# Medium Pressure Valves » Pressures to 22,500 psi (1,550 bar)



# Ordering Information Typical catalog number: 21V16M071

## Medium pressure valves

Maximator Medium pressure valves with metal to metal seats have a high level of safety and reliability under adverse operating conditions. These valves may be used both with gases and liquids.

Traceability is ensured through extensively documented data (batch number, maximum pressure, material number, type designation). All medium pressure valves include glands and collars.

#### » Materials:

Valve body: 1.4404 (SST 316L) Valve stem: 1.4542 (17-4PH)

21 V Valve Series	4M O.D. Tube Size	07 Stem Type	1 Body Pattern	Options		
21 V	<b>4M</b> – 1/4"	<b>07</b> – VEE stem	<b>1</b> – two-way straight	Extended		
	<b>6M</b> – 3/8"	87 – VEE stem with replaceable seat	<b>2</b> – two-way angle	temperature		
	<b>9M</b> – 9/16"			option, see		
	<b>12M</b> – 3/4"			information		
	<b>16M</b> – 1"			below.		

### Options for Medium pressure valves

#### **Special Designs for Extreme Temperatures**

Standard valves are supplied with Teflon / Carbon packing and may be operated to 450°F (230°C). High temperature packing and / or extended stuffing box are available for service from -423°F to 1200°F (-252°C to 650°C) by adding the following suffixes to catalog order number.

- B standard valve with cryogenic trim materials and Teflon packing to -100°F (-73°C).
- LT extended stuffing box valve with teflon packing and cryogenic trim materials to -423°F (-252°C).

For further available options and more detailed information please refer to our VFT catalogue.

	Connec- tion Type	Orifice Size in. (mm)	Rated Cv**	Pressure Rating @ R.T. psi (bar)***
1/4 <b>(6.35)</b>	4MF	0.106 <b>(2.7)</b>	0.31	22,500 <b>(1,550)</b>
3/8 <b>(9.53)</b>	6MF	0.201 <b>(5.1)</b>	0.75	22,500 <b>(1,550)</b>
9/16 <b>(14.29)</b>	9MF	0.307 <b>(7.8)</b>	1.30	22,500 <b>(1,550)</b>
3/4 <b>(19.05)</b>	12MF	0.438 <b>(11.1)</b>	2.50	22,500 <b>(1,550)</b>
1 <b>(25.4)</b>	16MF	0.562 <b>(14.3)</b>	4.40	22,500 <b>(1,550)</b>

Consult your MAXIMATOR representative for **repair kits** and valve bodies. Refer to the Tools and Installation section for proper maintenance procedures.

- \* Cv values shown are for 2-way straight pattern vee stem valves. For 2-way angle patterns, increase the Cv value by 50%. For Flow coefficient reference curves, please refer to chapter Technical Informations.
- \*\*\* See page 2 in the Technical Section of our VFT catalogue for Pressure/Temperature Rating Chart.

All technical and dimensional information subject to change. All general Terms and Conditions of sale, including limitations of our liability, apply to all products and services sold.

