

## 500 SERIES



- 100% helium leak tested to  $1 \times 10^{-4}$  ml/s for guaranteed performance and reliability
- 6,000 psi pressure rating @ 200 °F
- Replaceable Delrin® seat and straight through porting for bidirectional, high capacity flow and easy roddable cleaning
- Blow-out proof stem provides a secondary stem seal in the full open position
- FKM o-ring seal and PTFE back-up ring below the stem threads to protect from corrosion and galling; PTFE packing optional (certain NPT sizes only)
- All stems are 316 stainless steel
- All stem threads are rolled for strength and ease of operation
- One-piece bonnet with a metal-to-metal seal to the valve body below the bonnet threads
- Slotted spring pin to prevent accidental loosening
- Vinyl dust cap for bonnet and stem (non-packing)

### SPECIFICATIONS

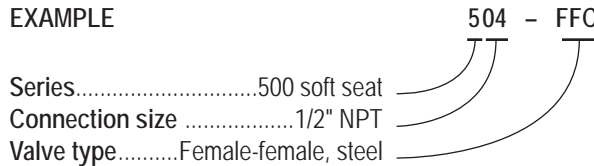
Materials	Zinc-nickel plated steel, electropolished 316 stainless steel
Connections	1/4", 3/8", 1/2", 3/4", 1", 1-1/4" & 1-1/2" NPT Male-female & Female-female configurations
Pressure rating	6,000 psi @ 200 °F
Orifice sizes	1/4" - 1/2" NPT: 0.187" 3/4" - 1-1/2" NPT: 0.438"
Flow coefficient	1/4" - 1/2" NPT: $C_v$ 0.76 3/4" - 1-1/2" NPT: $C_v$ 4.0
Stem seal & type	All 316 stainless steel stems with FKM o-ring and PTFE back-up ring below the threads, PTFE packing optional for 1/4", 3/8" & 1/2" NPT only
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	5 500 Series, soft seat			
CONNECTION SIZES	02 1/4" NPT 03 3/8" NPT	04 1/2" NPT 06 3/4" NPT	08 1" NPT 10 1-1/4" NPT	12 1-1/2" NPT 0402 1/2" NPT male - 1/4" NPT female
VALVE TYPES	MFC Male-Female, Steel FFC Female-Female, Steel		MFS Male-Female, Stainless Steel FFS Female-Female, Stainless Steel	

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: 504-FFC-HL5)

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

ORDERING INFORMATION - Additional Options				
SOFT SEATS	PK1 PEEK		KF1 PCTFE	
PACKINGS†	P1 PTFE			
STEM TIPS	T1 Non-rotating (316 stainless)			
O-RINGS*	EM1 EPDM		KZ1 FFKM (Kalrez® 3018 or equivalent)	NB1 NBR
PANEL MOUNTINGS	PM1 Panel mount (1 nut)		PM2 Panel mount (2 nuts)	
HANDLES	HL4 1-3/8" Phenolic		HL5 1-3/4" Phenolic	HL9 2-3/8" Phenolic**

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

† For 1/4", 3/8" and 1/2" NPT only.

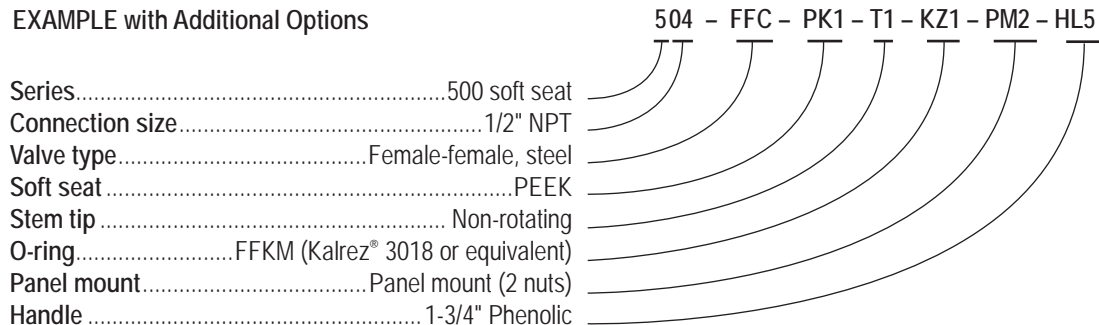
\* Other o-ring materials available on request.

