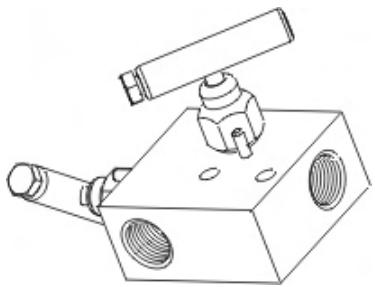


Instrument Manifolds

FOR THE PROCESS AND GAS INDUSTRIES



2, 3 and 5 Valve Manifold Designs

By-Pass Manifolds

Block & Bleed Manifolds

Purge Manifolds

Liquid Level Manifolds

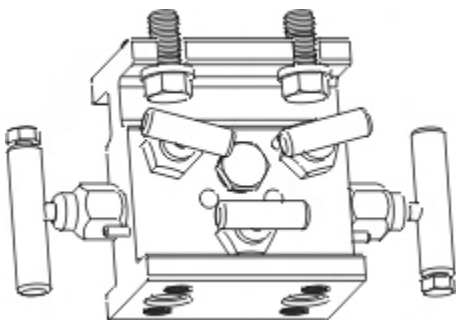
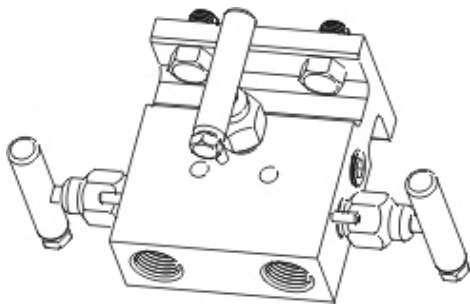
Meter Manifolds

Miniature Manifolds

Pipe Mount Manifolds

Pressure & Pressure Instrument Manifolds

Short Mount Manifolds



**Patented Pressure-Core™ Stem Seal
System with 5-year Warranty**

Rock Hard Carbide Ball Seats

Soft “Roddable” Seat Styles

Carbon Steel and 316 SS Standard Materials

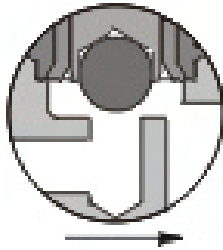
**Standard 316 SS meets NACE
(MR0175 Latest Revision)**

Specialty Alloys Available



Seat Designs ~ Features and Benefits

.136" .187" .250" .375" ORIFICE



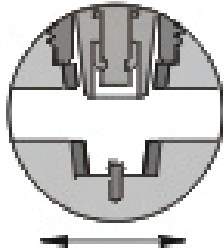
HARD BALL SEAT ~ .136" .187" .375" Orifice

FEATURES

- PGI Standard Carbide *Ball* Seat

BENEFITS

- Non-rotating ball eliminates seat galling and ball creasing
- Leak free, bubble tight seating
- Available in a variety of materials



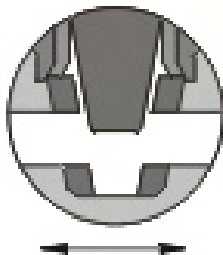
316 SS CONE SEAT ~ .375" Orifice

FEATURES

- PGI 316 SS *Cone* Seat

BENEFITS

- Non-rotating stem tip
- Roddable straight-through design
- Easily replaced
- Bi-directional flow



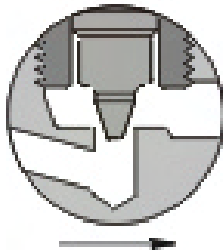
SOFT SEAT ~ .187" .250" .375" Orifice

FEATURES

- PGI Soft *Cone* Seat

BENEFITS

- Roddable straight-through design
- Leak free, bubble tight seating
- Easily replaced
- Available in a variety of materials
- Bi-directional flow



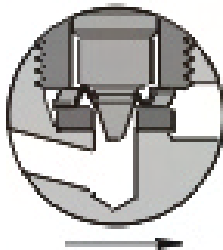
INTEGRAL METAL TO METAL SEAT ~ .136" Orifice [Mini Packed Valves]

FEATURES

- PGI Integral Metal Seat

BENEFITS

- Throtting and shut-off design
- Interchangeable between soft or metal seats



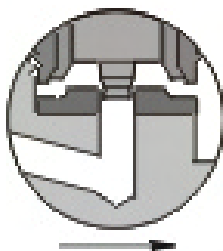
SOFT "WASHER" SEAT ~ .136" Orifice [Mini Packed Valves]

FEATURES

- PGI "Washer" Seat

BENEFITS

- Throtting and shut-off design
- Interchangeable between soft or metal seats
- Easily replaced
- Available in a variety of materials



SOFT "WASHER" SEAT ~ .125" .136" Orifice

FEATURES

- PGI "Washer" Seat

BENEFITS

- Throtting and shut-off design
- Four times the sealing area
- Easily replaced
- Available in a variety of materials

Pressure and Temperature Charts

.136" .187" .250" .375" ORIFICE

CHART A

SOFT SEATS - .136" ORIFICE
"T" CODE = TEFLON® PRESSURE-CORE™ SEAL

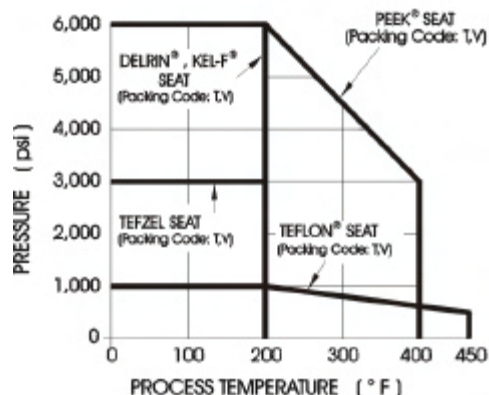


CHART B

SOFT SEATS - .187" and .250" ORIFICE
All Materials

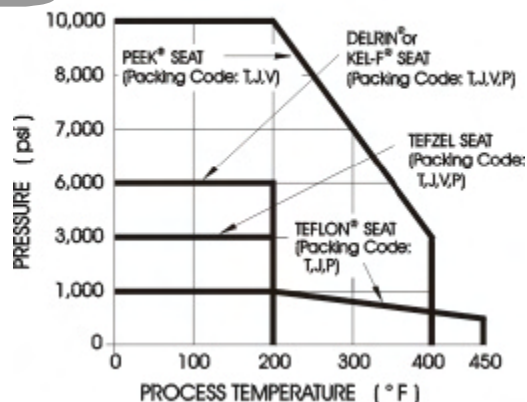


CHART C

"MINI" SOFT and INTEGRAL METAL SEATS - .136" ORIFICE
"T" CODE = TEFLON® PACKED and
"V" CODE = VITON O-RING SEAL

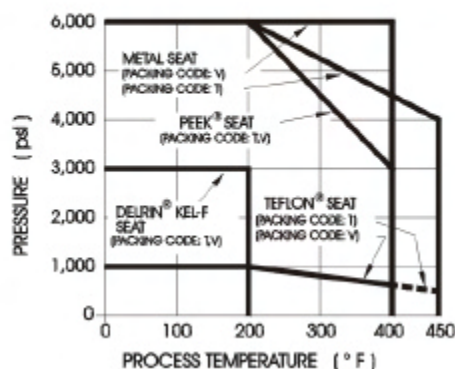


CHART D

HARD SEATS - .187" and .375" ORIFICE
TEFLON® PRESSURE-CORE™ SEAL
and VITON O-RING SEAL
All Materials

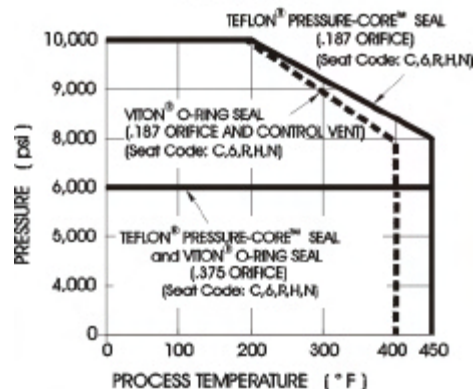


CHART E

SOFT SEATS - .375" ORIFICE

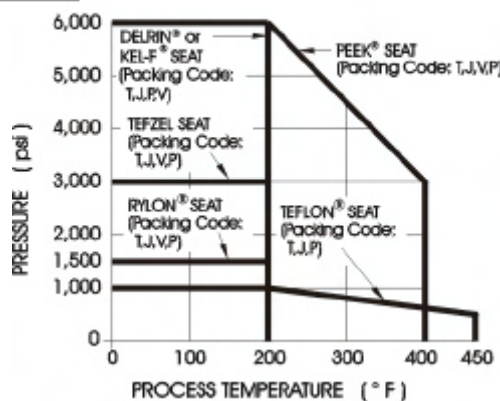
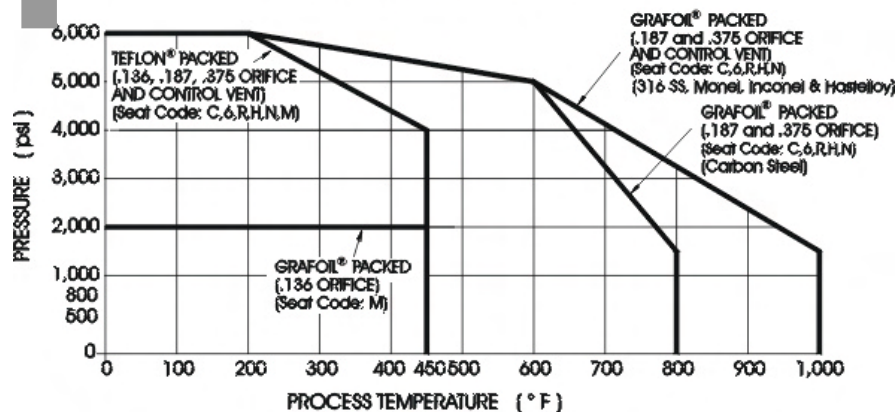


CHART F

GRAFOIL® AND TEFLON® PACKED
HARD SEATS - ALL ORIFICE SIZES



Manifold Seats & Seals

STANDARD BODY MATERIAL CODES				STANDARD STEM SEAL MATERIAL CODES			
CODE	MATERIAL	MAX TEMP	MIN TEMP	CODE	SEAL DESCRIPTION	MAX TEMP	MIN TEMP
C	ASTM A108 - 1215 CS	500° F	- 20° F	G	Grafoil® Packed Style	800° F (CS) 1,000° F (SS)	- 20° F - 80° F
S	ASTM A479 - 316 SS	1,000° F	- 100° F	J	Teflon® Pressure-Core Seal (Low Temperature)	450° F	- 50° F
P	ASTM A105 CF	800° F	- 20° F	T	Teflon® Pressure-Core Seal (Standard)	450° F	- 40° F
Non-standard body and bonnet materials such as Monel®, Inconel®, Hastelloy-C®, etc. are available on special factory order and carry the 316 SS temperature rating.				P	Teflon® Packed Style	450° F	- 80° F
				K	Teflon® Pressure-Core Back-up	400° F	-40° F
				V	Viton® O-Ring with filled Teflon Backup	400° F	- 15° F
				Y	Graflon® Packed Style	600° F	- 40° F
				T	"Mini" Teflon® Packed	450° F	- 15° F
STANDARD SOFT SEAT MATERIAL CODES				SOFT SEAT PRESSURE / TEMPERATURE RATINGS			
CODE	MATERIAL	MAX TEMP	MIN TEMP	CODE	SEAL DESCRIPTION	MAX PRESSURE	
D	Delrin® Cone & Mini Washer	200° F	- 40° F	D	Delrin® Cone & Mini Washer	6,000 PSI @ 200° F	
T	Teflon® Cone & Mini Washer	450° F	- 80° F	T	Teflon® Cone & Mini Washer	1,000 PSI @ 200° F	
L	Rylon® Cone (.375" Orifice) and Tefzel Mini Washers -.136" Orifice (Standard)	200° F	- 40° F	L	Rylon® (.375" Orifice Cone Only)	1,500 PSI @ 200° F	
Z	Tefzel Cone & Mini Washer	200° F	- 40° F	6	316 SS Cone (.375" Orifice Only)	6,000 PSI @ 200° F	
K	Kel-F® Cone & Mini Washer	200° F	- 100° F	Z	Tefzel Cone & Mini Washer	3,000 PSI @ 200° F	
P	PEEK® Cone & Mini Washer	400° F	- 40° F	K	Kel-F® Cone & Mini Washer	6,000 PSI @ 200° F	
				P	PEEK® Cone	10,000 PSI @ 200° F	
					PEEK® Mini Washer	6,000 PSI @ 200° F	
STANDARD HARD SEAT MATERIAL CODES				HARD SEAT PRESSURE / TEMPERATURE RATINGS			
CODE	MATERIAL	MAX TEMP	MIN TEMP	CODE	SEAL DESCRIPTION	MAX PRESSURE	
C	Carbide® Ball Nickel / Chrome Binder	800° F (CS) 1,000° F (SS)	- 100° F	C	Carbide® Ball	10,000 PSI @ 200° F	
6	316 SS Cone (.375" Orifice Block Valves Only) .187" & .375" Ball		- 100° F	6	316 SS Cone (.375" Orifice Only)	6,000 PSI @ 200° F	
R	Ceramic Ball		- 100° F	R	Ceramic Ball	10,000 PSI @ 200° F	
M	Integral Metal to Metal Seat		- 100° F	M	Integral Metal to Metal Seat	6,000 PSI @ 200° F	
N	Monel® Ball		- 100° F	N	Monel® Ball	10,000 PSI @ 200° F	
H	Hastelloy-C® Ball		-100° F	H	Hastelloy-C® Ball	10,000 PSI @ 200° F	

Notes

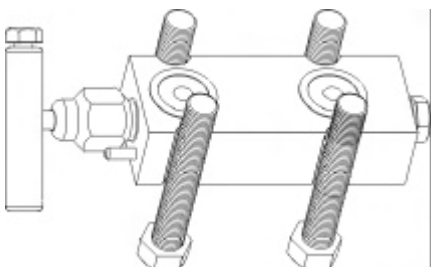
Monel® is a registered trademark of International Nickel Company.
Hastelloy® is a registered trademark of Haynes International.
Delrin®, Viton® and Teflon® are registered trademarks of the E.I. duPont de Nemours Company.
Grafoil® is a registered trademark of Union Carbide Corporation.
PEEK® is a registered trademark of ICI Americas, Inc.
Kel-F® is a registered trademark of the 3M Company.
Coplanar™ is a trademark of Rosemount®, Inc.
Rosemount® is a registered trademark of Rosemount®, Inc.
Parker® is a registered trademark of Parker Hannifin Corporation.
Swagelok® is a registered trademark of The Swagelok® Companies.

By-Pass Manifolds

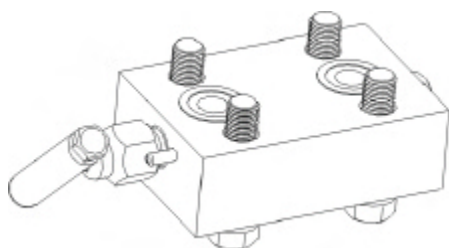
.187" ORIFICE

Description

Flange x Flange

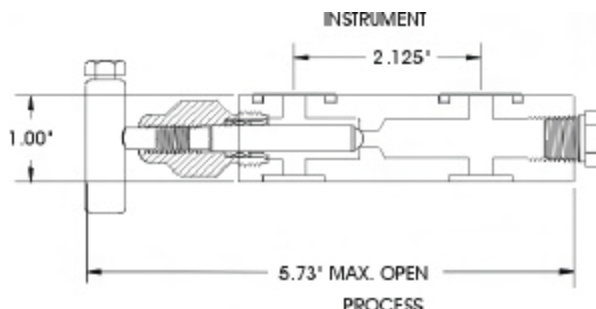


1/2" FNPT x Flange

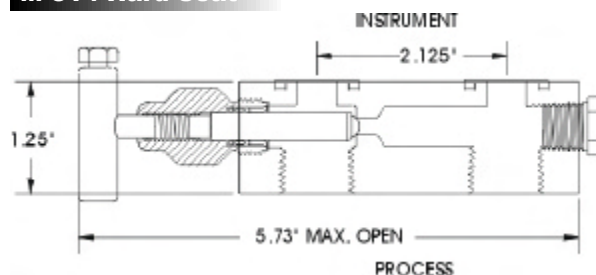


Body Style

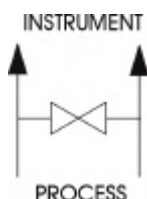
M-504 Hard Seat



M-514 Hard Seat



SEAT	MAX Cv RATINGS
Hard Ball	.53
Approx. Manifold Weight:	1.9 lbs each [M-504] 3.7 lbs each [M-514]



MATERIALS OF CONSTRUCTION

PART DESCRIPTION	CARBON STEEL	A105 CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	ASTM A105-CF	ASTM A479-316	Consult Factory.	Consult Factory.
Bonnet	ASTM A108-1215	ASTM A479-316	ASTM A479-316		
Stem	ASTM A582-303	ASTM A479-316	ASTM A479-316		
Seal Retainer	ASTM A479-316	ASTM A479-316	ASTM A479-316		
Handle Assembly	ASTM A108	ASTM A108	ASTM A582 (18-8)		
Plug	ASTM A108	ASTM F593 (18.8)	ASTM A182-F (18-8)		
Mounting Bolts	ASTM A449-TYPE 1	ASTM A449-TYPE 1	ASTM A449-TYPE 1		

- 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

By-Pass Manifolds

.187" ORIFICE

BY-PASS MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES				
Hard Seat									
M - 5 0 4				-					
M - 5 1 4				-					

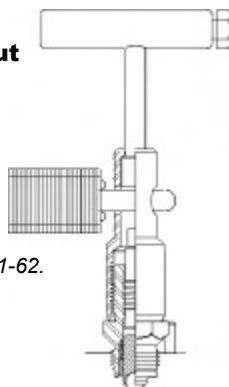
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S

HARD SEAT CODE	
C Carbide Ball [Std.]	
R Ceramic Ball	
6 316 SS Ball	

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

OPTIONS

- **Bonnet Handle Lock-Out**
- Bonnet Lock Plates



See Options/Accessories Pages 61-62.

