



H300 SERIES

NEEDLE VALVES



FEATURES:

- Straight and angle pattern.
- Stainless Steel and Brass Construction.
- MAWP 5000 psi (340bar)
- MAWT 810°F (435°C)
- Flow coefficient (Cv) 0.09 to 1.8.
- Sizes: 1/8" to 3/4" (3mm-12mm)
- Double Ferrule Let-Lok®,
- Single Ferrule, Female NPT, Male NPT, BSPT.
- Round and metal handles
- Variable stem range

GENERAL

The H300 Series is a high pressure instrumentation needle valve for shut-off service on instrumentation panels.

The valves offer compact structure size of with the ability for relatively high flow regulating and long life service. The H300 Series is rated to max. 5000 psig (340 Bar) and performs on-off service.

STEM PACKING KIT

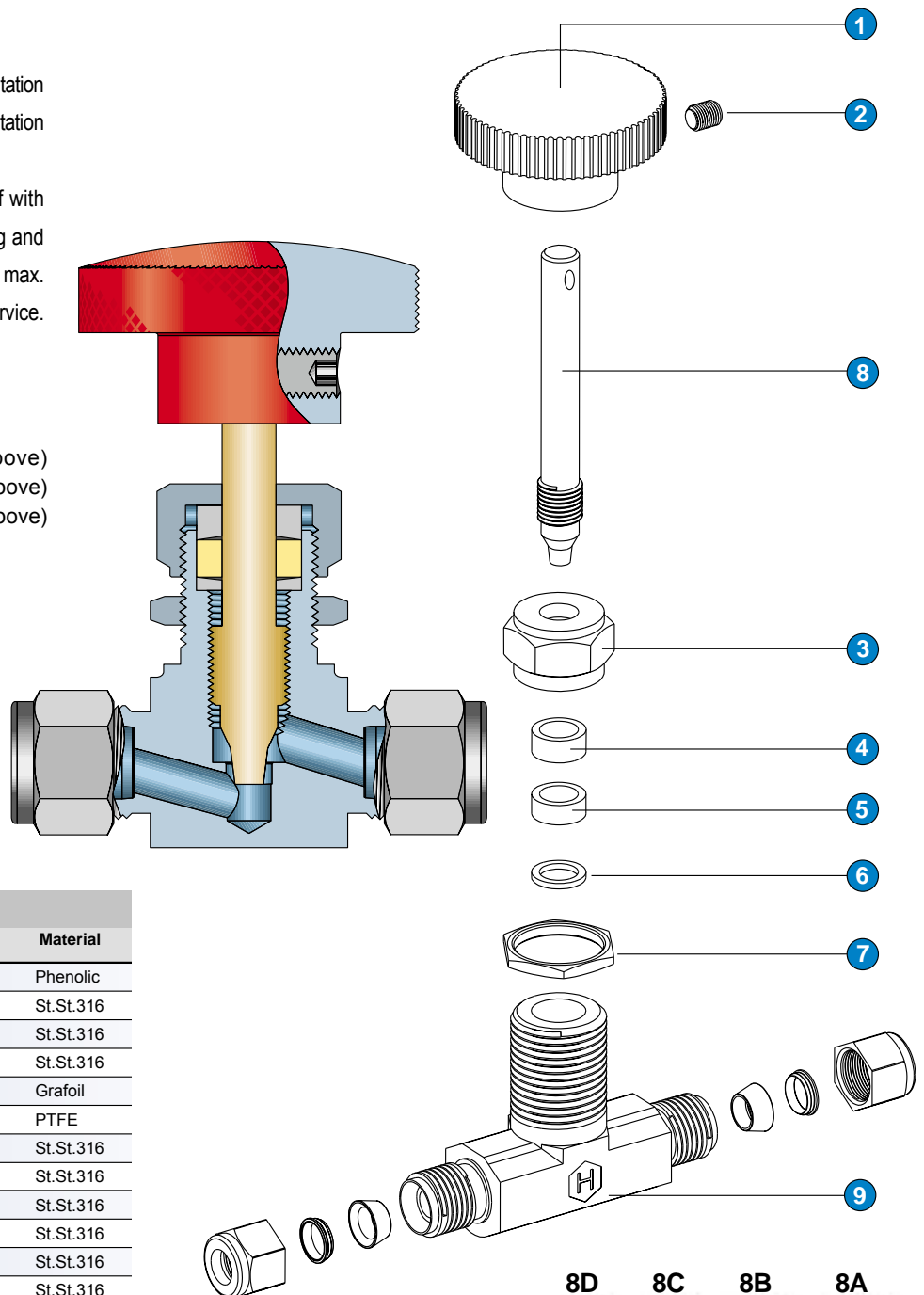
Packing kits are available.

