# Wet-R-Dri Butterfly Valves

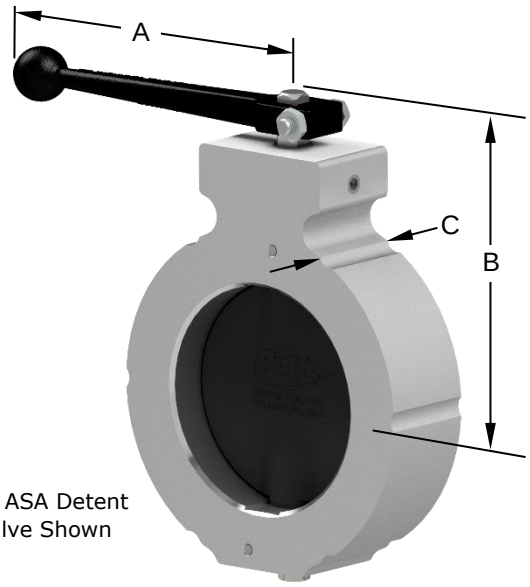
*ASA/ANSI Detent Models*



The Betts Wet-R-Dri Valve is a lightweight and compact quarter turn in-line stop valve. This easily maintained and versatile valve is widely used for liquid, gaseous or dry products and is available in a variety of sizes. The manual detent model provides a positive stop in the open and closed position as well as a detent spring and ball which assist in holding the disc in the open or closed position. The body is offered in aluminum, cast iron or stainless lined with coatings available for increased chemical resistance and extended service life. The disc seal and shaft O-rings are available in a variety of materials to optimize chemical resistance and service temperature range. Valve mounts between 125# or 150# ASA/ANSI flanges.

See Section 20 Page 5B for repair kits.
See Section 21 Page 1B for complete parts list.

| Size | Assembly Number | Body Material | Max. Working Pressure | Weight |
|---|---|---|---|---|
| 2” | WD221AL* | ALUMINUM | 75 psi [5.17 bar] | 2.5 lbs. [1.13 kg] |
| | WD221GI* | CAST IRON | | 4.7 lbs. [2.13 kg] |
| 3” | WD321AL* | ALUMINUM | 75 psi [5.17 bar] | 5.1 lbs [2.31 kg] |
| | WD321GI* | CAST IRON | | 11.0 lbs [4.99 kg] |
| 4” | WD421AL* | ALUMINUM | 75 psi [5.17 bar] | 6.8 lbs [3.08 kg] |
| | WD421GI* | CAST IRON | | 14.4 lbs [6.53 kg] |
| 5” | WD521AL* | ALUMINUM | 50 psi [3.44 bar] | 8.3 lbs [3.76 kg] |
| 6” | WD621AL* | ALUMINUM | 50 psi [3.44 bar] | 12.2 lbs [5.53 kg] |
| 8” | WD821AL* | ALUMINUM | 50 psi [3.44 bar] | 17.9 lbs [8.12 kg] |




4” ASA Detent Valve Shown

**Commonly used Suffixes**
**(add to end of assembly number)**
001 = E-Coated Valve Body
002 = Grease Fittings in shafts
004 = Valve less handle
019 = SS Shafts w/ SS Liner
032 = Left Hand Operation
046 = E-Coated Valve Left Hand Operation
089 = 225 psi tested w/ Fluorosilicone O-rings

* Replace asterisk in part number to designate disc coating.

| Material Code for Disc | Temp. Range |
|---|---|
| **B** = Black Nitrile (Buna-N) | -40°F to +240°F [-40°C to +116°C] |
| **WB** = White FDA Nitrile (Buna-N) | |
| **OP** = White FDA Nitrile w/ SS Insert | |
| **VB** = FKM (Viton™ B) type B | +9°F to +400°F [-13°C to +204°C] |
| **VF** = FKM GFLT-S | -11°F to +400°F [-24°C to +204°C] |
| **V** = FKM (Viton™ A) type A | 0°F to +400°F [-17°C to +204°C] |
| **U** = Black Urethane | -40°F to +200°F [-40°C to +93°C] |
| **E** = Black EPDM | -50°F to +250F [-45°C to +121°C] |
| **WE** = White EPDM | |
| Not all materials are available for every valve size. Actual temperature values may vary due to service conditions. | |

