Needle Valves

Soft Seat and Hard Seat

measuring • monitoring • analyzing

NVN

- 100 Series Mini Valves
- 400 Series Hard Seat Needle Valves
- 500 Series Soft Seat Needle Valves
- Economical
- Easy to Adjust T-Handle
- Blow-Out Proof Stem Provides a Secondary Stem Seal in Full Open Position
- Designed for Strength and Smooth Operation

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Description

The KOBOLD NVN line of needle valves is an ideal economical solution for small diameter piping installations. Available in zinc-nickel plated steel, electropolished stainless steel, and brass, all are equipped with both a FKM o-ring seal and a PTFE back-up ring below the stem threads to protect the valve from corrosion and galling. The stem threads are rolled for greater strength and ease of operation and the T-shaped handle makes for easy adjustments. The NVN 100 series offers a compact valve and both hard seat and soft tip options for your smallest piping needs. For bigger pipes, the NVN 400 series offers a metal to metal hard seat design and the NVN 500 series offers a precision molded replaceable soft seat design. Both the 400 and 500 series have a blow-out proof stem that provides a secondary stem seal in the full open position. They also feature a slotted spring pin to prevent accidental loosening.

100 Series Mini-Valves

Specifications

Material:	Zinc-Nickel Plated Steel, Electropolished Stainless Steel, Brass
Stem Type:	Stainless Steel
Max. Pressure for Hard Seat Mini-Valves:	
Brass:	6,000 PSI @ 200°F
Steel:	10,000 PSI @ 200°F
Stainless Steel:	10,000 PSI @ 200°F
Max. Pressure for Soft Tip Mini-Valves:	6,000 PSI @ 200°F
Standard O-Ring:	FKM
Standard Back-up Ring:	PTFE
Orifice Size:	0.172"
Flow Coefficient:	0.42

Order Details:

100 Series Hard Seat Mini-Valves (Example: **NVN-101 FF B**)

Model	Fitting Size	Fitting Type	Material*
NVN-	**101..** = 1/8" NPT **102..** = 1/4" NPT	**..FF..** = Female/Female **..MF..** = Male/Female **..MM..** = Male/Male	**..B** = Brass **..C** = Carbon Steel **..S** = Stainless Steel

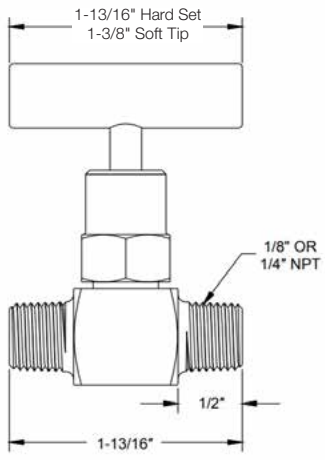
100 Series Soft Tip Mini-Valves (Example: **NVN-151 FF B**)

Model	Fitting Size	Fitting Types	Material*
NVN-	**151..** = 1/8" NPT **152..** = 1/4" NPT	**..FF..** = Female/Female **..MF..** = Male/Female **..MM..** = Male/Male	**..B** = Brass **..C** = Carbon Steel **..S** = Stainless Steel

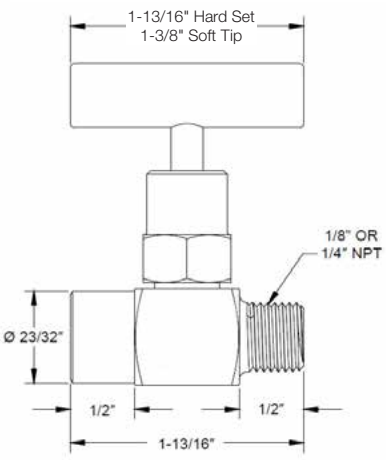
*The handle material will always match the material of the valve except for brass valves which have a Zinc-Nickel Plated Steel T-handle

