tyco
Flow Control

KEYSTONE

The figure 269J is a double seal mix-proof piston valve, used for product isolation, where safe separation of process and C.I.P. fluids is required.

Features

- Product contact parts manufactured from high quality 316L S/S Bar.
- Heavy walled body construction.
- Semi bright external surface finish.
- Compact, lightweight design.
- Heavy duty cast body clamps (bolted type)
- Seat material VITON®.
- Metal plug stop, protects seat seals from wear or damage.
- Resilient seated for positive isolation.
- Free draining design, eliminates product puddling and air pockets.
- Smooth ball shaped bodies, reduces turbulence and improves flow.
- Smooth internal surfaces for ease of cleaning.
- Maintenance friendly design.
- Spring extend actuator (normally down).
- Leakage chamber between seals.
- Clamped body style offers full 360° orientation of actuator.
- Butt weld end connections.
- Swage/crimp type fluid connectors to CIP poppet valves provided with valve.

Options:

- Mirror polished internals.
- Clamp and thread end connections.
- 3 Position actuator.
- Booster actuator.
- Spring retract actuator function (normally up).
- Control head or feed back unit.
- Quick release body clamps.

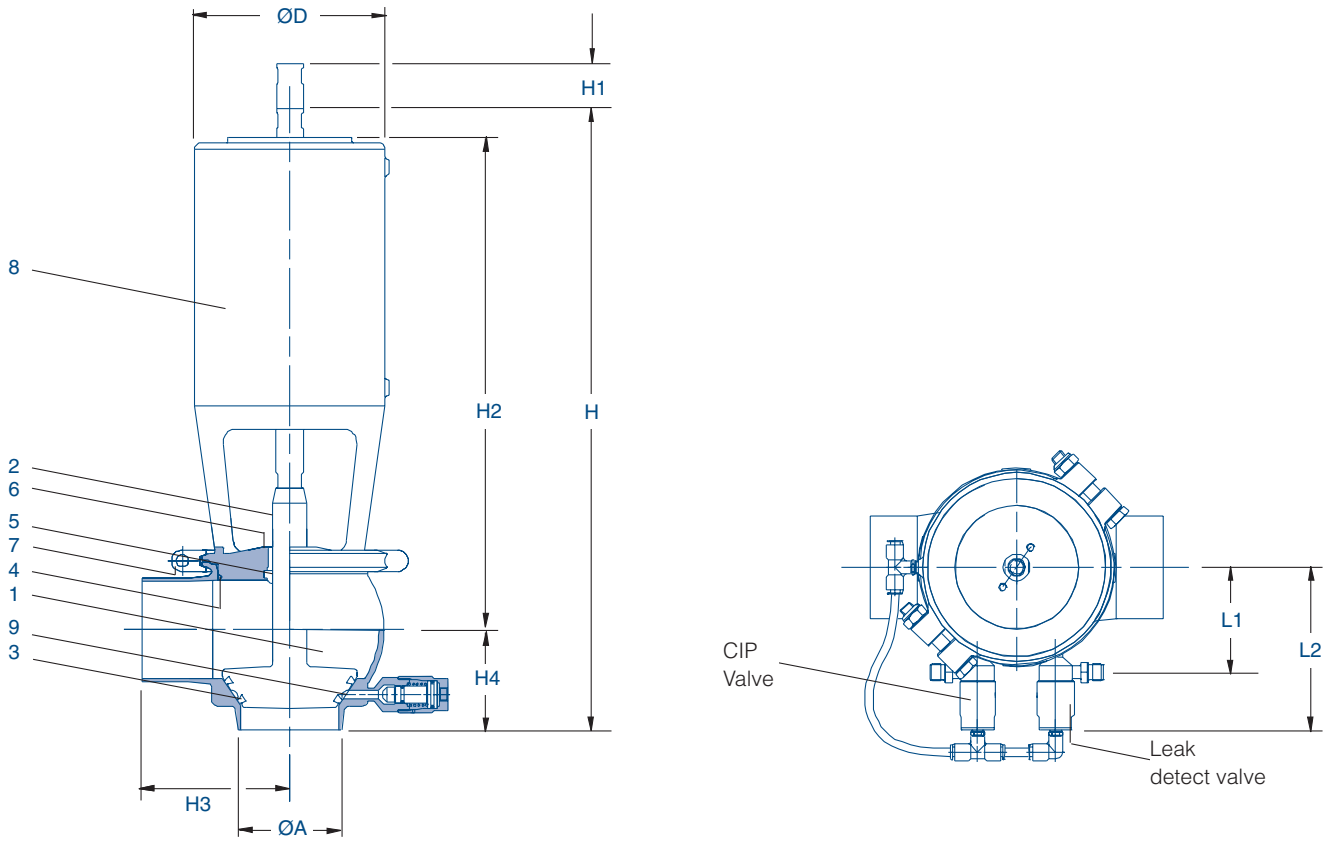
Note:
VITON® is the registered trademark of Du Pont.

