

Front panel valves SV



Front panel valves and actuator attachments

Key features




Actuator attachments			
<p>Pushbutton T</p> <p>Pushbuttons return to their initial switching position after they are actuated.</p>	<p>Switch N, H, Q</p> <p>Switches have several switching positions that can be alternated between as desired. Key actuators can only be activated using the key. The key can be removed in any switching position.</p>	<p>Mushroom pushbutton/mushroom pushbutton with detent P</p> <p>Mushroom pushbuttons return to their initial switching position after they are actuated. Mushroom pushbuttons with detent are actuated by pressing them and return to their initial switching position after they are unlocked:</p>	<ul style="list-style-type: none"> • Type PR: the actuator is unlocked by turning the detent ring on the mushroom head. • Type PRS: the actuator can only be unlocked using the key. The key can be removed in either switching position.

Basic valves			
<p>3/2-way valve SV-3-M5</p>	<p>5/2-way valve SV-5-M5-B</p>	<p>2x 3/2-way valve SV/O-3-PK-3X2</p>	<p>Key features</p> <p>The two basic valves are poppet valves that work without any overlap:</p> <ul style="list-style-type: none"> • No overflow between the channels during switching • Limited self-cleaning by air flow during operation

Front panel valves and actuator attachments

Technical data

-  - Temperature range
-10 ... +60 °C



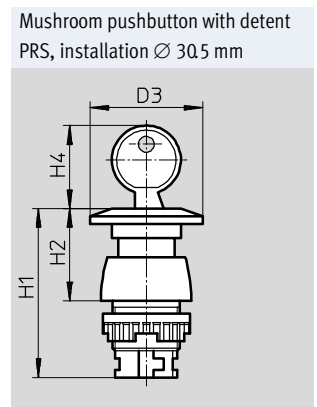
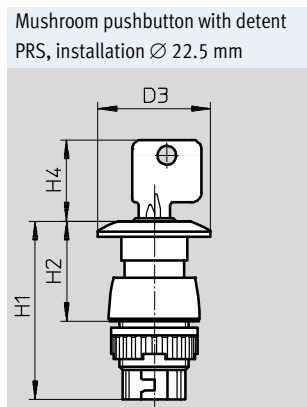
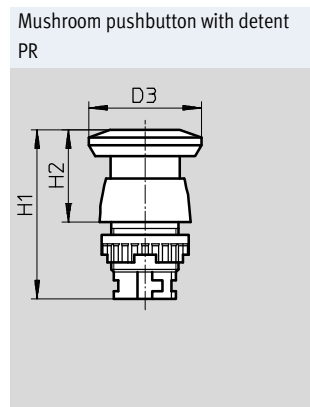
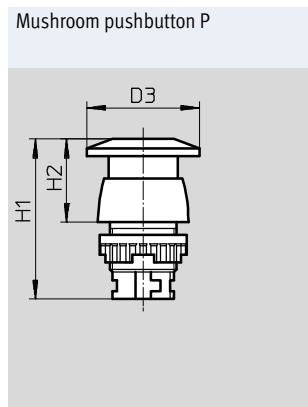
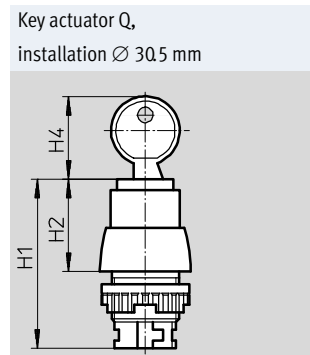
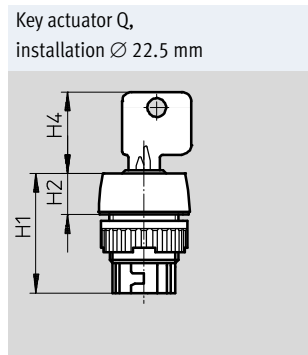
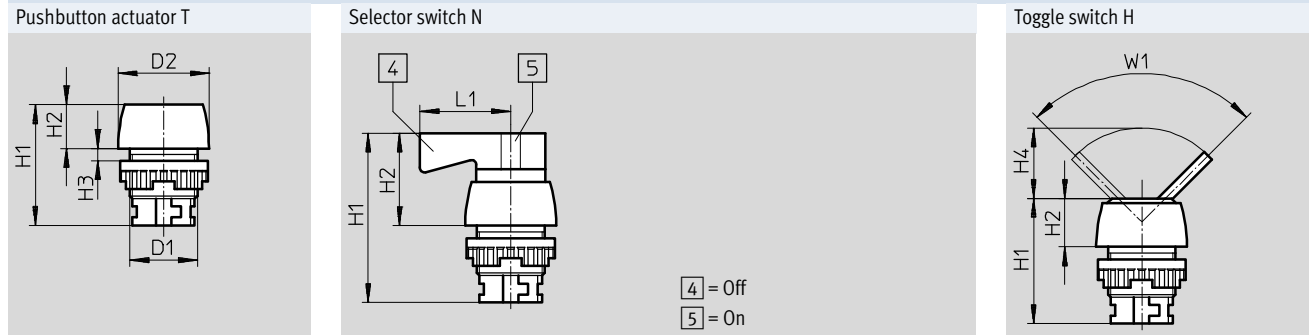
General technical data – Actuator attachments with 22.5 mm installation diameter										
	T-22-SW	T-22-GE	T-22-RT	N-22-SW	H-22-SW	Q-22-B	P-22-SW	PR-22-RT	PRS-22-RT-B	
Actuating force [N]	14	14	14	–	–	–	14	25	–	
Actuating torque [Nm]	–	–	–	0.4	0.14	–	–	–	–	
Product weight [g]	14	14	14	21	19	37	20	26	45	
Colour	Black	Yellow	Red	Black	Black	Black	Black	Red	Red	
Note on materials	–	–	–	–	–	RoHS-compliant	–	–	–	RoHS-compliant

