## 

Pressures to 150,000 psi (10350 har)

| Tube Outside Diameter Size Inches | Connection Type | $\begin{gathered} \text { Orifice } \\ \text { Size } \\ \text { Inches (mm) } \end{gathered}$ | Rated $\mathrm{C}_{\mathrm{v}}{ }^{\text {* }}$ | Pressure Rating psi (bar) @ Room Temperature** |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Series 100VM } \\ & 1 / 4,5 / 16,3 / 8 \end{aligned}$ | F312C150 | 0.062 (1.57) | . 09 | 100,000 (6895) |
| $\begin{array}{\|c} \text { Series } 150 \mathrm{~V} \\ 5 / 16 \end{array}$ | F312C150 | 0.062 (1.57) | . 06 | 150,000 (10342) |
| Notes: <br> ${ }^{*} C_{V}$ values shown are for 2-way straight valve pattern. For 2-way angle patterns, increase $C_{V}$ value $50 \%$. <br> ** For complete temperature ratings see pressure/temperature rating guide in Technical Information section. |  |  |  |  |




Notes: Torque wrench required to operate valves.

150V Series

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 100 V Series valves are furnished complete with connection components, unless otherwise specified.
Typical catalog number: 100VM5071


## Valve Options

Extreme Temperatures
Standard Parker Autoclave Engineers valves with PTFE packing may be operated to $450^{\circ} \mathrm{F}\left(232^{\circ} \mathrm{C}\right)$, and to $230^{\circ} \mathrm{F}\left(110^{\circ} \mathrm{C}\right)$ with nylonleather 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 | $\begin{gathered} \text { Stem } \\ \text { Type } \end{gathered}$ | $\begin{aligned} & \text { Outside } \\ & \text { Diameter } \\ & \text { Tube } \end{aligned}$ | $\begin{gathered} \text { Orifice } \\ \text { Diameter } \end{gathered}$ | Dimensions - inches (mm) |  |  |  |  |  |  |  |  |  |  |  | Block <br> Thickness | Valve <br> Pattern |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A | B | C | D | $\mathrm{D}_{1}$ | E | F | G | $\mathrm{G}_{1}$ | $\mathrm{H}^{*}$ | M | $N$ |  |  |

## 2-Way Straight

| 100VM4077 |  | 1/4" ${ }^{\text {(6).35) }}$ | 0.062 | 3.00 | 1.50 | 0.52 | 1.75 | 1.44 | 2.25 | 4.00 | 1.12 | 0.34 | 5.32 | 1.12 | 0.50 | 1.38 |  | e |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { 100VM5071 } \\ & \text { 100VV6071 } \end{aligned}$ | VEE | 3/8" (9.53) | (1.57) | (76.20) | (38.10) | (13.21) | (44.45) | (36.58) | (57.15) | (101.60) | (28.45) | (8.64) | (135.13) | (28.45) | (12.70) | (35.05) |  | Figure 1 |

## 2-Way Angle

| 100VM4072 | VEE | 1/4" ${ }^{\text {" }}$ (6.35) | 0.062 | 2.25 | 1.50 | 0.52 | 1.44 | 3.00 | 4.00 | 1.12 | 0.34 | 6.05 | 0.94 | 0.50 | 1.38 | See Figure 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100VM5072 100VM6072 |  | 5/16" ${ }^{\text {" }}$ (7.93) | (1.57) | (57.15) | (38.10) | (13.21) | (36.58) | (76.20) | (101.60) | (28.45) | (8.64) | (153.67) | (23.88) | (12.70) | (35.05) |  |

G - Packing gland mounting hole drill size
$G_{1}$ - Bracket mounting hole size
Panel mounting drill size: 0.22 " all valves.

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


| Catalog Number | $\begin{array}{\|c\|} \text { Stem } \\ \text { Type } \end{array}$ | Outside Diameter Tube | Orifice Diameter | Dimensions - inches (mm) |  |  |  |  |  |  |  |  |  |  |  | Block Thickness | Valve <br> Pattern |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | A | B | C | D | $\mathrm{D}_{1}$ | E | F | G | $\mathrm{G}_{1}$ | $\mathbf{H}^{*}$ | M | N |  |  |

## 3-Way / 2 On Pressure

| 100VM4073 |  | 1/4" (6.35) | 0.062 | 3.00 | 1.50 | 0.52 | 1.75 | 1.44 | 3.25 | 4.00 | 1.12 | 0.34 | 6.31 | 1.12 | 0.50 | 1.38 | See <br> Figure 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100VM5073 100VM6073 | VEE |  | (1.57) | (76.20) | (38.10) | (13.21) | (44.45) | (36.58) | (82.55) | (101.60) | (28.45) | (8.64) | (160.27) | (28.45) | (12.70) | (35.05) |  |

## 2-Way Angle/Replaceahle Seat

| 100VM4872 |  | 1/4" ${ }^{\text {a }}$ (6.35) | 0.062 | 2.25 | 1.50 | 0.52 | 1.44 | 3.00 | 4.00 | 1.12 | 0.34 | 7.57 | 0.94 | 0.50 | 1.38 | See |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 100VM5872 100VM6872 | VEE | 5/16" ${ }^{\text {" }}$ (7.93) ${ }^{\text {a }}$ (9.53) | (1.57) | (57.15) | (38.10) | (13.21) | 36.58) | (76.20) | 101.60) | (28.45) | (8.64) | (192.30) | (23.88) | (12.70) | (35.05) | Figure 4 |

2-Way Angle / Replaceable Seat

| $150 V 5072$ | VEE | $5 / 16$ | 0.062 | 3.75 | 1.88 | .052 | 2.25 | 2.63 | 4.00 |  | 1.650 |  | 7.12 | $1.25^{\dagger}$ |  |  | See |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $(7.93)$ | $(1.57)$ | $(95.25)$ | $(47.63)$ | $(13.21)$ | $(57.15)$ | $(66.80)$ | $(101.60)$ |  | $(41.91)$ |  | $(180.85)$ | $(31.75)$ |  |  | 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.
or prompt service, Parke Autoclave Engineers stock select products Consult factory.

${ }^{\dagger}$ (2) 1/4"-20 mounting holes $180^{\circ}$ apart and (1) locking device screw $90^{\circ}$ apart

