

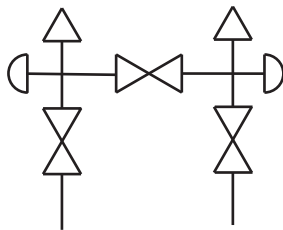
Mini, Hard Seat & Soft Tip (0.141" Orifice)

3610/3710 SERIES



- Compact design is ideal for installations with limited space, such as behind panels or in cabinets
- Designed for use with differential pressure transmitters incorporating two isolation valves and an equalizing valve in differential pressure measurement
- 100% helium leak tested to 1×10^{-4} ml/s for guaranteed performance and reliability
- Soft tip valves feature a patented Delrin® non-rotating soft tip stem, and a back-up metal-to-metal seal (**U.S. Patent 6,820,857**)
- 3610 Series hard seat valves have 10,000 psi pressure rating @ 200 °F
- 3710 Series soft tip valves have 6,000 psi pressure rating @ 200 °F
- 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; PTFE or Grafoil® packing optional
- 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
- Vinyl dust caps for bonnets and stems (non-packing)
- Patented body-to-bonnet, metal-to-metal seal is designed to significantly increase the pressure range of the valve (**U.S. Patent 7,758,014**)

Flow Schematic



SPECIFICATIONS

Materials	Zinc-nickel plated steel, electropolished 316 stainless steel
Connection	1/4" NPT
Pressure ratings*	Hard seat: 10,000 psi @ 200 °F Soft tip: 6,000 psi @ 200 °F
Orifice size	0.141"
Flow coefficient	C_v 0.44
Stem seal & type	All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® packing optional
Options	Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips
Weight	Approximately 1.4 lb.

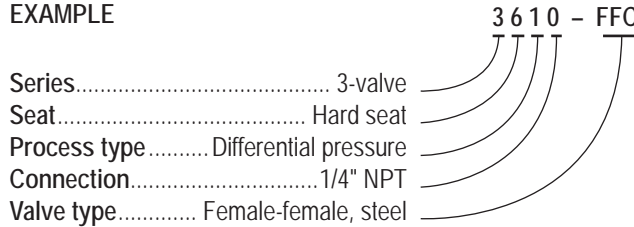
* If a packing option is chosen, maximum pressure rating is 6,000 psi. Refer to the "Pressure vs. Temperature: Packing Style with Compatible Fluid" chart at the back of this catalog.

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	
SEATS	6	Hard seat	7 Soft tip
PROCESS TYPE	1	Differential pressure	
CONNECTION	0	1/4" NPT	
VALVE TYPES	FFC	Female-Female, Steel	FFS Female-Female, 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 shown in the diagram below.

NOTE 1: The example shown includes ALL possible additional options. Please include ONLY the options required for your application when building your part number. (EXAMPLE: 3610-FFC-P1)

NOTE 2: When a packing option is selected, an o-ring option is NOT available.

NOTE 3: The standard o-ring in all the NOSHOK manifold valves is FKM.

ORDERING INFORMATION - ADDITIONAL OPTIONS				
PACKINGS [†]	P1 PTFE	P2 Grafoil ^{***}		
STEM TIPS	T1 Non-rotating (316 stainless)**	T4 PEEK ^{***}	T7 Ball (ceramic)**	T10 Regulating Delrin ^{®****}
	T2 Delrin [®] (Acetal) ^{***}	T5 Ball (440C stainless)**	T8 Ball (Monel)**	T11 Regulating PCTFE ^{***}
	T3 PCTFE ^{***}	T6 Ball (carbide)**	T9 Regulating hard**	T12 Regulating PEEK ^{***}
O-RINGS*	EM1 EPDM	KZ1 FFKM (Kalrez [®] 3018 or equivalent)	NB1 NBR	
HANDLES	HL2 2-1/2" "T"	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.

[†] If a packing option is chosen, maximum pressure rating is 6,000 psi. Refer to the "Pressure vs. Temperature: Packing Style with Compatible Fluid" chart at the back of this catalog.

* Other o-ring materials available on request.