\*\* For 3/4" NPT to 1-1/2" NPT only.

Please note that the standard o-ring in all the NOSHOK valves is FKM and the standard handles are "T" handles (HL2).

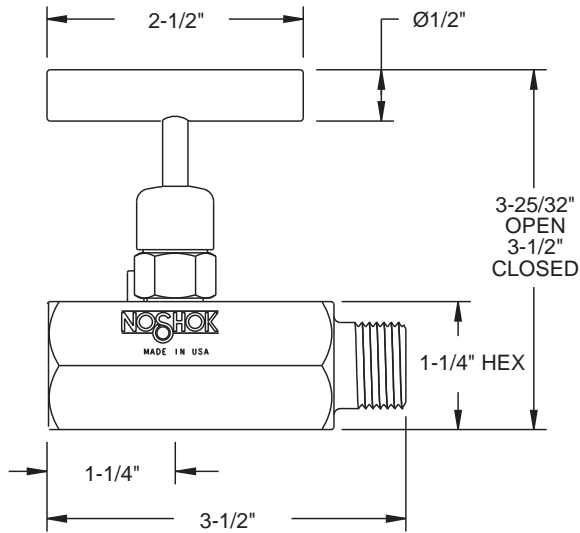
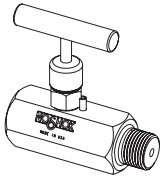
The handle material will always match the material of the valve, unless otherwise specified. For example, the "T" handle (HL2) on the 504-FFC will be steel. When only the standard configuration is needed, no additional designations are necessary. Please consult the factory for special application requests.

**EXAMPLE with Additional Options**

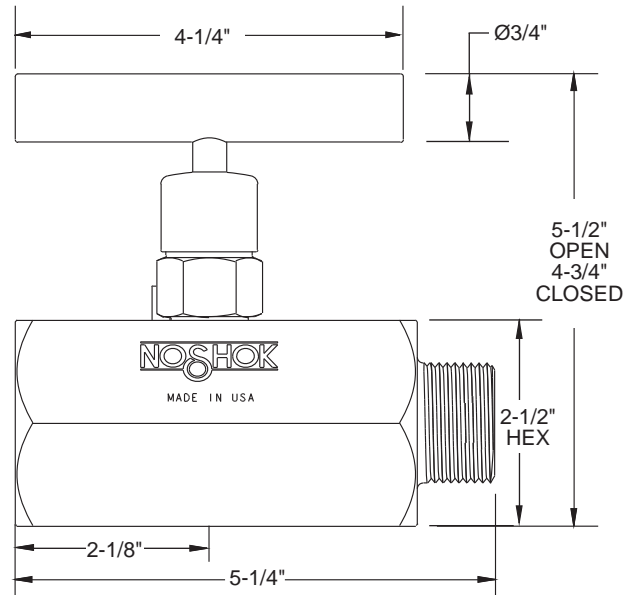
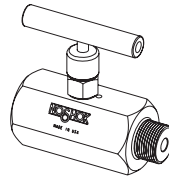


# Dimensions

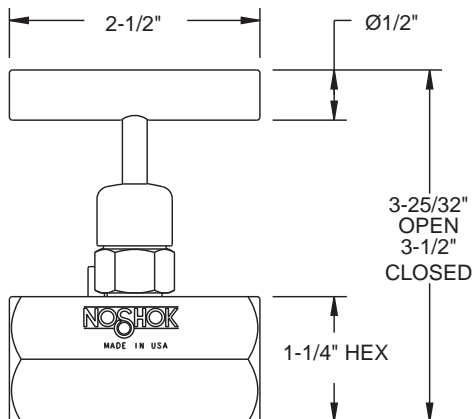
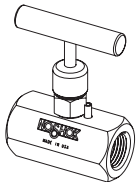
## 1/4" - 1/2" Male-Female



