

# Needle valve - type NP10JW

Stainless Steel, brass, carbon steel

PN 206/413  
DN 2-DN 10



**Table 1 Technical data**

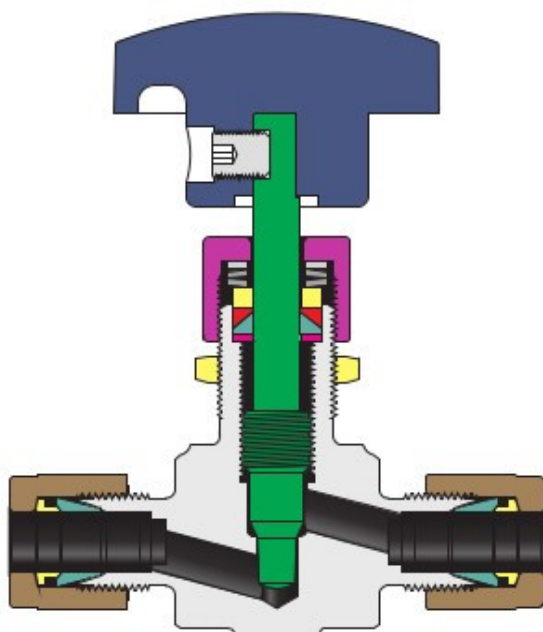
Dimension	1/8" to 1" / DN 4 to DN25
Material	SS, Monel, Titan, Inconel
Pressure class	6000psig/413bar
Temperature range	-40 °C till max 650 °C
Connection	JW-lok, Welded ends, Thread
Testing	EN 12266-1
Leakage	ISO 5208-D
Seat	Hårdtätande Koboltlegering

## FEATURES

- Live-loaded packing system.
- Integral-bonnet valve body design.
- Easy external adjustments by packing nut.
- The up stem threads are cold rolled for high strength and smooth operation.
- Compact design.
- Straight, angle and cross patterns can be choose.
- 2-piece chevron packing with disc springs:
- Improves seal
- Reduces friction wear
- Compensates for wear
- Reduces operating torque
- Standard maximum pressures:
- Stainless steel: 6000 psig (413 bar).
- Brass: 3000 psig (206 bar)
- Temperatures up to 450°F (232°C) with PTFE packing;
- Other ratings are limited to: 200°F (93°C) max with soft-seat stem with PCTFE stem tip.
- 250°F (121°C) max with UHMWPE packing.
- 450°F (232°C) max with PFA packing.
- 500°F (260°C) max with PEEK packing
- Every valve is 100% factory tested with nitrogen.

## APPLICATION

Suitable for sour gas service; materials are selected in accordance with NACE MR0175/ISO 15156.



## Stem Type



Blunt



Regulating



Ball



Soft

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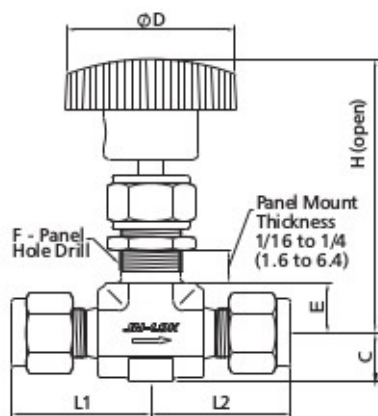
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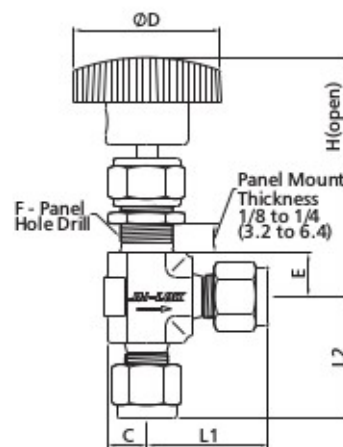
Table 2 - Material specification

