



GRINNELL Model B480 Butterfly Valve with Lever Handle Grooved End, Stainless Steel

General Description

The GRINNELL Model B480 Grooved End Stainless Steel Butterfly Valve with Lever Handle is a grooved-end stainless steel butterfly valve designed for 300 psi service, supplied with a 10-position locking lever handle. The end-to-end dimensions conform to MSS SP-67. The body is investment cast in grade CF8M (Type 316) to ASTM A743 with integral neck and ISO mounting top flange. The neck height allows for pipe insulation up to two inches thick. The disc is a dual-seal type, encapsulated either with Grade "EN" EPDM for cold water services or with Grade "T" Nitrile for oil services. The Model B480 Stainless Steel Butterfly Valves with standard disc and Grade "EN" EPDM seat are UL classified to ANSI/NSF 61 and ANSI/NSF 372.

NOTICE

The GRINNELL Model B480 Grooved End Stainless Steel Butterfly Valve described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified for compatibility with the specific application. Always read and understand the installation instructions.

The owner is responsible for maintaining their mechanical system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.

Technical Data

Approvals

Certified to all requirements of NSF/ANSI 61, Annex G and NSF/ANSI 372

Sizes

2 through 6 Inches

⚠ CAUTION

Pressure performance values shown for GRINNELL couplings on light-wall (Sch. 5 and Sch. 10) stainless steel pipe are dependent on the use of the required special roll for roll grooving light-wall stainless steel pipe. Failure to utilize the required special roll for roll grooving light-wall stainless steel pipe may result in equipment failure.

Maximum Working Pressure

300 psi (20 bar)

Temperature Rating

- Grade "EN" EPDM seat material: -30°F (-34°C) to +230°F (110°C)
- For general service. Recommended for water service, dilute acids, alkalis, oil-free air and many chemical services.

Note: Not recommended for use in petroleum services.

- Grade "T" Nitrile seat material: -20°F (-29°C) to +180°F (+82°C)

Recommended for petroleum products, air with oil vapors, vegetable oils and mineral oils.

Note: Not recommended for use in hot water services.

Contact Grinnell Technical Services for specific recommendations on seat material.

Materials of Construction

Valve Body:

CF8M (Type 316) Stainless Steel conforming to ASTM A743 or A351, or A744 which is UL Classified in accordance with ANSI/NSF 61 and ANSI/NSF 372 for potable water use up to 180°F (82°C)



For fire protection pressure rating, listing and approval information, contact your GRINNELL representative.



For warranty terms and conditions, visit www.grinnell.com

Stems

Stainless Steel Type 410 conforming to ASTM A582

Disc

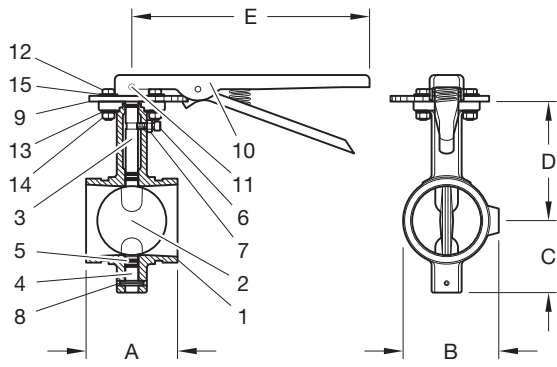
CF8M (Type 316) Stainless Steel conforming to ASTM A743 or A351, or A744 which is UL Classified in accordance with ANSI/NSF 61 and Annex G for potable water use up to 180°F (82°C)

Disc Encapsulation

Grade "EN" EPDM Rubber
Classified in accordance with ANSI/NSF 61 and ANSI/NSF 372 for potable water use up to 180°F (82°C), or Grade "T" Nitrile

