



2-piece (2652)      3-piece (2655)

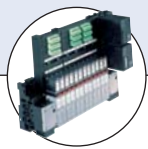
Types 2652/2655 can be combined with...


**Type 6012/6014 P**

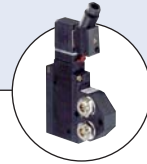
Pilot valve


**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	
<b>Orifice</b>	DN 10-50
<b>Body material</b>	Stainless steel 1.4408
<b>Actuator material</b>	PA (polyamide, glass-fibre reinforced)
<b>Pilot air ports material</b>	Stainless steel 1.4305
<b>Seal material</b>	PTFE
<b>Medium</b>	Gaseous and liquid media, which do not attack the body and sealing materials
<b>Medium temperature</b>	-10 to +120°C
<b>Ambient temperature</b>	-10 to +60°C
<b>Control medium</b>	Neutral gases, air
<b>Port connection</b>	Threaded port G 1/4 to G2
<b>Pilot pressure</b>	
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)
<b>Connection between actuator and ball valve</b>	Flange acc. to ISO 5211 or DIN 3337
<b>Rotation</b>	90° ±3°
<b>Rotation time for 90°</b>	1 to 3.5 s (depending on load and pilot pressure)
<b>Installation</b>	As required, preferably with actuator in upright position

## Technical data, continued

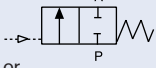
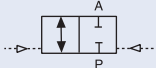
## Kvs values and weights

Orifice [mm]	Port connection [inch]	Kv value water [m <sup>3</sup> /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	–

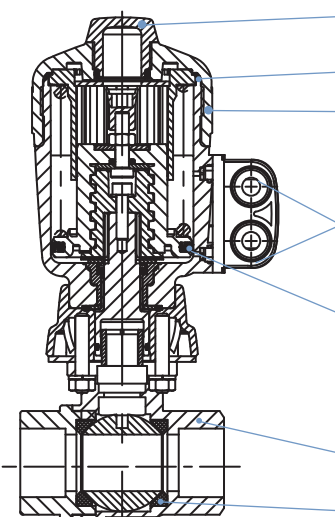
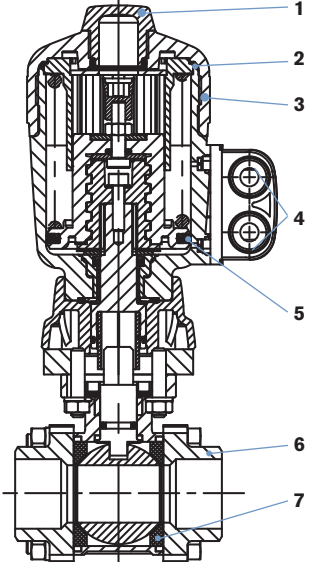
Kv value water [m<sup>3</sup>/h]: Measured at +20 °C, 1 bar pressure at valve inlet and free outlet  
 Pressure values [bar]: Measured as overpressure to the atmospheric pressure

## Ordering chart for ball valves (further versions on request)

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

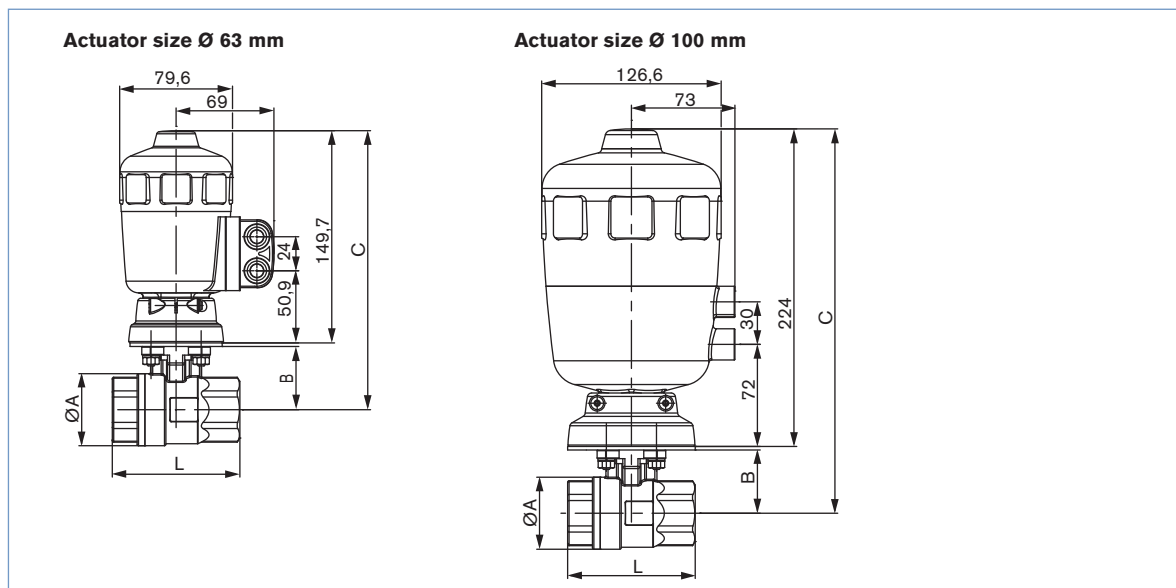
Control function	Orifice [mm]	Port connection (threaded port)	Kv value water [m <sup>3</sup> /h]	Pressure range [bar]		Single-acting actuator			Double-acting actuator		
				2-piece body	3-piece body	Actuator size Ø [mm]	Item no. Type 2652 2-piece	Item no. Type 2655 3-piece	Actuator size Ø [mm]	Item no. Type 2652 2-piece	Item no. Type 2655 3-piece
<b>A</b> 2/2-way ball valve closed by spring  or	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
<b>I</b> 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><b>2-piece body version (Type 2652)</b></p> 	<p><b>1 Transparent cap:</b> Polycarbonate (PSU)</p> <p><b>2 O-ring:</b> FKM</p> <p><b>3 Actuator:</b> PA polyamide (glass-fibre reinforced)</p> <p><b>4 Pilot air ports:</b> Stainless steel 1.4305</p> <p><b>5 Cylinder seal:</b> NBR</p> <p><b>6 Valve body:</b> Stainless steel 1.4408</p> <p><b>7 Ball sealing:</b> PTFE</p>	<p><b>3-piece body version (Type 2655)</b></p> 
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Dimensions ball valve [mm]