OPTION CODE	OPTION DESCRIPTION
GA	Anti-Tamper Bonnet
GJ	Bonnet Lock-Out (Lock Not Provided)
MH	Viton® O-Ring Flange Seals
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
TH	Hydrostatic Testing
W	Safety Bonnet Lock Plate
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

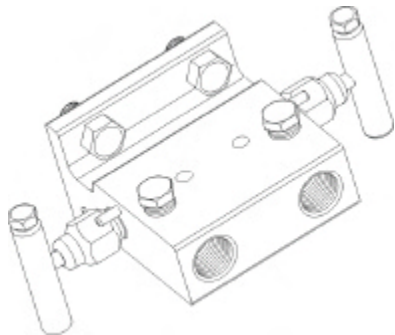
BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
See Page 5: Chart D		Chart F

Liquid Level Manifolds

.187" ORIFICE

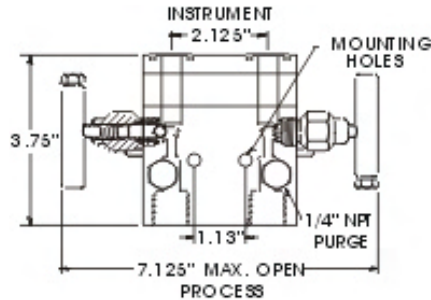
Description

1/2" FNPT x Flange

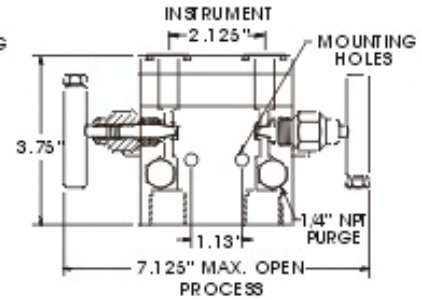


Body Style

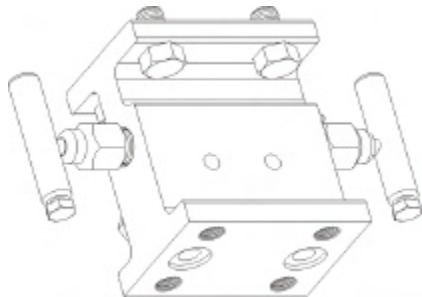
M-658 Hard Seat



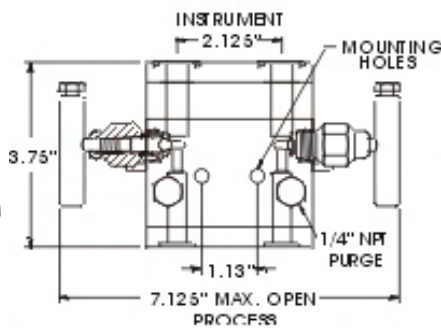
M-657 Soft Seat



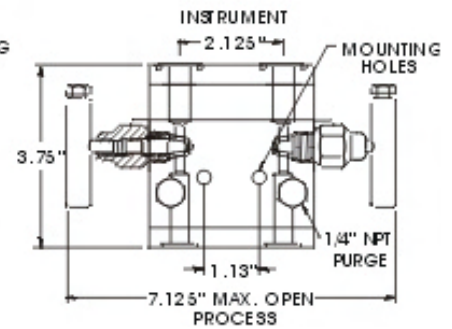
1/2" Flange x Flange



M-758 Hard Seat

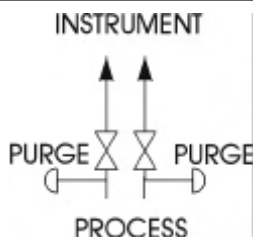


M-757 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.53
Soft Cone	.83
Approx. Manifold Weight:	5.1 lbs each [M-657 / 658] 5.6 lbs each [M-757 / 758]



PART DESCRIPTION	CARBON STEEL	A105 CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	ASTM A105-CF	ASTM A479-316	ASTM B164-N04400	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

Liquid Level Manifolds

.187" ORIFICE

LIQUID LEVEL MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Hard Seat								
M - 6 5 8								
M - 7 5 8				-				
Soft Seat								
M - 6 5 7								
M - 7 5 7				-				

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

HARD SEAT CODE	
[Std.] Carbide Ball	C
Ceramic Ball	R
316 SS Ball	6
Hastelloy-C®	H
K-Monel® Ball	N

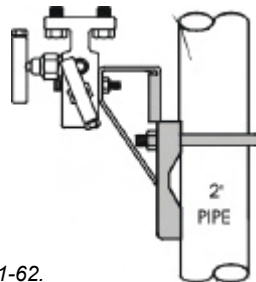
SOFT SEAT CODE	
Delrin® Cone [Std.]	D
Kel-F® Cone	K
PEEK® Cone	P
Teflon® Cone	T
Tefzel Cone	Z

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

OPTIONS

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

See Options/Accessories Pages 61-62.



OPTION CODE	OPTION DESCRIPTION	
AP7	½" Female Pipe Socket Weld (Process Ports)	
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	
GK	Bonnet Lock-Out (Lock Not Provided)	
MH	Viton® O-Ring Flange Seals	
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	2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™
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

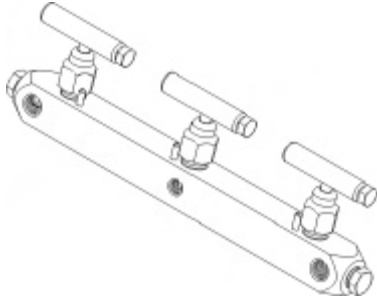
BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 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 Code C	6,000 PSI @ 200° F Max.	10,000 PSI @ 200° F 3,000 PSI @ 400° F
316 SS 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

Meter Manifolds

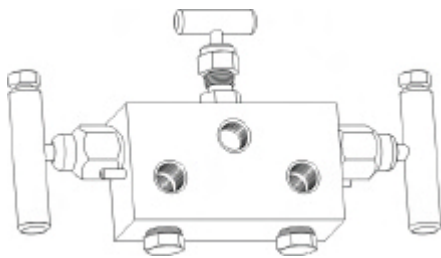
.187" ORIFICE

Description

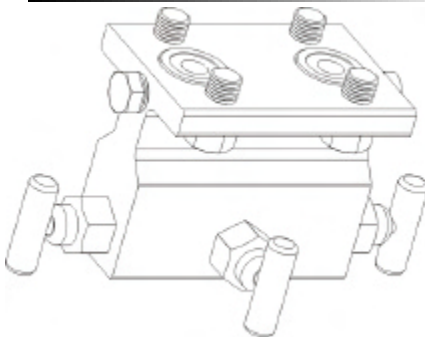
1/4" FNPT x 1/4" FNPT



1/4" FNPT x 1/4" FNPT

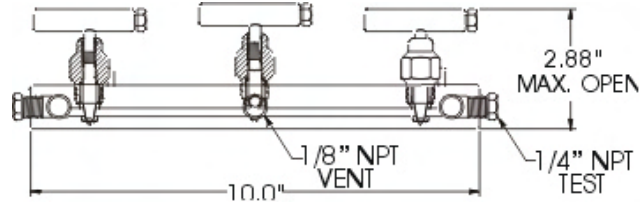


Flange x 1/4" FNPT

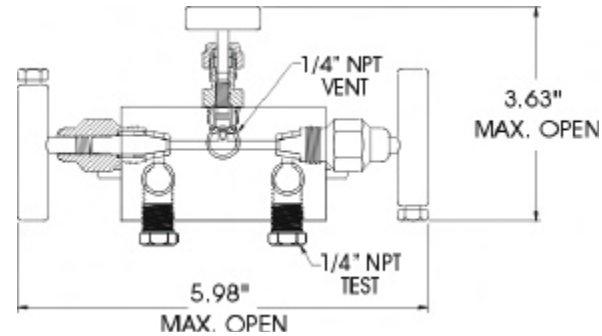


Body Style

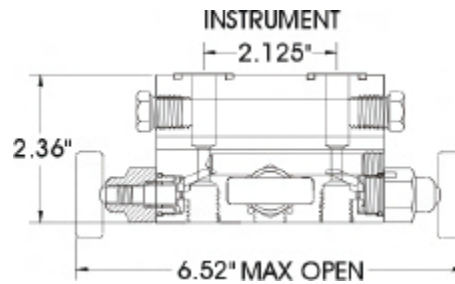
M-505 Soft Seat



M-509 Soft Seat



M-923 Soft Seat

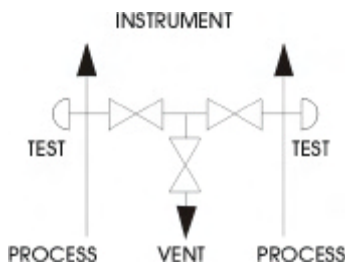


MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Soft Cone	.83
Approx. Manifold Weight:	3.7 lbs each [M-505] 5.0 lbs each [M-509]

PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	ASTM A479-316	Consult Factory.	Consult Factory.
Bonnet	ASTM A108-1215	ASTM A479-316		
Stem	ASTM A582-303	ASTM A479-316		
Seal Retainer	ASTM A479-316	ASTM A479-316		
Handle Assembly	ASTM A108	ASTM A582 (18-8)		
Plug(s)	ASTM A108	ASTM A182-F (18-8)		

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



Meter Manifolds

.187" ORIFICE

METER MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES				
Soft Seat									
M - 5 0 5				-					
M - 5 0 9				-					
M - 9 2 3									

BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S

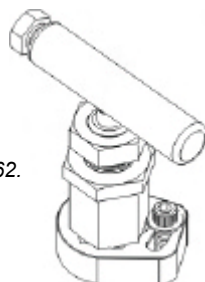
SOFT SEAT CODE	
D	Delrin® Cone/Washer [Std.]
K	Kel-F® Cone/Washer
P	PEEK® Cone/Washer
T	Teflon® Cone/Washer
Z	Tefzel Cone/Washer

STEM SEAL CODE	
[Std.] Teflon® Pressure-Core™	T
Viton® O-Ring	V
Low-Temp Pressure-Core™	J
Fluorosilicone Pressure-Core™	L

OPTIONS

- **Bonnet Lock Plates**
- Bonnet Handle Lock-Out

See Options/Accessories Pages 61-62.



PRESSURE & TEMPERATURE

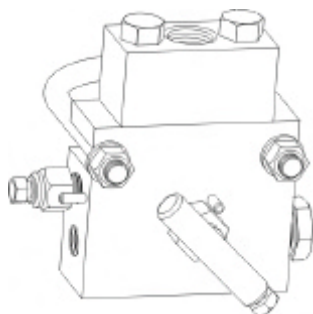
BODY MATERIAL	SOFT SEAT (Delrin) M-505	SOFT SEAT (Delrin) M-509
Carbon Steel	6,000 PSI @ 200° F Max.	3,000 PSI @ 200° F Max.
316 SS	6,000 PSI @ 200° F Max.	3,000 PSI @ 200° F Max.
See Page 5: Chart B Chart C		

OPTION CODE	OPTION DESCRIPTION
C4	(2) .187" Orifice Block Valves - 1/4" NPT F x M V-501CDT/SDT
GA	Anti-Tamper Bonnet (All Positions - M-505 Only)
*GC	Anti-Tamper Bonnet (Isolate Valve(s) Only - M-505 Only)
GD	Anti-Tamper Bonnet (Equalizer Valve(s) Only - M-505 & M-509 Only)
GE	Anti-Tamper Bonnet (Vent Valve Only - M-505 Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided - M-505 Only)
*GK	Bonnet Lock-Out (Isolate Valve Only - Lock Not Provided - M-505 Only)
GL	Bonnet Lock-Out (Equalizer Valve(s) Only - Lock Not Provided - M-505 & M-509 Only)
GM	Bonnet Lock-Out (Vent Valve Only - Lock Not Provided - M-505 Only)
MH	Viton® O-Ring Flange Seals (M-923 Only)
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)
* Only with C4 Option on M-505.	

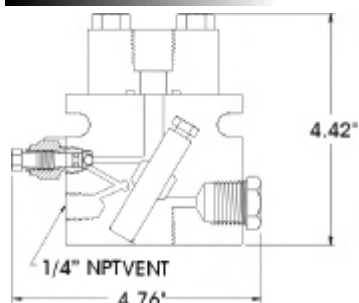
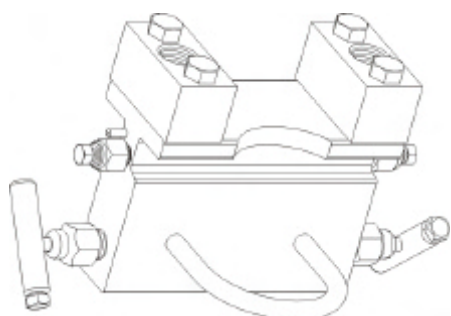
Pressure Instrument Manifolds

.187" ORIFICE

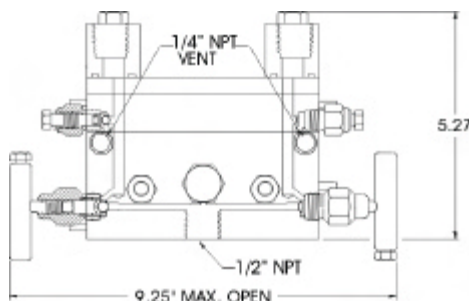
Description

1/2" FNPT x 1/2" FNPT


Single Instrument

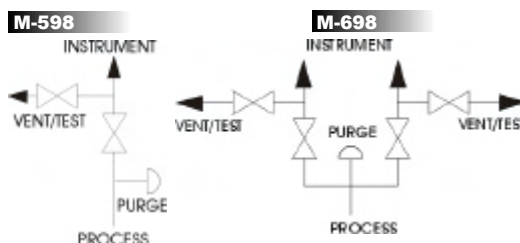
M-598 Hard Seat

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


Dual Instrument

M-698 Hard Seat


MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball / Cone	.53
Approx. Manifold Weight:	5.0 lbs each [M-598] 10.0 lbs each [M-698]



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)
U-Bolts	ASTM A449-G15	ASTM A449-G15	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

Pressure Instrument Manifolds

.187" ORIFICE

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE	OPTION CODES
Hard Seat				
M - 5 9 8			-	
M - 6 9 8			-	

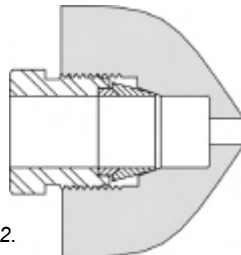
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

HARD SEAT CODE	
C Carbide Ball [Std.]	
R Ceramic Ball	
6 316 SS Ball	
H Hastelloy-C® Ball	
N K-Monel® Ball	

STEM SEAL CODE		
Block Valve(s)	Vent Valve(s)	
[Std.] Teflon® Pressure-Core™	Viton® O-Ring [Std.]	T
Grafoil® Packed	Grafoil® Packed	G
Viton® O-Ring	Viton® O-Ring	V
Teflon® Packed	Teflon® Packed	P
Low-Temp Pressure-Core™	Fluorosilicone O-Ring	J

OPTIONS

- **Integral Tube Fitting Connections**
- Bonnet Handle Lock-Out
- Bonnet Lock Plates



See Options/Accessories Pages 61-62.