Kits contain:

Packing (no. 5 in Material table above)

Upper Gland (no. 4 in Material table above)

Lower Gland (no. 6 in Material table above)



MATERIALS

No.	Part No.	Qty	Material
1	Handle	1	Phenolic
2	Set Screw	1	St.St.316
3	Packing Nut	1	St.St.316
4	Upper Gland	1	St.St.316
5	A Packing Grafoil	1	Grafoil
	B Packing PTFE	1	PTFE
6	Lower Gland	1	St.St.316
7	Panel Nut	1	St.St.316
	A Regulating Stem	1	St.St.316
	B V-Stem	1	St.St.316
8	C Non-Rotating Stem	1	St.St.316
	D Soft Seat Stem	1	St.St.316
9	Body	1	St.St.316

* As per customer request; see listed Alternative Stems below

ALTERNATIVE STEMS

Ham-Let needle valves are available with a choice of stem tip options to allow greater flexibility.

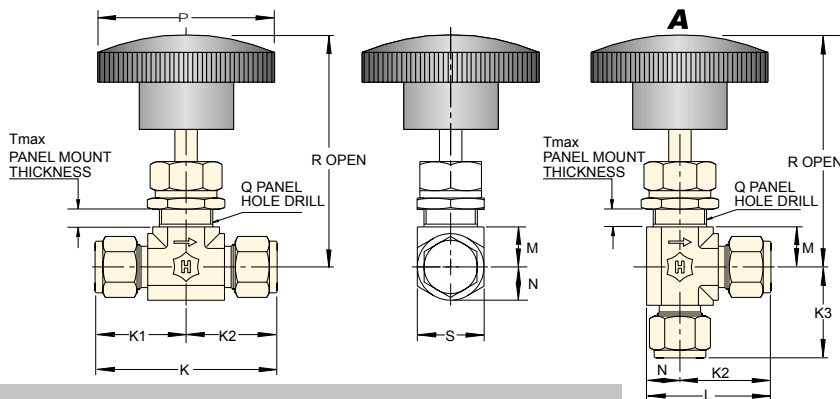
A Regulating: Used where some degree of flow control is required.

B V-Stem: A standard stem tip used for general purpose liquids and gases.

C Non-Rotating: Typically used in high-cycle applications to extend valve life. It is designed to prevent galling between the seat and stem.

D Soft Seat: A soft seat requires a lower seating torque than a metal stem tip. The soft seat is replaceable. Maximum temperature 250°F (121°C).