Dimensions 100 Series

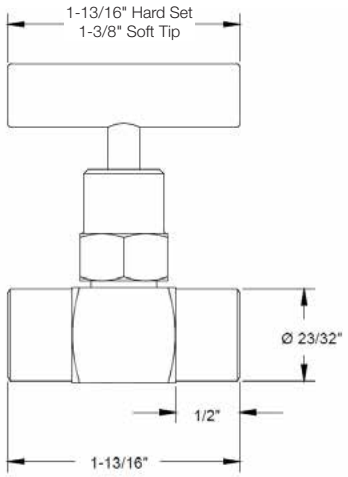
Male-Male



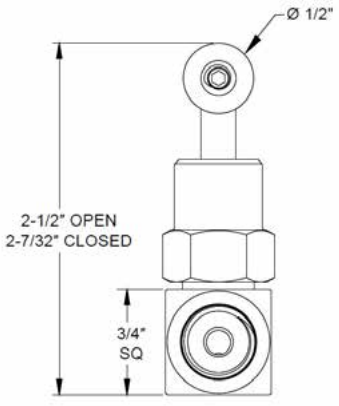
Female-Male



Female-Female



Side View



No responsibility taken for errors;
subject to change without prior notice.

400 Series Hard Seat Valves

Specifications

Material:	Zinc-Nickel Plated Steel, Electropolished Stainless Steel
Stem Type:	Stainless Steel
Max. Pressure:	
NVN-402...NVN-404:	10,000 PSI @ 200°F
NVN-406...NVN-412:	8,000 PSI @ 200°F
Standard O-Ring:	FKM
Standard Back-up Ring:	PTFE
Orifice Size:	
NVN-402...NVN-404:	0.187"
NVN-406...NVN-412:	0.438"
Flow Coeffecient:	
NVN-402...NVN-404:	0.44
NVN-406...NVN-412:	2.70

Order Details:

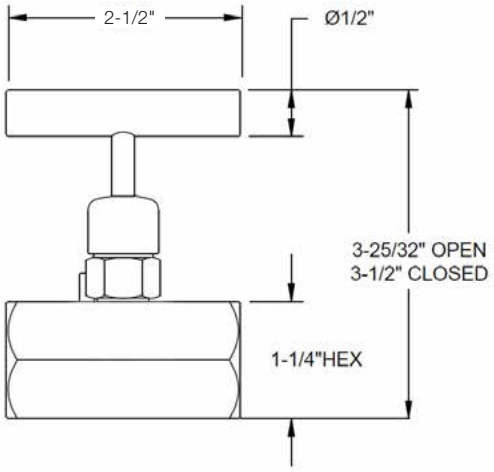
400 Series Hard Seat Needle Valve (Example: **NVN-402 FF C**)

Model	Fitting Size	Fitting Type	Material*
NVN-	**402..** = 1/4" NPT **404..** = 1/2" NPT **406..** = 3/4" NPT **408..** = 1" NPT **410..** = 1¼" NPT **412..** = 1½" NPT	**..FF..** = Female/Female **..MF..** = Male/Female	**..C** = Carbon Steel **..S** = Stainless Steel

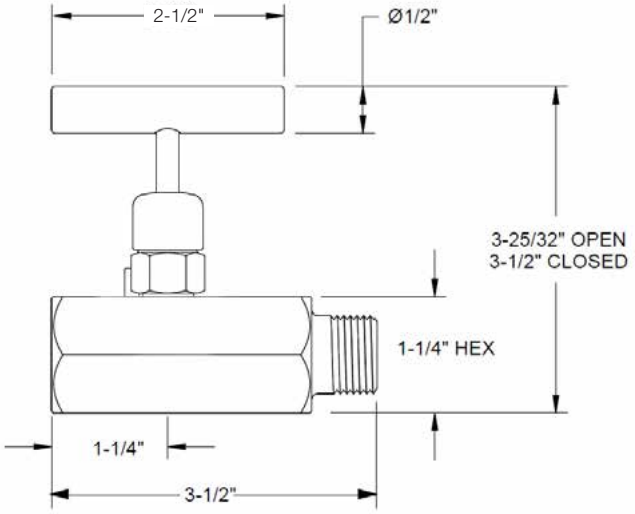
*The handle material will always match the material of the valve

