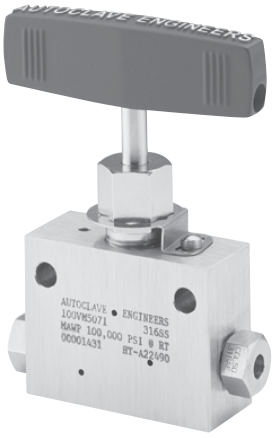
Needle Valves - 100VM & 150V Series

Pressures to 150,000 psi (10350 bar)

Tube Outside Diameter Size Inches	Connection Type	Orifice Size Inches (mm)	Rated C_V*	Pressure Rating psi (bar) @ Room Temperature**
Series 100VM				
1/4, 5/16, 3/8	F312C150	0.062 (1.57)	.09	100,000 (6895)
Series 150V				
5/16	F312C150	0.062 (1.57)	.06	150,000 (10342)

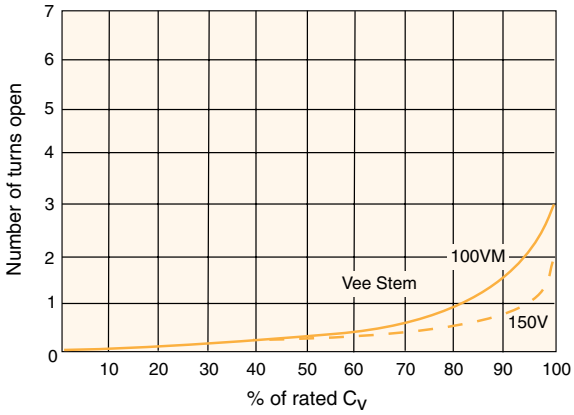
Notes:
** C_V values shown are for 2-way straight valve pattern. For 2-way angle patterns, increase C_V value 50%.*

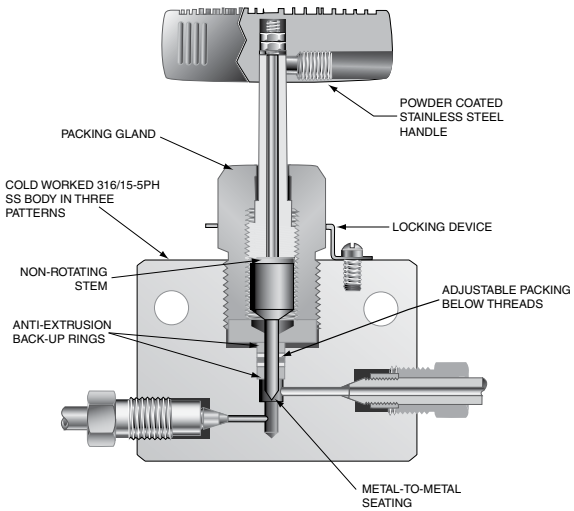
*** For complete temperature ratings see pressure/temperature rating guide in Technical Information section.*



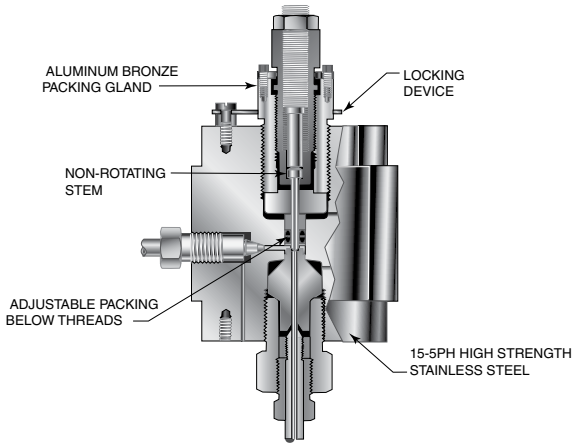


Generalized Flow Coefficient Curves (C_V)





100VM Series



Notes: Torque wrench required to operate valves.

150V Series

To ensure proper fit use Autoclave tubing

All general terms and conditions of sale, including limitations of our liability, apply to all products and services sold.

Ordering Procedure

For complete information on available stem types, optional connections and additional valve options, see Needle Valve Options section or contact your Sales Representative. The 100V Series valves are furnished complete with connection components, unless otherwise specified.

Typical catalog number: **100VM5071**

100VM	5	07	1	—	XX
Valve Series	**Outside Diameter Tube Size**	**Stem Type**	**Body Pattern**		**Options**
100VM 150V	***4**-1/4" **5**-5/16" ***6**-3/8"	**07** - non-rotating Vee stem (on off service) **08** - non-rotating regulating stem (tapered tip for regulating shutoff	**1** - two-way straight **2** - two-way angle **3** - three-way, two on pressure		For extreme temperature and other options, see Valve Options.

* Note: 1/4" and 3/8" for 100VM only.

Valve Options

Extreme Temperatures
Standard Parker Autoclave Engineers valves with PTFE packing may be operated to 450°F (232°C), and to 230°F (110°C) with nylon-leather packing.
K - anti-vibration collet and gland assembly.

For other packing options consult the factory.

Valve Maintenance

Repair Kits: add "R" to the front of valve catalog number for proper repair kit. (Example: **R100VM15071**)

Valve Bodies: Valve bodies are available. Order using the eight (8) digit part number found in the valve drawing or contact your Sales Representative for information.