General technical data – Actuator attachments with 30.5 mm installation diameter										
	T-30-SW	T-30-GE	T-30-RT	N-30-SW	H-30-SW	Q-30	P-30-SW	PR-30-RT	PRS-30-RT	
Actuating force [N]	14	14	14	–	–	23	14	25	23	
Actuating torque [Nm]	–	–	–	0.4	0.14	–	–	–	–	
Product weight [g]	22	22	22	30	27	88	28	37	91	
Colour	Black	Yellow	Red	Black	Black	–	Black	Red	Red	
Note on materials	–	–	–	–	–	–	–	–	–	

Front panel valves and actuator attachments

Technical data


Dimensions – Actuator attachments Download CAD data → www.festo.com





	Installation ∅	∅ D1	∅ D2	∅ D3	H1	H2	H3	H4	L1	W1
Pushbutton actuator T	22.5	M22x1.5	29	–	38.5	14	1 ... 6	–	–	–
	30.5	M30x1.5	36	–	39	8.5	1 ... 12	–	–	–
Selector switch N	22.5	M22x1.5	29	–	54	29.5	1 ... 6	–	29	–
	30.5	M30x1.5	36	–	54.5	24	1 ... 12	–	29	–
Toggle switch H	22.5	M22x1.5	29	–	40	15.5	1 ... 6	22.5	–	90°
	30.5	M30x1.5	36	–	40	9.5	1 ... 12	22.5	–	90°
Key actuator Q	22.5	M22x1.5	29	–	38.2	13.2	1 ... 6	26	–	–
	30.5	M30x1.5	36	–	54.5	24	1 ... 12	26.5	–	–
Mushroom pushbutton P	22.5	M22x1.5	29	36	51	26.5	1 ... 6	–	–	–
	30.5	M30x1.5	36	36	51.5	21	1 ... 12	–	–	–
Mushroom pushbutton with detent PR	22.5	M22x1.5	29	36	54	29.5	1 ... 6	–	–	–
	30.5	M30x1.5	36	36	54.5	24	1 ... 12	–	–	–
Mushroom pushbutton with detent, lockable PRS	22.5	M22x1.5	29	36	57	32	1 ... 6	26	–	–
	30.5	M30x1.5	36	36	56	25.5	1 ... 12	26.5	–	–

