

# 150 SERIES



- Compact size valve built for maximum durability and robust performance in the toughest applications
- 100% helium leak tested to  $1 \times 10^{-4}$  ml/s for performance and reliability
- Soft tip valves feature a patented Acetal non-rotating soft tip stem, and a back-up metal-to-metal seal (**U.S. Patent 6,820,857**)
- Available in Zinc-Nickel plated Steel, electropolished Stainless Steel, and Brass
- FKM o-ring seal and PTFE back-up ring below the stem threads to protect from corrosion and galling; PTFE packing optional
- All stem threads are rolled for strength and ease of operation
- 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**)

SPECIFICATIONS	
<b>Materials</b>	Zinc-Nickel plated Steel, electropolished 316 Stainless Steel*, 360 Brass
<b>Connections</b>	1/8" NPT, 1/4" NPT, 7/16"-20 UNF-2B, 9/16"-18 UNF-2B Male-male, Male-female, Female-female, in-line and angled configurations
<b>Pressure rating**</b>	6,000 psi @ 200 °F
<b>Orifice size</b>	0.172"
<b>Flow coefficient</b>	$C_v$ 0.42
<b>Stem seal &amp; type</b>	All 316 Stainless Steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE packing optional
<b>Options</b>	Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips
<b>Weight</b>	Approximately 0.5 lb.

\* All 316SS products meet the requirements of NACE MR0175/ISO 15156-3.

\*\* This pressure ratings applies to all 150 series Mini Valves except the following which have pressure ratings as shown:  
 Brass 7/16"- 20 UNF-2B connection: 5,000 psi @ 200 °F  
 Stainless Steel 9/16"- 18 UNF-2B connection: 5,000 psi @ 200 ° F  
 Steel 9/16"- 18 UNF-2B connection: 4,000 psi @ 200 ° F  
 Brass 9/16"- 18 UNF-2B connection: 2,000 psi @ 200 ° F

**WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

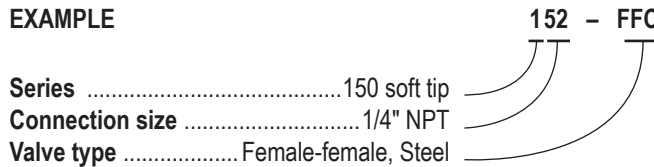
**NOTE:** All NOSHOK valve products conform to the MSS SP-99 instrument valves standards, and valves supplied with packing also conform to MSS SP-132 compression packing systems for instrument valves standard.

<b>SERIES</b>	1 150 Series, soft tip		
<b>CONNECTION SIZES</b>	51 1/8" NPT	92 7/16"- 20 UNF-2B*	
	52 1/4" NPT	93 9/16"- 18 UNF-2B*	
<b>VALVE TYPES</b>	<b>MMB</b> Male-Male, Brass	<b>MFC</b> Male-Female, Steel	<b>MFS</b> Male-Female, Stainless Steel
	<b>MFB</b> Male-Female, Brass	<b>EMFC</b> Extended Male-Female, Steel	<b>EMFS</b> Extended Male-Female, Stainless Steel
	<b>FFB</b> Female-Female, Brass	<b>FFC</b> Female-Female, Steel	<b>FFS</b> Female-Female, Stainless Steel
	<b>EFFB</b> Extended Female-Female, Brass	<b>EFFC</b> Extended Female-Female, Steel	<b>EFFS</b> Extended Female-Female, Stainless Steel
	<b>MMAB</b> Male-Male Angle, Brass	<b>MMAC</b> Male-Male Angle, Steel	<b>MMAS</b> Male-Male Angle, Stainless Steel
	<b>MFAB</b> Male-Female Angle, Brass	<b>MFAC</b> Male-Female Angle, Steel	<b>MFAS</b> Male-Female Angle, Stainless Steel
	<b>FFAB</b> Female-Female Angle, Brass	<b>FFAC</b> Female-Female Angle, Steel	<b>FFAS</b> Female-Female Angle, Stainless Steel
	<b>MMC</b> Male-Male, Steel	<b>MMS</b> Male-Male, Stainless Steel	

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

\* Available only on EFFB, EFFC and EFFS valve types.

**EXAMPLE**



To meet all of your specific application requirements, the following **additional options** are available for these needle 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: 152-MFC-HL3)**

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

ORDERING INFORMATION - ADDITIONAL OPTIONS			
<b>PACKING</b>	P1 PTFE		
<b>STEM TIPS</b>	T3 PCTFE	T10 Regulating Acetal	T12 Regulating PEEK
	T4 PEEK	T11 Regulating PCTFE	
<b>O-RINGS*</b>	EM1 EPDM	KZ1 FFKM (Perfluoroelastomer)	NB1 NBR
<b>PANEL MOUNTINGS</b>	PM1 Panel mount (1 nut)	PM2 Panel mount (2 nuts)	
<b>HANDLE</b>	HL3 1" Round knurled		

