2800 Series

Forged Body, Union Bonnet Needle Valves

For the most severe service applications, these valves feature a stem backseat for safety, a long cycle life with high temperature capability to 700° F (370° C), and a union bonnet for safe, convenient maintenance.



Typical Applications

- High temperature service to 700° F (370° C)
- Corrosive handling
- Reactive and hot condensates

Technical Data

BODY	316 stainless steel
MAXIMUM OPERATING PRESSURE	*Grafoil® packing:* • 4000 psig @ 70° F (276 Bar @ 21° C) • 2500 psig @ 700° F (172 Bar @ 370° C) *Dyna-Pak® packing:* • 5000 psig @ 70° F (345 Bar @ 21° C)
OPERATING TEMPERATURE RANGE	*Grafoil® packing* -100° to +700° F (-75° to +370° C) *Dyna-Pak® packing* -40° to +450° F (-40° to +232° C)
ORIFICE	0.312″ (7.9 mm)
Cv FACTOR	1.10

Features & Benefits

Safety

- Integral stem backseat
- Union bonnet design

High temperature service

- Grafoil® packing ring located below stem threads extends service to 700° F (370° C)

Extended cycle life

- 17-4PH stainless steel hardened stem with dry film lubricant on threads and hardened thread gland for increased thread life
- Nonrotating hardened stem tip prevents galling

Reliability

- All valves are tested for bubble-tight leakage at both seat and packing

Installation variety

- Choice of HOKE Gyrolok® tube fittings, female NPT, or tube socket weld connections

Panel mounting

- Panel mounting is standard on all models
- Special High Tolerance NPT Thread

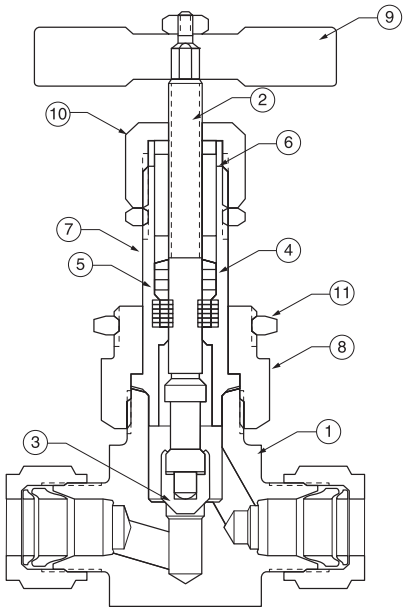
needle valves

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2800 Series

Materials of Construction

	DESCRIPTION	MATERIAL
1	Body	316 stainless steel
2	Stem	17-4PH stainless steel
3	Stem tip	17-4PH stainless steel
4	*Stem packing* Grafoil® packing Dyna-Pak® packing	 Grafoil® TFE/316 stainless steel wafer
5	Ring gland	316 stainless steel
6	Thread gland	416 stainless steel
7	Housing	XM-19 stainless steel
8	Adapter nut	316 stainless steel
9	Handle	316 stainless steel
10	Packing nut	316 stainless steel
11	Panel mounting nut	316 stainless steel



