Type 2654

Multiport

3-way multiport ball valve in stainless steel, DN 15...DN 100

- Low torques and long lifespane
- Maintenance-friendly
- High flow rates
- Anti-static
- ISO 5211 mounting flange

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

Can be combined with

Type 2051 ▸
Pneumatic rotary actuator

Type 2052 ▸
Pneumatic rotary actuator

Type 3003 ▸
Electrical Rotary Actuator - On/Off and control

Type 3005 ▸
Electric Rotary Actuator - On/Off and Control

Type 3004 ▸
Explosion Proof Rotary Actuator - On/Off and control

Type 1061 ▸
Accessory for pneumatic rotary actuators

Type description

The multiport ball valves in stainless steel are used for separating medium flows. The ball valves are equipped with a manual lever. However, they can also be connected via the mechanical interface (according to ISO 5211) with pneumatic rotary actuators (for example, Type 2051 or Type 2052) and electric rotary actuators (for example, Type 3003, 3004 or 3005). For manual use, the ball valves are equipped with hand levers as standard.

Further features and benefits are:
- High flow rate
- Low torques
- Maintenance-friendly

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Visit product website ▸

Table of contents

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1. General technical data

Product properties	
Dimensions	Further information can be found in the chapter "4. Dimensions" on page 6.
Materials	
Seal	PTFE (ball seal)
Body	Stainless steel 1.4408/316
Ball	Stainless steel 1.4401/316
Stem	Stainless steel 1.4401/316 Further information on materials can be found in chapter "3. Materials" on page 3.
Nominal diameter	DN 15...100 (up to DN 200 on request)
Medium data	
Medium temperature	-10 °C...200 °C (see "5.1. Pressure temperature diagram" on page 8)
Medium pressure	According to variant: 16 bar, 40 bar (see "5.1. Pressure temperature diagram" on page 8), max. 6 bar for steam with carbon-reinforced PTFE seal (option)
Process/Port connection & communication	
Port connections	Universal butt weld (applicable to different welded connection norms) Flange according to: • EN 1092-1 • ASME/ANSI B16.5 (on request)
Actuator-side interface	According to EN ISO 5211

2. Approvals and conformities

2.1. General notes

- The approvals and conformities listed below must be stated when making enquiries. This is the only way to ensure that the product complies with all required specifications.
- Not all available variants can be supplied with the below mentioned approvals or conformities.

2.2. Conformity

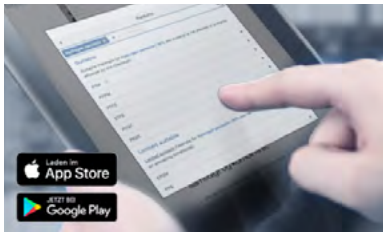
In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

2.3. Standards

The applied standards which are used to demonstrate compliance with the EU Directives are listed in the EU-Type Examination Certificate and/or the EU Declaration of Conformity.

3. Materials

3.1. Bürkert resistApp



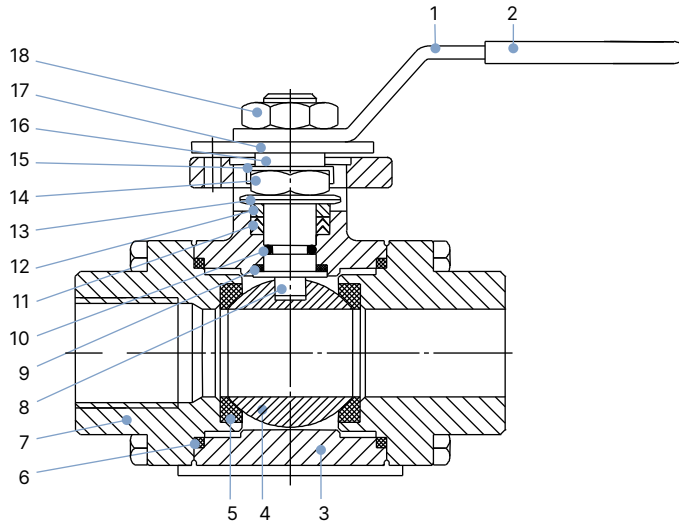
Bürkert resistApp – Chemical resistance chart