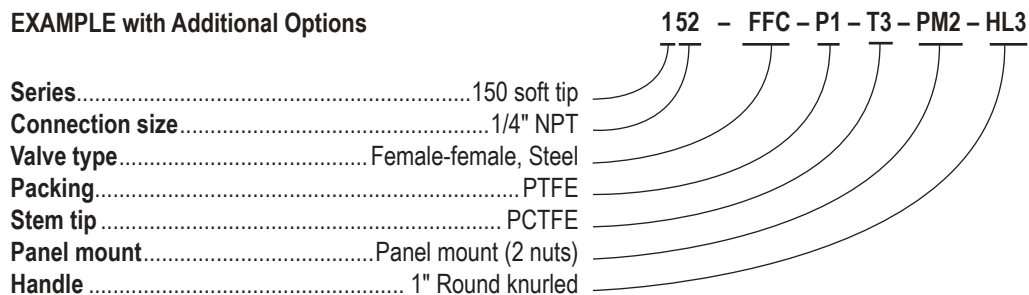
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

\* Other o-ring materials available on request.

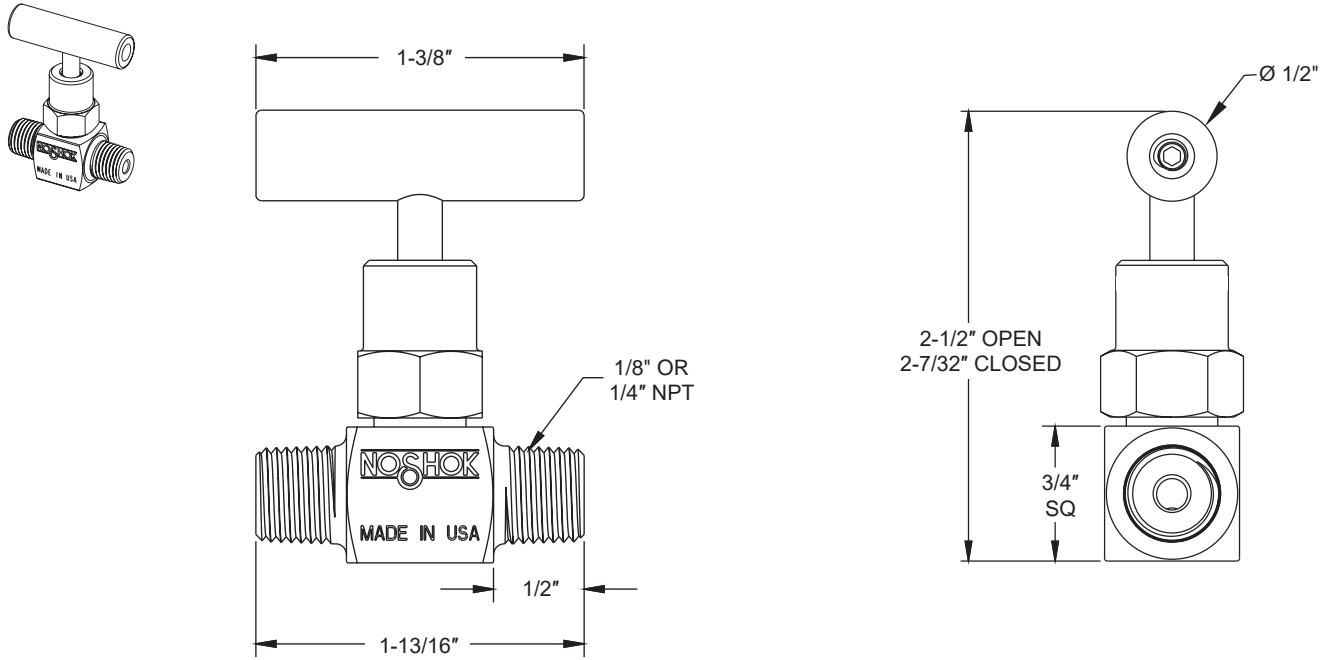
Please note that the standard o-ring in all the NOSHOK mini valves is FKM and the standard handles are Brass round knurled (HL3) handles, Steel mini "T" handles (HL7), and 316SS mini "T" handles (HL7).

The handle material will always match the material of the valve, unless otherwise specified. For example, the round knurled (HL3) on a 152-FFB will be Brass. When only the standard configuration is needed, no additional designations are necessary. Please consult the factory for special application requests.

