

KEYSTONE

The figure 267J and 268J valves are single seal piston valves, used to control process or C.I.P. fluids.

- F267J for isolating.
- F268J for diverting or converging flows.

Features

- Product contact parts are manufactured from high quality 316L Stainless Steel Bar.
- Heavy walled body construction.
- Semi-bright external surface finish.
- Compact, lightweight design.
- Heavy duty cast body clamps (bolted type).
- Various sealing options available.
- Metal plug stop helps protect seat seals from wear or damage.
- A wide choice of port configurations is available.
- 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.
- Reversible actuator.
- Clamped body style offers full 360° orientation of body ports.
- Butt Weld end connections.

Options

- Mirror polished internals.
- Clamp and thread end connections.
- Manual operating device.
- 3 Position actuator.
- Booster actuator.
- Long stroke actuators.
- Control head or feed back unit.
- Quick release body clamps.



General Applications

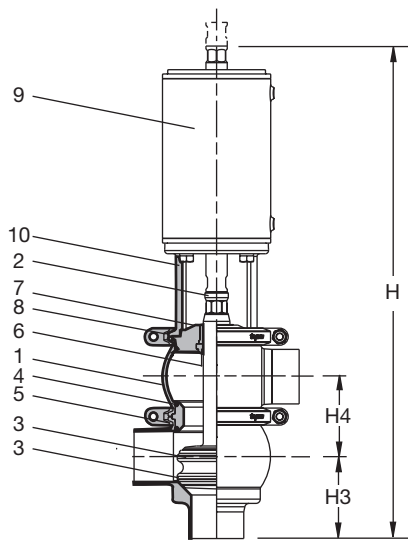
- Brewery
- Dairy
- Winery
- Cannery
- Food processing
- Pharmaceutical
- Chemical
- Beverage

tyco Flow Control

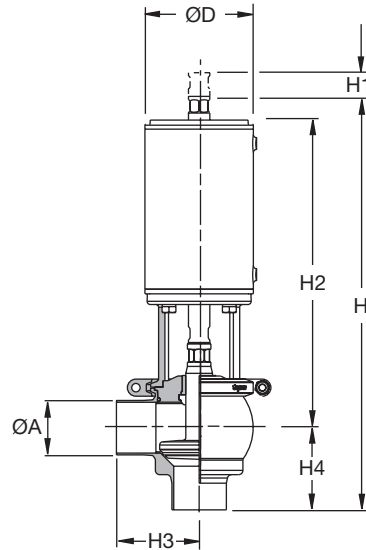
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Keystone Hygienic Products – Figure 267J/268J (Reversible)

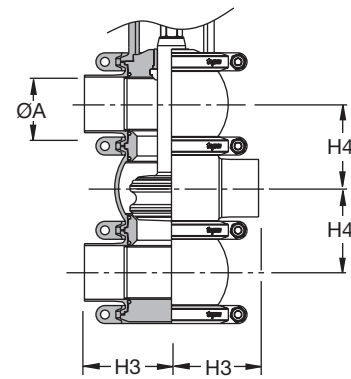
Single Seal Piston Valves



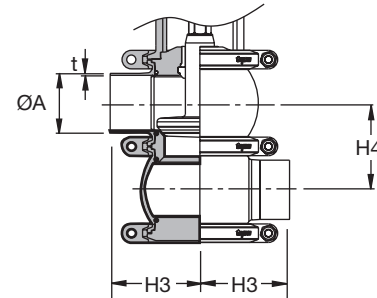
Note: F268J Standard



Note: F267J Standard



F268J - NC



F267J - NS

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	EPDM, Nitrile, PTFE, Viton®	FDA
4	Intermediate seal ring	316L S/S	ASTM A276
5	Body seal	EPDM, Nitrile, Viton®	FDA
6	Stem seal	Santoprene®, EPDM, Nitrile, Viton®	FDA
7	Shaft bush	PTFE, UHMWPE	Commercial
8	Body clamp	304 CF8 S/S	ASTM A743 CF8
9	Actuator assembly	304 S/S	-
10	Sight housing	304 CF8 S/S	ASTM A743 CF8

Dimensions (mm)

Size		ØA x t		ØD	H		H1	H2	H3		H4
Inch	Metric	Inch	Metric		(F267J)	(F268J)			Inch	Metric	
1"	025	25.4 x 1.6	29.5 x 1.6	85	288	334	10.0	214	55.0	54.0	46.0
1½"	040	38.1 x 1.6	41.5 x 1.6	85	300	359	15.5	220	61.5	60.5	58.5
2"	050	50.8 x 1.6	53.5 x 1.6	102	386	461	26.0	286	77.0	76.0	75.0
2½"	065	63.5 x 1.6	69.5 x 1.6	102	403.5	490	26.0	292	88.5	87.5	87.5
3"	080	76.2 x 1.6	84.5 x 1.6	141	494	596	38.0	360	109.0	108.0	102.0
4"	100	101.6 x 1.6	103.5 x 1.6	141	544	674.5	38.0	377	142.0	141.0	130.5
5"	125	129.0 x 2.0	130.0 x 2.0	219	551	711	50.0	400	143.0	142.0	160.0
6"	150	152.4 x 2.0	155.0 x 2.0	219	576	762	50.0	413	156.0	155.0	185.0

Notes

Metric bodies are created from standard inch bodies by expanding the ports to suit. Some variation can occur with dimensions H3, therefore if dimension is critical, please specify at time of order.