Front panel valves and actuator attachments

Technical data

-  - Flow rate
65 ... 95 l/min

-  - Pressure
-0.9 ... +8 bar
0 ... 8 bar

-  - Temperature range
-10 ... +60 °C



General technical data – Basic valves			
	3/2-way valve	5/2-way valve	2x 3/2-way valve
Valve function	3/2-way single solenoid valve, closed	5/2-way single solenoid valve	2x 3/2-way single solenoid valve, closed
Actuation type	Manual		
Operating medium	Compressed air in accordance with ISO 8573-1:2010 [7:--:-]		
Design	Poppet valve with spring return		
Reset method	Mechanical spring		
Sealing principle	Soft		
Mounting position	Any		
Type of control	Direct		
Type of mounting	Front panel mounting, with through-hole		
Pneumatic connection	M5		PK-3
Nominal size [mm]	2	2.3	2.5
Standard nominal flow rate [l/min]	65	95	70
Actuating force at 6 bar [N]	12	17	22
Weight [g]	40	53	34

Materials	
Housing	Plastic
Valve stem	Brass
Seals	Nitrile rubber

Operating and environmental conditions			
	3/2-way valve	5/2-way valve	2x 3/2-way valve
Operating pressure [bar]	-0.95 ... +8	0 ... +8	0 ... +8
Ambient temperature [°C]	-10 ... +60		

Front panel valves and actuator attachments

Technical data – Basic valves

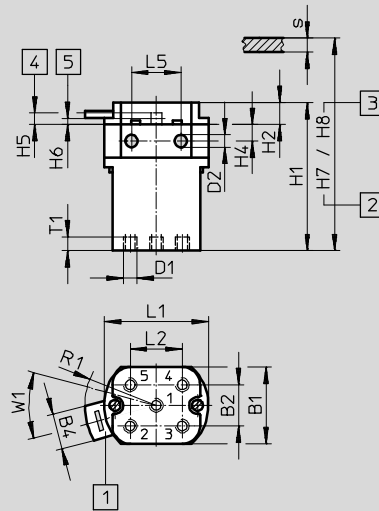
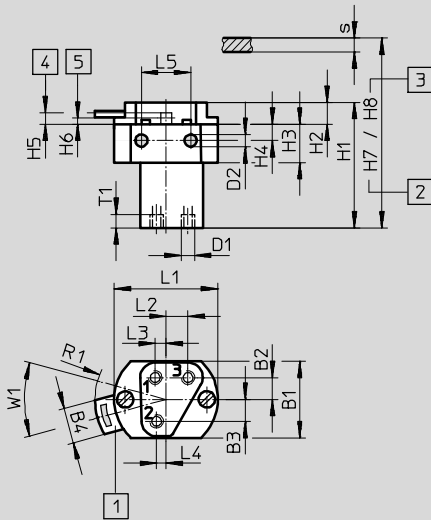


Dimensions – Basic valves

Download CAD data → www.festo.com

SV-3-M5

SV-5-M5-B



- 1 Quick latching coupler for actuator attachments
- 2 Install. dimensions for $\varnothing 22.5$

