

Quick exhaust valves VBQF

FESTO



Quick exhaust valves VBQF

Product range overview and type codes

FESTO

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 valve via the VBQF to the drive. The

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

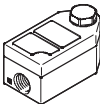
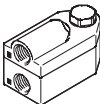
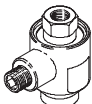
the supply port of the drive. The VBQF can be mounted in any position and can also be turned.

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	Flat design					
		VBQF-U	With silencer	G1/8, QS-6	G1/8	3
		VBQF-D	Without silencer	G1/8, QS-6	G1/8	3
	Compact design					
		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	G1/8, G1/4, G3/8, G1/2	se	

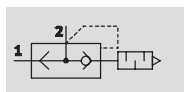
Type codes

		VBQF	-	U	-	G18	-	E
Type								
VBQF	Quick exhaust valve, flat design							
Exhaust air								
U	Unducted exhaust air							
D	Ducted exhaust air							
Pneumatic connection 2 (drive)								
G18	Thread G1/8							
Pneumatic connection 1 (valve)								
E	Threaded connection, like pneumatic connection 2 (drive)							
Q6	Push-in connector QS-6							

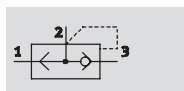
Quick exhaust valves VBQF

Technical data

Unducted exhaust air VBQF-U



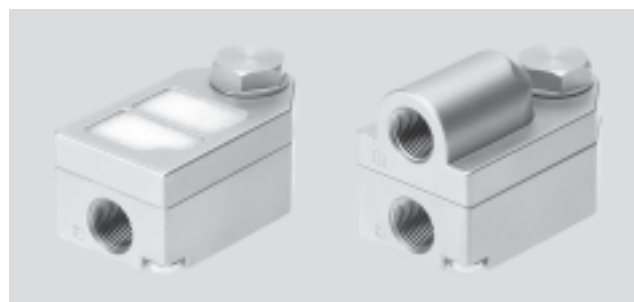
Ducted exhaust air VBQF-D



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)	G1/8	QS-6	G1/8	QS-6
Pneumatic connection 2 (drive)	G1/8	G1/8	G1/8	G1/8
Pneumatic connection 3 (exhaust air)	- (silencer)	- (silencer)	G1/8	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 _N [l/min] at 6 bar → 5 bar		
Pressurisation 1 → 2	350	350
Exhausting 2 → 3	-	850
Standard flow rate q _N [l/min] at 6 bar → 0 bar		
Exhausting 2 → 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 µm	
Ambient temperature [°C]	-20 ... +80	-10 ... +60
Temperature of medium [°C]	-20 ... +80	-10 ... +60
Corrosion resistance class CRC ¹⁾	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

Quick exhaust valves VBQF

Technical data

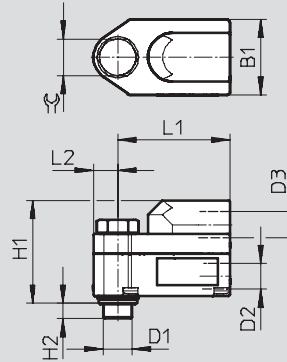
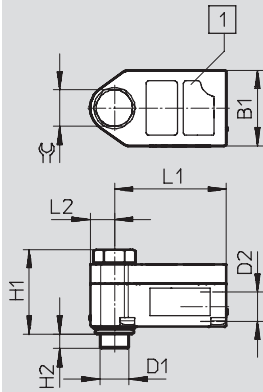
FESTO

Dimensions

Download CAD Data → www.festo.com/us/cad

Unducted exhaust air VBQF-U

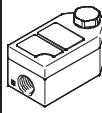
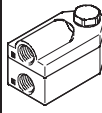
Ducted exhaust air VBQF-D



1 Silencer

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	547531	VBQF-U-G18-E
	QS-6	G1/8	–	85.5	547532	VBQF-U-G18-Q6
	G1/8	G1/8	G1/8	102.5	547533	VBQF-D-G18-E
	QS-6	G1/8	QS-8	105.0	547534	VBQF-D-G18-Q6

Product Range and Company Overview

A Complete Suite of Automation Services

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 & drives



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 12,000 employees in 56 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 2008, 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 environmentally friendly printing plant.

Festo North America

Festo Regional Contact Center

5300 Explorer Drive
Mississauga, Ontario L4W 5G4
Canada

USA Customers:

For ordering assistance,

Call: 1.800.99.FESTO (1.800.993.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: customer.service@us.festo.com

For technical support,

Call: 1.866.GO.FESTO (1.866.463.3786)

Fax: 1.800.96.FESTO (1.800.963.3786)

Email: product.support@us.festo.com

Canadian Customers:

Call: 1.877.GO.FESTO (1.877.463.3786)

Fax: 1.877.FX.FESTO (1.877.393.3786)

Email: festo.canada@ca.festo.com

USA Headquarters

Festo Corporation
395 Moreland Road
P.O. Box 18023
Hauppauge, NY 11788, USA
www.festo.com/us

USA Sales Offices

Appleton

North 922 Tower View Drive, Suite N
Greenville, WI 54942, USA

Boston

120 Presidential Way, Suite 330
Woburn, MA 01801, USA

Chicago

1441 East Business Center Drive
Mt. Prospect, IL 60056, USA

Dallas

1825 Lakeway Drive, Suite 600
Lewisville, TX 75057, USA

Detroit – Automotive Engineering Center

2601 Cambridge Court, Suite 320
Auburn Hills, MI 48326, USA

New York

395 Moreland Road
Hauppauge, NY 11788, USA

Silicon Valley

4935 Southfront Road, Suite F
Livermore, CA 94550, USA

United States



USA Headquarters, East: Festo Corp., 395 Moreland Road, Hauppauge, NY 11788

Phone: 1.631.435.0800; Fax: 1.631.435.8026;

Email: info@festo-usa.com

www.festo.com/us

Canada



Headquarters: Festo Inc., 5300 Explorer Drive, Mississauga, Ontario L4W 5G4

Phone: 1.905.624.9000; Fax: 1.905.624.9001;

Email: festo.canada@ca.festo.com

www.festo.ca

Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquahuac,
54020 Tlalneapantla, Edo. de México

Phone: 011 52 [55] 53 21 66 00; Fax: 011 52 [55] 53 21 66 65;

Email: festo.mexico@mx.festo.com

www.festo.com/mx

Central USA

Festo Corporation
1441 East Business
Center Drive
Mt. Prospect, IL 60056, USA
Phone: 1.847.759.2600
Fax: 1.847.768.9480



Western USA

Festo Corporation
4935 Southfront Road,
Suite F
Livermore, CA 94550, USA
Phone: 1.925.371.1099
Fax: 1.925.245.1286



Festo Worldwide

Argentina Australia Austria Belarus Belgium Brazil Bulgaria Canada Chile China Colombia Croatia Czech Republic Denmark
Estonia Finland France Germany Great Britain Greece Hong Kong Hungary India Indonesia Iran Ireland Israel Italy Japan Latvia
Lithuania Malaysia Mexico Netherlands New Zealand Norway Peru Philippines Poland Romania Russia Serbia Singapore
Slovakia Slovenia South Africa South Korea Spain Sweden Switzerland Taiwan Thailand Turkey Ukraine United States Venezuela

www.festo.com