Electric Flow Control Valve

Pressures to 60,000 psi (4137 bar)

The need to remotely control process flow at high pressure makes this valve a vital component to processing operations. Parker Autoclave Engineers now has a flow control valve available in several models. Parker Autoclave Engineers' control valve utilizes our standard Micro-metering valve coupled to an electric actuator. The combination of these two precision, high quality components, provide a superior low flow control valve for use with liquids and gases.

Electric Flow Control Valve Features:

- Sizes 1/8", 1/4" and 3/8"
- C_V: 0.004
- Precise, accurate control
- Temperatures: -100°F to +600°F
- End connections: low pressure and high pressure Autoclave
- Materials: 316 SS, special materials available
- Controller Enclosure Rating: IP65 Weatherproof

Parker

Autoclave Engineers®

www.autoclave.com

Electric Flow Control Valve

Flow Control Valvs - Electric

Pressures to 60,000 psi (4137 bar)

	Tube Outside Diameter Size Inches	Connection Type	Orifice Size Inches (mm)	Rated C_V	Pressure Rating psi (bar) @ Room Temperature**
10VRMM	1/8	W125	0.062 (1.57)	0.004	15,000 (1034)
30VRMM	1/4	F250C	0.062 (1.57)	0.004	30,000 (2069)
60VRMM	1/4	F250C	0.062 (1.57)	0.004	60,000 (4137)
60VRMM	3/8	F375C	0.062 (1.57)	0.004	60,000 (4137)

Note:

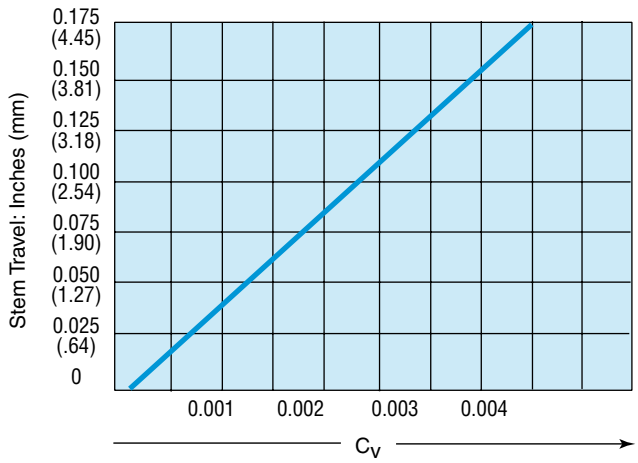
*** For complete temperature ratings see pressure/temperature rating guide in Technical Information section*

Controller Specifications

The microprocessor controlled motor guarantees optimum voltage, current and torque control when starting, running or stopping valve rotation. The microprocessor also assures accurate stem location and repeatability.

Power Requirement: 24VDC/50 Watts Min.
Control Input: 4-20 mA or 0-10 VDC
Operating Temperature: -22°F (-30°C) to 185°F (85°C)
2 foot lead cable
Anodized Aluminum Housing, IP65 (NEMA 4X) Weatherproof

Flow Coefficient (C_V)



Note: 1 turn is equal to 0.025" (0.64mm)

Ordering Information

Model	Control Input	No. Rotations	Controller RPMs	Fig.
10VRMM2812-C4	4 - 20 mA	6	10	1
10VRMM2812-C10	0 - 10 VDC	6	10	1
30VRMM4812-C4	4 - 20 mA	6	10	2
30VRMM4812-C10	0 - 10 VDC	6	10	2
60VRMM4812-C4	4 - 20 mA	6	10	2
60VRMM4812-C10	0 - 10 VDC	6	10	2
60VRMM6812-C4	4 - 20 mA	6	10	2
60VRMM6812-C10	0 - 10 VDC	6	10	2

Note: For micrometering valve details see needle valve section.

Valve Options

Extreme Temperatures
Standard Parker Autoclave Engineers valves with PTFE packing may be operated to 450°F (232°C). Optional packing or trim material available by adding the following suffixes to catalog order number.†

TG - standard valve with PTFE glass packing to 600°F (316°C).
B - standard valve with cryogenic trim material and PTFE packing to -100°F (-73°C).

†*Parker Autoclave Engineers does not recommend compression sleeve connections below 0°F (-17.8°C) or above 650°F (343°C). For additional valve options, contact your Sales Representative.*

See Needle Valve options for stem and seat coatings for erosive service.
Metering valve not to be used as a shutoff valve.

