

Introduction - Needle Valve

The Parker 20K H-Series needle valve has been purpose designed for operation with any fluid up to 20,000 psi (1379 bar) rating. Complete with standard PTFE gland packing and non rotational tip gives the user assurance of total in service sealing security. 100% repeatable bubble tight shut off and Tru-Loc® gland adjuster security are key features of this design. A range of end connections are offered including Phastite® and Cone & Thread, with additional options for NACE compatible and heat code traceable materials.

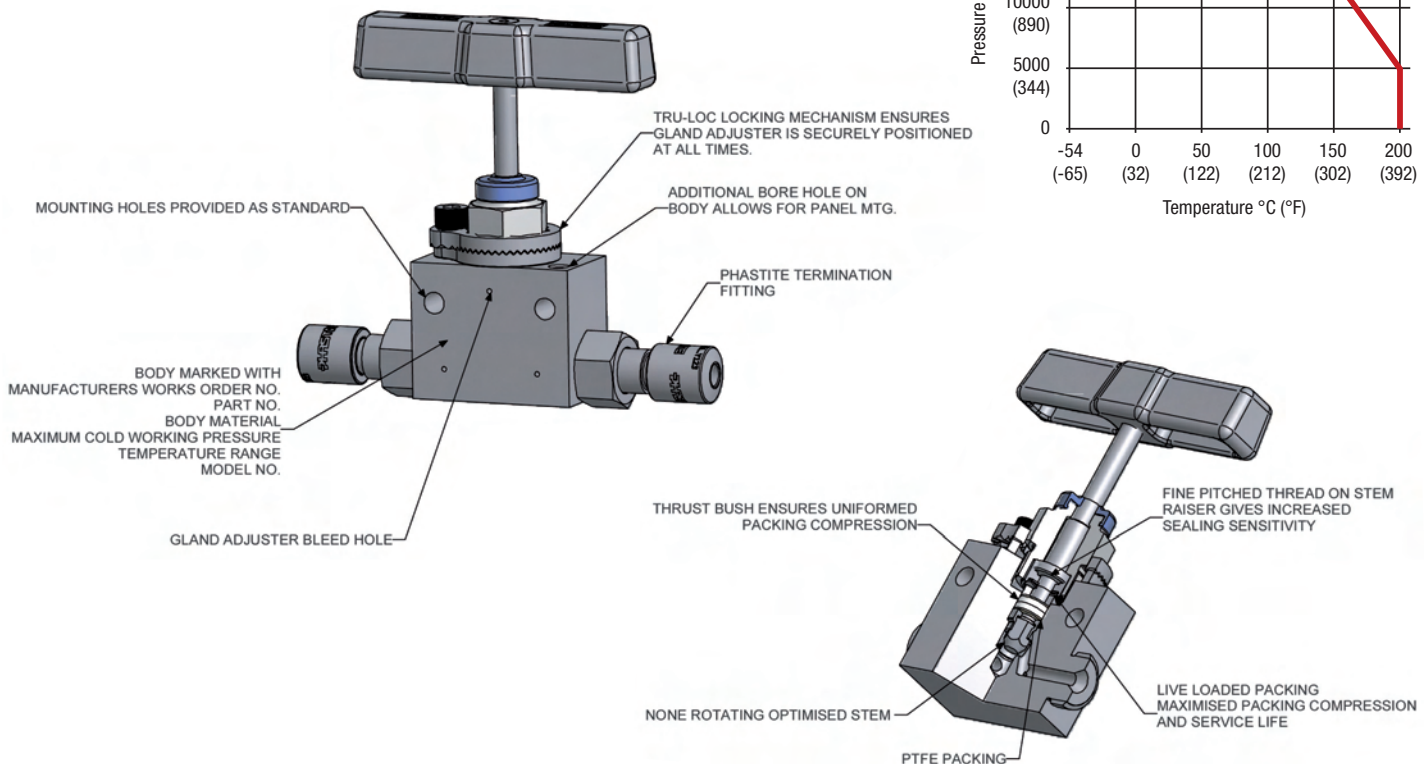
Features

- All valves 100% factory tested
- Inlet & outlet connections on same plane for ease of installation
- PTFE packing
- Non rotating spindle tip for bubble tight shut off
- Externally adjustable packing
- NACE compatible option
- Operating threads outside washout area
 - No pressure retaining threads in contact with media
- Fine threaded stem raiser gives increased stem sensitivity and accuracy
- Tru-Loc® anti-vibration locking system on gland adjuster for 100% security
- HCT available on all wetted parts
- Alternative material options available on request
- Panel and side mounting as standard

