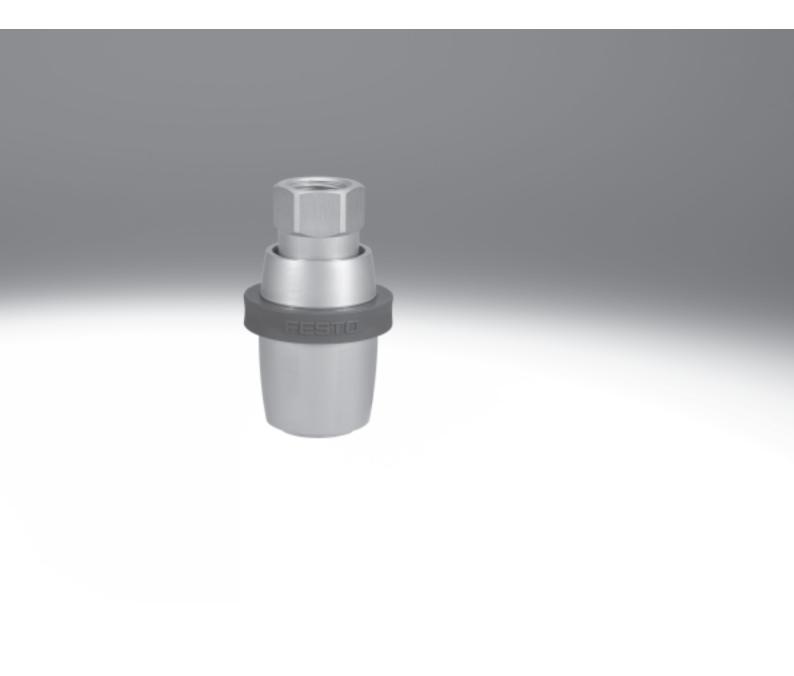
# Hand slide valves W/VBOH

# **FESTO**



# Hand slide valves W/VBOH Product range overview

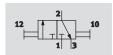


Version	Valve function	Version	Туре	Pneumatic connection 1	Pneumatic connection 2	qnN [l/min]	→ Page/ Internet
Hand slide valves	3/2-way, bi-stable		W	M5, G½, G¼, G¾, G¾, G½, G¾	M5, G½, G¾, G¾, G¾, G½, G¾	120 6,800	3
			VBOH	M5, G½, G¼, G¾, G¾, G½, G¾	M5, G½, G¾, G¾, G¾, G½, G¾	236 7,691	5

# Hand slide valves W

Technical data

# Function



-M- Standard nominal flow rate  $120 \dots 6,\!800 \text{ l/min}$  Temperature range

−10 ... +60 °C

Pressure

-0.95 ... +10 bar



General technical date								
Pneumatic connection 1		M5	G <sup>1</sup> / <sub>8</sub>	G1/4	G3/8	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	
Pneumatic connection 2		M5	G <sup>1</sup> /8	G1/4	G3/8	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	
Nominal size	[mm]	2.5	3	7	9	12	18	
Design		Sleeve valve						
Valve function		3/2-way, bi-stable						
Actuation type		Manual						
Actuating force	[N]	10	10	20	20	20	30	
Type of mounting		Screw-in						
		In-line installation						
Mounting position		Any						
Sealing principle		Soft						
Type of control		Direct						
Direction of flow Reversible								

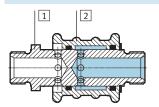
Flow rate characteristics							
Pneumatic connection 1	M5	G <sup>1</sup> /8	G <sup>1</sup> / <sub>4</sub>	G3⁄8	G <sup>1</sup> / <sub>2</sub>	G3/4	
Standard nominal flow [l/min] rate qnN <sup>1)</sup>	120	600	1,000	1,400	2,000	6,800	

1) Measured at p1 = 6 bar and p2 = 5 bar,  $\Delta$ p = 1 bar

Operating and environmental conditions								
Pneumatic connection 1		M5	G <sup>1</sup> /8	G1/4	G3/8	G <sup>1</sup> / <sub>2</sub>	G <sup>3</sup> / <sub>4</sub>	
Operating pressure	[bar]	-0.95 +8						
Operating medium		Compressed air in a	ccordance with ISO 8	573-1:2010 [7:4:4]				
Note on operating/pilot medi	um	Operation with lubri	cated medium possi	ble (in which case lu	bricated operation w	ill always be required	d)	
Ambient temperature [°C] -10 +60								
Temperature of medium	[°C]	-10 +60						

# Materials

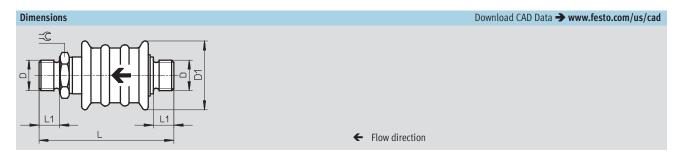
Sectional view



Hand slide valve	
1 Threaded plug	Anodised wrought aluminium alloy
2 Housing	Brass
- Seals	NBR
Note on materials	RoHS-compliant