Valve Pattern	Catalog	Stem	0.D.	Orifice									Valve	Block		
	Number	Туре	Tube in.	in. (mm)	A	В	C	D	E	F	н		J	к	Panel Hole	Thick- ness
2-Way Straight																
	21V4M071	Vee	1/4	0.106 <b>(2.7)</b>	4.61 <b>(117)</b>	2.01 <b>(51)</b>	1.62 <b>(41.1)</b>	0.22 <b>(5.6)</b>	0.37 <b>(9.5)</b>	1.24 <b>(31.5)</b>	2.95 <b>(75)</b>	1.19 <b>(30.2)</b>	2.01 <b>(51)</b>		0.75 <b>(19.1)</b>	0.79 <b>(20.1)</b>
	21V6M071	Vee	3/8	0.201 <b>(5.1)</b>	4.61 <b>(117)</b>	2.01 <b>(51)</b>	1.62 <b>(41.1)</b>	0.22 <b>(5.6)</b>	0.37 <b>(9.5)</b>	1.24 <b>(31.5)</b>	2.95 <b>(75)</b>	1.19 <b>(30.2)</b>	2.01 <b>(51)</b>		0.75 <b>(19.1)</b>	0.79 <b>(20.1)</b>
	21V9M071	Vee	9/16	0.307 <b>(7.8)</b>	5.87 <b>(149)</b>	2.88 <b>(73.2)</b>	2.38 <b>(60.5)</b>	0.37 <b>(9.5)</b>	0.45 <b>(11.5)</b>	1.38 <b>(35)</b>	3.94 <b>(100)</b>	1.75 <b>(44.5)</b>	2.50 <b>(63.5)</b>		1.00 <b>(25.4)</b>	1.02 <b>(25.9</b> )
	21V12M071	Vee	3/4	0.438 <b>(11.1)</b>	7.05 <b>(179)</b>	3.74 <b>(95)</b>	3.00 <b>(76)</b>	0.43 <b>(11)</b>	0.63 <b>(16)</b>	1.76 <b>(44.7)</b>	10.31 <b>(262)</b>	2.25 <b>(57.2)</b>	3.00 <b>(76)</b>		1.25 <b>(31.8)</b>	1.38 <b>(35</b> )
	21V16M071	Vee	1	0.562 <b>(14.3)</b>	8.98 <b>(228)</b>	4.65 <b>(118)</b>	3.75 <b>(95.3)</b>	0.53 <b>(13.5)</b>	1.13 <b>(28.7)</b>	2.50 <b>(63.5)</b>	10.31 <b>(262)</b>	2.81 <b>(71.4)</b>	4.13 <b>(105)</b>		1.62 <b>(41.1)</b>	1.77 <b>(45)</b>
2-Way Angle																
	21V4M072	Vee	1/4	0.106 <b>(2.7)</b>	5.00 <b>(127)</b>	2.43 <b>(61.7)</b>	1.19 <b>(30.2)</b>	0.22 <b>(5.6)</b>	0.37 <b>(9.5)</b>	1.24 <b>(31.5)</b>	2.95 <b>(75)</b>	1.00 <b>(25.4)</b>	2.01 <b>(51)</b>		0.75 <b>(19.1)</b>	0.79 <b>(20.1)</b>
	21V6M072	Vee	3/8	0.201 <b>(5.1)</b>	5.00 <b>(127)</b>	2.43 <b>(61.7)</b>	1.19 <b>(30.2)</b>	0.22 <b>(5.6)</b>	0.37 <b>(9.5)</b>	1.24 <b>(31.5)</b>	2.95 <b>(75)</b>	1.00 <b>(25.4)</b>	2.01 <b>(51)</b>		0.75 <b>(19.1)</b>	0.79 <b>(20.1</b> )
	21V9M072	Vee	9/16	0.307 <b>(7.8)</b>	6.36 <b>(161.5)</b>	3.38 <b>(85.9)</b>	1.75 <b>(44.5)</b>	0.37 <b>(9.5)</b>	0.45 <b>(11.5)</b>	1.38 <b>(35)</b>	3.94 <b>(100)</b>	1.25 <b>(31.8)</b>	2.50 <b>(63.5)</b>		1.00 <b>(25.4)</b>	1.02 <b>(25.9)</b>
	21V12M072	Vee	3/4	0.438 <b>(11.1)</b>	7.56 <b>(192)</b>	4.25 <b>(108)</b>	2.25 <b>(57.2)</b>	0.43 <b>(11)</b>	0.63 <b>(16)</b>	1.76 <b>(44.7)</b>	10.31 <b>(262)</b>	1.50 <b>(38)</b>	3.00 <b>(76)</b>		1.25 <b>(31.8)</b>	1.38 <b>(35)</b>
	21V16M072	Vee	1	0.562 <b>(14.3)</b>	9.45 <b>(240)</b>	5.12 <b>(130)</b>	2.81 <b>(71.4)</b>	0.53 <b>(13.5)</b>	1.13 <b>(28.7)</b>	2.50 <b>(63.5)</b>	10.31 <b>(262)</b>	2.07 <b>(52.5)</b>	4.13 <b>(105)</b>		1.62 <b>(41.1)</b>	1.77 <b>(45)</b>

G - Panel mounting screw thread size 10-24 UNC (screw included). All dimensions are for reference only and are subject to change.