

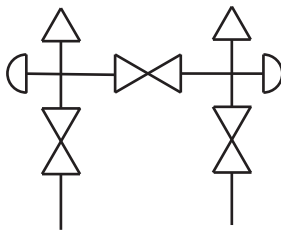
Manifold Valves, 3-Valve Differential Pressure  
Soft Seat (0.375" Orifice)

# 3510 SERIES



- Designed for use with differential pressure transmitters incorporating two isolation valves and an equalizing valve in differential pressure measurement
- Available in block, single flange, or double flange connection for remote or direct installation
- 100% helium leak tested to  $1 \times 10^{-4}$  ml/s for guaranteed performance and reliability
- Soft seat design has 6,000 psi pressure rating @ 200 °F
- Features a replaceable Delrin® seat, and straight through porting for bidirectional, high capacity flow and easy roddable cleaning
- Blow-out proof stem provides a secondary stem seal in the full open position
- FKM o-ring seal and PTFE back-up ring below the stem threads to protect from corrosion and galling
- All stems are 316 stainless steel
- All stem threads are rolled for strength and ease of operation
- One-piece bonnet with a metal-to-metal seal to the valve body below the bonnet threads
- Slotted spring pin to prevent accidental loosening
- Vinyl dust caps for bonnets and stems
- Non-rotating stem tip standard on isolation valves

Flow Schematic



## SPECIFICATIONS

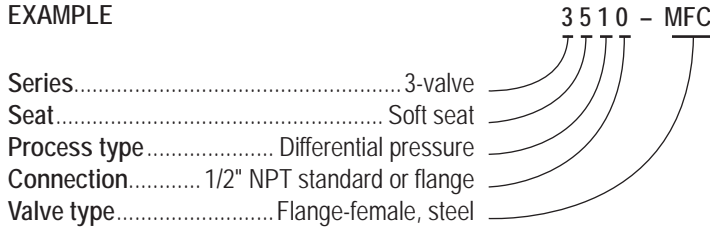
Materials	Zinc-nickel plated steel, electropolished 316 stainless steel
Connection	Flange-flange, 1/2" NPT-flange, 1/2" NPT-1/2" NPT
Pressure ratings	6,000 psi @ 200 °F
Orifice size	0.375"
Flow coefficient	C <sub>v</sub> 3.0
Stem seal & type	All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads
Options	Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips
Weight	Approximately 6.5 lb.

NOTE: All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

ORDERING INFORMATION			
SERIES	3 3-valve		
SEAT	5 Soft seat, 0.375" orifice		
PROCESS TYPE	1 Differential pressure		
CONNECTION	0 1/2" NPT standard or flange		
VALVE TYPES	MFC	Flange-Female, Steel	MFS Flange-Female, Stainless Steel
	FFC	Female-Female, Steel	FFS Female-Female, Stainless Steel
	MMC	Flange-Flange, Steel	MMS Flange-Flange, Stainless Steel

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

**EXAMPLE**



To meet all of your specific application requirements, the following additional options are available for these manifold valves. To order all or any of these options, simply add them to the part number as follows:

ORDERING INFORMATION - ADDITIONAL OPTIONS			
SOFT SEATS	PK1 PEEK	KF1 PCTFE	
O-RINGS*	EM1 EPDM	KZ1 FFKM (Kalrez® 3018 or equivalent)	NB1 NBR
HANDLES	HL3 1" Round knurled	HL4 1-3/8" Phenolic	HL5 1-3/4" Phenolic

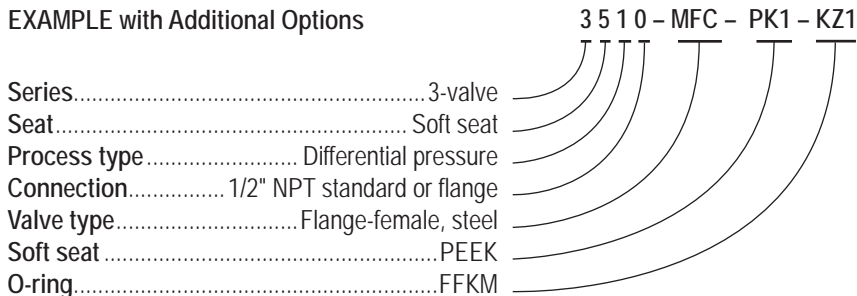
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

\* Other o-ring materials available on request.