General Applications

- Dairy factories.
- Breweries & Beverage Plants.
- Wineries.
- Canneries & Food Processing Plants.
- Pharmaceutical.
- Chemical processing.

F269J/2/00

Figure 269J Double Seal Piston Valve



Dimensions (mm)

Tube Size	ØA x t	ØD	H	H1	H2	H3	H4	L1	L2
025 (1")	25.4 x 1.6	85	-	-	-	-	-	-	-
040 (1.5")	38.1 x 1.6	102	305	15	281.5	74.5	49.5	79	122
050 (2")	50.8 x 1.6	102	386	26	288.0	77.0	52.0	79	122
065 (2.5")	63.5 x 1.6	141	483	38	357.5	102.5	68.0	79	122
080 (3")	76.2 x 1.6	141	497	38	365.0	109.0	74.0	79	122
100 (4")	101.6 x1.6	141	528	38	377.5	142.5	92.5	95	138
125 (5")	129 x 2.0	219	490	50	370	156	98	-	-
150 (6")	152.4 x 2.0	219	514	50	383	156	111	-	-

Parts list

No.	Description	Material	Standards
1	Body	316L S/S, 304L S/S	ASTM A276
2	Plug/shaft	316L S/S	ASTM A276
3	Seat seal	VITON®, EPDM, PTFE	FDA
4	Body seal	VITON®, EPDM	FDA
5	Stem seal	SANTOPRENE®, VITON®	FDA
6	Shaft bush	PTFE, UHMWPE	Commercial
7	Body clamp	304 CF8 S/S	ASTM A743 CF8
8	Actuator assembly	304 S/S	-
9	CIP/ Leak detect valves	316L S/S	ASTM A276

VITON® is the registered trademark of Du Pont.
SANTOPRENE® is the registered trademark of Monsanto.

Working Principle

The F269J valves are operated by compressed air, via a linear pneumatic actuator, that can be supplied with or without spring return.
The at-rest position of the valve, although normally closed (down position), can also be provided in the normally open (up position), this is determined by the actuator mode being either Spring Extend (SE) or Spring Retract (SR) respectively as selected at time of order.
When air pressure is applied to the cylinder, two small pneumatic normally open (NO) poppet valves, a leak detecting and a CIP valve instantly close and the main valve plug moves through its entire stroke changing the valve from the closed to open position.
When the air is removed or vented from the cylinders the main valve closes, following which the two smaller valves open, thereby venting and draining the leakage chamber to atmosphere. With the main valve in the closed position the leakage chamber can be flushed with water or CIP to clean away product residues.
Whilst the valve is in the closed position, one side of the valve can be CIP cleaned while product remains on the opposite side fully protected from possible contamination by the double seals and leakage chamber.

Technical Specifications

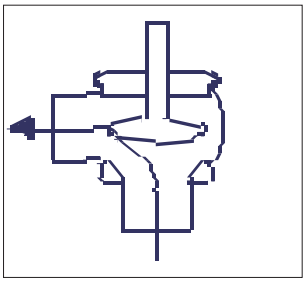
Working Temperature:	-5 to +100°C (-5 to 120°C for static condition)
Sterilising Temperature:	up to 140°C for 30 min's. (Steam for static condition)
Maximum Pressure, valve body:	10 Bar fluid pressure.
Maximum Pressure valve seat:	See separate plug lifting chart.
Minimum Pressure:	Full vacuum.
Operating air pressure:	4 to 8 Bar max.
Air connections:	R1/8" (BSP).
Surface finish:	Internal > 0.8Ra,External hairline / buffed.
Length tolerance between ends:	±0.5mm~±1.0mm.
Parallelism or squareness of ends:	±0.5° or less.

