

### General Description

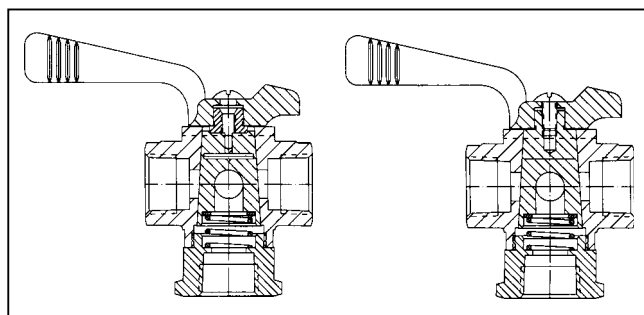
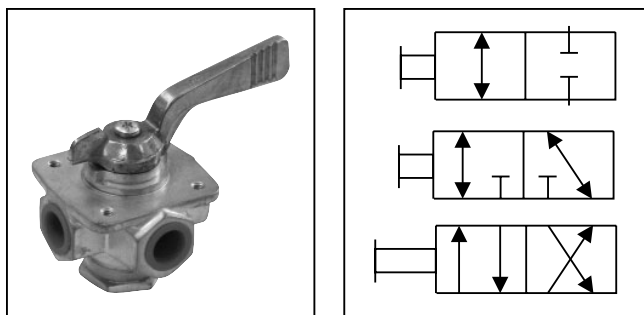
Series 300 and 700 are 2, 3, and 4-way plug valves which can handle a variety of media. Series 300 contains a self-lubricating PTFE plug. Series 700 features a metal plug which requires lubrication. The different valve configurations allow for shut off or the selection of a particular flow pattern.

### Features

- PTFE plug design requires no lubrication and is ideal for sampling applications.
- Wide selection of flow patterns available.
- Metal plug available with a wide range of lubricants for most applications.

### Specifications

<b>Service App.</b>	Liquid and air
<b>Pressure Range</b>	Liquid: 6.2 Bar (90 PSI) Air: 3.5 Bar (50 PSI)
<b>Internal Leakage</b>	Liquid: Zero Air: 1 bubble in 4 seconds at 3.5 Bar (50 PSI)
<b>Sizes</b>	See chart
<b>Ports</b>	NPT Pipe threads FLD Flared Tube Connection SAE 37°
<b>Mounting</b>	Flanged
<b>Material</b>	Series 300: Body Brass, aluminum alloy, stainless steel Plug Stainless steel impregnated PTFE Spring Stainless steel Handle Die cast aluminum alloy Series 700: Body Brass with brass plug; aluminum alloy with stainless steel plug; stainless steel with stainless steel plug Spring Stainless Steel Handle Die cast aluminum
<b>Temperature Range</b>	Series 300: Non-operating: -40°C to +121°C (-40°F to +250°F) Operating: -18°C to 71°C (0°F to +160°F) Series 700: 0°C to +71°C (32°F to +160°F)



### CV Factor

Size and Dash No.		1/8 4	1/4 6	3/8 8	1/2 10	3/4 12
Max.	Alum. Alloy	.13	.25	.50	.62	.75
Weight	Brass	.25	.43	1.00	1.50	1.75
	Stainless Steel	.37	.75	1.25	1.62	1.87
CV	Inline	1.00	2.00	5.00	9.00	16.00
Factor	Angle	.60	1.00	2.70	5.00	8.60

**NOTE:**  
Each plug and body assembly is individually ground and lapped for perfect fit. Plugs and bodies are not replaceable or interchangeable in the field. Most plug valves, other than 2-way, have port interflow when turning handle. If interflow is a problem, consult our technical department.

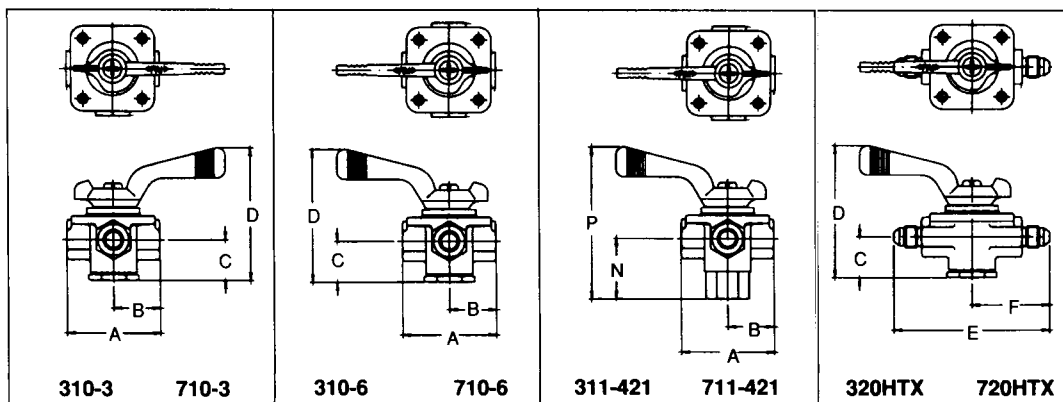
**Ordering Information**

**310-3**

Catalog Number	Type	Number of Ports	Type Porting			Sizes and Materials	Handle Turns	Flow Patterns
			A	B	C			
310-3 or 710-3	Flanged Inline	3	NPT	-	-	1/4B	90°	
310-6 or 710-6	Flanged Inline	4	NPT	-	-	1/4B	90°	
311-421 or 711-421	Flanged Inline Plus Bottom Port	4 + Bottom	NPT	-	NPT	1/4B	360°	
313-23	Flanged Inline Plus Bottom Port	2 + Bottom	NPT	-	NPT	3/4B	90°	
320HTX	Flanged Inline	2	FLD	FLD	-	8SS	90°	

<b>-1/4</b>	<b>B</b>
Size	Materials
See Available Sizes from Chart	<b>B</b> Brass
	<b>D</b> Aluminum Alloy
	<b>SS</b> Stainless Steel

**Dimensions**



All Dimensions are in Inches															
Tube Size	Pipe Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P
4	1/8"	1-7/16	23/32	47/64	2-9/32	2-5/8	1-5/16	1-13/16	.884	.687	6-32	3/16	11/32	1-1/16	2-39/64
6	1/4"	1-7/8	15/16	13/16	2-41/64	3-1/8	1-9/16	2-1/4	1.193	.937	10-32	3/16	7/16	1-13/64	3-1/32
8	3/8"	2-1/4	1-1/8	1-3/64	3-3/16	3-5/8	1-13/16	2-11/16	1.458	1.187	10-32	9/32	9/16	1-15/32	3-39/64
10	1/2"	2-1/2	1-1/4	1-9/64	3-15/32	4-1/4	2-1/8	3-1/8	1.724	1.406	1/4-28	1/4	5/8	1-23/32	4-3/64
12	3/4"	2-15/16	1-15/32	1-21/64	3-31/32	4-9/16	2-9/32	3-9/16	1.856	1.625	1/4-28	1/4	3/4	1-31/32	4-39/64

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**Service Note:** Valves taken from stock, or valves not used for some time, may be hard to turn. This condition is due to drying out of the lubricant. The plug may be loosened by squeezing the valve carefully in a vise, pressing against the center screw in the handle. Turning the handle several times will free-up the plug. If necessary, disassemble the valve, wash off all the old lubricant, and re-lubricate the valve using only a small quantity of the proper lubricant.

**CAUTION – DO NOT USE ANY OF THE ABOVE IN LIQUID OXYGEN SYSTEMS.**