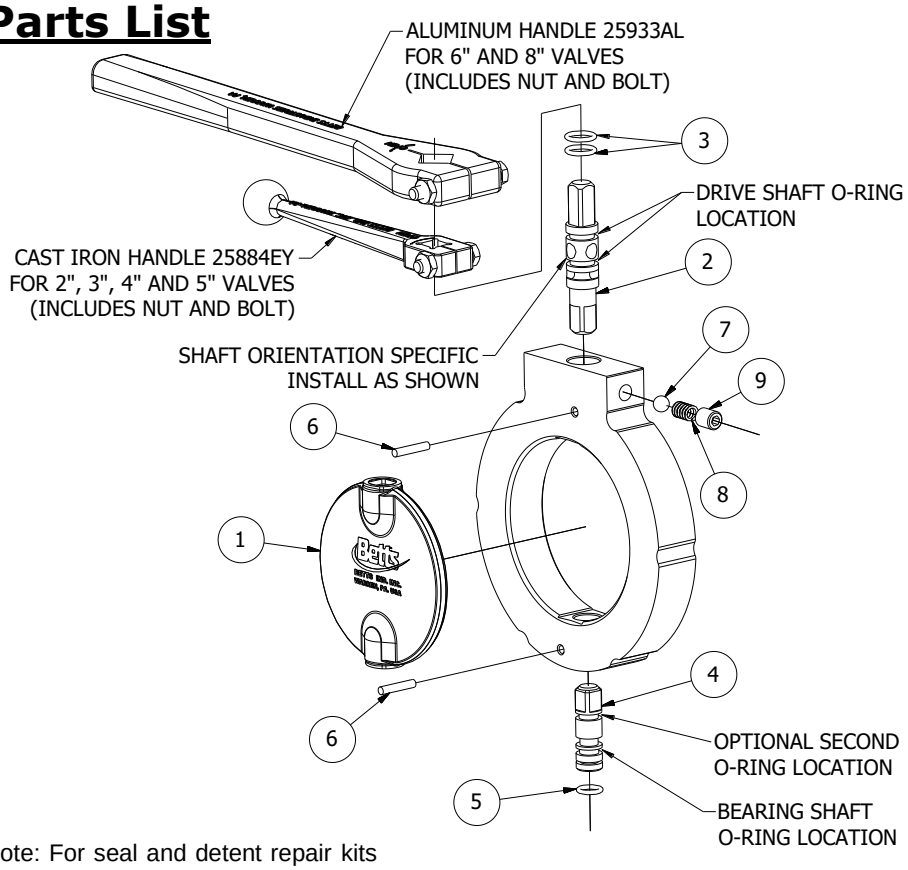
| DIMENSIONS | | | | | |
|---|---|---|---|---|---|
| Size | A | B | C | O.D. | I.D. |
| 2” | 6 3/4” [171.5 mm] | 4 1/4” [107.9 mm] | 1 1/8” [28.6 mm] | 3 3/4” [95.3 mm] | 2 1/4” [57.2 mm] |
| 3” | 6 3/4” [171.5 mm] | 5 5/16” [134.9 mm] | 1 3/4” [44.5 mm] | 5 5/8” [142.9 mm] | 3 3/8” [85.7 mm] |
| 4” | 6 3/4” [171.5 mm] | 5 13/16” [147.6 mm] | 2” [50.8 mm] | 6 5/8” [168.3 mm] | 4 3/8” [111.1 mm] |
| 5” | 6 3/4” [171.5 mm] | 6 3/8” [161.9 mm] | 2 1/8” [54.0 mm] | 7 5/8” [193.7 mm] | 5 7/16” [138.11 mm] |
| 6” | 12” [304.8 mm] | 7” [177.8 mm] | 2 1/8” [54.0 mm] | 8 5/8” [219.1 mm] | 6 1/8” [155.6 mm] |
| 8” | 12” [304.8 mm] | 8” [203.2 mm] | 2 1/2” [63.5 mm] | 10 7/8” [276.2 mm] | 8” [203.2 mm] |

**Installation:** The Wet-R-Dri Valve may be mounted in any position with handle located for easy operation. Standard right-hand operation opens by turning handle ¼ turn counterclockwise and left-hand operation (clockwise opening) is available for valve with suffix “032”. Care should be taken when mounting valve to be sure the I.D. of adjoining flanges or pipe is large enough to allow the disc of the valve to open freely. Valve mounts between 125# or 150# ASA/ANSI flanges.