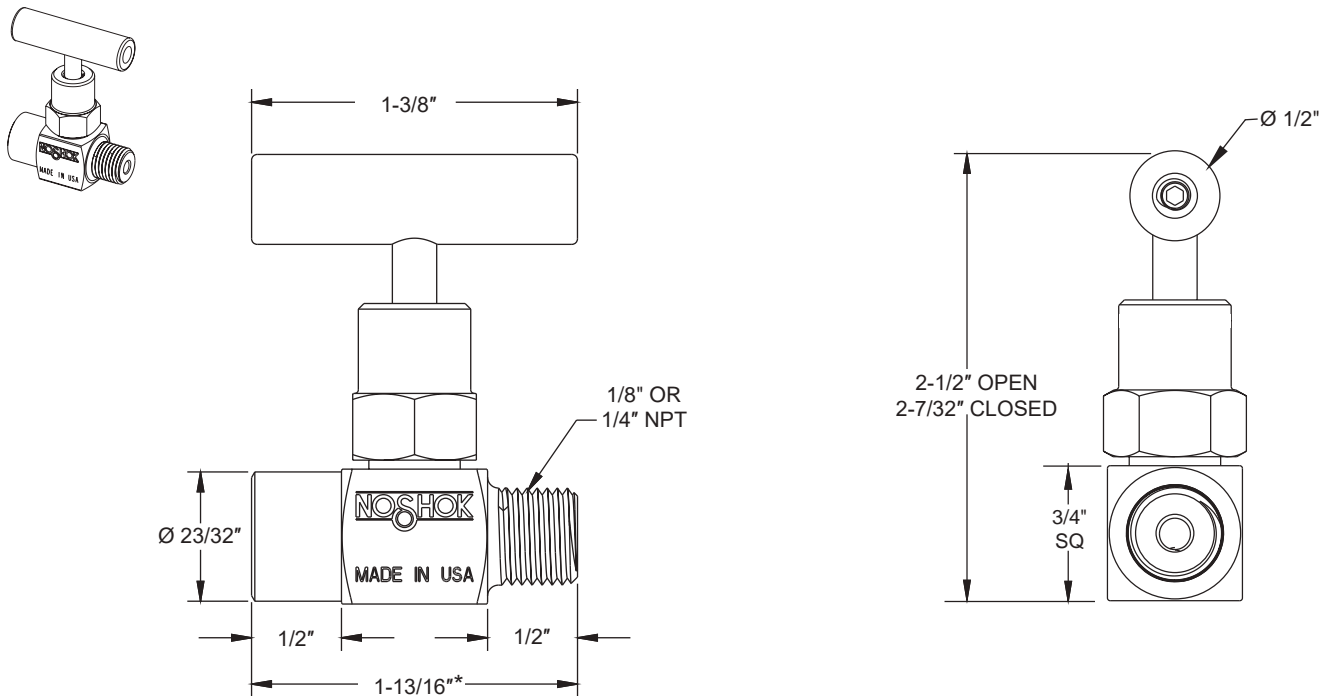
**EXAMPLE with Additional Options**



