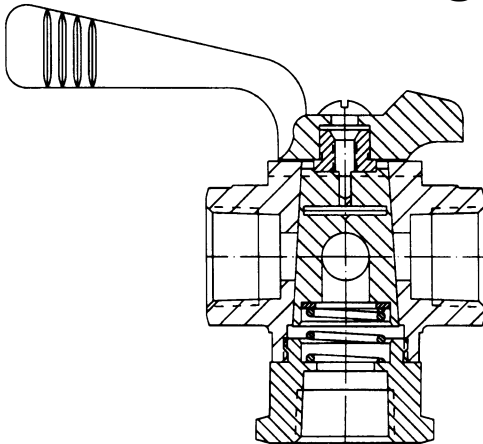


PTFE Coated Plug



Catalog Series 300 Features

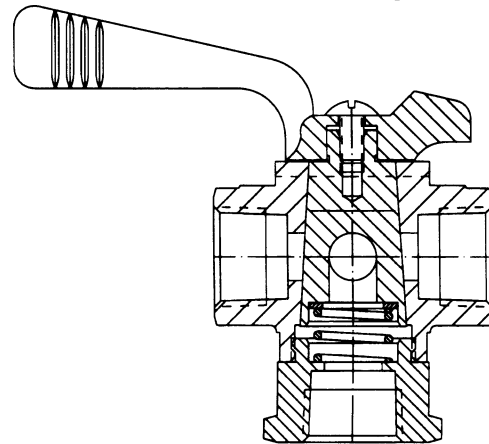
- PTFE plug design requires no lubrication and is ideal for sampling applications.
- Wide selection of flow patterns available.
- Metal plug available with a wide range of lubricants for most applications.

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.

Metal Plug



Catalog Series 700 Specifications

Service Applications: Liquid and air.

Lubricant:

300 Series, none required.
700 Series, see chart, page 4-2.

Pressure Range:

Liquid: 90 PSI maximum
Air: 50 PSI maximum

Internal Leakage:

Liquid: Zero.
Air: 1 bubble in 4 seconds at 50 PSI.

Temperature Range:

300 Series: Non-operating, -40° to 250° F.
Operating, 0° to 160° F.
700 Series: 32° to 160° F.

Materials: (300 Series)

Body: Brass, aluminum alloy, stainless steel.
Plug: Stainless steel impregnated PTFE.
Spring: Stainless steel.
Handle: Die cast aluminum alloy.

Materials: (700 Series)

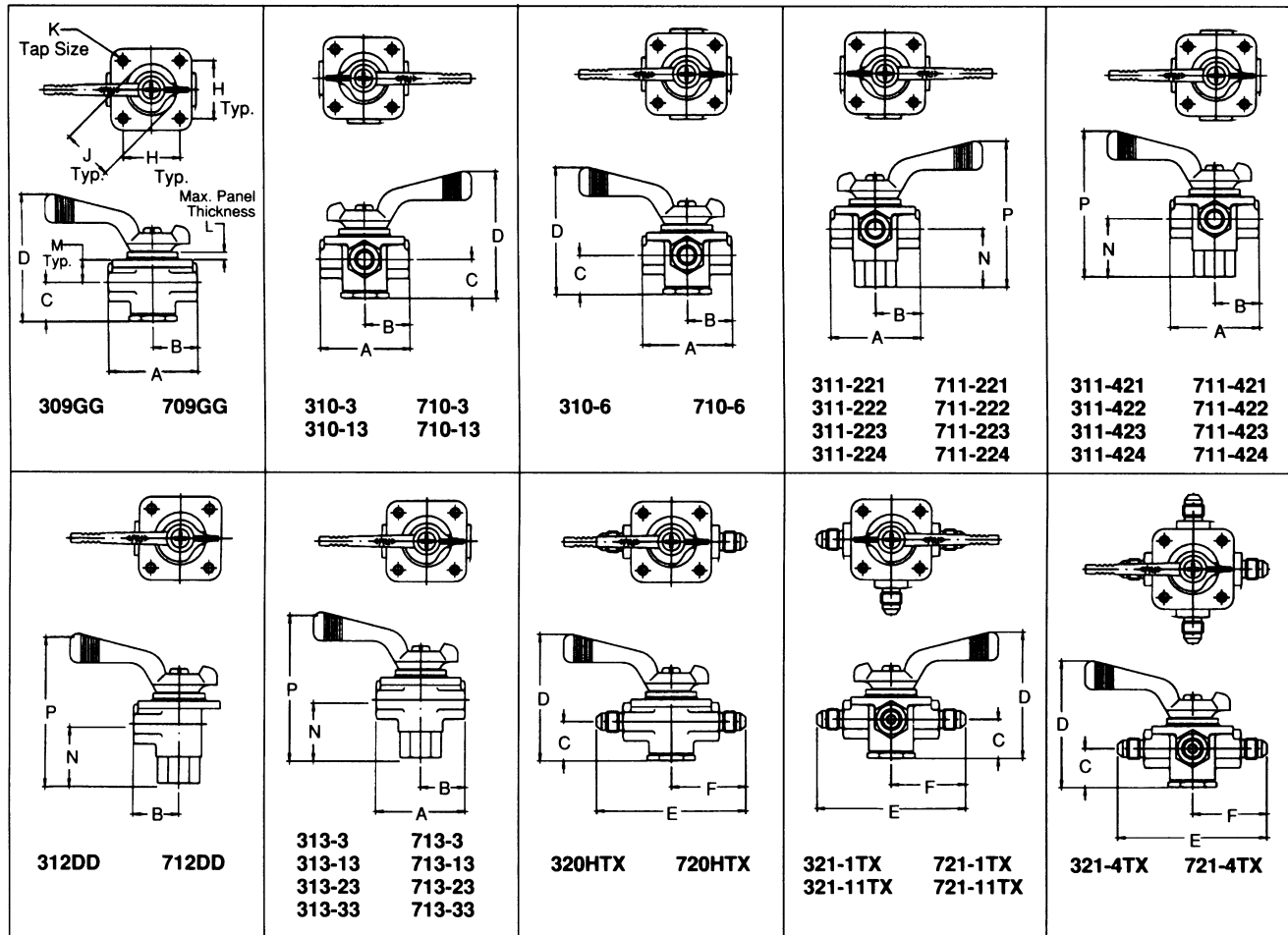
Body: Brass with brass plug; aluminum alloy with stainless steel plug; stainless steel with stainless steel plug.
Spring: Stainless steel.
Handle: Die cast aluminum.

