



## **Panel-mounting Valves and Actuating Attachments**



# Panel-mounting valves and actuating attachments

Key features



**Mushroom pushbutton with detent PR**

The actuator is unlocked by turning the detent ring at the mushroom button.

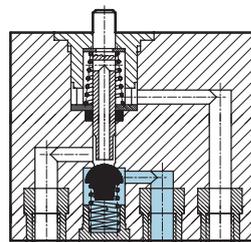
**Mushroom pushbutton with detent PRS Lockable**

After pressing, the button remains locked and can only be unlatched with the key. The key can be removed in either switch position.

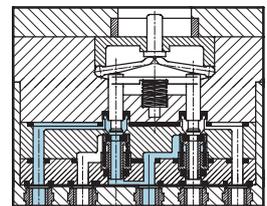
**Key actuator Q With key**

The key actuator can only be activated with the key. The key can be removed in either switch position.

**Basic valve SV-3-M5**



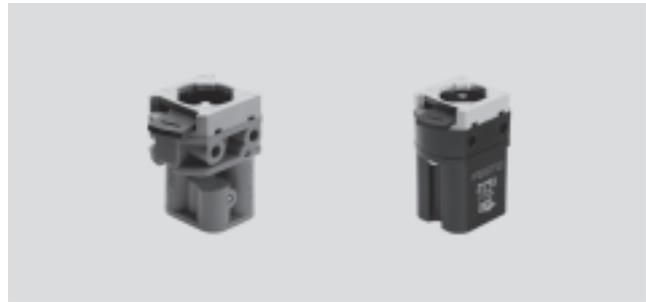
**Basic valve SV-5-M5-B**



# Panel-mounting valves and actuating 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		
Function	3/2-way valve	5/2-way valve
Operating medium	Filtered compressed air, lubricated or unlubricated Vacuum <sup>1)</sup>	
Constructional design	Poppet valve, directly actuated in one direction, with spring return	
Type of mounting	Front panel mounting, mounting diameters 22.5 and 30.5 mm, also 2 through-holes	
Pneumatic connection	M5	
Nominal size [mm]	2	2.3
Standard nominal flow rate 1 > 2 [l/min]	65	95
Operating pressure range [bar]	-0.95 ... +8	0 ... +8
Actuating force at 6 bar [N]	12	17
Temperature range [°C]	-10 ... +60	
Materials	Housing	Plastic
	Valve stem	Brass
	Seals	Nitrile rubber
Weight [g]	40	53

1) SV-3-M5: Vacuum connection at port 1

General technical data – Actuator attachments									
		Pushbutton actuator	Mushroom pushbutton	Mushroom pushbutton with detent		Selector switch	Toggle switch	Key actuator with key	
				Red	Red Lockable				
Actuating force / actuating torque at 6 bar	[Nm]	14	14	25	23	0.4	0.14	23	
Weights	Installation diameter 22.5	[g]	14	20	26	82	21	19	80
	Installation diameter 30.5	[g]	22	28	37	91	30	27	88

# Panel-mounting valves and actuating attachments

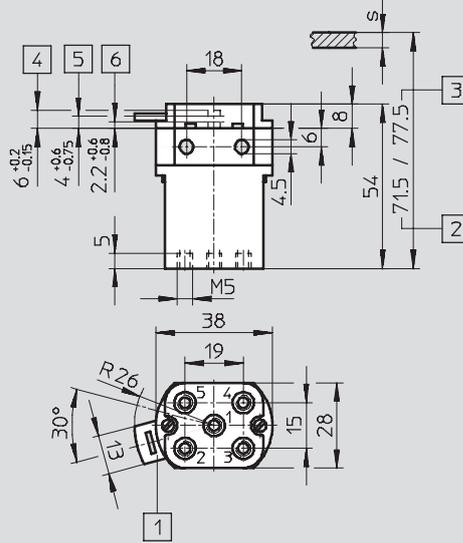
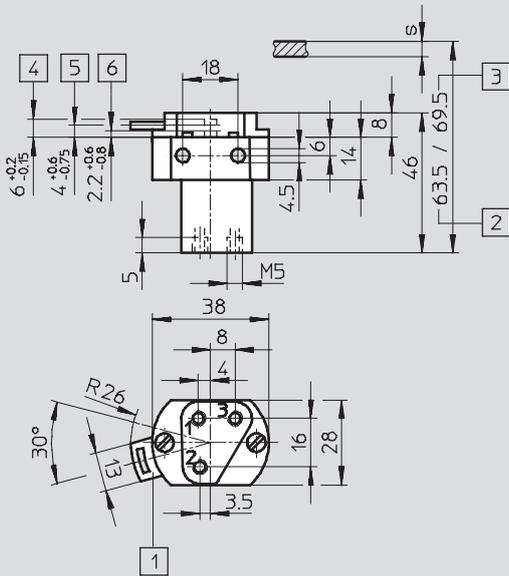
Technical data

