2/2 way Ball Valve with Pneumatic Rotary Actuator



2-piece (2652)

3-piece (2655)

- 2- or 3-piece ball valve
- Pneumatic actuator
- Compact design
- Visual position indicator
- Pilot valve connection NAMUR

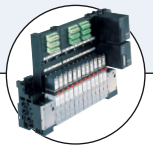
Types 2652/2655 can be combined with…



Type 6012/6014 P
Pilot valve



Type 8691
Control head



Type 8640/8644
Valve block



Type 5470
Solenoid valve



Type 6519 NAMUR
Solenoid valve

Complete ball valves of Types 2652 and 2655 consist of a pneumatic rotary actuator (Type2050) and a 2/2 way ball valve. The ball valvebody is 2-piece (Type 2652) or 3-piece (Type2655). The connection between the actuator and the ball valve takes place via a standard interface (flange connection).

The rotary movement in the drive is produced by a linear piston with quick-acting screw thread coupling. The rotary actuator moves the ball valve through 90° and thus opens or closes the line cross-section. The actuator has an optical display of the piston position.

The compact, pneumatically actuated ball valve can be employed for a wide range of applications, even under heavy-duty, slightly aggressive conditions.

Technical data	
Orifice	DN10-50
Body material	Stainless steel 1.4408
Actuator material	PA (polyamide, glass-fibre reinforced)
Pilot air ports material	Stainless steel 1.4305
Seal material	PTFE
Medium	Gaseous and liquid media, which do not attack the body and sealing materials
Medium temperature	-10 to +120 °C
Ambient temperature	-10 to +60 °C
Control medium	Neutral gases, air
Port connection	Rp ¼" to Rp 2" Whitworth threaded port acc. to DIN EN 10226-1 (old DIN 2999)
Pilot pressure Double-acting actuator Single-acting actuator	 2 to 10 bar (Ø 63 mm), 2 to 6 bar (Ø 100 mm) 5 to 10 bar (Ø 63 mm), 5 to 6 bar (Ø 100 mm)
Connection between actuator and ball valve	Flange acc. to ISO 5211 or DIN 3337
Rotation	90° ±3°
Rotation time for 90°	1 to 3.5 sec.(depending on load and pilot pressure)
Installation	As required, preferably with actuator in upright position

Applications

- Chemical process engineering
- Food and feed processing
- Machine industry
- Water treatment
- Cleaning machines
- Drinking water distribution etc.

DTS 1000110785 EN Version: L Status: RL (released | freigegeben | validé) printed: 01.02.2018

Technical data, continued

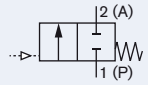
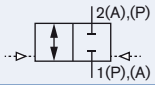
K_{VS} values and weights

Orifice [mm]	Port connection [inch]	K_V value water [m³/h]	Pressure range [bar] body	Actuatorsize Ø		Weight	
				double-acting [mm]	single-acting [mm]	double-acting [kg]	single-acting [kg]
10	Rp ¼	7	0-63	63	63	1.6	1.8
12	Rp ⅜	9	0-63	63	63	1.7	1.9
15	Rp ½	35	0-63	63	63	1.8	2.0
20	Rp ¾	46	0-63	63	100	2.4	4.8
25	Rp 1	72	0-63	63	100	3.0	5.3
32	Rp 1 ¼	105	0-63	100	–	5.3	–
40	Rp 1 ½	170	0-63	100	–	6.6	–
50	Rp 2	275	0-63	100	–	8.0	–

K_V value water [m³/h]: Measured at + 20 °C, 1 bar pressure at valve inlet and free outlet
Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Ordering chart for ball valves (further versions on request)

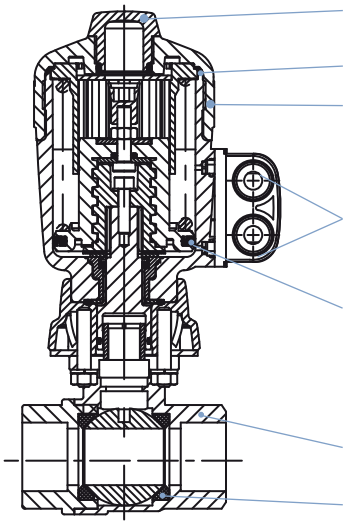
2-piece or 3-piece stainless steel body, PTFE seal

Control function	Orifice [mm]	Port connection (threaded port)	K_V value water [m³/h]	Pressure range [bar] body	Single-acting actuator			Double-acting actuator		
					Actuator size Ø [mm]	Article no. Type 2652 2-piece	Article no. Type 2655 3-piece	Actuator size Ø [mm]	Article no. Type 2652 2-piece	Article no. Type 2655 3-piece
A Pneumatically operated on / off valve, normally closed by spring force, flow direction above seat 	10	Rp ¼	7	0-63	63	435172	435175	63	429203	431195
	12	Rp ⅜	9	0-63	63	435173	435176	63	429204	431196
	15	Rp ½	35	0-63	63	435174	435177	63	429205	431197
	20	Rp ¾	46	0-63	100	431109	431205	63	429206	431198
or **I** Open/close operation on either side without spring, bidirectional 	25	Rp 1	72	0-63	100	431110	431206	63	429207	431199
	32	Rp 1 ¼	105	0-63	–	–	–	100	429208	431200
	40	Rp 1 ½	170	0-63	–	–	–	100	429209	176177
	50	Rp 2	275	0-63	–	–	–	100	429210	–

