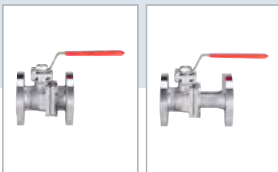




2/2-way flanged ball valve in stainless steel, 2 pieces, DN 15...DN 200

- Low torques
- Maintenance-friendly
- High flow rate
- Anti-static
- ISO 5211 mounting flange



Can be combined with

	Type 2051 Pneumatic actuator	▶
	Type 2052 Electrical actuator	▶
	Type 3003 Electrical actuator	▶
	Type 3004 Electrical actuator	▶
	Type 3005 Electrical actuator	▶
	Type 1061 Position feedback	▶

2/2-way flanged ball valves in stainless steel are used for separating various mediums. The ball valves are equipped with a manual lever. However, they can be connected via the mechanical interface (according to ISO 5211) with pneumatic rotary actuators (for example, Type 2051, Type 2052, Type 2053) and electrical rotary actuators (for example, Type 3003, Type 3004, Type 3005). The final position of pneumatically actuated ball valves can be checked via the position feedback box Type 1061. Moreover, the valves are available with different standardised dimensions (EN 558 - 1 series 1, EN 558 - 1 series 27).

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1. General technical data

Product properties	
Dimensions	Further information can be found in chapter "4. Dimensions" on page 6.
Material	
Seal	PTFE (ball seal) FKM (stem sealing)
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...200
Face-to-face length	DN 15...100: F4 (EN 558 - 1 series 27) or F1 (EN 558 - 1 series 1) DN 125...200: F5 (EN 558 - 1 series 27)
Medium data	
Medium temperature	- 10 °C...200 °C (see "5.1. Pressure temperature diagram" on page 10)
Medium pressure	Depending on variant: 16 bar, 40 bar (see "5.1. Pressure temperature diagram" on page 10) Max. 6 bar for steam with graphite-reinforced PTFE seal (option)
Process/Port connection & communication	
Port connection	Flange according to: • EN 1092 - 1 • ASME/ANSI B16.5
Actuator-side connection	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

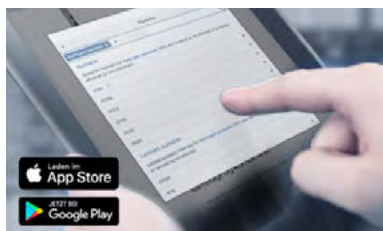
In accordance with the Declaration of Conformity, the product is compliant with the EU Directives.

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



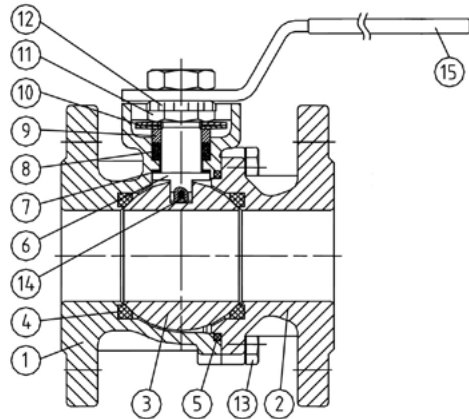
Bürkert resistApp – Chemical resistance chart

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](#)

