

## 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 Acetal 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 performance and reliability
- 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 Graphite (800 Series only) packing optional
- 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

<b>Materials</b>	Zinc-Nickel plated Steel, electropolished 316 Stainless Steel*, 360 Brass
<b>Connections</b>	1/4" & 1/2" NPT
<b>Hard seat pressure ratings**</b>	Brass: 6,000 psi @ 200 °F Steel: 10,000 psi @ 200 °F Stainless Steel: 10,000 psi @ 200 °F
<b>Soft tip pressure ratings</b>	Brass: 6,000 psi @ 200 °F Steel: 6,000 psi @ 200 °F Stainless Steel: 6,000 psi @ 200 °F
<b>Bleed port</b>	0.159"
<b>Stem seal &amp; type</b>	All 316 Stainless Steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE or Graphite (800 Series only) packing optional
<b>Options</b>	Panel mountings, o-ring materials, handles, packings, regulating stem and stem tips
<b>Weight</b>	Approximately 0.4 lb.

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

\*\* 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.



**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.

## ORDERING INFORMATION

SERIES	8 800/850 Series, hard seat/soft tip		
CONNECTION SIZES	02 Hard seat 1/4" NPT	52 Acetal soft tip 1/4" NPT	
	04 Hard seat 1/2" NPT	54 Acetal 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

Series.....800/850 hard seat/soft tip  
Connection size.....Hard seat 1/4" NPT  
Valve type.....Male, Steel

8 02 - MC

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 Graphite
STEM TIPS	T1 Non-rotating (316 Stainless) T3 PCTFE*** T4 PEEK***	T5 Ball (440C Stainless)** T6 Ball (carbide)** T7 Ball (ceramic)**
O-RINGS*	EM1 EPDM	KZ1 FFKM (Perfluoroelastomer)
HANDLES	HL2 2-1/2" "T"** HL3 1" Round knurled	NB1 NBR HL4 1-3/8" Phenolic** HL5 1-3/4" Phenolic**

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<sup>†</sup> 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.

