



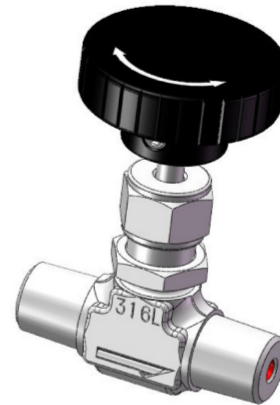
Integral Bonnet Needle Valves

HJZF6 Series: Working pressure up to 3000 psig

HJZF6H Series: Working pressure up to 5000 psig

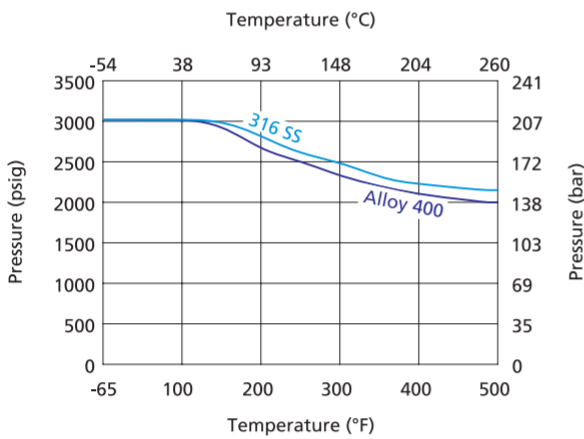
Features

- One-piece forged body
- Easy external adjustments by packing nut
- Live-loaded packing system
- Handles of different colors available
- Compact design
- Panel mounting available
- Every valve leak tested with Nitrogen or compressed air at the maximum allowable working pressure
- Working pressure up to:
 - HJZF6 Series—Stainless steel, Alloy 400: 3000 psig (207 bar)
 - HJZF6H Series—Stainless steel: 5000 psig (345 bar)
- Working temperature:
 - PTFE: -65°F to 450°F (-54°C to 232°C)
 - PEEK: -65°F to 500°F (-54°C to 260°C)

