

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 12" 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 12" valves is the nut drive.

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)





Standard Materials of Construction

Body:

Aluminum 304 Stainless Steel 316 Stainless Steel Carbon Steel

Rotor:

Aluminum 304 Stainless Steel 316 Stainless Steel

Seal:

Teflon Buna-N

Trim:

316 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 Nut Drive/Insulation Jacket

Pressure/Temperature Rating:

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

Flow Arrangement:

Inlet to Outlet A/B
Inlet to Outlet A/B or A&B

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.

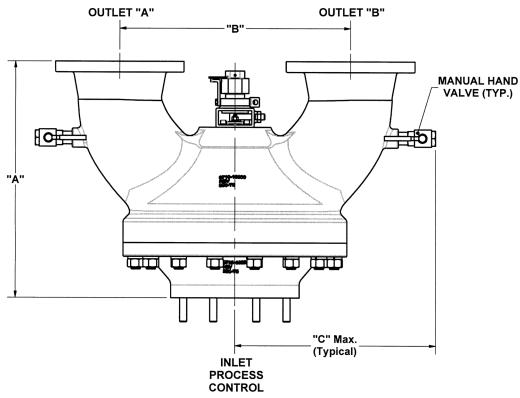
Active/Inactive Process Indication:

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.





Outline Dimensions



Flange	Dimension	97190						
Connection		2"	3"	4"	6"	8"	10"	12"
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)	36.00" (914 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)	33.00" (838 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)	30.00" (762 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)	31.25" (794 mm)	37.00" (940 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)	33.00" (838 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)	30.00" (762 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)	36.00" (914 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)	33.00" (838 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)	30.00" (762 mm)

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





97190 Ordering Guide

Model Number Selection

The model number will have a base number **97190** followed by 8 digit numbers. These digits will represent 8 sets of option tables.

97190 - AB - CD - EF - GH

Table A - Size

Option A	Description
2	2"
3	3"
4	4"
6	6"
8	8"
9	10"
0	12"

Table B - Body Material

Option B	Body Material		
1	304 Stainless Steel		
2	Carbon Steel		
3	316 Stainless Steel		
4	Aluminum		

Table C - Rotor Material

Option C	Rotor Material	
1	304 Stainless Steel	
3	316 Stainless Steel	
4	Aluminum	

Table E - Flow Arrangement

Option E	Description		
1	Inlet to Outlet A/B		
2	Inlet to Outlet A/B or A&B		

Table F - Seat Seal Material

Option F	Description
1	Teflon
2	Buna

Table G - Trim Material

Option G	Description		
1	316 Stainless Steel		
2	316 Stainless Steel / 17-4 Stainless Steel***		

^{***} Isolation disk, shaft, retraction bushing

Table H - Operator

Option H	Description	
1	Nut Drive	
3	Nut Drive / Insulation Jacket	

Table D - Flange Connection

Option D	Inlet	Outlet	
1	ANSI 150 lb. RF**	ANSI 150 lb. RF**	
2	ANSI 300 lb. RF**	ANSI 300 lb. RF**	
3	ANSI 150 lb. FF	ANSI 150 lb. FF	

^{**}Raised face flange not available for Aluminum Bodies.

Note: Flange connection matches ANSI 150# or 300# Dimensions.