## Dimensions – Basic valves

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

SV-3-M5

SV-5-M5-B

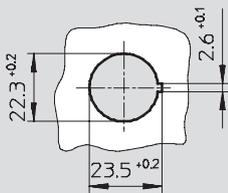


- 1 Quick latching coupler for actuator attachments
- 2 Installation dimensions for  $\varnothing 22.5$
- 3 Installation dimensions for  $\varnothing 30.5$
- 4 Max. stroke
- 5 Start of opening
- 6 Max. opening
- s Front panel thickness

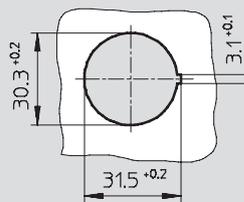
- 1 Supply port
- 2, 4 Working line
- 3, 5 Exhaust

## Mounting aperture

Installation diameter 22.5



Installation diameter 30.5



## Dimensions – Actuator attachments

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

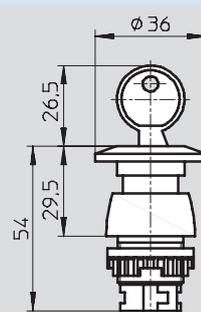
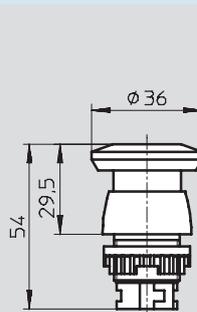
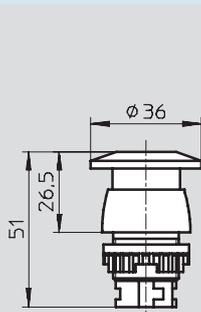
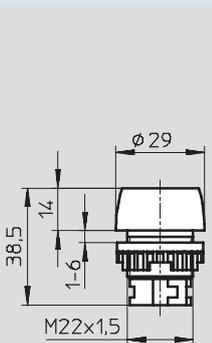
Installation diameter 22.5

Pushbutton actuator T-22

Mushroom pushbutton P-22

Mushroom pushbutton with detent, lockable PR-22

Mushroom pushbutton with detent, lockable PRS-22



# Panel-mounting valves and actuating attachments

Technical data

FESTO

## Dimensions – Actuator attachments for front panel mounting

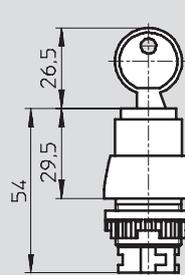
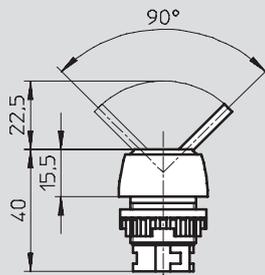
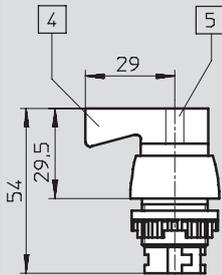
Download CAD data → [www.festo.com](http://www.festo.com)

Installation diameter 22.5

Selector switch N-22

Toggle switch H-22

Key actuator Q-22



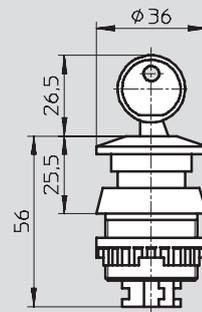
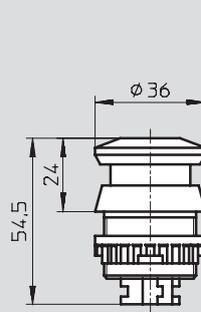
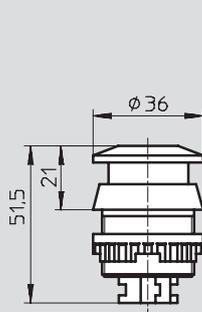
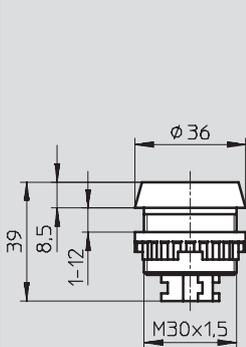
Installation diameter 30.5