OPTION CODE	OPTION DESCRIPTION
CVSCF	Vent Valve Seal Material: Fluorosilicone O-Ring
CVSCG	Vent Valve Seal Material: Grafoil® Packed
CVSCP	Vent Valve Seal Material: Teflon® Packed
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)
TH	Hydrostatic Testing
W	Safety Bonnet Lock Plate
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

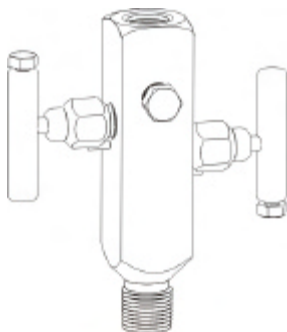
BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
See Page 5: Chart D		Chart F

Two-Valve Block & Bleed Manifolds

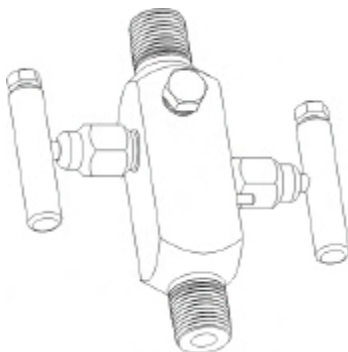
.187" ORIFICE

Description

1/2" MNPT x 1/2" FNPT

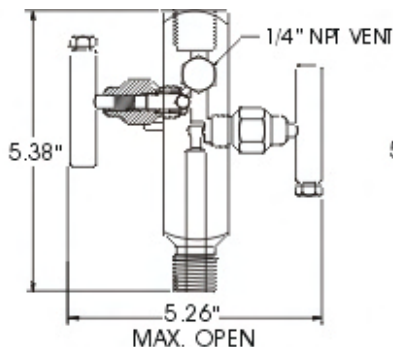


1/2" MNPT x 1/2" MNPT

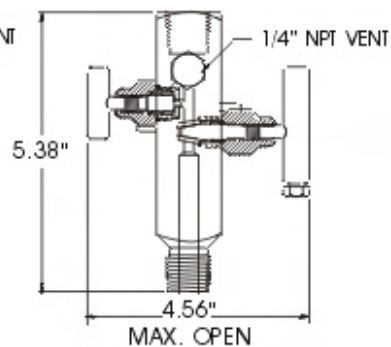


Body Style

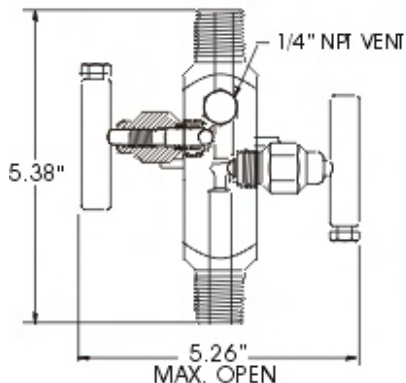
V-570 Hard Seat



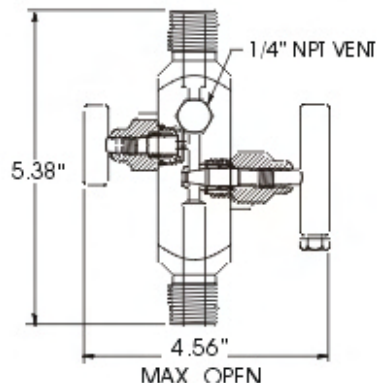
V-575 Soft Seat



V-612 Hard Seat



V-613 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.53
Soft Cone	.83
Approx. Manifold Weight:	3.0 lbs each [V-570 / 575 / 612 / 613]



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 A108-1215	ASTM F593 (18-8)	ASTM A182-F (18-8)	ASTM B164-N04405	ASTM B574-N10276

- 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			
Hard Seat								
V - 570				-				
V - 612				-				
Soft Seat								
V - 575				-				
V - 613				-				

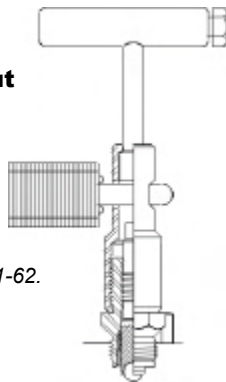
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

- **Bonnet Handle Lock-Out**
- Bonnet Lock Plates



See Options/Accessories Pages 61-62.

OPTION CODE	OPTION DESCRIPTION
AM7	½" Male Pipe Socket Weld (Process Port)
GA	Anti-Tamper Bonnet (All Positions - Hard Seats Only)
GC	Anti-Tamper Bonnet (Isolate Valve Only)
GE	Anti-Tamper Bonnet (Vent Valve Only - Hard Seats Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided - Hard Seats Only)
GK	Bonnet Lock-Out (Isolate Valve Only - Lock Not Provided)
GM	Bonnet Lock-Out (Vent Valve Only - Lock Not Provided - Hard Seats Only)
P9	¼" Hex Head Pipe Plug in Vent/Test Port
TH	Hydrostatic Testing
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

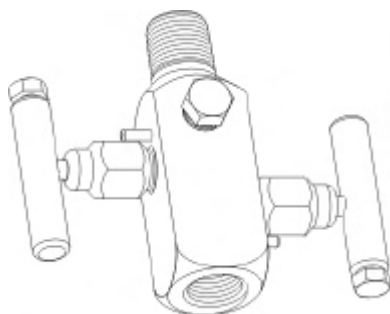
BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 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 Code C	6,000 PSI @ 200° F Max.	10,000 PSI @ 200° F 3,000 PSI @ 400° F
316 SS 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

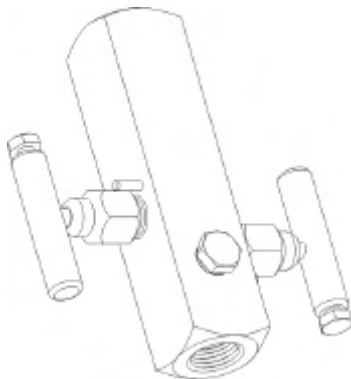
.187" ORIFICE

Description

1/2" FNPT x 1/2" MNPT

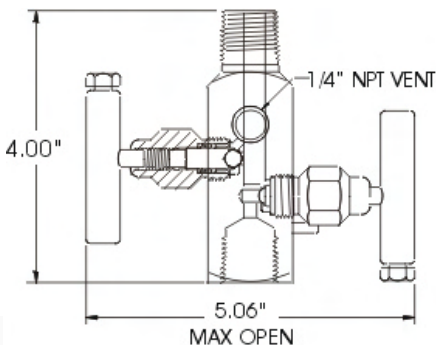


1/2" FNPT x 1/2" FNPT

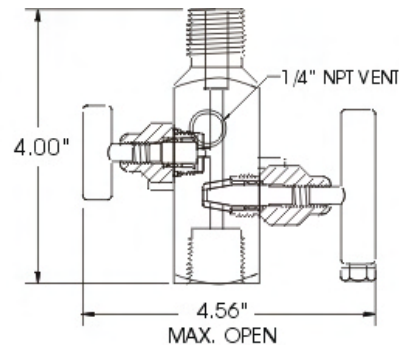


Body Style

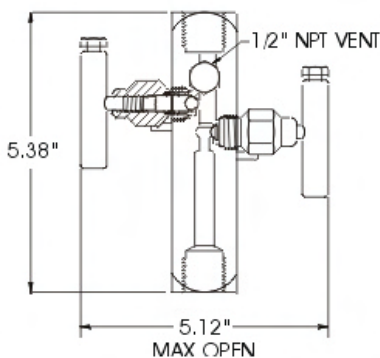
V-614 Hard Seat



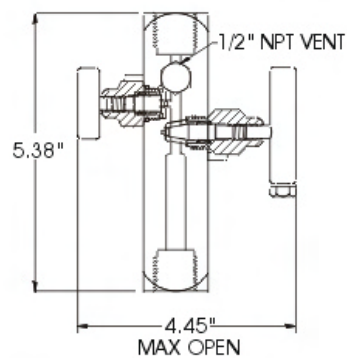
V-615 Soft Seat



V-626 Hard Seat



V-627 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.53
Soft Cone	.83
Approx. Manifold Weight:	3.0 lbs each [V-626 / 627] 2.4 lbs each [V-614 / 615]



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 A108-1215	ASTM F593 (18.8)	ASTM A182-F (18-8)	ASTM B164-N04405	ASTM B574-N10276

- 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			
Hard Seat								
V - 6 1 4				-				
V - 6 2 6				-				
Soft Seat								
V - 6 1 5				-				
V - 6 2 7				-				

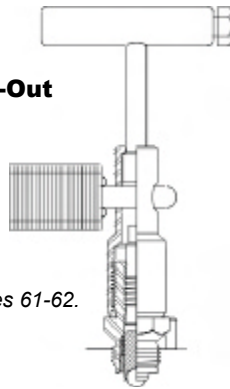
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

- **Bonnet Handle Lock-Out**
- Bonnet Lock Plates



See Options/Accessories Pages 61-62.

PRESSURE & TEMPERATURE

BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 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 Code C	6,000 PSI @ 200° F Max.	10,000 PSI @ 200° F 3,000 PSI @ 400° F
316 SS 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		

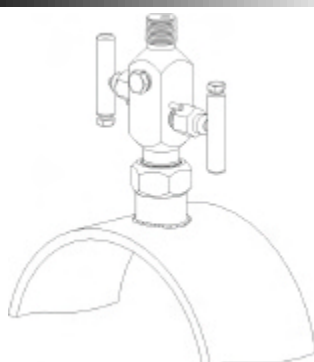
OPTION CODE	OPTION DESCRIPTION
AM7	½" Male Pipe Socket Weld (Process Port)
GA	Anti-Tamper Bonnet (All Positions - Hard Seats Only)
GC	Anti-Tamper Bonnet (Isolate Valve Only)
GE	Anti-Tamper Bonnet (Vent Valve Only - Hard Seats Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided - Hard Seats Only)
GK	Bonnet Lock-Out (Isolate Valve Only - Lock Not Provided)
GM	Bonnet Lock-Out (Vent Valve Only - Lock Not Provided - Hard Seats Only)
P9	¼" Hex Head Pipe Plug in Vent/Test Port
TH	Hydrostatic Testing
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)

Two-Valve Stabilized Block & Bleed Manifolds

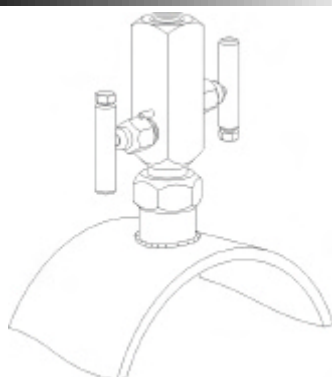
.187" ORIFICE

Description

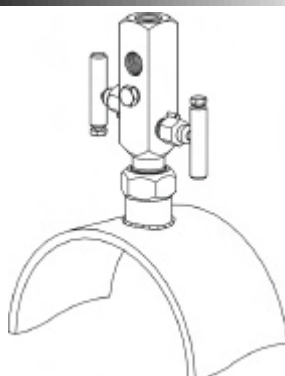
MNPT x 1/2" MNPT



MNPT x 1/2" FNPT

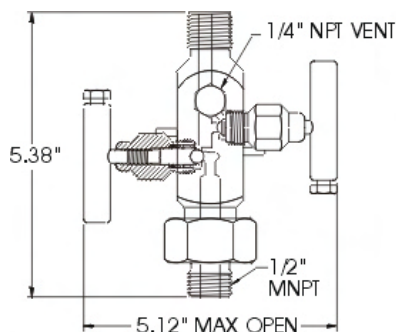


1/2" FNPT x (3) 1/2" FNPT

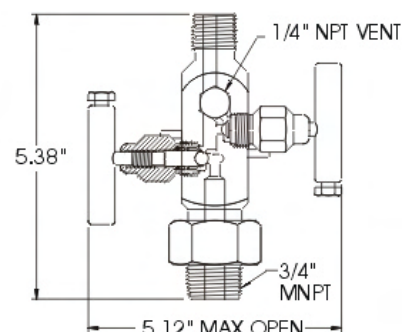


Body Style

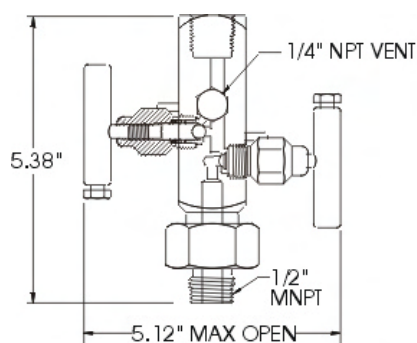
V-700 Hard Seat



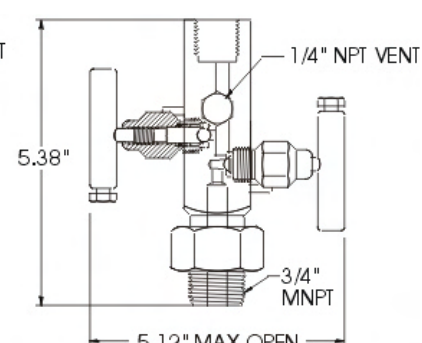
V-702 Hard Seat



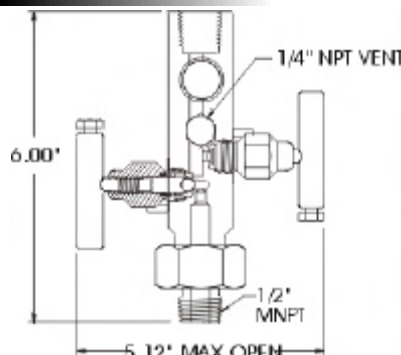
V-704 Hard Seat



V-706 Hard Seat



V-708 Hard Seat



All drawings shown with P9 Pipe Plug Option.

MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.53
Approx. Manifold Weight:	3.0 lbs each [V-700 / 702 / 704 / 706] 3.5 lbs each [V-708]



PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	Manifold not available in Carbon Steel.	ASTM A479-316	Consult Factory.	Consult Factory.
Bonnet		ASTM A479-316		
Stem		ASTM A479-316		
Seal Retainer		ASTM A479-316		
Handle Assembly		ASTM A582 (18-8)		
Plug(s)		ASTM A182-F (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 Stabilized Block & Bleed Manifolds

.187" ORIFICE

TWO-VALVE BLOCK & BLEED MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES							
Hard Seat												
V-700				-								
V-702				-								
V-704				-								
V-706				-								
V-708				-								

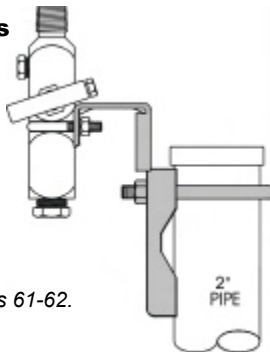
BODY CODE	
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

HARD SEAT CODE	
C	Carbide Ball [Std.]
R	Ceramic Ball
6	316 SS Ball

STEM SEAL CODE	
[Std.] Teflon® Pressure-Core™	T
Grafoil® Packed	G
Teflon® Packed	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
GA	Anti-Tamper Bonnet (All Positions - Hard Seats Only)
GC	Anti-Tamper Bonnet (Isolate Valve Only)
GE	Anti-Tamper Bonnet (Vent Valve Only - Hard Seats Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided - Hard Seats Only)
GK	Bonnet Lock-Out (Isolate Valve Only - Lock Not Provided)
GM	Bonnet Lock-Out (Vent Valve Only - Lock Not Provided - Hard Seats Only)
P9	¼" Hex Head Pipe Plug in Vent/Test Port
TH	Hydrostatic Testing
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

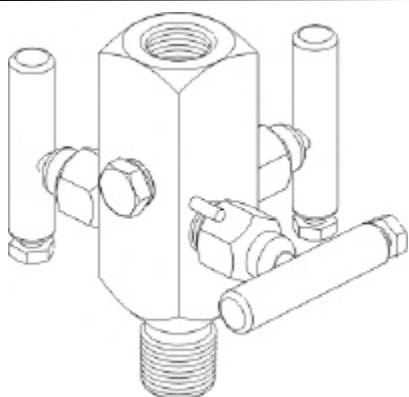
BODY MATERIAL	HARD SEAT Teflon Pressure-Core	HARD SEAT Grafoil
316 SS	10,000 PSI @ 200° F	6,000 PSI @ 200° F
	8,000 PSI @ 450° F	1,500 PSI @ 1,000° F
See Page 5: Chart D Chart F		

Three-Valve Double Block & Bleed Manifolds

.187" ORIFICE

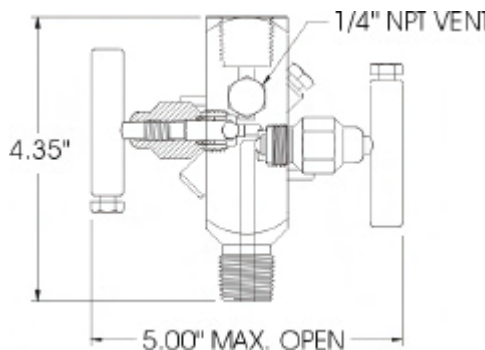
Description

1/2" MNPT x 1/2" FNPT

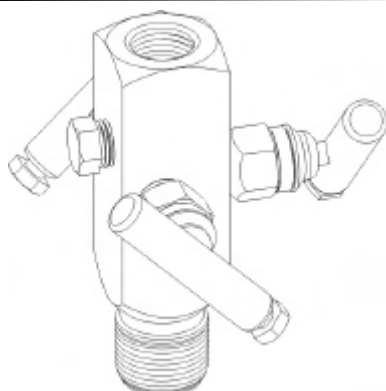


Body Style

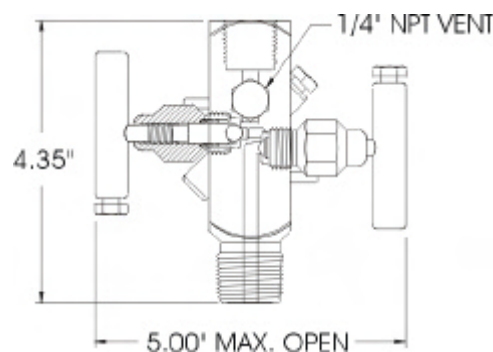
V-690 Hard Seat



3/4" MNPT x 1/2" FNPT



V-692 Hard Seat



Above drawings shown with P9 Pipe Plug Option.

SEAT	MAX Cv RATINGS
Hard Ball	.53
Soft Cone	.83
Approx. Manifold Weight:	3.0 lbs each [V-690 / 692]



MATERIALS OF CONSTRUCTION

PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	Consult Factory.	ASTM A479-316	Consult Factory.	Consult Factory.
Bonnet		ASTM A479-316		
Stem		ASTM A479-316		
Seal Retainer		ASTM A479-316		
Handle Assembly		ASTM A582 (18-8)		
Plug(s)		ASTM A182-F (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

Three-Valve Double Block & Bleed Manifolds

.187" ORIFICE

THREE-VALVE BLOCK & BLEED MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES				
Hard Seat									
V - 690				-					
V - 692				-					

BODY CODE
[Std.] 316 SS S

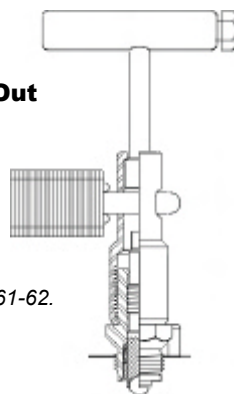
HARD SEAT CODE	
C	Carbide Ball [Std.]
R	Ceramic Ball
6	316 SS Ball

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

OPTIONS

- **Bonnet Handle Lock-Out**
- Bonnet Lock Plates

See Options/Accessories Pages 61-62.



OPTION CODE	OPTION DESCRIPTION
AM7	½" Male Pipe Socket Weld (Process Port)
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Only)
GE	Anti-Tamper Bonnet (Vent Valve Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided)
GK	Bonnet Lock-Out (Isolate Only - Lock Not Provided)
GM	Bonnet Lock-Out (Vent Valve Only - Lock Not Provided)
P9	¼" Hex Head Pipe Plug in Vent/Test Port
TH	Hydrostatic Testing
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

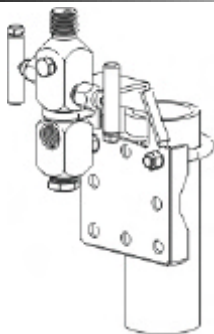
BODY MATERIAL	HARD SEAT Teflon Pressure-Core	HARD SEAT Grafoil
316 SS	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
See Page 5:	Chart D	Chart F

Two-Valve Versa-Mount Block & Bleed Manifolds

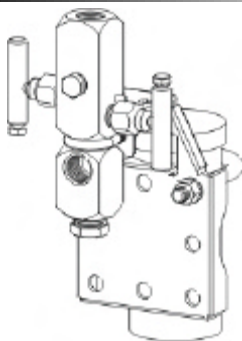
.187" ORIFICE

Description

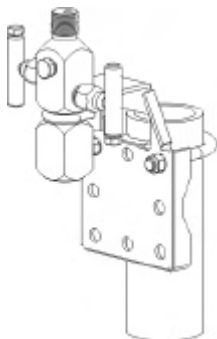
(2) 1/2" FNPT x 1/2" MNPT



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

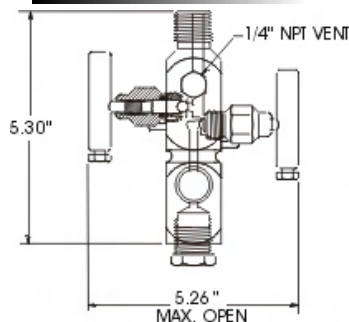


1/2" FNPT x 1/2" MNPT

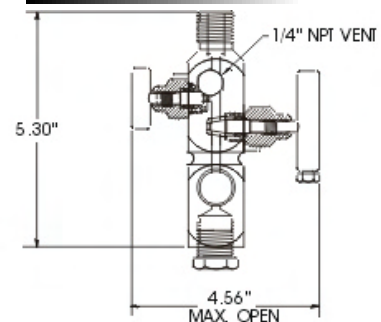


Body Style

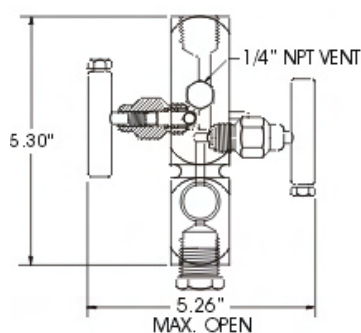
V-620 Hard Seat



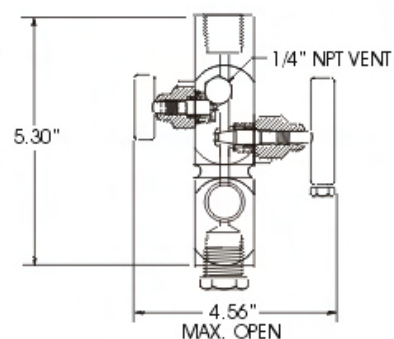
V-621 Soft Seat



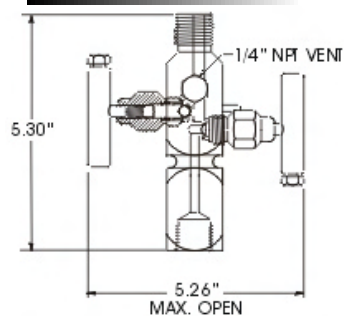
V-622 Hard Seat



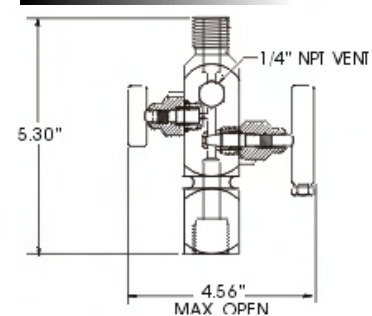
V-623 Soft Seat



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

V-620 & V-622



V-624



- 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 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			
Hard Seat								
V - 6 2 0				-				
V - 6 2 2								
V - 6 2 4				-				
Soft Seat								
V - 6 2 1				-				
V - 6 2 3								
V - 6 2 5				-				

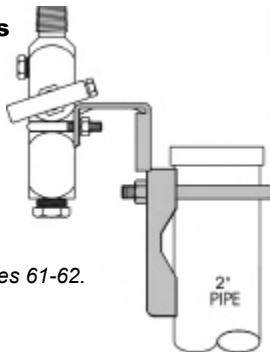
BODY CODE
[Std.] Carbon Steel C
A105 Carbon Steel P
[Std.] 316 SS S
Monel® M
Hastelloy-C® H

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.

PRESSURE & TEMPERATURE

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

See Page 5:

Chart D

Chart F

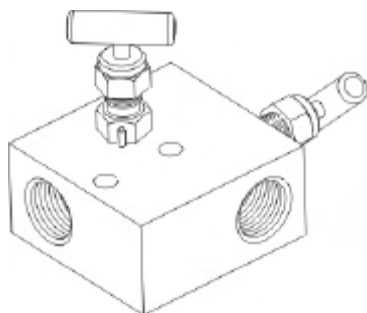
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)
GE	Anti-Tamper Bonnet (Vent Valve(s) Only)
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)

Two-Valve Block & Bleed Manifolds

.136" ORIFICE

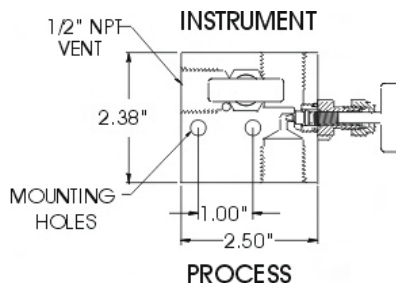
Description

1/2" FNPT x 1/2" FNPT

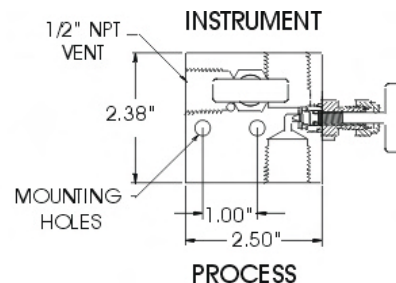


Body Style

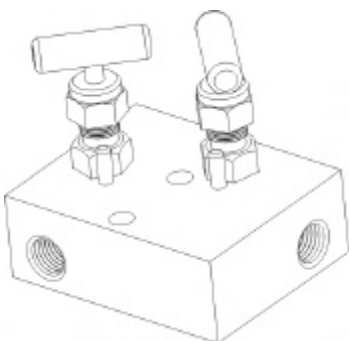
M-507 Hard Seat



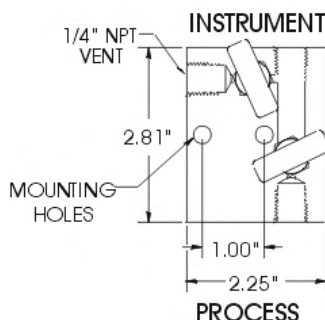
M-507 Soft Seat



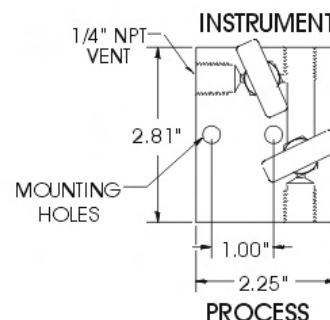
1/4" FNPT x 1/4" FNPT



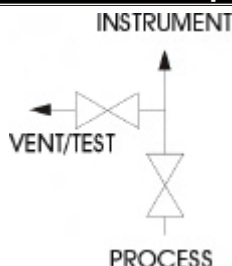
M-508 Hard Seat



M-508 Soft Seat



SEAT	MAX Cv RATINGS
Integral Metal	.25
Soft Washer	.22
Approx. Manifold Weight:	2.7 lbs each [M-507] 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				
Hard Seat									
M - 5 0 7				-					
M - 5 0 8				-					
Soft Seat									
M - 5 0 7				-					
M - 5 0 8				-					

BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S

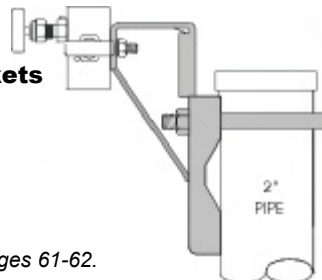
HARD SEAT CODE	
[Std.] Integral Metal	M

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

STEM SEAL CODE	
[Std.] Teflon® Packed	T
Grafoil® Packed	G
Viton® O-Ring	V

OPTIONS

- **Versa-Mount Brackets**



See Options/Accessories Pages 61-62.

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)

PRESSURE & TEMPERATURE

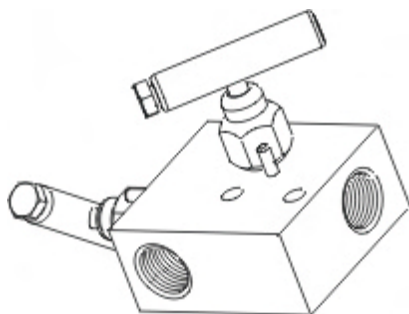
BODY MATERIAL	METAL SEAT	METAL SEAT
	Teflon Packed or Viton O-ring	Grafoil Packed
Carbon Steel	6,000 PSI @ 200° F Max.	2,000 PSI @ 450° F Max.
316 SS	4,000 PSI @ 450° F Max.	2,000 PSI @ 450° F Max.
BODY MATERIAL	SOFT SEAT (Delrin)	SOFT SEAT (Peek)
	Teflon Packed or Viton O-ring	Teflon Packed or Viton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

Two-Valve Block & Bleed Manifolds

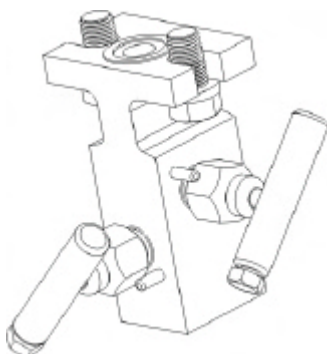
.187" ORIFICE

Description

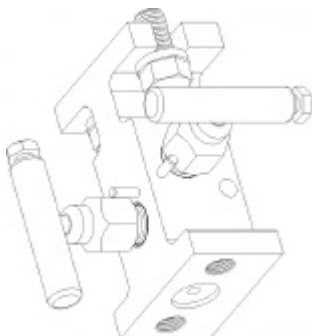
1/2" FNPT x 1/2" FNPT



1/2" FNPT x Flange

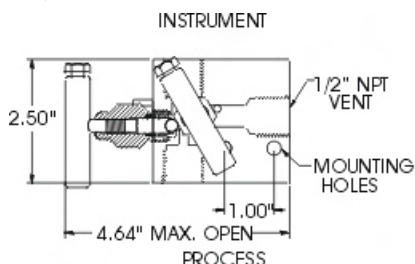


Flange x Flange

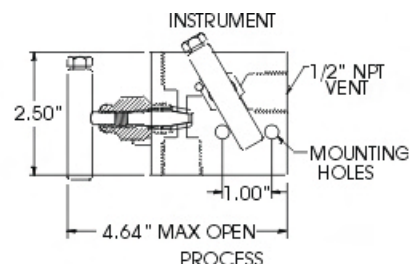


Body Style

M-518 Hard Seat

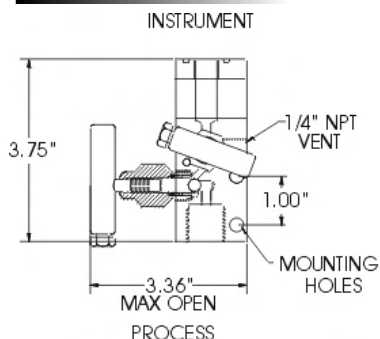


M-517 Soft Seat

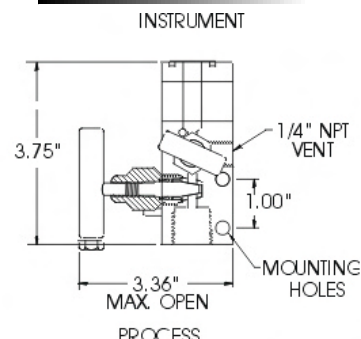


Slim Body Style

M-616 Hard Seat

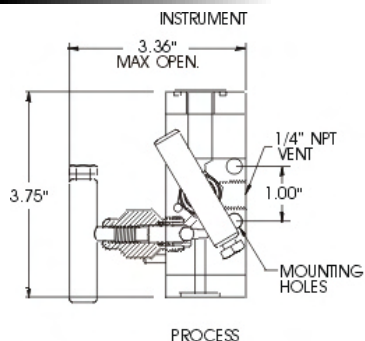


M-615 Soft Seat

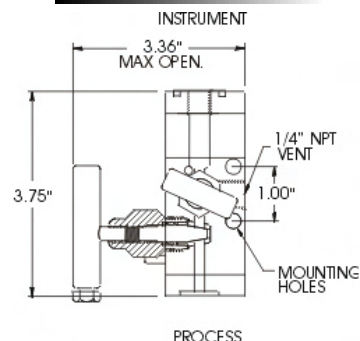


Slim Body Style

M-716 Hard Seat

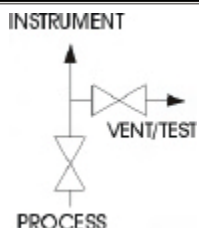


M-715 Soft Seat



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			
Hard Seat								
M - 5 1 8				-				
M - 6 1 6				-				
M - 7 1 6				-				
Soft Seat								
M - 5 1 7				-				
M - 6 1 5				-				
M - 7 1 5				-				