Valve Maintenance

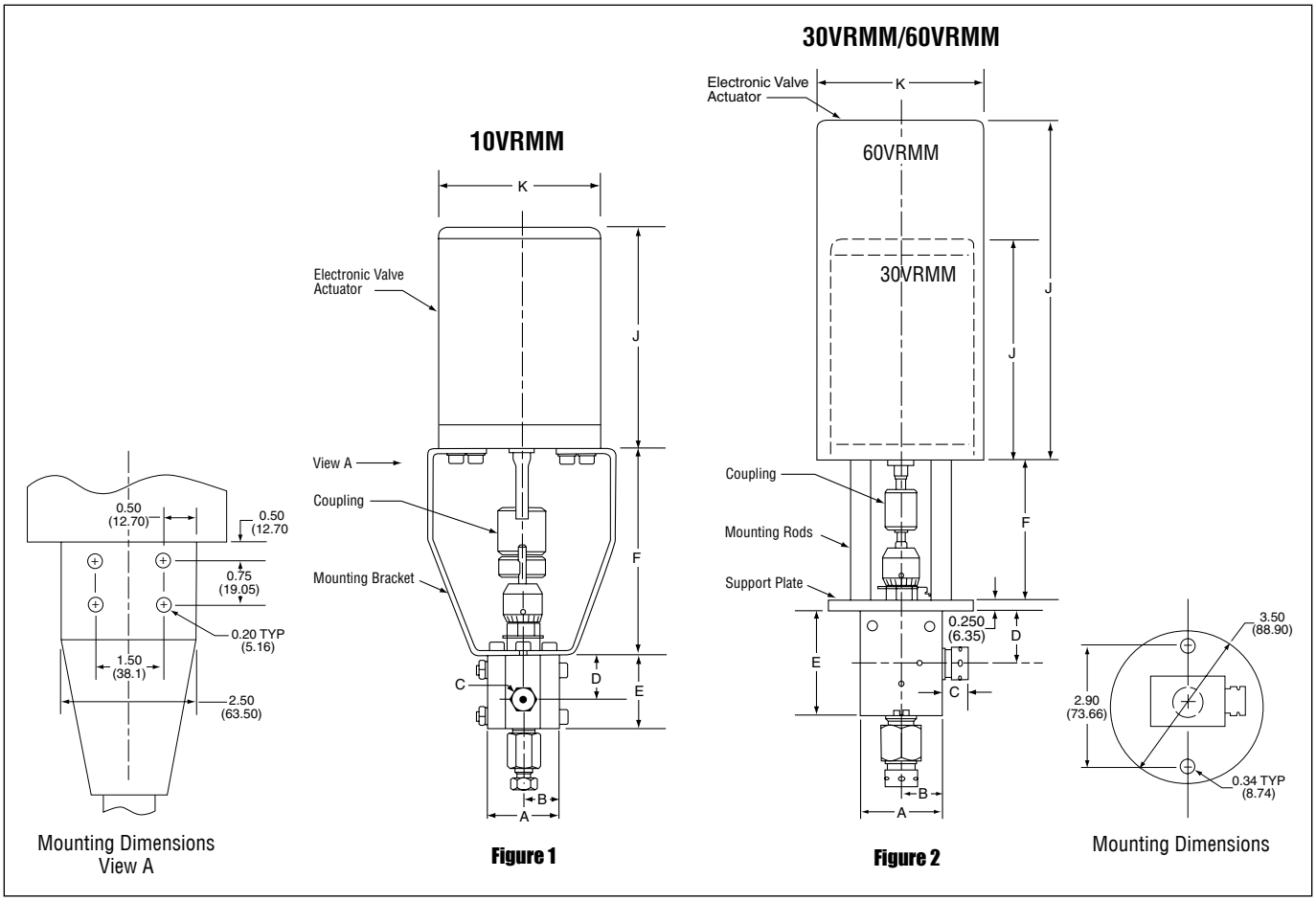
Repair Kits: add "R" to the front of valve catalog number for proper repair kit. (Example: **R60VRMM4882-C**)

Valve Bodies: Valve bodies are available. Order using the eight (8) digit part number found on 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	Outside Diameter Tube	Orifice Diameter	Dimensions - inches (mm) A	B	C	D	E	F	G	J	K	Block Thickness	Valve Pattern
10VRMM2812-C4	1/8	0.062	1.50	0.88	0.31	0.94	1.56	4.50	2.50	4.75	3.50	0.75	See Figure 1
10VRMM2812-C10	(3.17)	(1.57)	(38.10)	(22.35)	(7.87)	(23.87)	(39.62)	(114.30)	(63.50)	(120.65)	(88.90)	(19.05)	
30VRMM4812-C4	1/4	0.062	2.00	1.00	*0.50	1.12	2.00	3.50	3.50	4.75	3.50	1.00	See Figure 2
30VRMM4812-C10	(6.35)	(1.57)	(50.80)	(25.40)	(12.70)	(28.44)	(50.80)	(88.90)	(88.90)	(120.65)	(88.90)	(25.40)	
60VRMM4812-C4	1/4	0.062	2.00	1.00	0.50	1.31	2.63	3.50	3.50	8.30	4.10	1.00	
60VRMM4812-C10	(6.35)	(1.57)	(50.80)	(25.40)	(12.70)	(33.27)	(66.80)	(88.90)	(88.90)	(210.80)	(104.14)	(25.40)	
60VRMM6812-C4	3/8	0.062	2.00	1.00	0.53	1.31	2.63	3.50	3.50	8.30	4.10	1.00	
60VRMM6812-C10	(9.53)	(1.57)	(50.80)	(25.40)	(13.46)	(33.27)	(66.80)	(88.90)	(88.90)	(210.80)	(104.14)	(25.40)	

*Distance gland extends



Mounting Dimensions View A

Figure 1

Figure 2

Mounting Dimensions

WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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Instrumentation Products Division
Autoclave Engineers Operation
8325 Hessinger Drive
Erie, Pennsylvania 16509-4679 USA
PH: 814-860-5700 FAX: 814-860-5811
www.autoclave.com

Parker Hannifin Manufacturing Ltd.
Instrumentation Products Division, Europe
Industrial Estate Whitemill
Wexford, Republic of Ireland
PH: 353 53 914 1566
FAX: 353 53 914 1582

Caution! Do not mix or interchange parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

Caution! Parker Autoclave Engineers Valves, Fittings and Tools are not designed to work with common commercial instrument tubing and will only work with tubing built to Parker Autoclave Engineers AES Specifications. Failure to do so will void warranty.

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