- 3 Installation dimensions for $\varnothing 30.5$

- 4 Max. stroke
- 5 Start of opening

- 6 Max. opening
- s Front panel thickness

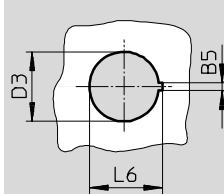
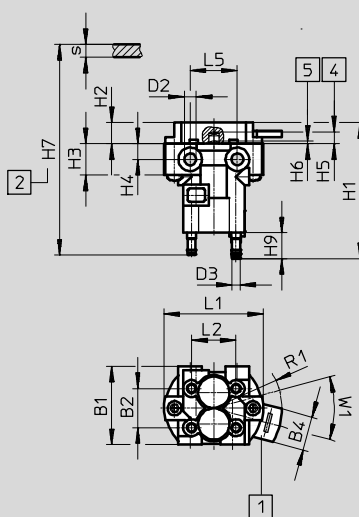
	B1	B2	B3	B4	D1	D2	H1	H2	H3	H4	H5	H6	H7	H8	L1	L2	L3	L4	L5	R1	T1	W1
SV-3-M5	28	8	8.2	13	M5	4.5	46	8	14	6	4.2	2	63.5	69.5	38	8	4	3.5	18	26	5	30°
SV-5-M5-B		15	-				54		-				71.5	77.5		19	-	-				

Dimensions

Download CAD data → www.festo.com

SV/O-3-PK-3X2

Mounting aperture (control panel cutout)



- 1 Quick latching coupler for actuator attachments
- 2 Installation dimensions for $\varnothing 22.5$

- 4 Max. stroke
- 5 Max. opening
- s Front panel thickness

	B1	B2	B4	B5	D2	D3	H1	H2	H3	H4	H5	H6	H7	H9	L1	L2	L5	L6	R1	W1
SV/O-3-PK-3X2	30	15	13	-	4.5	3	52	8	12	6	4.5	1	68.5	9.9	38	17	18	-	26	30°
Mounting aperture, $\varnothing 22.5$	-	-	-	2.6	-	22.3	-	-	-	-	-	-	-	-	-	-	-	23.5	-	-
Mounting aperture, $\varnothing 30.5$	-	-	-	3.1	-	30.3	-	-	-	-	-	-	-	-	-	-	-	31.5	-	-

Front panel valves and actuator attachments

Accessories

Ordering data				
Circuit symbol	Description		Part No.	Type
Actuator attachments, installation \varnothing 22.5 mm, protection class IP40				
	Pushbutton actuator	Black	9289	T-22-SW
		Yellow	9290	T-22-GE
		Red	9997	T-22-RT
	Selector switch	Black	9301	N-22-SW
			25261	NR-22-SWX2
	Toggle switch, detenting	Black	9305	H-22-SW
	Toggle switch	Black	25749	H-22-SWX2
	Key actuator with key	Black	573107	Q-22-B
	Mushroom pushbutton	Black	9293	P-22-SW
	Mushroom pushbutton with detent	Red, not lockable	9297	PR-22-RT
		Red, lockable	573108	PRS-22-RT-B
Actuator attachments, installation \varnothing 30.5 mm, protection class IP40				
	Pushbutton actuator	Black	9291	T-30-SW
		Yellow	9292	T-30-GE
		Red	10014	T-30-RT
	Selector switch	Black	9302	N-30-SW
	Toggle switch	Black	9306	H-30-SW
	Key actuator with key	–	9304	Q-30
	Mushroom pushbutton	Black	9295	P-30-SW
	Mushroom pushbutton with detent	Red, not lockable	9298	PR-30-RT
		Red, lockable	9300	PRS-30-RT
Basic valves				
	3/2-way valve		6817	SV-3-M5
	5/2-way valve		11914	SV-5-M5-B
	2x 3/2-way valve		184135	SV/O-3-PK-3X2

Product Range and Company Overview

A Complete Suite and Company Overview

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 & drivers



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 16,000 employees in 60 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.

