



2-piece (2652) 3-piece (2655)

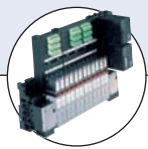
Types 2652/2655 can be combined with...


Type 6012/6014 P

Pilot valve


Type 8631

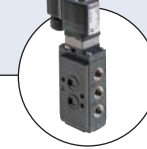
TopControl ON/OFF


Type 8640/8644

Valve block


Type 5470

Solenoid valve


Type 6519 NAMUR

Solenoid valve

2/2-way Quarter-Turn Ball Valve in stainless steel with pneumatic rotary actuator, DN 10-50

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

Complete ball valves of Types 2652 and 2655 consist of a pneumatic rotary actuator (Type 2050) and a 2/2-way ball valve. The ball valve body is 2-piece (Type 2652) or 3-piece (Type 2655). 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.

Applications

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

Technical data	
Orifice	DN 10-50
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	Threaded port G 1/4 to G2
Pilot pressure	
Double-acting actuator	2 to 10 bar (Ø 63 mm), 2 to 6 bar (Ø 100 mm)
Single-acting actuator	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 s (depending on load and pilot pressure)
Installation	As required, preferably with actuator in upright position

Technical data, continued

Kvs values and weights

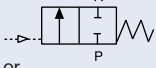
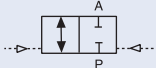
Orifice [mm]	Port connection [inch]	Kv value water [m ³ /h]	Pressure range [bar]		Actuator size Ø		Weight	
			2-piece body	3-piece body	double-acting [mm]	single-acting [mm]	double-acting [kg]	single-acting [kg]
10	G 1/4	7	0 - 100	0 - 63	63	63	1.6	1.8
12	G 3/8	9	0 - 100	0 - 63	63	63	1.7	1.9
15	G 1/2	35	0 - 100	0 - 63	63	63	1.8	2.0
20	G 3/4	46	0 - 100	0 - 63	63	100	2.4	4.8
25	G 1	72	0 - 100	0 - 63	63	100	3.0	5.3
32	G 1 1/4	105	0 - 100	0 - 63	100	–	5.3	–
40	G 1 1/2	170	0 - 100	0 - 63	100	–	6.6	–
50	G 2	275	0 - 100	0 - 63	100	–	8.0	–

Kv value water [m³/h]: Measured at +20 °C, 1 bar pressure at valve inlet and free outlet

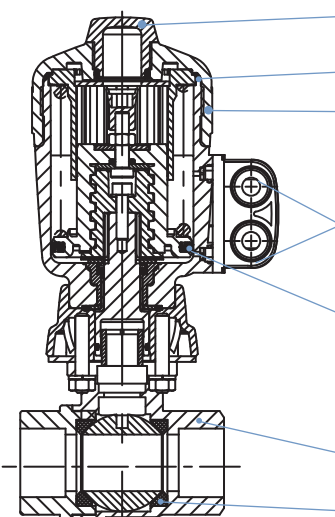
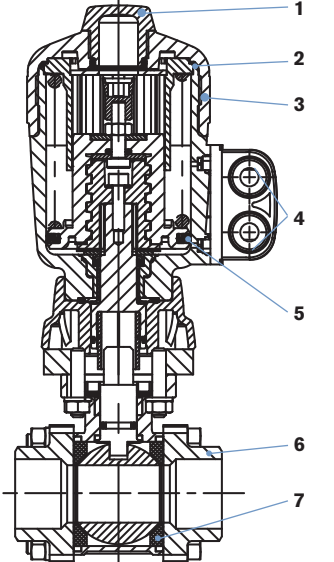
Pressure values [bar]: Measured as overpressure to the atmospheric pressure

Ordering chart for ball valves (further versions on request)