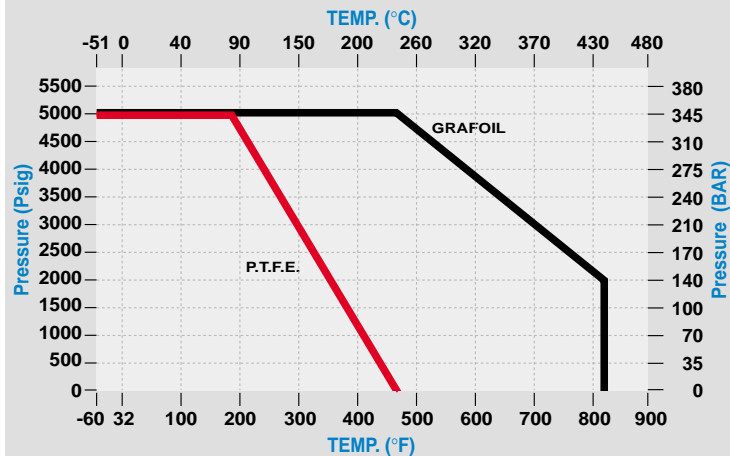


DIMENSIONS H300 SERIES

Basic Ordering Number	Orifice mm (in)	Cv	Connection Size		K		K1		K2		K3		Dimensions L		M mm/ inch	N mm/ inch	P mm/ inch	Q mm/ inch	R Open mm/ inch	S mm/ inch	Tmax mm/ inch
			Inlet	Outlet	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch							
H300	2.0 (0.08)	0.09	3mm LET-LOK	3mm LET-LOK	50.8	2.00	25.4	1.00	25.4	1.00	25.4	1.00	33.4	1.31	10.0	7.95	41.0	13.0	72.0	15.9	7.0
H300			1/8" LET-LOK	1/8" LET-LOK	50.8	2.00	25.4	1.00	25.4	1.00	25.4	1.00	33.4	1.31							
H395			1/8" MALE NPT	1/8" LET-LOK	44.4	1.75	19.0	0.75	25.4	1.00	19.0	0.75	33.4	1.31							
H300	4.4 (0.172)	0.37	1/4" LET-LOK	1/4" LET-LOK	58.8	2.31	29.4	1.16	29.4	1.16	29.4	1.16	37.4	1.47	0.39"	0.31"	1.61"	0.51"	2.83"	5/8"	0.27"
H300			6mm LET-LOK	6mm LET-LOK	58.8	2.31	29.4	1.16	29.4	1.16	29.4	1.16	37.4	1.47							
H300			8mm LET-LOK	8mm LET-LOK	58.8	2.31	29.4	1.16	29.4	1.16	29.4	1.16	37.4	1.47							
H310			1/8" Female NPT	1/8" Female NPT	41.2	1.62	20.6	0.81	20.6	0.81	20.6	0.81	28.6	1.12							
H380			1/8" Male NPT	1/8" Male NPT	50.8	2.00	25.4	1.00	25.4	1.00	25.4	1.00	33.4	1.31							
H380			1/4" Male NPT	1/4" Male NPT	50.8	2.00	25.4	1.00	25.4	1.00	25.4	1.00	33.4	1.31							
H395			1/4" Male NPT	1/4" LET-LOK	54.8	2.16	25.4	1.00	29.4	1.16	25.4	1.00	37.4	1.47							
H300			3/8" LET-LOK	3/8" LET-LOK	66.0	2.60	33.0	1.30	33.0	1.30	33.0	1.30	45.0	1.77							
H300	6.4 (0.25)	0.73	10mm LET-LOK	10mm LET-LOK	66.4	2.62	33.2	1.31	33.2	1.31	33.2	1.31	45.2	1.78	14.3	11.9	50.0	20.0	82.6	23.8	7.0
H300			1/2" LET-LOK	1/2" LET-LOK	71.6	2.82	35.8	1.41	35.8	1.41	35.8	1.41	47.7	1.88							
H300			12mm LET-LOK	12mm LET-LOK	71.6	2.82	35.8	1.41	35.8	1.41	35.8	1.41	47.7	1.88							
H310			1/4" Female NPT	1/4" Female NPT	54.0	2.12	27.0	1.06	27.0	1.06	27.0	1.06	38.9	1.53							
H310R			1/4" Female BSPT	1/4" Female BSPT	54.0	2.12	27.0	1.06	27.0	1.06	27.0	1.06	38.9	1.53							
H380			3/8" Male NPT	3/8" Male NPT	57.0	2.24	28.5	1.12	28.5	1.12	28.5	1.12	40.4	1.59							
H385			1/4" Male NPT	1/4" Female NPT	55.5	2.18	28.5	1.12	27.0	1.06	28.5	1.12	38.9	1.53							
H385			3/8" Male NPT	3/8" Female NPT	56.5	2.22	28.5	1.12	28.0	1.10	28.5	1.12	39.9	1.57							
H395			1/4" Male NPT	3/8" LET-LOK	61.5	2.42	28.5	1.12	33.0	1.30	28.5	1.12	45.0	1.77							
H395			3/8" Male NPT	3/8" LET-LOK	61.5	2.42	28.5	1.12	33.0	1.30	28.5	1.12	45.0	1.77							
H395			3/8" Male NPT	1/2" LET-LOK	64.3	2.53	28.5	1.12	35.8	1.41	28.5	1.12	47.7	1.88							
H300	9.5 (0.375)	1.8	3/4" LET-LOK	3/4" LET-LOK	97.0	3.82	48.5	1.91	48.5	1.91	48.5	1.91	63.6	2.50	19.0	15.1	64.0	26.0	103.3	30.2	6.5
H310			3/8" Female NPT	3/8" Female NPT	76.2	3.00	38.1	1.50	38.1	1.50	38.1	1.50	53.2	2.09							
H310			1/2" Female NPT	1/2" Female NPT	76.2	3.00	38.1	1.50	38.1	1.50	38.1	1.50	53.2	2.09							
H380			1/2" Male NPT	1/2" Male NPT	76.2	3.00	38.1	1.50	38.1	1.50	38.1	1.50	53.2	2.09							
H385			1/2" Male NPT	1/2" Female NPT	76.2	3.00	38.1	1.50	38.1	1.50	38.1	1.50	53.2	2.09							