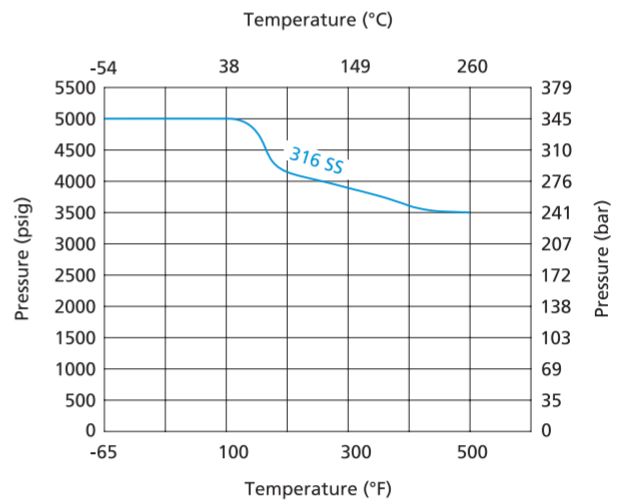


Pressure vs. Temperature

HJZF6 Series



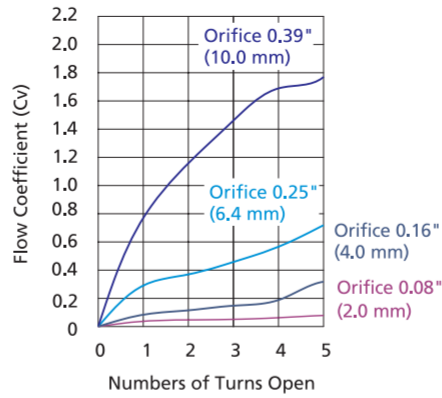
HJZF6H Series



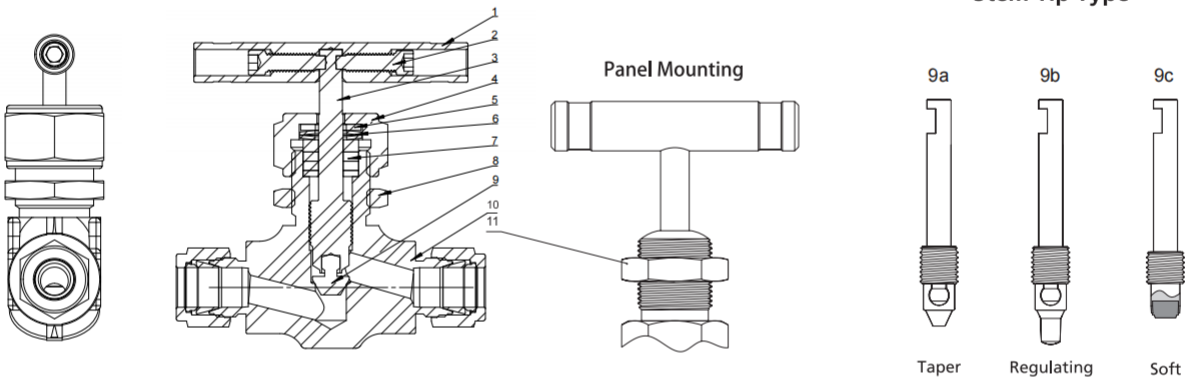
1. Graphs are based on PEEK packing.
2. Temperature rating is limited to 200°F (93°C) max with PCTFE stem tip (soft tip).

Flow Data at 100°F (38°C)

Regulating Stem Tip



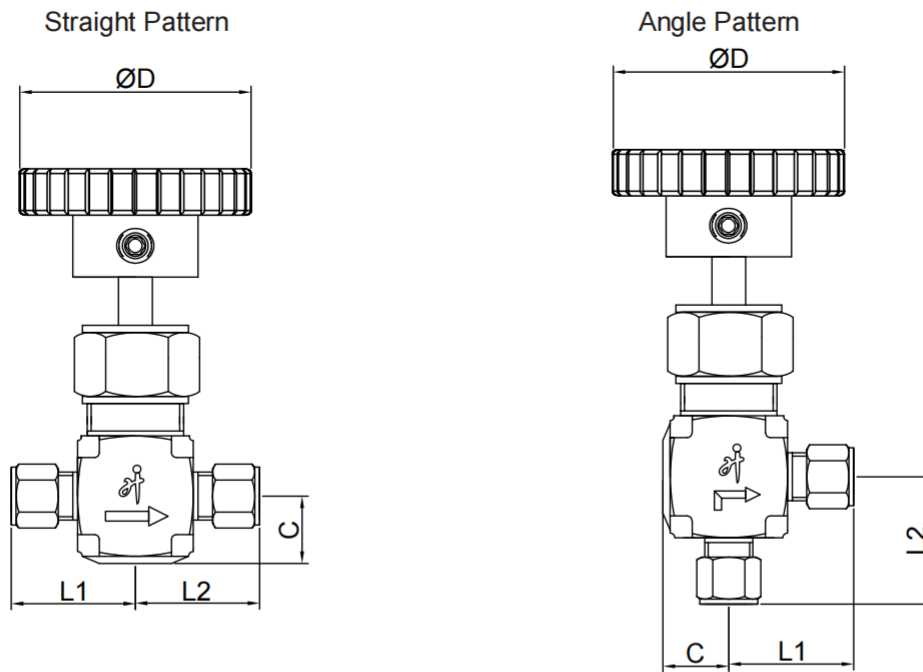
Standard Materials of Construction



Item	Component	Valve Body Material	
		316 SS	Alloy 400
		Material Grade/ASTM Specification	
1	Handle	Black knob (aluminum or nylon with copper insert), aluminum alloy or stainless steel bar handle	
2	Set Screw	304 SS/A479	
3	Stem	316 SS/A479	Alloy 400/B164
4	Packing Washer	316 SS/A479	Alloy 400/B164
5	Washer	316 SS/A479	
6	Packing Spring	316 SS/A479 or S17700/A693	
7	Packing Bolt	PTFE/PEEK	
8	Lock Nut	316 SS/A479	
9a	Stem Tip	Hardened 316 SS 479	Alloy 400/B164
9b			
9c		PCTFE or PEEK	
10	Body	316 SS/A479	Alloy 400/B164
11	Panel Nut	316 SS/A479	
	Lubricant	Molybdenum disulfide-based / Copper-based Grease/PTFE Lubricating Grease	