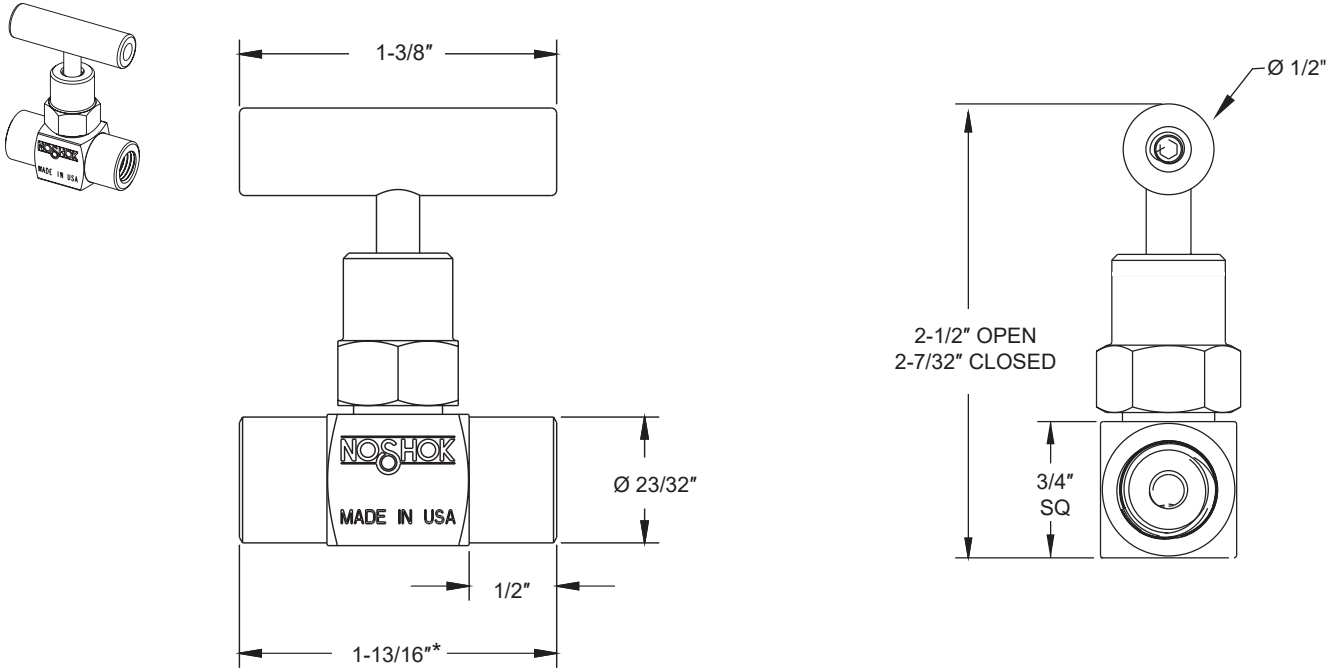
## Male-Male



## Male-Female

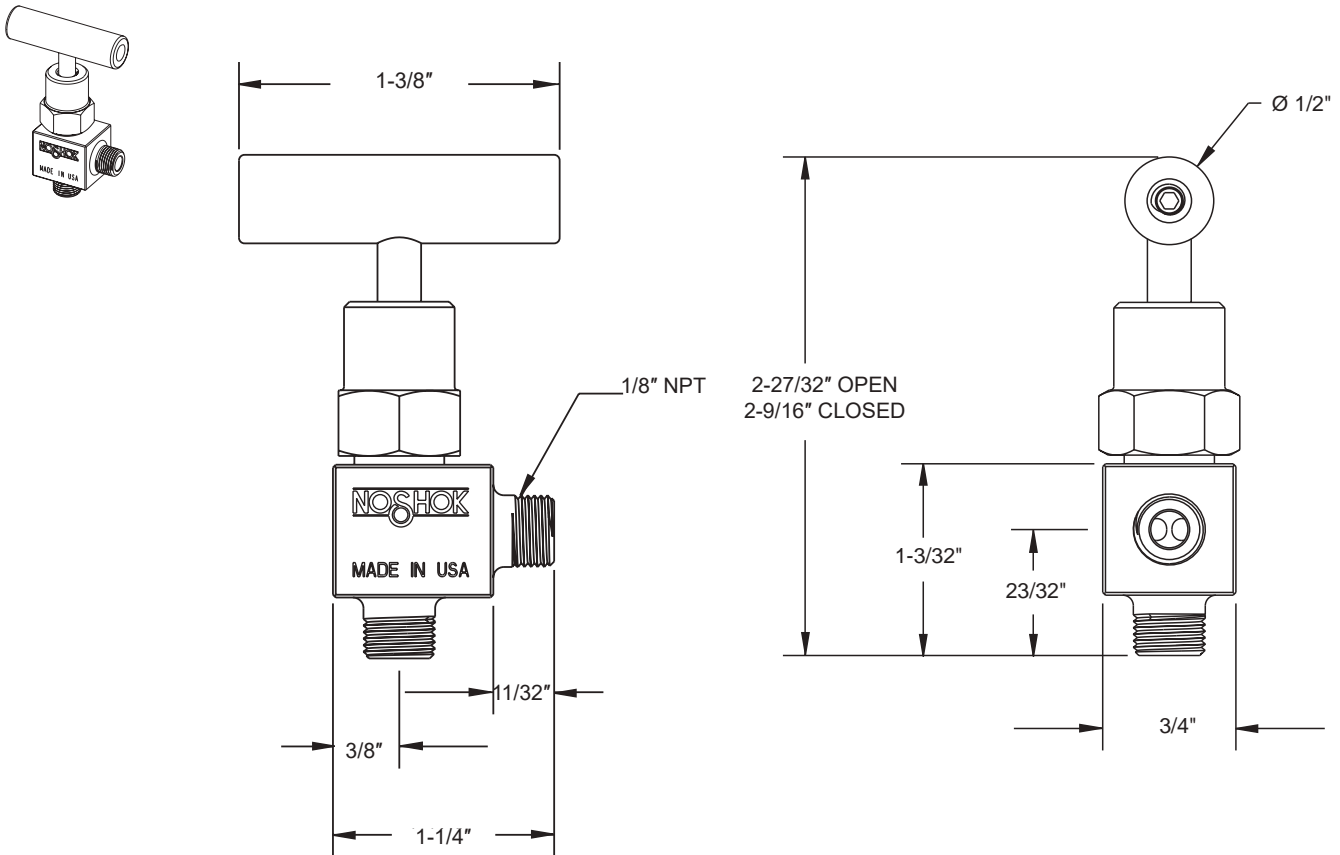


