# High Pressure Ball Valves





## Valve Options

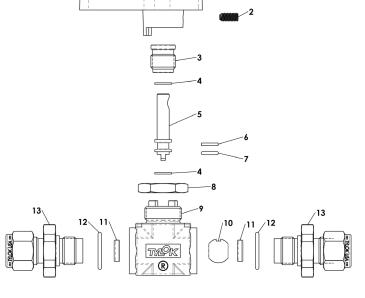
- Reliable, simple, operation for on-off service
- Fast acting, one quarter turn fully opens or closes the valve
- Maximum performance, straight through flow for minimum turbulence and pressure drop
- Positive leak tight shut off, even with fluctuating pressures.
- · Panel mounting capabilities standard

- 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

Specifications	Stainless Steel				
Орсонюамона	TFE	KEL-F			
Pressure Rating	1500 psig (103 bar)	5000 psig (344 bar)			
Temperature Rating	-15 to 400 °F (-26 to 204 °C)	-15 to 300 °F (-26 to 149 °C)			

<sup>\*</sup> For tubing and pipe working pressures see CBC-Lok® / CS-Lok® section.

#	Components	Stainless Steel	Brass				
1	Handle	Nylon with Brass Insert					
2	Screw	Stainless Steel					
3	Gland Nut	316 SS	Brass				
4	Stem Washer	Ny	/lat				
5	Stem	316 Stair	nless Steel				
6	Stem Back-up Ring	TFE					
7	Stem O-Ring	Fluoroca	rbon FKM				
8	Panel Lock Nut	316 SS	Brass				
9	Body	316 SS	Brass				
10	Ball	316 Stainless Steel					
11	Seat	TFE, KELF-F					
12	End Connector O-Ring	g Fluorocarbon FKM					
13	End Connector	316 SS Brass					

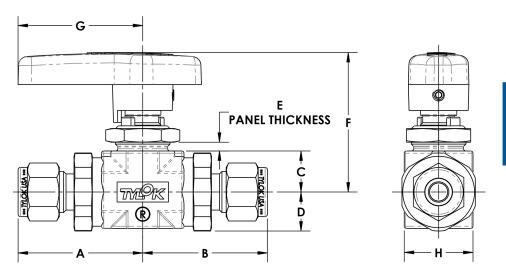


#### Part Number Shown:

#### SS-6-DTT-6-6-K

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

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



## Valve Dimension Chart

	Basic Part	Connection	Orifice	Dimensions (Inches)					sions (	Inches	5)			
	Number	Port A Port B	Inch (mm)	Α	В	C	D	Е	F	G	Н	Panel Hole	Panel Nut Hex	
	4-DTT-2-2*	1/8" CBC-Lok®		1.54	1.54									
4	4-STT-2-2*	1/8" CS-Lok®	1	1.54	1.54									
	4-DTT-4-4	1/4" CBC-Lok®	1	4.00	4.00	1								
SERIES	4-STT-4-4	1/4" CS-Lok®	1	1.63	1.63	0 50	0.47	1 /0	1 00	4 70	0.00	0.75	7/8	
谟	4-1FF-2-2	1/8" Female NPT	0.188 (4.8)	1.21	1.21	0.56	0.47	1/8	1.89	1./U	0.88	0.75	//8	
נט	4-1FF-4-4	1/4" Female NPT	0.100 (4.0)	1.46	1.46	1								
	4-1MM-2-2	1/8" Male NPT	1	1.30	1.30	1								
	4-1MM-4-4	1/4" Male NPT		1.49	1.49									
	6-DTT-4-4*	1/4" CBC-Lok®	7	1.65	1.65									
	6-STT-4-4*	1/4" CS-Lok®	1	1.00	1.00									
	6-DTT-6-6	3/8" CBC-Lok®		1.71	1.71	1								
	6-STT-6-6	3/8" CS-Lok®	1	1.71	/1   1./1	1.71   1.71								
9 9	6-DTT-8-8	1/2" CBC-Lok®		1.83	1.83									
SERIES	6-STT-8-8	1/2" CS-Lok®		1.00	1.00	0.56	0.54	5 / 3 O	1 01	1 70	0.94	0.75	7/8	
#	6-1FF-4-4	1/4" Female NPT		1.51	1.51	0.50	0.54	J/ JE	1.51	1.70	0.34	0.75	// 0	
S	6-1FF-6-6	3/8" Female NPT	0.250 (6.4)	1.51	1.51									
	6-1FF-8-8	1/2" Female NPT		1.70	1.70									
	6-1MM-4-4	1/4" Male NPT		1.51	1.51									
	6-1MM-6-6	3/8" Male NPT		1.51	1.51									
	6-1MM-8-8	1/2" Male NPT		1.70	1.70									
	8-DTT-6-6*	3/8" CBC-Lok®		1.85	1.85									
	8-STT-6-6*	3/8" CS-Lok®		1.05   1.0	1.00	1.00								
	8-DTT-8-8	1/2" CBC-Lok®		1.96	1.96				1 1					
œ	8-STT-8-8	1/2" CS-Lok®		1.30	1.50									
Si	8-DTT-12-12	3/4" CBC-Lok®	1 07	1.97	1.97									
뿚	8-STT-12-12	3/4" CS-Lok®				0.81	0.65	5/32	2.29	1.96	1.13	0.88	1-1/16	
SERIES	8-1FF-6-6	3/8" Female NPT	0.375 (9.5)	1.61	1.61									
	8-1FF-8-8	1/2" Female NPT	_	1.78	1.78									
	8-1FF-12-12	3/4" Female NPT	_	1.90	1.90		0.72							
	8-1MM-6-6	3/8" Male NPT	_	1.65	1.65		0.65							
	8-1MM-8-8	1/2" Female NPT		1.84	1.84		0.00							