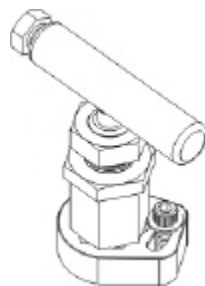
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

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

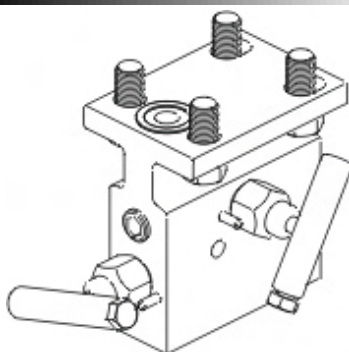
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)
GE	Anti-Tamper Bonnet (Vent Valve(s) Only)
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)

Two-Valve Block & Bleed Manifolds

.187" ORIFICE

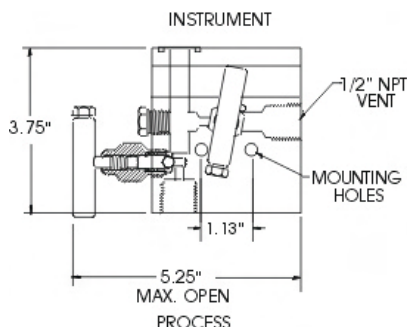
Description

1/2" FNPT x Flange

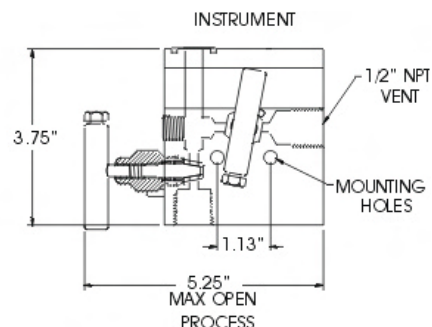


Body Style

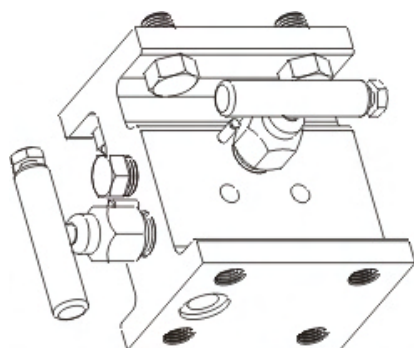
M-618 Hard Seat



M-617 Soft Seat

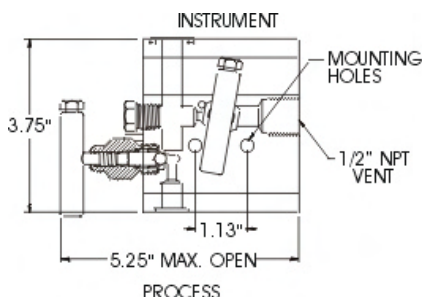


1/2" FNPT x Flange

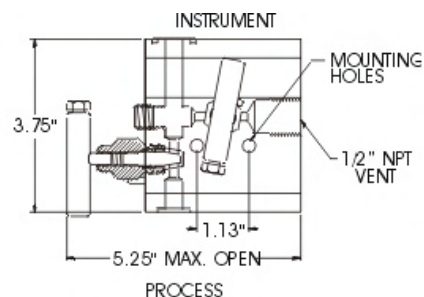


Slim Body Style

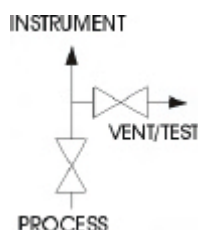
M-718 Hard Seat



M-717 Soft Seat



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



MATERIALS OF CONSTRUCTION

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				
Hard Seat									
M - 6 1 8				-					
M - 7 1 8				-					
Soft Seat									
M - 6 1 7				-					
M - 7 1 7				-					

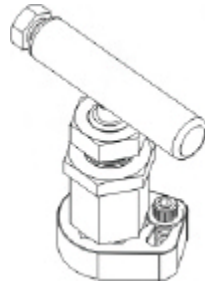
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

OPTIONS

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



PRESSURE & TEMPERATURE

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

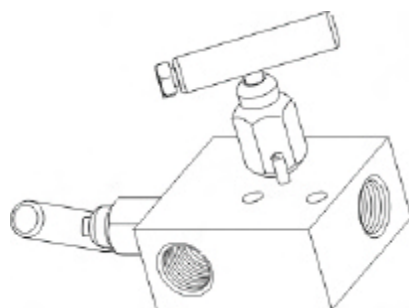
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)
GE	Anti-Tamper Bonnet (Vent Valve(s) Only)
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)

Two-Valve Block & Bleed Manifolds

.250" ORIFICE

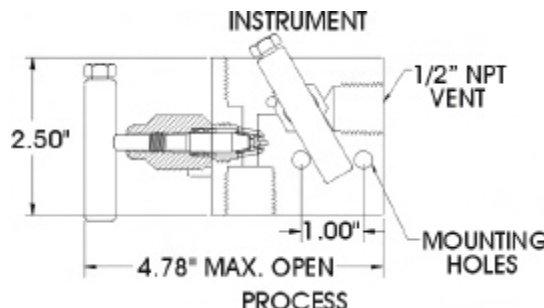
Description

1/2" FNPT x 1/2" FNPT

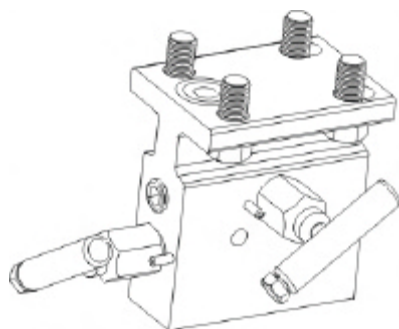


Body Style

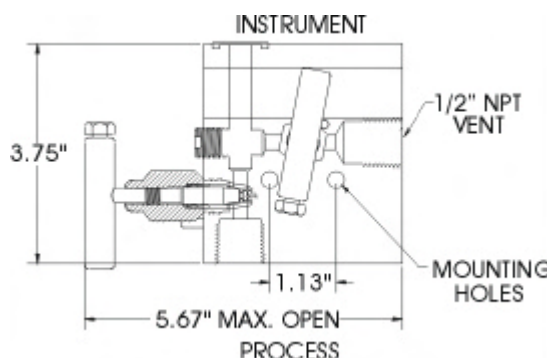
M2-517 Soft Seat



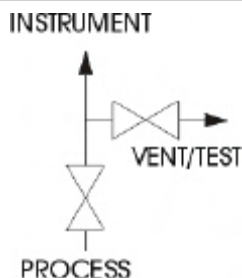
1/2" FNPT x Flange



M2-617 Soft Seat



SEAT	MAX Cv RATINGS
Soft Cone	.83
Approx. Manifold Weight:	3.1 lbs each [M2-517] 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				-					

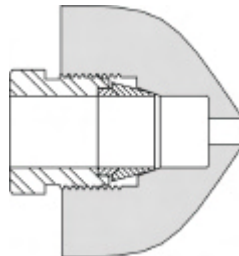
BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

OPTIONS

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



See Options/Accessories Pages 61-62.

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 3,000 PSI @ 400° F
316 SS	6,000 PSI @ 200° F Max.	10,000 PSI @ 200° F 3,000 PSI @ 400° F

See Page 5:

Chart B

Chart 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 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® 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	2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™ (Flange Manifolds Only)
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 (Oxvoen or Chlorine)	

Three-Valve Miniature Manifolds

.136" ORIFICE

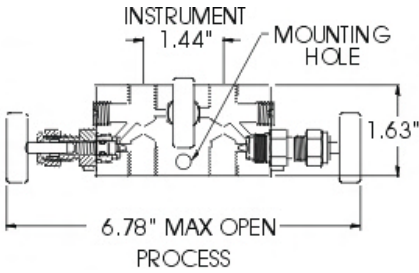
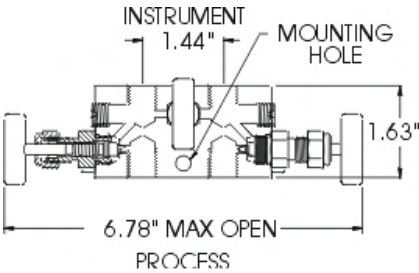
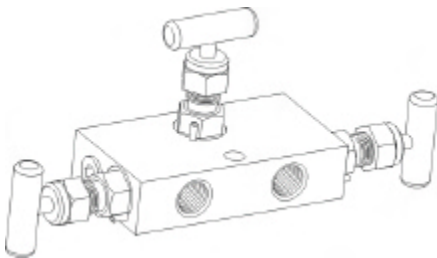
Description

1/4" FNPT x 1/4" FNPT

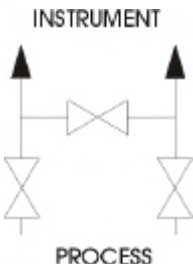
Body Style

M-506 Hard Seat

M-506 Soft Seat



SEAT	MAX Cv RATINGS
Integral Metal	.25
Soft Washer	.22
Approx. Manifold Weight:	1.8 lbs each [M-506]



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	ASTM A479-316	ASTM A479-316		
Handle Assembly	ASTM A108	ASTM A582 (18-8)		
Plug(s)	ASTM A108	ASTM A182-F (18-8)		

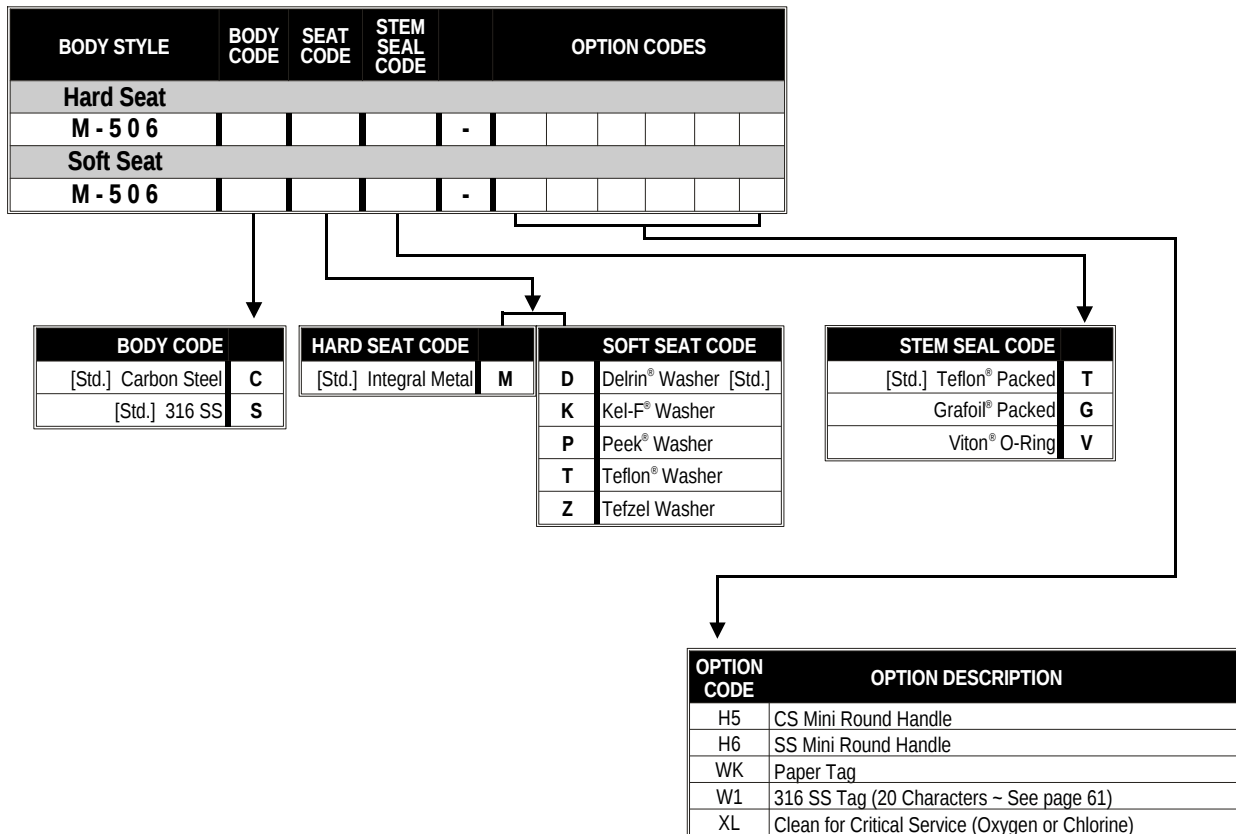
- Carbon Steel Manifolds are Zinc Cobalt Plated with Dichromate Dip
- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested

Three-Valve Miniature Manifolds

.136" ORIFICE

THREE-VALVE MINIATURE MANIFOLDS

ORDERING INFORMATION



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	6,000 PSI @ 200° F Max.	2,000 PSI @ 450° F Max.
See Page 5: Chart F 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 3,000 PSI @ 400° F
316 SS	3,000 PSI @ 200° F Max.	6,000 PSI @ 200° F 3,000 PSI @ 400° F
See Page 5: Chart C Chart C		

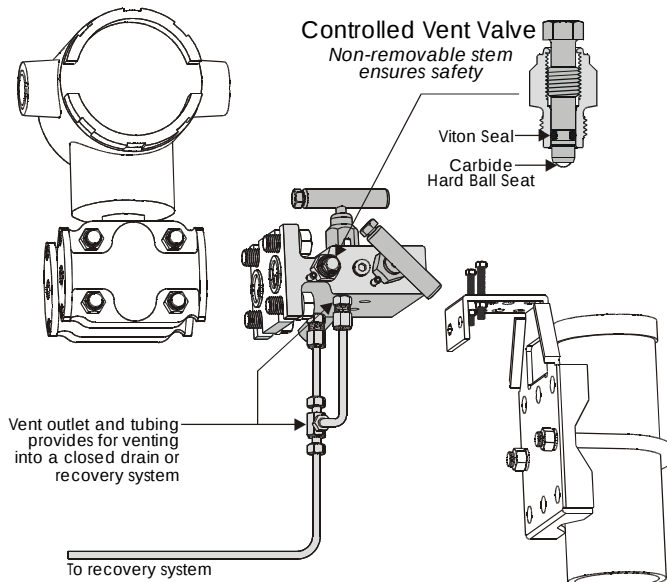
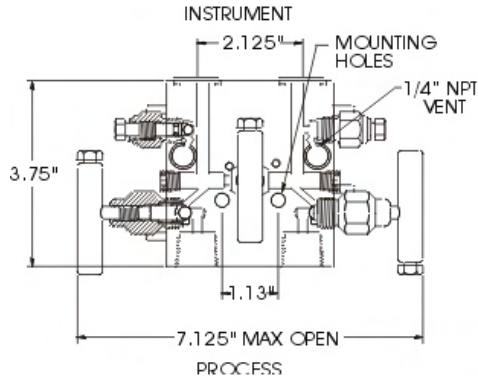
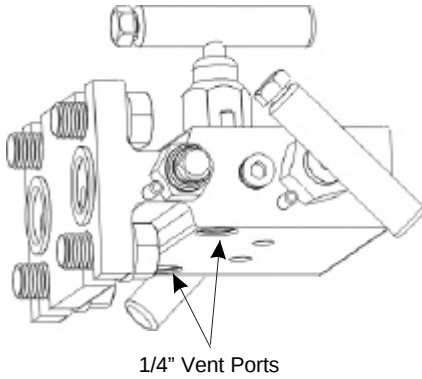
Three-Valve Fugitive Emissions Manifold

.187" ORIFICE

Description

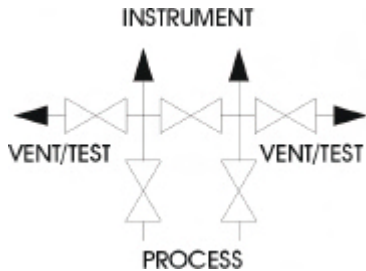
1/2" FNPT x Flange

Body Style

M-694 Hard Seat

MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball / Cone	.53
Approx. Manifold Weight: 5.2 lbs each [M-694]	



PART DESCRIPTION	CARBON STEEL	A105 CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	ASTM A105-CF	ASTM A479-316	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

Three-Valve Fugitive Emissions Manifolds

.187" ORIFICE

THREE-VALVE FUGITIVE EMISSIONS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE	OPTION CODES
Hard Seat				
M - 6 9 4			-	

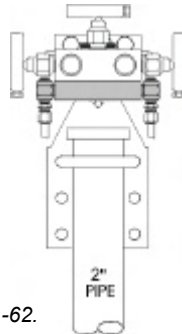
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

HARD SEAT CODE	
C Carbide Ball [Std.]	
R Ceramic Ball	
6 316 SS Ball	
H Hastelloy-C®	
N K-Monel®	

Block Valve(s)	Vent Valve(s)	
[Std.] Teflon® Pressure-Core™	Viton® O-Ring [Std.]	T
Grafoil® Packed	Grafoil® Packed	G
Viton® O-Ring	Viton® O-Ring	V
Teflon® Packed	Teflon® Packed	P
Low-Temp Pressure-Core™	Fluorosilicone O-Ring	J

OPTIONS

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



See Options/Accessories Pages 61-62.

