



5/2 way solenoid valve for pneumatic applications

- Compact design
- Fast switching times
- Low power consumption



Product variants described in the data sheet may differ from the product presentation and description.

Can be combined with



Type 2031 ▶
2/2 way diaphragm valve with pneumatic plastic actuator (Type CLASSIC)



Type 8640 ▶
Modular valve island for pneumatics

Type description

Type 6511 consists of a pilot flipper solenoid valve Type 6144 and a pneumatic seat valve. The flipper action system allows the switching of high pressures combined with low power consumption and short switching times. All the valves are equipped with manual override as standard. Type 6511 is extendable and, with plug connection to the rear, can be preferably used on valve island Type 8640 or, with plug connection to the front, on valve blocks for activating pneumatic actuators.

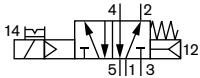
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1. General technical data

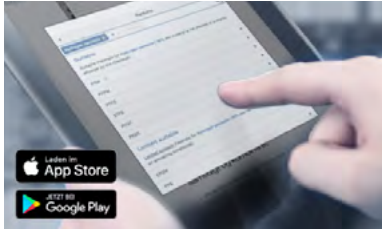
Product properties	
Dimensions	Detailed information can be found in chapter "4. Dimensions" on page 4.
Material	
Body	PPS, PA
Seal	FKM, NBR
Nominal diameter	DN 2.5 mm
Manual override	Standard
Performance data	
Duty cycle	Continuous operation (100 % ED)
Response times (Measurement acc. to ISO 12238)	Opening: < 15 ms Closing: < 10 ms
Electrical data	
Operating voltages	24 V DC
Voltage tolerance	± 10 %
Protection class	3 acc. to VDE 0580
Nominal power	0.8 W
Medium data	
Medium	Lubricated, oilfree, dry compressed air; neutral gases (5µm filter recommended)
Medium temperature	0 °C...50 °C
Process/Port connection & communication	
Port connection	Flange for MP02
Electric connection on valve	Rectangular plug, 2 pin, with raster 5.08 mm
Environment and installation	
Installation position	As required, preferably with actuator upright
Ambient temperature	0 °C...55 °C
Degree of protection	IP40

2. Circuit functions

Circuit functions	Description
	Type: H, solenoid valve 5/2 way Servo-controlled, pilot air and manual mode Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure.

3. Materials

3.1. Chemical Resistance Chart – Bürkert resistApp



Bürkert resistApp – Chemical Resistance Chart

You want to ensure the reliability and durability of the materials in your individual application case? Verify your combination of media and materials on our website or in our resistApp.

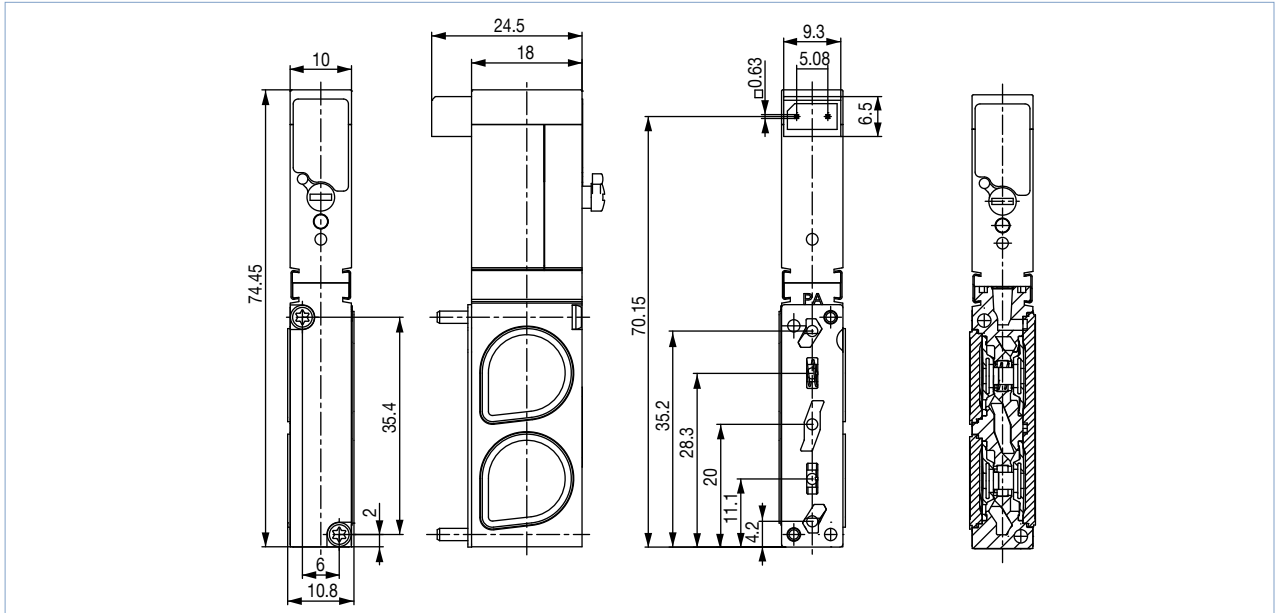
[Start Chemical Resistance Check](#)

4. Dimensions

4.1. 5/2 way solenoid valve

Note:

