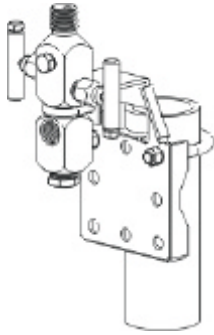


# Two-Valve Versa-Mount Block & Bleed Manifolds

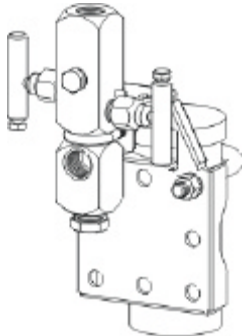
**.187" ORIFICE**

## Description

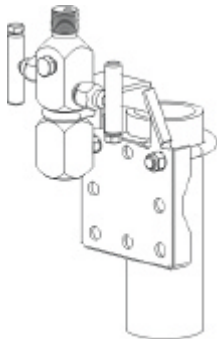
(2) 1/2" FNPT x 1/2" MNPT



(2) 1/2" FNPT x 1/2" FNPT

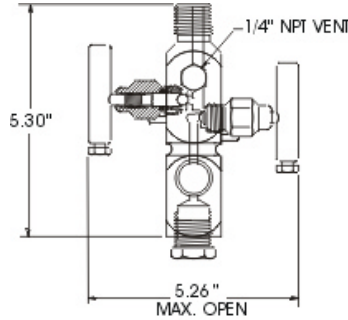


1/2" FNPT x 1/2" MNPT

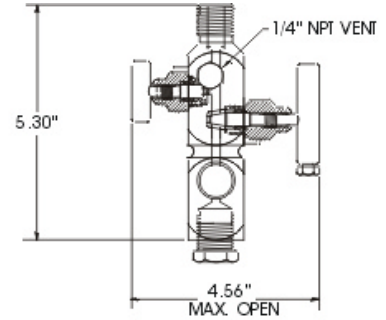


### Body Style

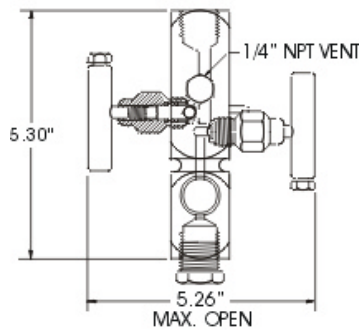
**V-620 Hard Seat**



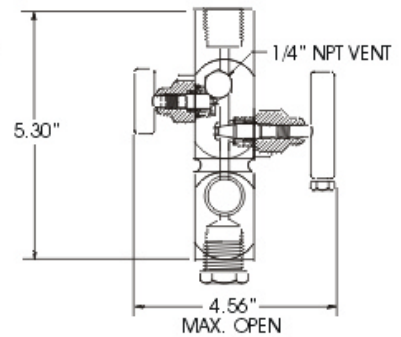
**V-621 Soft Seat**



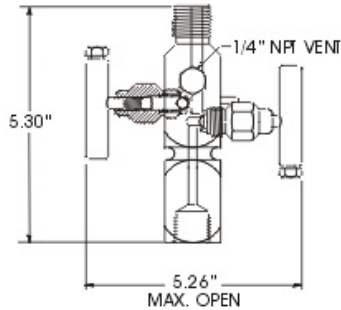
**V-622 Hard Seat**



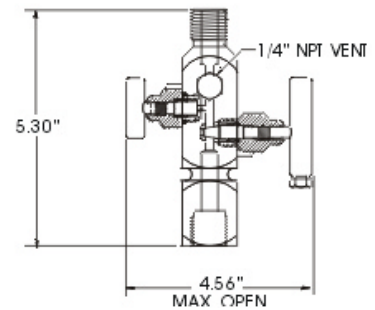
**V-623 Soft Seat**



**V-624 Hard Seat**



**V-625 Soft Seat**



Above drawings shown with P9 Pipe Plug Option.

## MATERIALS OF CONSTRUCTION

| SEAT      | MAX Cv RATINGS |
|-----------|----------------|
| Hard Ball | .53            |

| PART DESCRIPTION | CARBON STEEL   | A105 CARBON STEEL | 316 SS             | MONEL®           | HASTELLOY-C®     |
|------------------|----------------|-------------------|--------------------|------------------|------------------|
| Body             | ASTM A108-1215 | ASTM A105-CF      | ASTM A479-316      | ASTM B164-N04405 | ASTM B574-N10276 |
| Bonnet           | ASTM A108-1215 | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405 | ASTM B574-N10276 |
| Stem             | ASTM A582-303  | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405 | ASTM B574-N10276 |
| Seal Retainer    | ASTM A479-316  | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405 | ASTM B574-N10276 |
| Handle Assembly  | ASTM A108      | ASTM A108         | ASTM A582 (18-8)   | ASTM A582 (18-8) | ASTM A582 (18-8) |
| Plug(s)          | ASTM A108      | ASTM F593 (18.8)  | ASTM A182-F (18-8) | ASTM B164-N04405 | ASTM B574-N10276 |
| U-Bolts          | 300 SERIES SS  | 300 SERIES SS     | 300 SERIES SS      | 300 SERIES SS    | 300 SERIES SS    |

- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are AISI 1018

V-620 & V-622



V-624



# Two-Valve Versa-Mount Block & Bleed Manifolds

.187" ORIFICE

TWO-VALVE VERSA-MOUNT MANIFOLDS

## ORDERING INFORMATION

| BODY STYLE       | BODY CODE | SEAT CODE | STEM SEAL CODE | OPTION CODES |  |  |  |
|------------------|-----------|-----------|----------------|--------------|--|--|--|
| <b>Hard Seat</b> |           |           |                |              |  |  |  |
| V - 620          |           |           |                | -            |  |  |  |
| V - 622          |           |           |                |              |  |  |  |
| V - 624          |           |           |                | -            |  |  |  |
| <b>Soft Seat</b> |           |           |                |              |  |  |  |
| V - 621          |           |           |                | -            |  |  |  |
| V - 623          |           |           |                |              |  |  |  |
| V - 625          |           |           |                | -            |  |  |  |

