

## TY-FLO® HP Series Ball Valves



# TY-FLO® HP Series Ball Valves

## Design/Features

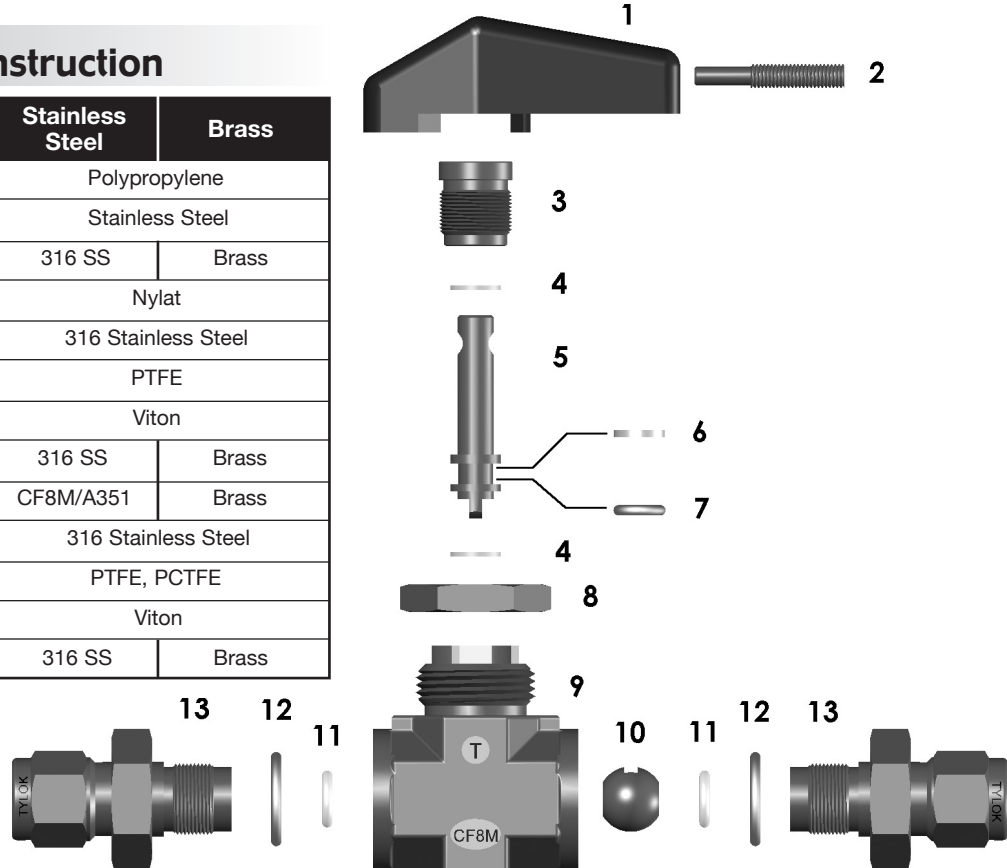
- Reliable, simple operation for on-off service
- Fast acting, one quarter turn fully opens or closes the valve
- Maximum performance, straight through flow for minimum turbulence and pressure drop
- Positive leak tight shut off, even with fluctuating pressures
- Panel mounting capabilities standard
- Bi-Directional Flow
- Handle direction indicates position of valve and flow direction
- Micro finished ball provides positive seal
- Free floating ball design compensates for seat wear
- Available in CBC-Lok®, CS-Lok®, or Tylok Standard tube fittings and NPT pipe end connections
- Available in 316 Stainless Steel and Brass construction

SPECIFICATIONS	Stainless Steel		Brass	
	PTFE	PCTFE	PTFE	PCTFE
Pressure Rating*	1500 psig (103 bar)	5000 psig (344 bar)	1500 psig (103 bar)	3000 psig (206 bar)
Temperature Rating	-15 to 400° F (-26 to 204° C)	-15 to 300° F (-26 to 149° C)	-15 to 400° F (-26 to 204° C)	-15 to 300° F (-26 to 149° C)

\*For tubing and pipe fitting working pressures see CBC-Lok, CS-Lok or Tylok Standard catalogs.

