



## Ball valve for hygienic applications

- High performance and low maintenance
- Suitable for CIP and SIP (cleaning in process)
- Stainless steel reinforced PTFE Seal: conform to EC Regulation 1935/2004/EC, Regulation (EU) No. 10/2011, FDA, USP Class VI
- ISO 5211 head flange

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

### Can be combined with

	<b>Type 2053</b> ▶ Pneumatic rotary actuator for the automation of ball and butterfly valves
	<b>Type 2051/2052</b> ▶ Pneumatic rotary actuator
	<b>Type 3003</b> ▶ Electrical Rotary Actuator - On/Off and control
	<b>Type 3005/3004</b> ▶ Electric Rotary Actuator - On/Off and Control
	<b>Type 1061</b> ▶ Accessory for pneumatic rotary actuators
	<b>Type 8692</b> ▶ Digital electropneumatic Positioner for the integrated mounting on process control valves
	<b>Type 8792</b> ▶ Digital electropneumatic Positioner SideControl

### Type description

The ball valves are manufactured using high quality materials and fulfil the requirements of many international standards. They offer maximum flow performance for hygienic duties.

They boast a high quality finish and are available in different variations. Through their simple construction the ball valves are very low-maintenance.

They are available with and without manual lever. Next to this, they can be connected via the mechanical interface (acc. to ISO 5211) with pneumatic (e.g. Type 2051, Type 2052, Type 2053) and electrical rotary actuators (e.g. Type 3003, Type 3004, Type 3005).

### Applications

- Biotechnology
- Pharmaceutical industry
- Chemical industry
- Dairy
- Food Industry
- Cosmetics

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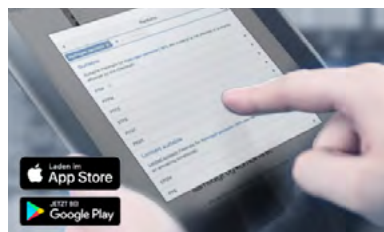
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## 1. General Technical Data

Product properties	
Dimensions	Detailed information can be found in chapter "3. Dimensions" on page 5.
Material	
Body	Stainless steel 1.4435 (316L)
Ball	Stainless steel 1.4435 (316L)
Selector shaft	Stainless steel 1.4435 (316L)
Seal	Seat in stainless steel reinforced PTFE (FDA conform) Body gasket, thrust washer and stem packing in PTFE (FDA conform) Stem seal silicone
Lever	Electropolished, CFM8 (1.4408)
Surface quality	Wetted surface RA < Ra 0.8 µm, Body surface electropolished
Medium data	
Medium temperature	-10 °C...200 °C (see "4.1. Pressure temperature diagram" on page 8)
Medium pressure	63 bar (see "4.1. Pressure temperature diagram" on page 8), max. 6 bar for steam with reinforced PTFE/Stainless steel seal
Process/Port connection & communication	
Port connection	Orbital welded end versions acc. <ul style="list-style-type: none"> <li>• DIN 11850 R2</li> <li>• ISO 1127 / ISO 4200</li> <li>• ASME BPE</li> </ul>
Approvals and Certificates	
ISO head flange	EN ISO 5211
Conformity (PTFE-Seal)	1935/2004/EG, FDA, USP Class VI

## 2. Materials

### 2.1. Chemical Resistance Chart – Bürkert resistApp

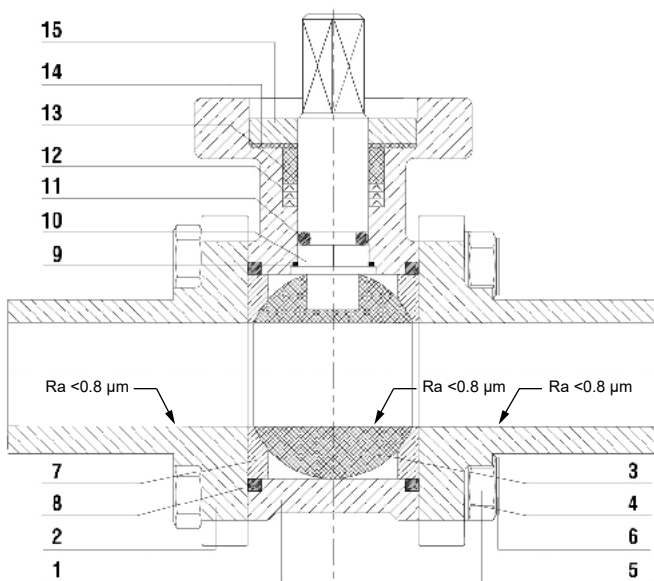


#### Bürkert resistApp – Chemical Resistance Chart

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](#)