DTS 1000110785 EN Version: L Status: RL (released | freigegeben | validé) printed: 01.02.2018

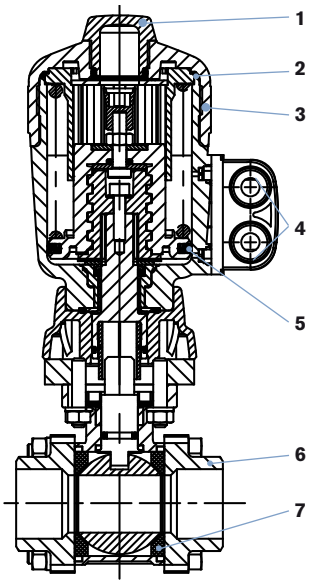
Materials

2-piece body version (Type 2652)



1	**Transparent cap:**	Polycarbonate (PSU)
2	**O-ring:**	FKM
3	**Actuator:**	PA polyamide (glass-fibre reinforced)
4	**Pilot air ports:**	Stainless steel 1.4305
5	**Cylinder seal:**	NBR
6	**Valve body:**	Stainless steel 1.4408
7	**Ball sealing:**	PTFE

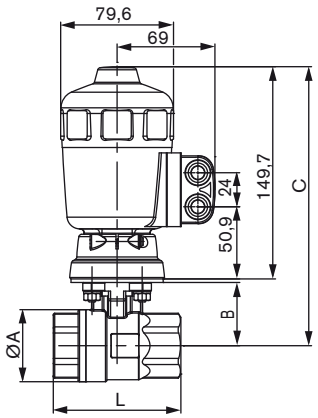
3-piece body version (Type 2655)



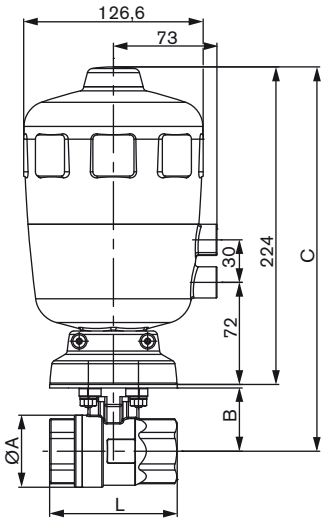
Dimensions ball valve [mm]

2-piece body version (Type 2652)

Actuator size Ø 63 mm



Actuator size Ø 100 mm

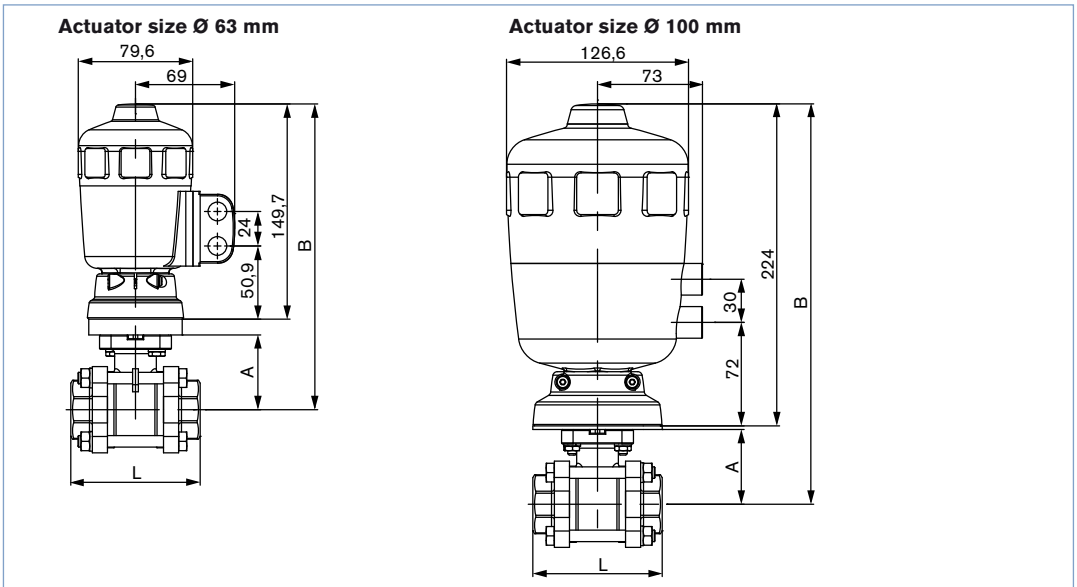


DN [mm]	Thread Rp	Actuator size [mm]	L	Ø A	B	C	
						Actuator size Ø 63 mm	Actuator size Ø 100 mm
10	Rp ¼"	63/100	50	32	33	185.5	259.5
12	Rp ⅜"	63/100	60	32	33	185.5	259.5
15	Rp ½"	63/100	75	35	35	187.5	261.5
20	Rp ¾"	63/100	80	45	41	193.5	267.5
25	Rp 1"	63/100	90	51	44.5	197	271
32	Rp 1 ¼"	100	110	63	49.5	–	276
40	Rp 1 ½"	100	120	75	55	–	281.5
50	Rp 2"	100	140	95.5	66.5	–	293

