bürkert
FLUID CONTROL SYSTEMS

5/2-way solenoid valve for pneumatic applications

- Compact design
- Second connection for shut-off function
- Low power consumption
- Fast switching times

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

Can be combined with

Type 8640 ▸
Modular valve island for pneumatics

Type 8644 ▸
Remote Process Actuation Control System AirLINE

Type MKRS ▸
Redundancy valve block for safety related shut-off function

Type 8647 ▸
AirLINE SP – electro-pneumatic automation system

Type 2505 ▸
10 mm socket for Bürkert small solenoid valves

Type description

Type 6525 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.

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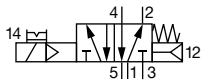
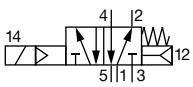
1. General technical data

Product properties	
Dimensions	Detailed information can be found in chapter "3. Dimensions" on page 4.
Material	
Seal	FKM, NBR and PUR
Body	PPS, PA
Weight	21 g
Manual override	Standard
Orifice	DN 4.0
Pneumatic module	With plug-in coupling, Ø 6 mm, Ø ¼"
Circuit function	H Detailed information can be found in chapter "2. Circuit functions" on page 3.
Performance data	
Nominal operating mode	Continuous operation (100 % ED)
Switching frequency	Approx. 1000 c.p.m.
Switching time[1.)]	Opening: <10 ms Closing: <10 ms
Electrical data	
Operating voltage	24 V DC[2.)]
Nominal power	0.8 W
Voltage tolerance	±10 %
Medium data	
Operating medium	Lubricated, oil-free, dry compressed air, neutral gases (5 µm filter recommended)
Medium temperature	-10 °C…+50 °C
Process/Port connection & communication	
Electrical connection	Rectangular plug with raster 5.08 mm
Approvals and certificates	
Degree of protection	IP40 with rectangular cable plug
Protection class	3 acc. to VDE 0580
Environment and installation	
Installation position	As required, preferably with actuator upright
Mounting	With 2 screws M2 x 20
Ambient temperature	-10 °C…+55 °C

1.) Measurement acc. to ISO 12238

2.) 10 % residual ripple allowed

2. Circuit functions

Circuit function	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.
	**Type: H, solenoid valve** 5/2 way Servo-controlled There is always one of the two outlet ports (2) or (4) pressurized when coil is activated.

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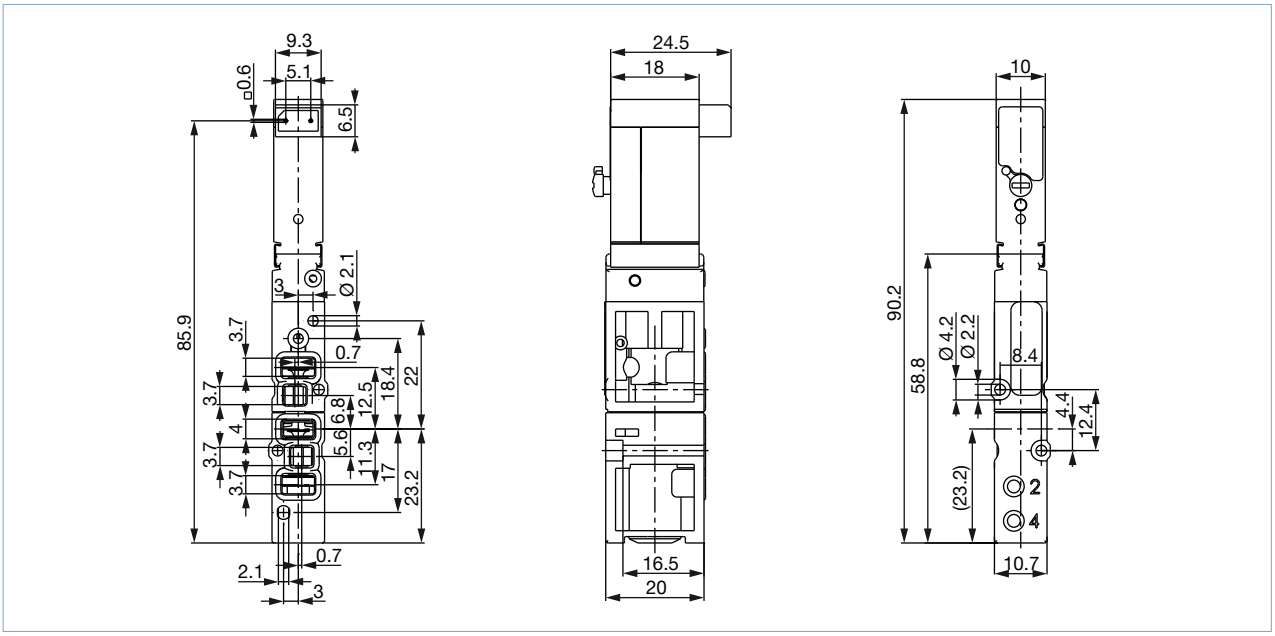
3. Dimensions