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

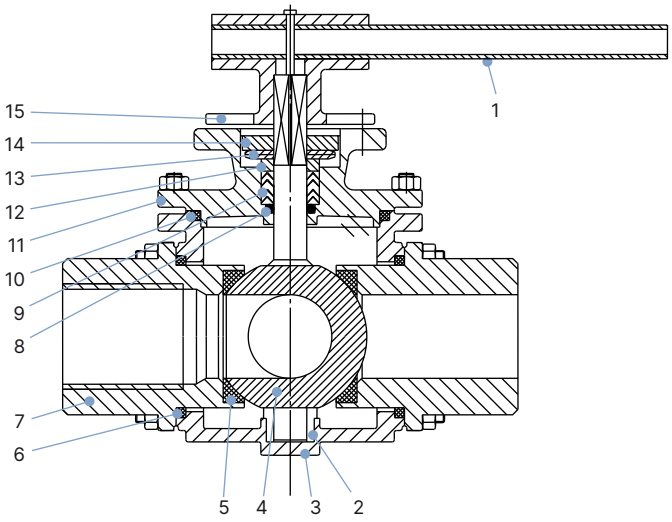
3.2. Material specifications for weld end variant

3-way ball valve, L-bore or T-bore, PN 40, DN 15...50 (¼"...2")



No.	Element	Qty.	Material
1	Manual lever	1	Stainless steel 1.4301/304
2	Cover of manual lever	1	Plastic
3	Body	1	Stainless steel 1.4408/316
4	Ball	1	1.4401/316
5	Ball seal	4	PTFE (glass fibre reinforced)
6	Body gasket	3	PTFE
7	End piece	3	Stainless steel 1.4408/316
8	Stem	1	Stainless steel 1.4401/316
9	Bearing	1	PTFE
10	O-ring	1	FKM
11	Stem packing	2	PTFE
12	Packing gland	1	Stainless steel 1.4301/304
13	Spring	2	Stainless steel 1.4301/304
14	Gland nut	1	Stainless steel 1.4301/304
15	Nut stop	1	Stainless steel 1.4301/304
16	Washer	1	Stainless steel 1.4301/304
17	Stop plate	1	Stainless steel 1.4301/304
18	Nut	1	Stainless steel 1.4301/304

3-way ball valve, L-bore or T-bore, PN 16, DN 65...100 (2½"...4")



No.	Element	Qty.	Material
1	Manual lever	1	Steel
2	End piece	3	Stainless steel 1.4408/316
3	Body	1	Stainless steel 1.4408/316
4	Ball and stem	1	Stainless steel 1.4401/316
5	Ball seal	4	PTFE (glass fibre reinforced)
6	Body gasket	3	PTFE
7	End piece	1	Stainless steel 1.4408/316
8	O-ring	1	FKM
9	Stem packing	2	PTFE
10	Top plate seal	1	PTFE
11	Top plate	1	Stainless steel 1.4408/316
12	Packing gland	1	Stainless steel 1.4301/304
13	Spring	2	Stainless steel 1.4301/304
14	Washer	1	Stainless steel 1.4301/304
15	Lever bracket	1	Stainless steel 1.4301/304