Please note that the standard o-ring in all the NOSHOK valves is FKM and the standard handles are isolation "T" handles (HL8) and equalizing "T" handles (HL2).

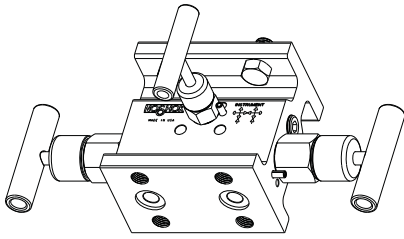
The handle material will always match the material of the valve, unless otherwise specified. For example, the "T" handle on the 3510-MFC will be steel. When only the standard configuration is needed, no additional designations are necessary. Please consult the factory for special application requests.

**EXAMPLE with Additional Options**

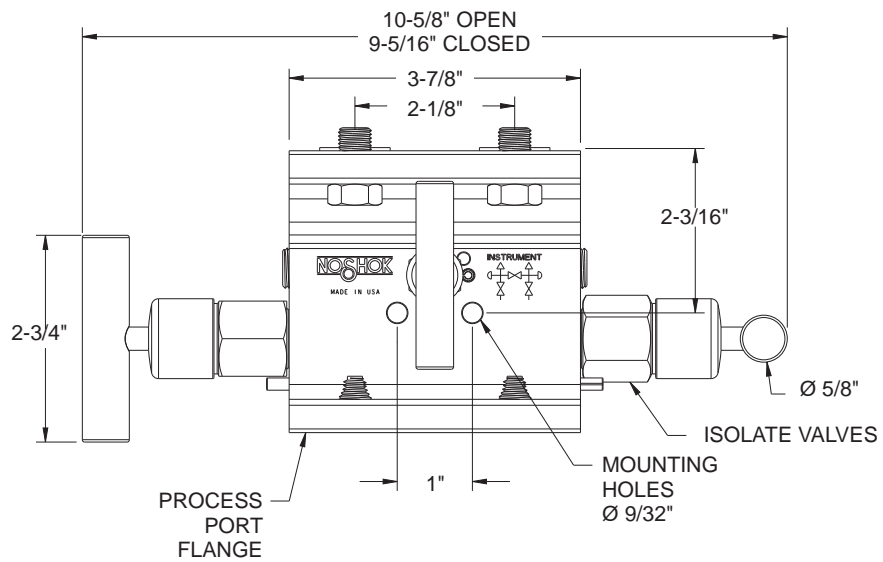


# Dimensions

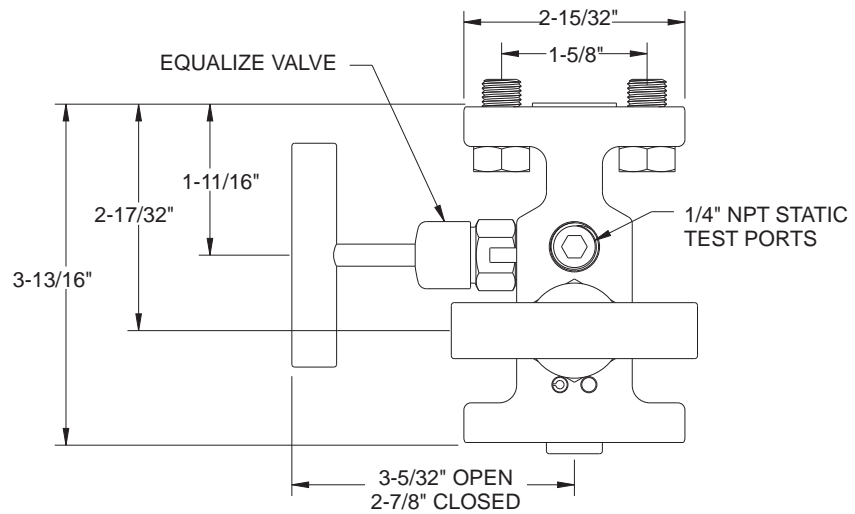
## Flange-Flange



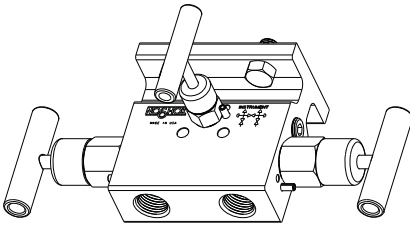
Top View



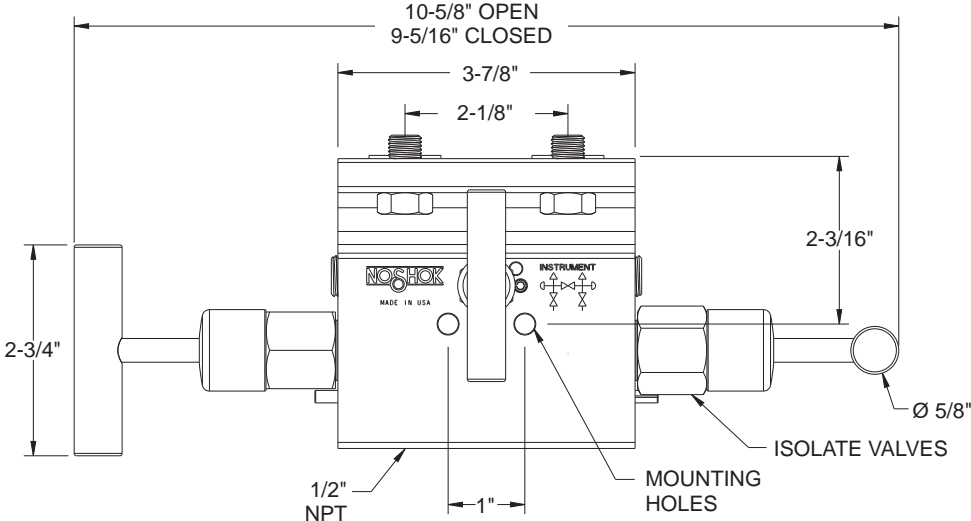
Side View



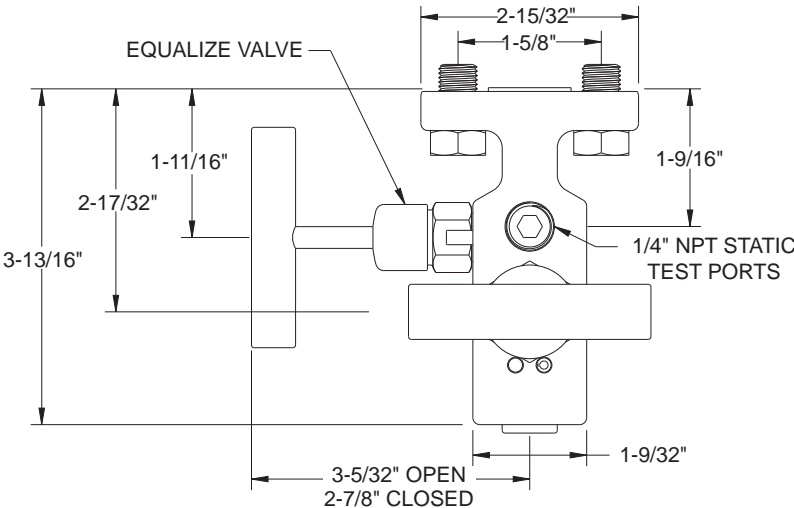
Flange-Female



Top View

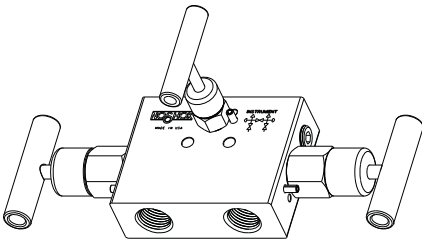


Side View

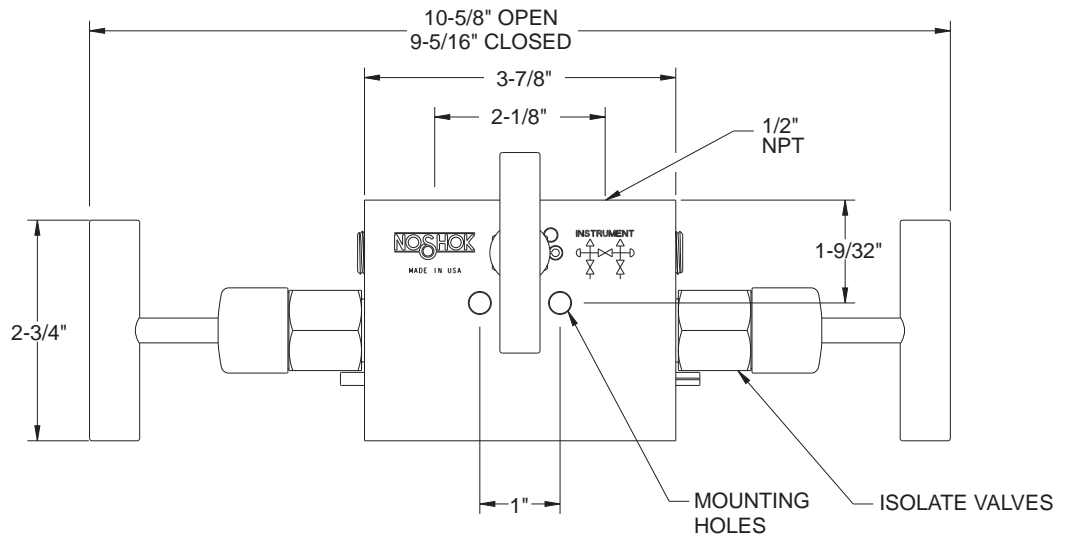


