

Large Diameter Butterfly Valve with Gear Operator Model B333



The Model B333 Large Diameter Butterfly Valve provides efficient control of fluid flow in piping systems. It is a grooved-end bubble tight shut-off valve with end-to-end dimensions that meet MSS SP-67, Table 4 and a mounting pad that meets ISO 5211 for the mounting of power actuators. The valve is capable of bidirectional fluid flow at working pressures to 300 psi (20 bar) and may be positioned in any orientation.

The 14 to 24 inch (DN350 to DN600) Model B333 Butterfly Valve is configured with a worm type gear operator and consists of an epoxy powder coated ductile iron body and EPDM or Nitrile (NBR) rubber encapsulation dual-seal disc. The body and disc construction provides for increased strength and durability. The disc seal and body coating are compatible with a variety of chemicals and temperature ranges. Contact your Anvil Representative for specific recommendations on seal and coating selections.

Maximum Working Pressure: 300 psi (20 bar), non-shock cold water

Material Specifications

Valve Body

Ductile iron conforming to ASTM A536, Gr. 65-45-12, vulcaized body

Disc

Ductile Iron conforming to ASTM A536, Grade 65-45-12
Optional: Stainless Steel conforming to ASTM A351, Grade CF8

Stem Seals

O-Ring, EPDM

Body Coating

Epoxy paint, blue color

Disc Encapsulation

Grade "E" EPDM, Grade "T" Nitrile (NBR)

Shafts

Stainless steel conforming to ASTM A582, Type 431

Gear Operator Housing

Cast iron, conforming to ASTM A126-B

Set Screw

Cr-Mo Steel

Hex Nut

Carbon Steel

Spring Pin

Spring Steel

Seat Material:

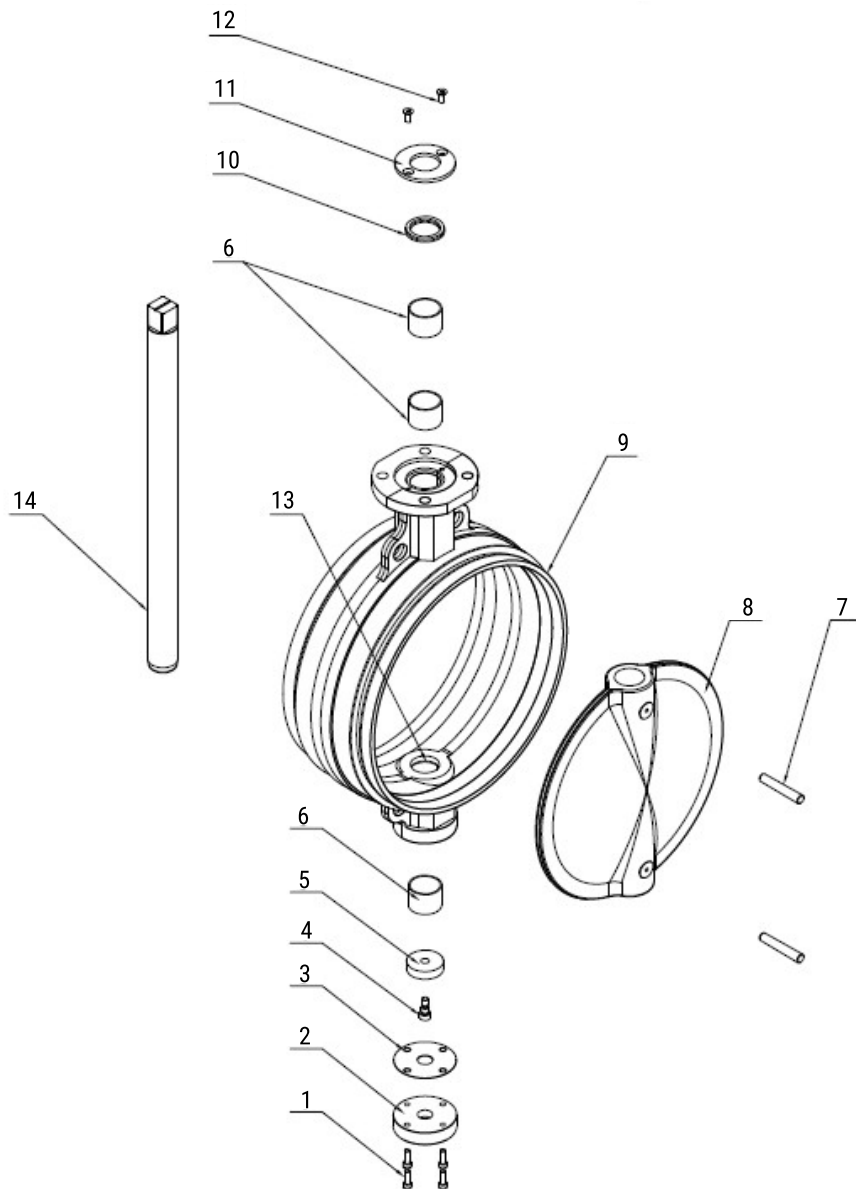
- Grade "E" EPDM – For service temperatures from -30°F to 200°F (-34°C to 93°C). Recommended for water service, dilute acids, alkalies, oil-free air, and many chemical services.
Note: Not recommended for use in petroleum services.
- Grade "T" Nitrile – For service temperatures from -20°F to 180°F (-29°C to 82°C). Recommended for petroleum products, air with oil vapors, vegetable oils, and mineral oils. They are not recommended for use in hot water services.
Note: Not recommended for use in hot water services.