O-rings

EPDM

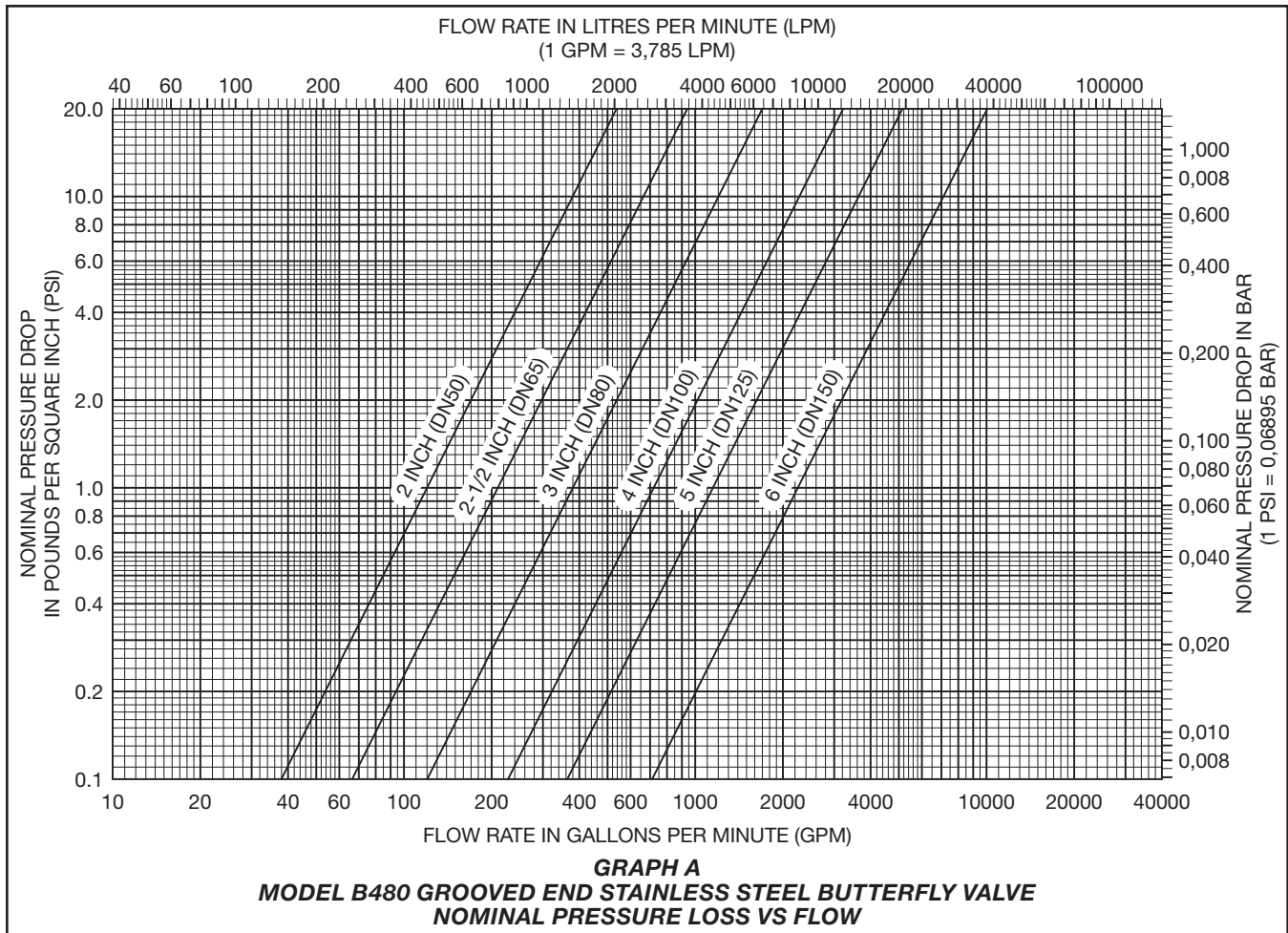


Detail	Part	Material	Qty.
1	Body	Stainless Steel	1
2	Disc	Stainless Steel	1
3	Upper Shaft	Stainless Steel	1
4	Lower Shaft	Stainless Steel	1
5	O-Ring	EPDM	5
6	Hex Socket Set Screw	Stainless Steel	1
7	Hex Nut	Stainless Steel	1
8	Roll Pin	Spring Steel	1
9	Throttle Plate	Stainless Steel	1
10	Lever-Lock Handle Assembly	Stainless Steel	1
11	Roll Pin	Spring Steel	1
12	Hex Bolt	Stainless Steel	2
13	Lock Washer	Stainless Steel	2
14	Hex Nut	Stainless Steel	2
15	Flat Washer	Stainless Steel	2

Nominal Pipe Size		Nominal Dimensions Inches mm					Operating Torque In.-Lbs. N-m	Weight Lbs. kg*
ANSI Inches DN	O.D. Inches mm	A	B	C	D	E		
2 50	2.375 60,3	3.19 81	2.756 70	2.480 63	4.17 106	7.56 192	78 8,80	5.0 2,3
2-1/2 65	2.875 73,0	3.81 97	3.386 86	2.677 68	4.28 111	7.56 192	84 9,50	7.0 3,2
- 76,1 mm	3.000 76,1	3.81 97	3.386 86	2.677 68	4.28 111	7.56 192	84 9,50	7.0 3,2
3 80	3.500 88,9	3.81 97	3.858 98	2.992 76	4.97 126	7.56 192	95 10,7	6.6 3,5
4 100	4.500 114,3	4.56 116	4.882 124	3.504 89	5.33 135	9.92 252	200 22,6	11.0 5,0
- 165,1 mm	6.500 165,1	5.81 148	7.008 178	4.488 114	6.62 168	9.92 252	310 34,9	20.2 9,2
6 150	6.625 168,3	5.81 148	7.008 178	4.488 114	7.25 184	13.46 342	310 34,9	20.2 9,2

* Weight includes the lever handle

FIGURE 1
MODEL B480 GROOVED END STAINLESS STEEL BUTTERFLY VALVE
NOMINAL DIMENSIONS



Installation

NOTICE

All replacement parts must be obtained from the manufacturer to assure proper operation of the valve.

In piping systems, butterfly valves should be located where operation, inspection, and maintenance are readily accessible.

When a valve closes “hard,” it may be due to debris lodged in the sealing area. This may be corrected by backing off the handle or handwheel and closing it again, several times if necessary. Never force the valve to seat by applying a wrench to the handwheel or extension to the lever, as it may distort the valve components or score the sealing surfaces.

To prevent rotation of the valve, the Model B480 Grooved End Stainless Steel Butterfly Valve is recommended to be installed with rigid type couplings such as the GRINNELL Figure 472 Coupling. If flexible couplings are used, additional support may be needed to prevent rotation.

Ordering Procedure

GRINNELL Products are available globally through a network of distribution centers. Visit www.grinnell.com for the nearest distributor.

When placing an order, indicate the full product name. Specify GRINNELL Model B480 Grooved End Stainless Steel Butterfly Valve(s) with Lever Handle, 300 psi, quantity, size(s), and disc encapsulation (EPDM or Nitrile).

