

Two-Way Ball Valves

Specifications

Nordson two-way ball valves regulate or change the direction of fluid flow. Ball valves have the following specifications.

Ports:	$\frac{3}{8}$ -in. NPT
Seals:	PTFE
Maximum working pressure:	207 bar (3000 psi)
Maximum working temperature:	232 °C (450 °F)
Valve dimensions:	See Figure 1

Ball Valve Repair

See Figure 1.

Disassembly

1. Remove the fillet-head screw (5) from the handle (4). Remove the handle from the ball valve.
2. Remove the flat spring (3) from the stem (1).
3. Unscrew the stem gland nut (6) from the housing (10). Pull the stem (1) out of the valve body.
4. Remove the thrust washer (7) and the stem packing (2).
5. Unscrew the body cap (9) from the housing.
6. Remove the ball (12) and ball seats (11). Remove and discard the body seal (8).

Clean and inspect the valve parts. Replace any worn or damaged parts.

Assembly

1. Install new ball seats (11) in the housing (10) and body cap (9). Install the new ball (12) into the housing, then screw the body cap into the housing hand-tight.



CAUTION: Do not tighten the body cap while the valve is cold. This forces the body seats out of the housing and cap seats.

2. Install a new thrust washer (7) in the housing.

3. Install a new stem packing (2) on the stem (1). Insert the stem (1) into the valve body, aligning the end of stem (1) with the slot in the ball (12).
4. Install the stem gland nut (6) over the stem (1). Screw the gland nut into the housing and tighten it hand-tight.
5. Heat the ball valve for 2.5 hours at 350 °F (177 °C) to form the ball seats, then tighten the body cap (9) and stem gland nut (6) securely while the valve is still hot.
6. When the valve has cooled, insert the flat spring (3) into the groove in the stem (1).
7. Install the handle (4) over the stem (1). Align the holes in the handle and stem. Install the fillet-head screw (5) into the handle and tighten it securely.

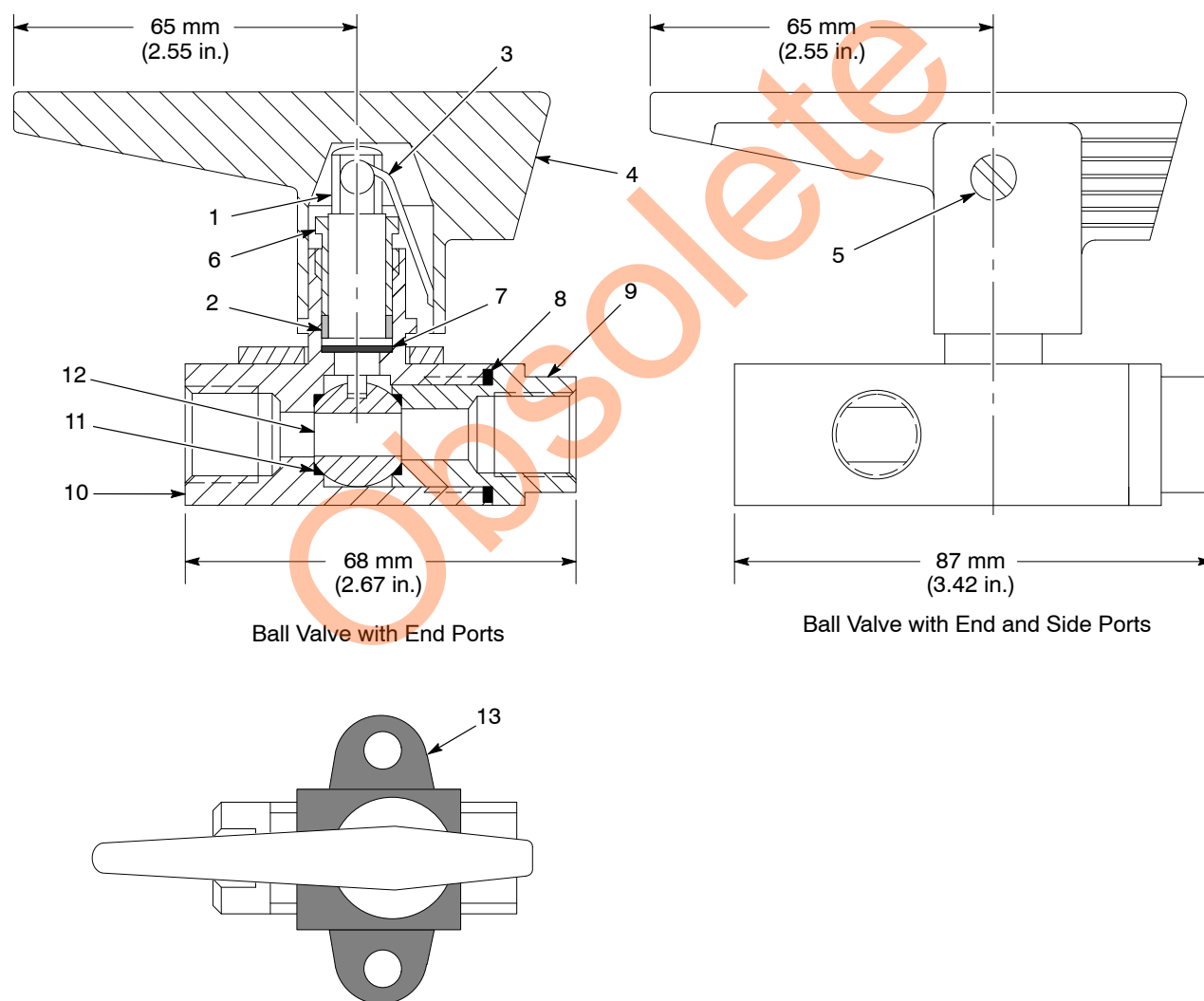


Figure 1 Ball Valve Dimensions and Parts

Parts

To order parts, call the Nordson Finishing Customer Support Center at (800) 433-9319 or your local Nordson representative.

Ball Valves

See Figure 1.

Item	Part	Description	Quantity	Note
—	750130	VALVE, ball, stainless steel	1	A
1	750134	• STEM	1	
2	750046	• PACKING, stem	1	
3	750048	• SPRING, flat, 1.125 x 0.218 OD x 0.026 in.	1	
4	750049	• HANDLE	1	
5	750050	• SCREW, fillet head, #8-32 x 0.875 in., steel, zinc, grade 5	1	
6	750045	• NUT, gland, stem	1	
7	750047	• WASHER, thrust, 0.343 x 0.500 x 0.020 in.	1	
8	750060	• SEAL, body	1	
9	750136	• CAP, body	1	
10	750131	• HOUSING, valve	1	A
11	750059	• SEAT, ball	2	
12	750135	• BALL	1	
13	750055	OPTIONAL BRACKET	1	
NOTE A: 316 is etched on the housing of stainless steel ball valves for identification.				

Ball Valve Repair Kit

See Figure 1.

Item	Part	Description	Quantity	Note
—	106251	KIT, service, packing valve	1	
2	750046	• PACKING, stem	1	
3	750048	• SPRING, flat, 1.125 x 0.218 x 0.026 in.	1	
7	750047	• WASHER, thrust, 0.343 x 0.500 x 0.020 in.	1	
8	750060	• SEAL, body	1	
11	750059	• SEAT, ball	2	

Obsolete

Issued 10/21

Original copyright date 1981. Nordson and the Nordson logo are registered trademarks of Nordson Corporation.

Loctite is a registered trademark of Henkel Loctite Corporation.