Air Consumption for single acting actuators (Litres of free air)

Press	**Valve Size**								
Bar	**025**	**040**	**050**	**065**	**080**	**100**	**125**	**150**
4.0	0.7	1.5		3.9			8.7	
6.0	1.0	2.2		5.8			13.0	
8.0	1.4	3.0		7.8			17.4	

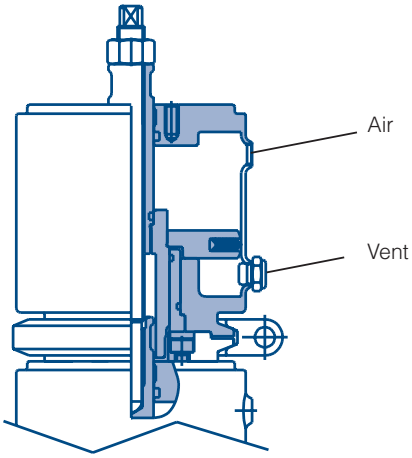
Valve type

Type	**Configuration**	
F269J-STD Standard Flow	L	T



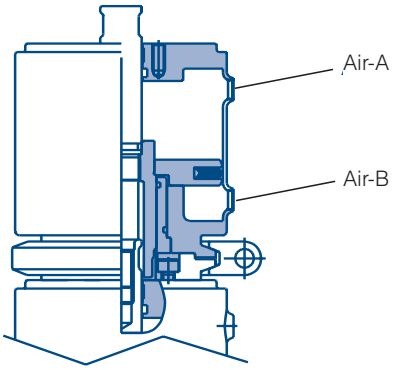
3-Position actuator

The 3-Position actuator can be used for an adjusted flow control at any position throughout the valves entire stroke.
For example on dosing or filling to give optional full flow or partial flows, for topping up, or varying flow between product or CIP duties.



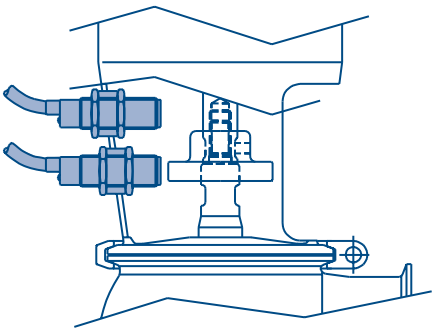
Booster actuator

The Booster Actuator can be used where extra force is required to hold seal tightness under extra high line pressures, or for opening valves against high line pressures.



Position sensors

Standard Ø18mm barrel type proximity sensors can be centre mounted, in the special slot provided within the sight-housing cone, and a target can be easily fitted to the plug shaft.



Typical Specifying Sequence

Example:	050	F269J	A	SE	B	L	F	6S	V	V	S	X

Size:
025 (1")
040 (1.5")
050 (2")
065 (2.5")
080 (3")
100 (4")
125 (5")
150 (6")

Figure Number:
F269J - Mix Proof Stop Valve

Valve Style:
A - STD (std)
B - Other

Actuator Type:
SE - Spring Extend (std)
SR - Spring Retract
DA - Double Acting

End Connection:
B - Butt weld (std)
C - Clamp ISO
J - Male thread RJT
D - Male thread IDF
E - Other

Port Configuration:
L
T

Actuator accessory:
F - Air fittings included (std)
D - Drilled for actuator optional extra
X - None

Material Type/Finish, wetted ports:
6S - 316LS/S (Semi bright) (std)
6P - 316LS/S (Polished)
4S - 304LS/S (Semi bright)
4P - 304LS/S (Polished)

Body Seal Materials:
V - VITON®
E - EPDM

Plug Seal Materials:
V - VITON®
E - EPDM
P - PTFE

Stem Seal Materials:
S - SANTOPRENE®
V - VITON®

Actuator Optional extras:
T - 3 Position actuator
U - Booster actuator
X - None