**Female-Female**

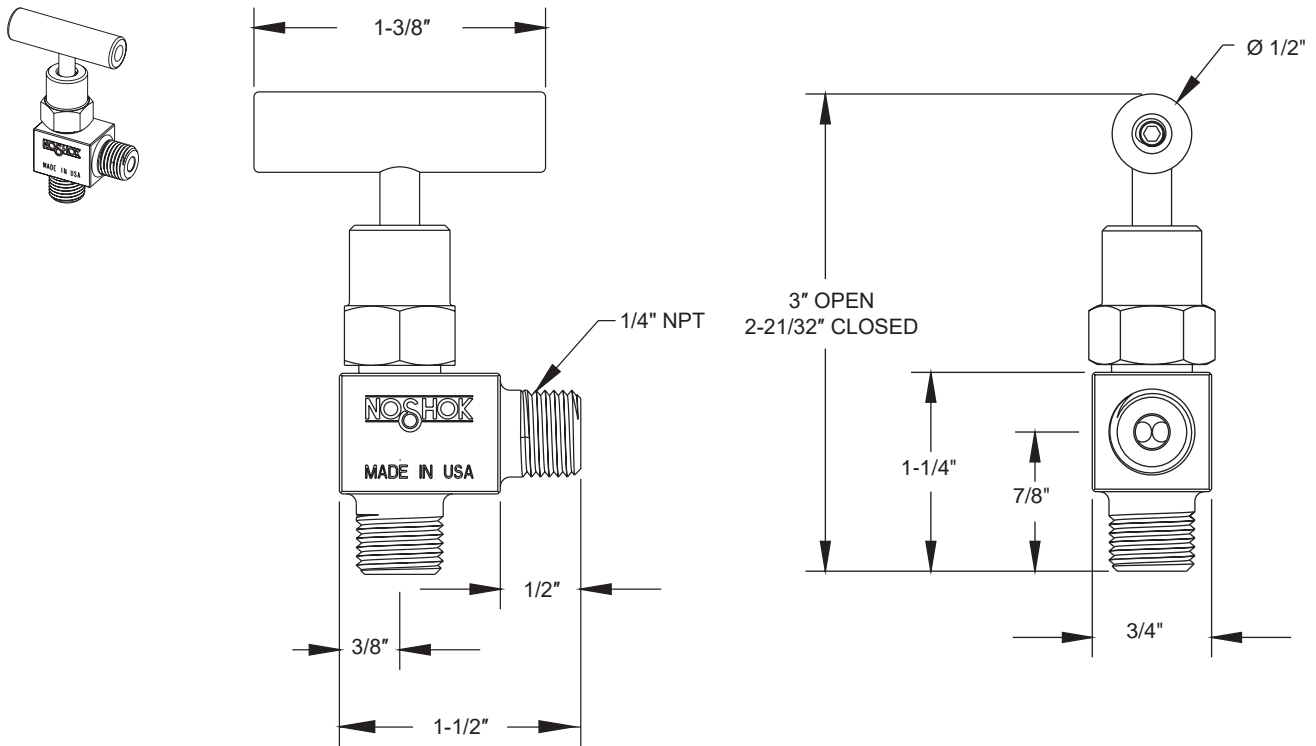


\*Dimension on extended version is 2-1/4"