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

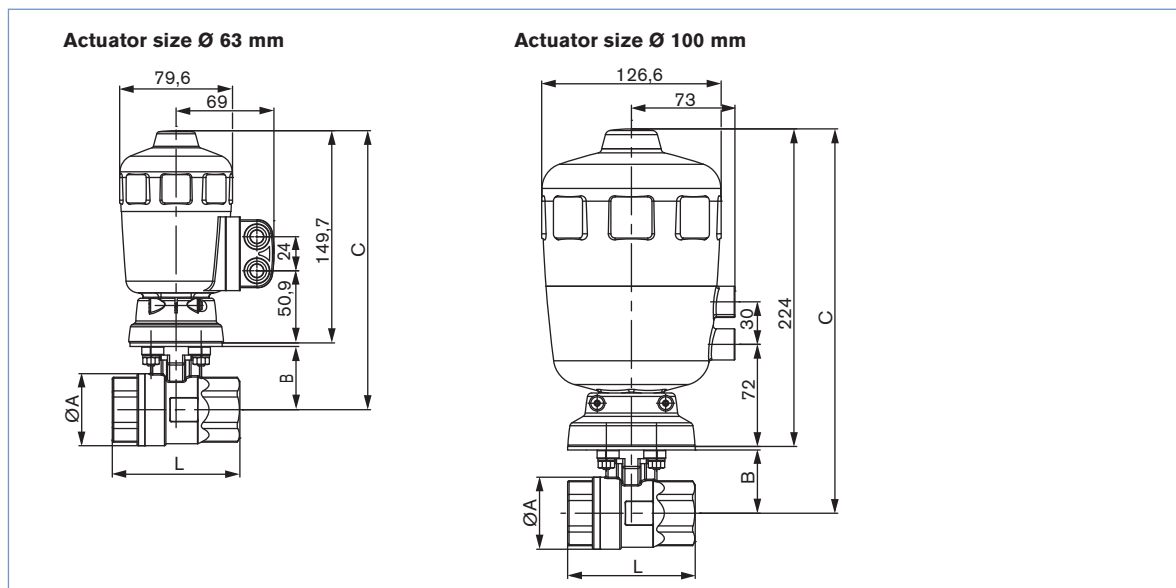
Control function	Orifice [mm]	Port connection (threaded port)	Kv value water [m ³ /h]	Pressure range [bar]		Single-acting actuator			Double-acting actuator		
				2-piece body	3-piece body	Actuator size Ø [mm]	Item no. Type 2652 2-piece	Item no. Type 2655 3-piece	Actuator size Ø [mm]	Item no. Type 2652 2-piece	Item no. Type 2655 3-piece
A 2/2-way ball valve closed by spring 	10	G 1/4	7	0 - 100	0 - 63	63	435 172	435 175	63	429 203	431 195
	12	G 3/8	9	0 - 100	0 - 63	63	435 173	435 176	63	429 204	431 196
	15	G 1/2	35	0 - 100	0 - 63	63	435 174	435 177	63	429 205	431 197
	20	G 3/4	46	0 - 100	0 - 63	100	431 109	431 205	63	429 206	431 198
	25	G 1	72	0 - 100	0 - 63	100	431 110	431 206	63	429 207	431 199
I 2/2-way ball valve bistable (double-acting) 	32	G 1 1/4	105	0 - 100	0 - 63	–	–	–	100	429 208	431 200
	40	G 1 1/2	170	0 - 100	0 - 63	–	–	–	100	429 209	431 201
	50	G 2	275	0 - 100	0 - 63	–	–	–	100	429 210	–

Materials

<p>2-piece body version (Type 2652)</p> 	<p>1 Transparent cap: Polycarbonate (PSU)</p> <p>2 O-ring: FKM</p> <p>3 Actuator: PA polyamide (glass-fibre reinforced)</p> <p>4 Pilot air ports: Stainless steel 1.4305</p> <p>5 Cylinder seal: NBR</p> <p>6 Valve body: Stainless steel 1.4408</p> <p>7 Ball sealing: PTFE</p>	<p>3-piece body version (Type 2655)</p> 
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Dimensions ball valve [mm]

