

WAFER-SPHERE® BUTTERFLY VALVES FOR STEAM SERVICE

WAFER-SPHERE high-performance butterfly valves are well suited for a wide range of steam applications. They are available in both lugged and wafer-style body designs. Sizes range from 2-1/2" – 60" (DN 65 – 1500) ANSI Class 150, 3" – 36" (DN 80 – 900) Class 300, and 3" – 24" (DN 80 – 600) Class 600.

WAFER-SPHERE valves offer a number of design features that make them the ideal choice for effective steam handling.

FEATURES

Tight Shut-Off

- Flexible PTFE seat design provides tight shut-off in either direction.

Ease of Operation

- Offset shaft and eccentric disc eliminates wear points at top and bottom of seat for higher cycle life and lower torque.

Low Maintenance

- Simply remove body insert and replace seat. Disassembly of disc and shaft is not required.

Single-Source Responsibility

- Purchase valves, actuators, and accessories completely mounted from one source.

Saturated Steam Ratings

| Series | Seat | Maximum Differential Pressure | |
|------------|------------|-------------------------------|---------|
| | | 200 psi* | 14 bar* |
| 815W, 815L | XTREME (X) | 200 psi | 14 bar |
| 830W, 830L | | 450 psi | 31 bar |
| 860W, 860L | | 350 psi | 24 bar |

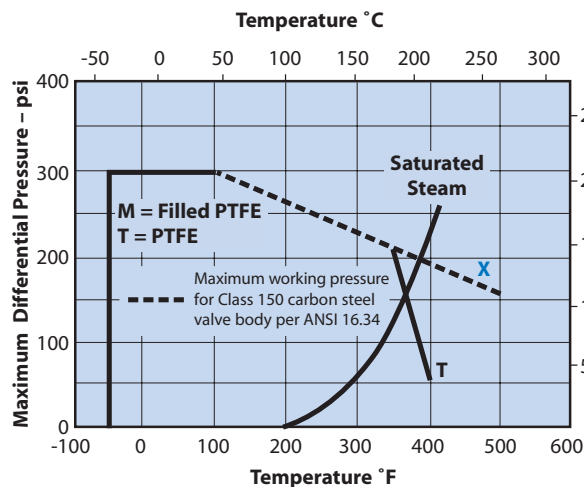
* Maximum rating of carbon steel body per ANSI B16.34 at corresponding saturated steam temperatures. Valves may be derated based on shaft material selection.

For throttling applications, WAFER-SPHERE valves with a filled PTFE seat are suitable for services with differential pressures as shown above, and throttling pressure drops as shown in Bulletin T150-3.

Seat Ratings

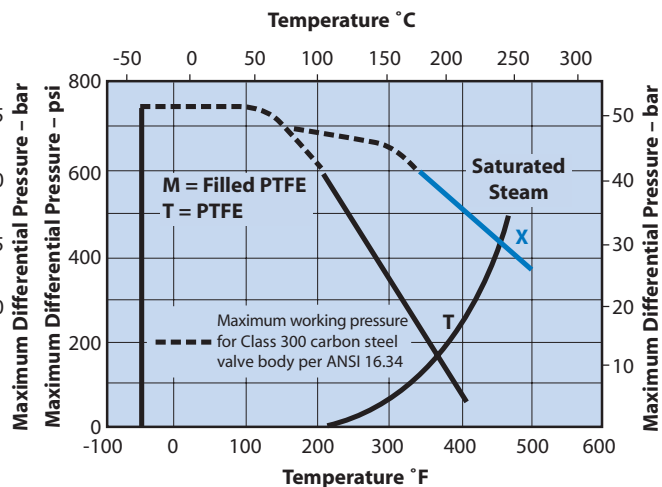
Seat ratings are based on differential pressure with the disc in the fully closed position and refer to seats only. Maximum body working pressures and test pressures of different materials are shown in the bulletins listed on the next page.

