

## 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<br>316 stainless steel, 360 brass  |
| Connections                | 1/4" & 1/2" NPT  |
| Hard seat pressure ratings | Brass: 6,000 psi @ 200 °F<br>Steel: 10,000 psi @ 200 °F<br>Stainless steel: 10,000 psi @ 200 °F  |
| Soft tip pressure ratings  | Brass: 3,000 psi @ 200 °F<br>Steel: 6,000 psi @ 200 °F<br>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  |

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

8 02 - MC

Series.....800/850 hard seat/soft tip

Connection size..... Hard seat 1/4" NPT

Valve type..... Male, steel

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

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\* 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

8 02 - MC - P1 - T1 - HL5

Series.....800/850 hard seat/soft tip

Connection size..... Hard seat 1/4" NPT

Valve type..... Male, steel

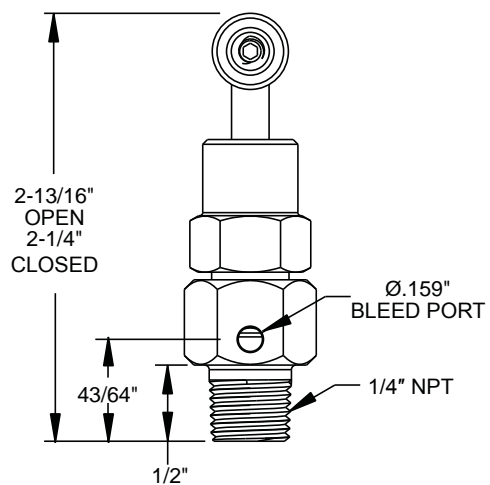
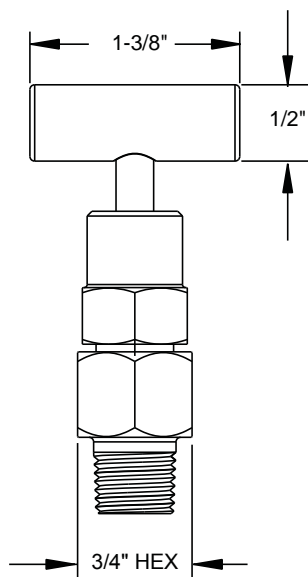
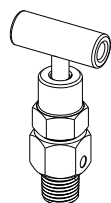
Packing..... PTFE

Stem tip ..... Non-rotating

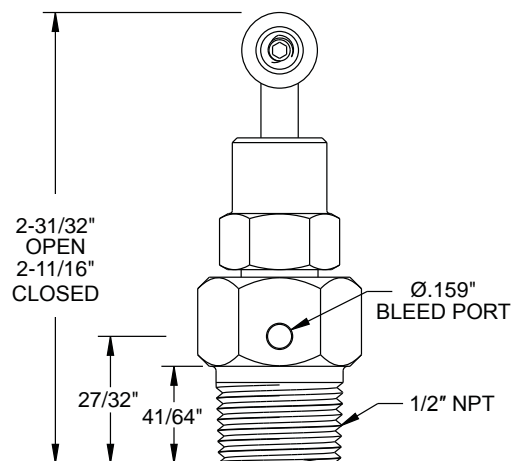
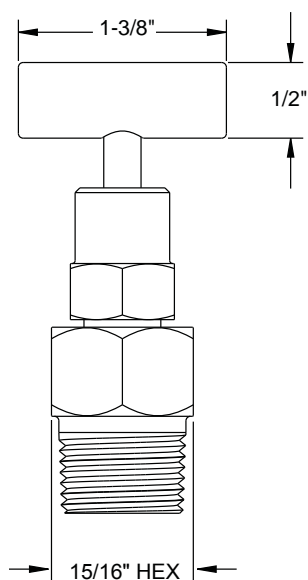
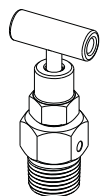
Handle ..... 1-3/4" Phenolic

