



The right connection  
The right environment

# Needle Valves - Inline and Right angle NLG / NLWG

Ref. No. H02310  
Release: Aug 2020

ENGINEERING - 1 of 2

## Description

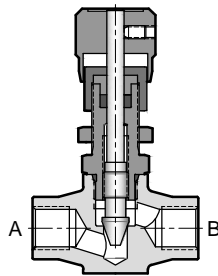
Needle valve model NL, NLW are two way Throttle valves.

The Valve allows accurate adjustment of flow by throttling action. The throttling can be varied by rotation of the Hand knob. These valves offer constant flow rate so long as the pressure drop across the valve and the viscosity of oil remains constant.

The throttle is effective in either direction.



## Section

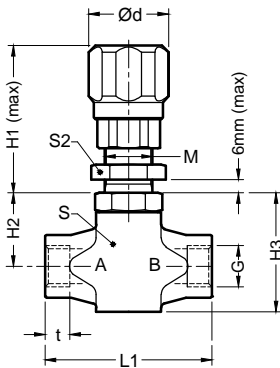


Hydraulic Symbol



## Unit Dimensions

In-line threaded ports



Right angle threaded ports

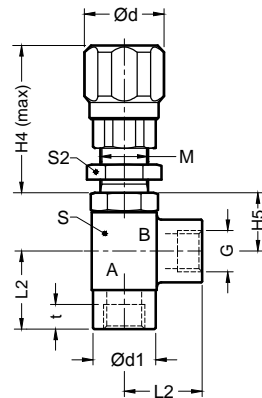
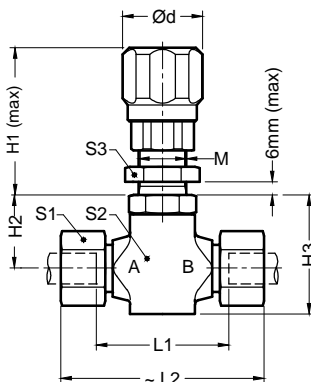


Table-1

Dimensions in mm.

G	Ød1	Pr. (bar)	L1	t	L2	H1	H2	H3	H4	H5	Ød	S	S2	M
G 1/4	22	350	70	14	30						40	30		
G 3/8	25	350	70	14	30	76.5	34.0	55.0	77.0	27.0	40	30	30	M22x1.5
G 1/2	29	350	77	17	36						40	30		
G 3/4	35	350	93	17	45	78.0	44.0	70.0	78.0	32.0	48	36	36	M26x1.5
G1	44	350	93	18	45						48	46	36	
G1.1/4	58	250	162	22	65	95.5	66.5	117.0	95.0	47.0	68	60	50	M42x2.0
G1.1/2	58	250	162	24	65						68	60	50	

In-line Tube mounting



Right Angle Tube mounting

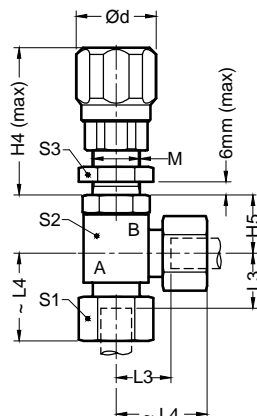


Table-2

Tube OD	Pr. (bar)	L1	L2	L3	L4	H1	H2	H3	H4	H5	Ød	S1	S2	S3	M
10	350	55	88		39.0						22				
12	350	55	88	22	39.0	76.5	34.0	55.0	76.5	27.0	40	24	30	30	M22x1.5
16	350	60	97		41.0						30				
20	350	72	115		68.0	78.5	43.5	71.5	78.0	32.0	48	36	41	36	M26x1.5
25	350	69	117		73.5						48	46			
30	250	135	188		63.0	95.5	66.5	118.0	95.0	48.0	68	50	60	50	M42x2.0
38	250	130	192	40	67.0						68	60	50		



The right connection  
The right environment

# Needle Valves - Inline and Right angle NLG / NLWG

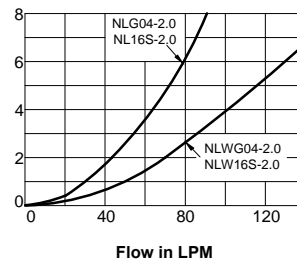
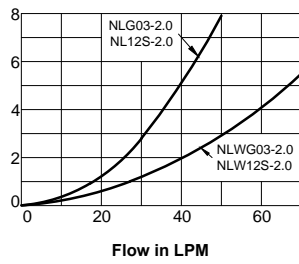
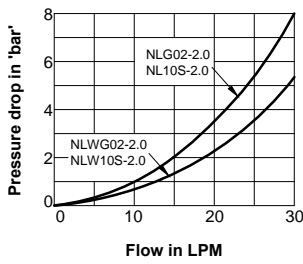
Ref. No. H02310  
Release: Aug 2020