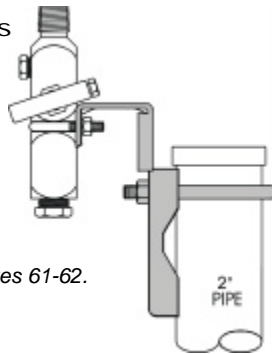
| BODY CODE           |   |
|---------------------|---|
| [Std.] Carbon Steel | C |
| A105 Carbon Steel   | P |
| [Std.] 316 SS       | S |
| Monel®              | M |
| Hastelloy-C®        | H |

| HARD SEAT CODE      |   | SOFT SEAT CODE |                              |
|---------------------|---|----------------|------------------------------|
| [Std.] Carbide Ball | C | D              | Delrin® Cone / Washer [Std.] |
| Ceramic Ball        | R | K              | Kel-F® Cone / Washer         |
| 316 SS Ball         | 6 | P              | PEEK® Cone / Washer          |
| Hastelloy-C® Ball   | H | T              | Teflon® Cone / Washer        |
| K-Monel® Ball       | N | Z              | Tefzel Cone / Washer         |

| STEM SEAL CODE                  |   |
|---------------------------------|---|
| [Std.] Teflon® Pressure-Core™   | T |
| Grafoil® Packed                 | G |
| Teflon® Packed [Hard Seat Only] | P |
| Viton® O-Ring                   | V |
| Low-Temp Pressure-Core™         | J |

## OPTIONS

- Versa-Mount Brackets
- Bonnet Handle Lock-Out
- Bonnet Lock Plates
- Integral Tube Fitting Connections



See Options/Accessories Pages 61-62.

| OPTION CODE | OPTION DESCRIPTION   |
|-------------|--|
| AU7         | ½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports) |
| AV7         | ½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)     |
| GA          | Anti-Tamper Bonnet (All Positions)                                     |
| GC          | Anti-Tamper Bonnet (Isolate Valve(s) Only)                             |
| GE          | Anti-Tamper Bonnet (Vent Valve(s) Only)                                |
| GJ          | Bonnet Lock-Out (All Positions - Lock Not Provided)                    |
| GK          | Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)            |
| GM          | Bonnet Lock-Out (Vent Valve(s) Only - Lock Not Provided)               |
| P9          | ¼" Hex Head Pipe Plug in Vent/Test Port                                |
| TH          | Hydrostatic Testing  |
| VC          | CS Versa-Mount Bracket   |
| VS          | 316 SS Versa-Mount Bracket   |
| VCH         | CS Heavy-Duty Versa-Mount Bracket                                      |
| VSH         | 316 SS Heavy-Duty Versa-Mount Bracket                                  |
| W           | Safety Bonnet Lock Plate   |
| WK          | Paper Tag  |
| W1          | 316 SS Tag (20 Characters - See page 61)                               |
| XL          | Clean for Critical Service (Oxygen or Chlorine)                        |

## PRESSURE & TEMPERATURE

| BODY MATERIAL                      | HARD SEAT                                 |  |
|------------------------------------|---|--|
|                                    | Teflon Pressure-Core                      | Grafoil                                    |
| <b>Carbon Steel</b><br>Code C      | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | Not Available.                             |
| <b>A105 Carbon Steel</b><br>Code P | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | 6,000 PSI @ 200° F<br>1,500 PSI @ 800° F   |
| <b>316 SS</b><br>Code S            | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | 6,000 PSI @ 200° F<br>1,500 PSI @ 1,000° F |