3.1. Standard version 5/2 way

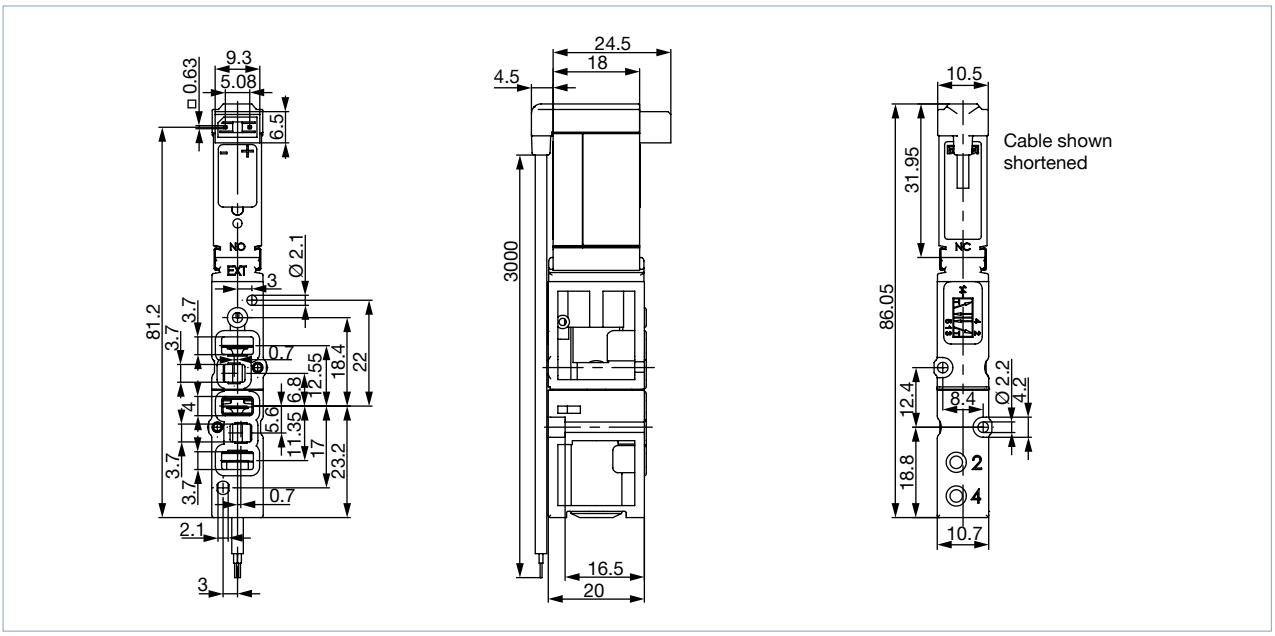
Note:

- For Type 6525 a standardisation of the pneumatic flange pattern has been made.
- There is a difference in the versions of the flange patterns. The external dimensions remain identical.
- Dimensions in mm



3.2. Second connection shut-off function 5/2 way

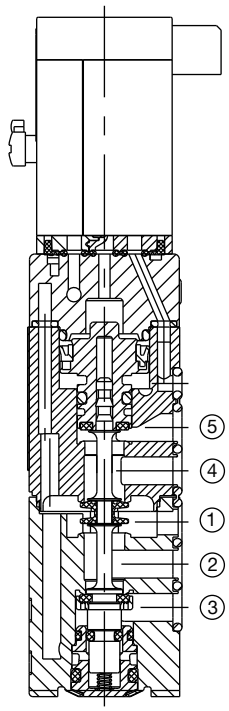
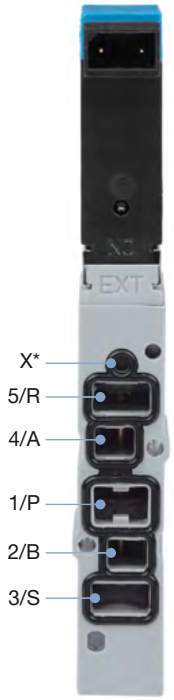
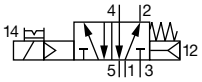
Note:
Dimensions in mm