## Materials of Construction

#	Component	Stainless Steel	Brass
1	Handle	Polypropylene	
2	Screw	Stainless Steel	
3	Gland Nut	316 SS	Brass
4	Stem Washer	Nylat	
5	Stem	316 Stainless Steel	
6	Stem Back-Up Ring	PTFE	
7	Stem O-Ring	Viton	
8	Panel Lock Nut	316 SS	Brass
9	Body	CF8M/A351	Brass
10	Ball	316 Stainless Steel	
11	Seat	PTFE, PCTFE	
12	End Connector O-Ring	Viton	
13	End Connector	316 SS	Brass

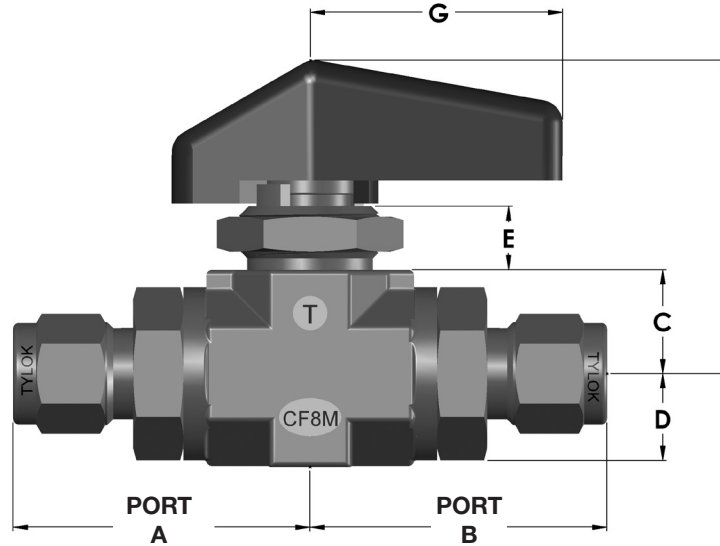


# TY-FLO® HP Series Ball Valves

Part Number Shown:  
SS-6-DTT-6-6-K

CBC-Lok® double ferrule tube ends are completely interchangeable with Swagelok® and Parker A-Lok® tube ends.

CS-Lok® single ferrule tube ends are completely interchangeable with Parker CPI® tube ends.



## Valve Dimension Table

	BASIC PART NUMBER	CONNECTION		ORIFICE INCH (MM)	DIMENSIONS (INCHES)																	
		PORT A	PORT B		A	B	C	D	E	F	G	PANEL HOLE										
Series 4	4-DTT-2-2*	1/8" CBC-Lok		0.188 (4.8)	1.54	1.54	0.59	0.47	0.38	1.50	1.37	0.75										
	4-STT-2-2*	1/8" CS-Lok																				
	4-DTT-4-4	1/4" CBC-Lok																				
	4-STT-4-4	1/4" CS-Lok																				
	4-1FF-2-2	1/8" Female NPT																				
	4-1FF-4-4	1/4" Female NPT																				
	4-1MM-2-2	1/8" Male NPT																				
4-1MM-4-4	1/4" Male NPT		1.21	1.21	1.46	1.46	1.30	1.30	1.49	1.49												
Series 6	6-DTT-4-4*	1/4" CBC-Lok		0.250 (6.4)	1.65	1.65	0.56	0.58	0.25	1.69	1.37	0.75										
	6-STT-4-4*	1/4" CS-Lok																				
	6-DTT-6-6	3/8" CBC-Lok																				
	6-STT-6-6	3/8" CS-Lok																				
	6-DTT-8-8	1/2" CBC-Lok																				
	6-STT-8-8	1/2" CS-Lok																				
	6-1FF-4-4	1/4" Female NPT																				
	6-1FF-6-6	3/8" Female NPT																				
	6-1FF-8-8	1/2" Female NPT																				
	6-1MM-4-4	1/4" Male NPT																				
	6-1MM-6-6	3/8" Male NPT																				
	6-1MM-8-8	1/2" Male NPT																				
	6-1MM-4-4	1/4" Male NPT			1.51	1.51							1.70	1.70	1.51	1.51	1.70	1.70				
Series 8	8-DTT-6-6*	3/8" CBC-Lok		0.375 (9.5)	1.85	1.85	0.81	0.65	0.66	2.00	1.56	0.88										
	8-STT-6-6*	3/8" CS-Lok																				
	8-DTT-8-8	1/2" CBC-Lok																				
	8-STT-8-8	1/2" CS-Lok																				
	8-DTT-12-12	3/4" CBC-Lok																				
	8-STT-12-12	3/4" CS-Lok																				
	8-1FF-6-6	3/8" Female NPT																				
	8-1FF-8-8	1/2" Female NPT																				
	8-1FF-12-12	3/4" Female NPT																				
	8-1MM-6-6	3/8" Male NPT																				
	8-1MM-8-8	1/2" Male NPT																				
	8-1MM-4-4	1/4" Male NPT			1.97	1.97							1.61	1.61	1.78	1.78	1.90	1.90	1.65	1.65	1.84	1.84
	8-1MM-6-6	3/8" Male NPT			1.61	1.61							1.78	1.78	1.90	1.90	1.65	1.65	1.84	1.84		
8-1MM-8-8	1/2" Male NPT		1.78	1.78	1.90	1.90	1.65	1.65	1.84	1.84	0.72	0.65										