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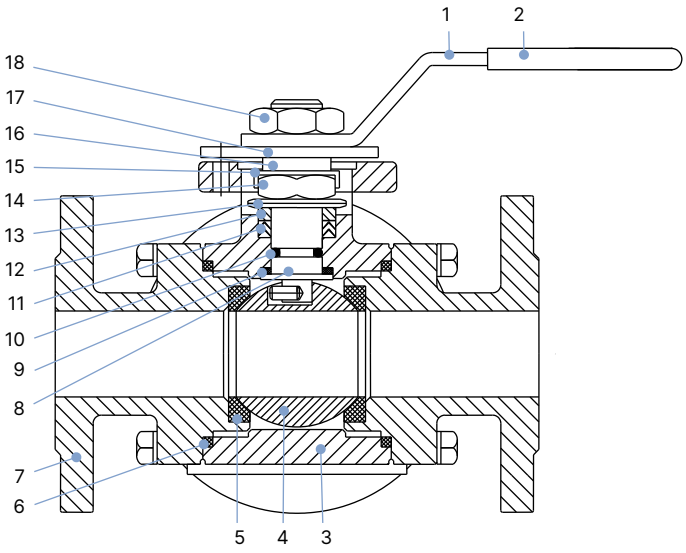
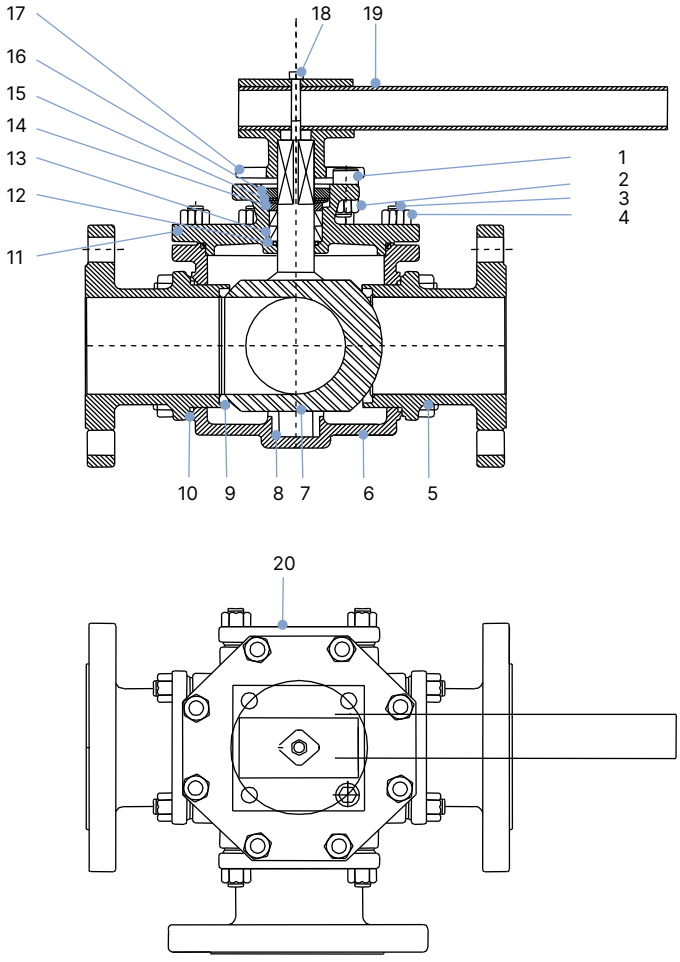
3.3. Material specifications for flange variant

3-way ball valve, L-bore or T-bore, PN 16, DN 15...50 (¼"...2")



No.	Element	Qty.	Material
1	Manual lever	1	Stainless steel 1.4301/304
2	Cover of manual lever	1	Plastic
3	Body	1	Stainless steel 1.4408/316
4	Ball	1	Stainless steel 1.4401/316
5	Ball seal	4	PTFE (glass fibre reinforced)
6	Body gasket	3	PTFE
7	End piece	3	Stainless steel 1.4408/316
8	Stem	1	Stainless steel 1.4401/316
9	Bearing	1	PTFE
10	O-ring	1	FKM
11	Stem packing	2	PTFE
12	Thrust washer	1	Stainless steel 1.4301/304
13	Spring	2	Stainless steel 1.4301/304
14	Gland nut	1	Stainless steel 1.4301/304
15	Nut stop	1	Stainless steel 1.4301/304
16	Washer	1	Stainless steel 1.4301/304
17	Stop plate	1	Stainless steel 1.4301/304
18	Nut	1	Stainless steel 1.4301/304

3-way ball valve, L-bore or T-bore, PN 16, DN 65...100 (2½"...4")



No.	Element	Qty.	Material
1	Stopper	1	Stainless steel 1.4301/304
2	Nut stop	1	Stainless steel 1.4301/304
3	Screws	8	Stainless steel 1.4301/304
4	Nut	8	Stainless steel 1.4301/304
5	End piece	3	Stainless steel 1.4408/316
6	Body	1	Stainless steel 1.4408/316
7	Ball and stem	1	Stainless steel 1.4401/316
8	Bearing	1	PTFE
9	Ball seal	4	PTFE (glass fibre reinforced)
10	Body gasket	4	PTFE
11	Top plate	1	Stainless steel 1.4408/316
12	O-ring	1	FKM
13	Stem packing	2	PTFE
14	Ring	1	Stainless steel 1.4301/304
15	Spring	1	Stainless steel 1.4301/304
16	Nut	1	Stainless steel 1.4301/304
17	Lever bracket	1	Stainless steel 1.4301/304
18	Screw	1	Stainless steel 1.4301/304
19	Manual lever	1	Stainless steel 1.4301/304
20	Blind flange	1	Stainless steel 1.4408/316