PRESSURE & TEMPERATURE

BODY	MATERIAL	HARD SEAT Teflon Pressure-Core	HARD SEAT Grafoil
Carbon Steel Code C		10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel Code P		10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S		10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
See Page 5:		Chart D	Chart F

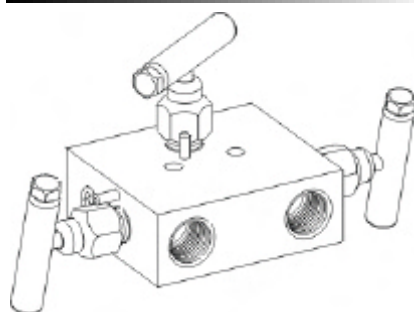
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
CVSCF	Vent Valve Seal Material: Fluorosilicone O-Ring
GC	Anti-Tamper Bonnet (Isolate Valves Only)
GD	Anti-Tamper Bonnet (Equalizer Valve Only)
GK	Bonnet Lock-Out (Isolate Valves Only - Lock Not Provided)
GL	Bonnet Lock-Out (Equalizer Valve Only - Lock Not Provided)
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)

Three-Valve Manifolds

.187" ORIFICE

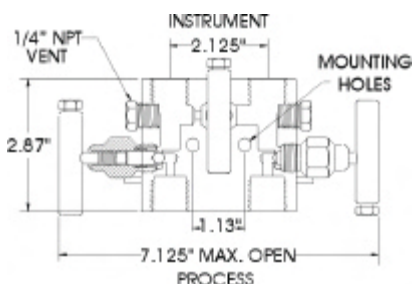
Description

1/2" FNPT x 1/2" FNPT

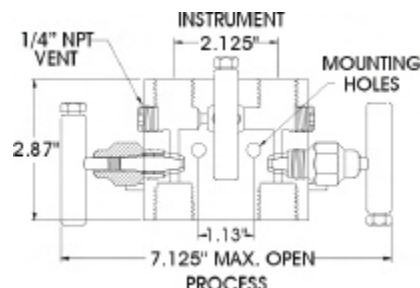


Body Style

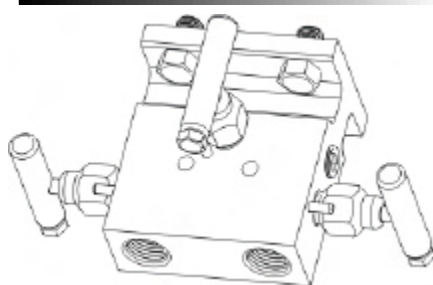
M-500 Hard Seat



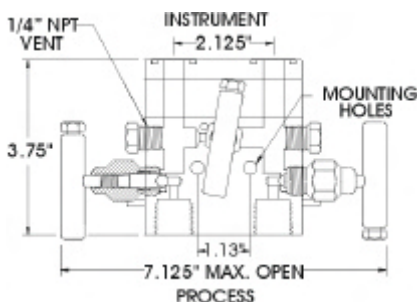
M-501 Soft Seat



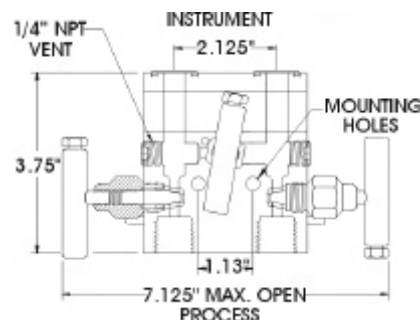
1/2" FNPT x Flange



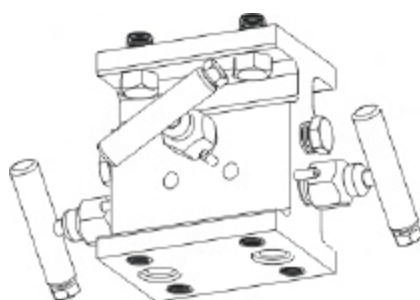
M-650 Hard Seat



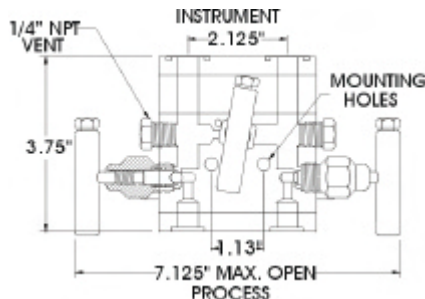
M-651 Soft Seat



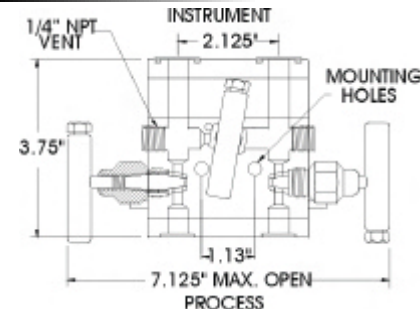
Flange x Flange



M-750 Hard Seat



M-751 Soft Seat

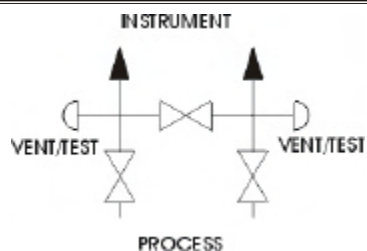


MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.53
Soft Cone	.83
Approx. Manifold Weight:	4.2 lbs each [M-500 / 501] 5.2 lbs each [M-650 / 651] 5.7 lbs each [M-750 / 751]

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 B165-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



Three-Valve Manifolds

.187" ORIFICE

THREE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Hard Seat								
M - 5 0 0				-				
M - 6 5 0				-				
M - 7 5 0				-				
Soft Seat								
M - 5 0 1				-				
M - 6 5 1				-				
M - 7 5 1				-				

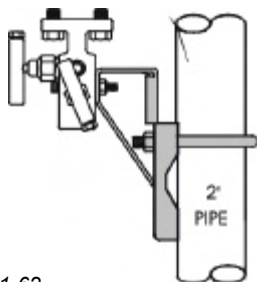
BODY CODE	
[Std.] Carbon Steel	C
A105 Carbon Steel	P
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

OPTIONS

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



See Options/Accessories Pages 61-62.

PRESSURE & TEMPERATURE

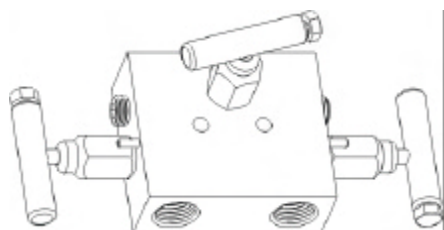
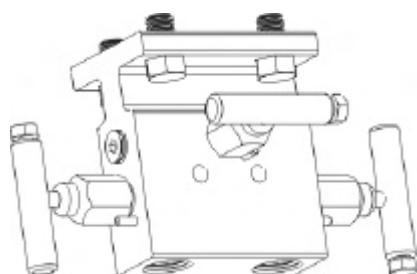
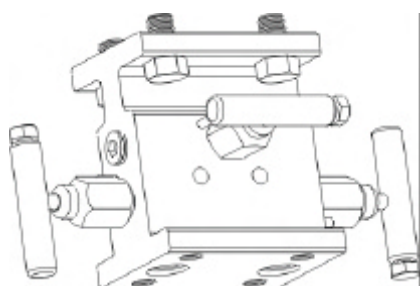
BODY MATERIAL	HARD SEAT Teflon Pressure-Core CODE T	HARD SEAT Teflon Pressure-Core CODE K	HARD SEAT Grafoil
Carbon Steel Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 400° F	Not Available.
A105 Carbon Steel Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 400° F	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
See Page 5: Chart D Chart D Chart F			
BODY MATERIAL	SOFT SEAT (Delrin) Teflon Pressure-Core CODE T	SOFT SEAT (Peek) Teflon Pressure-Core CODE T	
Carbon Steel Code C	6,000 PSI @ 200° F	10,000 PSI @ 200° F 3,000 PSI @ 400° F	
316 SS Code S	6,000 PSI @ 200° F	10,000 PSI @ 200° F 3,000 PSI @ 400° F	
See Page 5: Chart A Chart 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)
GD	Anti-Tamper Bonnet (Equalizer Valve(s) Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided)
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)
GL	Bonnet Lock-Out (Equalizer 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)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
PB	(2) ¼" Constant Purge Ports (Bottom) See pg. 61 for port locations.
PT	(2) ¼" Constant Purge Ports (Top) See pg. 61 for port locations.
P1	Purge or Test Connections
TC	Steam Trace Block - Carbon Steel
TH	Hydrostatic Testing
TS	Steam Trace Block - 316 SS
VA	Bracket Spacer for Flange to Flange Manifolds
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 2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™ (Flange Manifolds Only)
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)
X3	(2) ¼" Test Ports on Instrument Flange (Flange Manifolds Only) See pg. 61 for port locations.

Three-Valve Manifolds

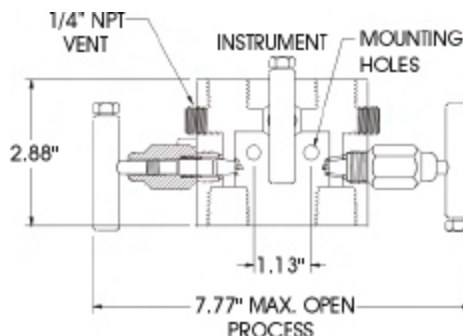
.250" ORIFICE

Description

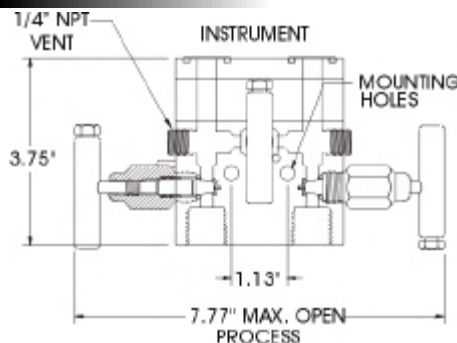
1/2" FNPT x 1/2" FNPT

1/2" FNPT x Flange

Flange x Flange


Body Style

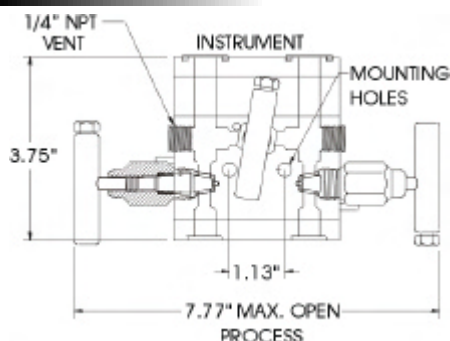
M2-501 Soft Seat



M2-651 Soft Seat

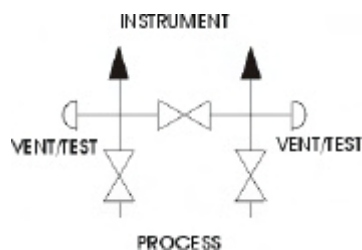


M2-751 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Soft Cone	1.4
Approx. Manifold Weight:	4.2 lbs each [M2-501] 5.2 lbs each [M2-651] 5.7 lbs each [M2-751]



PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	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 B165-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

Three-Valve Manifolds

.250" ORIFICE

THREE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES				
Soft Seat									
M 2 - 5 0 1				-					
M 2 - 6 5 1				-					
M 2 - 7 5 1				-					

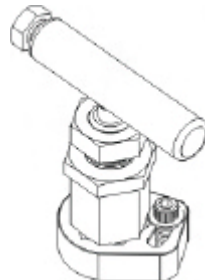
BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

OPTIONS

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



See Options/Accessories Pages 61-62.

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 3,000 PSI @ 400° F
316 SS	6,000 PSI @ 200° F Max.	10,000 PSI @ 200° F 3,000 PSI @ 400° F
See Page 5: Chart B Chart B		

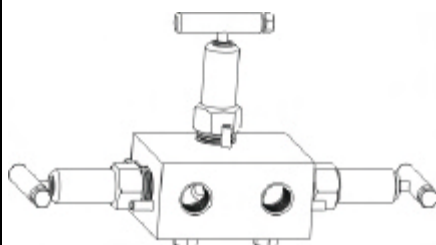
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Valve(S) Only)
GD	Anti-Tamper Bonnet (Equalizer Valve(s) Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided)
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)
GL	Bonnet Lock-Out (Equalizer 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)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
PB	(2) ¼" Constant Purge Ports (Bottom) See pg. 61 for port locations.
PT	(2) ¼" Constant Purge Ports (Top) See pg. 61 for port locations.
P1	Purge or Test Connections
TC	Steam Trace Block - Carbon Steel
TH	Hydrostatic Testing
TS	Steam Trace Block - 316 SS
VA	Bracket Spacer for Flange to Flange Manifolds
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 2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™ (Flange Manifolds Only)
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)
x3	(2) ¼" Test Ports on Instrument Flange (Flange Manifolds Only) See pg. 61 for port locations.

