

■ STBV60 Series up to 6000 psi

■ STBVC Series CNG/NGV Valves up to 3770 psi

Features

- Working pressure up to 6,000psi(413bar)@100°F(38°C).
- Compact, maximum flow design.
- Panel mountable as standard.
- Handle indicates flow direction.
- Low torque actuation.
- 2-way "Shut-up" and 3-way "Switching" type.
- Various end connections : include S-LOK Tube Fittings, NPT / ISO male & female.
- Optional sour gas service to NACE MR 0175.
- Every valve is 100% factory tested.



Technical Data

Valve Series	Seat Material	Temperature Rating °C (°F)	Pressure Rating @38°C (100°F)
STBV60	PCTFE	-17 to 121 (0 to 250)	6,000psig (413bar)
	PEEK	-17 to 232 (0 to 450)	6,000psig (413bar)
	PTFE		1,500psig (103bar)

Testing

- The rated pressure shown above is the maximum allowable pressure to the seat. If the system requires higher pressure to test, the valve must be in open position before and during test so as not to damage the seat.
- Every valve is factory tested for bubble - tight leakage at both seat and stem packing with nitrogen at 1000psi(69bar).
- Hydraulic shell test is performed at 1.5times the working pressure.
- Seats have a maximum allowable leak rate of 0.1 SCCM.
- Optional tests are available upon request.

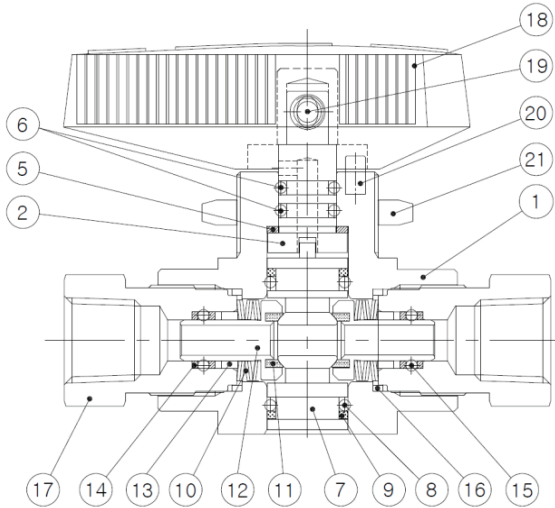
CNG / NGV Information

- STBVC Series valve provides leak - tight integrity in both low and high pressure systems in CNG and NGV applications. Valves with peek seat and HNBR O-ring are compatible with CNG fluid.

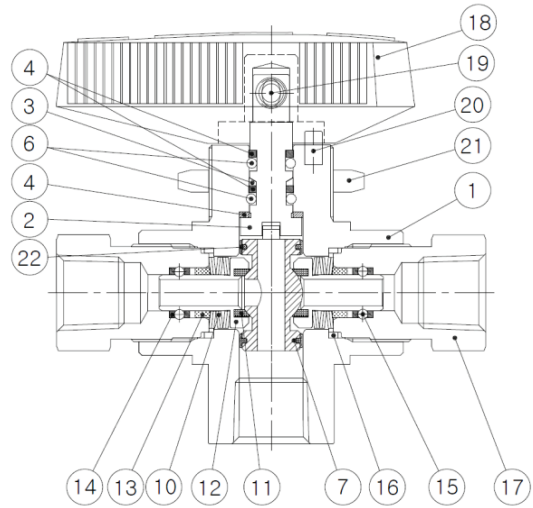
Valve Series	Certificates	ECE R110	ANSI NGV 3.1-2012	ISO 15500
STBVC Series 2-Way	Certificate No.	110R-010333	126840AUT14	126840MECH103
	Classification	Class 0	Manual valve	Manual valve
	Temperature	-40 to 120 °C (-40 to 248 °F)	-40 to 120 °C (-40 to 248 °F)	-40 to 120 °C (-40 to 248 °F)
	Working Pressure	260 bar @ 120°C	248 bar @ 120°C	260 bar @ 120°C
STBVC Series 3-Way	Certificate No.	110R-000184	110R-000184	110R-000184
	Classification	Class 0	Manual valve	Manual valve
	Temperature	-40 to -120°C (-40 to 248 °F)	-40 to -120°C (-40 to 248 °F)	-40 to -120°C (-40 to 248 °F)
	Working Pressure	260 bar @ 38°C	260 bar @ 38°C	260 bar @ 38°C

