

SMS Ball valves

Model **61371** 2-way ball valve, plain ends 304 or 316L stainless steel



Specifications

Dimensions: DN25 to DN104 (1" to 4")

Connections: to be welded

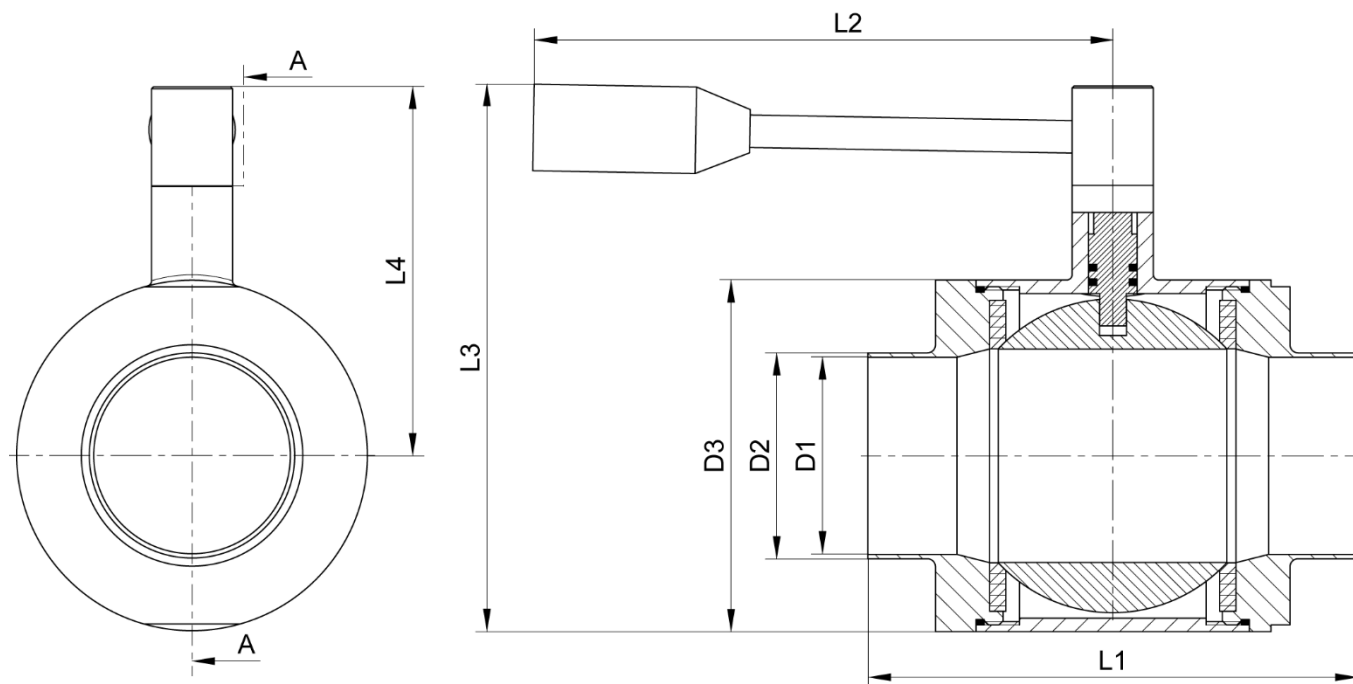
Operating pressure:

- PN20 for DN25
- PN15 from DN38 to DN76
- PN10 for DN104

Temperature: -20°C to +90°C

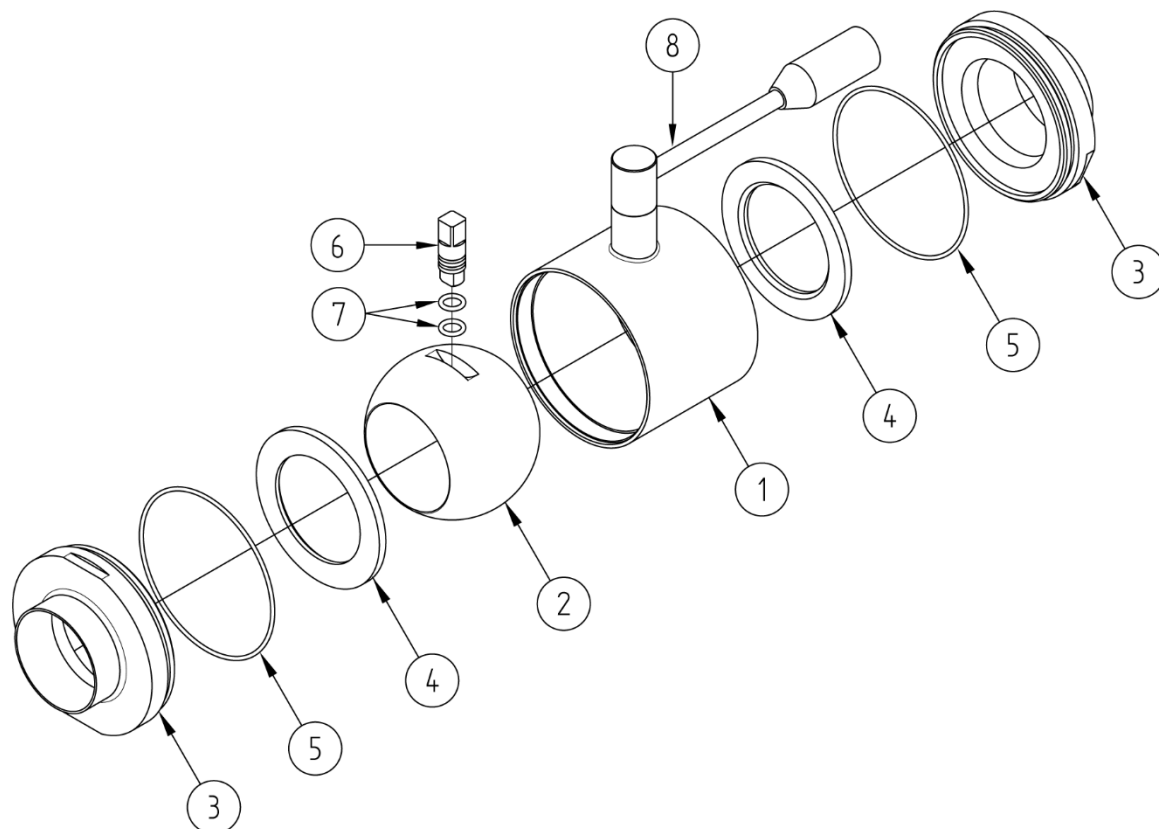
Material: 304 or 316L stainless steel

PTFE and NBR gaskets as standard



A-A CROSS SECTION

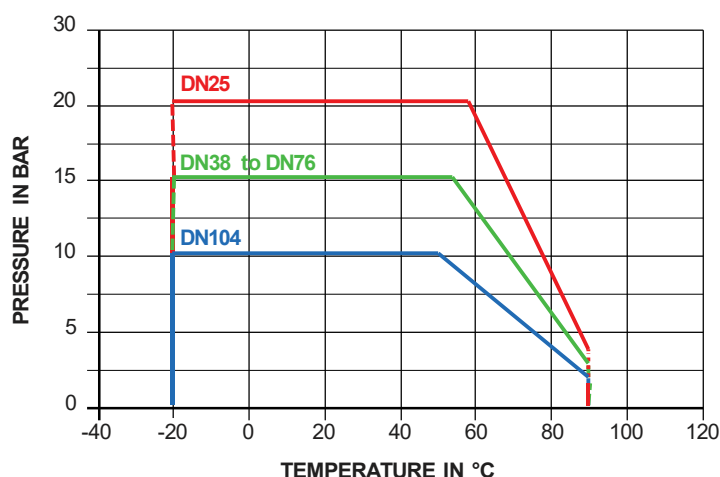
DN (mm)	NB (inches)	D1 (mm)	D2 (mm)	D3 (mm)	L1 (mm)	L2 (mm)	L3 (mm)	L4 (mm)	Weight (kg)	Part number SS 304	Part number SS 316L
25	1"	22.4	25.4	51	103	120.5	92	75.3	0.90	261371-25	661371-25
38	1 1/2"	35.1	38.1	72.5	131	152.5	124	102	1.10	261371-38	661371-38
51	2"	48	50.8	88	138	157	139	110.6	1.90	261371-51	661371-51
63	2 1/2"	60.5	63.5	88	138	157	139	134.3	3.80	261371-63	661371-63
76	3"	73	76.1	124	181	213.5	199	139	5.20	261371-76	661371-76
104	4"	100	104	160	206	270	241	162	8.60	261371-104	661371-104