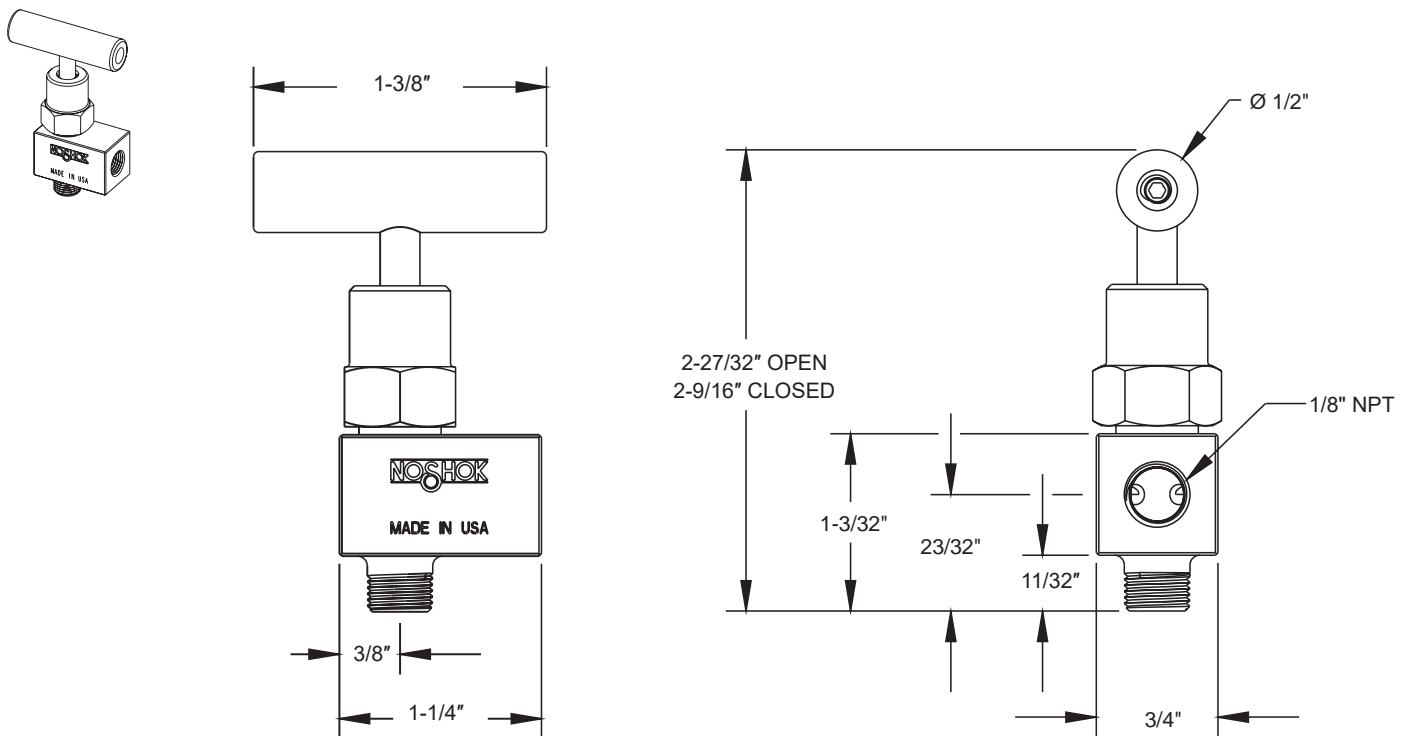
**1/8" Male-Male Angle**



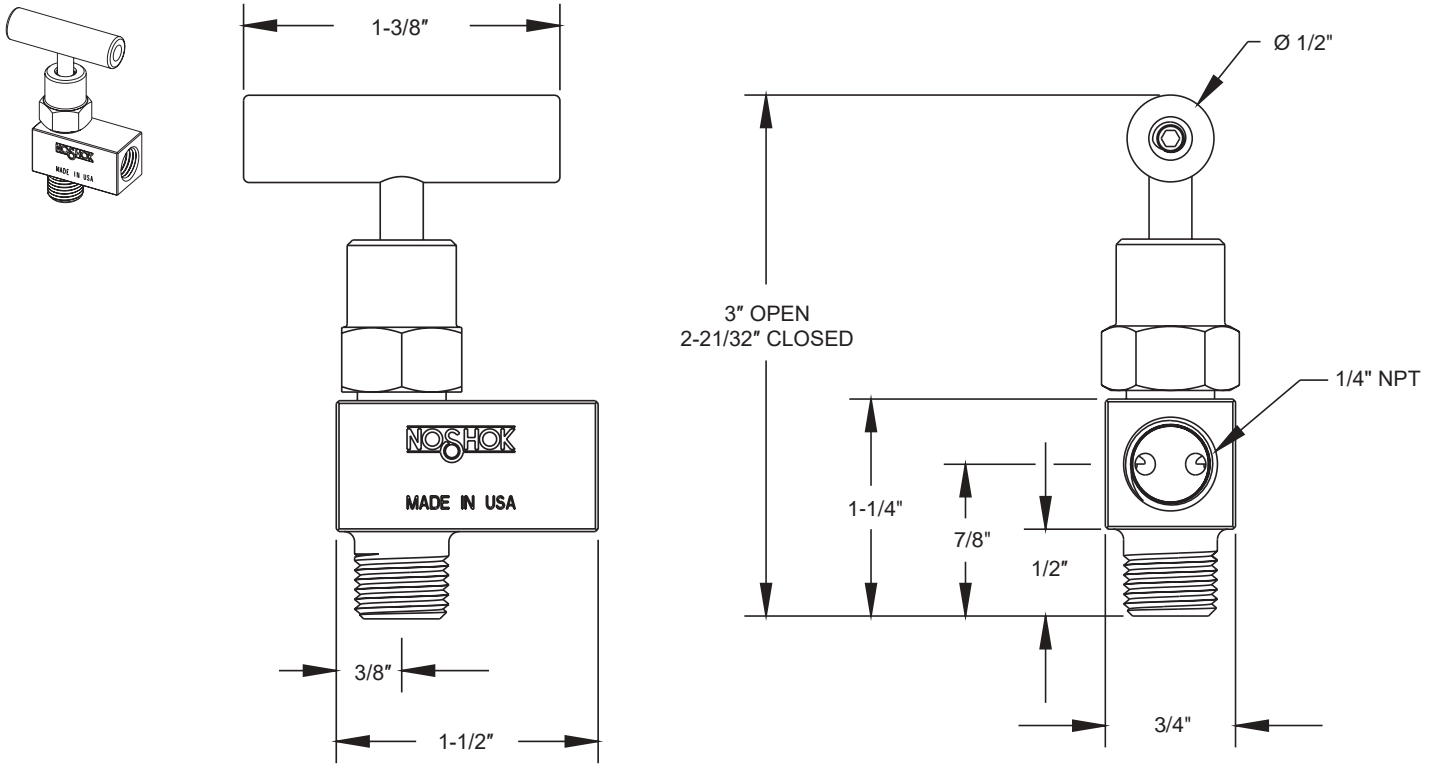
## 1/4" Male-Male Angle



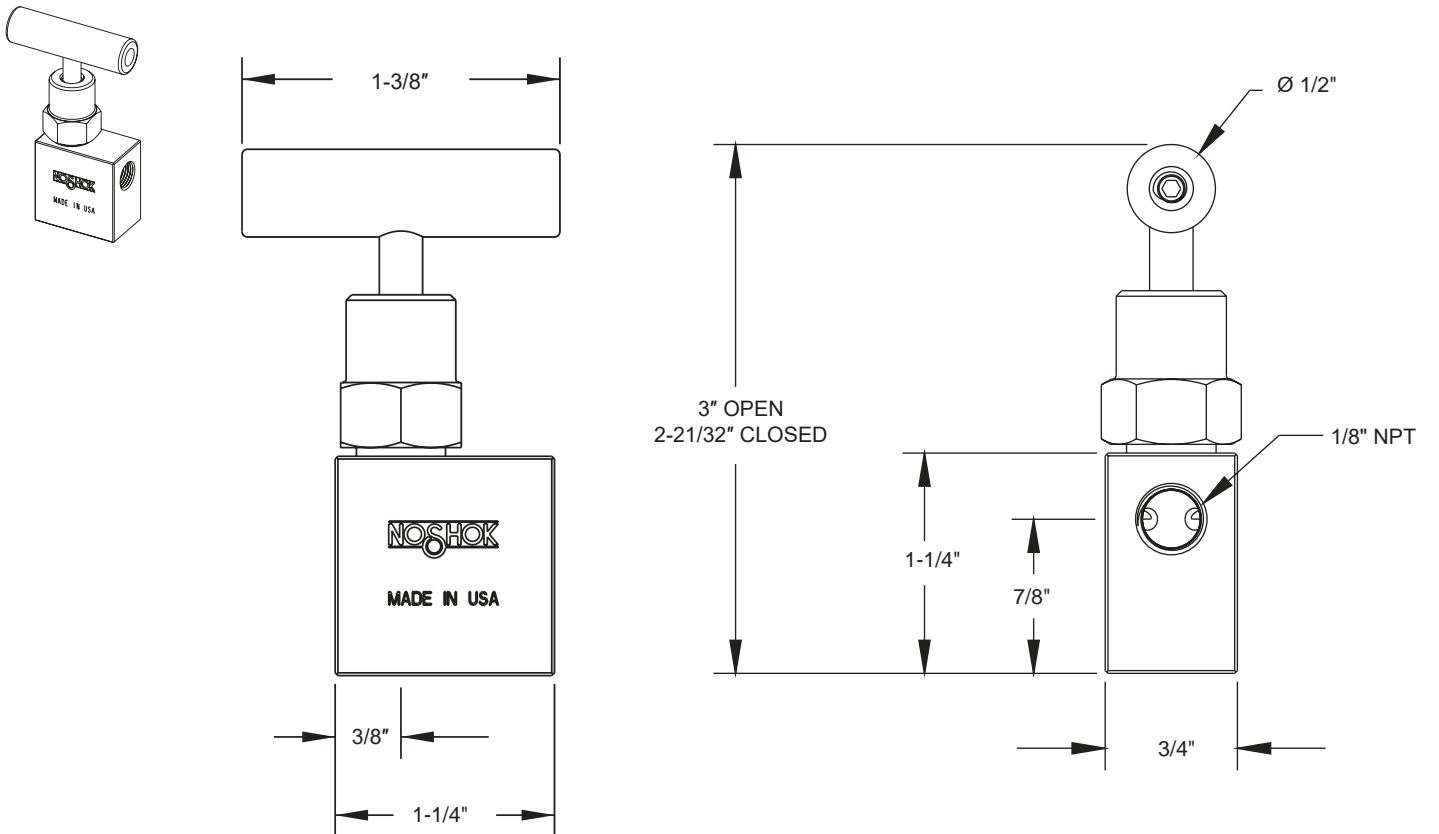
## 1/8" Male-Female Angle



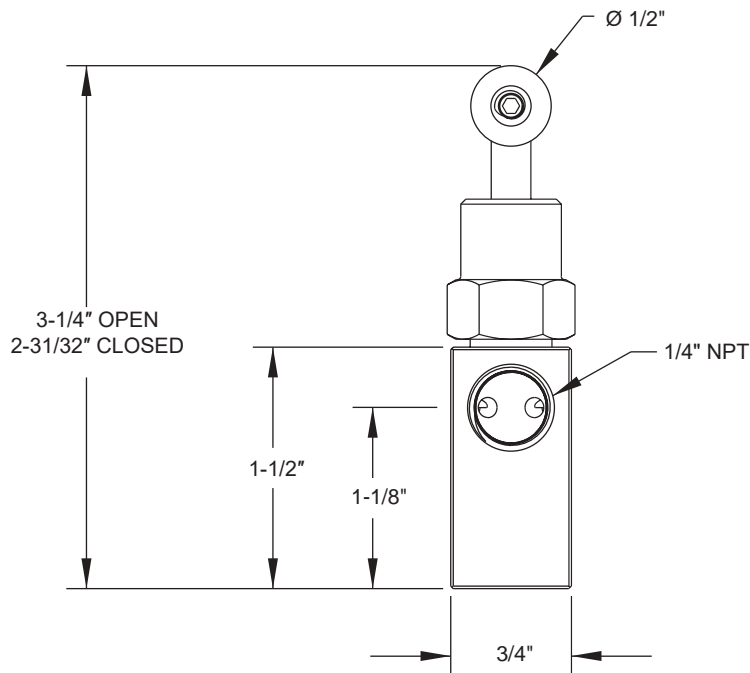
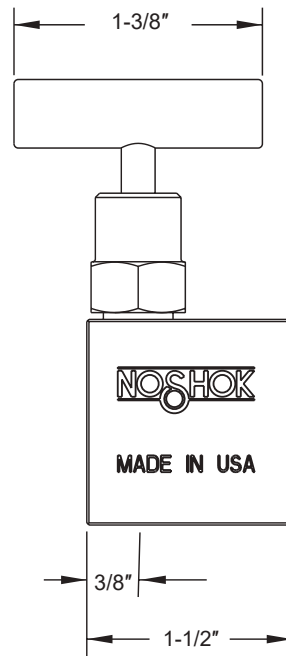
