Needle Valves - 40VM Series

Pressures to 40,000 psi (2760 bar)

Tube Outside Diameter Size Inches	Connection Type	Orifice Size Inches (mm)	Rated C _v *	Pressure Rating psi (bar) @ Room Temperature**
9/16	F562C40	0.109 (2.77)	0.28	40,000 (2760)

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.



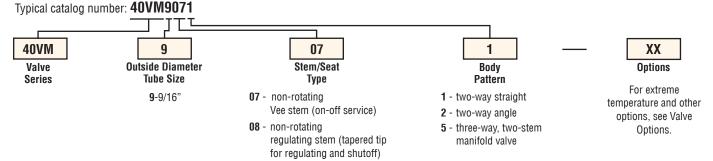
ALUMNUM BRONZE PACKING GLAND COLD WORKED TYPE 316 SS BODY IN TWO PATTERNS NON-ROTATING STEM ANTI-EXTRUSION BACK-UP RINGS CHOICE OF VEE OR REQULATING STEM TIP METAL-TO-METAL SEATING

Generalized Flow Coefficient Curves (C_v) 6 Number of turns open 5 4 Regulating Stem 3 2 Vee Stem 10 20 100 50 80 90 % of rated C_v

To ensure proper fit use Autoclave tubing

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 40VM Series valves are furnished complete with connection components, unless otherwise specified.



Valve Options

Extreme Temperatures

Standard Autoclave valves with Teflon packing may be operated from 0°F (-17.8°C) to 450°F (232°C). High temperature packing is available for service from -423°F (-252°C) to 1200°F (649°C) by adding the following suffixes to catalog order number.

TG - standard valve with Teflon glass packing to 600°F (316°C). See note below.

GY - standard valve with graphite braided yarn packing to 800°F (427°C).

HT - extended stuffing box valve with graphite braided yarn packing to 1200°F (649°C).

B - standard valve with cryogenic trim material and Teflon packing to -100°F (-73°C).

LT - extended stuffing box valve with Teflon packing & Cryogenic trim materials to -423°F (-252°C).

K - anti-vibration collet and gland assembly.

Note: 40VM and 60VM valves supplied with Peak/Teflon Glass/Peek

Valve Maintenance

Repair Kits: add "R" to the front of valve catalog

number for proper repair kit. (Example: **R40VM9071**)

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

Catalog Stem Outside Orifice				DIHIGHSIOHS - HIGHGS (HIHI)									Block Thick-	Valve			
Number	Туре	Diameter Tube	Diameter	Α	В	С	D	D ₁	E	F	G	G ₁	Н*	M	N	ness	Pattern

2-Way Straight

, -		,															
40VM9071	VEE	9/16	0.109	2.62	1.31	0.72	1.75	1.31	2.50	3.00	1.00	0.28	5.06	0.69	0.38	1.50	See
40VM9081	REG	(14.3)	(2.77)	(66.55)	(33.27)	(18.29)	(44.45)	(33.27)	(63.50)	(76.20)	(25.40)	(7.11)	(128.52)	(17.53)	(9.65)	(38.10)	Figure 1

2-Way Angle

	3															
40VM9072	VEE	9/16	0.109	2.62	1.31	0.72	1.31	2.81	3.00	1.00	0.28	5.37	0.69	0.38	1.50	See
40VM9082	REG	(14.3)	(2.77)	(66.55)	(33.27)	(18.29)	(33.27)	(71.37)	(76.20)	(25.40)	(7.11)	(136.40)	(17.53)	(9.65)	(38.10)	Figure 2

3-Way / 2 Stem Manifold

40VM9075	VEE	9/16	0.109	2.62	1.31	0.72	2.06	1.31	4.12	3.00	1.00	0.28	6.59	0.69	0.38	1.50	See
40VM9085	REG	(14.3)	(2.77)	(66.55)	(33.27)	(18.29)	(52.32)	(33.27)	(104.65)	(76.20)	(25.40)	(7.11)	(167.39)	(17.53)	(9.65)	(38.10)	Figure 3

2-Way Angle / Replaceable Seat

40VM98	2 VEE	9/16	0.109	2.62	1.31	0.72	1.31	2.68	2.62	3.00	1.00	0.28	6.90	0.69	0.38	1.50	See
40VM98	2 REG	(14.29)	(2.77)	(66.55)	(33.27)	(18.29)	(33.27)	(68.07)	(66.55)	(76.20)	(25.40)	(7.11)	(175.26)	(17.53)	(9.65)	(38.10)	Figure 4

G - Packing gland mounting hole drill size G_1 - Bracket mounting hole size

G₁ - Bracket mounting noie size Panel mounting drill size: 0.22" all valves. All dimensions for reference only and subject to change.

* H Dimension is with stem in the closed position

For prompt service, Autoclave stocks select products. Consult factory.