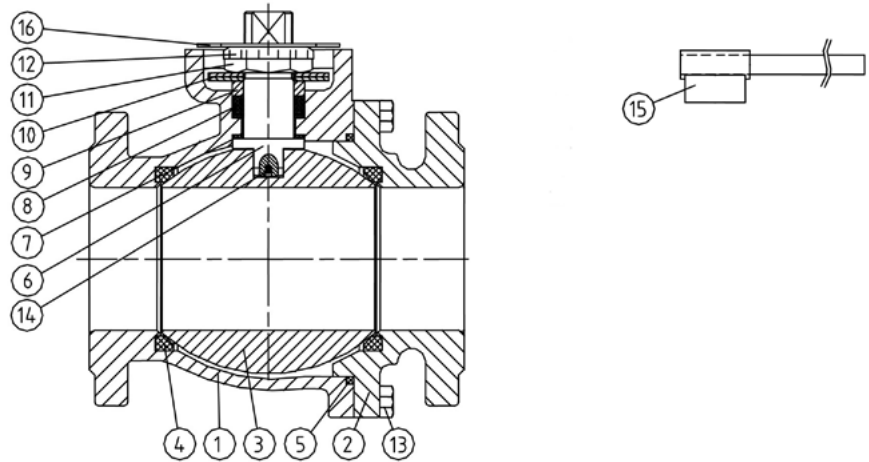
3.2. Material specifications

DN 15...100



No.	Element	Quantity	Material
1	Body	1	Stainless steel 1.4408/316
2	Body II (DN 15...100), end piece (DN 125...200)	1	Stainless steel 1.4408/316
3	Ball	1	Stainless steel 1.4401/316
4	Ball seal	2	PTFE (glas-fibre reinforced)
5	Body seal	1	PTFE
6	Stem	1	Stainless steel 1.4401/316
7	Thrust collar	1	PTFE
8	Stem packing	1 kit	PTFE (conductive)
9	Packing gland	1	Stainless steel 1.4401/316
10	Disc spring	2	Stainless steel 1.4310/301
11	Hexagon nut	1	Stainless steel A2 - 70
12	Lock washer	1	Stainless steel 1.4301/304
13	Hexagon bolt	1	Stainless steel 1.4308/CF- 8
14	Anti-static ball	1	Stainless steel A4 - 70 (DN 15...100), stainless steel A2 - 70 (DN 125...200)
15	Manual lever	1	Stainless steel 1.4301/304 (with plastic cover) (DN 15...100), stainless steel 1.4308/CF- 8 (DN 125...200)

