

## 97190 3-Way Safety Selector Valve

The S&J Model 97190 3-Way Selector Valve permits the safe and efficient maintenance of redundant pressure relief systems without any process interruptions. This is achieved through the smooth operation of the valve, allowing full flow from the primary system, to be diverted to the secondary system while providing positive shut off for the isolated system. The switching of the systems through a single valve only requires one connection into the pressure vessel, allowing the quick change over and avoiding the costly depressurizing of the system.

The 97190 3-Way Selector Valve, is available in sizes from 2" to 10" with ANSI B16.5 150 lb. and 300 lb. raised face or ANSI B16.5 150 lb. flat face flanged connections. The high flow internal configuration is designed to provide maximum capacity under emergency conditions, while providing positive shutoff for the isolated branch. Operation during "switchover" is performed effortlessly with the low friction design of bearings, seats and seals.

A wide selection of body, rotor and stem materials are available to suit the needs of your specific application. Available materials of construction include 304 Stainless Steel, 316 Stainless Steel, Cast Steel and Aluminum. Consult factory for other material selections. The standard seat seal material is Teflon or Buna-N. Consult the factory for other material selections.

Operators are provided for all sizes. The standard operator for the 2" through 10" valves is the nut drive. Worm gear operators with hand wheels are optional (Consult Factory).

Consult Factory for Remote Limit Switch option.



### Features

- Permits "switchover" function
- High flow capacity with minimal pressure drop
- Positive shutoff of isolated branch
- Low cost option to multiple valve and piping configurations
- Low torque operation during switchover
- Provided with red position indicator and lockout protection
- Remote limit switches (optional)

**97190**

**3-Way Safety Selector Valve**

**SHAND & JURS**

## Standard Materials of Construction

---

**Body:**

304/316 Stainless Steel  
Carbon Steel  
Aluminum

**Seal:**

Teflon  
Buna-N

**Rotor:**

304/316 Stainless Steel  
Carbon Steel  
Aluminum Seat

**Trim:**

316 Stainless Steel  
316 Stainless Steel/17-4 Stainless Steel

**Isolation Disk, Shaft, Retraction Bush:**

316 Stainless Steel/17-4 Stainless Steel

## Specifications

---

**Flanged Connections:**

150 lb. ANSI RF Flange  
300 lb. ANSI RF Flange  
150 lb. ANSI FF Flange

**Operator:**

Nut Drive, Worm Gear  
Nut Drive/Insulation Jacket  
Worm Gear/Insulation Jacket

**Pressure/Temperature Rating:**

25 PSIG Standard at 100°F (38°C).  
Consult Factory for higher pressures.

**Flow Arrangement:**

Inlet to Outlet

**Padlocking:**

The foolproof provision for dual padlocking will prevent unwanted access to the units.