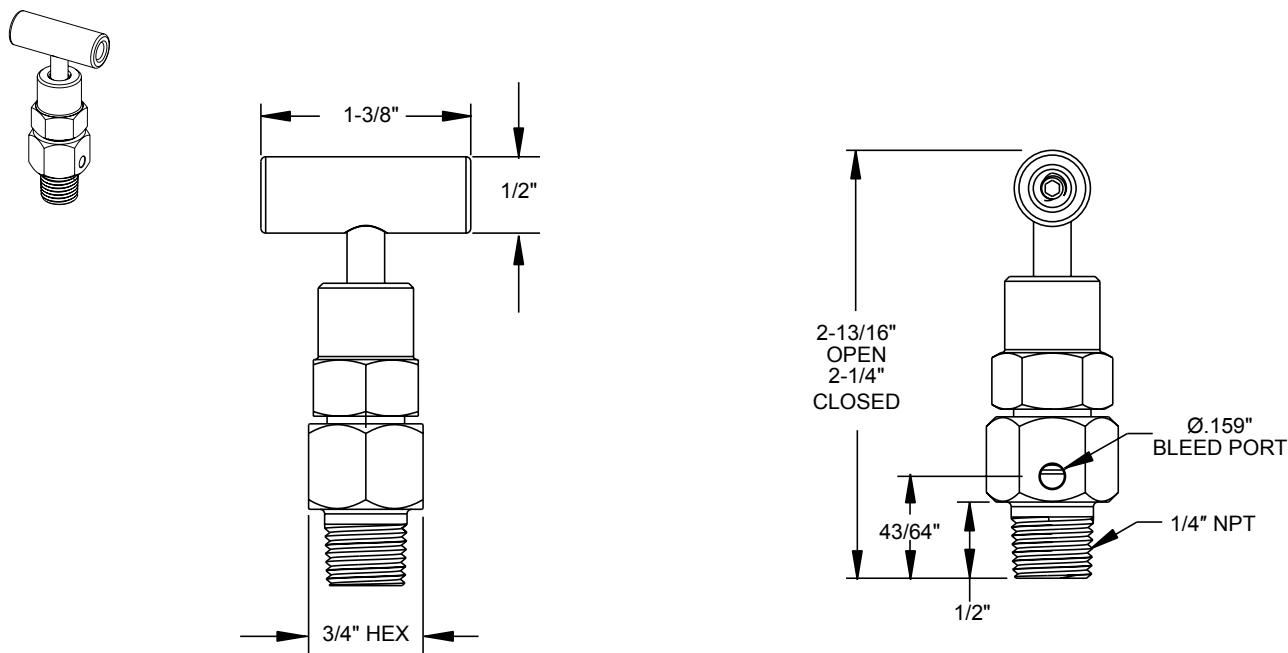
## EXAMPLE with Additional Options

Series.....800/850 hard seat/soft tip  
Connection size.....Hard seat 1/4" NPT  
Valve type.....Male, Steel  
Packing.....PTFE  
Stem tip.....Non-rotating  
Handle.....1-3/4" Phenolic