4. Product design and assembly

4.1. Product assembly

Standard version 5/2 way

Sectional drawing	Connection overview	Circuit function
		**H** 

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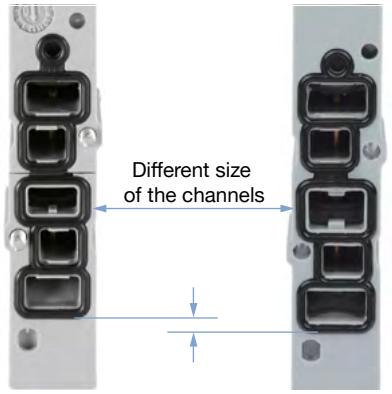
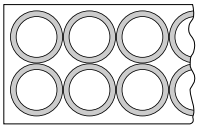
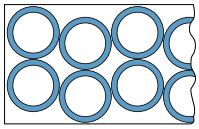
4.2. Distinguishing features valve revisions

Note:

- For type 6525, 3/2-way, the pneumatic flange pattern has been standardised.
- There is a difference in the versions of the flange patterns (Rev. 1/Rev. 2). The external dimensions remain identical.
- Before the pneumatic installation, the compatibility with the present valve terminal must be checked (see operating instructions of the corresponding valve terminal).

The valve revisions can be distinguished by the following features:

Valves 6525	Valve REV. 1	Valve REV. 2
Article no.	Distinguishing by Article no. see “5. Ordering information” on page 7	
Visual distinction	 **REV. 1** Single valves Type 6524 and Type 6525 with flange interface „FM14“ Different size of the channels **REV. 2** Single valves Type 6524 and Type 6525 with flange interface „FM20“	
Information label	There is a corresponding information label on the relevant valve which indicates that the valve has been overhauled. This information label must be removed before assembly.	
Compatibility with the pneumatic modules of the island by means of the working ports	 black parallel	 blue wavy

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5. Ordering information

5.1. Bürkert eShop – Easy ordering and quick delivery

Bürkert eShop – Easy ordering and fast delivery

You want to find your desired Bürkert product or spare part quickly and order directly? Our online shop is available for you 24/7. Sign up and enjoy all the benefits.

Order online now

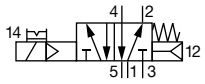
5.2. Bürkert product filter

Bürkert product filter – Get quickly to the right product

You want to select products comfortably based on your technical requirements? Use the Bürkert product filter and find suitable articles for your application quickly and easily.

Try out our product filter

5.3. Ordering chart standard version

Circuit function	Orifice	Q_{Nn} value air	Pressure range	Switching times		Voltage/ Frequency	Article no.	
	[mm]	[l/min][1.]	[bar][2.]	Opening [ms]	Closing [ms]	[V/Hz]	Valves REV. 1	Valves REV. 2
5/2 way								
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  	4	300	1…10[3.]	<10	<10	24 V DC[4.]	20029914 (186271)[5.]	20029922 (20013117)[5.]
			2.5…10	<10	<10	24 V DC[4.]	20029912 (179938)[5.]	20029920 (365610)[5.]

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

2.) Measured as overpressure to the atmospheric pressure

3.) Version with auxiliary pilot air

4.) 10 % residual ripple allowed

5.) The valve article number can no longer be ordered. Please order superior set.

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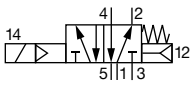
5.4. Ordering chart second connection for shut-off function

Circuit function	Orifice	Q_{Nn} value air	Pressure range	Switching times		Voltage/ Frequency	Article no.	
	[mm]	[l/min][1.]	[bar][2.]	Opening [ms]	Closing [ms]	[V/Hz]	Valves REV. 1	Valves REV. 2
5/2 way, without manual override								
H, solenoid valve 5/2 way Servo-controlled There is always one of the two outlet ports (2) or (4) pressurized when coil is activated 	4	300	1…10[3.]	< 10	< 10	24 V DC[4.]	on request	on request
			2.5…10	< 10	< 10	24 V DC[4.]	20029917 (285544)[5.]	20029925 (20013137)[5.]

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

2.) Measured as overpressure to the atmospheric pressure

3.) Version with auxiliary pilot air

4.) 10 % residual ripple allowed

5.) The valve article number can no longer be ordered. Please order superior set.

5.5. Ordering chart for accessories

Accessories	Version	Features	Article no.
Rectangular cable plug for 6524 single valve	Grid 5.08 mm	With 3 m cable, 2-pins	133486
		With 300 mm flying leads, 2-pins	644068
		With 2 single contacts	644067
Covering plate for 5/2 way valve position	Complete	For 1 unused valve position	650373
Set profile seal pilot valve	For REV. 1	12 seals	20024334
Set profile seal pilot valve	For REV. 2	12 seals	20016305

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