

Models: 1696, 1697

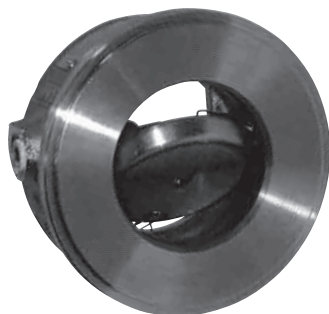
Carbon Steel Unibody CHEXTER™ Check Valves API, RTJ Check Valves Sizes: 2" - 4" (50 - 100mm)

| Pressure/Temperature - Non-Shock | | |
|----------------------------------|--------------|-----------------------------------|
| Model | Material | Rating |
| 1696-A | Carbon Steel | 2000psi @ 100°F |
| | | 138 bar @ 38°C |
| | | 1430psi @ 650°F 99 bar @ 343°C |
| 1697-A | Carbon Steel | 3000psi @ 100°F |
| | | 207 bar @ 38°C |
| | | 2145psi @ 100°F |
| | | 148 bar @ 38°C |

1696 **API Class 2000**
1697 **API Class 3000**



Model 1696



Model 1696
Open

Typical Services

- Recommended for use in higher temperature or pressure applications

Features

- Compact design with short face-to-face dimensions for minimum space requirements.
- Unibody style provides full wall thickness throughout.
- 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 Cv values due to aerodynamic disc shape and near full port opening.
 - Superior to other check valve designs, similar to Butterfly valves

Construction

- Robust unibody valve is wafer style, featuring compact face-to-face dimensions to fit in small spaces.
- Designed to fit within ANSI bolt circles.
- Metal-to-metal seats only
- Disc rotates on the hinge pin, creating very low pivot friction, so little wear in operation.
- Can be supplied in Stainless Steel or Alloy Steel materials, consult factory.

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.

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

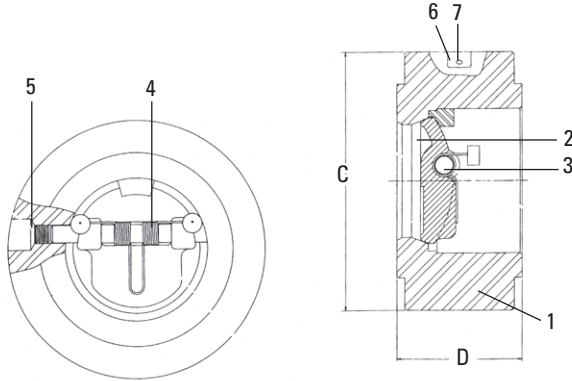
Representative _____

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 Ring Type Joint Styles



2000-3000psi API — RTJ Valve Dimensions

| LINE SIZE | | DIMENSIONS | | | | | | | |
|-----------|-----|------------------------|-----------------------|----|---------------|----------|---------------|----------|------|
| | | OVERALL FACE TO FACE D | C DIAMETER & RING NO. | | | | | | |
| in. | mm | | in. | mm | 2000PSI CLASS | RING NO. | 3000PSI CLASS | RING NO. | |
| 2 | 50 | 2¾ | 69.9 | 4¼ | 108.0 | R-23 | 5 | 127.0 | R-24 |
| 3 | 80 | 3¼ | 82.6 | 5¾ | 146.1 | R-31 | 6⅞ | 155.6 | R-31 |
| 4 | 100 | 4 | 101.6 | 7¼ | 184.2 | R-37 | 7¼ | 184.2 | R-37 |

Parts List

| PART NO. | DESCRIPTION | NO.REQ'D |
|----------|----------------------|----------|
| 1 | Body | 1 |
| 2 | Disc | 1 |
| 3 | Hinge Pin | 1 |
| 4 | Spring | 1 |
| 5 | Hex Socket Pipe Plug | 2 |
| 6 | Nameplate | 1 |
| 7 | Drive Screw | 2 |

Denotes recommended spare parts for one year operation.

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