Type 815W and 815L Valve Seat Ratings



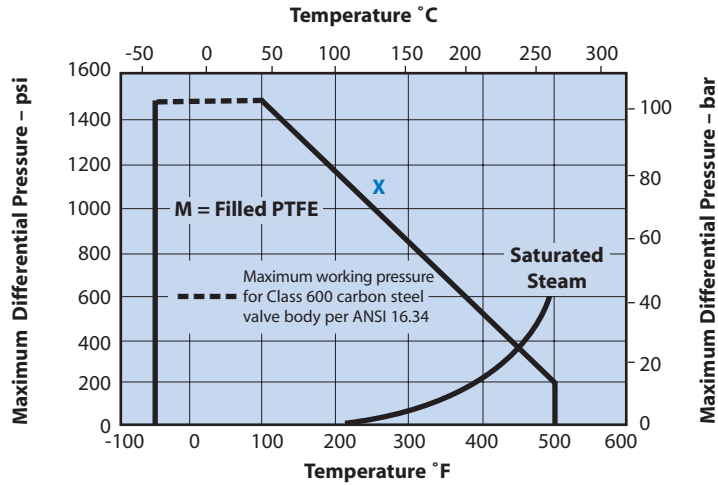
NOTE: 14" – 60" (DN 350 – 1500) valves equipped with 316 stainless or Alloy 20 shaft are rated for maximum differential pressure of 150 psi (10.3 bar).

Type 830W and 830L Valve Seat Ratings



NOTE: Valves equipped with 316 stainless or Alloy 20 shaft are rated for maximum differential pressure of 300 psi (20.7 bar).

Type 860W and 860L Valve Seat Ratings



HOW TO ORDER

Refer to the following bulletins for ordering information, dimensions, bill of materials, and other specifications of *WAFER-SPHERE* butterfly valves that are capable of filling a wide variety of steam service applications.

If *WAFER-SPHERE* valves are to be used in piping systems where steam hammer can be a problem, the valves should be equipped with manual gear actuators instead of operating handles for more gradual valve operation.

| | Bulletin |
|--|-----------------|
| 2-1/2" – 60" (DN 65-1500) ANSI Class 150 valves | W101-6 |
| 3" – 36" (DN 80-900) ANSI Class 300 valves | W101-6 |
| 3" – 36" (DN 80-900) ANSI Class 600 valves | W104-1 |
| 30" – 60" (DN 750-1500) Series 835 Process-Rated Class 150 valves | W105-1 |

Installation Instructions, Maintenance and Operation

IMO's (Installation, Maintenance, and Operating instructions) or AMI's (Assembly, Mounting, and Installation instructions) are shipped with the products. Additional copies of these instructions are available. Call your local Metso Automation Distributor, or visit our web site.

Metso Automation, Field Systems Division

Europe, Levytie 6, P.O.Box 310, 00811 Helsinki, Finland. Tel. int. +358 20 483 150. Fax int. +358 20 483 151

Europe (UK), 8 Pipers Wood Industrial Park, Waterlooville, Hampshire PO7 7XU UK. Tel. int. +44 (0)23 9223 8500. Fax int. +44 (0)23 9223 8510

North America, 44 Bowditch Drive, P.O.Box 8044, Shrewsbury, Massachusetts, 01545-8044 USA. Tel. int. +1 508 852 0200. Fax int. +1 508 852 8172

North America, 3100 Medlock Bridge Road, Suite 250, Norcross, GA 30071, USA. Tel. int. +1 770 446 7818. Fax int. +1 770 242 8386

Latin America, Av. Central, 181- Cháracas Reunidas, 12238-430, São Jose dos Campos. Tel. int. +55 12 335 3500. Fax int. +55 12 335 3535

Asia Pacific, 501 Orchard Road, #05-09 Wheelock Place, 238880 Singapore. Tel. int. +65 735 5200. Fax int. +65 735 2955

www.jamesbury.com