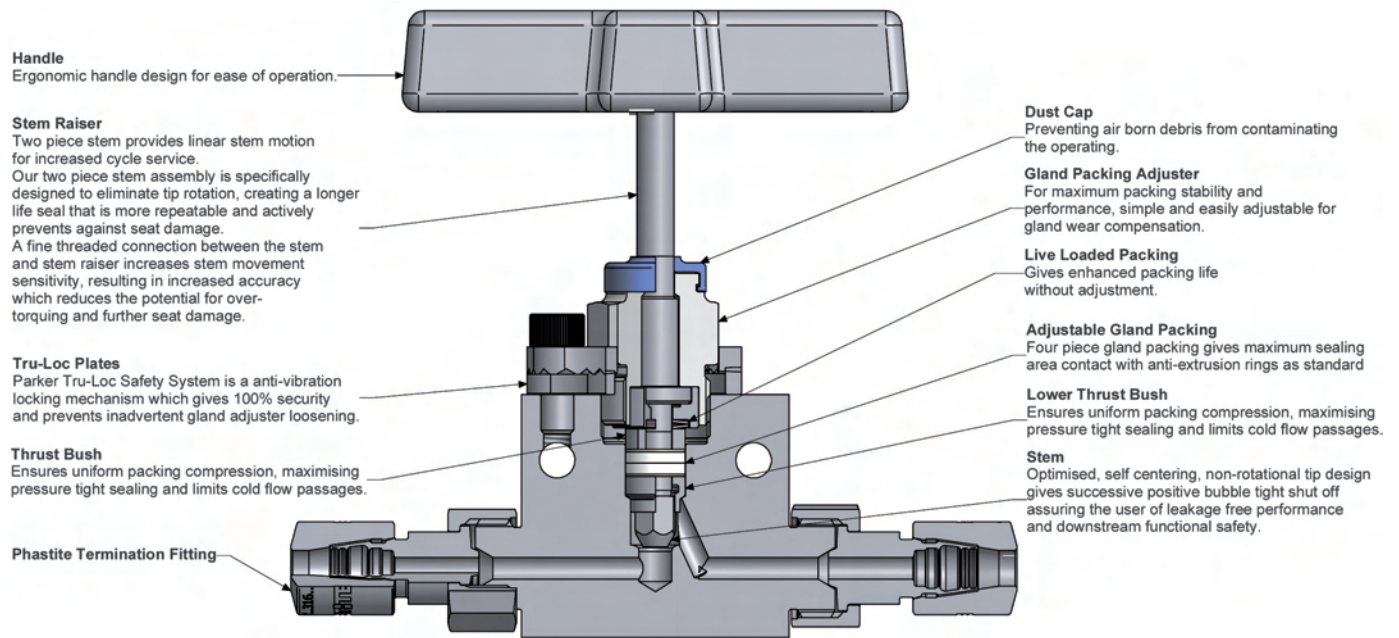
Specifications

- 316 Stainless steel construction as standard
- Maximum cold working pressure rating - 20,000 psi (1379 bar)
- PTFE standard gland packing with PEEK anti-extrusion rings
- Max Cv 0.66 (dependent on fitting size)
- Temperature rating -54°C to +200°C (-65.2°F to +392°F)*