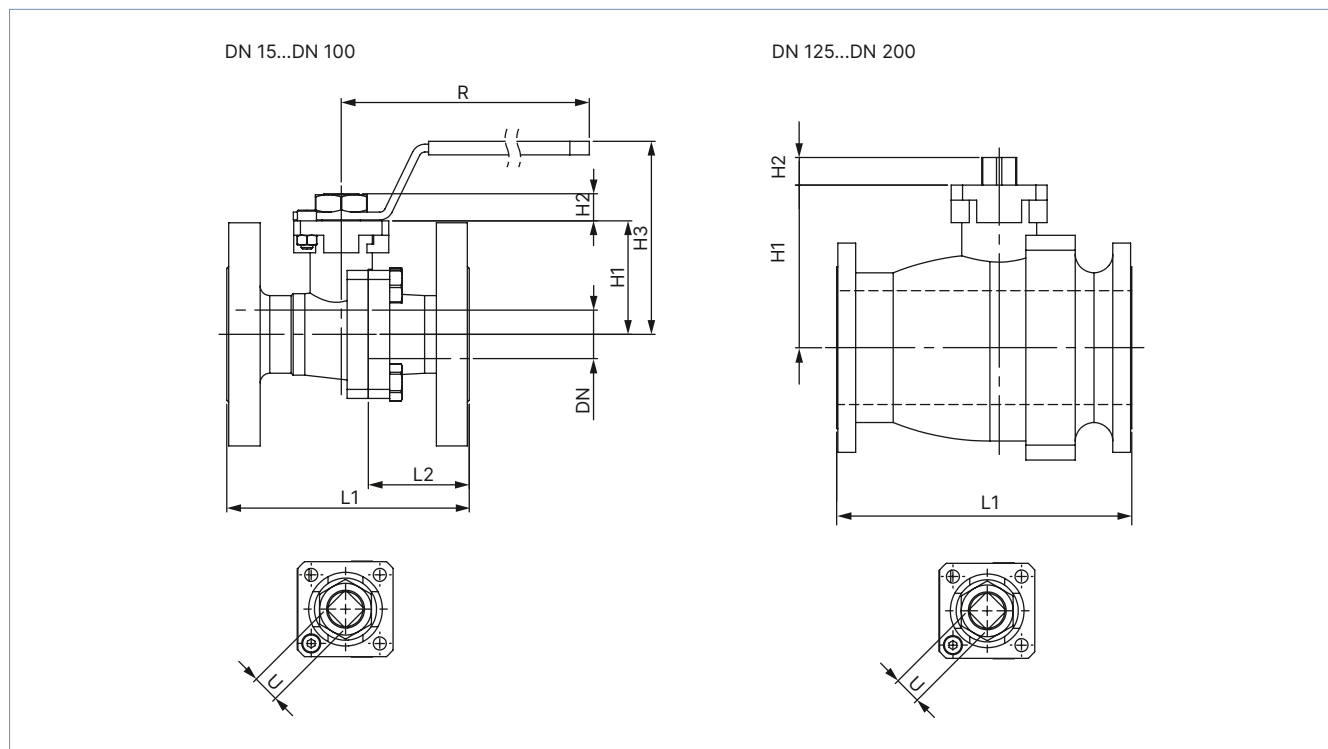
DN 125...200



No.	Element	Quantity	Material
1	Body	1	Stainless steel 1.4408/316
2	Body (DN 15...100), end piece (DN 125...200)	1	Stainless steel 1.4408/316
3	Ball	1	Stainless steel 1.4401/316
4	Ball seal	2	PTFE (glas-fibre reinforced)
5	Body seal	1	PTFE
6	Stem	1	Stainless steel 1.4401/316
7	Bearing	1	PTFE
8	Stem packing	1 kit	PTFE (conductive)
9	Thrust washer	1	Stainless steel 1.4401/316
10	Spring	2	Stainless steel 1.4310/301
11	Stem nut	1	Stainless steel A2 - 70
12	Lock washer	1	Stainless steel 1.4301/304
13	Hexagon bolt	1	Stainless steel 1.4308/CF - 8
14	Anti-static-ball	1	Stainless steel A4 - 70 (DN 15...100), stainless steel A2 - 70 (DN 125...200)
15	Manual lever	1	Stainless steel 1.4301/304 (with plastic cover) (DN 15...100), stainless steel 1.4308/CF - 8 (DN 125...200)
16	Stop plate	1	Stainless steel 1.4401/316