Dimensions 400 Series

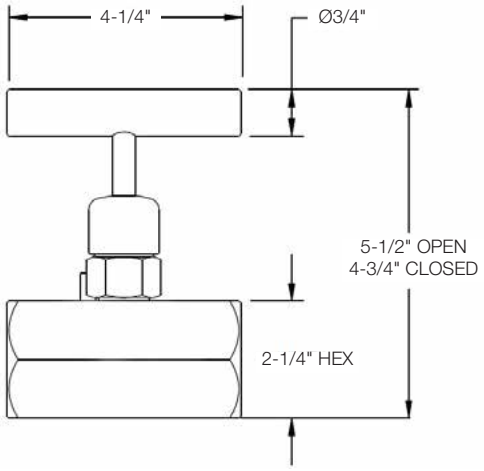
1/4"-1/2" Female - Female



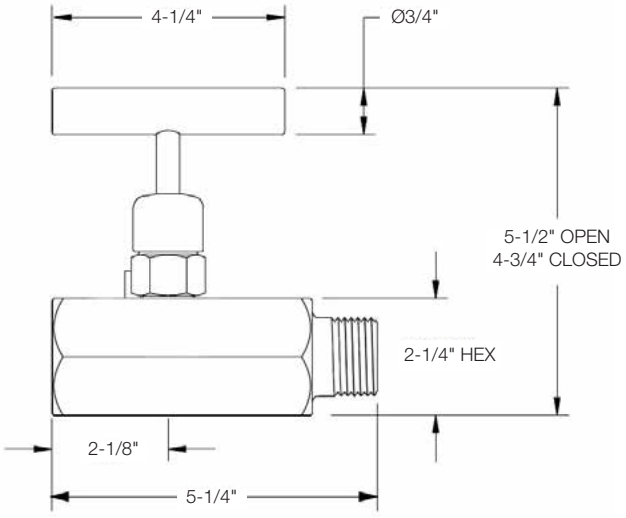
1/4"-1/2" Male - Female



3/4"-1½" Female - Female



3/4"-1½" Male - Female



500 Series Soft Seat Valves

Specifications

Material:	Zinc-Nickel Plated Steel, Electropolished Stainless Steel
Stem Type:	Stainless Steel
Max. Pressure:	6,000 PSI @ 200°F
Standard O-Ring:	FKM
Standard Back-up Ring:	PTFE
Orifice Size:	
NVN-502...NVN-504:	0.187"
NVN-506...NVN-512:	0.438"
Flow Coeffecient:	
NVN-502...NVN-504:	0.76
NVN-506...NVN-512:	4.0

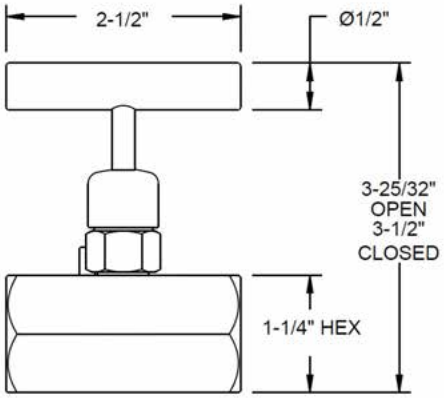
Order Details:
500 Series Soft Seat Needle Valve (Example: **NVN-502 FF C**)

Model	Fitting Size	Fitting Type	Material*
NVN-	**502..** = 1/4" NPT **504..** = 1/2" NPT	**..FF..** = Female/Female **..MF..** = Male/Female	**..C** = Carbon Steel **..S** = Stainless Steel
	508.. = 1" NPT	**..FF..** = Female/Female	

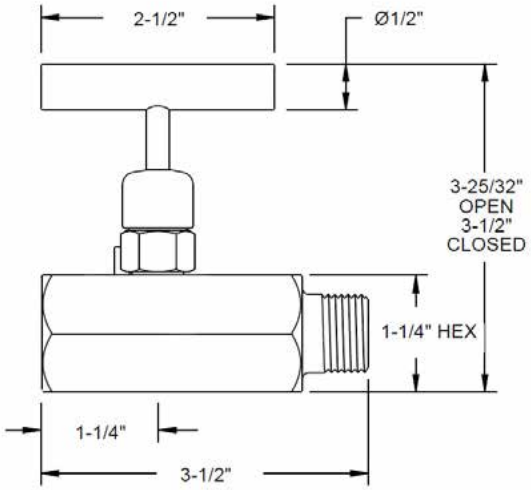
*The handle material will always match the material of the valve