Size: 1/8, 1/4, 3/8, 1/2, 3/4, 4, 6, 8, 10, 12.

Type Ports: NPT Pipe Threads, FLD Flared Tube Connection SAE 37°.

Mounting: Flanged.

C



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

Plug Valve Series 700 Lubricants

Lub No.

- #1 **Service 1 Gasoline and Oil.** High octane fuel, gasoline, petroleum and hydraulic oils.
- #1 **Service 2 Oxygen (Gaseous) Low Pressure.** Do not use in liquid oxygen service.
- #1 **Service 3 Water, Air, Vacuum.** Completely waterproof. Use Lubricant 7 for drinking (potable) water.
- #1 **Service 4 Alcohol Service.** Alcohol, water, and anti-freeze solutions.
- #1 **Service 5 Low Temp, Compressor Air and Vacuum +10° F. to +200° F.**
- #6 **Service 6 Acid and Alkali.** General purpose-acid, alkali, water, air and natural gas.
- #7 **Service 7 Food and Water.** Liquid food and potable water.

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.

Interpretation of Valve Number

Options	310-3 Catalog Number	Type	Number of Ports	Type Porting			Sizes	Handle Turns	Flow Patterns	-1/8 Size	B Materials	Lub# 700 Series Only
				A	B	C						
A Nuts and Sleeves	309GG or 709GG	flanged inline	2	NPT	NPT	—	1/8 to 3/4	90°		1/8	B Brass	1
	310-3 or 710-3	flanged inline	3	NPT	—	—	1/8 to 3/4	90°		1/4		
B Wirelock Hole in Handle	310-6 or 710-6	flanged inline	4	NPT	—	—	1/8 to 3/4	90°		3/8	D Aluminum Alloy	6
	310-13 or 710-13	flanged inline	3	NPT	—	—	1/8 to 3/4	90°		1/2		
C Handle Stops Removed	311-221 or 711-221	flanged inline plus bottom port	3 + bottom	NPT	—	NPT	1/8 to 1/2	360°		3/4	SS Stainless Steel	7
	311-222 or 711-222	flanged inline plus bottom port	3 + bottom	NPT	—	NPT	1/8 to 1/2	90°		4		
D Square Milled Valve Stem	311-223 or 711-223	flanged inline plus bottom port	3 + bottom	NPT	—	NPT	1/8 to 1/2	90°		6		
	311-224 or 711-224	flanged inline plus bottom port	3 + bottom	NPT	—	NPT	1/8 to 1/2	90°		8		
E Valve Less Handle	311-421 or 711-421	flanged inline plus bottom port	4 + bottom	NPT	—	NPT	1/8 to 1/2	360°		10		
	311-422 or 711-422	flanged inline plus bottom port	4 + bottom	NPT	—	NPT	1/8 to 1/2	360°		12		
F Remove Flange	311-423 or 711-423	flanged inline plus bottom port	4 + bottom	NPT	—	NPT	1/8 to 1/2	360°				
	311-424 or 711-424	flanged inline plus bottom port	4 + bottom	NPT	—	NPT	1/8 to 1/2	360°				
	312DD or 712DD	flanged angle	2	NPT	—	NPT	1/8 to 3/4	90°				
	313-3 or 713-3	flanged inline plus bottom port	2 + bottom	NPT	—	NPT	1/8 to 1/2	90°				
	313-13 or 713-13	flanged inline plus bottom port	2 + bottom	NPT	—	NPT	1/8 to 1/2	90°				
	313-23 or 713-23	flanged inline plus bottom port	2 + bottom	NPT	—	NPT	1/8 to 1/2	90°				
	313-33 or 713-33	flanged inline plus bottom port	2 + bottom	NPT	—	NPT	1/8 to 1/2	360°				
	320HTX or 720HTX	flanged inline	2	FLD	FLD	—	4 to 8	90°				
	321-1TX or 721-1TX	flanged inline	3	FLD	—	—	4 to 8	90°				
	321-4TX or 721-4TX	flanged inline	4	FLD	—	—	4 to 8	90°				
	321-11TX or 721-11TX	flanged inline	3	FLD	—	—	4 to 8	90°				