2.2. Material specifications



Nr.	Element	Material
1	Body	1.4435
2	End Cap	1.4435
3	Ball	1.4435
4	Washer	SS316
5	Nut	SS316
6	Bolt	SS316
7	Seat	PTFE SS-FDA (50 % stainless steel reinforced)
8	Body gasket	PTFE-FDA
9	Thrust Washer	PTFE-FDA
10	Shaft / Star	1.4435
11	O-Ring	Silicone
12	Stem Packing	PTFE-FDA
13	Gland	SS316
14	Spring	Spring Steel
15	Nut	SS316

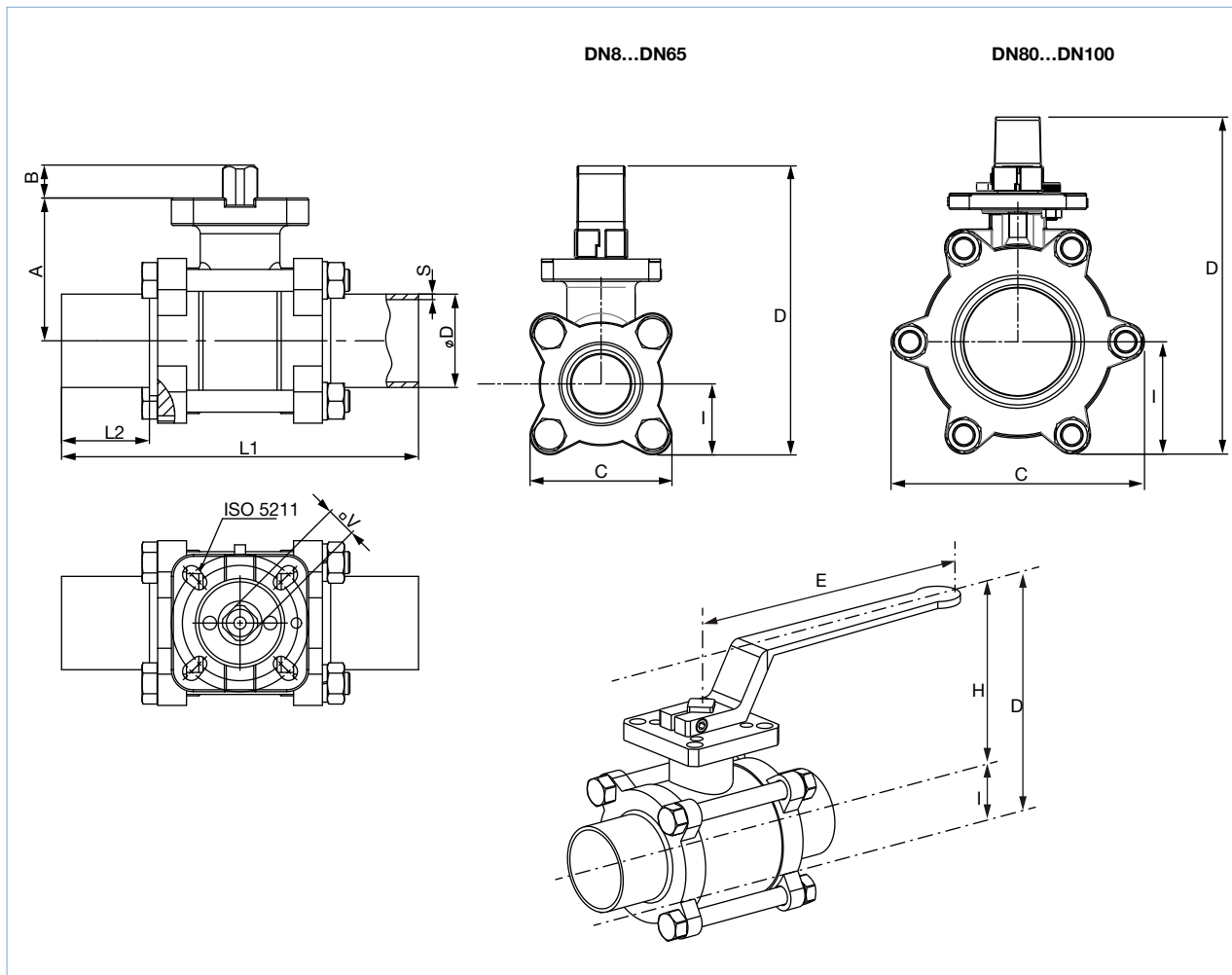
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### 3. Dimensions

