

# INSTRUMENT

## Trunnion Ball Valve VBT Series



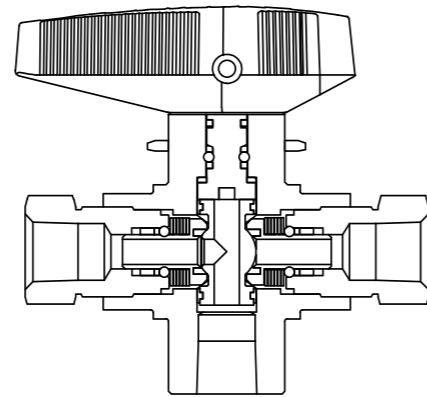
# Trunnion Ball Valve

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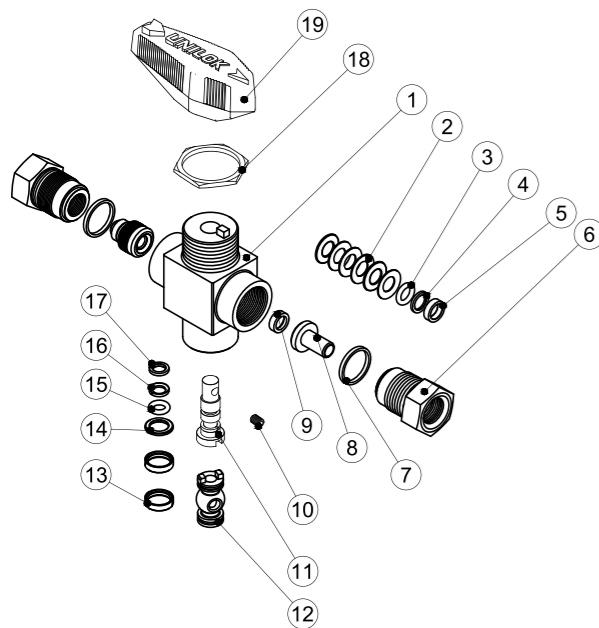
## Features

- Design Spec : ANSI / ASME B16.34
- 2- or 3-way flow patterns
- Panel mount
- Low operating torque
- Temperature rating from -17 °C(-0 °F) to 37 °C(100 °F) with standard PCTFE seats
- Pressure rating up to 6000Psig(413Bar) @21°C(70 °F) with Standard PCTFE seats.



## Testing

- Every Valve is 100% factory tested with air and nitrogen at 1000psig(69bar) for leakage at the seat and packing.
- Each test is performed to a maximum allowable leak rate of 0.1 scc/min.
- Hydrostatic shell test to be performed at 1.5 time of the working pressure with optional.



## Cleaning

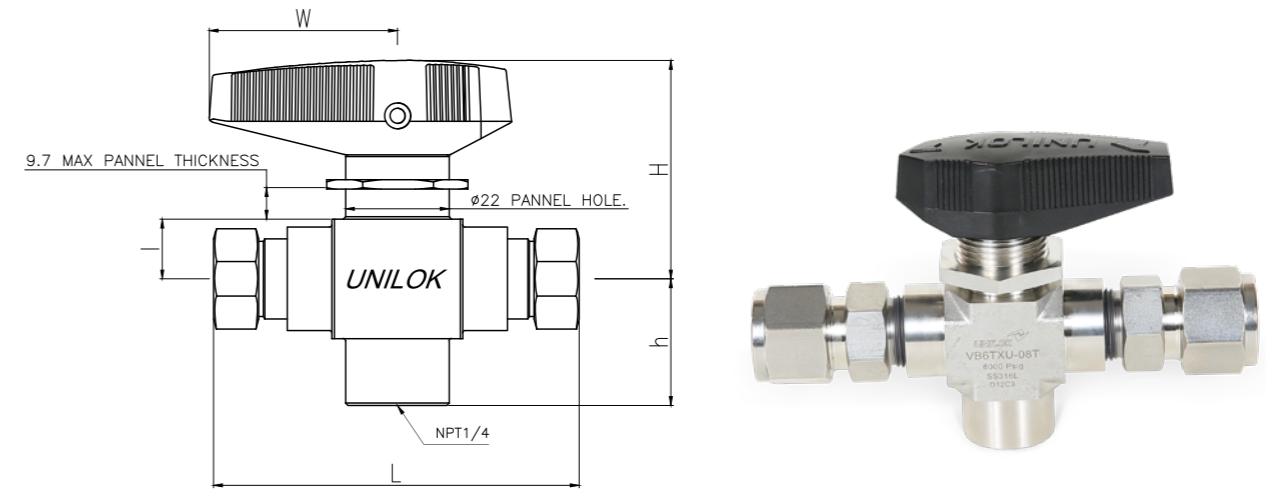
UNILOK valves are free from machine oils, loose particles and grease throughout the close cleaning process.

## Materials of Construction

No.	Description	Materials	EA
1	Body	SUS316	1
2	Seat Spring	SUS304	12
3	O-Ring	FKM	2
4	Seat Carrier Backup Ring	PTFE	4
5	Seat Carrier Guide	SUS316	2
6	End Screw	SUS316	2
7	End Screw Seal	PTFE	2
8	Seat Carrier	SUS316	1
9	Seat	PCTFE	2
10	Stem Set Screw	PCTFE	1
11	Stem	SUS316	1
12	Ball	SUS316	1
13	Trunnion Bearing	PEEK	2
14	Stem Bearing	PEEK	1
15	O-Ring	FKM	1
16	Secondary Stem Backup Ring	PTFE	2
17	Primary Stem Backup Ring	PTFE	1
18	Panel Nut	SUS316	1
19	Handle	Nylon66	1

## How to Order

UNILOK VBT Series ball Valve are ordered by part number as shown below.