4. Dimensions

4.1. DIN flange according to EN 1091-1, EN 558-1 series 27 - F4 (DN 15...100) and EN 558-1 series 27 - F5 (DN 125...200)

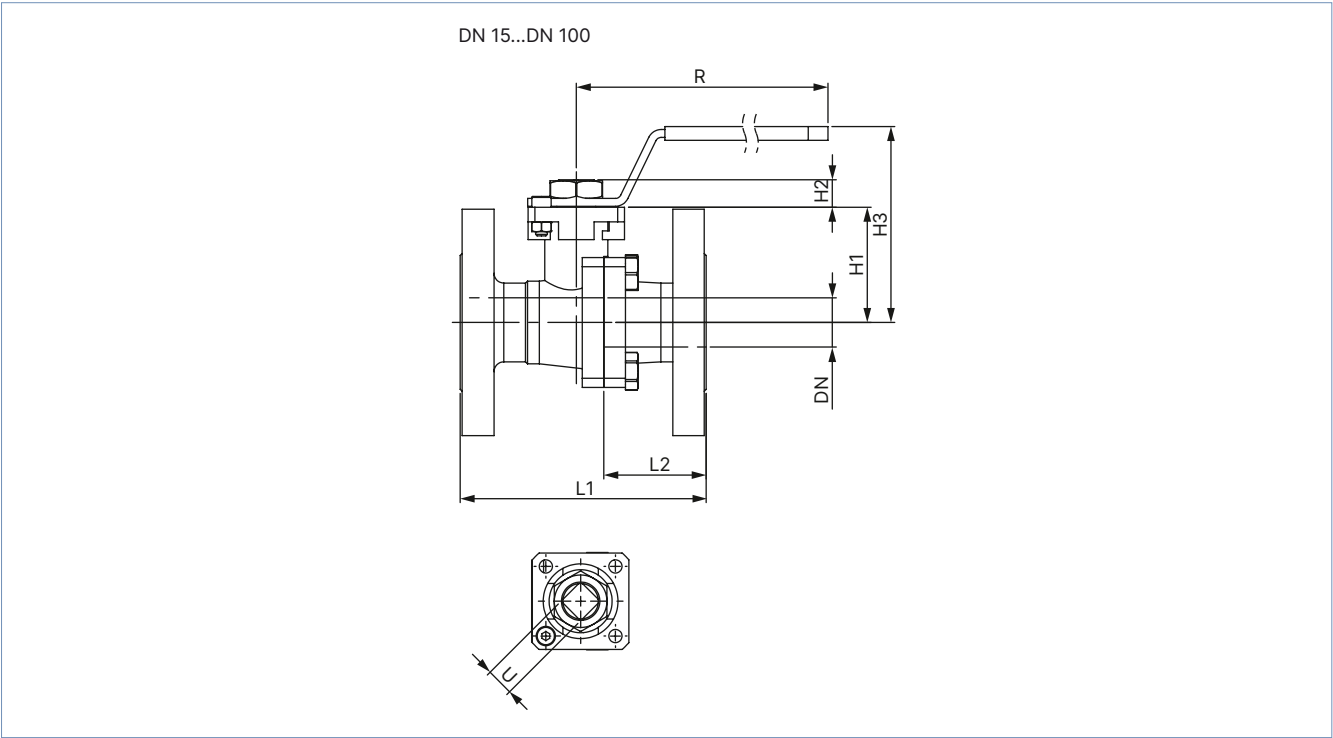


Note:

- ① Number of flange drillings, PN 16
- ② Number of flange drillings, PN 40

DN	L1	L2	H1	H2	H3	R	Interface acc. to ISO 5211	U	①	②	Weight PN 16	Weight PN 40	Article no.	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]			[kg]	[kg]	PN 16	PN 40
15	115	48.5	50	11	92	180	F05	11	4	4	–	2.7	–	772143
20	120	51.5	53.5	11	95.5	180	F05	11	4	4	–	3.4	–	772144
25	125	52	58.5	14	100.5	180	F05	14	4	4	–	4.4	–	772145
32	130	57	71	14	113	180	F05	14	4	4	–	5.6	–	772146
40	140	59	76	17	122.5	300	F07	17	4	4	–	8.1	–	772147
50	150	62	83.5	17	130	300	F07	17	4	4	–	10.7	–	772148
65	170	72	95	17	141.5	300	F07	17	4	8	13.8	14.5	772152	772149
80	180	71.2	113	22	194.5	400	F10	22	8	8	19.6	20.7	772153	772150
100	190	75.5	131	22	212.5	400	F10	22	8	8	26.7	29.7	772154	772151
125	325	–	151.5	22	–	700	F10	22	8	8	45	50	293779	293786
150	350	–	217	37	–	700	F14	36	8	8	70	75	293780	293787
200	400	–	252	37	–	700	F14	36	8	8	120	125	293781	293788