Dimensions



Dimensions of HJZF6 Series

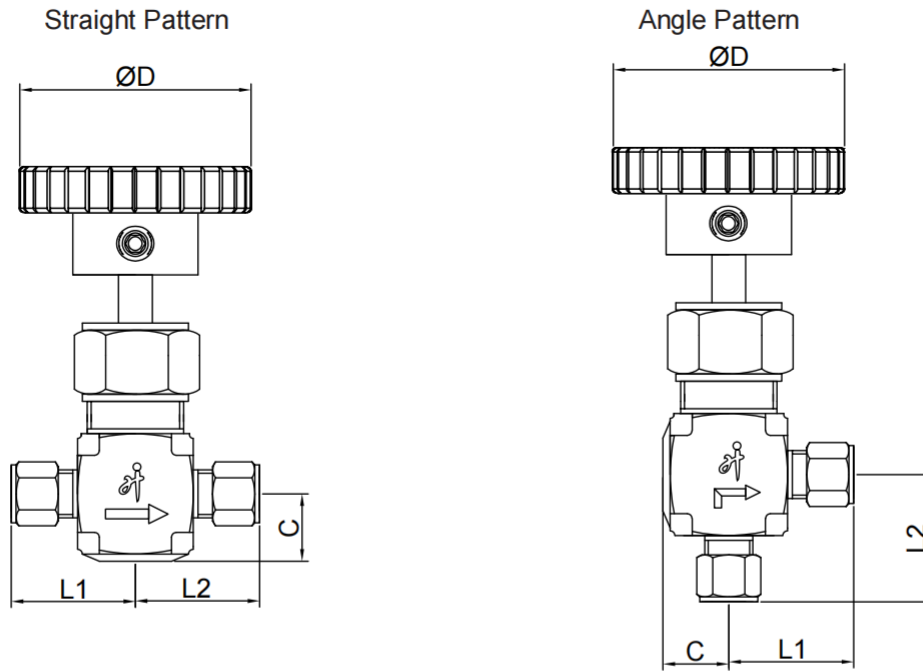
Basic Ordering Number	Connection Type and Size Inlet/Outlet	Orifice in.(mm)	Cv	Connection Pressure at 100°F (38°C) bar(psig)	Dimensions, in.(mm)			
					L1	L2	C	D
HJZF6-MNPT2-5-	1/8 Male NPT	0.08 (2.0)	0.09	316 SS	0.75 (19.05)	0.75 (19.05)	0.32 (8.2)	1.00 (25.4)
HJZF6-FNPT2-5-	1/8 Female NPT				0.81 (20.6)	0.81 (20.6)		
HJZF6-YZ2-5-	1/8" Fractional Tube Fitting				0.98 (25.0)	0.98 (25.0)		
HJZF6-FNPT2-7-	1/8 Female NPT	0.16 (4.0)	0.35	207(3000)	0.81 (20.6)	0.81 (20.6)	0.39 (10.0)	1.38 (35.0)
HJZF6-MNPT4-7-	1/4 Male NPT				0.98 (25.0)	0.98 (25.0)		
HJZF6-YZ4-7-	1/4" Fractional Tube Fitting				1.13 (28.7)	1.13 (28.7)		
HJZF6-GZ6-7-	6 mm Metric Tube Fitting				1.17 (29.7)	1.17 (29.7)		
HJZF6-GZ8-7-	8 mm Metric Tube Fitting				2.24 (57.0)	2.24 (57.0)		
HJZF6-GDHJ6-7-	6 mm Rotatable Metric Tube Butt Weld	0.25 (6.4)	0.70		2.24 (57.0)	2.24 (57.0)	0.49 (12.5)	1.88 (47.8)
HJZF6-FNPT4-8-	1/4 Female NPT				1.06 (26.9)	1.06 (26.9)		
HJZF6-FNPT6-8-	3/8 Female NPT				1.12 (28.4)	1.12 (28.4)		
HJZF6-MNPT6-8-	3/8 Male NPT				1.50 (38.1)	1.50 (38.1)		
HJZF6-MNPT8-8-	1/2 Male NPT				1.29 (32.8)	1.29 (32.8)		
HJZF6-YZ6-8-	3/8" Fractional Tube Fitting				1.40 (35.6)	1.40 (35.6)		
HJZF6-YZ8-8-	1/2" Fractional Tube Fitting				1.30 (33.0)	1.30 (33.0)		
HJZF6-GZ10-8-	10 mm Metric Tube Fitting				1.30 (33.0)	1.30 (33.0)		