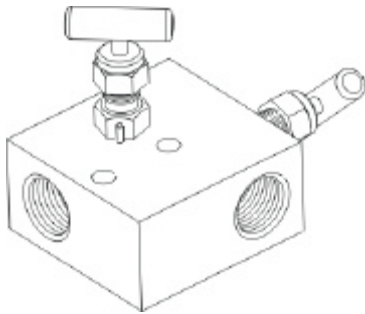
See Page 5: Chart D Chart F

# Two-Valve Block & Bleed Manifolds

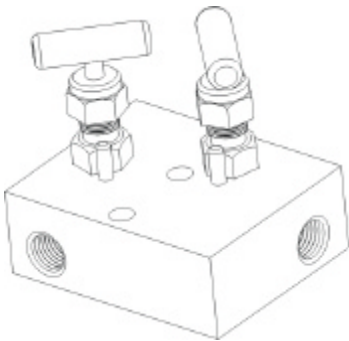
**.136" ORIFICE**

## Description

**1/2" FNPT x 1/2" FNPT**

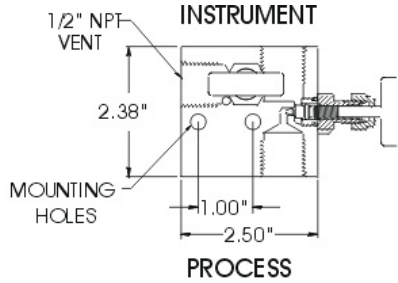


**1/4" FNPT x 1/4" FNPT**

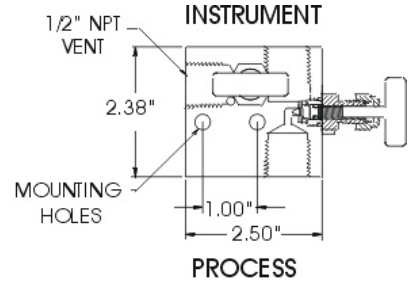


### Body Style

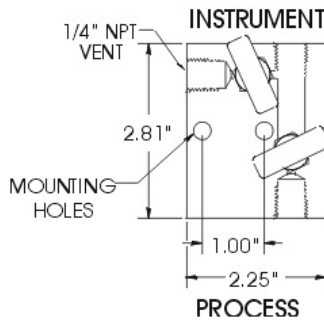
**M-507 Hard Seat**



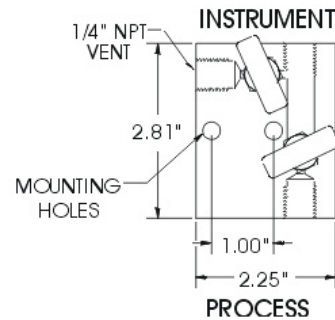
**M-507 Soft Seat**



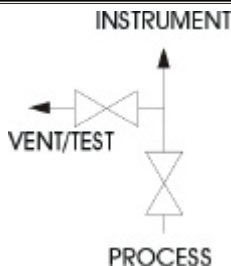
**M-508 Hard Seat**



**M-508 Soft Seat**



| SEAT                     | MAX Cv RATINGS                               |
|--------------------------|--|
| Integral Metal           | .25  |
| Soft Washer              | .22  |
| Approx. Manifold Weight: | 2.7 lbs each [M-507]<br>2.4 lbs each [M-508] |



## MATERIALS OF CONSTRUCTION

| PART DESCRIPTION | CARBON STEEL   | 316 SS           | MONEL®                            | HASTELLOY-C®                            |
|------------------|----------------|------------------|-----------------------------------|---|
| Body             | ASTM A108-1215 | ASTM A479-316    | Manifold not available in Monel®. | Manifold not available in Hastelloy-C®. |
| Bonnet           | ASTM A108-1215 | ASTM A479-316    |                                   |   |
| Stem             | ASTM A582-303  | ASTM A479-316    |                                   |   |
| Seal Retainer    | ---            | ---              |                                   |   |
| Handle Assembly  | ASTM A108      | ASTM A582 (18-8) |                                   |   |
| Plug(s)          | ---            | ---              |                                   |   |
| Mounting Bolts   | ---            | ---              |                                   |   |

- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are AISI 1018

# Two-Valve Block & Bleed Manifolds

.136" ORIFICE

TWO-VALVE BLOCK & BLEED MANIFOLDS

## ORDERING INFORMATION

| BODY STYLE       | BODY CODE | SEAT CODE | STEM SEAL CODE | OPTION CODES |
|------------------|-----------|-----------|----------------|--------------|
| <b>Hard Seat</b> |           |           |                |              |
| M - 507          |           |           | -              |              |
| M - 508          |           |           | -              |              |
| <b>Soft Seat</b> |           |           |                |              |
| M - 507          |           |           | -              |              |
| M - 508          |           |           | -              |              |

| BODY CODE           |          |
|---------------------|----------|
| [Std.] Carbon Steel | <b>C</b> |
| [Std.] 316 SS       | <b>S</b> |

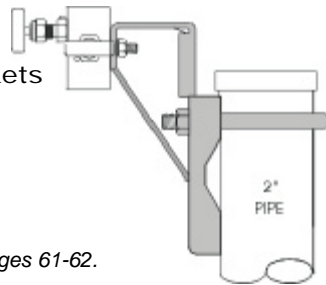
| HARD SEAT CODE        |          |
|-----------------------|----------|
| [Std.] Integral Metal | <b>M</b> |

| SOFT SEAT CODE |                       |
|----------------|-----------------------|
| <b>D</b>       | Delrin® Washer [Std.] |
| <b>K</b>       | Kel-F® Washer         |
| <b>P</b>       | PEEK® Washer          |
| <b>T</b>       | Teflon® Washer        |
| <b>Z</b>       | Tefzel Washer         |

| STEM SEAL CODE        |          |
|-----------------------|----------|
| [Std.] Teflon® Packed | <b>T</b> |
| Grafoil® Packed       | <b>G</b> |
| Viton® O-Ring         | <b>V</b> |

## OPTIONS

- Versa-Mount Brackets



| OPTION CODE | OPTION DESCRIPTION                              |
|-------------|---|
| H5          | CS Mini Round Handles                           |
| H6          | SS Mini Round Handles                           |
| TH          | Hydrostatic Testing                             |
| VC          | CS Versa-Mount Bracket                          |
| VS          | 316 SS Versa-Mount Bracket                      |
| WK          | Paper Tag                                       |
| W1          | 316 SS Tag (20 Characters - See page 61)        |
| XL          | Clean for Critical Service (Oxygen or Chlorine) |

See Options/Accessories Pages 61-62.

## PRESSURE & TEMPERATURE

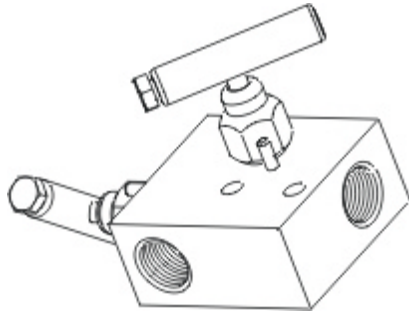
| BODY MATERIAL | METAL SEAT                    | METAL SEAT                    |
|---------------|-------------------------------|-------------------------------|
|               | Teflon Packed or Viton O-ring | Grafoil Packed                |
| Carbon Steel  | 6,000 PSI @ 200° F Max.       | 2,000 PSI @ 450° F Max.       |
| 316 SS        | 4,000 PSI @ 450° F Max.       | 2,000 PSI @ 450° F Max.       |
| See Page 5:   | Chart C                       | Chart F                       |
| BODY MATERIAL | SOFT SEAT (Delrin)            | SOFT SEAT (Peek)              |
|               | Teflon Packed or Viton O-ring | Teflon Packed or Viton O-ring |
| Carbon Steel  | 3,000 PSI @ 200° F Max.       | 6,000 PSI @ 200° F Max.       |
| 316 SS        | 3,000 PSI @ 200° F Max.       | 6,000 PSI @ 200° F Max.       |
| See Page 5:   | Chart C                       | Chart C                       |

# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

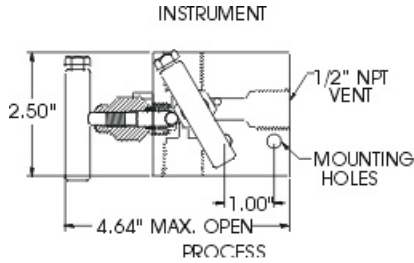
## Description

**1/2" FNPT x 1/2" FNPT**

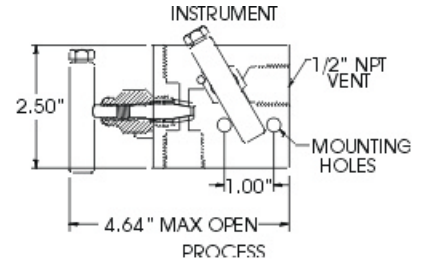


### Body Style

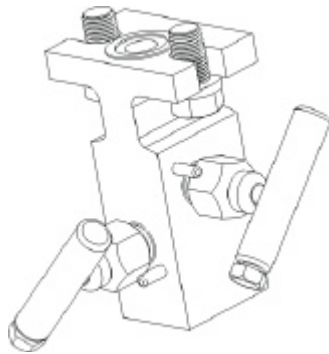
**M-518 Hard Seat**



**M-517 Soft Seat**

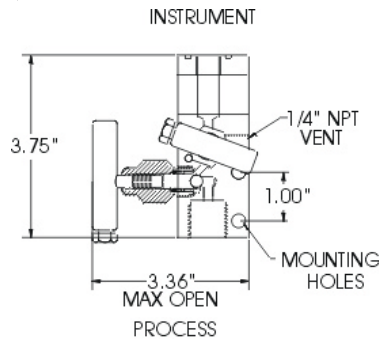


**1/2" FNPT x Flange**

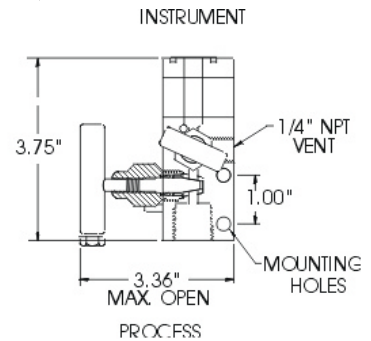


### Slim Body Style

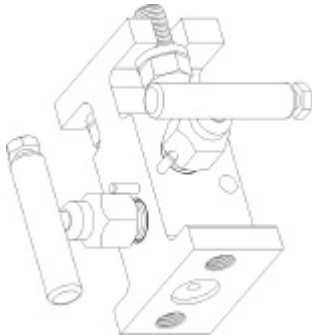
**M-616 Hard Seat**



**M-615 Soft Seat**

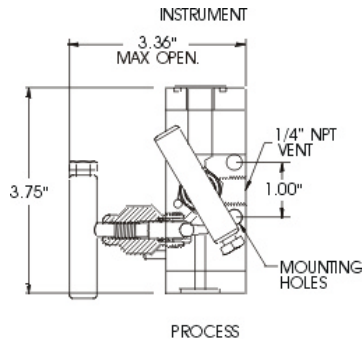


**Flange x Flange**

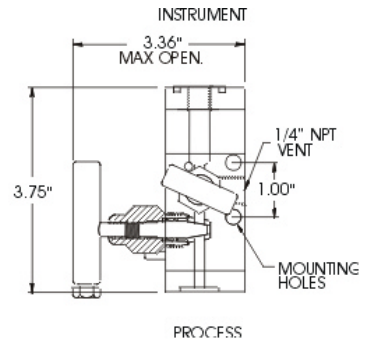


### Slim Body Style

**M-716 Hard Seat**



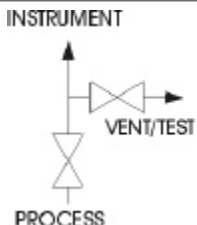
**M-715 Soft Seat**



## MATERIALS OF CONSTRUCTION

| SEAT                     | MAX Cv RATINGS             |
|--------------------------|----------------------------|
| Hard Ball                | .53                        |
| Soft Cone                | .83                        |
| Approx. Manifold Weight: | 3.1 lbs each [M-517 / 518] |
|                          | 2.6 lbs each [M-615 / 616] |
|                          | 3.0 lbs each [M-715 / 716] |

| PART DESCRIPTION | CARBON STEEL     | A105 CARBON STEEL | 316 SS             | MONEL®                               | HASTELLOY-C®                          |
|------------------|------------------|-------------------|--------------------|--------------------------------------|---------------------------------------|
| Body             | ASTM A108-1215   | ASTM A105-CF      | ASTM A479-316      | ASTM B164-N04405 or ASTM B164-N04400 | ASTM B575-N10276 or ASTM A494 CW-12MW |
| Bonnet           | ASTM A108-1215   | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Stem             | ASTM A582-303    | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Seal Retainer    | ASTM A479-316    | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Handle Assembly  | ASTM A108        | ASTM A108         | ASTM A582 (18-8)   | ASTM A582 (18-8)                     | ASTM A582 (18-8)                      |
| Plug(s)          | ASTM A108        | ASTM F593 (18.8)  | ASTM A182-F (18-8) | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Mounting Bolts   | ASTM A449-TYPE 1 | ASTM A449-TYPE 1  | ASTM A449-TYPE 1   | ASTM F593 (18-8)                     | ASTM F593 (18-8)                      |



- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are AISI 1018

# Two-Valve Block & Bleed Manifolds

.187" ORIFICE

TWO-VALVE BLOCK & BLEED MANIFOLDS

## ORDERING INFORMATION

| BODY STYLE       | BODY CODE | SEAT CODE | STEM SEAL CODE | OPTION CODES |
|------------------|-----------|-----------|----------------|--------------|
| <b>Hard Seat</b> |           |           |                |              |
| M - 5 1 8        |           |           | -              |              |
| M - 6 1 6        |           |           | -              |              |
| M - 7 1 6        |           |           | -              |              |
| <b>Soft Seat</b> |           |           |                |              |
| M - 5 1 7        |           |           | -              |              |
| M - 6 1 5        |           |           | -              |              |
| M - 7 1 5        |           |           | -              |              |