⚠ **WARNING:** This product can expose you to chemicals including Chromium (hexavalent compounds), which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov

Designed, engineered and manufactured in the USA.

## Parts List




Note: For seal and detent repair kits see catalog Section 20 Page 5B.

| Material Code for Disc & O-Rings |
|---|
| **BN** = Black Nitrile (Buna-N) |
| **WB** = White FDA Nitrile (For Disc Only) |
| **OP** = White FDA Nitrile w/ Stainless Insert (For Disc Only) |
| **VB** = FKM type B (Viton™ B) |
| **VF** = FKM GFLT-S |
| **VT** = FKM type A (Viton™ A) |
| **PY** = Black Urethane |
| **EP** = Black EPDM |
| **WE** = White EPDM (For Disc Only) |
| **FS** = Fluorosilicone (For O-rings Only) |

| No. | Description | Material | 2” | 3” | 4” | 5” | 6” | 8” |
|---|---|---|---|---|---|---|---|---|
| 1 | Disc | See Mat’l Table | WD101-2_ _ * | WD101-3_ _ * | WD101-4_ _ * | WD101-5_ _ * | WD101-6_ _ * | WD101-8_ _ * |
| 2 | Drive Shaft | Steel Zinc Plated | 27053MS001 | 27051MS001 | 27051MS001 | 27051MS001 | 16229MS001 | 16229MS002 |
| | | 303 Stainless | 27053SL001 | 27051SL001 | 27051SL001 | 27051SL001 | 16229SL | 16229SL002 |
| | Drive Shaft with Grease Fittings | Steel Zinc Plated | 27053MS002 | 27051MS002 | 27051MS002 | 27051MS002 | 16229MS002 | 16229MS002 |
| | | 303 Stainless | 27053SL002 | 27051SL002 | 27051SL002 | 27051SL002 | 16229SL002 | 16229SL002 |
| 3 | O-ring (Drive Shaft) | See Mat’l Table | 17889_ _ * | 17889_ _ * | 17889_ _ * | 17889_ _ * | 18831_ _ * | 18831_ _ * |
| 4 | Bearing Shaft | Steel Zinc Plated | 16006MS | 15913MS | 15913MS | 15913MS | 16230MS001 | 16230MS002 |
| | | 303 Stainless | 16006SL | 15913SL | 15913SL | 15913SL | 16230SL | 16230SL002 |
| | Bearing Shaft with Grease Fittings | Steel Zinc Plated | 16006MS002 | 15913MS002 | 15913MS002 | 15913MS002 | 16230MS002 | 16230MS002 |
| | | 303 Stainless | - | 15913SL002 | 15913SL002 | 15913SL002 | 16230SL002 | 16230SL002 |
| 5 | O-ring (Bearing Shaft) | See Mat’l Table | 17781_ _ * | 18141_ _ * | 18141_ _ * | 18141_ _ * | 18831_ _ * | 18831_ _ * |
| 6 | Driv-Lok-Pin | Steel Zinc Plated | 9Q4893 | 9Q4925A | 9Q4925 | 9Q4925 | 9Q4926 | 9Q4938 |
| 7 | Ball – Detent | Stainless | 9Z4856 | | | | | |
| 8 | Spring - Detent | Stainless | 15229SL | | | | | |
| 9 | Set Screw- Detent | Stainless | 9Q5838 | | | | | |

* Disc and O-ring material is specified by the letter code as shown table. Not all materials are available for every size.

**WARNING:** Use only genuine Betts Industries replacement parts. Substitute parts can impair the proper functioning of this product and void all warranties.

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