Pushbutton actuator T-30

Mushroom pushbutton P-30

Mushroom pushbutton with detent,  
lockable PR-30

Mushroom pushbutton with detent,  
lockable PRS-30

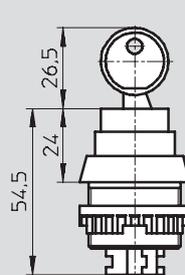
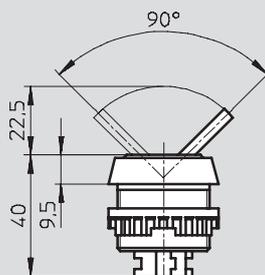
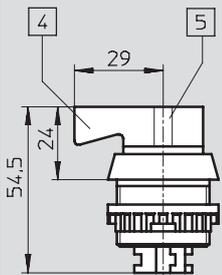


Installation diameter 30.5

Selector switch N-30

Toggle switch H-30

Key actuator Q-30



Type N

4 = Off

5 = On

Type PR

The actuator is unlocked by turning the detent ring at the mushroom button.

Type PRS

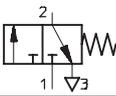
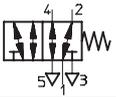
After pressing, the button remains locked and can only be unlatched with the key. The key can be removed in either switch position.

Type Q

The key actuator can only be activated with the key. The key can be removed in either switch position.

# Panel-mounting valves and actuating attachments

Technical data

Ordering data – Basic valves			
Circuit symbol	Description	Part No.	Type
	3/2-way valve	6817	SV-3-M5
	5/2-way valve	11 914	SV-5-M5-B

Ordering data – Actuator attachments					
Circuit symbol	Description	Installation diameter 22.5		Installation diameter 30.5	
		Part No.	Type	Part No.	Type
<b>Pushbutton actuator</b>					
	Black	9 289	T-22-SW	9 291	T-30-SW
	Yellow	9 290	T-22-GE	9 292	T-30-GE
	Red	9 997	T-22-RT	10 014	T-30-RT
<b>Mushroom pushbutton</b>					
	Black	9 293	P-22-SW	9 295	P-30-SW
<b>Mushroom pushbutton with detent</b>					
	Red	9 297	PR-22-RT	9 298	PR-30-RT
	Red, lockable	9 299	PRS-22-RT	9 300	PRS-30-RT
<b>Selector switch</b>					
	Black	9 301	N-22-SW	9 302	N-30-SW
<b>Toggle switch</b>					
	Black	9 305	H-22-SW	9 306	H-30-SW
<b>Key actuator with key</b>					
	-	9 303	Q-22	9 304	Q-30



# 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

## United States

**Customer Resource Center**  
502 Earth City Expy., Suite 125  
Earth City, MO 63045

For ordering assistance, or to find  
your nearest Festo Distributor,

**Call:** 1.800.99.FESTO

**Fax:** 1.800.96.FESTO

**Email:** customer.service@us.festo.com

For technical support,

**Call:** 1.866.GO.FESTO

**Fax:** 1.800.96.FESTO

**Email:** product.support@us.festo.com

### Headquarters

Festo Corporation  
395 Moreland Road  
P.O. Box 18023  
Hauppauge, NY 11788  
[www.festo.com/us](http://www.festo.com/us)

---

### Sales Offices

#### Appleton

N. 922 Tower View Drive, Suite N  
Greenville, WI 54942

#### Boston

120 Presidential Way, Suite 330  
Woburn, MA 01801

#### Chicago

1441 East Business Center Drive  
Mt. Prospect, IL 60056

#### Dallas

1825 Lakeway Drive, Suite 600  
Lewisville, TX 75057

#### Detroit - Automotive Engineering Center

2601 Cambridge Court, Suite 320  
Auburn Hills, MI 48326

#### New York

395 Moreland Road  
Hauppauge, NY 11788

#### Silicon Valley

4935 Southfront Road, Suite F  
Livermore, CA 94550

## Design and Manufacturing Operations



**East:** 395 Moreland Road, Hauppauge, NY 11788



**Central:** 1441 East Business Center Drive, Mt. Prospect, IL 60056



**West:** 4935 Southfront Road, Suite F, Livermore, CA 94550

---

## Mexico

### Headquarters

Festo Pneumatic, S.A.  
Av. Ceylán 3, Col. Tequesquahuac  
54020 Tlalnepantla, Edo. de México  
**Call:** 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](http://www.festo.com/mx)



---

## Canada

### Headquarters

Festo Inc.  
5300 Explorer Drive  
Mississauga, Ontario L4W 5G4  
**Call:** 1.905.624.9000  
**Fax:** 1.905.624.9001  
**Email:** info.ca@ca.festo.com  
[www.festo.com/ca](http://www.festo.com/ca)



---

## 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](http://www.festo.com)