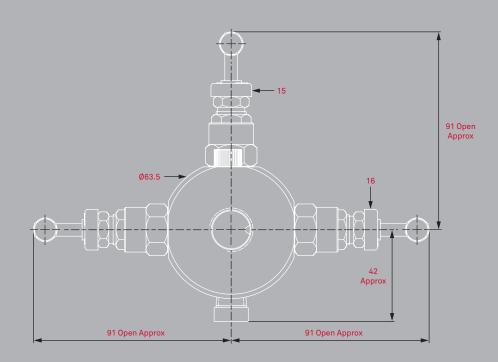
DBB 'N' Series Manifold

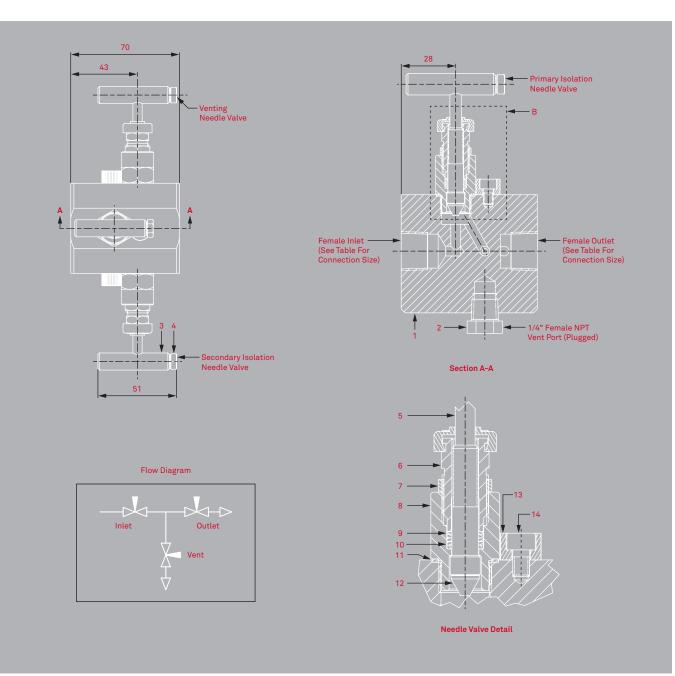
Double Block & Bleed (Needle, Needle, Needle) 6,000 PSI

The Double Block & Bleed Manifold is fully approved to be supplied to many of the world's oil majors. The design provides an economical method for mounting gauges with facility to test and calibrate gauges and pressure switches. The DBB 'N' series is a slim-line and compact single piece 3 valve manifold. Both isolation and vent valves incorporate the long service firesafe 'N' series needle valve, graphite multi-ring piston style packing and back sealing facility.

- All valves have 2-piece non-rotating hardened (17-4PH) tips as standard for bubble tight shut off and long service life
- Firesafe design
- Positive no slack stem action
- Metal to metal body bonnet seal for high pressure and high temperature sealing
- Valve flow can be reversed so calibration can be conducted in situ
- Temperature range -40°C to 427°C

- Fine control of venting
- Available in 316/316L
- Full material traceability
- Materials of construction supplied to meet the requirements of NACE MR 0175





	Item No.	Description	Material		Quantity	,	
	1	NEEDLE MANIFOLD	A479 UNS S31600		1		
Components Key	2	BLANK PLUG	A479 UNS S31600		1		
	3	"T" HANDLE	UNS S31600		3		
	4	HANDLE BOLT	A4 ST/ST		3		
	5	NEEDLE STEM	A479 UNS S31600		3		
	6	GLAND ADJUSTER	UNS S31600		3		
	7	GLAND LOCKNUT	UNS S31600		3		
	8	BONNET HOUSING	A479 UNS S31600		3		
	9	STEM SEAL	RTFE		3		
	10	GLAND PACKING	GRAPHITE		12		
	11	BONNET SEAL	UNS S31600		3		
	12	VALVE TIP	A564 UNS S17400		3		
	13	LOCKING CAM	UNS S31600		3		
	14	CAM SCREW	A4 ST/ST		3		
ло,	15	ISOLATE DUST CAP	PVC		2		
0	16	VENT DUST CAP	PVC		1		
Dimensions shown are in metric mm		Part no. EDBB-NNN-NV4NS-FS	Connection size 1/2" NPT	Bore 5	CV 0.7	Weight 1.9 Kg	

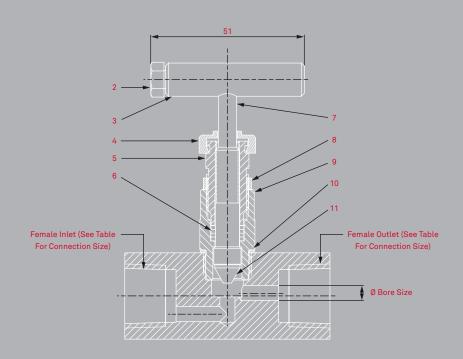
UN Series Needle Valve

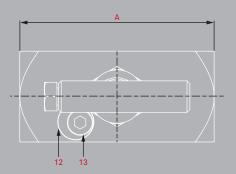
Needle Valves 10,000 PSI

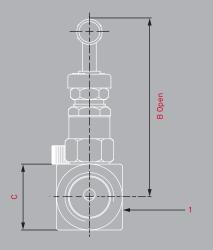
The precision made 'UN' series, single isolation hand valve utilising metal to metal seat and body to bonnet connection for superior, bubble tight sealing capabilities at both extreme pressures and temperatures. The 'UN' series also offers non-rotating hardened tip for extended service life. The unique anti-vibration cam locking device at the body bonnet connection is for extra safety. Maximum working pressure is 10,000psi. Maximum working temperature up to 230°C.

- 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
- 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
- Back sealing stem to extend packing life

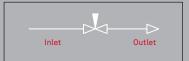
- Temperature range -40°C to 230°C
- Available in 316/316L
- Actuating threads are above the packing seals to prevent contamination by process medium
- Body to bonnet ingress seal fitted as standard to prevent crevice corrosion
- Repair/service kits available to extend service life further
- Full material traceability of major components
- Materials of construction supplied to meet the requirements of NACE MR 0175











	Item No.	Description	Material				Quanti	ty		
Components Key	1	NEEDLE BODY	A479 UNS S31600			1				
	2	HANDLE BOLT	A4 ST/ST	A4 ST/ST			1			
	3	"T" HANDLE	UNS S31600	UNS S31600			1			
	4	ISOLATE DUST CAP	PVC			1				
	5	GLAND ADJUSTER	UNS S31600			1				
	6	GLAND PACKING	RTFE				4			
	7	NEEDLE STEM	A479 UNS S31600			1				
	8	GLAND LOCKNUT	UNS S31600			1				
	9	BONNET HOUSING	A479 UNS S31	A479 UNS S31600			1			
	10	INGRESS SEAL	VITON	VITON			1			
	11	VALVE TIP	A564 UNS S17400			1				
	12	LOCKING CAM	UNS S31600			1				
	13	CAM SCREW	A4 ST/ST			1				
Dimensions shown are in metric mm		Part no. UN2NS UN3NS UN4NS UN6NS UN8NS	Connection size 1/4" NPT 3/8" NPT 1/2" NPT 3/4" NPT 1" NPT	A 61 68 76 85	B 76 77 82 85	Bore 4 5 5 8	C 25 25 29 38 45	CV 0.6 0.6 0.7 0.8 1.8	Weight 0.40 Kg 0.38 Kg 0.47 Kg 0.80 Kg 1.2 Kg	