Simply Unique Single Seat

Unique SSV Y-body

General Information
The Unique Single Seat Valve is an innovative new generation that are designed to meet the highest process demands of hygiene and safety. They're built on a well-proven, platform from an installed base of more than one million valves.

Application
The Unique Single Seat Valve is a sanitary pneumatic seat valve with a modular design. The Y-body version offers a straight through product flow path and is designed for gentle product treatment. The main use for these valves is in applications involving high viscosity or large particulates.

Working principle
The valve is remote-controlled by means of compressed air. It has few and simple moveable parts which results in a very reliable valve with low maintenance cost.

Standard design
The Unique Single Seat Y-Body Valve is designed to deliver years of reliability and performance you've come to expect with all Alfa Laval products. The actuator is connected to the valve body using a yoke and all components are assembled with clamp rings.

The Unique Single Seat Y-body Valve range covers sizes from DN/OD 51 mm to 101.6 mm.

The standard actuator comes with a five year warranty.

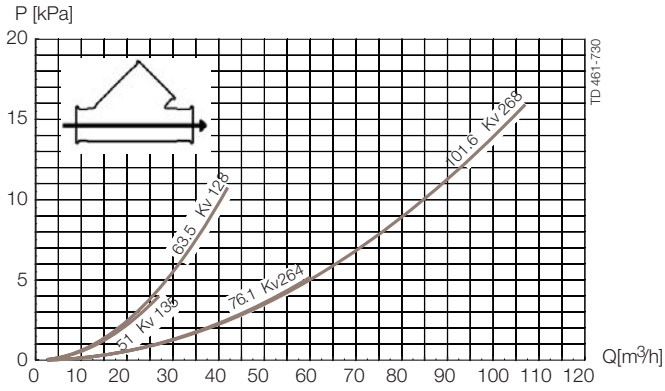
Other valves in the same basic design
The Unique SSV valve range includes several purpose built valves. Please use the Alfa Laval computer aided selection tool (CAS) for full access to all models and options.



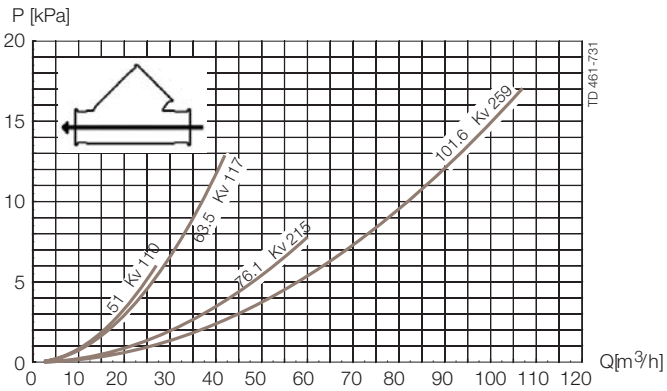
Unique Single Seat Valve Y-Body

Gillain & Co NV | Boomsesteenweg 85, B-2630 Aartselaar | Tel. +32 3 870 60 80, Fax +32 3 870 60 89 | advice@gillain.com | www.gillain.com

Pressure drop/capacity diagrams



For the diagrams the following applies:



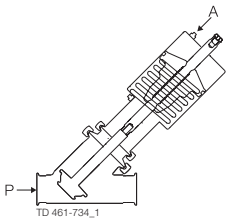
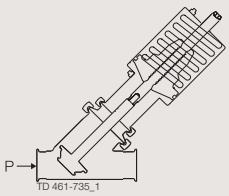
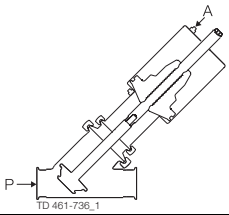
Medium: Water (68° F/20° C)

Measurement: In accordance with VDI2173

Pressure data for Unique Single Seat Valve Y-body

Table 1

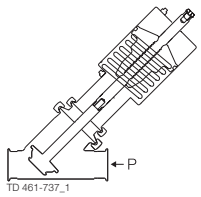
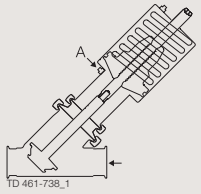
Max. pressure in bar without leakage at the valve seat

Actuator / Valve body combination and direction of pressure	Air pressure [bar]	Plug position	Valve size DN/OD 51 mm	DN/OD 63.5 mm	DN/OD 76.1 mm	DN/OD 101.6 mm
	6	NO	4.9	2.7	3.8	2.1
		NC	4.4	2.4	3.8	2.1
	6	A/A	10.0	7.1	9.4	5.4

A = Air
P = Product pressure

Table 2

Max. pressure in bar against which the valve can open.