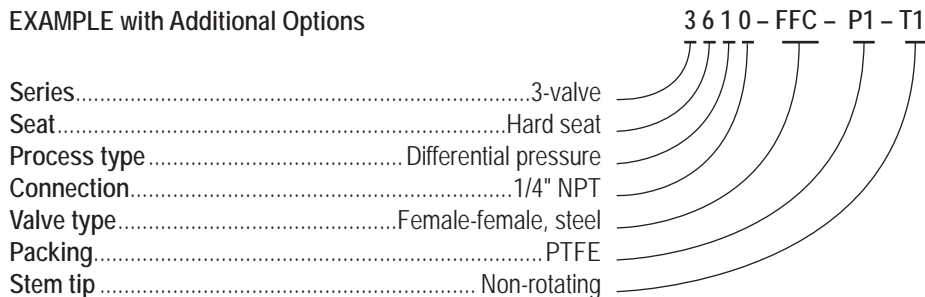
** For 3610 only.

*** For 3710 only.

Please note that the standard o-ring in all the NOSHOK valves is FKM and the standard handles are 1-3/8" mini "T" handles (HL7).

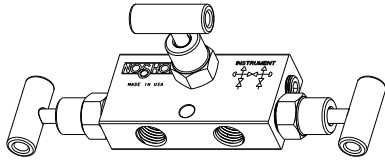
The handle material will always match the material of the valve, unless otherwise specified. For example, the 1-3/8" mini "T" handle (HL7) on the 3710-FFC will be steel. When only the standard configuration is needed, no additional designations are necessary. Please consult the factory for special application requests.