Three-Valve Manifolds

.375" ORIFICE

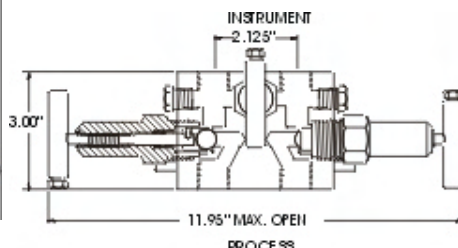
Description

1/2" FNPT x 1/2" FNPT

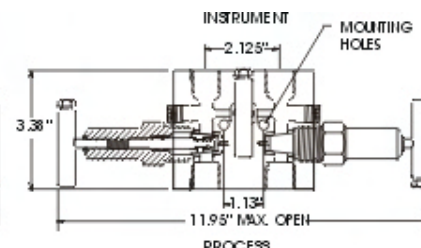


Body Style

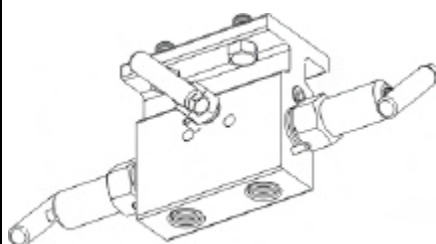
M3-500 Hard Seat



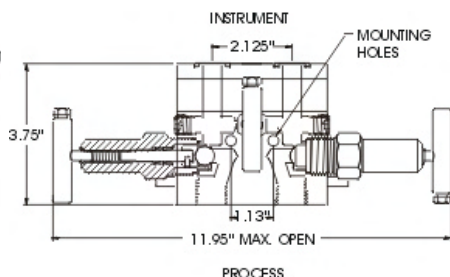
M3-551 Soft Seat



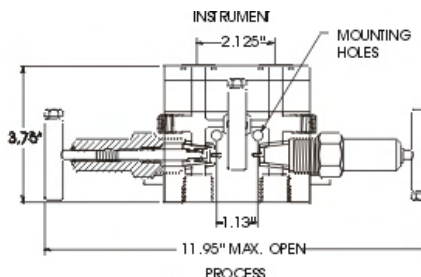
1/2" FNPT x Flange



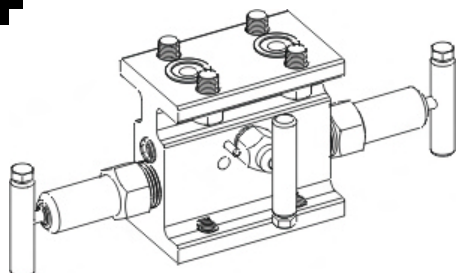
M3-650 Hard Seat



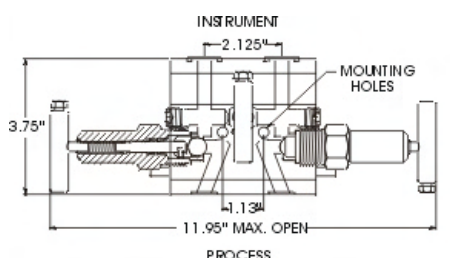
M3-651 Soft Seat



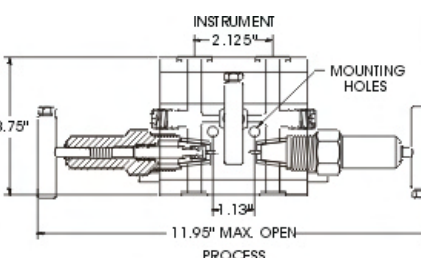
Flange x Flange



M3-750 Hard Seat



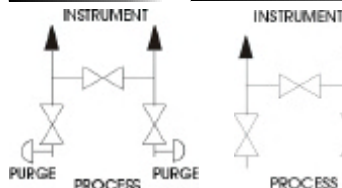
M3-751 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	2.4
Hard Cone	3.0
Soft Cone	3.0
Approx. Manifold Weight:	9.0 lbs each [M3-500] 6.5 lbs each [M3-551] 7.0 lbs each [M3-650 / 651] 7.6 lbs each [M3-750 / 751]

M3-500 **M3-551/650/651/750/751**



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 B165-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

Three-Valve Manifolds

.375" ORIFICE

THREE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Hard Seat								
M 3 - 5 0 0				-				
M 3 - 6 5 0				-				
M 3 - 7 5 0				-				
Soft Seat								
M 3 - 5 5 1				-				
M 3 - 6 5 1				-				
M 3 - 7 5 1				-				

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

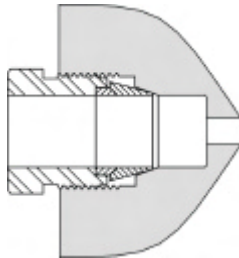
HARD SEAT CODE	
[Std.] Carbide Ball	C
Ceramic Ball	R
316 SS Ball	6
K-Monel® Ball	N
Hastelloy-C® Ball	H

SOFT SEAT CODE	
Rylon® Cone [Std.]	L
Delrin® Cone	D
Kel-F® Cone	K
PEEK® Cone	P
Teflon® Cone	T
316 SS Cone	6

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

OPTIONS

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



See Options/Accessories Pages 61-62.

PRESSURE & TEMPERATURE

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

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 Valves Only)
GD	Anti-Tamper Bonnet (Equalizer Valve(s) Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided)
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)
GL	Bonnet Lock-Out (Equalizer Valve(s) Only - Lock Not Provided)
MA	Versa-Mount Bracket Holes (M3-500 Only)
ME	Slotted Instrument Flange Using Bolts over 3"
MH	Viton® O-Ring Flange Seals
MU	Dielectric Isolation (Flange Manifolds Only)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
PB	(2) ¼" Constant Purge Ports (Bottom) See pg. 61 for port locations.
PT	(2) ¼" Constant Purge Ports (Top) See pg. 61 for port locations.
P1	Purge or Test Connections
TC	Steam Trace Block - Carbon Steel
TH	Hydrostatic Testing
TS	Steam Trace Block - 316 SS
VA	Bracket Spacer for Flange to Flange Manifolds
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)
X3	(2) ¼" Test Ports on Instrument Flange (Flange Manifolds Only) See pg. 61 for port locations.

Five-Valve Manifolds

.187" ORIFICE

FIVE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE			OPTION CODES		
Hard Seat								
M - 5 0 2				-				
M - 6 5 2				-				
M - 7 5 2				-				
Soft Seat								
M - 5 7 3				-				
M - 6 7 3				-				
M - 7 7 3				-				

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

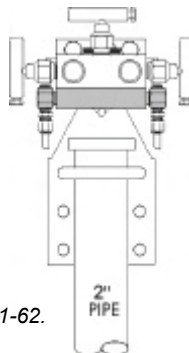
HARD SEAT CODE		SOFT SEAT CODE	
[Std.] Carbide Ball	C	D	Delrin® Cone / Washer [Std.]
Ceramic Ball	R	K	Kel-F® Cone / Washer
316 SS Ball	6	P	PEEK® Cone / Washer
K-Monel®	N	T	Teflon® Cone / Washer
Hastelloy-C®	H	Z	Tefzel Cone / Washer

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

OPTIONS

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

See Options/Accessories Pages 61-62.



PRESSURE & TEMPERATURE

BODY	MATERIAL	HARD SEAT	HARD SEAT
		Teflon Pressure-Core	Grafoil
Carbon Steel	Code C	10,000 PSI @ 200° F 8,000 PSI @ 450° F	Not Available.
A105 Carbon Steel	Code P	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 1,500 PSI @ 800° F
316 SS	Code S	10,000 PSI @ 200° F 8,000 PSI @ 450° F	6,000 PSI @ 200° F 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	Code C	6,000 PSI @ 200° F Max.	6,000 PSI @ 200° F 3,000 PSI @ 400° F
316 SS	Code S	6,000 PSI @ 200° F Max.	6,000 PSI @ 200° F 3,000 PSI @ 400° F
See Page 5:		Chart A	Chart A

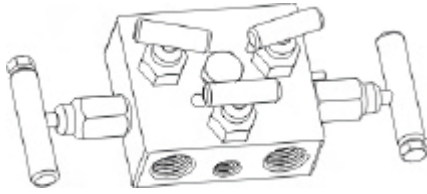
OPTION CODE	OPTION DESCRIPTION
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)
MH	Viton® O-Ring Flange Seals
MU	Dielectric Isolation (Flange Manifolds Only)
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)
PB	(2) ¼" Constant Purge Ports (Bottom) See pg. 61 for port locations.
PS	(2) ¼" Side Purge with Plugs (M-773 and M-752 Only) See pg. 61 for port locations.
TC	Steam Trace Block - Carbon Steel
TH	Hydrostatic Testing
TS	Steam Trace Block - 316 SS (Not available with M-773)
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 2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™ (Flange Manifolds Only)
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)
X3	(2) ¼" Test Ports on Instrument Flange (Available on M-652, M-752 and M-773) See pg. 61 for port locations.

Five-Valve Manifolds

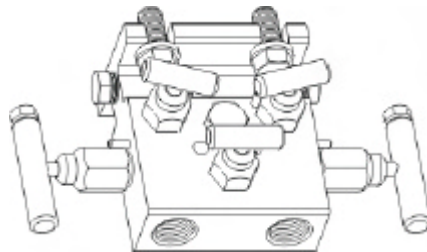
.250" ORIFICE

Description

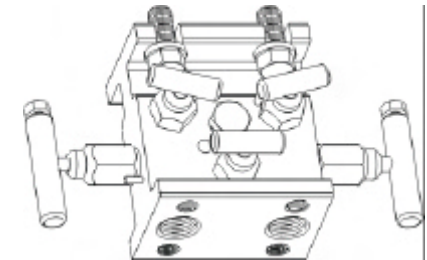
1/2" FNPT x 1/2" FNPT



1/2" FNPT x Flange

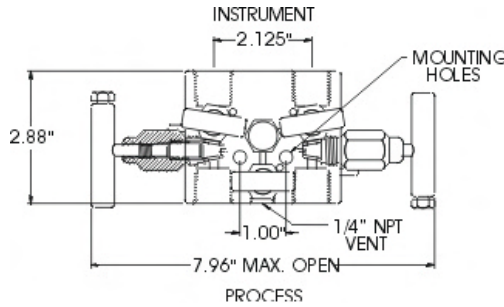


Flange x Flange

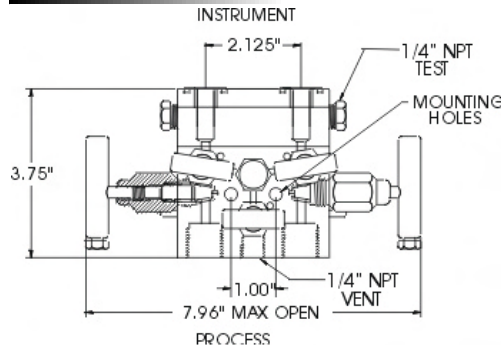


Body Style

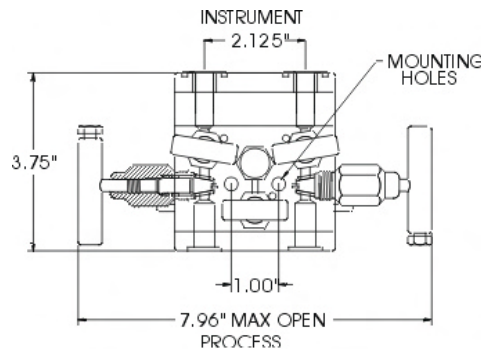
M2-573 Soft Seat



M2-673 Soft Seat



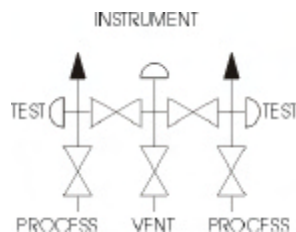
M2-773 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Soft Cone	1.4
Approx. Manifold Weight:	4.7 lbs each [M2-573]
	5.7 lbs each [M2-673]
	6.2 lbs each [M2-773]

NOTE: M2-573 / 773: TEST PORTS LOCATED ON BOTTOM SIDE OF MANIFOLD.



PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	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 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

Five-Valve Manifolds

.250" ORIFICE

FIVE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Soft Seat								
M 2 - 5 7 3				-				
M 2 - 6 7 3				-				
M 2 - 7 7 3				-				

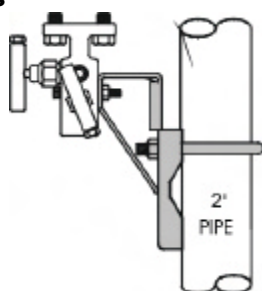
BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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

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

OPTIONS

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



PRESSURE & TEMPERATURE

BODY MATERIAL	SOFT SEAT (Delrin)	SOFT SEAT (Peek)
	Teflon Pressure-Core	Teflon Pressure-Core
Carbon Steel	6,000 PSI @ 200° F Max.	6,000 PSI @ 200° F 3,000 PSI @ 400° F
316 SS	6,000 PSI @ 200° F Max.	6,000 PSI @ 200° F 3,000 PSI @ 400° F
See Page 5: Chart A		Chart A

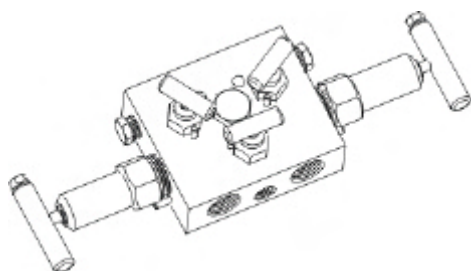
OPTION CODE	OPTION DESCRIPTION	
AU7	½" Integral Tube Fitting - Parker® A-LOK Dual Ferrules (Process Ports)	
AV7	½" Integral Tube Fitting - Swagelok® Dual Ferrules (Process Ports)	
GC	Anti-Tamper Bonnet (Isolate Valves Only)	
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)	
MH	Viton® O-Ring Flange Seals	
MU	Dielectric Isolation (Flange Manifolds Only)	
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)	
PB	(2) ¼" Constant Purge Ports (Bottom) See pg. 61 for port locations.	
PT	(2) ¼" Constant Purge Ports (Top - M2-673/773 Only) See pg. 61 for port locations.	
P1	Purge or Test Connections	
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	2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 with Coplanar™ (Flange Manifolds Only)
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)	
X3	(2) ¼" Test Ports on Instrument Flange (Available on M2-773 Only) See pg. 61 for port locations.	

Five-Valve Manifolds

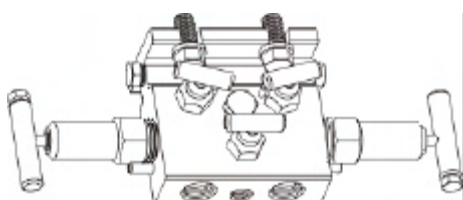
.375" ORIFICE

Description

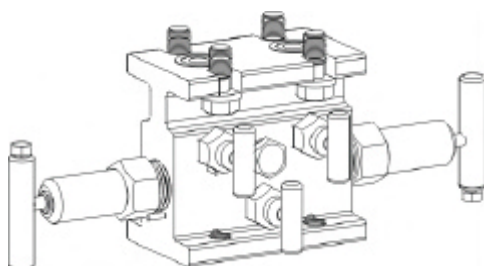
1/2" FNPT x 1/2" FNPT



1/2" FNPT x Flange

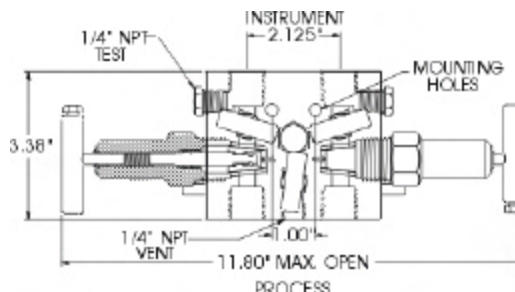


Flange x Flange

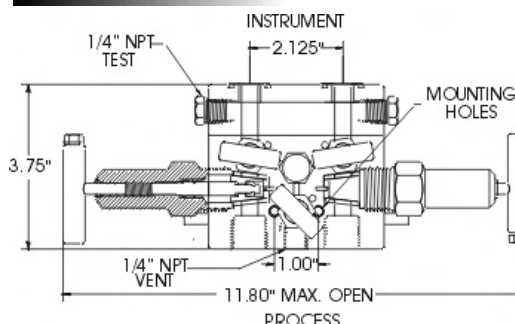


Body Style

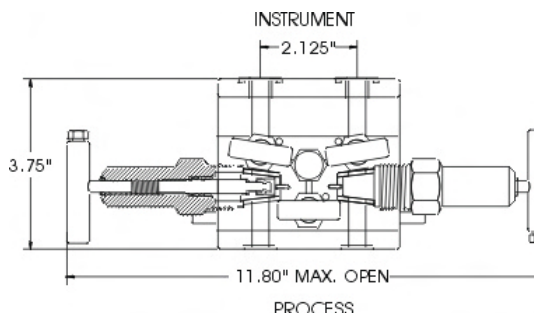
M3-573 Soft Seat



M3-673 Soft Seat



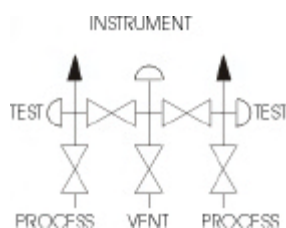
M3-773 Soft Seat



MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Soft Cone	3.0
Approx. Manifold Weight:	7.1 lbs each [M3-573] 7.7 lbs each [M3-673] 8.3 lbs each [M3-773]

NOTE: M3-773: TEST PORTS LOCATED ON BOTTOM SIDE OF MANIFOLD.



PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	ASTM A108-1215	ASTM A479-316	ASTM B164-N04405 or ASTM B164-N04400	ASTM B575-N10276 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

Five-Valve Manifolds

.375" ORIFICE

FIVE-VALVE MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Soft Seat								
M 3 - 5 7 3				-				
M 3 - 6 7 3				-				
M 3 - 7 7 3				-				

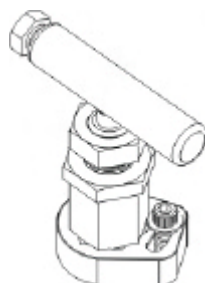
BODY CODE	
[Std.] Carbon Steel	C
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

SOFT SEAT CODE	
L	Rylon® Cone [Std.]
K	Kel-F® Cone
P	PEEK® Cone
T	Teflon® Cone
D	Delrin® Cone
6	316 SS Cone

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

OPTIONS

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



PRESSURE & TEMPERATURE

BODY MATERIAL	SOFT SEAT (Delrin)	SOFT SEAT (Rylon)
Carbon Steel	6,000 PSI @ 200° F Max.	1,500 PSI @ 200° F Max.
316 SS	6,000 PSI @ 200° F Max.	1,500 PSI @ 200° F Max.
See Page 5: Chart A Chart A		

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)	
GC	Anti-Tamper Bonnet (Isolate Valve(s) Only)	
GK	Bonnet Lock-Out (Isolate Valve(s) Only - Lock Not Provided)	
MD	Versa-Mount Bracket Holes (M3-673 Only)	
MH	Viton® O-Ring Flange Seals	
MU	Dielectric Isolation (Flange Manifolds Only)	
M7	Required Slotting for Rosemount® 1151 Transmitters Series 6 & Above (Flange Manifolds Only)	
PB	(2) 1/8" Constant Purge Ports (Bottom - M3-573 / 773 Only) See pg. 61 for port locations.	
PS	(2) ¼" Side Purge with Plugs (M3-773 Only) See pg. 61 for port locations.	
P1	Purge or Test Connections	
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	2-¼" Bolts for Rosemount® 3051C, 3095, or 2024 Coplanar Flange
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)	
X3	(2) ¼" Test Ports on Instrument Flange (Available on M3-773) See pg. 61 for port locations.	

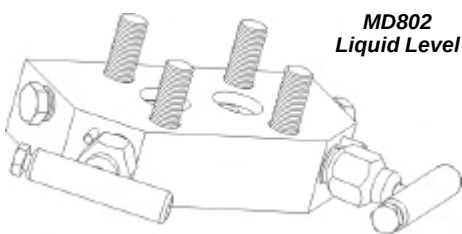
Two, Three & Five-Valve Integral Coplanar™ Manifolds

For Rosemount® 3051, 3095 and 2024 without Coplanar™

.125" ORIFICE

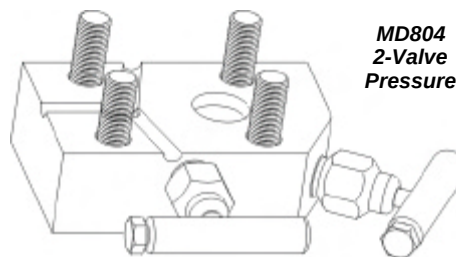
Description

1/2" FNPT x Flange



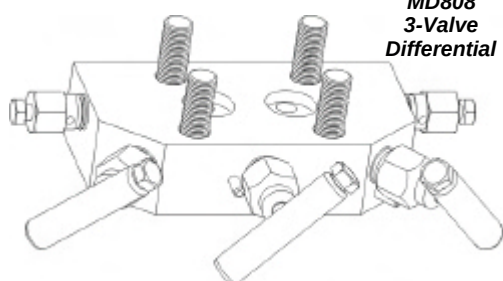
MD802
Liquid Level

1/2" FNPT x Flange



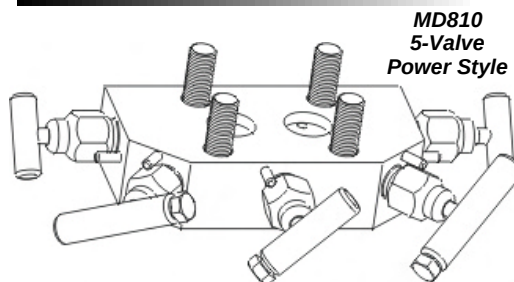
MD804
2-Valve
Pressure

1/2" FNPT x Flange



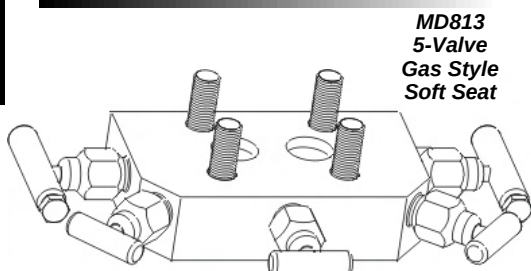
MD808
3-Valve
Differential

1/2" FNPT x Flange



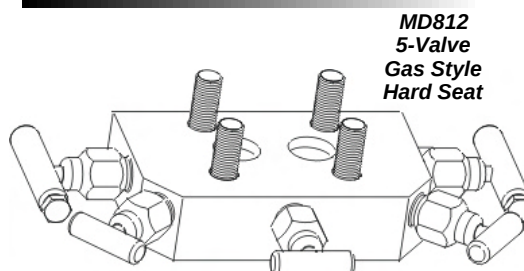
MD810
5-Valve
Power Style

1/2" FNPT x Flange



MD813
5-Valve
Gas Style
Soft Seat

1/2" FNPT x Flange

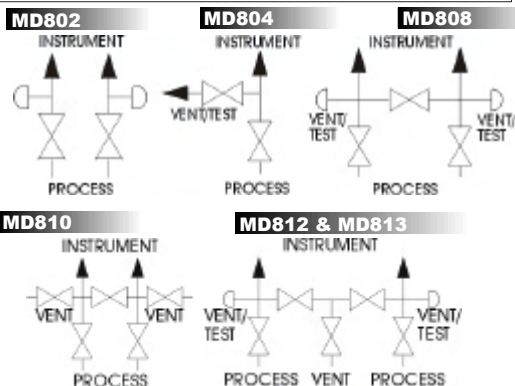


MD812
5-Valve
Gas Style
Hard Seat

MATERIALS OF CONSTRUCTION

SEAT	MAX Cv RATINGS
Hard Ball	.25
Soft Cone / Washer	.25
Approx. Manifold Weight:	5.0 lbs each [MD802] 4.3 lbs each [MD804] 5.1 lbs each [MD808] 5.9 lbs each [MD810] 6.4 lbs each [MD812 / 813]

PART DESCRIPTION	CARBON STEEL	316 SS	MONEL®	HASTELLOY-C®
Body	Manifold not available in Carbon Steel.	ASTM A479-316 or ASTM A240-316	ASTM B164-N04405	ASTM B575-N10276 or ASTM A494 CW-12MW
Bonnet		ASTM A479-316	ASTM B164-N04405	ASTM B574-N10276
Stem		ASTM A479-316	ASTM B164-N04405	ASTM B574-N10276
Seal Retainer		ASTM A479-316	ASTM B164-N04405	ASTM B574-N10276
Handle Assembly		ASTM A582 (18-8)	ASTM A582 (18-8)	ASTM A582 (18-8)
Plug(s)		ASTM A182-F (18-8)	ASTM B164-N04405	ASTM B574-N10276
Mounting Bolts		ASTM A574	ASTM F593 (18-8)	ASTM F593 (18-8)



- 316 SS Manifolds Meet NACE MR0175 Requirements (Latest Revision)
- 100% Pressure Tested
- Coplanar™ is a trademark of Rosemount®, Inc.
- Rosemount® is a registered trademark of Rosemount®, Inc.

Two, Three & Five-Valve Integral Coplanar™ Manifolds

.125" ORIFICE

INTEGRAL COPLANAR™ MANIFOLDS

ORDERING INFORMATION

BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE		OPTION CODES			
Hard Seat								
M D 8 0 2								
M D 8 0 4								
M D 8 0 8								
M D 8 1 0				-				
M D 8 1 2				-				
Soft Seat								
M D 8 1 3				-				

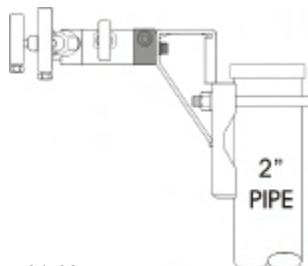
BODY CODE	
[Std.] 316 SS	S
Monel®	M
Hastelloy-C®	H

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
K-Monel® Ball	N	T	Teflon® Cone / Washer
Hastelloy-C® Ball	H	Z	Tefzel Cone / Washer

STEM SEAL CODE	
[Std.] Teflon® Pressure-Core™	T
Grafoil® Packed	G
Low-Temp Pressure-Core™	J

OPTIONS

- **Steam Trace Block**
- Versa-Mount Brackets
- Bonnet Lock Plates
- Bonnet Handle Lock-Out



See Options/Accessories Pages 61-62.

PRESSURE & TEMPERATURE

BODY MATERIAL	HARD SEAT	HARD SEAT
	Teflon Pressure-Core	Grafoil
316 SS	6,000 PSI @ 450° F Max.	6,000 PSI @ 200° F 1,500 PSI @ 1,000° F
BODY MATERIAL	SOFT SEAT (Delrin)	
	Teflon Pressure-Core	
316 SS	6,000 PSI @ 200° F Max.	

OPTION CODE	OPTION DESCRIPTION
GA	Anti-Tamper Bonnet (All Positions)
GC	Anti-Tamper Bonnet (Isolate Valves Only)
GD	Anti-Tamper Bonnet (Equalizer Valve Only)
GJ	Bonnet Lock-Out (All Positions - Lock Not Provided)
GK	Bonnet Lock-Out (Isolate Valves Only - Lock Not Provided)
GL	Bonnet Lock-Out (Equalizer Valve Only - Lock Not Provided)
TH	Hydrostatic Testing
TS	Steam Trace Block - 316 SS
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)
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)

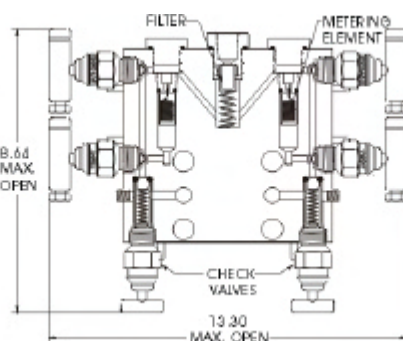
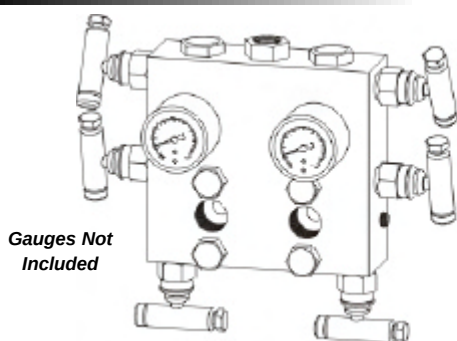
Purge Adapters

PATENT PENDING

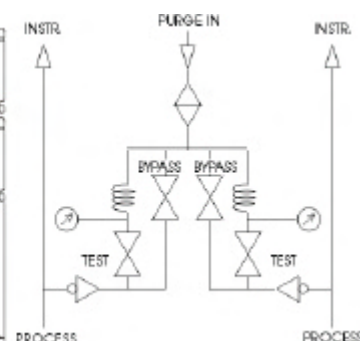
Description

AK-062SCT

Flow & Level

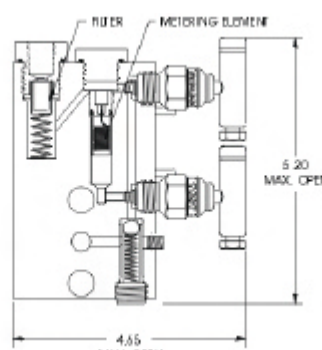
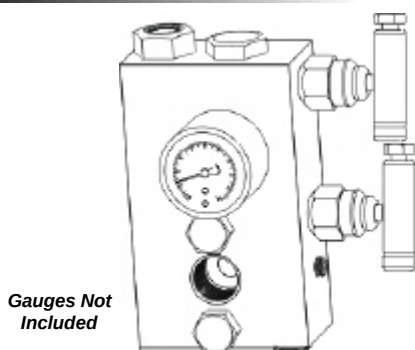


Adjustable Check Valve Option Shown

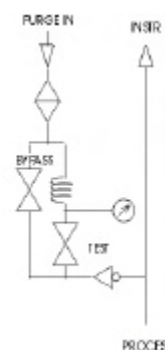


AK-064SCT

Gauge Pressure



Fixed Check Valve Option Shown



FEATURES

- Fixed constant purge for gases or liquids
- A variety of flow rates available
- Built-in test valves to test purge flows
- Built-in by-pass valves to by-pass purge metering elements in order to allow for a high flow purge into the process
- Built-in filter element to protect purge metering elements
- Optional check valves to prevent back flow of process into the purge adapter in case of purge failure or process surge
- 316 SS Body
- Tungsten Carbide® ball seats
- Teflon® Pressure-Core® Stem Seal
- ½" FNPT x Flange connections

METERING ELEMENT FLOW RATE DATA

SCFH		GPH	
Capillary Flow Rates			
0.1 SCFH @ 10 PSI Air		N/A	
0.4 SCFH @ 10 PSI Air		0.3 GPH @ 25 PSI H ₂ O	
N/A		1.0 GPH @ 25 PSI H ₂ O	
Orifice Size	Orifice Flow Rates		
.016"	4 SCFH @ 10 PSI Air	2 GPH @ 25 PSI H ₂ O	
.031"	19 SCFH @ 10 PSI Air	6 GPH @ 25 PSI H ₂ O	
.047"	36 SCFH @ 10 PSI Air	16 GPH @ 25 PSI H ₂ O	
.063"	55 SCFH @ 10 PSI Air	28 GPH @ 25 PSI H ₂ O	
.078"	85 SCFH @ 10 PSI Air	42 GPH @ 25 PSI H ₂ O	
.094"	110 SCFH @ 10 PSI Air	48 GPH @ 25 PSI H ₂ O	

MATERIALS OF CONSTRUCTION

PART DESCRIPTION	
Body	ASTM A479-316
Bonnet	ASTM A479-316
Stem	ASTM A479-316
Seal Retainer	ASTM A479-316
Handle Assembly	ASTM A582 (18.8)
Pipe Plugs	ASTM A182-F (18.8)
Caps/Plugs	ASTM A479-316
Capillary Assembly	300 Series SS
Check Valve Assembly	300 Series SS
Filter	5 Micron Phenolic Impregnated Rayon
O-Ring Seals	Viton®

Purge Adapters

ORDERING INFORMATION

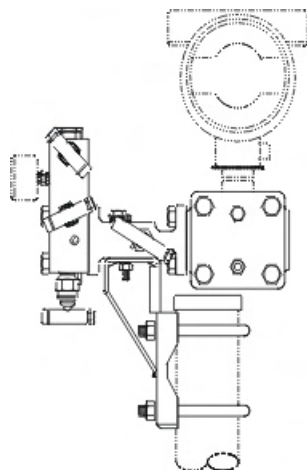
BODY STYLE	BODY CODE	SEAT CODE	STEM SEAL CODE	OPTION CODES	DESCRIPTION
Hard Seat					
A K - 0 6 2			-		Differential Pressure Purge Adapter Only
A K - 0 6 4			-		Static Pressure Purge Adapter Only
A K - 0 8 4			-		Differential Purge Adapter, M-750SCT 3-Valve Manifold and Mounting Bracket Assembly
A K - 0 8 8			-		Static Pressure Purge Adapter, M-716SCT 2-Valve Manifold and Mounting Bracket Assembly
A K - 0 9 0			-		Liquid Level Purge Adapter, M-758SCT 2-Valve Liquid Level Manifold and Mounting Bracket Assembly

BODY CODE
[Std.] 316 SS S

HARD SEAT CODE	
C	Carbide Ball [Std.]
R	Ceramic Ball
6	316 SS Ball
N	K-Monel® Ball
H	Hastelloy-C® Ball

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

AK-084SCT
AK-088SCT
AK-090SCT
Assemblies



OPTION CODE	OPTION DESCRIPTION
C3	EPDM O-Rings
CC	Adjustable Check Valve(s)
CD	Non-Adjustable Check Valve(s)
CF	0.1 SCFH Capillary Assembly
CG	1.0 GPH Capillary Assembly
CK	0.4 SCFH / .3 GPH Capillary Assembly
CHXXX	Orifice Assembly XXX = Orifice Size (Choose .016", .031", .047", .063", .078" or .094" as referenced on page 51)
CJ	7 Micron Filter, Sintered 316 SS
CE	Anit-Tamper Device on all Vent/Test Bonnets

PRESSURE & TEMPERATURE

BODY MATERIAL	HARD SEAT Teflon Pressure-Core	HARD SEAT Grafoil
316 SS	6,000 PSI @ 400° F	6,000 PSI @ 400° F