Contact an ASC Engineered Solutions Sales Representative for specific recommendations on seat material.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

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Material Specifications

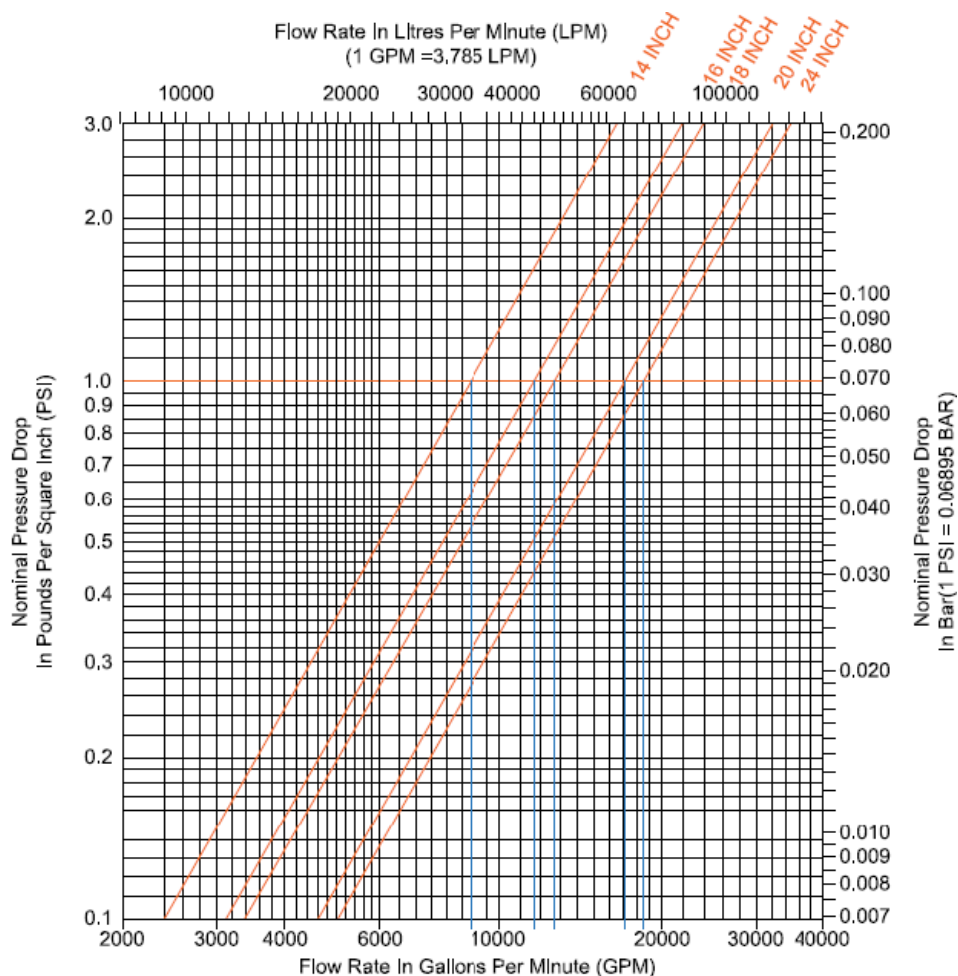
- 1 Cap Screws** Type SS304 Stainless Steel
- 2 Bottom Cover** Ductile Iron conforming to ASTM A 536, Grade 65-45-12
- 3 Gasket** Grade "E" EPDM
- 4 Shoulder Screws** Carbon Steel
- 5 Adjusting Washer** Copper
- 6 Bushing** PAP
- 7 Pin** Type SS316 Stainless Steel
- 8 Disc** Ductile Iron conforming to ASTM A 536, Grade 65-45-12
Optional: Stainless Steel conforming to ASTM A351 Gr CF8M
- 9 Valve Body** Ductile Iron conforming to ASTM A 536, Grade 65-45-12, vulcanized body
- 10 Seat Ring** Properties as specified in accordance with ASTM D 2000.
- 11 Cover** Type SS304 Stainless Steel
- 12 Screws** Countersunk Philips Type SS304 Stainless Steel
- 13 Body Lining Rubber** Grade "E" EPDM
- 14 Shaft** Type SS431 Stainless Steel



