

N Series

General Information

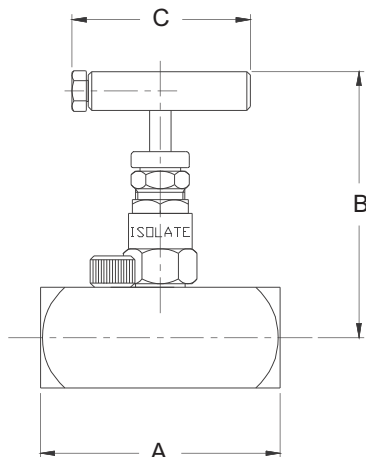
Needle Valves 6,000 psi & 10,000 psi

The precision made 'N' series, single isolation hand valve utilising metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The "N" series also offers non-rotating hardened tip for first time seal and long service life. The unique anti-vibration cam locking device at the body bonnet connection is for extra safety. Working pressures are 6,000 psi and 10,000 psi. Maximum working temperature up to 230°C and up to 427°C with GP option.

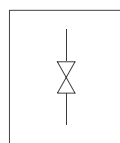


Design Features

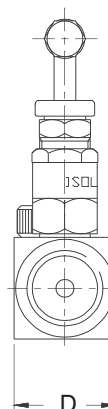
- Bubble tight metal to metal seat for positive shut off.
2 piece non-rotating hardened (17-4PH) tip for first time seal and long service life.
- Pressure responsive multi-ring / piston packing for compression and pressure dynamic sealing.
- Metal to metal body bonnet seal for high pressure and high temperature sealing.
- Unique bonnet locking cam. No accidental removal of head unit, or loosening due to vibration.
Positive no slack stem action.
- Bi-directional flow, with preferred flow indicated.
- Back sealing stem to extend packing life.
- Temperature range -46°C to 230°C (427°C with GP option). (Pressures may vary)
- Repair / service kits available to extend field life further. Actuating threads are above the packings to prevent contamination by the process medium.
- Body to bonnet ingress seal fitted as standard to prevent crevice corrosion.
- Full material traceability of major components.
- Available fire safe.
- Materials of construction can be supplied to meet the requirements of NACE MR-01-75.
- Available NPT, BSPP, BSPT threaded.



Flow



The Alco N series needle valve has a preferred flow direction however the unit is bi-directional



Part Numbers

St / St Part No.	Connections Size	A	B (Open)	Orifice size	C	D	CV	KV	Weight (Kgs)
N2NS	1/4" NPT	61	74	4	51	25	0.6	0.5	0.35
N3NS	3/8" NPT	61	74	4	51	25	0.6	0.5	0.35
N4NS	1/2" NPT	68	75	5	51	29	0.7	0.6	0.38
N6NS	3/4" NPT	76	80	5	51	38	0.8	0.7	0.7
N8NS	1" NPT	85	83	8	51	45	1.8	1.5	1.2

For 10,000 psi version add "U" i.e. UN4NS
For BSPP threads change "N" to "P" i.e. N2PS
For BSPT threads change "N" to "T" i.e. N2TS
Packing materials: RTFE (standard) graphoil high temperature option -GP
Orifice may vary with rating

Dims are in mm (appx)
See technical section for important additional valve data.