ENGINEERING - 2 of 2

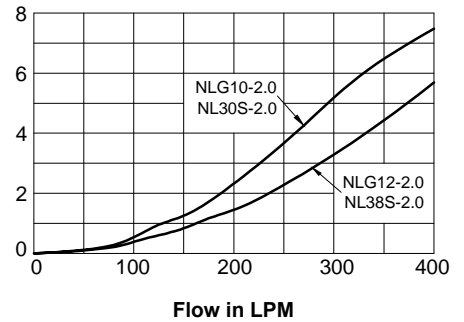
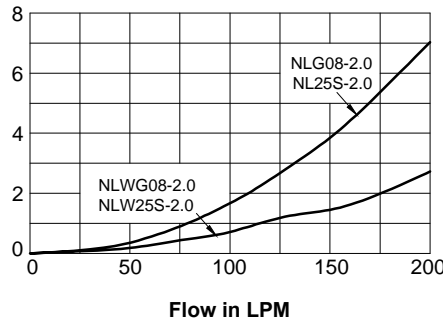
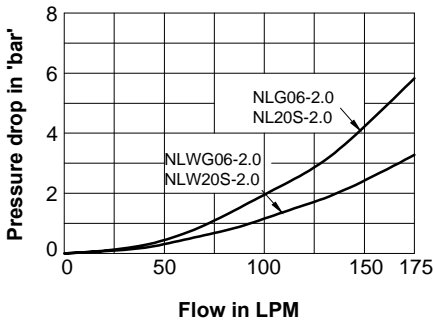
## Technical Specifications

Construction .....	Rising conical spindle.	Hydraulic medium .....	Mineral oil.
Mounting style .....	Inline or right angle port or tube mounting.	Viscosity range .....	10 cSt to 380 cSt.
Mounting position .....	Optional	Fluid temperature range .....	-20 °C to +80 °C
Flow direction .....	Either side.	Fluid cleanliness requirement .....	As per ISO 4406 20/18/15
Operating pressure .....	Refer Table -1 and Table-2.	Nom. flow handling capacity .....	Refer graphs

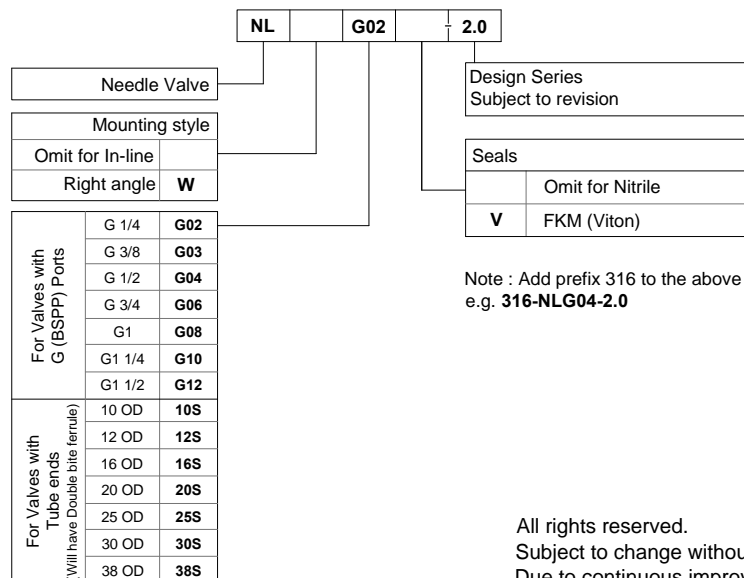
## Performance curves



Oil used : ISO VG 68  
Viscosity : 68 cSt @ 40 °C  
Test conducted at : 50 °C  
Condition : Valve fully opened



## Ordering Code



Note : Add prefix 316 to the above part code for SS 316 Valves.  
e.g. **316-NLG04-2.0**

All rights reserved.  
Subject to change without notice.  
Due to continuous improvement in the design of the product,  
the actual product supplied may look different than shown above.