#### 3.1. Version ISO 1127 / ISO 4200

**Note:**

Dimensions in mm

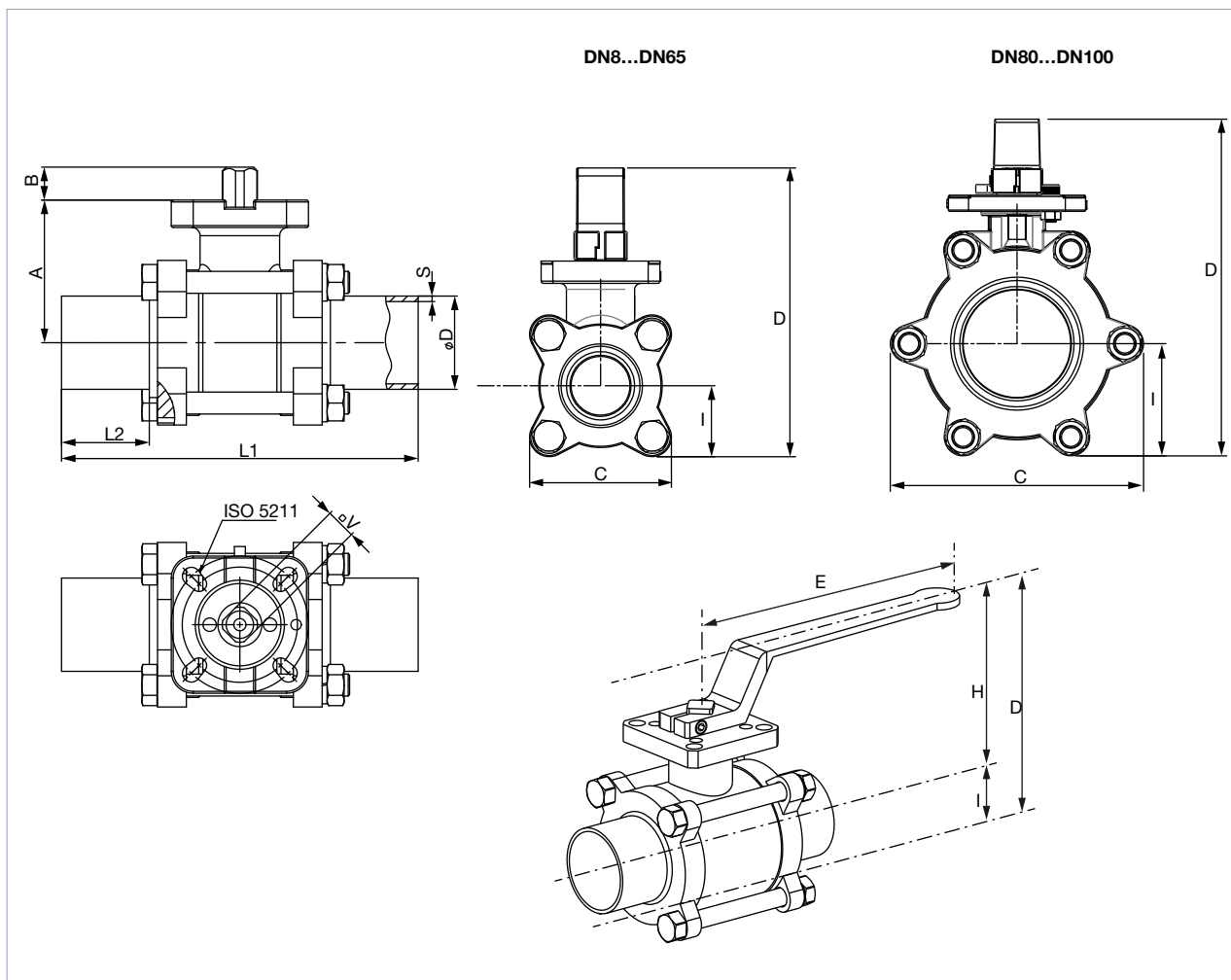


Orifice [mm]	A	B	C	D	E	H	I	L1	L2	Ø D	S	V	ISO 5211	Article no.	
														Manual operated	Bare shaft <sup>1.)</sup>
8	40	9	47	88	125	64.5	23.5	100	23	13.5	1.6	9	F03/F04	773810	773799
10	40	9	47	88	125	64.5	23.5	100	23	17.2	1.6	9	F03/F04	773811	773800
15	40	9	47	88	125	64.5	23.5	100	25	21.3	1.6	9	F03/F04	773812	773801
20	44	9	53.5	95	125	68	27	105	25	26.9	1.6	9	F03/F04	773813	773802
25	52	12	60.5	123	189	93	30	115	25	33.7	2.0	11	F04/F05	773814	773803
32	58	12	71	133	189	97.5	35.5	140	33	42.4	2.0	11	F04/F05	773815	773804
40	68	12	81.5	147	221	106.5	40.5	150	33	48.3	2.0	14	F05/F07	773816	773805
50	77	16	100	167	221	117	50	170	33	60.3	2.0	14	F05/F07	773817	773806
65	98	19	127	218	302	154.5	63.5	220	40	76.1	2.0	17	F07/F10	773818	773807
80	110	19	188	250	302	166.5	83.5	300	65	88.9	2.3	17	F07/F10	773819	773808
100	138	24	221	317	350	219.5	97.5	325	65	114.3	2.3	22	F10	773820	773809

1.) The ball valves with bare shaft are suitable for automated operation with pneumatic or electric rotary actuators.