# Dimensions

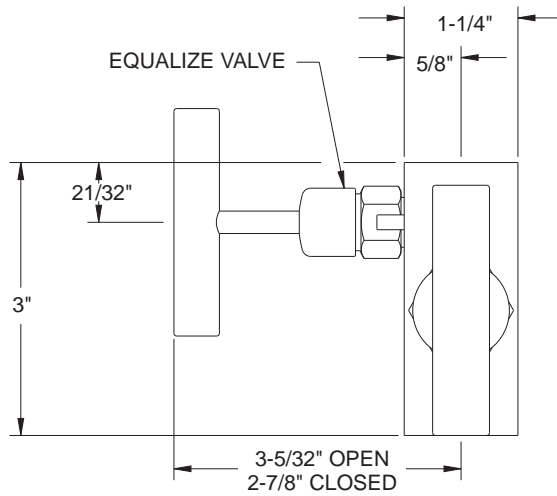
## Female-Female



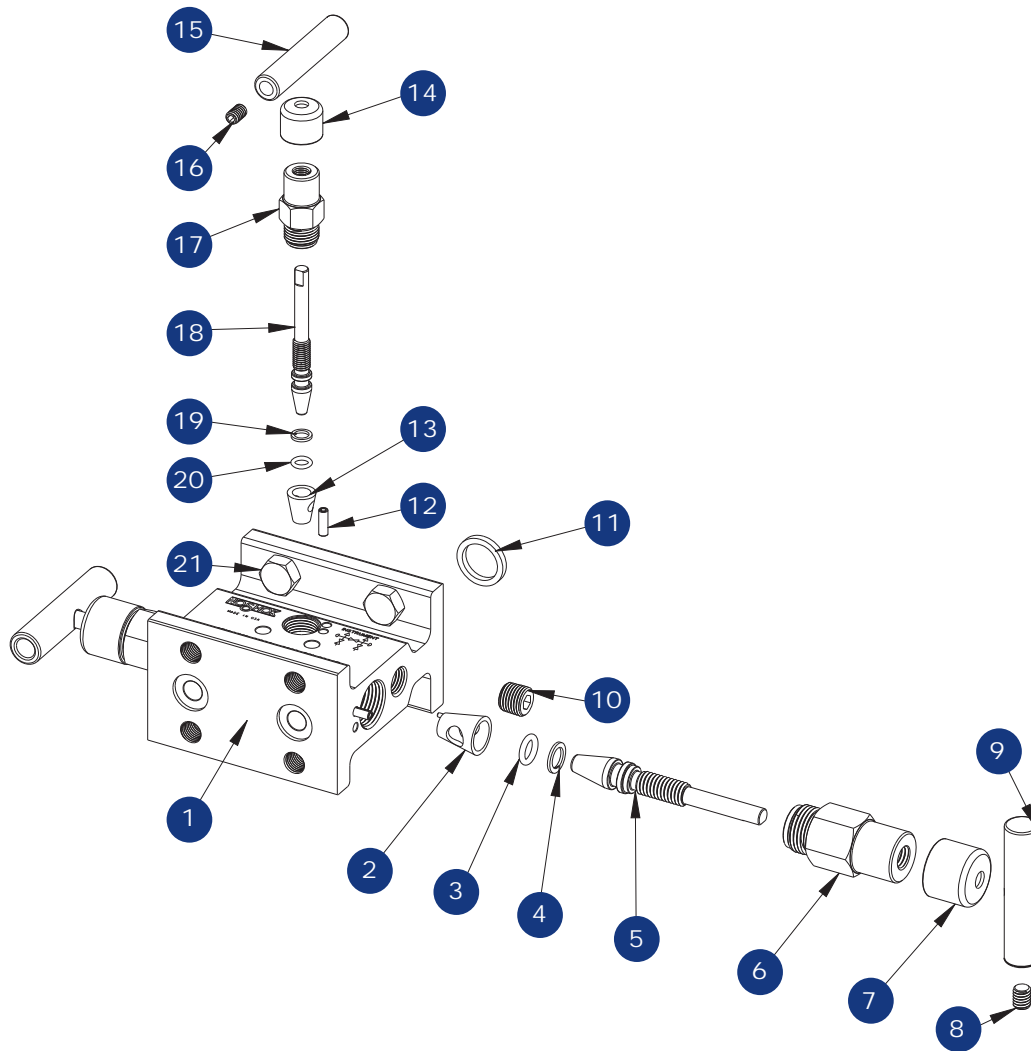
Top View



Side View



For panel mount and packing dimensions, see pgs. 64-65.



- |                              |                       |
|------------------------------|-----------------------|
| 1 Valve body                 | 12 Slotted spring pin |
| 2 Delrin® seat               | 13 Delrin® seat       |
| 3 FKM o-ring                 | 14 Green dust cap     |
| 4 PTFE back-up ring          | 15 Valve "T" handle   |
| 5 Non-rotating stem assembly | 16 Set screw          |
| 6 Valve bonnet               | 17 Valve bonnet       |
| 7 Blue dust cap              | 18 Valve stem         |
| 8 Set screw                  | 19 PTFE back-up ring  |
| 9 Valve "T" handle           | 20 FKM o-ring         |
| 10 Plug                      | 21 Head bolt          |
| 11 Gasket ring               |                       |