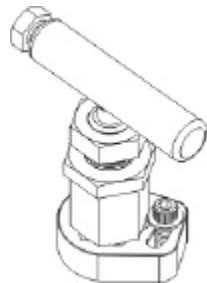
| BODY CODE           |          |
|---------------------|----------|
| [Std.] Carbon Steel | <b>C</b> |
| A105 Carbon Steel   | <b>P</b> |
| [Std.] 316 SS       | <b>S</b> |
| Monel®              | <b>M</b> |
| Hastelloy-C®        | <b>H</b> |

| HARD SEAT CODE      |          | SOFT SEAT CODE |                     |
|---------------------|----------|----------------|---------------------|
| [Std.] Carbide Ball | <b>C</b> | <b>D</b>       | Delrin® Cone [Std.] |
| Ceramic Ball        | <b>R</b> | <b>K</b>       | Kel-F® Cone         |
| 316 SS Ball         | <b>6</b> | <b>P</b>       | Peek® Cone          |
| K-Monel®            | <b>N</b> | <b>T</b>       | Teflon® Cone        |
| Hastelloy-C®        | <b>H</b> | <b>Z</b>       | Tefzel Cone         |

| STEM SEAL CODE                  |          |
|---------------------------------|----------|
| [Std.] Teflon® Pressure-Core™   | <b>T</b> |
| Grafoil® Packed                 | <b>G</b> |
| Viton® O-Ring                   | <b>V</b> |
| Low-Temp Pressure-Core™         | <b>J</b> |
| Teflon® Packed [Hard Seat Only] | <b>P</b> |

## OPTIONS

- Bonnet Lock Plates
- Versa-Mount Brackets
- Bonnet Handle Lock-Out
- Steam Trace Block
- Integral Tube Fitting Connections



See Options/Accessories Pages 61-62.

| OPTION CODE | OPTION DESCRIPTION   |
|-------------|--|
| AU7         | ½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports) |
| AV7         | ½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)     |
| GA          | Anti-Tamper Bonnet (All Positions)                                     |
| GC          | Anti-Tamper Bonnet (Isolate Valve(s) Only)                             |
| GE          | Anti-Tamper Bonnet (Vent Valve(s) Only)                                |
| GJ          | Bonnet Lock-Out (All Positions - Lock Not Provided)                    |
| GK          | Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)            |
| GM          | Bonnet Lock-Out (Vent Valve(s) Only - Lock Not Provided)               |
| ME          | Slotted Instrument Flange Using Bolts over 3"                          |
| MH          | Viton® O-Ring Flange Seals   |
| MU          | Dielectric Isolation (Flange Manifolds Only)                           |
| TC          | Steam Trace Block - Carbon Steel                                       |
| TH          | Hydrostatic Testing  |
| TS          | Steam Trace Block - 316 SS   |
| VC          | CS Versa-Mount Bracket   |
| VS          | 316 SS Versa-Mount Bracket   |
| VCH         | CS Heavy-Duty Versa-Mount Bracket                                      |
| VSH         | 316 SS Heavy-Duty Versa-Mount Bracket                                  |
| W           | Safety Bonnet Lock Plate   |
| WA          | CS   |
| WAW3        | 300 SS   |
| WAW9        | 316 SS   |
| WK          | Paper Tag  |
| W1          | 316 SS Tag (20 Characters - See page 61)                               |
| W3          | 300 SS Standard Length Flange Bolts (CS Standard)                      |
| W9          | 316 SS Standard Length Flange Bolts (CS Standard)                      |
| XL          | Clean for Critical Service (Oxygen or Chlorine)                        |

## PRESSURE & TEMPERATURE

| BODY MATERIAL               | HARD SEAT                                 |  |
|-----------------------------|---|--|
|                             | Teflon Pressure-Core                      | Grafoil                                    |
| Carbon Steel<br>Code C      | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | Not Available.                             |
| A105 Carbon Steel<br>Code P | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | 6,000 PSI @ 200° F<br>1,500 PSI @ 800° F   |
| 316 SS<br>Code S            | 10,000 PSI @ 200° F<br>8,000 PSI @ 450° F | 6,000 PSI @ 200° F<br>1,500 PSI @ 1,000° F |
| See Page 5: Chart D         |   | Chart F                                    |
| BODY MATERIAL               | SOFT SEAT (Delrin)                        | SOFT SEAT (Peek)                           |
|                             | Teflon Pressure-Core                      | Teflon Pressure-Core                       |
| Carbon Steel<br>Code C      | 6,000 PSI @ 200° F Max.                   | 10,000 PSI @ 200° F<br>3,000 PSI @ 400° F  |
| 316 SS<br>Code S            | 6,000 PSI @ 200° F Max.                   | 10,000 PSI @ 200° F<br>3,000 PSI @ 400° F  |
| See Page 5: Chart B         |   | Chart B                                    |