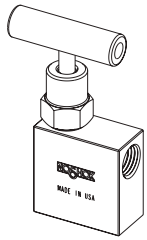
**1/4" Male-Female Angle**



**1/8" Female-Female Angle**

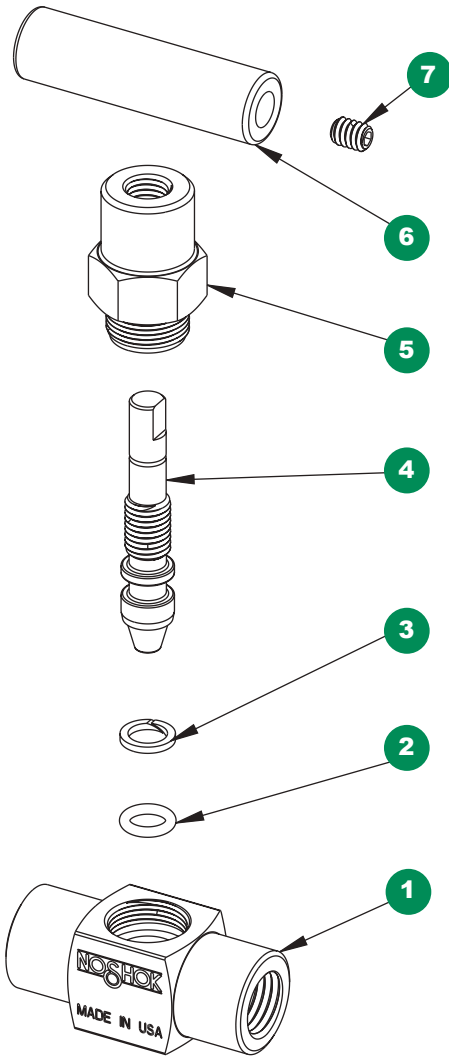


## 1/4" Female-Female Angle

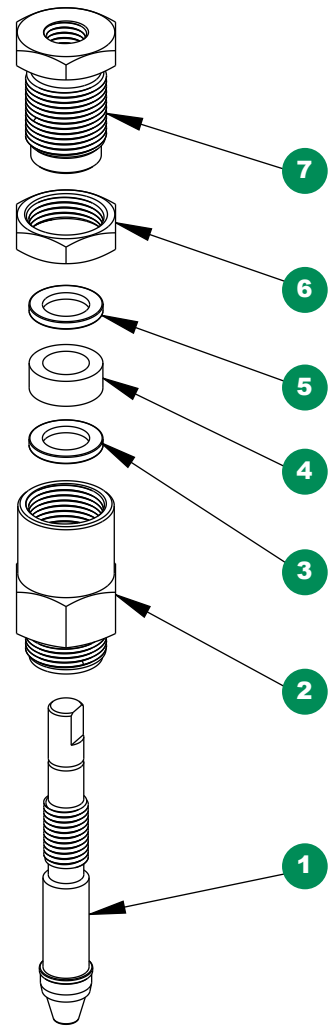


For panel mount, packing,  
& stem tip dimensions,  
see pgs. 64-67.

**Mini, Soft Tip** **Option With Packing**



- 1 Mini valve body
- 2 FKM o-ring
- 3 PTFE back-up ring
- 4 Soft tip stem
- 5 Mini valve bonnet
- 6 Mini valve "T" handle
- 7 Set screw



- 1 Soft tip packing stem
- 2 Mini valve packing bonnet
- 3 Packing washer
- 4 Packing washer
- 5 Packing washer
- 6 Jam nut
- 7 Packing adjustment screw