

Model: 77**Carbon Steel or Stainless Steel
SURE CHECK™ Valves, Class 900
Sizes: 2"–12" (50 – 300mm)****Pressure / Temperature – Non-Shock**

Model	Material	Rating
77D	Carbon Steel	2220psi @ -20°F to 100°F
		153.06 bar @ 37.78°C
		955psi @ 850°F
77H	Stainless Steel	2160psi @ -20°F to 100°F
		148.93 bar @ 37.78°C
		1255psi @ 850°F
		86.53 bar @ 454.44°C

*Seat and/or Spring Materials may limit temperature.

77**Class 900**

Model 77

Typical Service

- Designed for liquids and gases where flow reversal can cause surge and water hammer.

Features

- Compact design with short face-to-face dimensions for minimum space requirements.
- Dual shaft design allows interchangeability of shafts.
- Torsion springs close the valve prior to flow reversal.
- Torsion springs exert a lifting motion on the discs, enabling the center “heel” to open first. This prevents excessive wear of the seat in this area, and provides a consistent wear pattern and long sealing capability.
- Downstream stop shaft stabilizes the discs at high flow rates and prevents them from striking each other, which can cause premature wear, stress on the shaft, and chattering.

Construction

- Robust cast body is wafer style, featuring compact face-to-face dimensions.
- Designed to fit within ANSI bolt circles.
- Variety of trim and seat materials are available.
- High pressure elastomer seats are available for sizes 4" and up.

Installation

- Can be installed horizontally or vertically.
 - Consult factory for downward vertical flow applications.
 - In horizontal applications, shaft should be in vertical orientation.
- Good piping practice recommends installing a distance of 5 to 10 pipe diameters from elbows, pumps, or other 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.
- Consult factory for applications such as pump suction and volatile liquids.

Special Coatings or Treatments

- For Stainless Steel, pickling and passivation available on request, consult factory

Approvals/Specifications

- Applicable ASTM, ANSI, and API standards

Testing

- API 598

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____