Basic Ordering Number	Connection Type and Size Inlet/Outlet	Orifice in.(mm)	Cv	Connection Pressure at 100°F (38°C) bar(psig)	Dimensions, in.(mm)			
					316 SS	L1	L2	C
HJZF6-GZ12-8-	12 mm Metric Tube Fitting	0.25 (6.4)	0.70	207(3000)	1.40 (35.6)	1.40 (35.6)	0.49 (12.5)	1.88 (47.8)
HJZF6-GZ14-8-	14 mm Metric Tube Fitting				1.56 (39.7)	1.56 (39.7)	0.62 (15.8)	
HJZF6-MS20-8-	M20 x 1.5 Male Metric Thread (for RG-M)				1.50 (38.1)	1.50 (38.1)		
HJZF6-GDHJ10-8-	10 mm Rotatable Metric Tube Butt Weld				2.60 (66.0)	2.60 (66.0)	0.49 (12.5)	
HJZF6-GDHJ14-8-	14 mm Rotatable Metric Tube Butt Weld							
HJZF6-FNPT8-9-S-	1/2 Female NPT	0.39(10.0)	1.80		1.50 (38.1)	1.50 (38.1)	0.76 (19.4)	3.50 (88.9)
HJZF6-FNPT12-9-S-	3/4 Female NPT				1.56 (39.7)	1.56 (39.7)	0.80 (20.4)	
HJZF6-MNPT12-9-S-	3/4 Male NPT				1.56 (39.7)	1.56 (39.7)	0.76 (19.4)	
HJZF6-YZ8-9-S-	1/2" Fractional Tube Fitting							
HJZF6-YZ12-9-S-	3/4" Fractional Tube Fitting				1.90 (48.3)	1.90 (48.3)	0.76 (19.4)	
HJZF6-GZ14-9-S-	14 mm Metric Tube Fitting							

- 1.Sizes and types listed are standard. Other sizes and types are available upon request.
- 2.HJZF6 Series Needle Valves are standard without panel mounting.
- 3.If you need to order a valve with a perforated plate structure, please add "-Y" after the basic order model, for example:

HJZF6-MNPT2-5-Y-SS



Dimensions of HJZF6H Series

Basic Ordering Number	Connection Type and Size Inlet/Outlet	Orifice in.(mm)	Cv	Connection Pressure at 100°F (38°C) bar(psig)	Dimensions, in.(mm)			
					L1	L2	C	D
HJZF6H-MNPT2-5-	1/8 Male NPT	0.08 (2.0)	0.09	316 SS	0.75 (19.05)	0.75 (19.05)	0.32 (8.2)	1.00 (25.4)
HJZF6H-FNPT2-5-	1/8 Female NPT				0.81 (20.6)	0.81 (20.6)		
HJZF6H-YZ2-5-	1/8" Fractional Tube Fitting				0.98 (25.0)	0.98 (25.0)		
HJZF6H-FNPT2-7-	1/8 Female NPT	0.16 (4.0)	0.35	345(5000)	0.81 (20.6)	0.81 (20.6)	0.39 (10.0)	1.38 (35.0)
HJZF6H-MNPT4-7-	1/4 Male NPT				0.98 (25.0)	0.98 (25.0)		
HJZF6H-YZ4-7-	1/4" Fractional Tube Fitting				1.13 (28.7)	1.13 (28.7)		
HJZF6H-GZ6-7-	6 mm Metric Tube Fitting	0.25 (6.4)	0.70	345(5000)	1.17 (29.7)	1.17 (29.7)	0.49 (12.5)	1.88 (47.8)
HJZF6H-GZ8-7-	8 mm Metric Tube Fitting				2.24 (57.0)	2.24 (57.0)		
HJZF6H-GDHJ6-7-	6 mm Rotatable Metric Tube Butt Weld				1.06 (26.9)	1.06 (26.9)		
HJZF6H-FNPT4-8-	1/4 Female NPT	0.25 (6.4)	0.70	345(5000)	1.12 (28.4)	1.12 (28.4)	0.62 (15.8)	1.88 (47.8)
HJZF6H-FNPT6-8-	3/8 Female NPT				1.50 (38.1)	1.50 (38.1)		
HJZF6H-MNPT6-8-	3/8 Male NPT				1.29 (32.8)	1.29 (32.8)		
HJZF6H-MNPT8-8-	1/2 Male NPT	0.25 (6.4)	0.70	345(5000)	1.40 (35.6)	1.40 (35.6)	0.49 (12.5)	1.88 (47.8)
HJZF6H-YZ6-8-	3/8" Fractional Tube Fitting				1.30 (33.0)	1.30 (33.0)		
HJZF6H-YZ8-8-	1/2" Fractional Tube Fitting				1.40 (35.6)	1.40 (35.6)		
HJZF6H-GZ10-8-	10 mm Metric Tube Fitting	0.25 (6.4)	0.70	345(5000)	1.30 (33.0)	1.30 (33.0)	0.49 (12.5)	1.88 (47.8)
HJZF6H-GZ12-8-	12 mm Metric Tube Fitting				1.40 (35.6)	1.40 (35.6)		