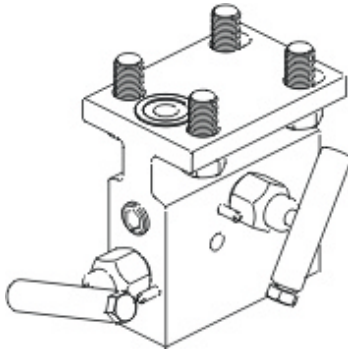


# Two-Valve Block & Bleed Manifolds

**.187" ORIFICE**

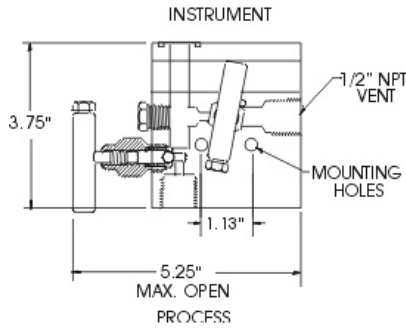
## Description

1/2" FNPT x Flange

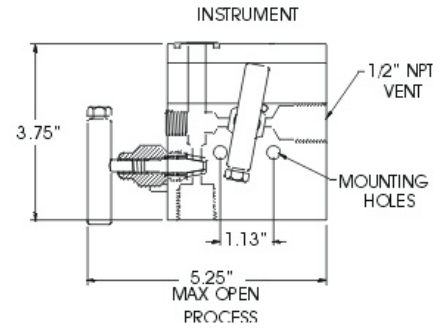


### Body Style

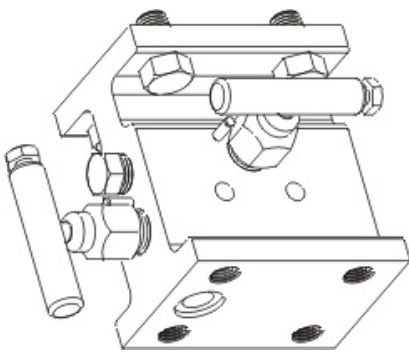
M-618 Hard Seat



M-617 Soft Seat

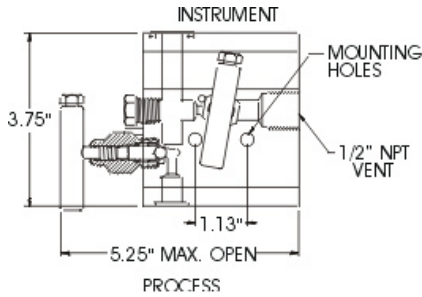


1/2" FNPT x Flange

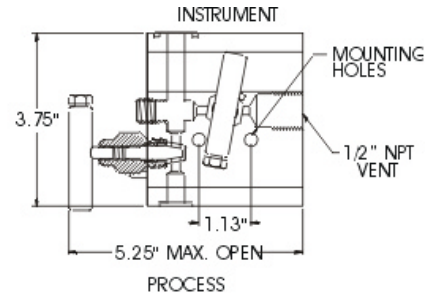


### Slim Body Style

M-718 Hard Seat



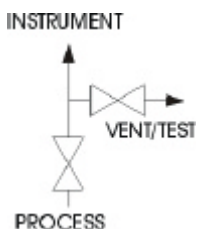
M-717 Soft Seat



## MATERIALS OF CONSTRUCTION

| SEAT                     | MAX Cv RATINGS   |
|--------------------------|--|
| Hard Ball                | .53  |
| Soft Cone                | .83  |
| Approx. Manifold Weight: | 5.0 lbs each [M-617 / 618]<br>5.5 lbs each [M-717 / 718] |

| PART DESCRIPTION | CARBON STEEL     | A105 CARBON STEEL | 316 SS             | MONEL®                               | HASTELLOY-C®                          |
|------------------|------------------|-------------------|--------------------|--------------------------------------|---------------------------------------|
| Body             | ASTM A108-1215   | ASTM A105-CF      | ASTM A479-316      | ASTM B164-N04405 or ASTM B164-N04400 | ASTM B575-N10276 or ASTM A494 CW-12MW |
| Bonnet           | ASTM A108-1215   | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Stem             | ASTM A582-303    | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Seal Retainer    | ASTM A479-316    | ASTM A479-316     | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Handle Assembly  | ASTM A108        | ASTM A108         | ASTM A582 (18-8)   | ASTM A582 (18-8)                     | ASTM A582 (18-8)                      |
| Plug(s)          | ASTM A108        | ASTM F593 (18.8)  | ASTM A182-F (18-8) | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Mounting Bolts   | ASTM A449-TYPE 1 | ASTM A449-TYPE 1  | ASTM A449-TYPE 1   | ASTM F593 (18-8)                     | ASTM F593 (18-8)                      |



- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are AISI 1018

# Two-Valve Block & Bleed Manifolds

.187" ORIFICE

TWO-VALVE BLOCK & BLEED MANIFOLDS

## ORDERING INFORMATION

| BODY STYLE       | BODY CODE | SEAT CODE | STEM SEAL CODE | OPTION CODES |
|------------------|-----------|-----------|----------------|--------------|
| <b>Hard Seat</b> |           |           |                |              |
| M - 6 1 8        |           |           | -              |              |
| M - 7 1 8        |           |           | -              |              |
| <b>Soft Seat</b> |           |           |                |              |
| M - 6 1 7        |           |           | -              |              |
| M - 7 1 7        |           |           | -              |              |

| BODY CODE           |          |
|---------------------|----------|
| [Std.] Carbon Steel | <b>C</b> |
| A105 Carbon Steel   | <b>P</b> |
| [Std.] 316 SS       | <b>S</b> |
| Monel®              | <b>M</b> |
| Hastelloy-C®        | <b>H</b> |

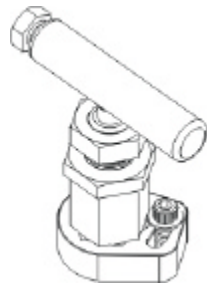
| HARD SEAT CODE      |          | SOFT SEAT CODE |                     |
|---------------------|----------|----------------|---------------------|
| [Std.] Carbide Ball | <b>C</b> | <b>D</b>       | Delrin® Cone [Std.] |
| Ceramic Ball        | <b>R</b> | <b>K</b>       | Kel-F® Cone         |
| 316 SS Ball         | <b>6</b> | <b>P</b>       | Peek® Cone          |
| K-Monel®            | <b>N</b> | <b>T</b>       | Teflon® Cone        |
| Hastelloy-C®        | <b>H</b> | <b>Z</b>       | Tefzel Cone         |

| STEM SEAL CODE                  |          |
|---------------------------------|----------|
| [Std.] Teflon® Pressure-Core™   | <b>T</b> |
| Grafoil® Packed                 | <b>G</b> |
| Viton® O-Ring                   | <b>V</b> |
| Low-Temp Pressure-Core™         | <b>J</b> |
| Teflon® Packed [Hard Seat Only] | <b>P</b> |

