



# I Application

NLD/NTD shut-off valve is a pneumatically actuated sanitary single seat valve designed to detect product loss in case of the seal failure.

### I Operating principle

The valve is pneumatically actuated by means of compressed air.

The valve is supplied with a NC single-acting pneumatic actuator, thus in case of air supply failure, the valve goes back to the safety position (closed valve).

The detector is installed as NO (normally open), so that when the valve is closed, it lets the product out, thus giving a signal of leakage.

The seat is provided with two gaskets, between which a safety or detection chamber with a direct outlet to the exterior via the detector is formed.

Compressed air must simultaneously be supplied to the actuator (to open the valve) and to the detector to close it and prevent any loss of product.

Small amounts of product may be lost at the moment of the valve actuation, an air flow regulator can be installed to synchronise the opening/closing times of the actuator/detector to minimise these losses.

#### I Design and features

Robust and compact design.

Normally closed valve standard version.

Weld connections (mm or inches).

Avalable sizes: 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 sealing.

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  $Ra \le 0.8 \mu m$ External surface finish bright polish

#### **I Options**

Gaskets: FPM.

Connections: DIN, Clamp, SMS, RJT, FIL-IDF, etc.

"Twin-Stop" actuator.

INOXPA control unit for the main actuator.

Position sensors in the main actuator.

Steam barrier (if shaft sterilisation is required).

Surface finish Ra ≤ 0,5 μm.





## I Technical specifications

Available sizes DN 25 - DN 100 DN 1"- DN 4" Working temperature -10 °C to +120 °C (EPDM) 14 °F to 248 °F

> +140 °C (SIP, max. 30 min) 284 °F

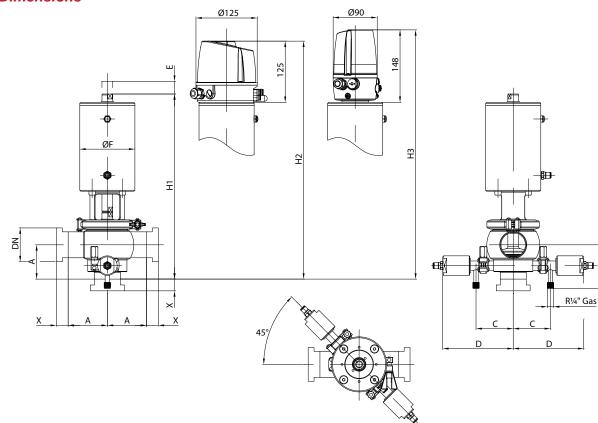
Maximum working pressure 10 bar 145 PSI

Minimum working pressure Vacuum

Compressed air pressure 6-8 bar 87-116 PSI

Air connections G 1/8 (BSP)

## **I Dimensions**



DN		A	В	С	D	ØF	E	Н1	Н2	Н3	X			
											Male DIN	Nut DIN	Clamp DIN	Clamp OD
25	1"	57	76	63	100	87	22	281	381	404	22	15		
40	1½"	60	83	70	110	112,5	22	288	388	411	22	15	21,5	
50	2"	70	93	75	115	112,5	32	359	459	482	23	16		12,7
65	21/2"	80	100	90	130	143	36	422	522	545	25	17		
80	3"	90	110	95	135	143	36	440	540	563	25	17	28	
100	4"	125	123	105	145	216	36	482	582	605	30	20		15,8





