

SMTV Series

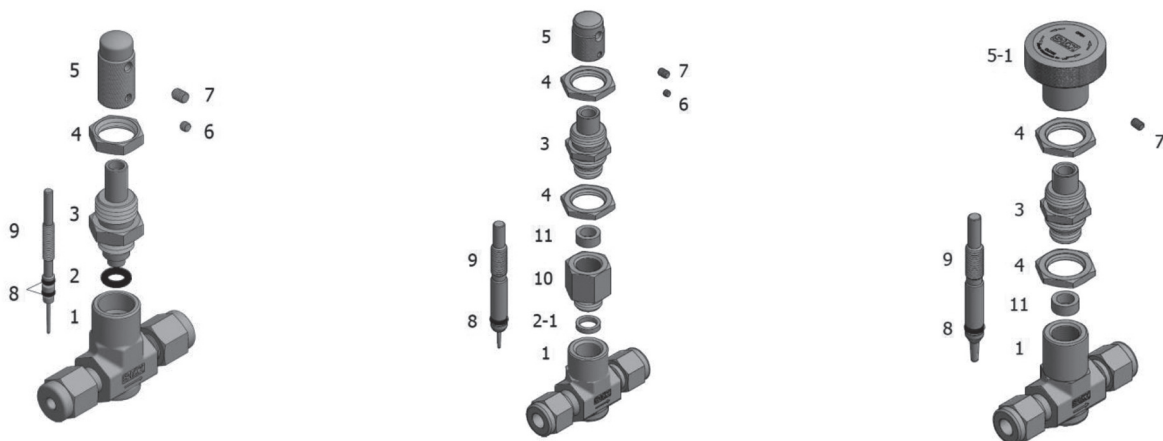
Low Pressure Metering Valves

Features

- Forged body SS316 or brass material.
- Straight and angle patterns.
- Variety of end connections include S-LOK, NPT & ISO threads Male/Female.
- Variety of handle options : knurled, round, vernier, slotted, and adjustable torque handles.
- Flow setting lock system : knurled and slotted handles.
- Handle stop design : Prevent damage to stem and orifice.
- Panel mounting is standard for all valves.
- Tapered stem tip : Provide a wide flow range with ultrafine metering control.



Material of Construction



Item	Component	Material	
		Stainless Steel	Brass
1	Body	SS316 / A182	Brass / B124
2	Body O-ring	FKM	NBR
2-1	Body Seal	Stainless Steel	
3	Bonnet	SS316 / A479 or A276	* Brass / B16
4	Lock Nut	SS316 / A479 or A276	* Brass / B16
5	Handle	Stainless Steel	* Brass / B16
5-1	Round Handle	Aluminum 6061	
6	Lock Screw	Stainless Steel	
7	Set Screw	Stainless Steel	
8	Stem O-ring	FKM	NBR
9	Stem	SS316 / A479 or A276	
10	Body Extension	SS316 / A479 or A276	* Brass / B16
11	Stem Guide Ring	PTFE	

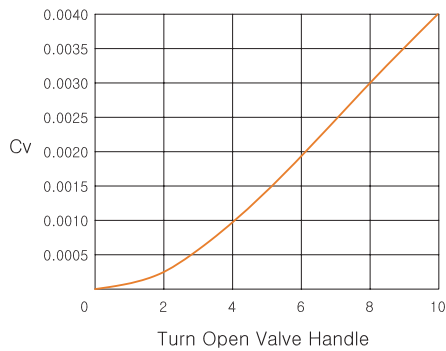
* Chrome Plated

Technical Data

Pressure and Temperature Ratings

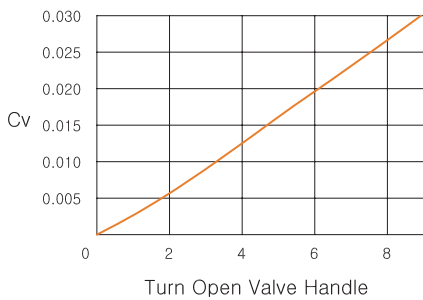
Valve Series	Temperature Ratings with O-ring Material			Pressure Rating @38°C(100°F)	Stem Taper	Flow Shut off
	FKM (Viton)	NBR	FFKM (Kalrez)			
SMTV1	-23°C to 204°C (-10°F to 400°F)	-23°C to 148°C (-10°F to 300°F)	-17°C to 148°C (0°F to 300°F)	2000psig (137 bar)	1°	No
SMTV2				1000psig (68.9 bar)	3°	No
SMTV3				1000psig (68.9 bar)	6°	Yes