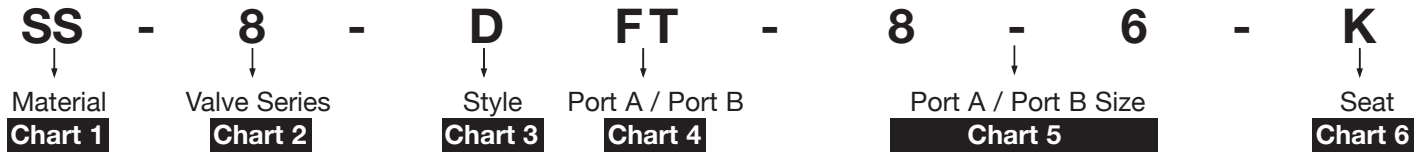
Dimensions shown with CBC-Lok® and CS-Lok® nuts finger-tight. Dimensions shown are for reference only, subject to change.

\* Reduced Port

# How to Order TY-FLO® HP Series Ball Valves

Ty-Flo® HP Series Ball Valves are ordered as listed in this catalog by inserting the material code before the part number. Ty-Flo® HP Series Ball Valves can be identified through the part number as to material, valve series, style, valve configurations, port size, and seat material. The part number describes a complete ball valve assembly. **Special configurations available upon request.**

Example: A 5000 PSI Stainless Steel ball valve, 0.375" orifice, with a 1/2" female NPT end connection for port A and a 3/8" CBC-Lok® end connection for port B and PCTFE seats, is designated as follows.



## Chart 1 - Material

SS	Stainless Steel
B	Brass

## Chart 2 - Valve Series

4	0.188" Orifice
6	0.250" Orifice
8	0.375" Orifice

## Chart 3 - Style

D	CBC-Lok
S	CS-Lok
1	Tylok Standard

## Chart 4 - Valve Configuration

Type	Port A	Port B
TT	Tube	Tube
MM*	Male NPT	Male NPT
FF*	Female NPT	Female NPT
MF*	Male NPT	Female NPT
FM*	Female NPT	Male NPT
TM	Tube	Male NPT
MT	Male NPT	Tube
TF	Tube	Female NPT
FT	Female NPT	Tube

\*Use Style 1 from chart 3 for this type of configuration.

Example: B-4-DTT-4-4-T

Designates a 1500 PSI Brass ball valve, 0.188" orifice, with 1/4" CBC-Lok end connections and PTFE seats.

Example: SS-6-1FF-6-4-K

Designates a 5000 PSI Stainless Steel ball valve, 0.250" orifice, with a 3/8" female NPT end connection for port A and a 1/4" female NPT end connection for port B and PCTFE seats.

## Chart 5 - Port Size

Designator	Tube OD (Inches)	Pipe Thread (NPT)
2	1/8"	1/8-27
4	1/4"	1/4-18
6	3/8"	3/8-18
8	1/2"	1/2-14
12	3/4"	3/4-14

See dimension chart for available sizes.

## Chart 6 - Seat

T	PTFE
K	PCTFE

## Options

### Handles

Assembled standard with Black handle. For other colors add the designator as a suffix to the ordering number.

Example: SS-6-DTT-6-6-K-BL

Handle Color	Designator
RED	-RD
BLUE	-BL
GREEN	-GR
ORANGE	-OG
YELLOW	-YW

### Lock-Out Device

A lock-out device allows the user to lock the valve in either the fully opened or fully closed position.

Lock-Out devices are available factory installed only.

Add the suffix -LD to the ordering number.

Example: SS-6-DTT-6-6-K-LD



1061 East 260th Street • Euclid, Ohio 44132  
 Tel: (216) 261-7310 • 1-800-321-0466 • Fax: (216) 261-7317  
 info@tylok.com • www.tylok.com