*refer to P/T graph below



Design Features



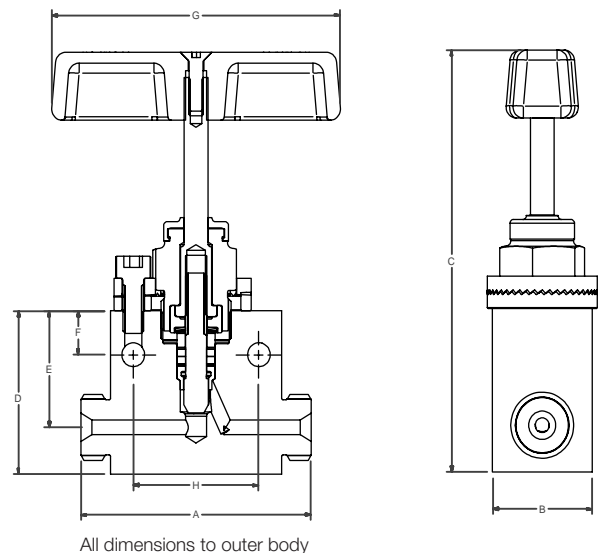
Standard Range Part Numbers

Part no.	Inlet	Outlet	Orifice Size	Max Cv	Dimension							
	Female	Female	mm (inch)	Rating	A mm (inch)	B mm (inch)	C mm (inch)	D mm (inch)	E mm (inch)	F mm (inch)	G mm (inch)	H mm (inch)
Cone and Thread												
20KNVS4CT	1/4" C&T	1/4" C&T	2.8 (0.11)	0.14	50.8 (2.00)	28.6 (1.13)	113.2 (4.46)	41.3 (1.63)	31.8 (1.25)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVS6CT	3/8" C&T	3/8" C&T	5.0 (0.20)	0.50	63.5 (2.50)	28.6 (1.13)	116.4 (4.58)	44.5 (1.75)	33.0 (1.30)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVS9CT	9/16" C&T	9/16" C&T	6.0 (0.24)	0.66	76.2 (3.00)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	36.5 (1.44)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
Phastite												
20KNVS4PH	1/4" PH	1/4" PH	3.7 (0.15)	0.14	66.0 (2.60)	28.6 (1.13)	116.4 (4.58)	44.5 (1.75)	31.8 (1.25)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVS6PH	3/8" PH	3/8" PH	6.0 (0.24)	0.50	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVS8PH	1/2" PH	1/2" PH	6.0 (0.24)	0.66	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVSM6PH	6 mm PH	6 mm PH	3.7 (0.15)	0.35	66.0 (2.60)	28.6 (1.13)	116.4 (4.58)	44.5 (1.75)	31.8 (1.25)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVSM8PH	8 mm PH	8 mm PH	4.7 (0.19)	0.60	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVSM10PH	10 mm PH	10 mm PH	6.0 (0.24)	0.66	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVSM12PH	12 mm PH	12 mm PH	6.0 (0.24)	0.66	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)
20KNVSM14PH	14 mm PH	14 mm PH	6.0 (0.24)	0.66	66.0 (2.60)	28.6 (1.13)	122.7 (4.83)	50.8 (2.00)	34.9 (1.38)	12.0 (0.47)	82.7 (3.26)	36.0 (1.42)

