

# GTB Series Needle Valves

Bar stock, hard seat  
6,000psi



## ► Overview

The GTB series bar stock construction needle valves are intended to provide economical and long service life. Valves are available in 316 stainless steel and carbon steel with nickel zinc plate. GTB series are produced in 1/4", 1/2", and 3/4" NPT with male-female and female-female threaded connections. The GTB packing consists of a Viton® O-ring and Teflon® back-up ring.



## ► Features

- ▶ All bonnets are assembled with a locking pin to prevent accidental removal while in service.
- ▶ The stem threads are rolled and lubricated to prevent galling and reduce operating torque.
- ▶ Stem packing below the threads prevents lubricant washout and ensures no process contamination. This ensures smooth valve operation and long service life.
- ▶ Body to bonnet seal is metal to metal in constant compression, creating a reliable seal point to eliminate possible tensile breakage of bonnet and isolate the bonnet threads from process fluid corrosion.
- ▶ Dust caps are fitted to contain stem lubricant and prevent the ingress of contaminants.
- ▶ Low torque operating T-bar handle
- ▶ All valves are hydrostatically tested to 1.5 times maximum working pressure (9000psi) prior to shipment.
- ▶ The valves are Mill Test traceable.
- ▶ 316SS material traceable to NACE MR0175

**AB CRN# OC08236.2**  
**BC CRN# OC08236.21**  
**SK CRN# OC08236.23**

## ► How to order

Part Number	Connections		Material	Orifice Size
	Inlet	Outlet		
GTB12MFC	1/2" MNPT	1/2" FNPT	A108 carbon steel	4.8 mm
GTB12FFC	1/2" FNPT	1/2" FNPT	A108 carbon steel	4.8 mm
GTB3412MFC	3/4" MNPT	1/2" FNPT	A108 carbon steel	4.8 mm
GTB12MFSS	1/2" MNPT	1/2" FNPT	316SS	4.8 mm
GTB12FFSS	1/2" FNPT	1/2" FNPT	316SS	4.8 mm
GTB3412MFSS	3/4" MNPT	1/2" FNPT	316SS	4.8 mm
GTB14MFC	1/4" MNPT	1/4" FNPT	A108 carbon steel	3.2 mm
GTB14FFC	1/4" FNPT	1/4" FNPT	A108 carbon steel	3.2 mm
GTB14MFSS	1/4" MNPT	1/4" FNPT	316SS	3.2 mm
GTB14FFSS	1/4" FNPT	1/4" FNPT	316SS	3.2 mm

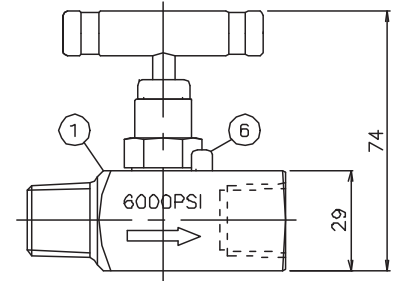
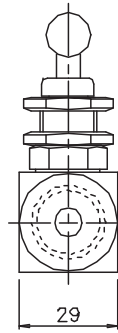
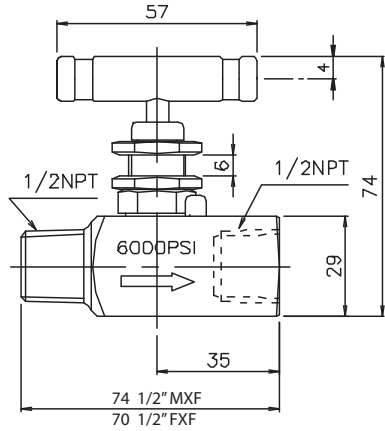
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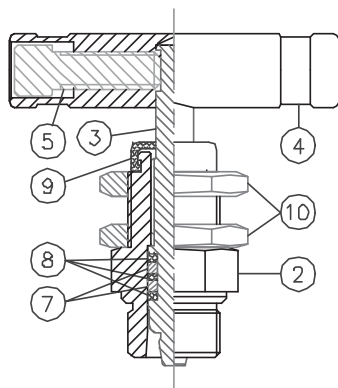
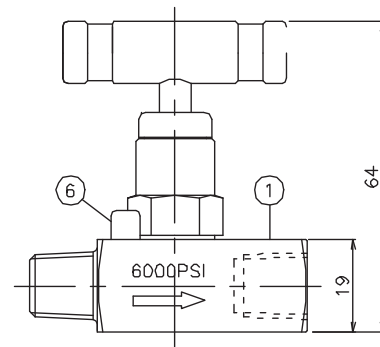
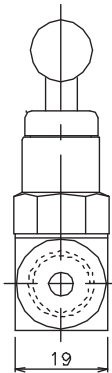
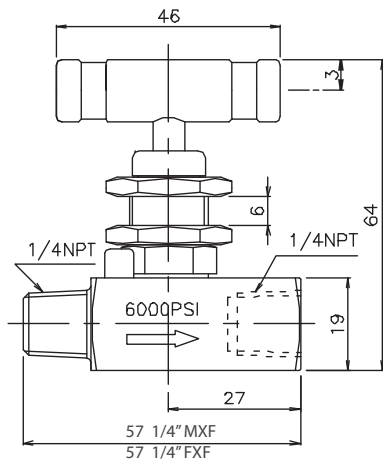


## ► Dimensions (Drawings are not to scale. Dimensions in millimeters.)

1/2" NPT



1/4" NPT



No.	Description	316SS	A108 carbon steel
1	Body	S316	A108 carbon steel
2	Bonnet	S316	A108 carbon steel
3	Stem	S316	S316
4	Handle	S303	A108 carbon steel
5	Fixing Screw	S302	A108 carbon steel
6	Lock Pin	S303	A108 carbon steel
7	O-ring	Viton®	Viton®
8	Back-up ring	Teflon®	Teflon®
9	Dust cap	NBR	NBR
10	Mountable Nuts*	S316	A108 carbon steel

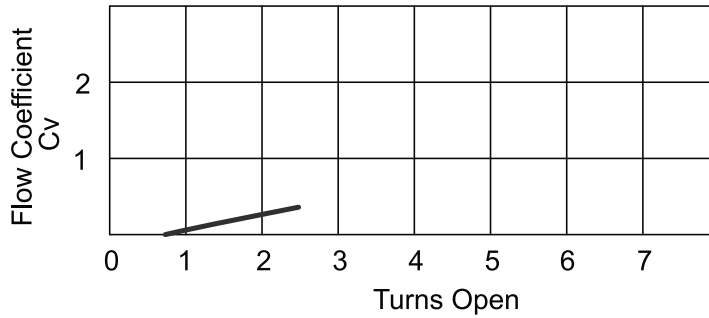
\*Optional

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## ► Flow Characteristics



## ► Pressure vs Temperature

