



I Application

The N/M shut-off valve is a hygienic single seat pneumatically operated valve with a wide range of applications in the food-processing, pharmaceutical and fine chemicals industries.

I Operating principle

Seat valves are automatically operated by a single-acting or a double-acting actuator. Compressed air moves the shaft to place the valve in the "open" or "closed" position. The 180° rotation of the pneumatic cylinder of the single-acting actuators allows to have a normally open or normally closed valve.

I Design and features

Compact and robust design.

Normally closed valve (NC) in the standard version.

The valve can be changed to normally open (NO) by simply reversing the position of the pneumatic actuator.

Weld connections (mm or inches).

Available sizes: from DN 25/1" to DN 100/4".

Easy disassembly of internal parts by loosening the clamp fastener.

Open lantern to allow visual inspection of shaft selaing.

360° adjustable body.

I Materials

Parts in contact with the product AISI 316L
Other St. St. parts AISI 304

Gasket EPDM according to FDA 177.2600

Internal surface finish Ra \leq 0,8 μ m External surface finish mirror polished



Double-acting pneumatic actuator.

Manual actuation.

Gaskets: FPM. All of them according to FDA 177.2600. Connections: DIN, Clamp, SMS, RJT, FIL-IDF, etc.

"Twin-Stop" actuator. C-TOP control unit.

External position sensors.

Steam barrier (if shaft sterilisation is required).

Jacketed body.

Surface finish: Ra ≤ 0,5 μm.







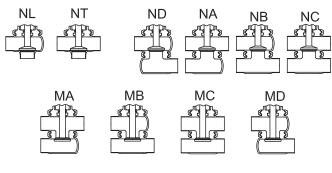
I Technical specifications

Available sizes DN 25 - DN 100 DN 1"- DN4" Working temperature -10 $^{\circ}$ C to +120 $^{\circ}$ C (EPDM) 14 $^{\circ}$ F to 248 $^{\circ}$ F

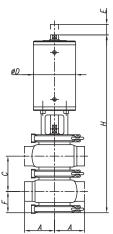
+140 °C (SIP, max. 30 min.) 284 °F 10 bar 145 PSI

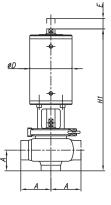
Max.working pressure10 bar145 PSICompressed air pressure6-8 bar87-116 PSIPneumatic connectionsG1/8" (BSP)

I Configurations of bodies



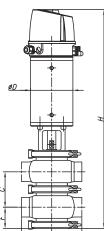


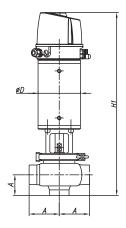




N/M VALVE

DN		Α	С	D	Е	F	н	H1
25	1″	50	56	87	22	20	330	274
40	11/2"	60	68	112	22	25	356	288
50	2″	70	84	112	32	30	442	359
65	21/2"	80	100	143	36	35	522	422
80	3″	90	115	143	36	46	555	440
100	4″	125	138	216	36	55	620	482





N/M VALVE (with control top)

DN		Α	С	D	E	F	н	H1
25	1″	50	56	87	22	20	430	374
40	11/2"	60	68	112	22	25	456	388
50	2″	70	84	112	32	30	542	459
65	21/2"	80	100	143	36	35	622	522
80	3″	90	115	143	36	46	655	540
100	4″	125	138	216	36	55	720	582











Maximum pressure in bar / PSI without leakage at the valve seat.

Actuator / valve body direction of	Air pressure	Plug position	DN 1″ DN 25	DN 1½" DN 40	DN 2" DN 50	DN 2½" DN 65	DN 3" DN 80	DN 4" DN 100	
M	N	[bar] / [PSI]		[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]
	P	-	NC	6 / 87	4 / 58	5 / 73	6,5 / 94	4 / 58	5 / 73
PA		6 / 87	NC	10 / 145	10 / 145	8 / 116	6,5 / 94	5 / 73	10 / 145
P		-	NO	9 / 131	5 / 73	5 / 73	4 / 58	3,5 / 51	4 / 58
	P	6 / 87	NO	10 / 145	8 / 116	8 / 116	10 / 145	5,5 / 80	10 / 145
PA		6 / 87	A/A	10 / 145	10 / 145	10 / 145	10 / 145	10 / 145	10 / 145
	P	6 / 87	A/A	10 / 145	10 / 145	10 / 145	10 / 145	10 / 145	10 / 145

Maximum pressure in bar / PSI which the valve can open.

Actuator / valve body combination and direction of pressure		Proceliro	Plug position	. DN 72	DN 1½" DN 40	DN 2" DN 50	DN 2½″ DN 65	DN 3" DN 80	DN 4" DN 100
M	N	[bar] / [PSI]	position	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / [PSI]	[bar] / <i>[PSI]</i>
Î P		-	NC	10 / 145	6 / 87	10 / 145	6,5 / 94	6,5 / 94	6 / 87
	PA	6 / 87	NC	10 / 145	10 / 145	10 / 145	10 / 145	8 / 116	10 / 145
	P	-	NO	10 / 145	8 / 116	10 / 145	9,5 / 138	5,5 / 80	6 / 87
A A		6 / 87	NO	10 / 145	10 / 145	10 / 145	9 / 131	8 / 116	10 / 145

A = Air

NC = Normally closed

P = Product pressureNO = Normally open

A/A = Double acting

Note: Values valid for standard actuators.

For other pressures, bigger actuators can be assembled.

Consult Inoxpa.







