

## Bleed, Hard Seat &amp; Soft Tip

## 800/850 SERIES



- Bleed valves provide a convenient means to relieve process pressures trapped between a shut off valve and the instrument
- Uses the same bonnet assemblies of the 100/150 Series mini valves with an integrated single threaded body for insertion in vent port
- 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**)
- 100% helium leak tested to  $1 \times 10^{-4}$  ml/s for guaranteed performance and reliability
- 10,000 psi hard seat pressure rating @ 200 °F
- 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 or Grafoil® (800 Series only) packing optional
- All stems are 316 stainless steel
- All stem threads are rolled for strength and ease of operation
- 0.159" bleed port
- 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

Materials	Zinc-nickel plated steel, electropolished 316 stainless steel, 360 brass
Connections	1/4" & 1/2" NPT
Hard seat pressure ratings*	Brass: 6,000 psi @ 200 °F Steel: 10,000 psi @ 200 °F Stainless steel: 10,000 psi @ 200 °F
Soft tip pressure ratings	Brass: 6,000 psi @ 200 °F Steel: 6,000 psi @ 200 °F Stainless steel: 6,000 psi @ 200 °F
Bleed port	0.159"
Stem seal & type	All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Grafoil® (800 Series only) packing optional
Options	Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips

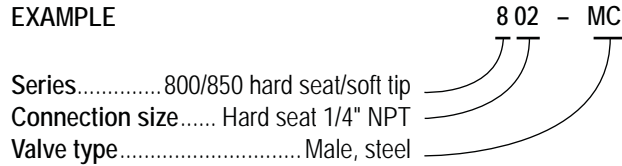
\* If a packing option is chosen, maximum pressure rating is 6,000 psi. Refer to the "Pressure vs. Temperature: Packing Style with Compatible Fluid" chart at the back of this catalog.

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	8 800/850 Series, hard seat/soft tip		
CONNECTION SIZES	02 Hard seat 1/4" NPT	52 Delrin® soft tip 1/4" NPT	
	04 Hard seat 1/2" NPT	54 Delrin® soft tip 1/2" NPT	
VALVE TYPES	MC Male, Steel	MS Male, Stainless Steel	MB Male, Brass

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 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: 802-MC-EM1)

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

ORDERING INFORMATION - Additional Options					
PACKINGS <sup>†</sup>	P1 PTFE	P2 Grafoil <sup>®***</sup>			
STEM TIPS	T1 Non-rotating (316 stainless)	T4 PEEK <sup>***</sup>	T7 Ball (ceramic) <sup>**</sup>		
	T2 Delrin <sup>®</sup> (Acetal) <sup>***</sup>	T5 Ball (440C stainless) <sup>**</sup>	T8 Ball (Monel) <sup>**</sup>		
	T3 PCTFE <sup>***</sup>	T6 Ball (carbide) <sup>**</sup>			
O-RINGS*	EM1 EPDM	KZ1 FFKM (Kalrez <sup>®</sup> 3018 or equivalent)	NB1 NBR		
HANDLES	HL2 2-1/2" "T" <sup>***</sup>	HL4 1-3/8" Phenolic <sup>**</sup>	HL5 1-3/4" Phenolic <sup>**</sup>		
	HL3 1" Round knurled				

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† 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.

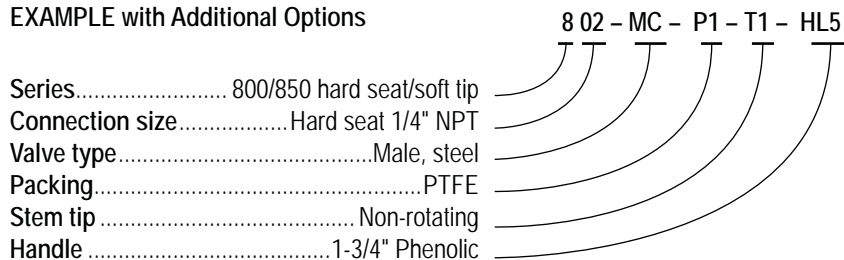
\*\* For 800 Series only.

