneumatic connection 1 (valve)	G $\frac{1}{8}$	QS-6	G $\frac{1}{8}$	QS-6
Pneumatic connection 2 (drive)	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$	G $\frac{1}{8}$
Pneumatic connection 3 (exhaust air)	- (silencer)	- (silencer)	G $\frac{1}{8}$	QS-8
Valve function	Quick exhaust			
Nominal size [mm]	5			
Type of mounting	Screw-in			
Mounting position	Any			
Noise level [dB (A)]	75	75	-	-

Flow rate characteristic values		
Exhaust air	Unducted exhaust air VBQF-U	Ducted exhaust air VBQF-D
Standard nominal flow rate $q_{nN}$ [l/min] at 6 bar $\rightarrow$ 5 bar		
Pressurisation 1 $\rightarrow$ 2	350	350
Exhausting 2 $\rightarrow$ 3	-	850
Standard flow rate $q_N$ [l/min] at 6 bar $\rightarrow$ 0 bar		
Exhausting 2 $\rightarrow$ 3	1,300	1,300

Operating and environmental conditions		
Type of connection	Threaded connection	Push-in connector QS
Operating pressure [bar]	0.5 ... 10	
Operating medium	Filtered compressed air, lubricated or unlubricated, grade of filtration 40 $\mu$ m	
Ambient temperature [°C]	-20 ... +80	-10 ... +60
Temperature of medium [°C]	-20 ... +80	-10 ... +60
Corrosion resistance class CRC <sup>1)</sup>	1	

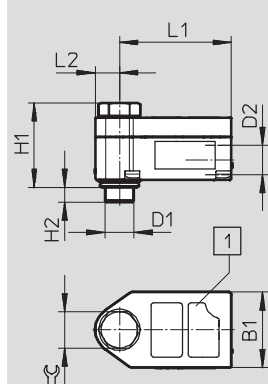
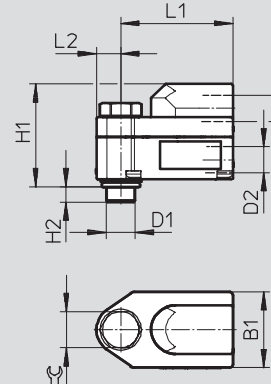
1) Corrosion resistance class 1 according to Festo standard 940 070  
Components subject to low corrosion stress. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers.

Materials	
Housing	Die-cast zinc
Seals	NBR
Note on materials	RoHS-compliant

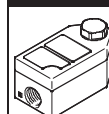
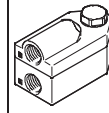
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Technical data

**Dimensions** Download CAD data → [www.festo.com](http://www.festo.com)

Unducted exhaust air VBQF-U	Ducted exhaust air VBQF-D
	
<p><span style="border: 1px solid black; padding: 2px;">1</span> Silencer</p>	

Type	B1	D1	D2	D3	H1	H2	L1	L2	☞
VBQF-U-...-E	25	G1/8	G1/8	–	27.4	5.3	37	8	12
VBQF-U-...-Q6			QS-6	–			41		
VBQF-D-...-E	25	G1/8	G1/8	G1/8	33.9	5.3	37	8	12
VBQF-D-...-Q6			QS-6	QS-8			41		

Ordering data						
Version	Pneumatic connection			Weight [g]	Part No.	Type
	1 (valve)	2 (drive)	3 (exhaust air)			
	G1/8	G1/8	–	84.2	<b>547531</b>	<b>VBQF-U-G18-E</b>
	QS-6	G1/8	–	85.5	<b>547532</b>	<b>VBQF-U-G18-Q6</b>
	G1/8	G1/8	G1/8	102.5	<b>547533</b>	<b>VBQF-D-G18-E</b>
	QS-6	G1/8	QS-8	105.0	<b>547534</b>	<b>VBQF-D-G18-Q6</b>