4.2. DIN flange according to EN 1091 - 1 and EN 558 - 1 series 1 - F1

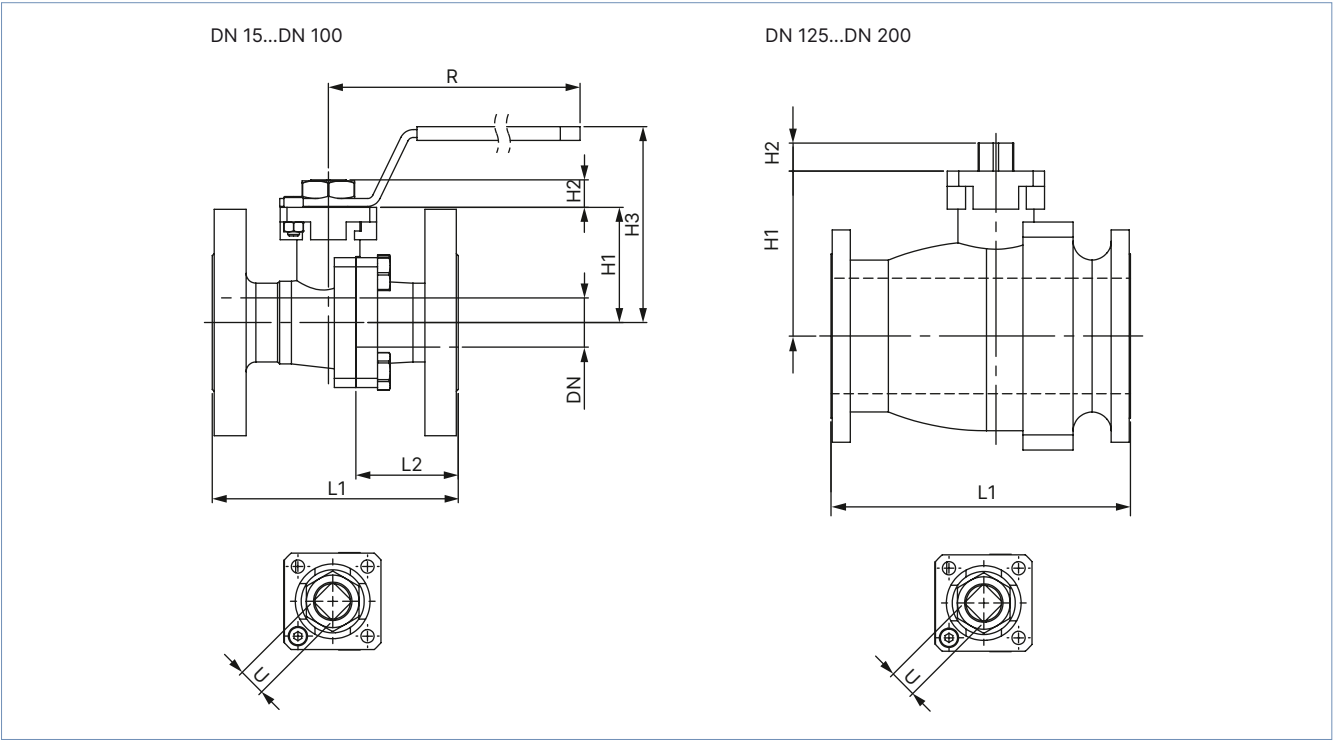


Note:

- ① Number of flange drillings, PN 16
- ② Number of flange drillings, PN 40

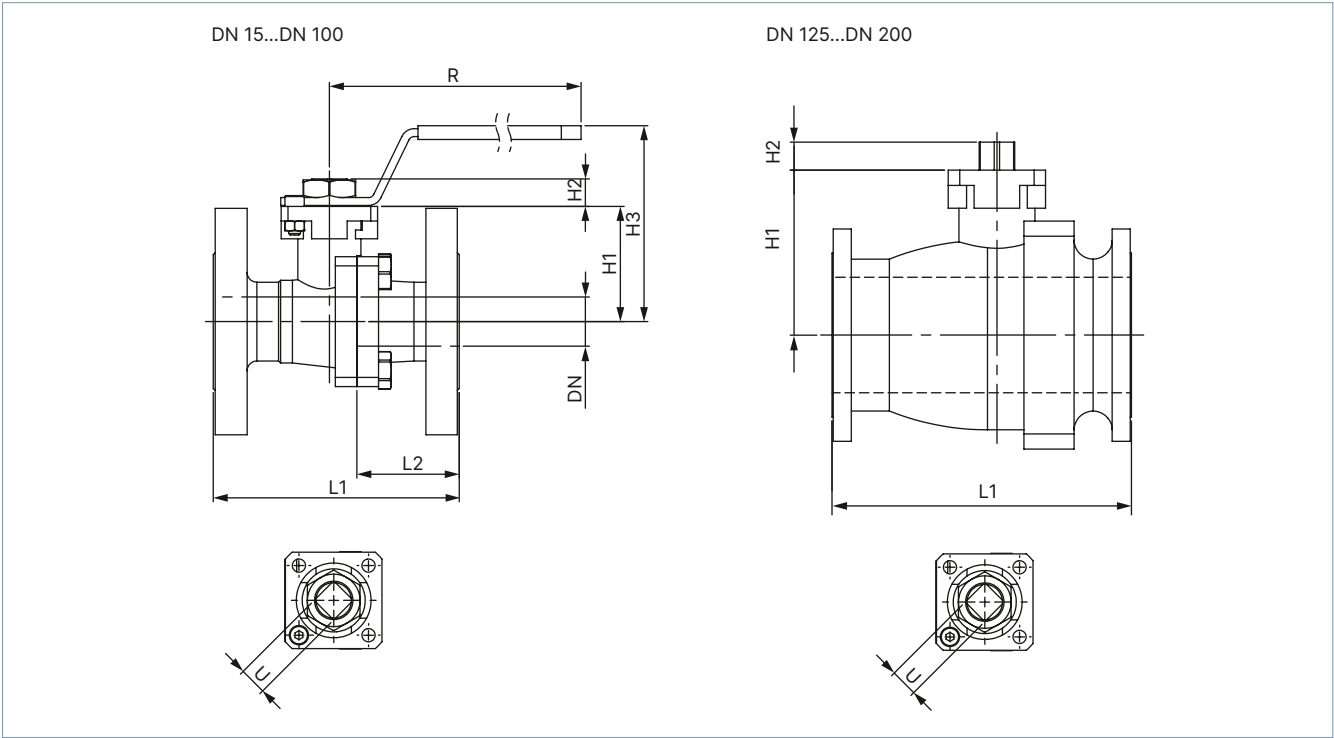
DN	L1	L2	H1	H2	H3	R	Interface acc. to ISO 5211	U	①	②	Weight PN 16 [kg]	Weight PN 40 [kg]	Article no.	
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]					PN 16	PN 40
15	130	63.5	50	11	92	180	F05	11	4	4	–	2.7	–	772161 ☒
20	150	81.5	53.5	11	95.5	180	F05	11	4	4	–	3.5	–	772162 ☒
25	160	87	58.5	14	100.5	180	F05	14	4	4	–	4.5	–	772163 ☒
32	180	107	71	14	113	180	F05	14	4	4	–	6	–	772164 ☒
40	200	119	76	17	122.5	300	F07	17	4	4	–	8.6	–	772165 ☒
50	230	142	83.5	17	130	300	F07	17	4	4	–	11.5	–	772166 ☒
65	290	192	95	17	141.5	300	F07	17	4	8	15.3	16.1	772170 ☒	772167 ☒
80	310	201.2	113	22	194.5	400	F10	22	8	8	21.5	22.6	772171 ☒	772168 ☒
100	350	235.5	131	22	212.5	400	F10	22	8	8	30.4	33.4	772172 ☒	772169 ☒

4.3. Flange according to ASME/ANSI B16.5 Class 150



DN	L1 [mm]	L2 [mm]	H1 [mm]	H2 [mm]	H3 [mm]	R [mm]	Interface acc. to ISO 5211	U [mm]	Flange drillings	Weight [kg]	Article no.
15	108	41.5	50	11	92	180	F05	11	4	2	772173
20	117	48.5	53.5	11	92.5	180	F05	11	4	2.5	772174
25	127	54	58.5	14	100.5	180	F05	14	4	3.4	772175
32	140	67	71	14	113	180	F05	14	4	4.7	772176
40	165	84	76	17	122.5	300	F07	17	4	7.2	772177
50	178	90	83.5	17	130	300	F07	17	4	10	772178
65	190.5	92.5	95	17	141.5	300	F07	17	4	14.7	772179
80	203	94.2	113	22	194.5	400	F10	22	4	20.4	772180
100	229	114.5	131	22	212.5	400	F10	22	4	31.3	772181
125	325	-	151.5	22	-	700	F10	22	8	52	293774
150	394	-	217	37	-	700	F14	36	8	74	293775
200	457	-	252	37	-	700	F14	36	8	100	293776