\*\*\* For 850 Series only.

Please note that the standard o-ring in all the NOSHOK valves is FKM and the standard handles are 1" round knurled handles (HL3) on brass, and 1-3/8" mini "T" handles (HL7) on stainless steel and steel.

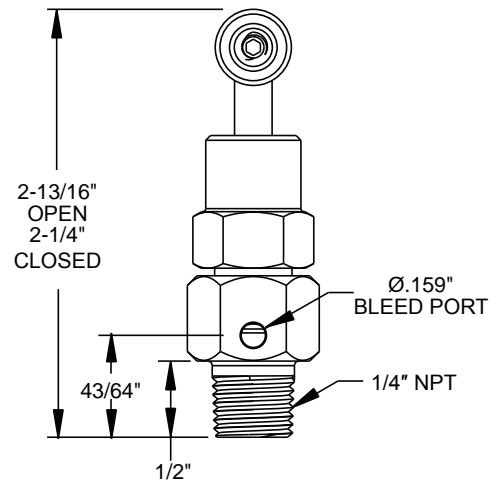
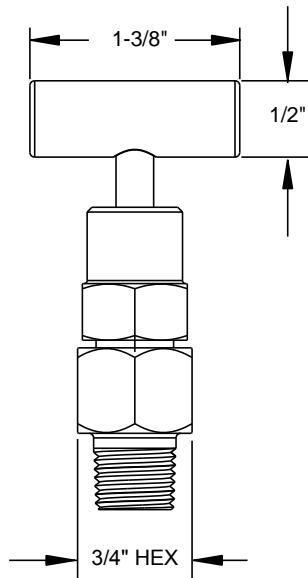
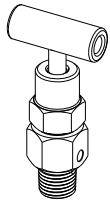
The handle material will always match the material of the valve, unless otherwise specified. For example, the mini "T" handle (HL7) on the 802-MC will be steel. When only the standard configuration is needed, no additional designations are necessary. Please consult the factory for special application requests.

**EXAMPLE with Additional Options**

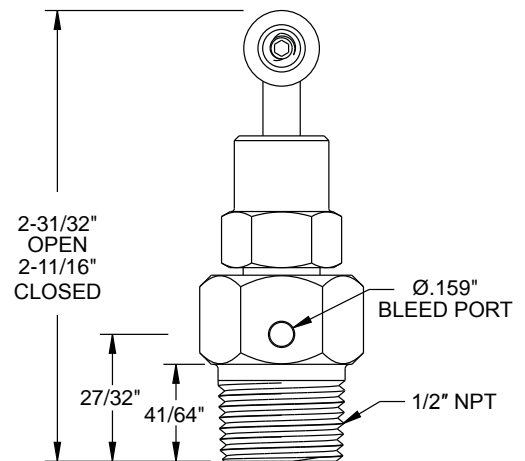
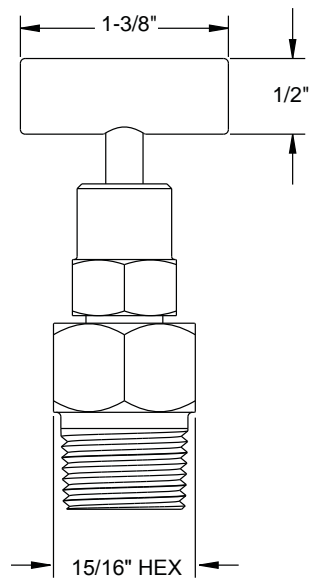
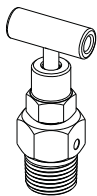