Materials of Construction

STBV60 & STBVC 2-Way



STBV60 & STBVC 3-Way

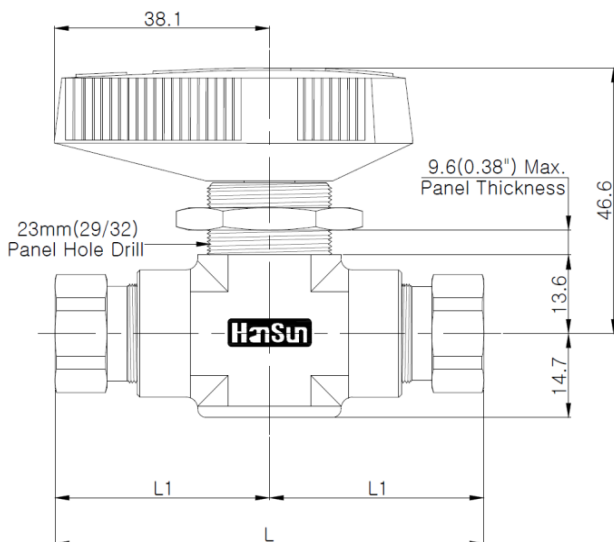


Item	Description	STBV60 Series		STBVC Series	
		2-Way	3-Way	2-Way	3-Way
		Grade/ASTM Specification			
1	Body	S316 / A276 or A479			
2	Stem*	S316 / A276 or A479			
3	Stem Support Ring*	-	PEEK	-	PEEK
4	Stem Backup Ring*	-	PTFE	-	PTFE
5	Stem Bearing*	PEEK			
6	Stem O-Ring*	FKM		HNBR	
7	Trunnion Ball*	S316 / A276 or A479			
8	Ball O-Ring*	FKM	-	HNBR	-
9	Ball Backup Ring*	PTFE	-	PTFE	-
10	Disc Spring*	Alloy X-750 / AMS 5542			
11	Seat*	PCTFE, optional PTFE, PEEK		PEEK	
12	Seat Carrier*	S316 / A276 or A479			
13	Seat Carrier Guide*	S316 / A276 or A479			
14	Seat Carrier Backup Ring*	PTFE			
15	Seat Carrier O-Ring*	FKM		HNBR	
16	End Connector Packing*	PTFE / D1710, Type 1			
17	End Connector	S316 / A276 or A479			
18	Handle*	Phenolic with brass insert			
19	Set Screw*	S316			
20	Stop Pin	S316			
21	Lock Nut	S316 / A276 or A479			
22	Slip Ring*	-	PTFE	-	PTFE

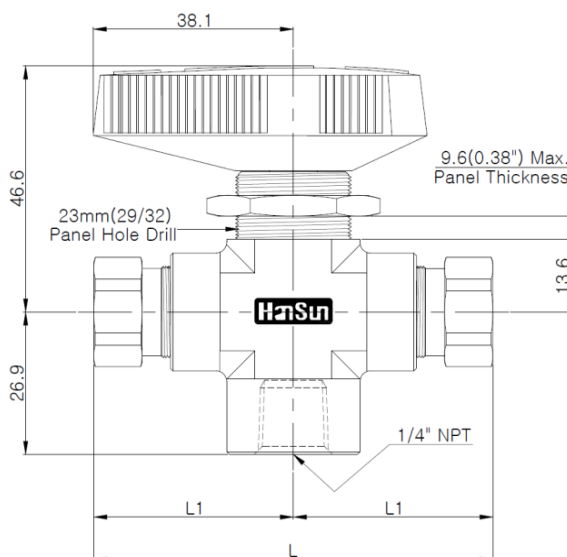
*Service kits contain part

Table of Dimensions

STBV60 & STBVC 2-Way



STBV60 & STBVC 3-Way



2-Way Valve Orifice 4.75mm (0.187 in.)