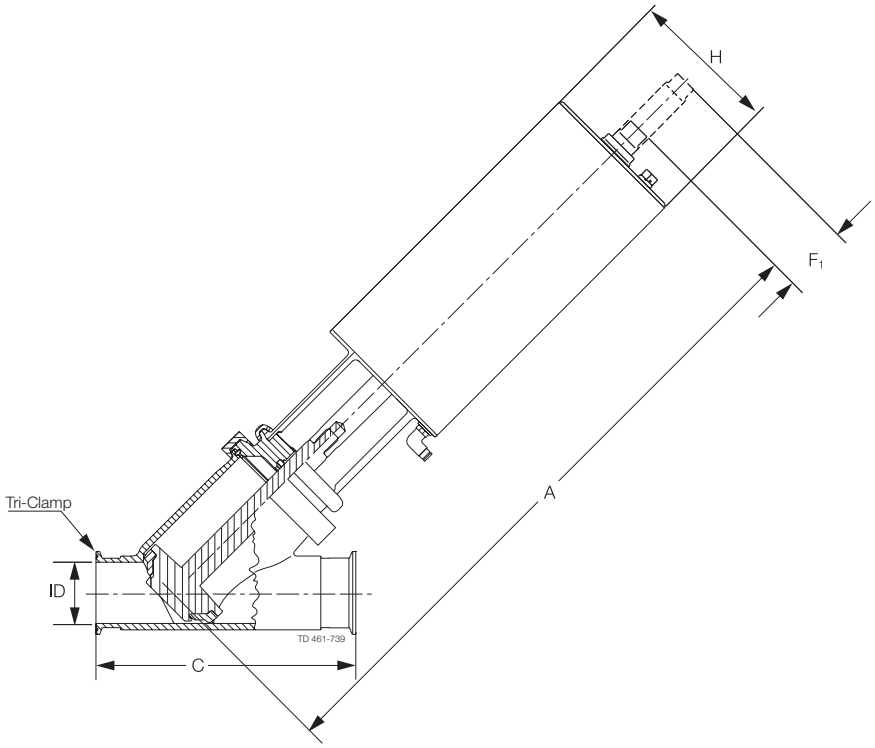
Actuator / Valve body combination and direction of pressure	Air pressure [bar]	Plug position	Valve size DN/OD 51 mm	DN/OD 63.5 mm	DN/OD 76.1 mm	DN/OD 101.6 mm
		NO	9.2	5.1	6.5	3.7
	6	NC	9.8	5.4	6.5	3.7

A = Air
P = Product pressure

Gillain & Co
HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

Dimensions

	Nominal Size			
	DN/OD 51 mm	DN/OD 63.5 mm	DN/OD 76.1 mm	DN/OD 101.6 mm
A	440	456	560	620
C	200	235	264	321
ID	47	60	73	97
F_1	50	50	67	67
H	115	115	156	156
Weight (kg)	8.6	11.1	18.6	27.1



Y-body valve

Caution, opening/closing time:

Opening/closing time will be affected by the following:

- The air supply (air pressure).
- The length and dimensions of the air hoses.
- The number of valves connected to the same air hose.
- Use of a single solenoid valve for serial connected air actuator functions.
- Product pressure.

Air Connections Compressed air:

R 1/8" (BSP). internal thread.

Technical data

Max. product pressure (depending on valve specifications): . . . . . .1000 kPa (10 bar).
Min. product pressure: . . . . . .Full vacuum.
Temperature range: . . . . . .-10°C to +140°C (EPDM).
Air pressure: . . . . . .500 to 700 kPa (5 - 7 bar).

Actuator function

- Pneumatic downward movement, spring return.
- Pneumatic upward movement, spring return.
- Pneumatic upward and downward movement (A/A).

Air Consumption (Litres free air) for one stroke		
Size	**DN/OD 51 - 63.5 mm**	**DN/OD 76.1 - 101.6 mm**
NO and NC	0.8 x air pressure [bar]	2 x air pressure [bar]
A/A	1.4 x air pressure [bar]	3.9 x air pressure [bar]

Materials

Product wetted steel parts: . . . . . .1.4404 (316L) (internal Ra < 0.8 µ).
Other steel parts: . . . . . .1.4301 (304).
Plug seal: . . . . . .TR2 (floating PTFE design).
Other product wetted seals: . . . . . .EPDM (standard).
Other seals: . . . . . .NBR.

Options

a. Control and Indication: IndiTop, ThinkTop or ThinkTop Basic.
b. Product wetted seals in HNBR/NBR or FPM.
c. External surface finish bright.

Ordering

Please state the following when ordering:

- Size.
- Actuator function: NC, NO or A/A.
- Options.

Note!

For further details, see instruction ESE00608.

Gillain & Co
HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

Gillain & Co
HYGIENIC EQUIPMENT FOR FOOD & LIFE SCIENCES

The information contained herein is correct at the time of issue, but may be subject to change without prior notice.

Gillain & Co NV | Boomsesteenweg 85, B-2630 Aartselaar | Tel. +32 3 870 60 80, Fax +32 3 870 60 89 | advice@gillain.com | www.gillain.com