

Operate Your Diaphragm Valve as You Please

Aseptic Diaphragm Valve - Actuators

Actuators

All our standard actuators have a stainless steel bonnet/ distance piece allowing for high operating temperature and steam sterilisation of the valve.

The actuators are available in either a manual or a pneumatic version. For both types there is a number of options enabling you to choose the actuator fulfilling your requirements.

This PD sheet shows our standard and optional ranges of actuators. More configurations and designs are available upon request.

Manual actuators







The 601, 612 and 673 actuators are suitable for most applications, but where extra cleanability is required, for external surfaces, we recommend the 653 (or 654 optional) actuators.

For large valve bodies actuator 672 is available.

Technical data - Manual actuators

Max. operating pressure:
 EPDM diaphragm: 10 bar
 PTFE diaphragm 6 bar
 Max. operating temperature 150°C
 (depending on application)



Type	601	612	673	653	672	654
						
Std/opt.	Standard	Standard	Standard	Standard	Option	Option
Seat size	8	10	25, 40, 50	10, 25, 40, 50, 80	80, 100	10, 25, 40, 50
DN size	4 - 15	10 - 20	15 - 50	10 - 80	65 - 100	10 - 50
Stainless steel distance piece	X	X	X	X	X	X
Plastic hand wheel	X	X	X	X	X	
Stainless steel hand wheel						X
Seal adjuster ¹⁾	X	X	X	X		X
Stroke limiter ²⁾				X		X
Proximity switch ³⁾				X	O	X
Non rising hand wheel				X	X	X
Pocket free hand wheel ⁴⁾				X		X
Shrouded bonnet ⁵⁾				O		O

¹⁾ Variable adjustment and setting of sealing force which prevent over-closure and prolong diaphragm lifetime.

²⁾ Offers variable adjustment of opening stroke and thus facilitating flow regulation.

³⁾ Electronic position indicator.

⁴⁾ Smooth hand wheel without entrapment area.

⁵⁾ A shroud covering the body fasteners for increased external hygiene.

X = standard for actuator





O = option for actuator

Pneumatic actuators

Pneumatically operated: Normally Open, Normally Closed and Double Acting.

Our 605, 625 and 687 actuators are suitable for most applications, but where extra cleanability is required, Alfa Laval recommends the 650 actuator for cleaning of external surfaces.

3.5

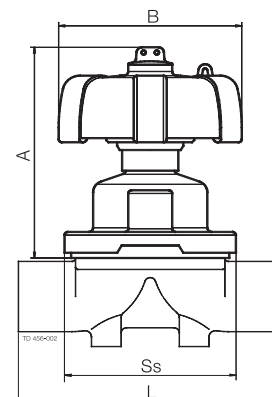
Type	605	625	687	650
				
Std/opt	Standard	Standard	Standard	Standard
Seat size	8	10	25, 40, 50, 80, 100	8, 10, 25, 40, 50
DN size	4 - 15	10 - 20	15 - 100	4 - 50
Stainless steel distance piece	X	X	X	X
Plastic bonnet	X	X	X	
Stainless steel bonnet				X
Working pressure ¹⁾ (bar)	EPDM	0 - 8	0 - 6	0 - 10
	PTFE/EPDM	0 - 6	0 - 6	0 - 6
Control pressure (bar)	NC	4 - 7	5 - 7	5 - 6
	NO, DA	3 - 4	4 - 6	3 - 6

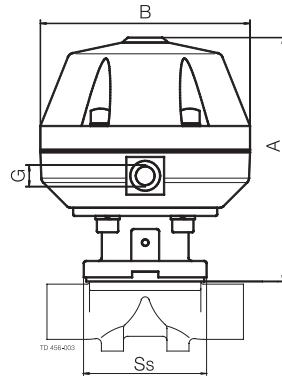
¹⁾ Applied upstream

Dimensions

Manual valves

	Seat size (Ss)	A Opened	A closed	Ø B	Weight
601	8	62	58	32	0.09
612	10	83	77	60	0.23
673	25	116	102	90	0.63
	40	133	119	114	1.22
	50	144	136	140	2.03
672	80	263	263	214	5.70
	100	311	311	214	8.57
653/654	10	89	89	63	-
	25	108	108	92	-
	40	133	133	114	-
	50	155	155	132	-





Pneumatic valves

	Seat size (Ss)	A NC	A NO, DA	B	G Air Connection	Weight (kg)
605	8	92.5	92.5	68	1/4"	0.3
625	10	102.5	102.5	68	1/4"	0.4
687	25	143	109	128	1/4"	2.1
	40	180	138	158		3.9
	50	215	161	213		6.6
	80	311	256	259		14.8
650	100	305	250	259	1/4"	16.2
	8	77	77	61		0.4
	10	101	101	61		0.9
	25	130	130	92		2.0
	40	168	168	114	1/4"	3.8
	50	216	216	132		7.6

Automation

Alfa Laval offers various automation equipment as accessories for the actuators.

Electrical position indicator 1235

This position indicator is suitable for our pneumatic actuators and offers integrated mechanical positions sensing, electrical signal transmission and optical indication of the valve position.

The readiness for working, the end position of the valve and the programming mode are indicated via LEDs. A continuously operating long-life travel sensor measures the position.

The device can be individually adjusted with a simple and quick one-hand operation without opening the housing.

Technical data









- Power supply: 24 VDC +/- 30%
- Current consumption: 70 mA
- Power consumption: 1.7 W
- Output signal: 2 x relay - SPST
- Position indicator: OPEN and CLOSE
- Indication: Coloured LED
- Material: Cover PP/base PVDF
- Protection class: IP67
- Operating temperature: -20°C to +70°C
- Option: AS Interface version
Lower section in stainless steel

Stroke limiters, Optical position indicators

Our accessories for the pneumatic actuators can easily be retrofitted without dismantling the actuators.

3.5

Accessory	1101	1106	1110	1114	1161	1300
						
Stroke limiter	X	X	X	X	X	
Optical position indicator				X	X	X
Seal adjuster			X			
Features			Transparent cap	Transparent cap, manual override	Transparent cap	Transparent cap
For actuator	650, 687	605, 625, 687	687	687	605, 625, 650, 687	687

Ordering

The valves are sold as complete valves and the item numbers for the standard program are included in the ordering leaflets.

For other configurations please specify:

- Port size
- Seat Size
- Body configuration
- Tube standard
- Connection
- Surface finish
- Stainless steel quality
- Diaphragm material
- Actuator type
- Additional options