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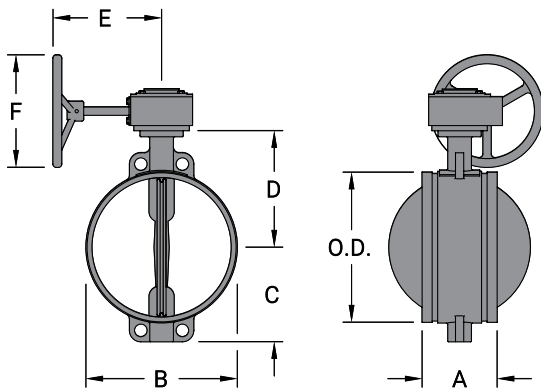
Note: For design purposes, a safety factor of 15% to 20% should be applied to the values in the above table.



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B333 Large Diameter Butterfly Valve

Valve Size	O.D.	Operating Torque	Dimensions						Approx. Wt. Ea.
			A	B	C	D	E	F	
In./mm	In./mm	In-lb/Nm	In./mm	In./mm	In./mm	In./mm	In./mm	In./mm	Lbs./Kg
14	15.30	1328	7.01	15.30	10.71	14.49	12.60	15.75	130.0
350	388.2	1800	178	388.2	272	368	320	400	59
16	17.40	1328	7.01	17.40	12.80	15.75	12.60	15.75	147.4
400	441.96	1800	178	441.96	325	400	320	400	67
18	19.50	1328	7.99	19.50	13.98	16.61	12.60	15.75	223.5
450	495.30	1800	203	495.30	355	422	320	400	101.4
20	21.60	1328	8.50	21.60	15.16	18.90	14.57	15.75	292.6
500	548.64	1800	216	548.64	385	480	370	400	133.0
24	28.35	2066	10.00	28.35	17.72	22.13	14.57	19.69	352.0
600	720.0	2800	254	720.0	450	562	370	500	160.0

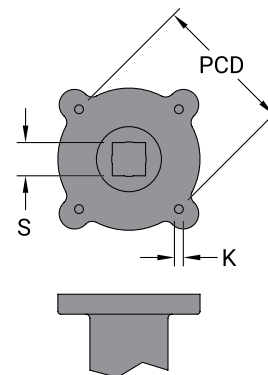
These torque values were derived from test data with non-lubricated valves in water, non-pressurized at ambient temperatures

For information on alternative sizes, contact an ASC Engineered Solutions Sales Representative.

Note: The torque values are based on liquid applications. For dry or non-lubricating applications add a 25% service factor to the above values.

Gear Operator Mounting Dimensions

Valve Size	PCD Dia.	Dimensions	
		Bolt Size K	S
In./mm	In./mm	In./mm	In./mm
14	4.92	M14	1.06
350	125		27
16	4.92	M14	1.06
400	125		27
18	5.51	M18	1.42
450	140		36
20	5.51	M28	1.42
500	140		36
24	6.50	M22	1.81
600	165		46



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