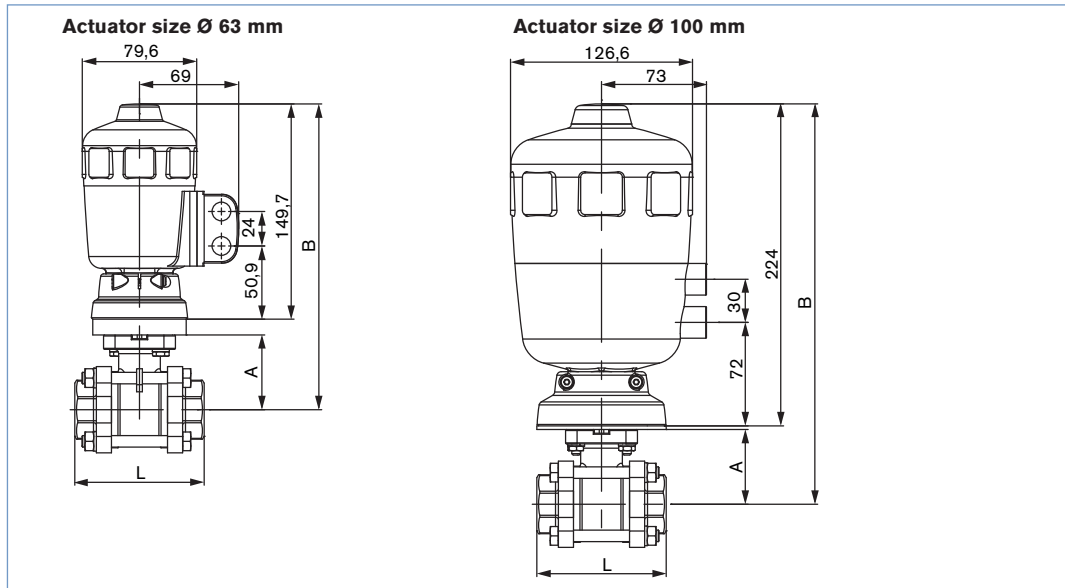
2-piece body version (Type 2652)



DN [mm]	Thread G	Actuator size [mm]	L	Ø A	B	C	
						Actuator size Ø 63 mm	Actuator size Ø 100 mm
10	G 1/4"	63/100	50	32	33	185.5	259.5
12	G 3/8"	63/100	60	32	33	185.5	259.5
15	G 1/2"	63/100	75	35	35	187.5	261.5
20	G 3/4"	63/100	80	45	41	193.5	267.5
25	G 1"	63/100	90	51	44.5	197	271
32	G 1 1/4"	100	110	63	49.5	-	276
40	G 1 1/2"	100	120	75	55	-	281.5
50	G 2"	100	140	95.5	66.5	-	293

Dimensions ball valve [mm], continued

3-piece body version (Type 2655)



DN [mm]	Thread G	Actuator size [mm]	L	A	B	
					Actuator size Ø 63 mm	Actuator size Ø 100 mm
10	G 1/4"	63/80	65	40	201	275
12	G 3/8"	63/80	65	40	201	275
15	G 1/2"	63/80	75	40	201	275
20	G 3/4"	63/80	80	44	205	279
25	G 1"	63/80	90	52	204.5	278.5
32	G 1 1/4"	80	110	58	-	284.5
40	G 1 1/2"	80	120	68	-	294.5
50	G 2"	80	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]	Item no. Voltage/frequency [V/Hz]	
									024/DC	230/50
50-125	6014P	G 1/4	G 1/4	2	120	0-10	Form A	8	424 103	424 107

NAMUR adapter for pilot valves with NAMUR flange

Actuator size Ø [mm]	Material	Item no.
63	Plastic (PA)	427 405
100	Brass	637 114
	Stainless steel	634 275

Cable plug Type 2508 for pilot valves

(for other versions see Datasheet Type 2508)

	Item no.
Type 2508, Form A acc. DIN EN 175301-803, 0 to 250 V without circuitry (Type 6014 P, Type 0331P)	008 376

For further accessories see datasheet for Type 1062 or the accessories datasheet Type 2XXX for the full options programme.

Note: For design reasons, some of the accessories cannot be supplied for actuator size Ø 40 mm. Please request the accessories datasheet Type 2XXX.