Consult your Parker Autoclave Engineers representative for pricing on repair kits and valve bodies. Refer to the Tools, Installation, Operation and Maintenance section for proper maintenance procedures.

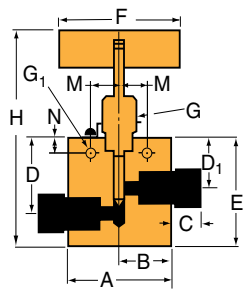
Catalog Number	Stem Type	Outside Diameter Tube	Orifice Diameter	Dimensions - inches (mm)													Block Thickness	Valve Pattern
				A	B	C	D	D_1	E	F	G	G_1	H*	M	N			
2-Way Straight																		
100VM4071 100VM5071 100VM6071	VEE	1/4" (6.35) 5/16" (7.93) 3/8" (9.53)	0.062 (1.57)	3.00 (76.20)	1.50 (38.10)	0.52 (13.21)	1.75 (44.45)	1.44 (36.58)	2.25 (57.15)	4.00 (101.60)	1.12 (28.45)	0.34 (8.64)	5.32 (135.13)	1.12 (28.45)	0.50 (12.70)	1.38 (35.05)		See Figure 1
2-Way Angle																		
100VM4072 100VM5072 100VM6072	VEE	1/4" (6.35) 5/16" (7.93) 3/8" (9.53)	0.062 (1.57)	2.25 (57.15)	1.50 (38.10)	0.52 (13.21)	1.44 (36.58)		3.00 (76.20)	4.00 (101.60)	1.12 (28.45)	0.34 (8.64)	6.05 (153.67)	0.94 (23.88)	0.50 (12.70)	1.38 (35.05)		See Figure 2

G - Packing gland mounting hole drill size
G_1 - Bracket mounting hole size
Panel mounting drill size: 0.22" all valves.

** H Dimension is with stem in closed position.*
All dimensions for reference only and subject to change.

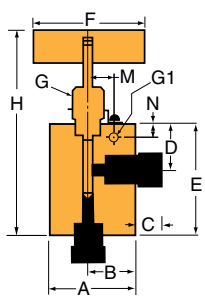
For prompt service, Parker Autoclave Engineers stock select products. Consult factory.

Figure 1



2-Way Straight

Figure 2



2-Way Angle

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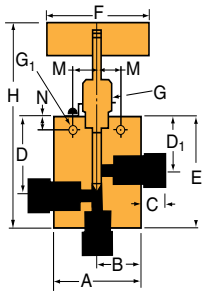
Catalog Number	Stem Type	Outside Diameter Tube	Orifice Diameter	Dimensions - inches (mm)												Block Thick-ness	Valve Pattern
				A	B	C	D	D_1	E	F	G	G_1	H*	M	N		
3-Way / 2 On Pressure																	
100VM4073 100VM5073 100VM6073	VEE	1/4" (6.35) 5/16" (7.93) 3/8" (9.53)	0.062 (1.57)	3.00 (76.20)	1.50 (38.10)	0.52 (13.21)	1.75 (44.45)	1.44 (36.58)	3.25 (82.55)	4.00 (101.60)	1.12 (28.45)	0.34 (8.64)	6.31 (160.27)	1.12 (28.45)	0.50 (12.70)	1.38 (35.05)	See Figure 3
2-Way Angle/Replaceable Seat																	
100VM4872 100VM5872 100VM6872	VEE	1/4" (6.35) 5/16" (7.93) 3/8" (9.53)	0.062 (1.57)	2.25 (57.15)	1.50 (38.10)	0.52 (13.21)		1.44 (36.58)	3.00 (76.20)	4.00 (101.60)	1.12 (28.45)	0.34 (8.64)	7.57 (192.30)	0.94 (23.88)	0.50 (12.70)	1.38 (35.05)	See Figure 4
2-Way Angle / Replaceable Seat																	
150V5072	VEE	5/16 (7.93)	0.062 (1.57)	3.75 (95.25)	1.88 (47.63)	.052 (13.21)	2.25 (57.15)	2.63 (66.80)	4.00 (101.60)		1.650 (41.91)		7.12 (180.85)	1.25† (31.75)			See Figure 5

G - Packing gland mounting hole drill size
G_1 - Bracket mounting hole size
Panel mounting drill size: 0.22" all valves.
See mounting note below for 150V series.

** H Dimension is with stem in closed position.*
All dimensions for reference only and subject to change.

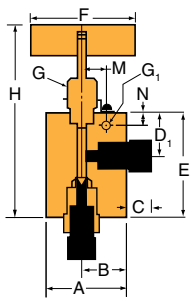
For prompt service, Parker Autoclave Engineers stock select products. Consult factory.

Figure 3



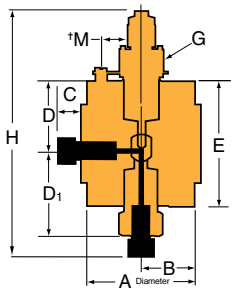
3-Way / 2 on Pressure

Figure 4



2-Way Angle / Replaceable Seat

Figure 5



2-Way Angle / Replaceable Seat

† (2) 1/4"-20 mounting holes 180° apart and (1) locking device screw 90° apart

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