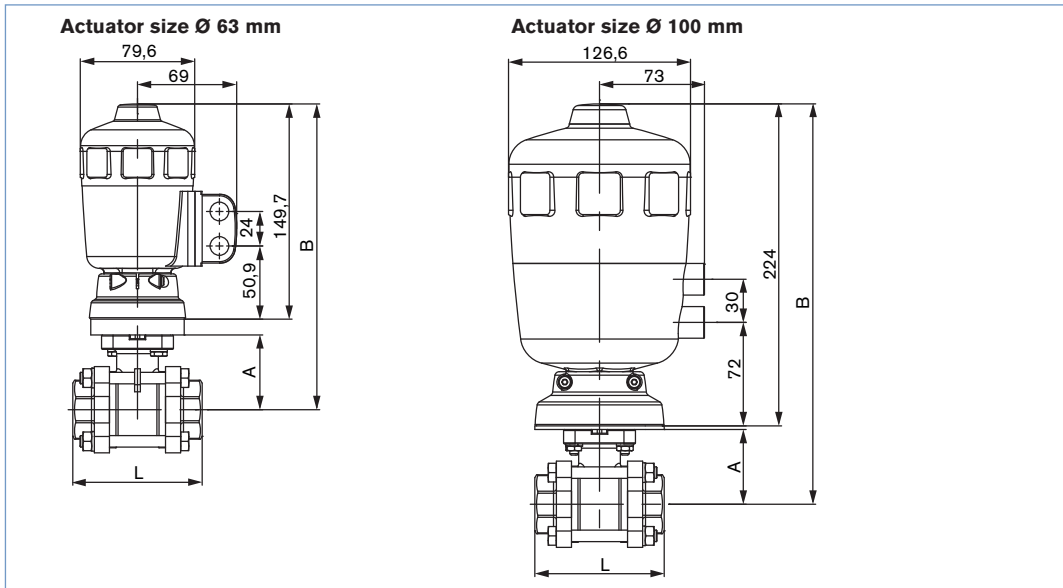
2-piece body version (Type 2652)



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 <sub>Nn</sub> 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 <sub>N</sub> , W) <sup>1)</sup>	<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"/>	<input type="text"/>
Absolute pressure at valve inlet P1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Absolute pressure at valve outlet P2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Steam pressure P <sub>v</sub>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Kinematic viscosity (ν)	<input type="text"/>	mm <sup>2</sup> /s or cSt		
Dynamic viscosity (η)	<input type="text"/>	mPa.s or cP		
Standard density	<input type="text"/>	Kg/m <sup>3</sup>		
Max. sound level accepted	<input type="text"/>	dB (A)		

<sup>1)</sup> standard unit: Liquid Q = m<sup>3</sup>/h; Steam W = kg/h; Gas Q<sub>N</sub> = Nm<sup>3</sup>/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 <sup>2)</sup>	<input type="text"/> internal		<input type="text"/> external			
Seat sealing material	<input type="checkbox"/> Metal	<input type="checkbox"/> PTFE	<input type="checkbox"/> EPDM <sup>2)</sup>	<input type="checkbox"/> FKM <sup>2)</sup>		
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 <sup>3)</sup>	<input type="checkbox"/> NO <sup>3)</sup>	<input type="checkbox"/> Double-acting			
Pilot pressure	<input type="text"/> min.	<input type="text"/> max.				

<sup>2)</sup> only diaphragm valve <sup>3)</sup> 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:

\*

In case of special application conditions, please consult for advice.

Subject to alteration.  
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