Pos	Detailj	Material		
		SS 316	Brass	Steel
1	Handle	Anodized aluminum or stainless steel or black knob		
2	Set screw	Nickel cadmium-plated steel		
3	Packing Nut	SS 316/A479	Brass 360/B16	12L14/A108
4	Gland	SS 304/A276		
5	Packing Spring	S17700/A693		
6	Packing Gland	SS 304/A276		
7	Upper Packing	PTFE or PEEK or graphite		
8	Lower Packing	PTFE or PEEK or graphite		
9	Lower Gland	SS 316/A276		
10	Panel Nut	SS 316/A276		
11	Stem	Chrome-plated SS 316/A276		
12	Body	SS 316/A276	Brass 377/B283	Chrome-plated 11L17/A108
	Lubricant	Molybdenum disulfide based		

## Straight Pattern



## Angle Pattern



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**Table 3 - Connection specification**

Pos	Shortening	Material	Pos	Shortening	Material
1	FN	Female NPT	11	MTS	MTS Metric Tube Socket Weld
2	N	N Male NPT	12	MTB	MTB Metric Tube Butt Weld
3	FR	FR Female BSPT	13	PS	PS Pipe Socket Weld
4	RT	RT Male BSPT	14	PB	PB Pipe Butt Weld Standard
5	FM	FM Female ISO	15	FJ	FJ Fractional Tube Fitting
7	MS	MS Male ISO	16	MJ	MJ Metric Tube Fitting
8	FP	FP Female BSPP	17	UFB	UFB Nut + Gasket + Fractional Bulge Nipple
9	BP	BP Male BSPP	18	UMB	UMB Nur + Gasket + Metric Bulge Nipple
10	TS	TS Fractional Tube Socket Weld			

**Table 4 - Dimensions NP2, NP4**

Product Code	Connection type and size		Orifice in./mm	Cv	Dimension in./mm						
	Inlet	Outlet			L1	L2	C	D	E	F	H
NP2-FN2	1/8 Female NPT	1/8 Female NPT	0,08/ 2,0	0,09	0,81/ 20,6	0,81/ 20,6	0,31/ 7,9	1,0/ 25,4	0,44/ 11,2	0,47/ 11,9	2,28/ 57,9
NP2-FJ2	1/8" JW-LOK	1/8" JW-LOK			0,98/ 25,0	0,98/ 25,0					
NP2-MJ3	3 mm JW-LOK	3 mm JW-LOK									
NP4-FN2	1/8 Female NPT	1/8 Female NPT	0,157/ 4,0	0,35	0,81/ 20,6	0,81/ 20,6	0,39/ 9,9	1,38/ 35,0	0,44/ 11,2	0,53/ 13,5	2,50/ 63,5
NP4-N2	1/8 Male NPT	1/8 Male NPT			0,98/ 25,0	0,98/ 25,0					
NP4-N4	1/4 Male NPT	1/4 Male NPT									
NP4-FJ4	1/4" JW-LOK	1/4" JW-LOK			1,13/ 28,7	1,13/ 28,7					
NP4-MJ6	6 mm JW-LOK	6 mm JW-LOK									
NP4-MJ8	8 mm JW-LOK	8 mm JW-LOK			1,17/ 29,7	1,17/ 29,7					