4.4. Flange according to ASME/ANSI B16.5 Class 300

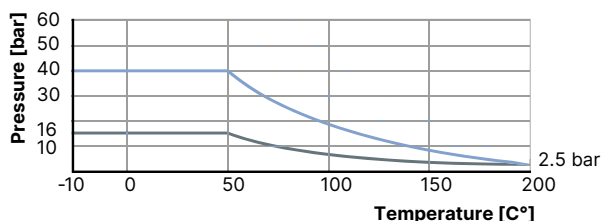


DN	L1	L2	H1	H2	H3	R	Interface acc. to ISO 5211	U	Flange drillings	Weight	Article no.
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]		[mm]		[kg]	
15	140	73.5	50	12	92	180	F05	11	4	2.5	772182
20	152	83.5	58.7	11	97.7	180	F05	11	4	3.6	772183
25	165	92	62	14	104	180	F05	14	4	4.5	772184
32	178	105	71	15	117	180	F05	14	4	6.1	772185
40	190	109	78	15	124.5	300	F07	17	4	9.7	772186
50	216	128	84.5	17.5	135	300	F07	17	8	11.6	772187
65	241	143	95.5	16.5	142	300	F07	17	8	17	772188
80	282.5	173.7	113	22	198.5	400	F10	22	8	25.1	772189
100	305	190.5	131	23.5	216.5	400	F10	22	8	43.1	772190
150	403	–	217	37	–	700	F14	36	8	124	293777
200	502	–	252	37	–	700	F14	36	8	180	293778

5. Performance specifications

5.1. Pressure temperature diagram

For general industrial use



5.2. Torques

Note:

The values were measured under the following conditions: max. Δp , ambient temperature = 20 °C, medium: water

Torques for ball valves with a PN 16 pressure rating												
DN [mm]	15	20	25	32	40	50	65	80	100	125	150	200
Breakaway torque [Nm]	12	14	18	32	42	57	83	120	183	441	583	688
Running torque [Nm]	10	12	16	29	30	38	69	80	122	299	384	456

Torques for ball valves with a PN 40 pressure rating												
DN [mm]	15	20	25	32	40	50	65	80	100	125	150	200
Breakaway torque [Nm]	18	24	42	63	81	120	210	293	390	882	1166	1376
Running torque [Nm]	16	21	40	55	57	80	160	195	260	598	768	912

5.3. Nominal flow

Note:

The nominal flow K_{vs} according to VDI/VDE 2173 indicates the flow in cubic meters per hour, at $\Delta p = 1$ bar and + 15 °C.

Nominal flow – K_{vs} value [m³/h]												
DN [mm]	15	20	25	32	40	50	65	80	100	125	150	200
K_{vs} [m³/h]	19.4	45.6	71.5	105	170	275	507	905	1414	2362	3674	7155

6. Ordering information

6.1. Bürkert eShop



Bürkert eShop – Easy ordering and quick delivery

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6.3. Ordering chart DIN flange according to EN 1091 - 1 and EN 558 - 1 series 27 - F4 (DN 15...100) and F5 (DN 125...200)

Note:

Further information can be found in chapter [“4.1. DIN flange according to EN 1091 - 1, EN 558 - 1 series 27 - F4 \(DN 15...100\) and EN 558 - 1 series 27 - F5 \(DN 125...200\)”](#) on page 6.

6.4. Ordering chart DIN flange according to EN 1091 - 1 and EN 558 - 1 series 1 - F1

Note:

Further information can be found in chapter [“4.2. DIN flange according to EN 1091 - 1 and EN 558 - 1 series 1 - F1”](#) on page 7.

6.5. Ordering chart flange according to ASME/ANSI B16.5 Class 150

Note:

Further information can be found in chapter [“4.3. Flange according to ASME/ANSI B16.5 Class 150”](#) on page 8.

6.6. Ordering chart flange according to ASME/ANSI B16.5 Class 300

Note:

Further information can be found in chapter [“4.4. Flange according to ASME/ANSI B16.5 Class 300”](#) on page 9.