V
B6TX
U
-
04N
-
SS
-
 

UNILOK    Valve Type    Connection Type    Connection Size    Body Materials    Seat Materials

Valve Type	
B6T	2 WAY / Orifice 4.75mm
B6TX	3 WAY / Orifice 4.75mm
B10T	2 WAY / Orifice 4.75mm
B10TX-	3 WAY / Orifice 4.75mm

Connection Type	
U	UNILOK Tube Fitting
F	Female NPT or ISO7/1(PT)

Connection Size				
Fractional(Inch) Tube O.D. Designation				
Tube O.D.	inch	1/4	3/8	1/2
	mm	6.35	9.52	12.7
Designator		04T	06T	08T

Connection Size			
Female NPT or ISO7/1(PT)			
Size	1/4	3/8	1/2
Designator	04N	06N	08N

Connection Size				
Fractional(Inch) Tube O.D. Designation				
Tube O.D.	inch	1/4	3/8	1/2
	mm	6.35	9.52	12.7
Designator		04T	06T	08T

Body Materials	
SS	316SS

Stem Type	
None	Vee Stem
R	Regulating Stem

## Ordering Information & Dimensions

2way (PCTFE)									
Part Number		End Connection	Orifice mm	CV	Dimensions mm(in.)				
					L	I	H	H	W
VB6T	F-02N-SS	1/8 Female NPT	4.75	1.2	74.7(2.94)	12.7	46.6	26.9	39.9
	F-04N-SS	1/4 Female NPT		1.0	74.7(2.94)				
	F-08N-SS	1/2 Female NPT		1.2	99.8(3.93)				
	U-04T-SS	1/4" UNILOK		1.6	105(4.14)				
	U-06T-SS	3/8" UNILOK		1.4	112(4.39)				
	U-08T-SS	1/2" UNILOK		1.0	117(4.60)				
	U-M06T-SS	6mm UNILOK		1.6	105(4.14)				
	U-M08T-SS	8mm UNILOK		1.5	105(4.14)				
	U-M10T-SS	10mm UNILOK		1.3	112(4.41)				
	U-M12T-SS	12mm UNILOK		1.0	117(4.60)				

2way (PEEK)										
Part Number		End Connection	Working Pressure psig(bar)	Orifice mm	CV	Dimensions mm(in.)				
						L	I	H	H	W
VB10T	F-02N-SS-PK	1/8 Female NPT	10000(689)	4.75	1.2	74.7(2.94)	12.7	46.6	26.9	39.9
	F-04N-SS-PK	1/4 Female NPT			1.0	99.8(3.93)				
	U-04T-SS-PK	1/2 Female NPT			1.6	105(4.14)				
	U-06T-SS-PK	1/4" UNILOK			1.4	112(4.39)				
	U-08T-SS-PK	3/8" UNILOK			1.0	117(4.60)				
	U-M06T-SS-PK	1/2" UNILOK			1.6	105(4.14)				
	U-M08T-SS-PK	6mm UNILOK			1.5	105(4.15)				
	U-M10T-SS-PK	8mm UNILOK			1.3	112(4.41)				
	U-M12T-SS-PK	10mm UNILOK			1.0	117(4.60)				

## Ordering Information & Dimensions

3way (PCTFE)									
Part Number		End Connection	Orifice mm	CV	Dimensions mm(in.)				
					L	I	H	H	W
VB6TX	F-04N-SS	1/4 Female NPT	4.75	0.75	74.7(2.94)	12.7	46.6	26.9	39.9
	F-06N-SS	3/8 Female NPT			74.7(2.94)				
	U-04T-SS	1/4" UNILOK			105(4.14)				
	U-06T-SS	3/8" UNILOK			112(4.39)				
	U-08T-SS	1/2" UNILOK			117(4.60)				
	U-M06T-SS	6mm UNILOK			105(4.14)				
	U-M08T-SS	8mm UNILOK			105(4.15)				
	U-M10T-SS	10mm UNILOK			112(4.41)				
	U-M12T-SS	12mm UNILOK			117(4.60)				

3way (PEEK)										
Part Number		End Connection	Working Pressure psig(bar)	Orifice mm	CV	Dimensions mm(in.)				
						L	I	H	H	W
VB10TX	F-04N-SS-PK	1/4 Female NPT	10000(689)	4.75	0.75	74.7(2.94)	12.7	46.6	26.9	39.9
	F-06N-SS-PK	3/8 Female NPT				74.7(2.94)				
	U-04T-SS-PK	1/4" UNILOK				105(4.14)				
	U-06T-SS-PK	3/8" UNILOK				112(4.39)				
	U-08T-SS-PK	1/2" UNILOK				117(4.60)				
	U-M06T-SS-PK	6mm UNILOK				105(4.14)				
	U-M08T-SS-PK	8mm UNILOK				105(4.15)				
	U-M10T-SS-PK	10mm UNILOK				112(4.41)				
	U-M12T-SS-PK	12mm UNILOK				117(4.60)				

# Pressure-Temperature Ratings