Dimensions 500 Series

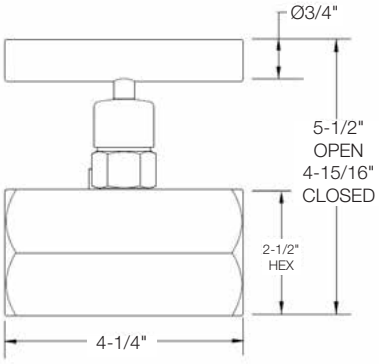
1/4"-1/2" Female - Female



1/4"-1/2" Male - Female



1" Female - Female



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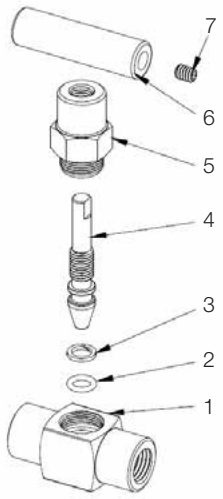
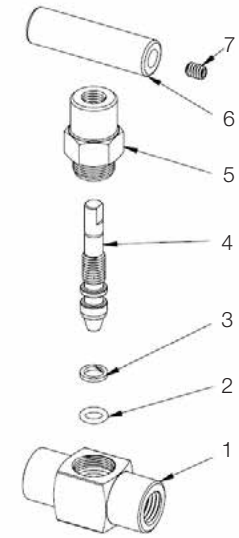
Assembly

100 Series Hard Seat Mini - Valves



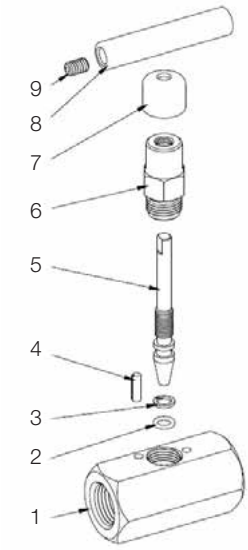
1. Mini Valve Body
2. FKM O-ring
3. PTFE Back-up Ring
4. Mini Valve Stem
5. Mini Valve Bonnet
6. Mini Valve "T" Handle
7. Set Screw

100 Series Soft Tip Mini - Valves



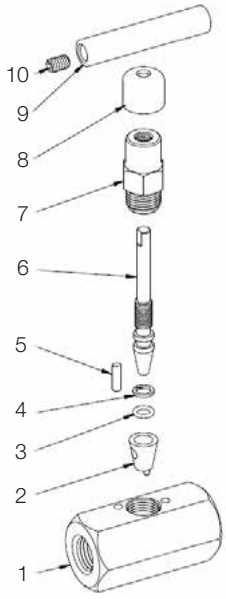
1. Mini Valve Body
2. FKM O-ring
3. PTFE Back-up Ring
4. Soft Tip Stem
5. Mini Valve Bonnet
6. Mini Valve "T" Handle
7. Set Screw

400 Series Hard Seat Valves



1. Valve Body
2. FKM O-ring
3. PTFE Back-up Ring
4. Slotted Spring Pin
5. Valve Stem
6. Valve Bonnet
7. Dust Cap
8. Valve "T" Handle
9. Set Screw

500 Series Soft Seat Valves



1. Valve Body
2. POM Seat
3. FKM O-ring
4. PTFE Back-up Ring
5. Slotted Spring Pin
6. Valve Stem
7. Valve Bonnet
8. Dust Cap
9. Valve "T" Handle
10. Set Screw

Model		Weight
100 Series Hard Seat Mini - Valves		0.5 lbs
100 Series Soft Tip Mini - Valves		0.5 lbs
400 Series Hard Set Valves	Up to ½"	1.3 lbs
	Large Hex, Female - Female	4.5 lbs
	Large Hex, Male - Female	6.0 lbs
500 Series Soft Set Valves	Up to ½"	1.3 lbs