EXAMPLE with Additional Options

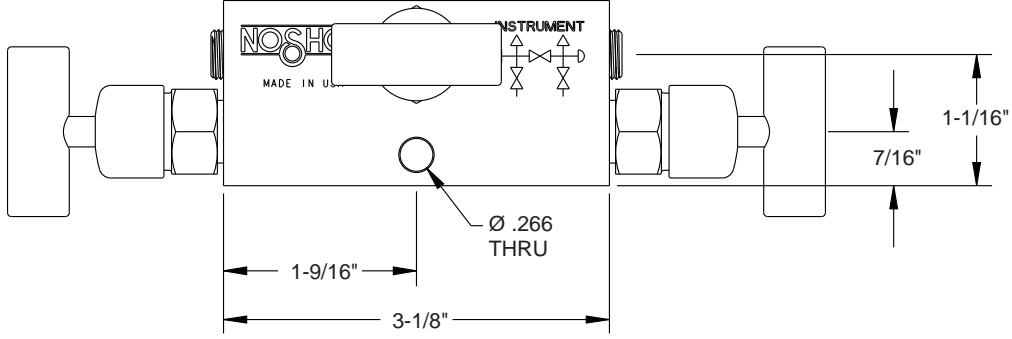


Dimensions

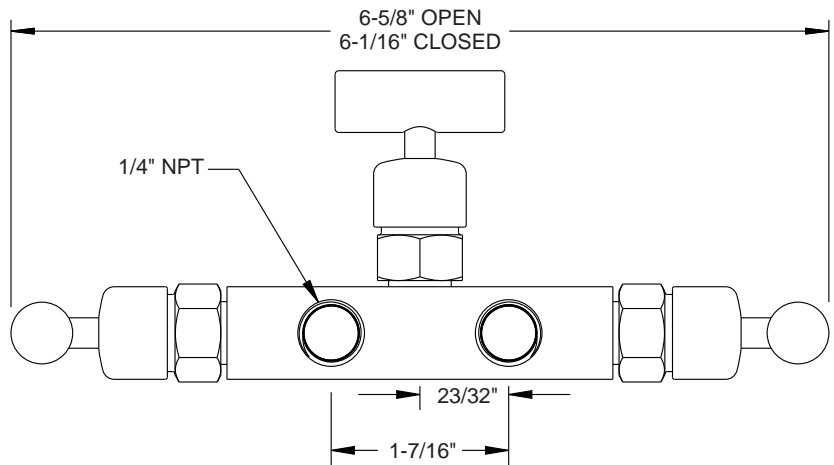
Female-Female



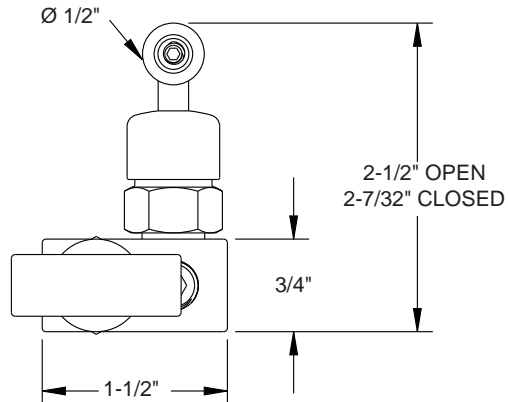
Top View



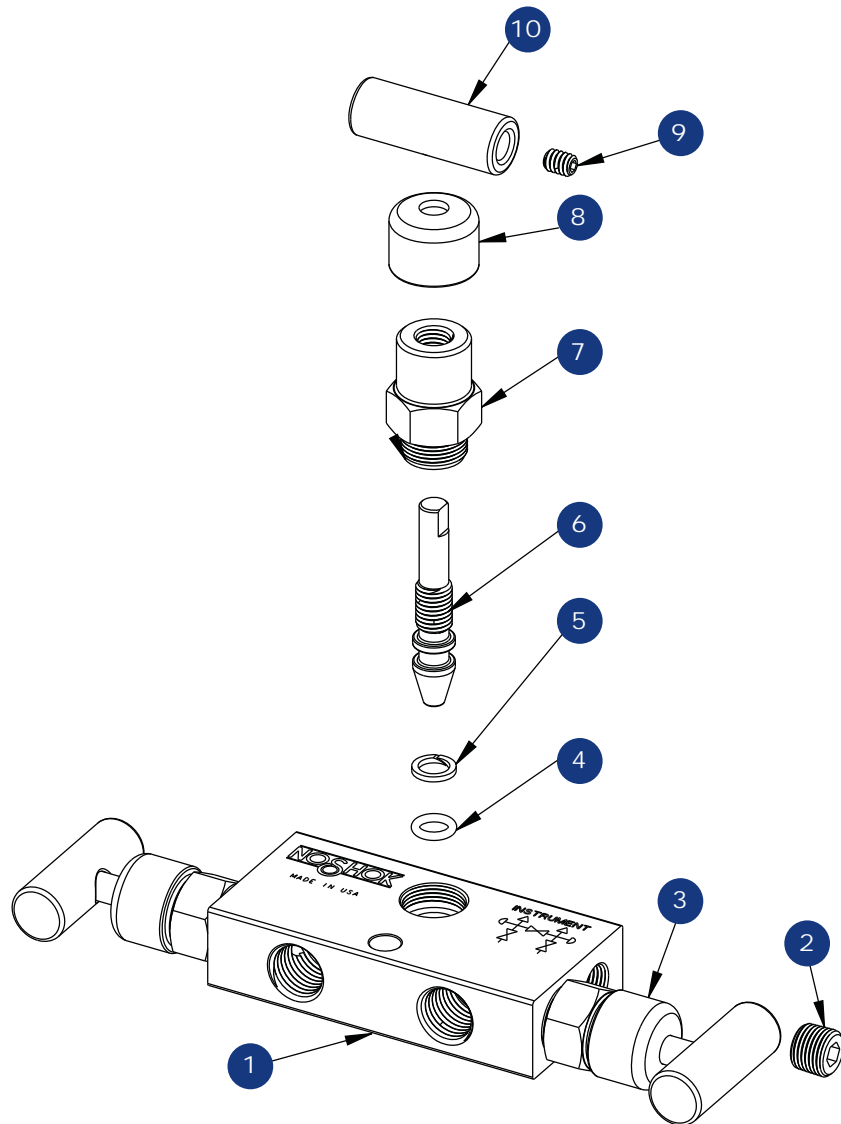
Front View



Side View



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



- 1 Valve body
- 2 Plug
- 3 Blue dust cap
- 4 FKM o-ring
- 5 PTFE back-up ring
- 6 Soft tip stem
- 7 Mini valve bonnet
- 8 Green dust cap
- 9 Set screw
- 10 Mini valve "T" handle