# Dimensions

## 1/4" Bleed Valve



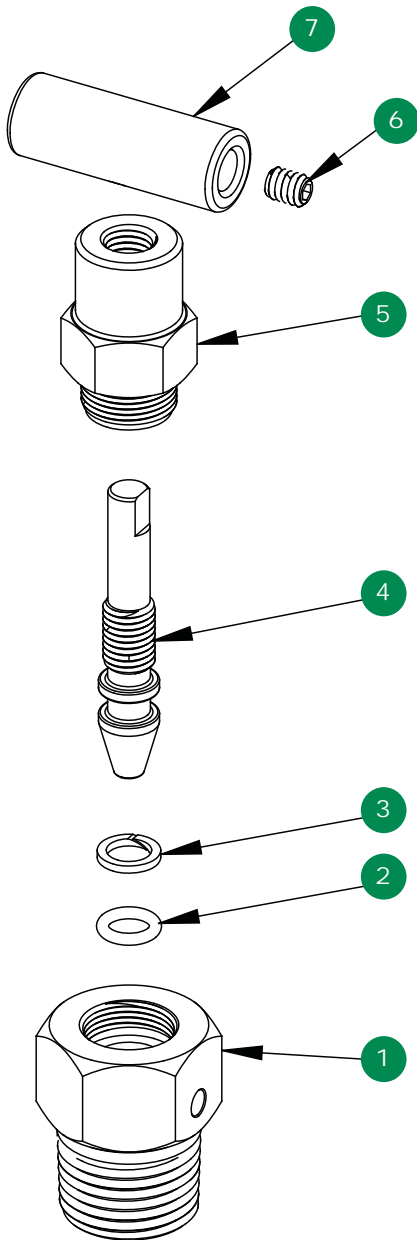
## 1/2" Bleed Valve



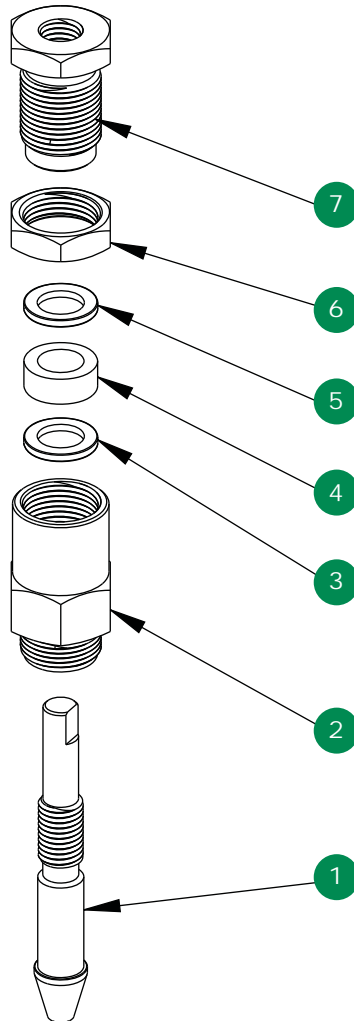
## Bleed, Hard Seat

## Option With Packing, Hard Seat

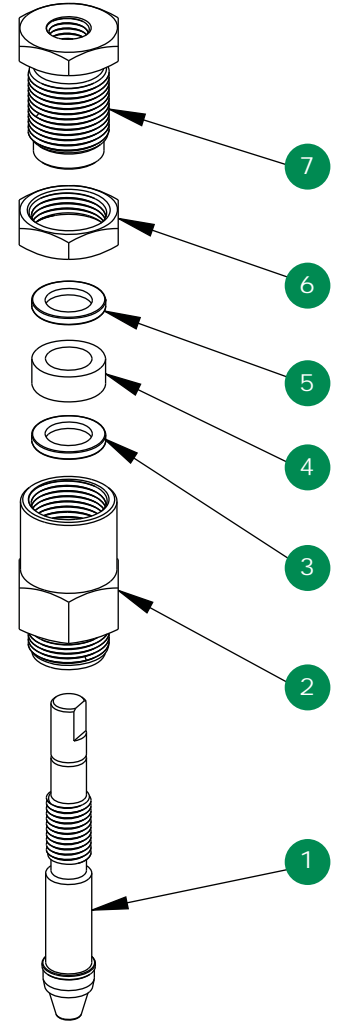
## Option With Packing, Soft Tip



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



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



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