Basic Ordering Number	Connection Type and Size Inlet/Outlet	Orifice in.(mm)	Cv	Connection Pressure at 100°F (38°C) bar(psig)	Dimensions, in.(mm)				
					316 SS	L1	L2	C	D
HJZF6H-GZ14-8-	14 mm Metric Tube Fitting	0.25 (6.4)	0.70	345(5000)	1.56 (39.7)	1.56 (39.7)	0.62 (15.8)	1.88 (47.8)	
HJZF6H-MS20-8-	M20 x 1.5 Male Metric Thread (for RG-M)				1.50 (38.1)	1.50 (38.1)			
HJZF6H-GDHJ10-8-	10 mm Rotatable Metric Tube Butt Weld				2.60 (66.0)	2.60 (66.0)	0.49 (12.5)		
HJZF6H-GDHJ14-8-	14 mm Rotatable Metric Tube Butt Weld								
HJZF6H-FNPT8-9-	1/2 Female NPT	0.39 (10.0)	1.80		1.50 (38.1)	1.50 (38.1)		0.76 (19.4)	3.50 (88.9)
HJZF6HHH-MNPT12-9-	3/4 Male NPT				1.56 (39.7)	1.56 (39.7)			
HJZF6H-YZ8-9-	1/2" Fractional Tube Fitting								
HJZF6H-YZ12-9-	3/4" Fractional Tube Fitting				1.90 (48.3)	1.90 (48.3)			
HJZF6H-GZ14-9-	14 mm Metric Tube Fitting								

- Sizes and types listed are standard. Other sizes and types are available upon request.
- HJZF6H Series Needle Valves are standard without panel mounting.
- If you need to order a valve with a perforated plate structure, please add " -Y " after the basic order model, for example: **HJZF6H-MNPT2-5-Y-SS**



Ordering Number Description

HJZF6 Series	FNPT Inlet Type	8 Inlet Size	YZ 8 Outlet Type	8 Outlet Size	9 Orifice Size	K Stem Tip Type	P Packing Material	Y Panel Mounting	S Handle	A Flow Pattern	HC Body Material
HJZF6	FNPT Female NPT	2 1/8"		Same as Inlet	5 0.08" (2.0 mm)	Taper	PTFE	No	Black Aluminum Bar	Straight	SS 316 SS
HJZF6H	MINPT Male NPT	4 1/4"		Specify in the same way as inlet Type and inlet Size	7 0.16" (4.0 mm)	T Regulating	P PEEK	Y Yes	Red F Aluminum Bar	A Angle	SL 316L SS
	FRT Female BSPT	3/8" or 6 mm			8 0.25" (6.4 mm)	P Soft Tip-PEEK			Green Q Aluminum Bar		S4 304 SS
	RT Male BSPT	1/2" or 8 mm			9 0.39" (10 mm)	K Soft Tip-PCTFE			Blue L Aluminum Bar		S4L 304L SS
	FMS Female Metric Thread (for RG-M)	10 10 mm							Stainless Steel Bar		S21 321 SS
	MS Male Metric Thread (for RG-M)	3/4" or 12 mm							H Black Knob		Duplex D22 2205
	FRP Female BSPP (for RP)	14 14 mm or M14 x 1.5									Alloy M4 400
	BP Male BSPP (for RG)	1" or 16 mm									Alloy INC6 600
	YZ Fractional Tube Fitting	18 18 mm									Alloy HC C-276
	GZ Metric Tube Fitting	1 1/4" or 20 20 mm or M20 x 1.5									
	G3DH Rotatable Metric Tube Butt Weld	22 22 mm or M22 x 1.5									

1. Standard thread pitch for metric threads are as follows:
M10 and below: 1 mm
M12 to M24: 1