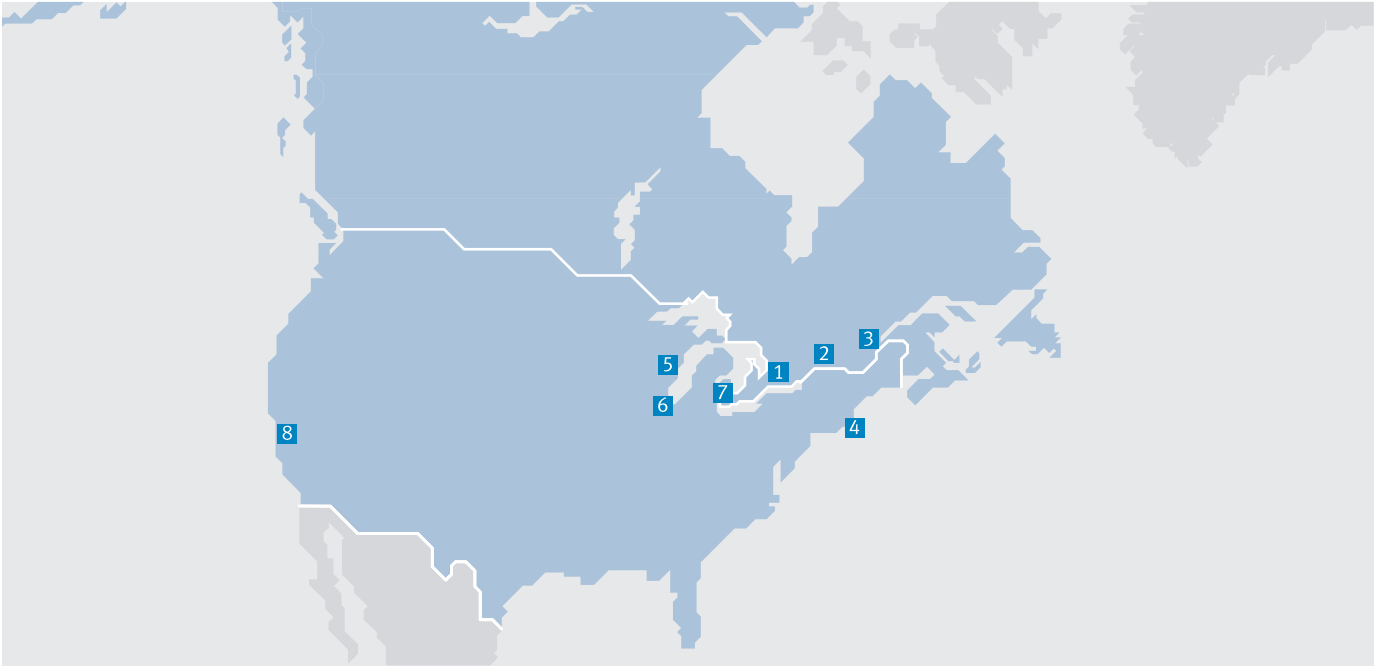


© Copyright 2013, Festo Corporation. While every effort is made to ensure that all dimensions and specifications are correct, Festo cannot guarantee that publications are completely free of any error, in particular typing or printing errors. Accordingly, Festo cannot be held responsible for the same. 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 environmental friendly printing plant.

Festo North America



**1 Festo Canada
Headquarters
Festo Inc.**
5300 Explorer Drive
Mississauga, ON
L4W 5G4

2 Montréal
5600, Trans-Canada
Pointe-Claire, QC
H9R 1B6

3 Québec City
2930, rue Watt#117
Québec, QC
G1X 4G3



**4 Festo United States
Headquarters
Festo Corporation**
395 Moreland Road
Hauppauge, NY
11788

5 Appleton
North 922 Tower View Drive, Suite N
Greenville, WI
54942

7 Detroit
1441 West Long Lake Road
Troy, MI
48098

6 Chicago
85 W Algonquin - Suite 340
Arlington Heights, IL
60005

8 Silicon Valley
4935 Southfront Road, Suite F
Livermore, CA
94550

Festo Regional Contact Center

Canadian Customers

Commercial Support:
Tel: 1 877 GO FESTO (1 877 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: festo.canada@ca.festo.com

Technical Support:

Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 877 FX FESTO (1 877 393 3786)
Email: technical.support@ca.festo.com

USA Customers

Commercial Support:
Tel: 1 800 99 FESTO (1 800 993 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: customer.service@us.festo.com

Technical Support:

Tel: 1 866 GO FESTO (1 866 463 3786)
Fax: 1 800 96 FESTO (1 800 963 3786)
Email: product.support@us.festo.com