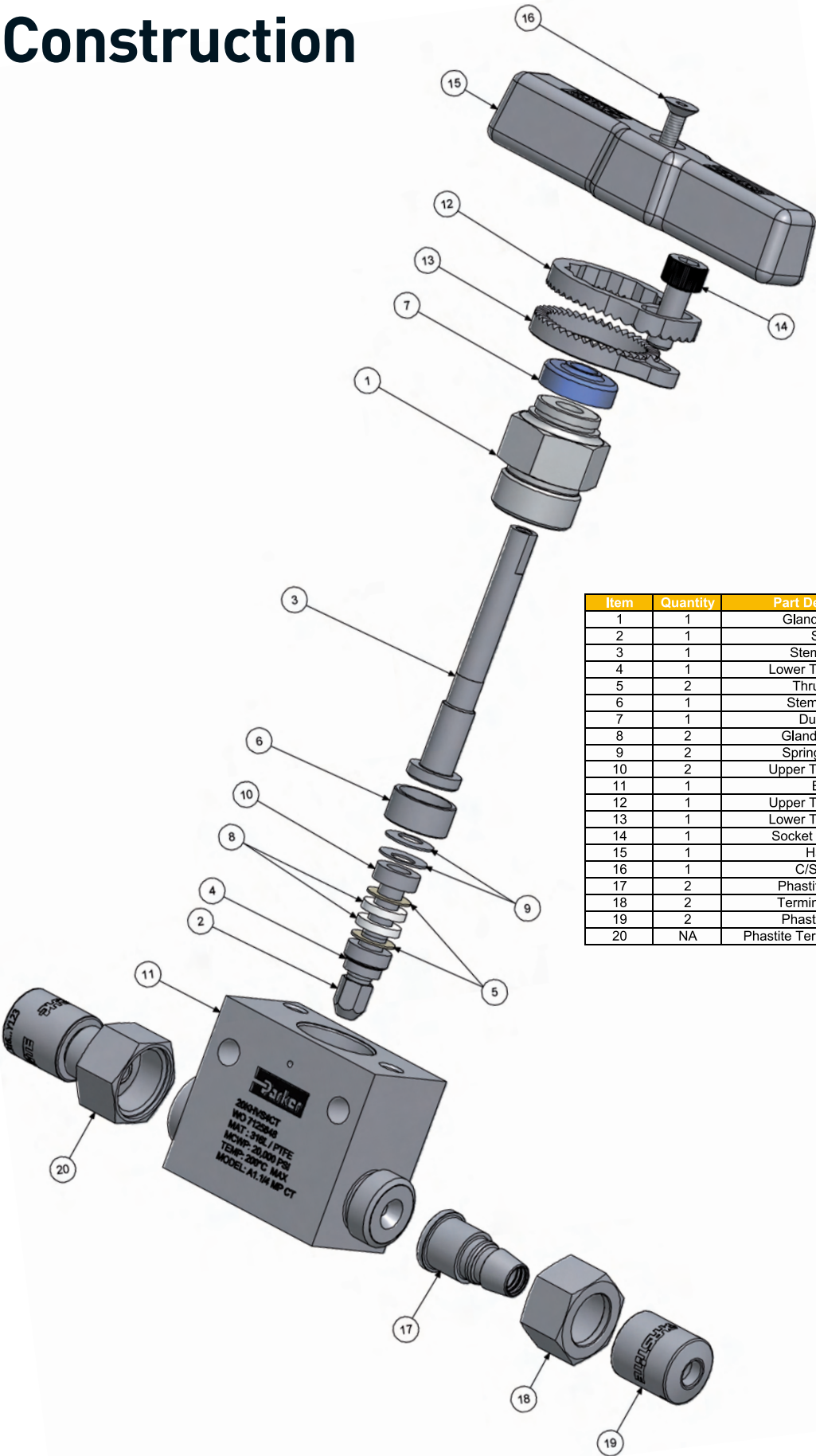
Other materials and connection options are available. The actual pressure ratings for any alternative option will vary from those stated - please consult with factory for your specific requirements.

The specification of any alternative material, connection or tubing is critical to the overall performance of the system. Caution should be exercised by the user to ensure proper selection in accordance with actual operating or design conditions.

Valves with Phastite® connections are recommended for use with 316/316L tubing conforming to ASTM A-269, having a hardness not exceeding 90HRB.



Construction



Item	Quantity	Part Description	Material
1	1	Gland Adjuster	ASTM A 479 Type 316
2	1	Stem	ASTM A 564 Type 17-4 PH
3	1	Stem Raiser	NES 833 Aluminium Bronze
4	1	Lower Thrust Bush	ASTM A 479 Type 316
5	2	Thrust Seal	PEEK
6	1	Stem Carrier	316 Stainless Steel
7	1	Dust Cap	Polymer
8	2	Gland Packing	Virgin PTFE
9	2	Spring Washer	316 Stainless Steel
10	2	Upper Thrust Bush	ASTM A 479 Type 316
11	1	Body	ASTM A 479 Type 316
12	1	Upper Tru-loc Plate	316 Stainless Steel
13	1	Lower Tru-loc Plate	316 Stainless Steel
14	1	Socket Cap Screw	316 Stainless Steel
15	1	Handle	316 Stainless Steel
16	1	C/S Screw	316 Stainless Steel
17	2	Phastite Ferrule	ASTM A 479 Type 316
18	2	Termination Nut	ASTM A 479 Type 316
19	2	Phastite Collar	ASTM A 479 Type 316
20	NA	Phastite Termination Fitting	NA