PRESSURE TEMPERATURE CURVE

Only applicable to metallic stem tips in 316 St. St. Body.

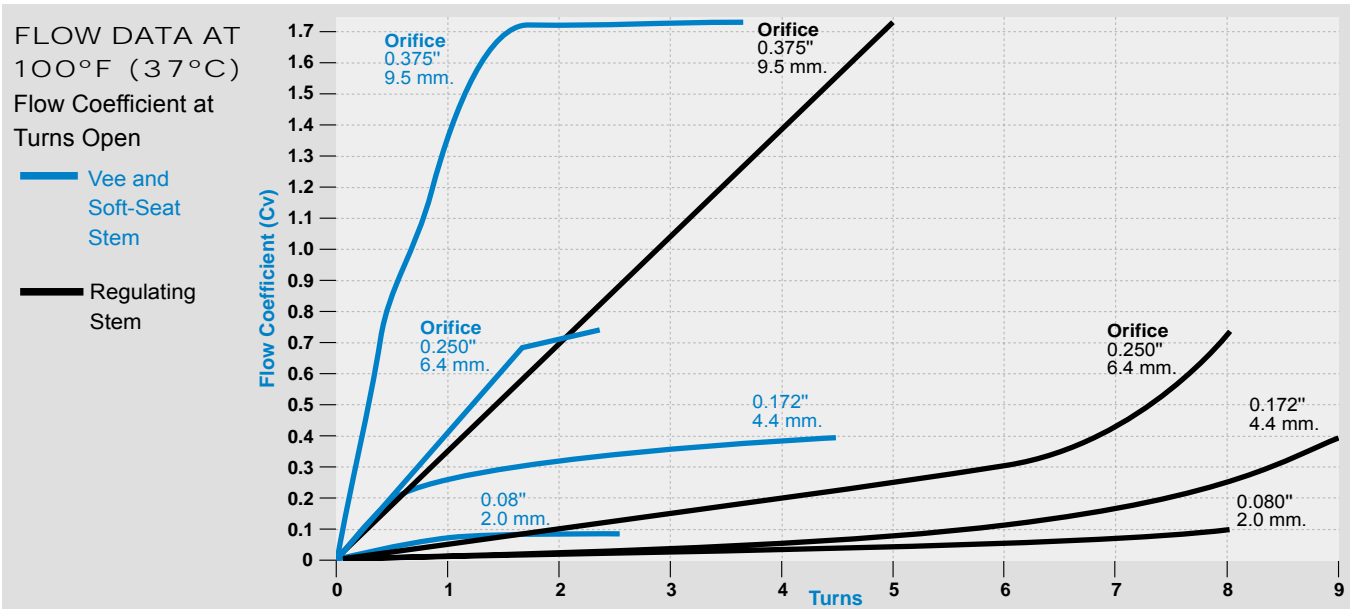


TECHNICAL DATA

The following table depicts the temperature and pressure ratings for a standard valve with PTFE packing