N°	Part Name	Material
1	BODY	AISI 304 / AISI 316L
2	BALL	AISI 304 / AISI 316L
3	PLAIN END	AISI 304 / AISI 316L
4	SEAT	PTFE
5	BODY GASKET	NBR
6	SHAFT	AISI 304 / AISI 316L
7	GASKET (SHAFT/BODY)	NBR
8	HANDLE	AISI 304 / AISI 316L

Pressure and temperature

For pressure/temperature ratings, see the graph below.



Warning: If the ball valve is used with fluids that have a temperature above 60°C then people could burn themselves if they touch the ball valve.

Fluids

This valve is suitable for non-abrasive and non-coagulable fluids, as long as the fluids are chemically compatible with the valve parts that they can come into contact with.

Assembly and maintenance instructions

Installation

You can install the valve in any position. However, check that all fluids can flow through it freely.

Check that there is enough space to move the valve's handle and to carry out maintenance operations where you are planning to install the valve.

Check that all piping is perfectly aligned and that the piping support structure is dimensioned so that the valve is not subject to any external stresses. The piping support structure must only support the pipes, not the valve.

How to install a valve with plain ends:

Welding must be carried out by qualified personnel. It is not necessary to disassemble the valve to weld it to the piping.

However, you must avoid overheating the plain end flanges, as this would damage the gaskets between the flanges and the body (part 5).

Clean the installation leaving the valve fully open so that there are no impurities between the ball and the body.

Check the valve is operating correctly.

Pressure test the installation according to the relevant standards (e.g. EN 12266-1), but do not exceed the valve's specifications.

Maintenance

The valve does not require any specific maintenance if it is used in normal operating conditions.

If the valve is never opened or closed during normal operation then you should regularly open and close the valve to check that it is still working correctly.

You may need to change some of the valve's parts due to unusual wear and tear, or if a fluid has damaged the valve and caused a leak or malfunction.

If this is the case see the "Assembly / Disassembly" section below.

Assembly / Disassembly

The maintenance and removal/reassembly of the ball valve must be carried out by personnel who are qualified and trained for this type of intervention.



Warning: Before you work on the valve, check that the installation has been stopped and that the piping is empty and is not pressurised.

Warning: If the ball valve is used with fluids that have a temperature above 60°C then people could burn themselves if they touch the ball valve.

Warning: Beware of hazardous materials - follow the instructions provided by the suppliers.

For DN25 valves

- A** Close the valve.
- B** Remove the pin from the handle **8** using a pin punch and then remove the handle **8**.
- C** Unscrew the two ends **3** and remove the two seat parts **4**.
- D** Remove the ball **2**.
- E** Press the shaft **6** in order to extract it through the inside of the valve's body **1**.



Replace the worn gaskets(parts **4,5** and **7**).

Follow the disassembly steps in reverse order to reassemble the valve.

Pressure test the valve and check that it can be opened and closed before you put the installation back into service.

For DN38 to DN104 valves

- A** Close the valve.
- B** Unscrew the first part of the handle **8** and then remove the second part of the handle **8**.
- C** Unscrew the two ends **3** and remove the two seat parts **4**.
- D** Remove the ball **2**.
- E** Remove the retaining ring, located on the shaft, through the inside of the valve's body.
- F** Press the shaft **6** in order to extract it from the valve's body **1**.



Replace the worn gaskets(parts **4,5** and **7**).

Follow the disassembly steps in reverse order to reassemble the valve.

Pressure test the valve and check that it can be opened and closed before you put the installation back into service.

Standards and compliance

- This valve complies with European Pressure Equipment Directive (PED) 2014/68/EU Article 4 paragraph 3 (formerly 97/23/EC Article 3 paragraph 3)
- This valve complies with EC Directive 1935/2004