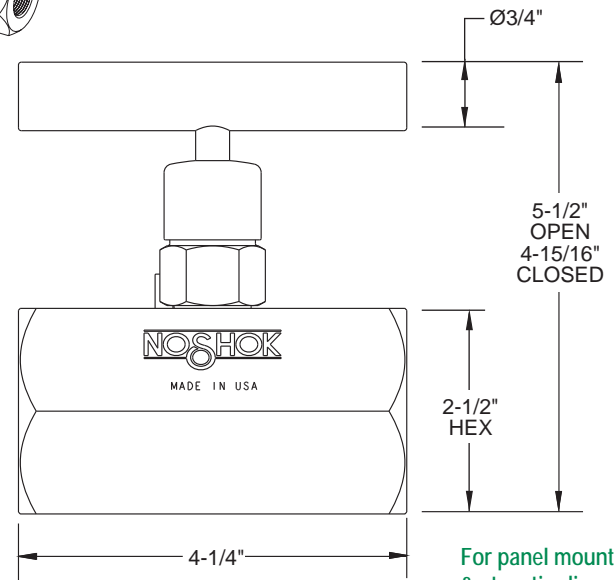
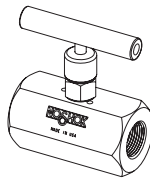
## 3/4" - 1-1/2" Male-Female



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



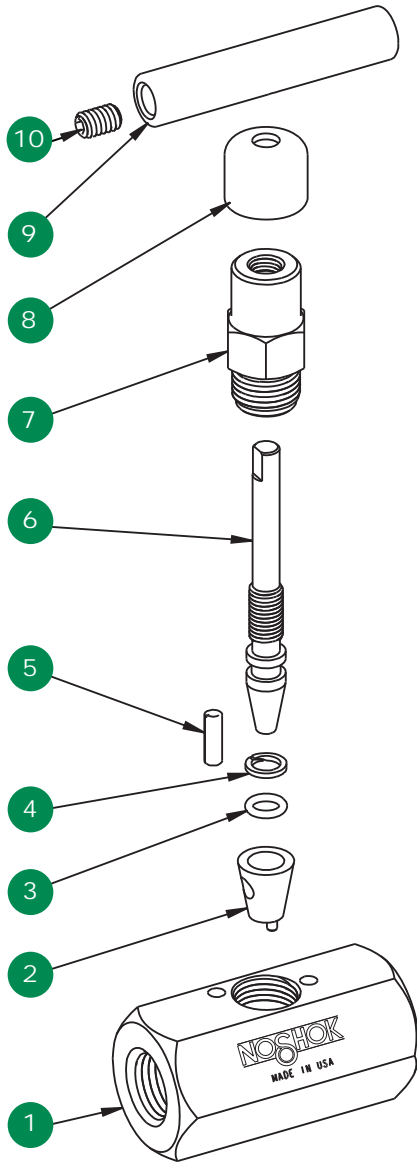
## 3/4" - 1-1/2" Female-Female



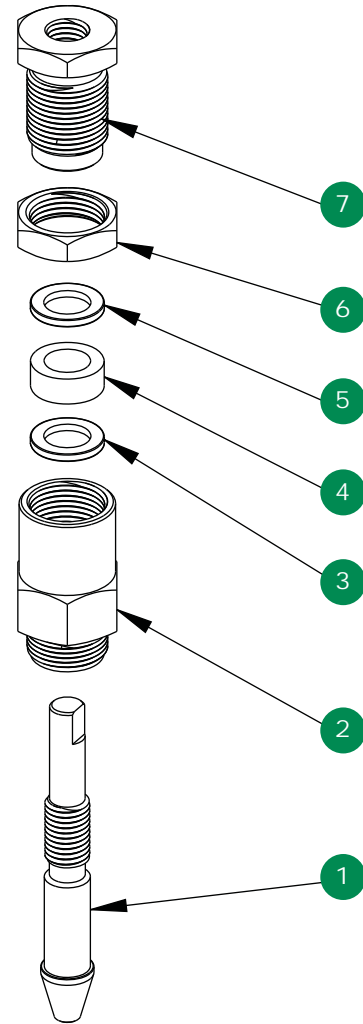
For panel mount, packing, & stem tip dimensions, see pgs. 64-67.

Standard, Soft Seat

Option With Packing



- 1 Valve body
- 2 Delrin® 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



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