**Bleed Valve:**

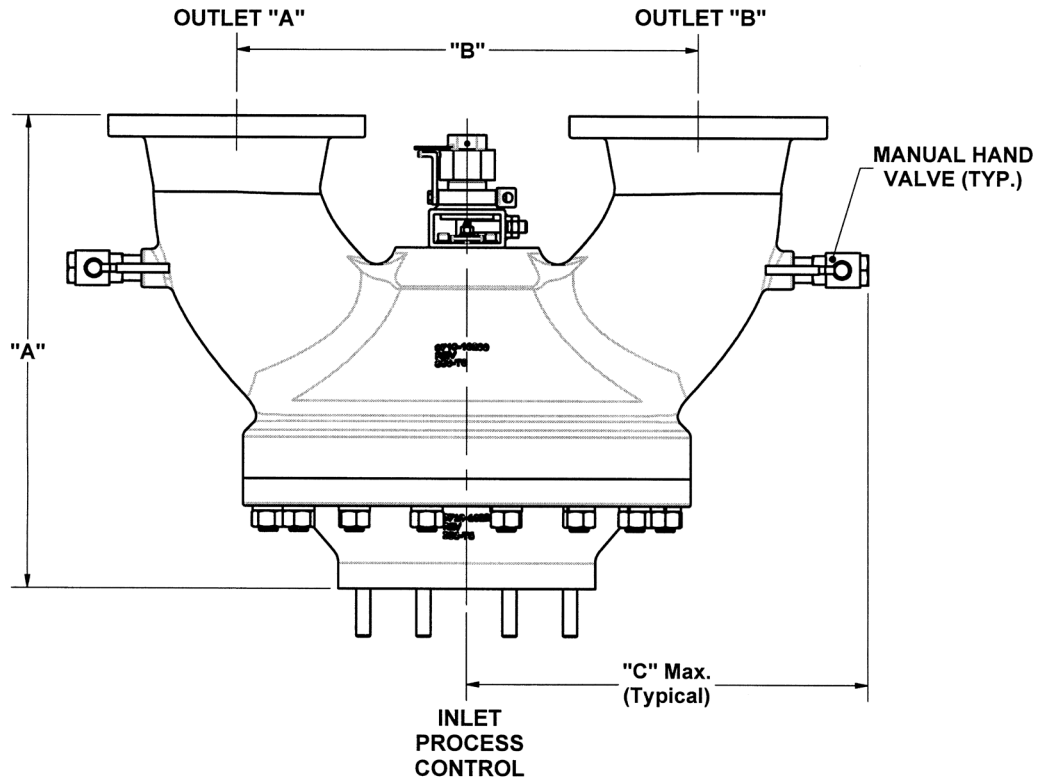
By incorporating a bleed valve on both process connections, the SSV provides an effective way of venting trapped gas before servicing. It also enables field testing on the PRV vent when set pressure adjustments are made.

**Active/Inactive Process Indication:**

A bright red indicator for positive indication of the active process connection is available so there is never any question which process connection is active.

**SHAND & JURS**

## Outline Dimensions



Flange Connection	Dimension	97190					
		2"	3"	4"	6"	8"	10"
ANSI B16.5 (150 lb. RF)	"A"	11.75" (298 mm)	13.26" (337 mm)	16.13" (410 mm)	20.17" (512 mm)	24.69" (627 mm)	30.25" (768 mm)
	"B"	12.13" (308 mm)	14.00" (356 mm)	16.50" (419 mm)	20.75" (527 mm)	24.25" (616 mm)	28.00" (711 mm)
	"C" (Max.)	11.00" (279 mm)	13.00" (330 mm)	15.00" (381 mm)	19.00" (483 mm)	22.00" (559 mm)	26.00" (660 mm)
ANSI B16.5 (300 lb. RF)	"A"	11.95" (304 mm)	13.70" (348 mm)	16.63" (422 mm)	21.17" (538 mm)	25.69" (653 mm)	30.25" (768 mm)
	"B"	12.13" (308 mm)	14.00" (356 mm)	16.50" (419 mm)	20.75" (527 mm)	24.25" (616 mm)	28.00" (711 mm)
	"C" (Max.)	11.00" (279 mm)	13.00" (330 mm)	15.00" (381 mm)	19.00" (483 mm)	22.00" (559 mm)	26.00" (660 mm)
ANSI B16.5 (150 lb. FF)	"A"	11.75" (298 mm)	13.26" (337 mm)	16.13" (410 mm)	20.17" (512 mm)	24.69" (627 mm)	30.25" (768 mm)
	"B"	12.13" (308 mm)	14.00" (356 mm)	16.50" (419 mm)	20.75" (527 mm)	24.25" (616 mm)	28.00" (711 mm)
	"C" (Max.)	11.00" (279 mm)	13.00" (330 mm)	15.00" (381 mm)	19.00" (483 mm)	22.00" (559 mm)	26.00" (660 mm)

All designs subject to change. Certified dimensions and specifications available upon request.