| OPTION CODE | OPTION DESCRIPTION   |
|-------------|--|
| AU7         | ½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports) |
| AV7         | ½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)     |
| GA          | Anti-Tamper Bonnet (All Positions)                                     |
| GC          | Anti-Tamper Bonnet (Isolate Valve(s) Only)                             |
| GE          | Anti-Tamper Bonnet (Vent Valve(s) Only)                                |
| GJ          | Bonnet Lock-Out (All Positions - Lock Not Provided)                    |
| GK          | Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)            |
| GM          | Bonnet Lock-Out (Vent Valve(s) Only - Lock Not Provided)               |
| ME          | Slotted Instrument Flange Using Bolts over 3"                          |
| MH          | Viton® O-Ring Flange Seals   |
| MU          | Dielectric Isolation (Flange Manifolds Only)                           |
| TC          | Steam Trace Block - Carbon Steel                                       |
| TH          | Hydrostatic Testing  |
| TS          | Steam Trace Block - 316 SS   |
| VC          | CS Versa-Mount Bracket   |
| VS          | 316 SS Versa-Mount Bracket   |
| VCH         | CS Heavy-Duty Versa-Mount Bracket                                      |
| VSH         | 316 SS Heavy-Duty Versa-Mount Bracket                                  |
| W           | Safety Bonnet Lock Plate   |
| WA          | CS   |
| WAW3        | 300 SS   |
| WAW9        | 316 SS   |
| WK          | Paper Tag  |
| W1          | 316 SS Tag (20 Characters - See page 61)                               |
| W3          | 300 SS Standard Length Flange Bolts (CS Standard)                      |
| W9          | 316 SS Standard Length Flange Bolts (CS Standard)                      |
| XL          | Clean for Critical Service (Oxygen or Chlorine)                        |

## OPTIONS

- Bonnet Lock Plates
- Versa-Mount Brackets
- Bonnet Handle Lock-Out
- Steam Trace Block
- Integral Tube Fitting Connections



See Options/Accessories Pages 61-62.

## PRESSURE & TEMPERATURE

| BODY                        | MATERIAL | HARD SEAT                        |                                |
|-----------------------------|----------|----------------------------------|--------------------------------|
|                             |          | Teflon Pressure-Core             | Grafoil                        |
| Carbon Steel<br>Code C      |          | 10,000 PSI @ 200° F              | Not Available.                 |
|                             |          | 8,000 PSI @ 450° F               |                                |
| A105 Carbon Steel<br>Code P |          | 10,000 PSI @ 200° F              | 6,000 PSI @ 200° F             |
|                             |          | 8,000 PSI @ 450° F               | 1,500 PSI @ 800° F             |
| 316 SS<br>Code S            |          | 10,000 PSI @ 200° F              | 6,000 PSI @ 200° F             |
|                             |          | 8,000 PSI @ 450° F               | 1,500 PSI @ 1,000° F           |
| See Page 5:                 |          | Chart D                          | Chart F                        |
| BODY MATERIAL               |          | SOFT SEAT                        |                                |
|                             |          | (Delrin)<br>Teflon Pressure-Core | (Peek)<br>Teflon Pressure-Core |
| Carbon Steel<br>Code C      |          | 6,000 PSI @ 200° F Max.          | 10,000 PSI @ 200° F            |
|                             |          |                                  | 3,000 PSI @ 400° F             |
| 316 SS<br>Code S            |          | 6,000 PSI @ 200° F Max.          | 10,000 PSI @ 200° F            |
|                             |          |                                  | 3,000 PSI @ 400° F             |
| See Page 5:                 |          | Chart B                          | Chart B                        |

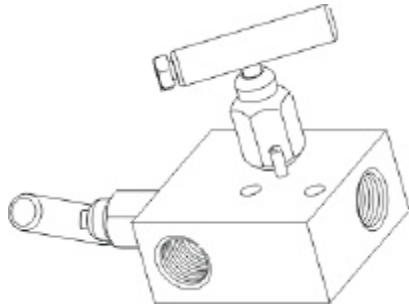


# Two-Valve Block & Bleed Manifolds

**.250" ORIFICE**

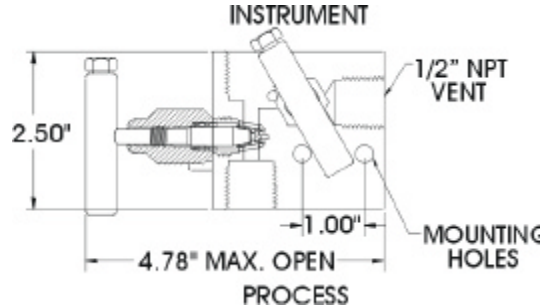
## Description

**1/2" FNPT x 1/2" FNPT**

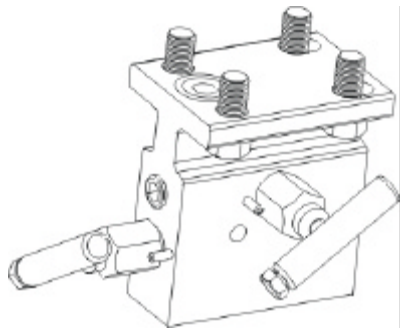


## Body Style

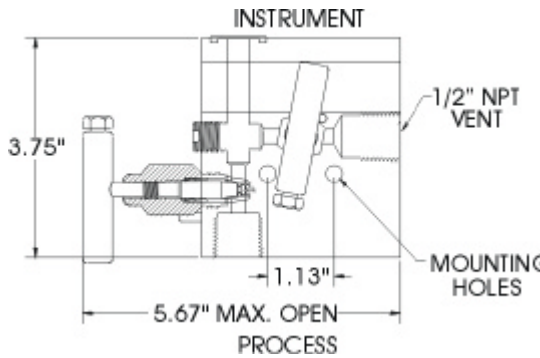
**M2-517 Soft Seat**



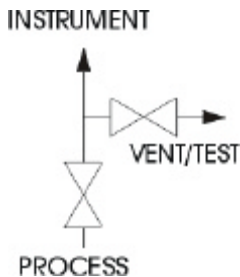
**1/2" FNPT x Flange**



**M2-617 Soft Seat**



| SEAT                     | MAX Cv RATINGS                                 |
|--------------------------|--|
| Soft Cone                | .83  |
| Approx. Manifold Weight: | 3.1 lbs each [M2-517]<br>5.1 lbs each [M2-617] |