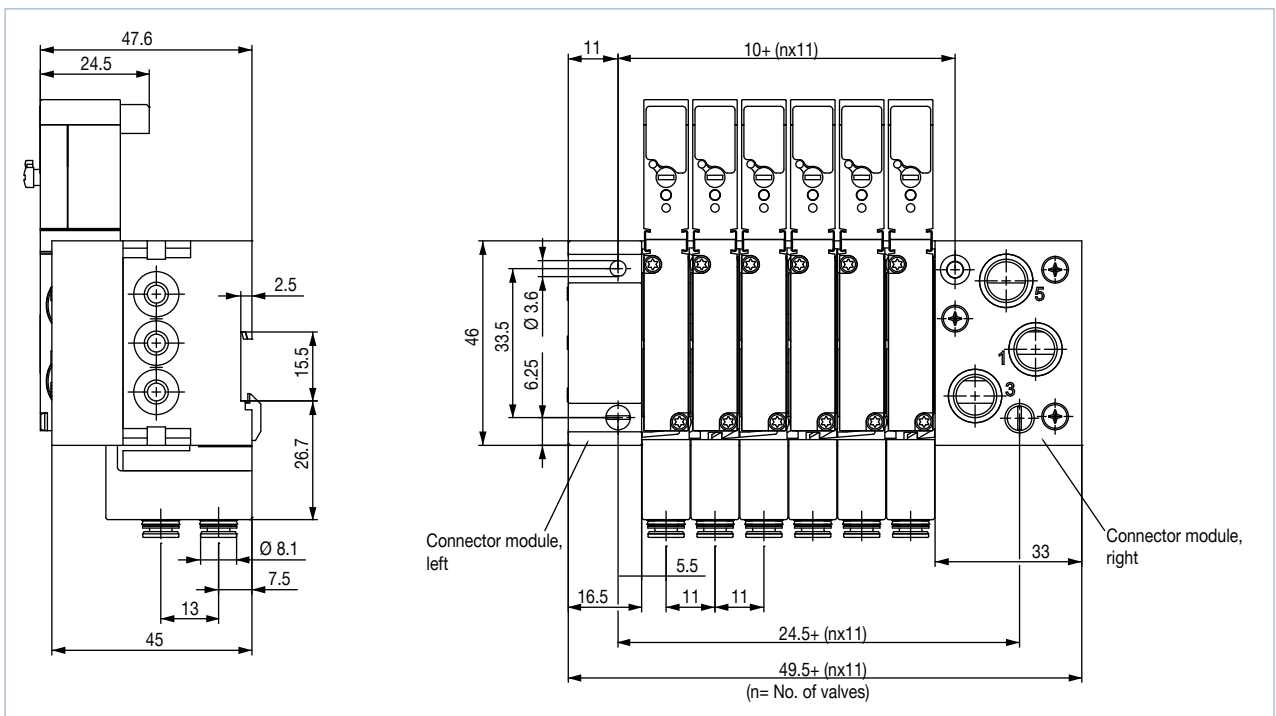
Dimensions in mm



4.2. Manifold mounting on wall or with DIN EN 50045 rail

Note:

Dimensions in mm



5. Ordering information

5.1. Bürkert eShop – Easy ordering and quick delivery



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5.2. Bürkert product filter

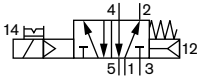


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5.3. Ordering chart valves (5/2 way valve)

Circuit function	Orifice	Q _{Nn} value air ^{1.)}	Pressure range ^{2.)}	Voltage/ Frequency	Manual over- ride	Article no. plug contact at rear ^{3.)} for Valve island Type 8640	Article no. plug contact in front ^{4.)} for valve block
	[mm]	[l/min]	[bar]	[V/Hz]			
Type: H, solenoid valve 5/2 way Servo-controlled, pilot air and manual mode Pressure applied via port (1), therefore one of the two ports (2) or (4) is under pressure. 	2.5	130	2.5...10	24 V DC	with	187604 ☒	184315 ☒
					none	184310 ☒	187603 ☒

1.) Measured at +20 °C, 6 bar pressure at valve inlet and 1 bar pressure difference

2.) Overpressure to the atmospheric pressure

3.) At rear: Plug connection on flange side

4.) In front: Plug connection offset at 180° to flange






5.4. Ordering chart pneumatic module Type MP02 (for 5/2 way valve)

Modules Type MP02	Article no.
Connector module right, G 1/8	135008 ☒
Connector module without supply, left	135007 ☒
Basic module 2 valves, push-in connection Ø 4 mm	135011 ☒
Basic module 3 valves, push-in connection Ø 4 mm	134744 ☒






5.5. Ordering example complete valve blocks (Type 6511 with Type MP02)

Note:

Please order the modules for block assembly from right to left (according to the example).

No.	Unit	Article no.
1	Connector module, right, G 1/8	135008 
1	Basic module, 2 valves, push-in connection Ø 4 mm	135011 
1	Basic module, 3 valves, push-in connection Ø 4 mm	135744 
1	Connector module without supply, left	135007 
5	Valves	134283 

5.6. Ordering chart accessories

Version	Feature	Article no.
Closing plug	for plug-in coupling Ø 4 mm	781664 
Blanking plug	G 1/8	631019 
Rectangular cable plug	with 3 m cable	133486 
Rectangular cable plug	with 300 mm flying leads	644068 
Rectangular cable plug	with 2 single contacts	644067 

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