Working Principle

The F267J and F268J 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 open (up position). This is determined by the actuator mode being either Spring Extend (SE) or Spring Retract (SR) as selected at time of order. The mode can also be easily changed on site by simply inverting the actuator assembly. (See separate Repair and Maintenance Instructions for details).

When air pressure is applied to the cylinder, the valve plug moves through its entire stroke changing from one state to the other. In the case of the F267J from open to closed or vice versa, and the F268J changing the flow path from one direction to the other. These valves have only a few simple moving parts resulting in a very reliable valve in service.

Technical Specifications

Working Temperature	-5 to +100°C (-5 to 120°C for static condition)
Sterilizing 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 (Liters of free air)

Press Bar	Valve Size					
	025	040	050	065	080 100	125 150
4.0	0.7		1.5		3.9	8.70
6.0	1.05		2.25		5.85	13.05
8.0	1.4		3.0		7.8	17.4

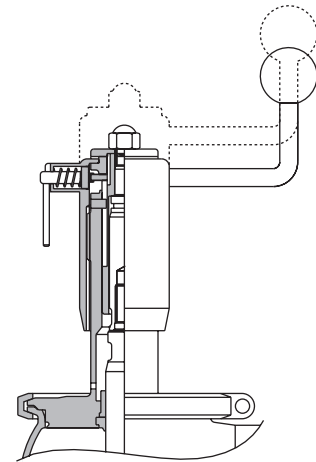
Manual Operator

The manual operator replaces the air driven actuator, and is used where variable control of flow is required or automation is not possible.

Flow is fully adjustable throughout the entire stroke of the valve.

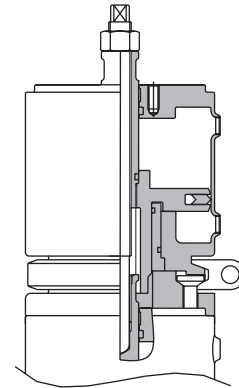
The manual operator comes equipped with a visual position indicator and a locking device that can be engaged at any position.

The lever crank allows quick and easy operation of the valve.



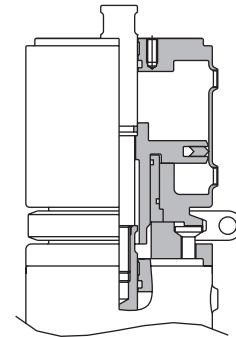
3-Position Actuator

The 3-Position actuator can be used for an adjusted flow control at any position throughout the valve's 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.



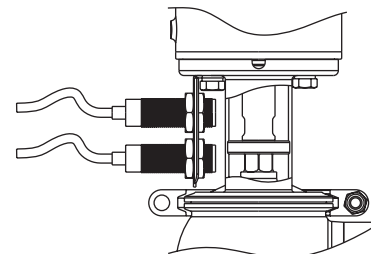
Booster Actuator

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 provided as a kit, complete with mounting bracket and sensor target.



Keystone Hygienic Products – Figure 267J/268J (Reversible)

Single Seal Piston Valves

Typical Specifying Sequence

Example: AA - F268J A SE B LL - M 6S V V S X

Body Size:

Inch	Metric
A = (1")	M = 025
B = (1 1/2")	O = 040
C = (2")	P = 050
D = (2 1/2")	Q = 065
E = (3")	R = 080
F = (4")	S = 100
G = (5")	T = 125
H = (6")	U = 150
I = (8")	V = 200

Figure Number:

F267J - Stop Valve
F268J - Diverge/Converge Valve

Valve Style:

A - STD (std)
B - NS/NC (Extra body)
C - NWS/NWC (Extra Body+Reverse plug)
D - Other

Actuator Type:

SE - Spring Extend (std) LE - Long Stroke (SE)
SR - Spring Retract LR - Long Stroke (SR)
DA - Double Air/Acting LD - Long Stroke (DA)
MO - Manual Operator

End Connection:

B - Butt Weld (std) S - Male thread SMS
C - Clamp ISO M - Male thread RJT Modified
J - Male thread RJT D - Male thread DIN 11851
I - Male thread IDF E - Other

Port Configuration:

L T LT TL LL TT
LLL LLT LTT TTL TLL TTT

Actuator Accessory:

M - Metric 6mm Air Fittings (std)
I - Imperial 1/4" Air Fittings
X - None

Material Type/Finish, Welded Parts:

6S - 316L SS (Semi bright) (std)
6P - 316L SS (Polished)
4S - 304L SS (Semi bright)
4P - 304L SS (Polished)

Body Seal Materials:

E - EPDM (std)
N - Nitrile
V - Viton®

Plug Seal Materials:

E - EPDM (std)
N - Nitrile
V - Viton®
P - PTFE

Stem Seal Materials:

S - Santoprene® Wiper Type (std) D - Diaphragm (Only available on some sizes) E - EPDM
V - Viton® Wiper Type F - Viton® O-Ring Type N - Nitrile

Actuator Optional Extras:

T - 3 Position actuator D - Damper actuator
U - Booster actuator X - None

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