<sup>\*</sup> Reduced Port



HP Series Ball Valve are ordered as listed in this catalog by inserting the material code before the part number. HP Series 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.

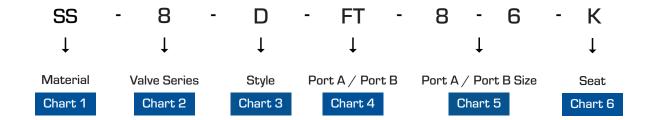


Chart 1- Material		
B Brass		
SS Stainless Steel		

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			
Туре	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	

	Chart 5- Port Siz	е
Designator	Tube OD (Inches)	Pipe Thread (NPT)
TT	Tube	Tube
MM*	Male NPT	Male NPT
FF*	Female NPT	Female NPT
MF*	Male NPT	Female NPT
FM*	Female NPT	Male NPT

See dimension chart for available sizes.

	Chart 6- Seat			
T PTFE (Teflon)				
К	KEL-F			

#### 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 connections for port A and a 1/4" female NPT end connection for port B and PCTFE seats.

<sup>\*</sup> Use Style 1 from Chart 3 for this type of configuration.

# High Pressure Ball Valves

# Handles & Locking Device

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





#### **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



Handle Color	Designator
Black	-BK
Red	-RD
Blue	-BL
Green	-GN
Orange	-OG
Yellow	-YW

Tylok is proud to announce a newly-redesigned handle and locking device for our HP Series Ball Valves.

The handle comes in various colors: black, red, blue, green, orange, and yellow. These color choices will make it easy to identify different process lines and can help customers who want their valves handles to conform to ASME A13.1, Scheme for the Identification of Piping Systems.

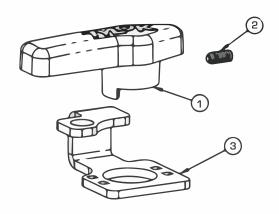
Our new lock-out device is designed specifically to work with the new handles, and allows the valve to be locked in fully open or fully closed positions.

For example, a 1/2" stainless steel valve with 1/2" CBC-Lok Tube Ends, a PCTFE seat, lock out valve, and a green handle would have the part number: SS-8-DTT-8-8-K-LD-GR

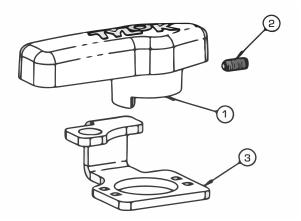
To order an handle for field assembly, use the following part numbers:

Series 4 & 6	Series 8
NY-HPBV-46-BK	NY-HPBV-8-BK
NY-HPBV-46-RD	NY-HPBV-8-RD
NY-HPBV-46-BL	NY-HPBV-8-BL
NY-HPBV-46-GN	NY-HPBV-8-GN
NY-HPBV-46-OG	NY-HPBV-8-OG
NY-HPBV-46-YW	NY-HPBV-8-YW









8 Series

Kit Number	Description	Handle	Set Screw	Locking Bracket
KIT-46-BK*	4/6 Series Ball Valve Black Handle Kit	6-BV-16-BK	BV-16B	N/A
KIT-8-BK*	8 Series Ball Valve Black Handle Kit	8-BV-16-BK	BV-16B	N/A
-	-	-	-	-
KIT-46-HPBV-LD	4/6 Series Locking Device	N/A	N/A	SS-6-BV-17
KIT-8-HPBV-LD	8 Series Locking Device	N/A	N/A	SS-6-BV-17
-	-	-	-	-
KIT-46-HPBV-LDH**	4/6 Series Ball Valve Black Handle Kit with Locking Device	6-BV-16-BK	BV-16B	SS-6-BV-17
KIT-8-HPBV-LDH * *	8 Series Ball Valve Black Handle Kit with Locking Device	8-BV-16-BK	BV-16B	SS-6-BV-17

 $<sup>^{\</sup>star}$  "BK" designates black colored handle, other color handles are available and should be verified against part number.

<sup>\*\*</sup> By default "LDH" kits contain black handles, however other color handles are available and should be verified against part number.