## MATERIALS OF CONSTRUCTION

| PART DESCRIPTION | CARBON STEEL     | 316 SS             | MONEL®                               | HASTELLOY-C®                          |
|------------------|------------------|--------------------|--------------------------------------|---------------------------------------|
| Body             | ASTM A108-1215   | ASTM A479-316      | ASTM B164-N04405 or ASTM B164-N04400 | ASTM B574-N10276 or ASTM A494 CW-12MW |
| Bonnet           | ASTM A108-1215   | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Stem             | ASTM A582-303    | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Seal Retainer    | ASTM A479-316    | ASTM A479-316      | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Handle Assembly  | ASTM A108        | ASTM A582 (18-8)   | ASTM A582 (18-8)                     | ASTM A582 (18-8)                      |
| Plug(s)          | ASTM A108        | ASTM A182-F (18-8) | ASTM B164-N04405                     | ASTM B574-N10276                      |
| Mounting Bolts   | ASTM A449-TYPE 1 | ASTM A449-TYPE 1   | ASTM F593 (18-8)                     | ASTM F593 (18-8)                      |

- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Carbon Steel Weld End Connection Bodies are AISI 1018

# Two-Valve Block & Bleed Manifolds

.250" ORIFICE

TWO-VALVE BLOCK & BLEED MANIFOLDS

## ORDERING INFORMATION

| BODY STYLE  | BODY CODE | SEAT CODE | STEM SEAL CODE | OPTION CODES |  |  |  |
|-------------|-----------|-----------|----------------|--------------|--|--|--|
| Soft Seat   |           |           |                |              |  |  |  |
| M 2 - 5 1 7 |           |           | -              |              |  |  |  |
| M 2 - 6 1 7 |           |           | -              |              |  |  |  |

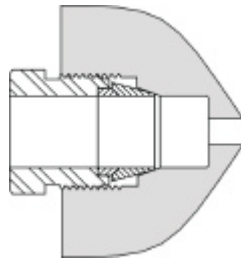
| BODY CODE                |   |
|--------------------------|---|
| [Std.] Carbon Steel      | C |
| [Std.] 316 SS            | S |
| Monel <sup>®</sup>       | M |
| Hastelloy-C <sup>®</sup> | H |

| SOFT SEAT CODE |                                 |
|----------------|---------------------------------|
| D              | Delrin <sup>®</sup> Cone [Std.] |
| K              | Kel-F <sup>®</sup> Cone         |
| P              | PEEK <sup>®</sup> Cone          |
| T              | Teflon <sup>®</sup> Cone        |
| Z              | Tefzel Cone                     |

| STEM SEAL CODE  |   |
|---|---|
| [Std.] Teflon <sup>®</sup> Pressure-Core <sup>™</sup> | T |
| Viton <sup>®</sup> O-Ring                             | V |
| Low-Temp Pressure-Core <sup>™</sup>                   | J |

## OPTIONS

- Integral Tube Fitting Connections
- Versa-Mount Brackets
- Bonnet Handle Lock-Out
- Bonnet Lock Plates



See Options/Accessories Pages 61-62.

| OPTION CODE | OPTION DESCRIPTION   |
|-------------|--|
| AU7         | ½" Integral Tube Fitting - Parker <sup>®</sup> A-LOK Dual Ferrules (Process Ports) |
| AV7         | ½" Integral Tube Fitting - Swagelok <sup>®</sup> Dual Ferrules (Process Ports)     |
| GA          | Anti-Tamper Bonnet (All Positions)   |
| GC          | Anti-Tamper Bonnet (Isolate Valves Only)   |
| GE          | Anti-Tamper Bonnet (Vent Valve Only)   |
| GJ          | Bonnet Lock-Out (All Positions - Lock Not Provided)                                |
| GK          | Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)                        |
| GM          | Bonnet Lock-Out (Vent Valve(s) Only - Lock Not Provided)                           |
| MH          | Viton <sup>®</sup> O-Ring Flange Seals   |
| TH          | Hydrostatic Testing  |
| VC          | CS Versa-Mount Bracket   |
| VS          | 316 SS Versa-Mount Bracket   |
| VCH         | CS Heavy-Duty Versa-Mount Bracket  |
| VSH         | 316 SS Heavy-Duty Versa-Mount Bracket  |
| W           | Safety Bonnet Lock Plate   |
| WA          | CS   |
| WAW3        | 300 SS   |
| WAW9        | 316 SS   |
| WK          | Paper Tag  |
| W1          | 316 SS Tag (20 Characters - See page 61)   |
| W3          | 300 SS Standard Length Flange Bolts (CS Standard)                                  |
| W9          | 316 SS Standard Length Flange Bolts (CS Standard)                                  |
| XL          | Clean for Critical Service (Oxygen or Chlorine)                                    |

## PRESSURE & TEMPERATURE

| BODY MATERIAL | SOFT SEAT (Delrin)      | SOFT SEAT (PeeK)                          |
|---------------|-------------------------|---|
|               | Teflon Pressure-Core    | Teflon Pressure-Core                      |
| Carbon Steel  | 6,000 PSI @ 200° F Max. | 10,000 PSI @ 200° F<br>3,000 PSI @ 400° F |
| 316 SS        | 6,000 PSI @ 200° F Max. | 10,000 PSI @ 200° F<br>3,000 PSI @ 400° F |

See Page 5: Chart B Chart B