Hand slide valves W

Technical data



Туре	Connection D	D1 ∅	L	L1	=©
W-3-M5	M5	20	46.4	5.0	9
W-3-1/8	G1/8	24	51.3	6.5	14
W-3-1/4	G1/4	35	70.4	8.0	17
W-3-3/8	G3/8	45	79.4	9.0	27
W-3-1/2	G <sup>1</sup> / <sub>2</sub>	45	82.4	10.5	27
W-3-3/4	G3/4	50	99.0	12.0	32

Ordering data						
	Pneumatic		Standard nominal flow rate qnN	Weight	Part No.	Туре
	connection	า				
	1	2	[l/min]	[g]		
	M5	M5	120	25	4451	W-3-M5
	G1/8	G1/8	600	40	2339	W-3-1/8
	G1/4	G1/4	1,000	110	2340	W-3-1/4
	G3/8	G3/8	1,400	280	2341	W-3-3/8
	G1/2	G <sup>1</sup> / <sub>2</sub>	2,000	300	2342	W-3-1/2
	G3/4	G3/4	6,800	400	4052	W-3- <sup>3</sup> / <sub>4</sub>



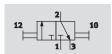
# Hand slide valves VBOH

**FESTO** 

5

Technical data

### Function



-M- Standard nominal flow rate 236 ... 7,691 l/min Temperature range  $$-10 \ ... + 80\ ^{\circ}\text{C}$$  Pressure

-0.95 ... +12 bar



Hand slide valves VBOH are used as a shut-off function for pressurising and exhausting compressed air systems,

for example upstream of service unit combinations, for air guns and also for exhausting pneumatic cylinders.

- Non-overlapping, so no pressure losses when switching
- Minimal installation
- High flow rate and operating pressure
- Exclusive design

General technical data									
Pneumatic connection 1		M5	G1/8	G1/4	G <sup>3</sup> /8	G½	G3/4		
Pneumatic connection 2		M5	G1/8	G1/4	G3/8	G½	G3/4		
Grid dimension [mm]		17	24	31	39.5	45	57.5		
Nominal size	[mm]	3.6	5.7	8.4	9.9	12.1	19.3		
Design		Sleeve valve		•		•	•		
Valve function		3/2-way, dou	3/2-way, double solenoid						
Actuation type		Manual	Manual						
Actuating force	[N]	14	17	45	41	37	70		
Type of mounting		Screw-in	Screw-in						
		In-line instal	In-line installation						
Mounting position		Any	Any						
Sealing principle		Soft	Soft						
Type of control Direct									

Flow rate characteristics							
Pneumatic connection 1	M5	G <sup>1</sup> /8	G <sup>1</sup> / <sub>4</sub>	G3/8	G½	G <sup>3</sup> / <sub>4</sub>	
Standard nominal flow [l/min] rate qnN <sup>1)</sup>	236	777	1,675	2,201	3,420	7,691	

<sup>1)</sup> Measured at p1 = 6 bar and p2 = 5 bar,  $\Delta p$  = 1 bar

Operating and environmental conditions					
Operating pressure [bar]	-0.95 +12				
Operating medium	Compressed air according to ISO 8573-1:2010 [7:4:4]				
Note on operating/pilot medium	Lubricated operation possible (in which case lubricated operation will always be required)				
Ambient temperature [°C]	-10 +80				
Temperature of medium [°C]	-10 +80				
Corrosion resistance class CRC <sup>1)</sup>	2				

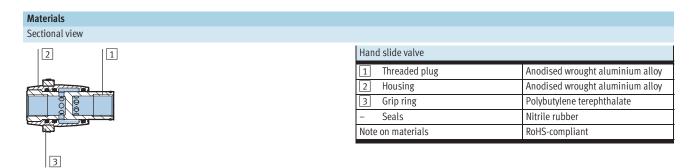
<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.



# Hand slide valves VBOH

**FESTO** 

Technical data





Туре	Connection D	D1 ∅	L	L1	L2	=©
VBOH-32-M5	M5	17	35.6	24.5	5	8
VBOH-32-G18	G½8	24	38.5	27	9	13
VBOH-32-G14	G1/4	31	52.5	37	13	17
VBOH-32-G38	G3/8	39.5	60.5	42	13.5	22
VBOH-32-G12	G <sup>1</sup> / <sub>2</sub>	45	60.5	42	15	27
VBOH-32-G34	G3/4	57.5	82	56.5	17	32

Ordering data						
	Pneumati	С	Standard nominal flow rate qnN	Weight	Part No.	Туре
	connectio	n				
	1	2	[l/min]	[g]		
	M5	M5	236	8	1609969	VBOH-32-M5
	G1/8	G1/8	777	17	1558073	VBOH-32-G18
	G1/4	G1/4	1,675	35	1302994	VBOH-32-G14
	G3/8	G3/8	2,201	70	1482679	VBOH-32-G38
	G1/2	G1/2	3,420	90	1587988	VBOH-32-G12
	G3/4	G3/4	7,691	183	1629664	VBOH-32-G34

# **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.



# **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) 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

### Mexico



Headquarters: Festo Pneumatic, S.A., Av. Ceylán 3, Col. Tequesquinahuac, 54020 Tlalnepantla, 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, 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