DTS 1000110785 EN Version: L Status: RL (released | freigegeben | validé) printed: 01.02.2018

Dimensions ball valve [mm], continued

3-piece body version (Type 2655)



DN [mm]	Thread Rp	Actuator size [mm]	L	A	B	
					Actuator size Ø 63 mm	Actuator size Ø 100 mm
10	Rp ¼"	63/100	65	40	201	275
12	Rp ⅜"	63/100	65	40	201	275
15	Rp ½"	63/100	75	40	201	275
20	Rp ¾"	63/100	80	44	205	279
25	Rp 1"	63/100	90	52	204.5	278.5
32	Rp 1 ¼"	100	110	58	–	284.5
40	Rp 1 ½"	100	120	68	–	294.5
50	Rp 2"	100	140	77	–	303.5

Ordering chart accessories

3/2 way pilot valves with banjo bolts

Seal material valve FKM, seal material banjo bolt NBR

Valve for actuator size [Ø mm]	Type	Pressure inlet P (valve body)	Service port A (banjo bolt)	Orifice [mm]	Q_{Nn} value air [l/min]	Pressure range [bar]	Electrical coil connection Ind. Std.	Power consumption [W]	Article no. Voltage/frequency [V/Hz]	
									024/DC	230/50
50-125	6014P	G ¼	G ¼	2	120	0-10	Form A	8	424103	424107

NAMUR adapter for pilot valves with NAMUR flange

Actuator siez Ø [mm]	Material	Article no.
63	Plastic (PA)	427405
100	Brass	637114
	Stainless steel	634275

Cable plug Type 2508 for pilot valves

(for other versions see Datasheet Type 2508)

	Article no.
Type 2508, Form A acc. DIN EN 175301-803, 0 to 250 V without circuitry (Type 6014 P, Type 0331P)	008376

For further accessories see datasheet Type 2XXX.

DTS 1000110785 EN Version: L Status: RL (released | freigegeben | validé) printed: 01.02.2018

bürkert

Note
You can fill out the fields directly in the PDF file before printing out the form.

Process valves – request for quotation

Please fill out and send to your nearest Bürkert facility* with your inquiry or order

Company	Contact person
Customer no.	Department
Address	Tel./Fax
Postcode/town	E-Mail

■ = mandatory fields to fill out Quantity Required delivery date

Operating data

		min	standard	max	unit
Site of control					
Measuring and control task					
Pipeline	DN / PN				
Pipe material					
Process medium					
Type of media	☐ Liquid ☐ Steam ☐ Gas				
Flow rate (Q, Q_N, W) [1]					
Temperature at valve inlet T1					
Absolute pressure at valve inlet P1					
Absolute pressure at valve outlet P2					
Steam pressure Pv					
Kinematic viscosity (ν)			mm²/s or cSt		
Dynamic viscosity (η)			mPa.s or cP		
Standard density			Kg/m³		
Max. sound level accepted			dB (A)		

[1] standard unit: Liquid Q = m³/h; Steam W = kg/h; Gas Q_N = Nm³/h

Valve features

Valve type	☐ Globe	☐ Angle seat	☐ Diaphragm	☐ Ball valve	☐ Butterfly	☐ Other
Body material	☐ Stainless steel		☐ PVC	☐ PP	☐ PVDF	☐ Other
Surface finish[2]		internal		external		
Seat sealing material	☐ Metal	☐ PTFE	☐ EPDM[2]	☐ FKM[2]		
Nominal pressure	PN					
Nominal size	DN					
Type of connection	☐ Flange	☐ Socket union	☐ Welded	☐ Internal thread	☐ External thread	☐ Clamp
Standard connection	☐ ISO	☐ DIN	☐ ANSI	☐ JIS	☐ Other	
Function	☐ NC[3]	☐ NO[3]	☐ Double-acting			
Pilot pressure		min.		max.		

[2] only diaphragm valve [3] NC: normally closed by spring action; NO: normally open by spring action

Reset form

* To find your nearest Bürkert facility, click on the orange box → www.burkert.com

In case of special application conditions, please consult for advice.
Subject to alteration.
© Christian Bürkert GmbH & Co. KG

1801/9_EU-en_00891692

DTS 1000110785 EN Version: L Status: RL (released | freigegeben | validé) printed: 01.02.2018