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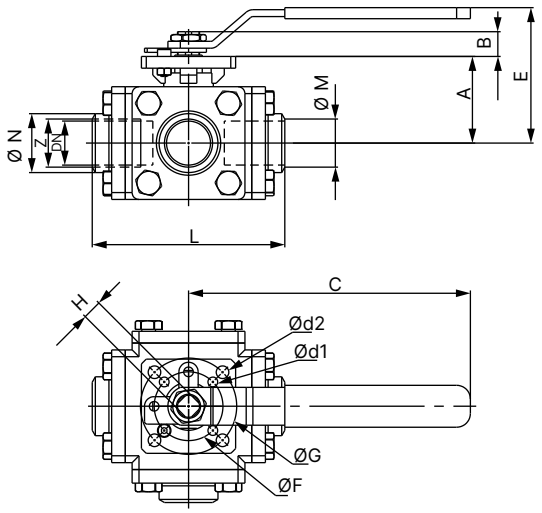
4. Dimensions

4.1. Welded connection variant

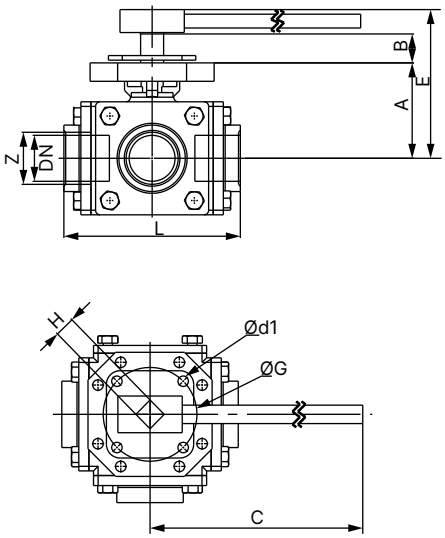
Note:

- Dimensions in mm
- Universal butt welded connection, applicable to different welded connection norms

DN15...DN50 (PN40)



DN65...DN100 (PN16)



DN	PN	A	B	C	Ø d1	Ø d2	E	Ø F	Ø G	H	L	Ø M	Ø N	Article no.	
	[bar]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	L-bore	T-bore
15	40	41	11	130	6	6	62	36	42	9	105	17.5	21.5	770738	773005
20	40	49	14	165	6	7.1	82	42	50	11	112	22.5	27.5	770739	773006
25	40	55	14	165	6	7.1	89	42	50	11	128	28	34.5	772997	773007
32	40	63	18	205	7.1	9.2	98	50	70	14	140	35	42.8	770042	773008
40	40	74	18	205	7.1	9.2	108	50	70	14	160	41	49	772998	773009
50	40	93	23	325	9.2	11.4	140	70	102	17	192	54	61	772999	772835
65	16	118.5	25	400	–	11.4	210	–	102	22	294	–	–	773000	773010
80	16	136.5	25	500	–	11.4	228	–	102	22	317	–	–	773001	773011
100	16	156.5	25	650	–	11.4	248	–	102	22	369	–	–	773002	773012

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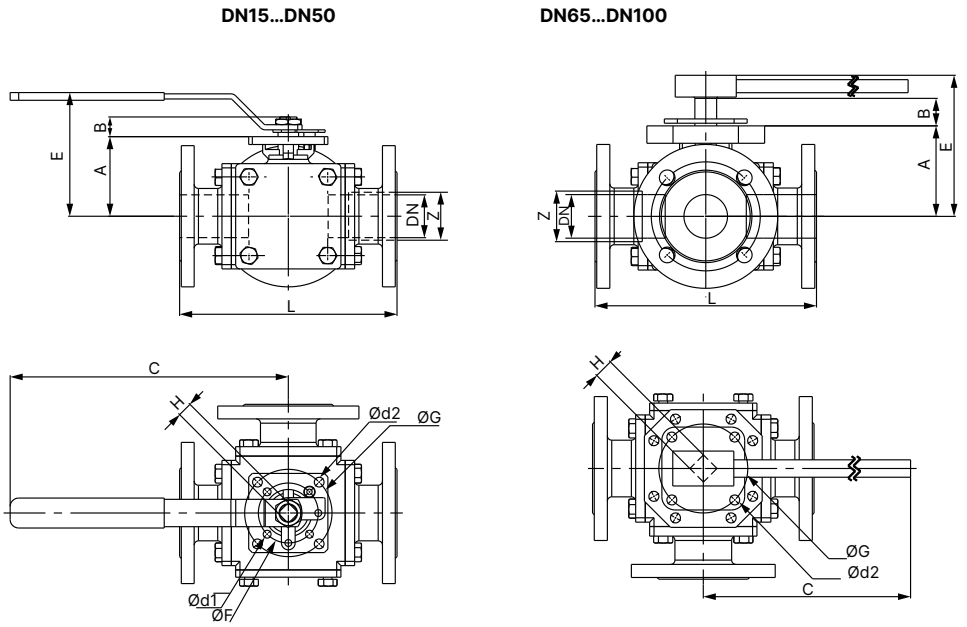
4.2. Flange variant