### 3.2. Version DIN 11850 R2

**Note:**  
Dimensions in mm

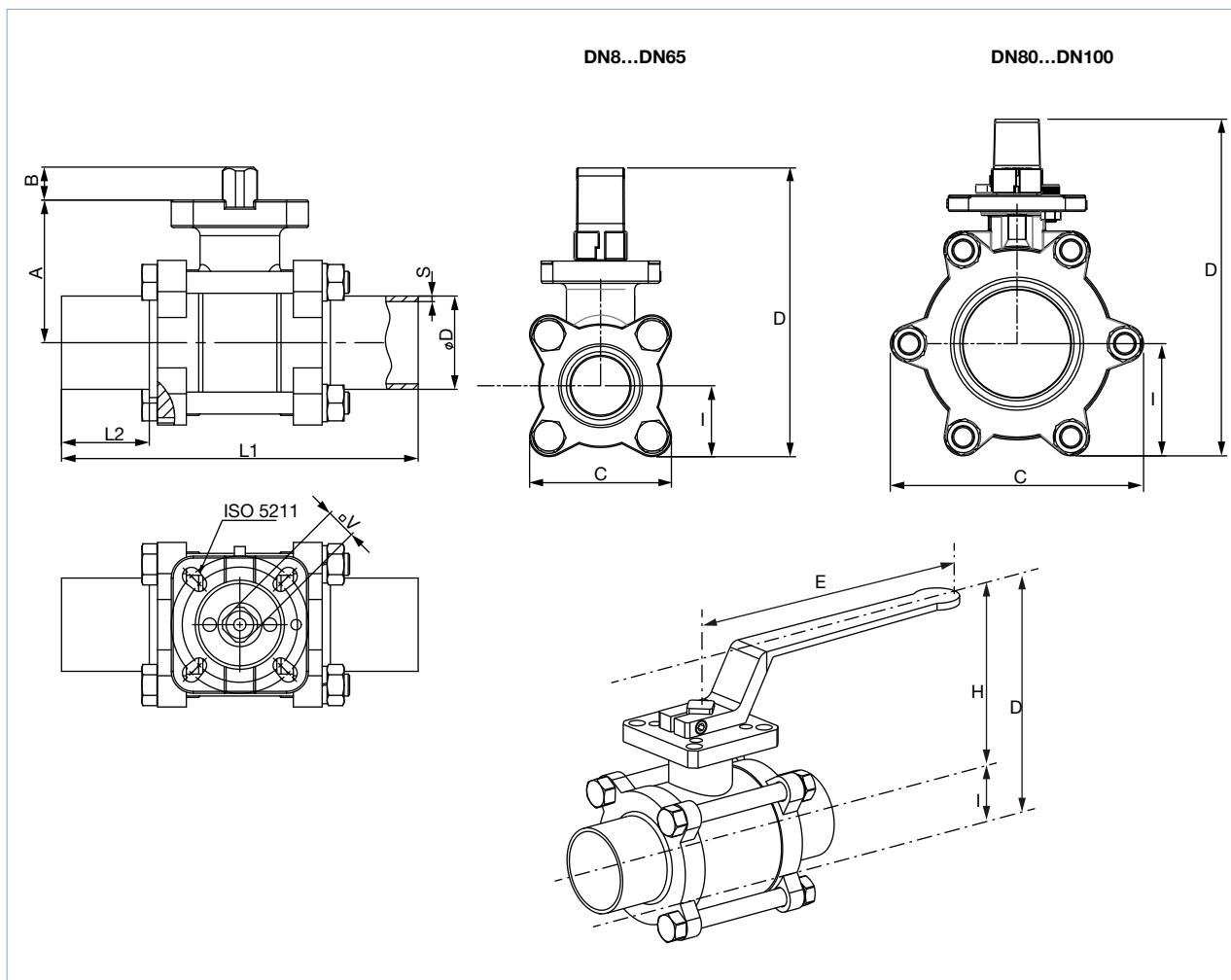


Orifice [mm]	A	B	C	D	E	H	I	L1	L2	Ø D	S	V	ISO 5211	Article no.	
														Manual operated	Bare shaft <sup>1.)</sup>
10	40	9	47	88	125	64.5	23.5	100	23	13.0	1.5	9	F03/F04	351683	351667
15	40	9	47	88	125	64.5	23.5	100	25	19.0	1.5	9	F03/F04	351684	351668
20	44	9	53.5	95	125	68	27	105	25	23.0	1.5	9	F03/F04	351685	351669
25	52	12	60.5	123	189	93	30	115	25	29.0	1.5	11	F04/F05	314427	351670
32	58	12	71	133	189	97.5	35.5	140	33	35.0	1.5	11	F04/F05	351686	351671
40	68	12	81.5	147	221	106.5	40.5	150	33	41.0	1.5	14	F05/F07	351687	351672
50	77	16	100	167	221	117	50	170	33	53.0	1.5	14	F05/F07	351688	351673
65	98	19	127	218	302	154.5	63.5	220	40	70.0	2.0	17	F07/F10	351689	351674
80	110	19	188	250	302	166.5	83.5	300	65	85.0	2.0	17	F07/F10	351690	351675
100	138	24	221	317	350	219.5	97.5	325	65	104.0	2.0	22	F10	351691	351676

1.) The ball valves with bare shaft are suitable for automated operation with pneumatic or electric rotary actuators.