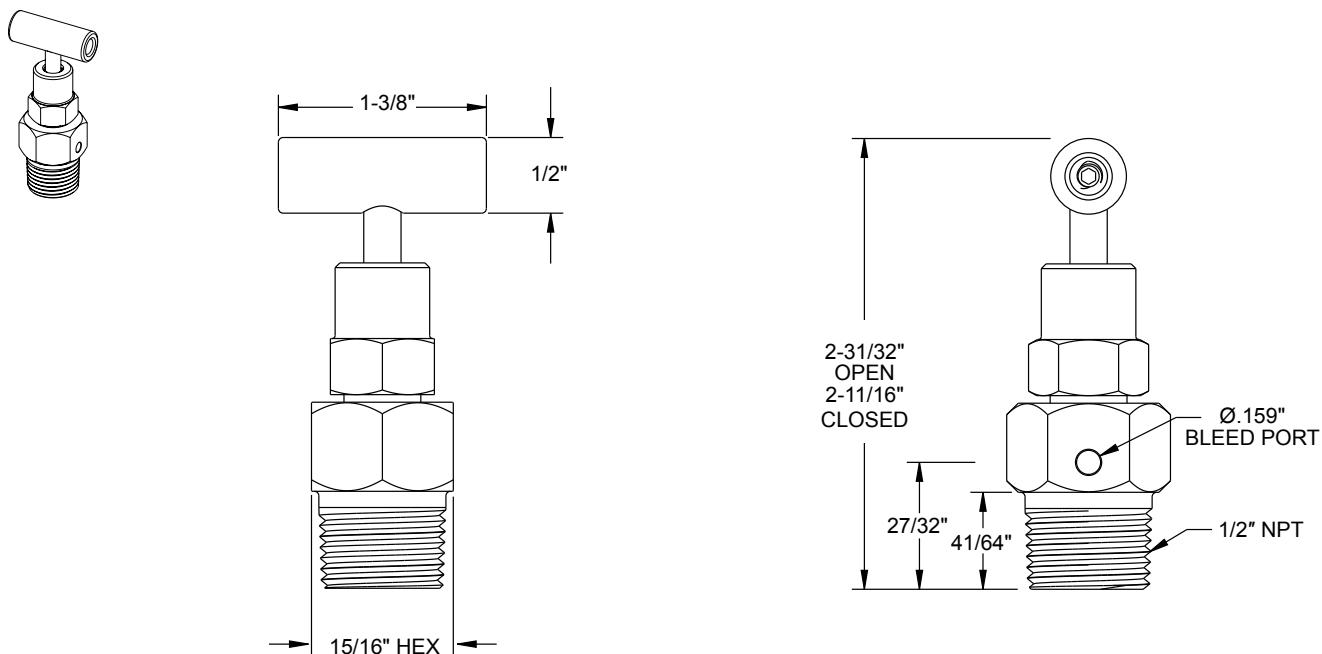
8 02 - MC - P1 - T1 - HL5

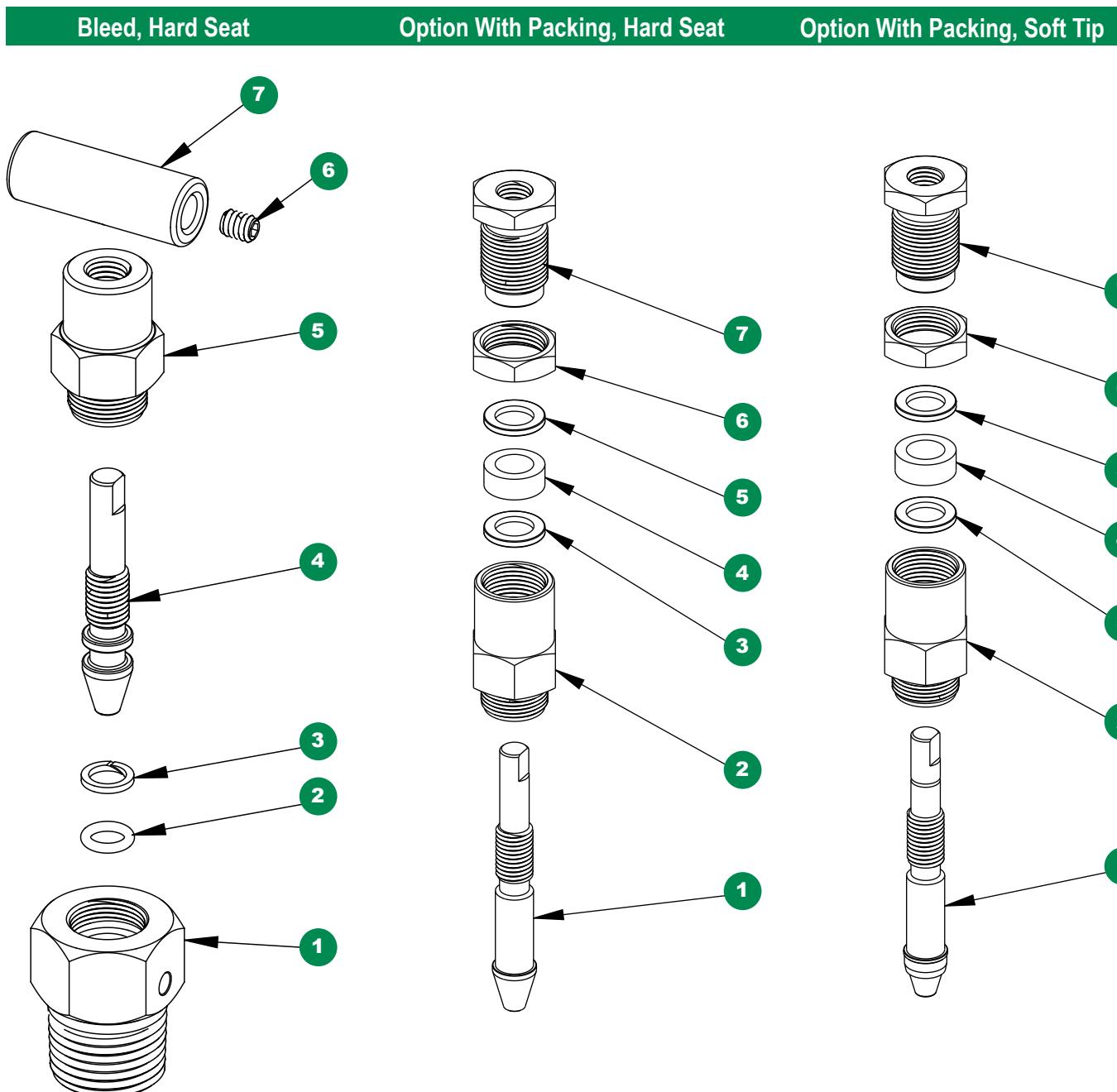
## Dimensions

## 1/4" Bleed Valve



## 1/2" Bleed Valve





- 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