

## Quick exhaust valves VBQF

**FESTO**



## Product range overview and type codes

### Function

The quick exhaust valves VBQF can be used to achieve higher piston speeds during the return stroke of single-acting and double-acting drives.

Compressed air flows from the control valve to the drive via the VBQF. This

closes exhaust port 3. When the pressure at port 1 falls, exhaust flow is from port 2 to port 3.

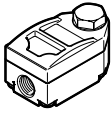
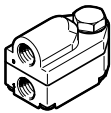

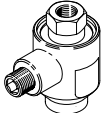
In order to allow quick exhausting in full, the VBQF must be mounted directly on the drive's air connection. The

VBQF can be mounted in any position and can also be turned.

The VBQF is available with or without silencer.

Key features:

- Minimal height
- High flow rate
- Improved noise emissions
- Can be rotated during installation (however, rotation during operation should 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	G1/8, QS-6	G1/8	3
				G1/4, QS-8	G1/4	
		VBQF-D	Without silencer	G1/8, QS-6	G1/8	3
				G1/4	G1/4	
	<b>Compact design</b>					
	SEU	With silencer	G1/8, G1/4, G3/8, G1/2	G1/8, G1/4, G3/8, G1/2	seu	
	SE	Without silencer	G1/8, G1/4, G3/8, G1/2, G3/4	G1/8, G1/4, G3/8, G1/2, G3/4	se	

### Type codes

001	Series
VBQF	Quick exhaust valve

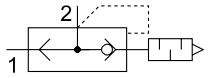
002	Exhaust
D	Ducted
U	Silencer

003	Pneumatic connection 2
G18	G1/8
G14	G1/4

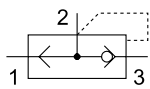
004	Pneumatic connection 1
E	Same size as connection 2
Q6	Push-in connector 6 mm
Q8	Push-in connector 8 mm




## Datasheet

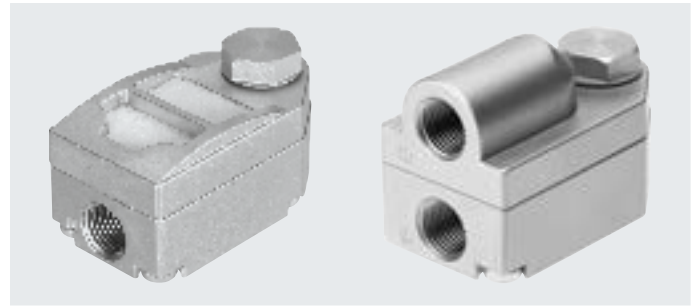
Unducted exhaust air VBQF-U



Ducted exhaust air VBQF-D



-  - Flow rate  
2500 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 2 (drive)	G1/8		G1/4		G1/8		G1/4
Pneumatic connection 1 (valve)	G1/8	QS-6	G1/4	QS-8	G1/8	QS-6	G1/4
Pneumatic connection 3 (exhaust air)	- (silencer)		- (silencer)		G1/8	QS-8	G1/4
Valve function	Quick exhaust						
Nominal width [mm]	5		7		5		7
Type of mounting	Screw-in						
Mounting position	Any						
Noise level [dB(A)]	75		75		-		-

### Operating and environmental conditions

Connection type	Threaded connection		Push-in connector QS	
Operating pressure [bar]	0.5 ... 10			
Operating medium	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 ... +80		-10 ... +60	
Temperature of medium [°C]	-20 ... +80		-10 ... +60	
Corrosion resistance class CRC <sup>1)</sup>	1 - Low corrosion stress			

1) More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

### Materials

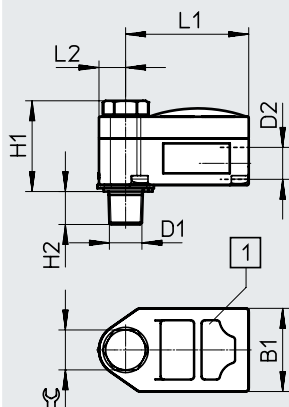
Housing	Die-cast zinc, die-cast aluminium
Seals	NBR
Note on materials	RoHS-compliant
LABS (PWIS) conformity	VDMA24364-B1/B2-L
Cleanroom class	Class 4 to ISO 14644-1

## Datasheet

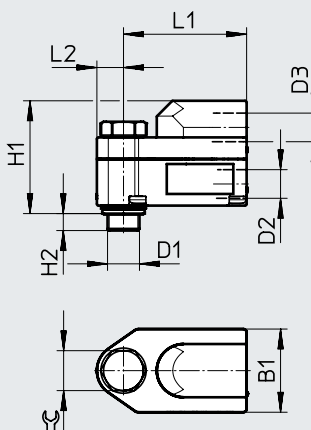
### Dimensions

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

Unducted exhaust air VBQF-U



Ducted exhaust air VBQF-D



[1] Silencer

Type	Connection D1	D2	D3	B1	H1	H2	L1	L2	⊕
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		
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

Version	Pneumatic connection			Standard nominal flow rate q <sub>nN</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				
				2	1	3	[l/min]	[l/min]	[l/min]

#### Unducted exhaust air

	G1/8	G1/8	–	350	–	1300	84.2	547531	VBQF-U-G18-E
		QS-6	–	350	–	1300	85.5	547532	VBQF-U-G18-Q6
	G1/4	G1/4	–	960	–	2500	226	548001	VBQF-U-G14-E
		QS-8	–	800	–	2500	232	548002	VBQF-U-G14-Q8

#### Ducted exhaust air

	G1/8	G1/8	G1/8	350	850	1300	102.5	547533	VBQF-D-G18-E
		QS-6	QS-8	350	850	1300	105	547534	VBQF-D-G18-Q6
	G1/4	G1/4	G1/4	960	1500	2500	253	548003	VBQF-D-G14-E