

Models: 1606, 1646

Carbon Steel or Stainless Steel CHEXTER™ Check Valves Sizes: 2" - 12" (50 - 300mm)

| Pressure/Temperature - Non-Shock | | |
|----------------------------------|-----------------|-----------------|
| Model | Material | Rating |
| 1606-A | Carbon Steel | 2220psi @ 100°F |
| | | 153 bar @ 38°C |
| | | 1850psi @ 400°F |
| 1606-C | Stainless Steel | 128 bar @ 204°C |
| | | 2160psi @ 100°F |
| | | 149 bar @ 38°C |
| | | 1490psi @ 400°F |
| | | 103 bar @ 204°C |

1606
1646

Class 900, RF
Class 900, RTJ



Model 1606
Open

Typical Services

Can be used in a vast number of industries and applications. Included are:

- Industrial and Marine
 - Gas and liquid applications
 - Water filtration, oxygen systems, boiler feed lines
 - Centrifugal pump and compressor systems
- Utilities
 - All gas and liquid applications
- Process Industries (Refining, petro-chemical, mining, textiles, pulp and paper, etc.)
 - Variety of materials and trims for corrosive services

Features

- Compact design with short face-to-face dimensions for minimum space requirements.
- Single moving part insures long, trouble-free service life.
- Seal-ring is one piece, easily replaceable in the field.
- Interchangeable parts for ease of maintenance.
- Operates fully at low pressure differential.
- Spring returns disc to fully closed position prior to reverse flow, minimizing water hammer.
- Disc is counter-weighted, utilizing gravity to additionally insure closure.
- Soft seal is located out of the flow path to reduce erosion effects.
- High C_V values due to aerodynamic disc shape and near full port opening.
 - Superior to other check valve designs, similar to Butterfly valves

Construction

- Robust cast body is wafer style, featuring compact face-to-face dimensions to fit in small spaces.
- Designed to fit within ANSI bolt circles.
- Variety of trim and seat materials are available, both soft and metal-to-metal.
 - Parts are interchangeable
- Disc rotates on the hinge pin, creating very low pivot friction, so little wear in operation.
- Model 1606 features RF facing, Model 1646 has RTJ facing.

Installation

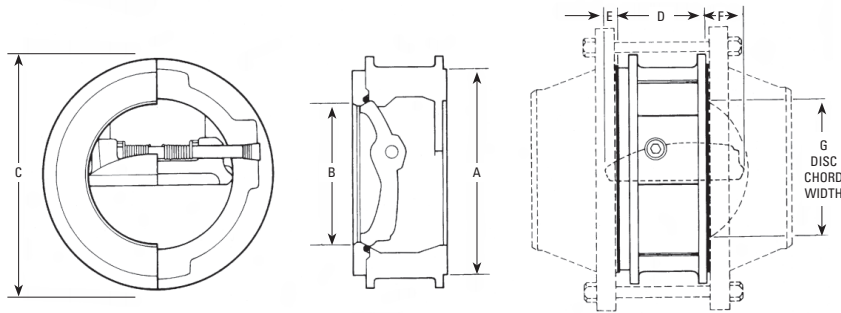
- Can be installed horizontally or vertically.
 - Consult factory for downward vertical flow applications.
 - In horizontal applications, valve should be installed top up, with shaft aligned horizontally with the top up (hinge pin plugs are above the pipe centerline)
- Good piping practice recommends installing a distance of 5 to 10 pipe diameters from elbows, pumps, or others turbulence-creating devices.
- Mueller Steam Specialty strongly recommends the installation of a strainer ahead of the pump to ensure protection of both the pump and the valve from foreign particles.

Materials

- See Information section of the CHEXTER™ Check section of the Mueller Steam Specialty Engineering binder for standard materials
- See Information section of the CHEXTER™ Check section of the Mueller Steam Specialty Engineering binder for How to Order instructions.

Dimensions

Raised Face And Flat Face Valves



2" – 12 (50 – 300)

| LINE SIZE | | DIMENSIONS | | | | | | | | | | | | |
|-------------------------------|-----|--------------------------------|-------|---|--------------------------------|-------|---------------------------------|-------|--------------------------------|------|---------------------------------|------|---------------------------------|-------|
| | | A | | B | C 900 CLASS | | D* | | E | | F | | G | |
| in. | mm | in. | mm | SAME VALVE FITS SCHEDULE 40 AND 80 LINE SIZES | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| 2 | 50 | 3 ⁵ / ₈ | 92.1 | | 5 ⁵ / ₈ | 142.9 | 1 ¹ / ₂ | 38.1 | 0 | 0 | 1/2 | 12.7 | 1 ¹⁵ / ₁₆ | 33.3 |
| 2 ¹ / ₂ | 65 | 4 ¹ / ₈ | 104.8 | | — | — | 1 ¹⁵ / ₁₆ | 49.2 | 1/16 | 1.6 | 9/16 | 14.3 | 2 ⁷ / ₈ | 60.3 |
| 3 | 80 | 5 | 127.0 | | 6 ⁵ / ₈ | 168.3 | 2 ¹ / ₈ | 54.0 | 1/8 | 3.2 | 3/4 | 19.1 | 2 ⁷ / ₈ | 73.0 |
| 4 | 100 | 6 ³ / ₁₆ | 157.2 | | 8 ¹ / ₈ | 206.4 | 2 ³ / ₄ | 69.9 | 1/8 | 3.2 | 1 ¹ / ₈ | 28.6 | 3 ⁷ / ₈ | 98.4 |
| 5 | 125 | 7 ⁵ / ₁₆ | 185.7 | | — | — | 3 ¹ / ₂ | 88.9 | 7/16 | 11.1 | 1 ³ / ₈ | 34.9 | 4 ¹ / ₁₆ | 103.2 |
| 6 | 150 | 8 ¹ / ₂ | 215.9 | | 11 ³ / ₈ | 288.9 | 4 ¹ / ₈ | 104.8 | 5/8 | 15.9 | 1 ¹ / ₄ | 31.8 | 4 ¹⁵ / ₁₆ | 125.4 |
| 8 | 200 | 10 ⁵ / ₈ | 269.9 | | 14 ¹ / ₈ | 358.8 | 5 ³ / ₈ | 136.5 | 1 | 25.4 | 1 ¹⁵ / ₁₆ | 49.2 | 6 ⁷ / ₈ | 174.6 |
| 10 | 250 | 12 ³ / ₄ | 323.9 | | 17 ¹ / ₈ | 435.0 | 6 ¹ / ₁₆ | 169.9 | 1 ¹ / ₂ | 38.1 | 2 ³ / ₈ | 60.3 | 8 ³ / ₈ | 212.7 |
| 12 | 300 | 15 | 381.0 | | 19 ⁵ / ₈ | 498.5 | 8 | 203.2 | 2 ¹ / ₁₆ | 52.4 | 2 ⁷ / ₁₆ | 61.9 | 9 ³ / ₈ | 238.1 |

*"D" dimensions (overall face-to-face) are for 125-600 Class.

Mueller Steam Specialty product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Mueller Steam Specialty Technical Service. Mueller Steam Specialty reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Mueller Steam Specialty products previously or subsequently sold.



A Division of Watts Water Technologies, Inc.

USA: 1491 NC Hwy 20 West St. Pauls, NC 28384; www.muellersteam.com

Tel: 910-865-8241 Fax: 910-865-6220

Toll Free Phone 1-800-334-6259 Toll Free Fax: 1-800-421-6772