Dimensions

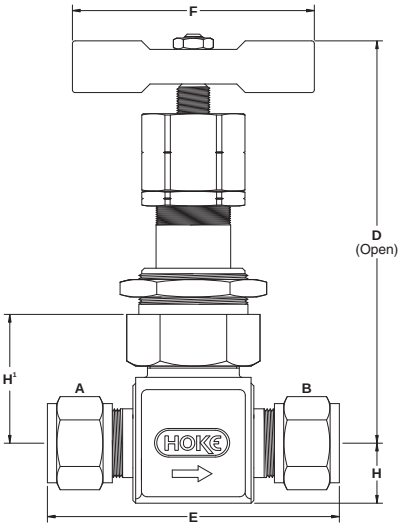
INLET A AND OUTLET B		D	E	F	H	H[1]
¼″ Gyrolok®	inch	4¾	2 15/16	2⅝	⅝	1 13/32
	mm	121	75	67	16	36
⅜″ Gyrolok®	inch	4¾	2 15/16	2⅝	⅝	1 13/32
	mm	121	75	67	16	36
⅜″ socket weld	inch	4¾	2 7/16	2⅝	⅝	1 13/32
	mm	121	62	67	16	36
½″ Gyrolok®	inch	4¾	3 5/16	2⅝	⅝	1 13/32
	mm	121	84	67	16	36
½″ female NPT	inch	4¾	2 7/16	2⅝	⅝	1 13/32
	mm	121	62	67	16	36
½″ socket weld	inch	4¾	2 7/16	2⅝	⅝	1 13/32
	mm	121	62	67	16	36

Dimensions for reference only, subject to change.

Panel mounting

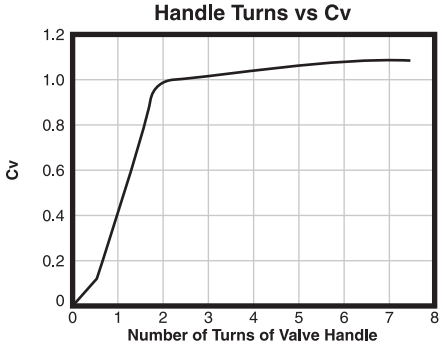
Panel hole = 1 3/16″ (30.2 mm) diameter

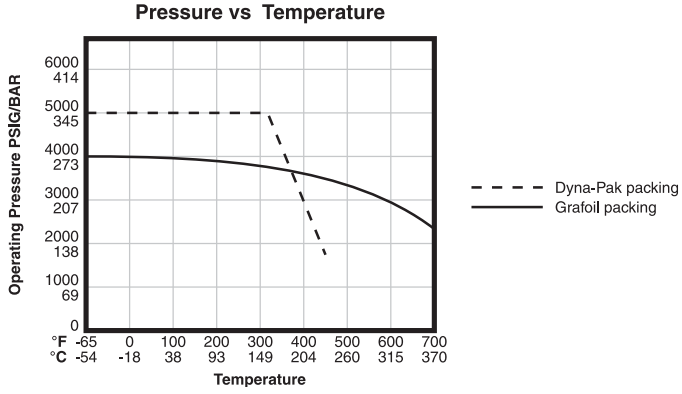
Panel thickness = 3/16″ (4.7 mm) maximum



2800 Series

Curves





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How to Order: Standard Valves



2813F8Y: Globe pattern

2800 Series Globe Pattern
Metal stem tip; Dyna-Pak® packing for service to
+450° F (232° C) at 1800 psi
0.312˝ orifice/1.10 Cv

END CONNECTIONS	ORDER BY PART NUMBER
INLET AND OUTLET	316 STAINLESS STEEL
½˝ female NPT	2813F8Y
½˝ Gyrolok®	2813G8Y



2811G8Y: Globe pattern

2800 Series Globe Pattern
Metal stem tip; Grafoil® packing for service to
+700° F (371° C) at 2500 psi
0.312˝ orifice/1.10 Cv

END CONNECTIONS	ORDER BY PART NUMBER
INLET AND OUTLET	316 STAINLESS STEEL
¼˝ Gyrolok®	2811G4Y
⅜˝ Gyrolok®	2811G6Y
⅜˝ socket weld	2811N6Y
½˝ Gyrolok®	2811G8Y
½˝ female NPT	2811F8Y
½˝ socket weld	2811N8Y

Ordering Options

Spare Parts
Spare parts and repair kits are available for all needle valves. Please contact your distributor for specific information.

Cleaning and Testing
When ordering, please specify if oxygen cleaning or helium leak testing is required.

Additional Sizes
Additional sizes and options are available on special request. Please consult your local HOKE distributor.