# Dimensions

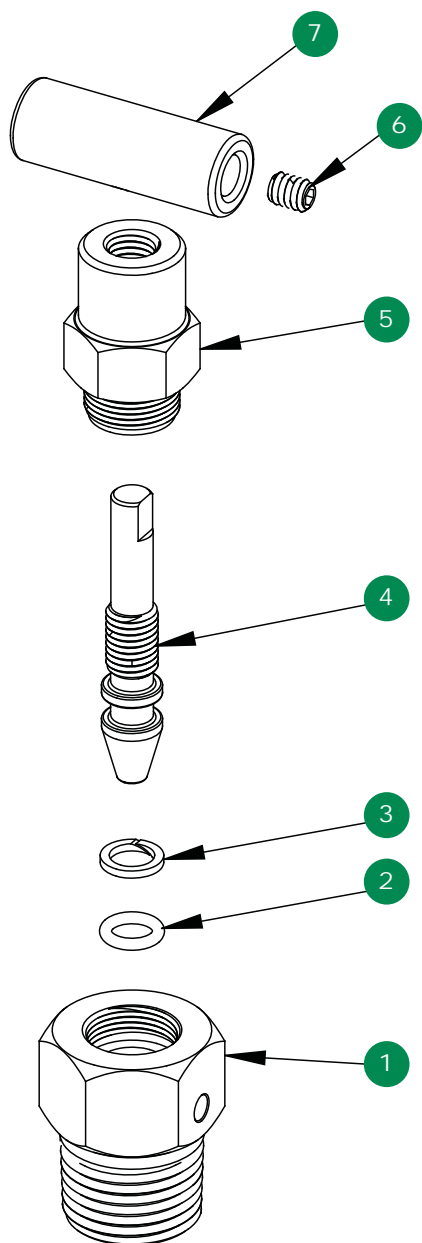
## 1/4" Bleed Valve



## 1/2" Bleed Valve

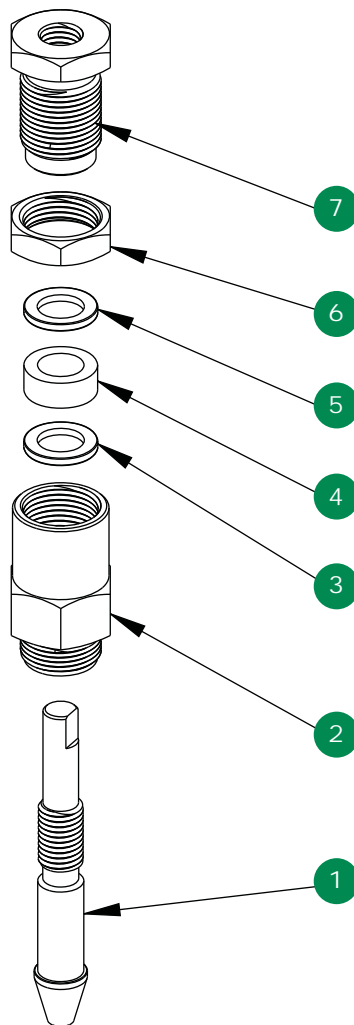


## Bleed, Hard Seat



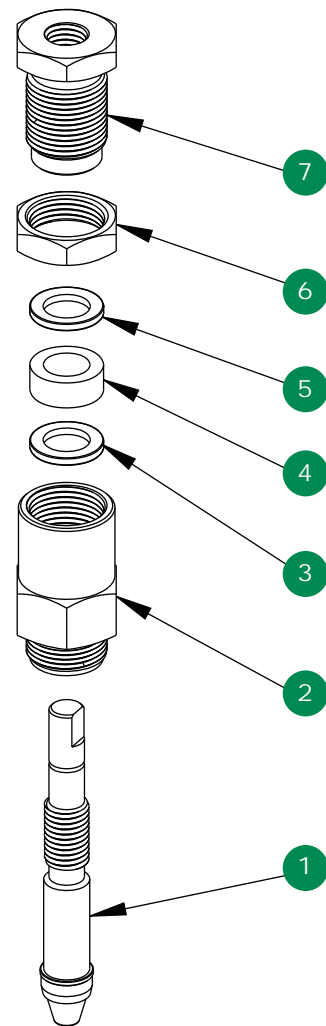
- 1 Valve body
- 2 FKM o-ring
- 3 PTFE back-up ring
- 4 Mini valve stem
- 5 Mini valve bonnet
- 6 Set screw
- 7 Mini "T" handle

## Option With Packing, Hard Seat



- 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

## Option With Packing, Soft Tip



- 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