### 3.3. Version ASME BPE

**Note:**  
Dimensions in mm



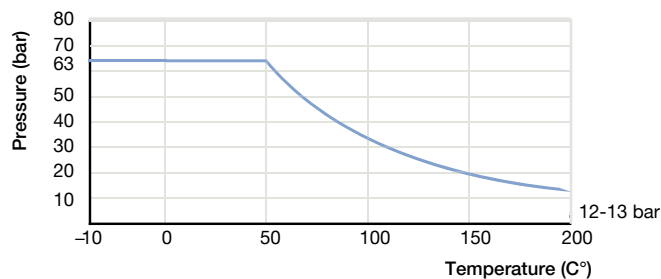
Orifice [Inch]	A	B	C	D	E	H	I	L1	L2	Ø D	S	V	ISO 5211	Article no.	
														Manual operated	Bare shaft <sup>1.)</sup>
3/8"	40	9	47	88	125	64.5	23.5	95	23	9.53	0.89	9	F03/F04	351677	351661
1/2"	40	9	47	88	125	64.5	23.5	100	20	12.70	1.65	9	F03/F04	351678	351662
3/4"	44	9	53.5	95	125	68	27	105	25	19.05	1.65	9	F03/F04	344217	344216
1"	52	12	60.5	123	189	93	30	115	25	25.40	1.65	11	F04/F05	343002	343003
1 1/2"	68	12	81.5	147	221	106.5	40.5	150	33	38.10	1.65	14	F05/F07	351679	343004
2"	77	16	100	167	221	117	50	170	33	50.80	1.65	14	F05/F07	351680	351663
2 1/2"	98	19	127	218	302	154.5	63.5	220	40	63.50	1.65	17	F07/F10	351681	351664
3"	110	19	188	250	302	166.5	83.5	300	65	76.20	1.65	17	F07/F10	351682	351665
4"	138	24	221	317	350	219.5	97.5	325	65	101.60	2.11	22	F10	345207	351666

1.) The ball valves with bare shaft are suitable for automated operation with pneumatic or electric rotary actuators.

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## 4. Performance specifications

### 4.1. Pressure temperature diagram



### 4.2. Torques

Torques - for ball valves with a PN 16 pressure rating											
DN [mm]	8	10	15	20	25	32	40	50	65	80	100
Breakaway torque [Nm]	6	6	10	14	17	24	29	44	78	112	140
Running torque [Nm]	4	4	7	9	11	16	19	30	52	89	112

## 5. Product accessories

### 5.1. Wearing part set for ball valve Type 2654 Hygienic

**Note:**

Detailed ordering information can be found in chapter [“Wearing part set for ball valve Type 2654 Hygienic”](#) on page 9.

Description	Quantity	Material
V-Packing / Stem Packing	4	PTFE-FDA
O-Ring	1	Silicone
Thrust washer	1	PTFE-FDA
Seat	2	PTFE-SS-FDA (50% stainless steel reinforced)
Body Gasket	2	PTFE-FDA

### 5.2. Lever for ball valve Type 2654 Hygienic

**Note:**

- Casted lever in 1.4408, screw and travel stop included.
- Electropolished
- Eyelet to lock the ball valve via pad lock or screw.
- Detailed ordering information can be found in chapter [“Lever for ball valve Type 2654 Hygienic”](#) on page 10.



## 6. Ordering information

### 6.1. Bürkert eShop – Easy ordering and quick delivery



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### 6.3. Ordering chart ISO 1127 / ISO 4200

#### Note:

Detailed ordering information can be found in chapter [“3.1. Version ISO 1127 / ISO 4200”](#) on page 5.

### 6.4. Ordering chart DIN 11850 R2

#### Note:

Detailed ordering information can be found in chapter [“3.2. Version DIN 11850 R2”](#) on page 6.

### 6.5. Ordering chart ASME BPE

#### Note:







Detailed ordering information can be found in chapter [“3.3. Version ASME BPE”](#) on page 7.






### 6.6. Ordering chart accessories

#### Wearing part set for ball valve Type 2654 Hygienic






#### Note:

Detailed information can be found in chapter [“5.1. Wearing part set for ball valve Type 2654 Hygienic”](#) on page 8.

DN [mm]	Article no.
8	773821 
10	773822 
15	773823 
20	773824 
25	773825 
32	773826 

DN [mm]	Article no.
40	773827 
50	773828 
65	773829 
80	773829 
100	773830 

**Lever for ball valve Type 2654 Hygienic**

DN [mm]	Article no.
8...20	773768 
25...32	773769 
40...50	773770 
65...80	773771 
100	773772 

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