Flow Data with Number of Handle Turns



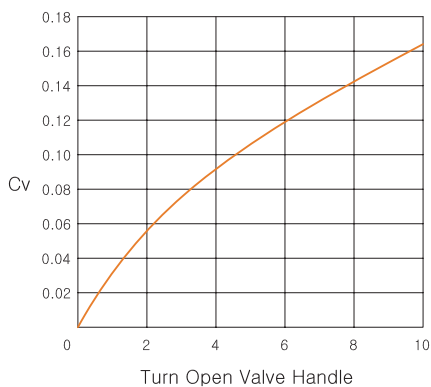
SMTV1 Series

Pressure Drop@ Atmosphere psi (bar)	Air Flow Std. ft ³ /min. (Std. L/min.)	Water Flow U.S. gal/min. (L/min.)
10 (0.68)	0.04 (1.1)	0.01 (0.03)
50 (3.4)	0.1 (2.8)	0.02 (0.07)
100 (6.8)	0.2 (5.6)	0.04 (0.15)



SMTV2 Series

Pressure Drop@ Atmosphere psi (bar)	Air Flow Std. ft ³ /min. (Std. L/min.)	Water Flow U.S. gal/min. (L/min.)
10 (0.68)	0.33 (9.3)	0.09 (0.34)
50 (3.4)	0.9 (25.4)	0.21 (0.79)
100 (6.8)	1.5 (42.4)	0. (1.1)



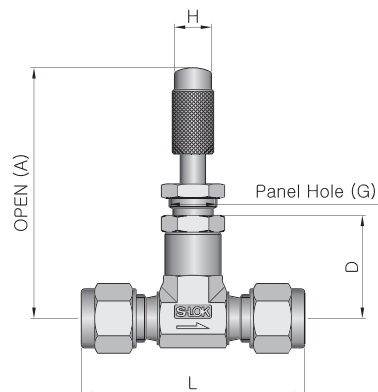
SMTV3 Series

Pressure Drop@ Atmosphere psi (bar)	Air Flow Std. ft ³ /min. (Std. L/min.)	Water Flow U.S. gal/min. (L/min.)
10 (0.68)	2.0 (56.6)	0.51 (1.9)
50 (3.4)	6.4 (181.0)	1.2 (4.5)
100 (6.8)	11.4 (323.0)	1.7 (6.4)

Dimensions

Straight Pattern

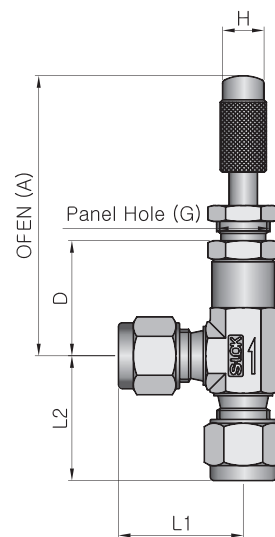
Ordering Number		Orifice (mm)	Cv	End Connections		Dimensions (mm)			
				Inlet	Outlet	L	A	D	H
SMTV1	S-1T	0.81	0.004	1/16" S-LOK	39.6	58.0	23.9	9.6	
	S-2T			1/8" S-LOK	48.2				
	S-3M			3mm S-LOK	51.8				
	S-4T			1/4" S-LOK					
	S-6M			6mm S-LOK					
SMTV2	S-2T	1.42	0.03	1/8" S-LOK	50.7	63.7	33.9	12.7	
	S-3M			3mm S-LOK	55.8				
	S-4T			1/4" S-LOK					
	S-6M			6mm S-LOK					
	M-2N			1/8" Male NPT	38.1				
	M-4N			1/4" Male NPT	49.8				
	F-2N			1/8" Female NPT	49.3				
	SMTV3			S-4T	3.25				0.16
S-6M		6mm S-LOK	62.5						
S-6T		3/8" S-LOK							
M-4N		1/4" Male NPT		50.8					



Series	Panel Hole (G)	Panel MaxThickness
SMTV1	11.4	4.1
SMTV2	14.7	3.3
SMTV3	14.7	3.3

Angle Pattern

Ordering Number		Orifice (mm)	Cv	End Connections		Dimensions (mm)				
				Inlet	Outlet	L1	L2	A	D	H
SMTV1	S-1T	0.81	0.004	1/16" S-LOK		20.6	22.4	58.0	23.9	9.6
	1/8" S-LOK			24.1		58.0				
	3mm S-LOK			24.9	25.1	58.0				
	1/4" S-LOK			25.9		58.0				
SMTV2	S-2T	1.42	0.03	1/8" S-LOK		25.6		59.0	29.2	12.7
	3mm S-LOK									
	1/4" S-LOK			27.9		59.0				
	6mm S-LOK					59.0				
	1/8" Male NPT			19.5	59.0					
	1/4" Male NPT			24.9	59.0					
	1/8" Female NPT			24.2	59.0					
SMTV3	S-4T	3.25	0.16	1/4" S-LOK		28.7		73.0	34.4	28.7
	6mm S-LOK									



Series	Panel Hole (G)	Panel MaxThickness
SMTV1	11.4	4.1
SMTV2	14.7	3.3
SMTV3	14.7	3.3

Ordering Information

SMTV1	S	2T	A	KA	VH	S6
Valve Series	Connection Type	Connection Size	Flow Pattern	O-ring Material	Handle	Body Material
	· S : S-LOK Tube Fitting · M: Male Thread · F : Female Threa		· Nil : