

# NV1

Needle Valve (Hard Seat)  
(Instrumentation Valves)



Type needle valves with hard seat are designed for use on applications requiring complete isolation or throttling of the media. The conical metal tip (Stem Type CT) press fitted ensures perfect alignment for positive bubble tight shut-off. Available with end connections in sizes from 1/8" to 1" and a wide choice in connections of female screwed, male screwed, male to female screwed or socket weld.

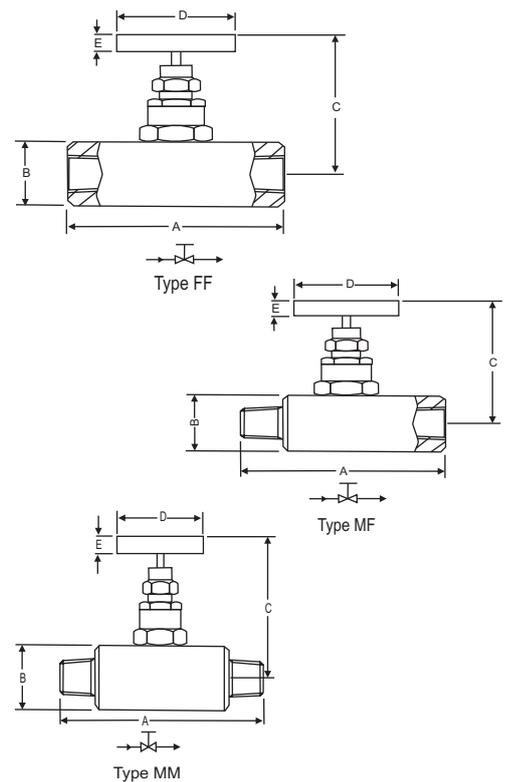
## Applications

- High pressure line shut off
- Instrument isolation
- Drain valve
- Liquid and vapor service

## Technical specifications

Design Pressure	: 6000 PSI
Max temp.	: 240°C
Material	: Stainless Steel
Stem	: (Type CT) Conical tip
Gland Packing	: PTFE
Stem packing area	: Burnished finish for Smooth valve operation.
Safety Feature	: Back seating for preventing stem blowout.

Size	Type	Length A	Width B	Height (open) Max., C	Handle D	Handle OD E
1/8"	FxF	50	22	55	40	10
	MxF	55	22	55	40	10
	MxM	60	22	55	40	10
1/4"	FxF	55	25	65	40	10
	MxF	65	25	65	40	10
	MxM	60	25	65	40	10
3/8"	FxF	55	25	65	40	10
	MxF	65	25	65	40	10
	MxM	65	25	65	40	10
1/2"	FxF	65	32	86.6	55	12.7
	MxF	75	32	86.6	55	12.7
	MxM	70	32	86.6	55	12.7
3/4"	FxF	70	38	88.6	55	12.7
	MxF	75	38	88.6	55	12.7
	MxM	80	38	86.6	55	12.7
1"	FxF	90	45	98	70	12
	MxF	105	45	98	70	12
	MxM	105	45	98	70	12



Notes : • Drawings are not to scale.  
• All Dimensions are in mm.

### Optional :

NV 10 - High pressure valves for 10,000 psi pressure  
NV 20 - High pressure valves for 20,000 psi pressure  
All dimensions are in mm

Note : Other combination sizes available on request.  
Please contact us for more details.

## How To Order

Body Material	Stem Packing	Size = P x P1	Connections (inlet x outlet)	Threads
C = Carbon Steel	P = PTFE	22 = 1/8" x 1/8"	FF = Female x Female	N = NPT (ANSI B 1.20.1)
S = SS 316	G = Grafoil	24 = 1/4" x 1/4"	MF = Male x Female	P = BSPP (BS 2779, ISO 228/1)
S4 = SS 304		33 = 3/8" x 3/8"	MM = Male x Male	B = BSPT (BS 21, ISO 7/1)
SL = SS 316L		44 = 1/2" x 1/2"	SW = Socket Weld	
M4 = Monel 400		66 = 3/4" x 3/4"		
M5 = Monel 500		88 = 1" x 1"		
H = Hastelloy C				
B = Brass				

### Options

**TF** : Compliance to NACE standard  
**SG** : For Oxygen service, valves are supplied cleaned, degreased and suitably packed.  
**GH** : Material test certificate  
**GO** : Hydro test certificate

\* Material test certificate will be provided for wetted parts only with chemical composition testing. For others, please consult factory.

### Example

To place an order simply refer to the codes in the table.

Valve Type : Body Material + Stem Packing + Size + Connections + Threads + Options

NV4 + S + P + 44 + FF + N = NV4 . S . P . 44 . FF . N . Options

### Standard Valve Materials

Valve	Body	Bonnet	Stem	Tip
Carbon Steel	CS A105	CS A105	SS 304	SS 304
Stainless Steel	SS 304	SS 304	SS 304	SS 304
Stainless Steel	SS 316	SS 316	SS 316	SS 316
Monel	Monel	Monel	Monel	Monel

Note : Other combination sizes available on request.  
Please contact us for more details.