Ordering information for Quarter-Turn Ball Valve System Type 8801-BA/BB/8803-BA/BB

A complete quarter-turn ball valve system Type 8801-BA/BB or 8803-BA/BB consists of an ball valve Type 2652 (2-piece) or Type 2655 (3-piece) and a valve actuation system TopControl Type 8631 or an electrical position feedback Type 1062. The control head is only delivered in combination with an actuator as a part of a complete valve system. The following information is necessary for the selection of a complete valve system:

• **Item no.** of the quarter-turn ball valve **Type 2652 or 2655** (see Ordering chart)

• **Item no.** of the desired positioner **Type 8631** or position feedback, **Type 1062** (see separate datasheets)

Please also use the "request for quotation" form on p. 6 for ordering the complete system [go to page](#)

Example for variations of quarter turn ball valve system

Quarter turn ball valve Type 2652 / 2655



Control Head



8631



1062

Angle seat valve with required body and port connection



**Quarter turn ball valve
TopControl system**
2652+8631
(Type 8801-BA)



**Quarter turn ball valve
Electrical Position
Feedback system**
2655+1062
(Type 8803-BB)

When you click on the orange box "More info." below, you will come to our website for the resp. product where you can download the datasheet.

Control Head Type 8631 TopControl On/Off



DeviceNet™

More
info.

The Type 8631 TopControl On/Off head performs the task of completely automating pneumatically operated process valves. Mechanical mounting and pneumatic coupling to the process valve result in a unit that is both visually pleasing and functionally compact. Valve position feedback and pneumatic actuation can also be integrated into common fieldbuses such as AS-Interface or DeviceNet.

Main customer benefits are:

- Control of process valves
 - single-acting/double-acting
 - with external pneumatic control
- Position feedback with maximum two adjustable inductive limit switches or two micro limit switches
- Electrical control of the control head, optionally via multipole (parallel wiring) or field bus interface (AS-Interface or DeviceNet)
- Pressure-relief valve
- Suitable for hazardous locations per zone 1 or zone 2 and 22

Electrical Position Feedback Type 1062

More
info.

Positions are electrically signaled according to switch type:

- open,
 - closed or
 - open and closed.
- LEDs provide optical position indication (except for Namur Ex-version). Mechanical or inductive switches are housed in a compact splash-proof enclosure. The position indicator can be rotated 360° and is easily fitted to the valve. Trip cams do not require adjustment.
- The unit only needs to be screwed on and connected to be ready for operation.

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

Site of control	<input type="text"/>		
Measuring and control task	<input type="text"/>		
Pipeline	DN <input type="text"/>	PN <input type="text"/>	
Pipe material	<input type="text"/>		
Process medium	<input type="text"/>		
Type of media	<input type="checkbox"/> Liquid	<input type="checkbox"/> Steam	<input type="checkbox"/> Gas
Flow rate (Q, Q _N , W) ¹⁾	<input type="text"/> min	<input type="text"/> standard	<input type="text"/> max <input type="text"/> unit
Temperature at valve inlet T1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Absolute pressure at valve inlet P1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Absolute pressure at valve outlet P2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steam pressure P _v	<input type="text"/>	<input type="text"/>	<input type="text"/>
Kinematic viscosity (ν)	<input type="text"/>	mm ² /s or cSt	
Dynamic viscosity (η)	<input type="text"/>	mPa.s or cP	
Standard density	<input type="text"/>	Kg/m ³	
Max. sound level accepted	<input type="text"/>	dB (A)	

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

Valve features

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

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

Accessories

Click on the orange box "More info." below... you will come to our website for the resp. product where you can download the datasheet.

Control Head

Type 8631 **More info.**

Control

24 V DCI ASI-Bus

DeviceNet Ex-version

Feedback

mechanical limit switches

inductive proximity switches

Electrical connection

Cable connector

Multipol circular connector

Please specify item no. if known:

Electrical position feedback

Type 1062 **More info.**

Limit switches

mechanical

Voltage 12-48 V

Voltage 110-250 V

inductive

NAMUR EEExi

Status

closed

open

open/closed

Please specify item no. if known:

* 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.
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