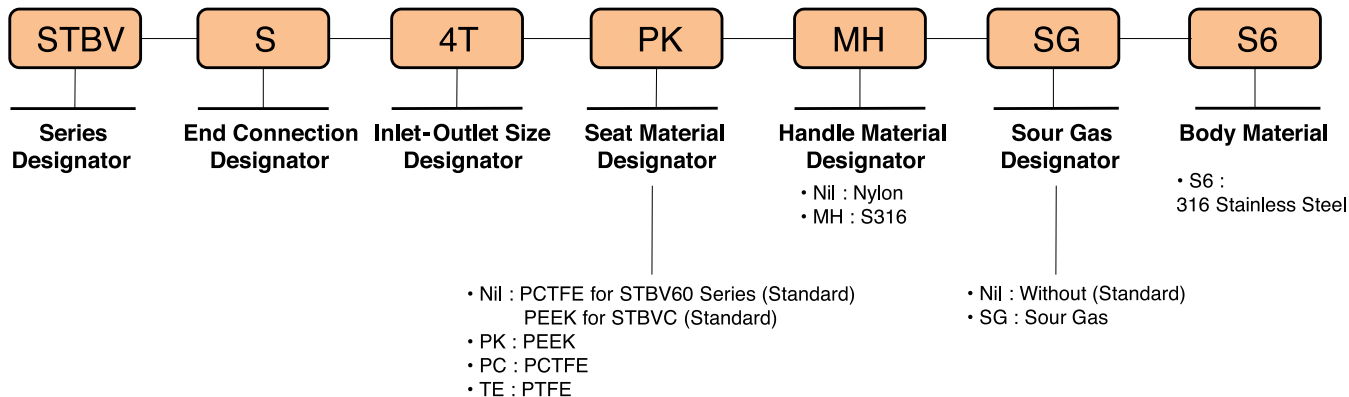
STBV60 Series Ordering Numbers	End Connection		Cv	Dimensions mm (in.)	
	Inlet	Outlet		L	L1
STBV / STBVC	F-2N	1/8" Female NPT	1.2	76.2 (3)	38.1 (1.5)
	F-4N	1/4" Female NPT	1	76.2 (3)	38.1 (1.5)
	-	1/4" Female NPT	1	99.8 (3.93)	50 (1.97)
	F-8N	1/2" Female NPT	1.2	108 (4.25)	54.1 (2.13)
	S-4T	1/4" S-LOK	1.6	105 (4.14)	52.6 (2.07)
	S-6T	3/8" S-LOK	1.4	112 (4.41)	55.6 (2.19)
	S-8T	1/2" S-LOK	1	117 (4.6)	58.4 (2.3)
	S-6M	6mm S-LOK	1.6	105 (4.14)	52.6 (2.07)
	S-8M	8mm S-LOK	1.5	105 (4.14)	52.6 (2.07)
	S-10M	10mm S-LOK	1.3	112 (4.41)	55.9 (2.2)
S-12M	12mm S-LOK	1	117 (4.6)	58.4 (2.3)	

3-Way Valve Orifice 4.75mm (0.187 in.)

STBV-3B / STBVC-3B	F-2N	1/8" Female NPT	0.75	76.2 (3)	38.1 (1.5)
	F-4N	1/4" Female NPT		76.2 (3)	38.1 (1.5)
	-	1/4" Female NPT		99.8 (3.93)	50 (1.97)
	S-4T	1/4" S-LOK		105 (4.14)	52.6 (2.07)
	S-6T	3/8" S-LOK		112 (4.41)	55.6 (2.19)
	S-8T	1/2" S-LOK		117 (4.6)	58.4 (2.3)
	S-6M	6mm S-LOK		105 (4.14)	52.6 (2.07)
	S-8M	8mm S-LOK		105 (4.14)	52.6 (2.07)
	S-10M	10mm S-LOK		112 (4.41)	55.9 (2.2)
	S-12M	12mm S-LOK		117 (4.6)	58.4 (2.3)

Ordering Information

• Selection of the applicable options from the designators are listed below.



Safety in Valve Selection

- When selecting a valve, the total system design must be considered to ensure safe, trouble - free performance.
- Valve function, materials compatibility, adequate ratings, proper installation, operation, and maintenance are the responsibility of the system designer and user.

Service Kit

Service kits contain components of the same materials as new components. To order the service kit, selection of the applicable options from the designators are listed mark(*) of 3page.