Body Material	Stem Type	Rating	
		Temperature	Pressure
316 st.st.	All St.St. Stems	-46°C to 230°C (-51°F to 446°F)	5000 psi
	Kel-F	-46°C to 121°C (-51°F to 250°F)	(34,450kPa)
Brass	Regulating & V-Stem	-46°C to 200°C (-51°F to 392°F)	3000 psi
	Kel-F	-46°C to 121°C (-51°F to 250°F)	(20,600kPa)

* Extreme temperature fluctuations may require packing nut adjustment



ORDERING INFORMATION

Your Safety is important to us. Please ensure proper reference to our latest catalog

Valve Series	Body Material	End Connection	Stem Designator	End Connection Size	Handle	Pattern Designator	Suffix Designator
H3	SS	L	V	1/4	R	A	G
00 - LET-LOK to LET-LOK 10 - Female to Female 80 - Male to Male 95 - Male to LET-LOK	SS - 316SS B - Brass	L - LET-LOK R - NPT N - BSPT NL - NPT to LET-LOK HL - Single Ferrule G - BSPP GL - Face Seal Ends	V - V-Stem R - Regulating Stem K - Soft Seat Kel-F Stem NR - Non-Rotating Stem	1/8" 3mm 1/4" 6mm 3/8" 8mm 1/2" 10mm 3/4" 12mm	RS - Black Plastic RAS - Black Aluminum RAR - Red Aluminum RAB - Blue Aluminum RAG - Green Aluminum RAY - Yellow Aluminum M - Metal 316L	A - Angle S - Straight (standard)	G - Grafoil

OPTIONAL:

For other materials and end connections consult factory Engineering Dept.
For more technical information and data see our catalog T-3300 Corrosion Data.

Spare Parts Kit - Repair Kit

COLOR HANDLE AVAILABLE:



Spare parts kit is available for each valve. The kit includes: Stem Packing. To order a spare parts kit, use the following format:

H300 -	KIT -	1/4 -	C -	M
Seat Handle	End Connection Size	Seat Material	RS - Black Plastic RAB - Blue Aluminum RAS - Black Aluminum RAG - Green Aluminum RAR - Red Aluminum RAY - Yellow Aluminum M - Metal 316L	
		P - PTFE® G - Grafoil		

Spare Round Handle Kit

Spare Round Handle Kits are available for each valve. The spare Round Handle Kit includes: Aluminum Round Handle and set screw.

Warning - for your safety:

Select the right component for safety's sake: The total design of the system must be taken into consideration when selecting components in order to ensure that your Ham-Let products provide safe, trouble-free operation. It is the responsibility of the system designer and the user to consider the compatibility of the materials, of the components and system, the function of the component, appropriate ratings and to ensure proper installation, operation and maintenance. Improper selection or use of products can cause property damage or personal injury, in respect of which the system designer and/or the user shall be solely liable and responsible.

CLEANING & PACKAGING:

Ham-Let's H300 Needle valve is treated with Ham-Let Passivation Cleaning and Packaging (Procedure 8075).
Ham-Let H300 Needle valves with face seal end connections are treated with Oxygen Cleaning and Packaging (Procedure 8055).
Oxygen Cleaning and Packaging (Procedure 8055) is available as an option.

TESTING:

The H300 series Needle Valve designs have been tested for Proof, Burst and Leakage. Every H300 Needle Valve is factory tested with nitrogen at 1000psi (69 bar). Maximum allowable leak across seats is 0.1 std cc/min. No leakage is allowed for shell testing.

PACKING ADJUSTMENT

Due to the varied service applications of the valve, packing adjustment may be occasionally necessary. Initial adjustment is recommended after installation and prior to start-up. Please find more information at installation instruction chapter.