**Table 5 - Dimensions NP6, NP11**

Product Code	Connection type and size		Orifice in./mm	Cv	Dimension in./mm						
	Inlet	Outlet			L1	L2	C	D	E	F	H
NP6-FN4	1/4 Female NPT	1/4 Female NPT	0,25/ 6,4	0,70	1,06/ 26,9	1,06/ 26,9	0,5/ 12,7	1,88/ 47,8	0,5/ 12,7	0,78/ 19,8	2,97/ 75,4
NP6-FN6	3/8" Female NPT	3/8" Female NPT			1,12/ 28,4	1,12/ 28,4					
NP6-N6	3/8 Male NPT	3/8 Male NPT			1,50/ 38,1	1,50/ 38,1					
NP6-N8	1/2 Male NPT	1/2 Male NPT			1,29/ 32,8	1,29/ 32,8					
NP6-FJ6	3/8" JW-LOK	3/8" JW-LOK			1,4/ 35,6	1,4/ 35,6					
NP6-FJ8	1/2" JW-LOK	1/2" JW-LOK			1,3/ 33,0	1,3/ 33,0					
NP6-MJ10	10 mm JW-LOK	10 mm JW-LOK			1,4/ 35,6	1,4/ 35,6					
NP6-MJ12	12 mm JW-LOK	12 mm JW-LOK			1,56/ 39,7	1,56/ 39,7					
NP6-MJ14	14 mm JW-LOK	14 mm JW-LOK			1,50/ 38,1	1,50/ 38,1					
NP6-MS20	M20x1.5 Male ISO	M20x1.5 Male ISO			1,50/ 38,1	1,50/ 38,1					
NP6-FN8	1/2 Female NPT	1/2 Female NPT	1,50/ 38,1	1,50/ 38,1	0,75/ 19,1	3,00/ 76,2	0,75/ 19,1	1,03/ 26,2	3,91/ 99,3		
NP11-FN12	3/4 Female NPT	3/4 Female NPT	1,63/ 41,3	1,63/ 41,3							
NP11-N12	3/4 Male NPT	3/4 Male NPT									
NP11-FJ8	1/2" JW-LOK	1/2" JW-LOK	1,90/ 48,3	1,90/ 48,3							
NP11-FJ12	3/4" JW-LOK	3/4" JW-LOK									
NP11-MJ14	14 mm JW-LOK	14 mm JW-LOK									

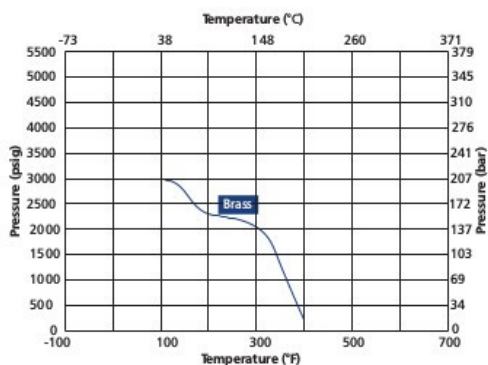
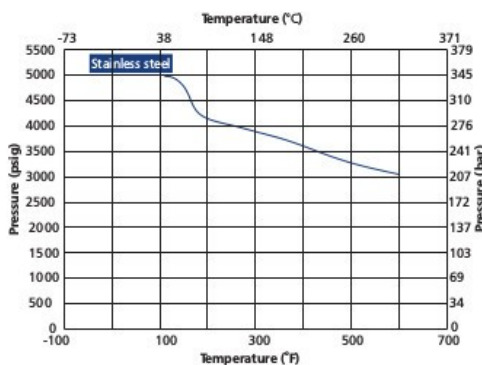
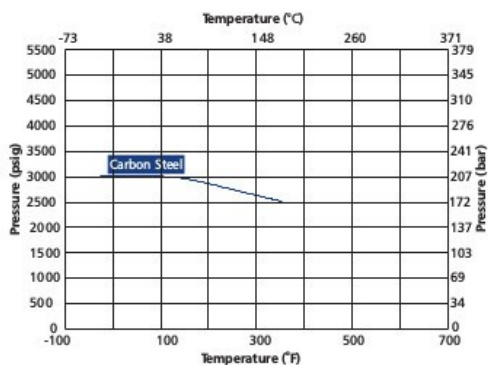
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## Pressure vs. Temperature



## Regulating Stems Flow Data at 100°F (37°C)



Address EF Valves AB  
Teknikringen 1F  
583 30 Linköping  
Sweden

Contact: +46 (0) 703 22 56 36  
info@efvalves.se  
www.efvalves.se