Note:
Flange according to DIN EN 1092 - 1



DN	PN	A	B	C	Ø d1	Ø d2	E	Ø F	Ø G	H	L (PN 16)	L (PN 40) 1.)	Article no. [PN 16]	
	[bar]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	L-bore	T-bore
15	16	41	11	130	6	6	62	36	42	9	160	160	770028	774375
20	16	49	14	165	6	7.1	82	42	50	11	177	177	770031	774376
25	16	55	14	165	6	7.1	89	42	50	11	190	190	770029	771821
32	16	63	18	205	7.1	9.2	98	50	70	14	208	208	774377	772440
40	16	74	18	205	7.1	9.2	108	50	70	14	234	234	770030	772222
50	16	93	23	325	9.2	11.4	140	70	102	17	273	273	771196	771195
65	16	118	25	400	–	11.4	210	–	102	22	300	300	772834	771166
80	16	236.5	25	500	–	11.4	228	–	102	22	305	330.4	771087	771107
100	16	156.5	25	650	–	11.4	248	–	102	22	368.5	393.5	773387	774378

1.) PN 40 available on request

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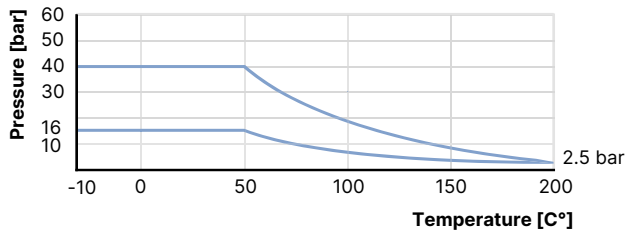
5. Performance specifications

5.1. Pressure temperature diagram

For general industrial use



5.2. Torques

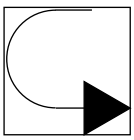
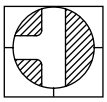
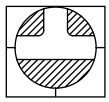
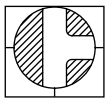
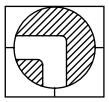
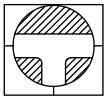
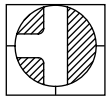
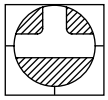
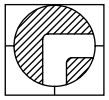
Torques for ball valves with a PN 16 pressure rating									
DN [mm]	15	20	25	32	40	50	65	80	100
Torque [Nm] for lubricating mediums	12.8	15.4	32.1	34.6	55.3	71.8	134.7	147.5	237.3
Torque [Nm] for non-lubricating mediums	16.2	19.5	38.4	41.3	63.4	96.2	229	258.2	427.5

Torques for ball valves with a PN 40 pressure rating									
DN [mm]	15	20	25	32	40	50	65	80	100
Torque [Nm] for lubricating mediums	17.9	21.6	44.9	48.4	77.4	100.5	188.6	206.5	332.2
Torque [Nm] for non-lubricating mediums	22.7	27.3	53.8	57.8	88.8	134.7	320.6	361.5	598.5

5.3. Nominal flow

Nominal flow – K_V value [m^3/h]									
DN [mm]	15	20	25	32	40	50	65	80	100
L-bore	9	17	26	40	60	114	139	217	348
T-bore	7	18	19	35	46	83	105	186	310

5.4. Switching positions 3-way

Ball bore		T			L
Position 	0°				
	90°				
Switching position		T1	T2	T3	L4

6. Ordering information

6.1. Bürkert eShop

Bürkert eShop – Easy ordering and quick delivery

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Use the Bürkert product filter and find suitable articles for your application quickly and easily.

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6.3. Ordering chart weld end variant

Note:
Further ordering information can be found in chapter "4.1. Welded connection variant" on page 6.

6.4. Ordering chart flange variant

Note:
Further ordering information can be found in chapter "4.2. Flange variant" on page 7.

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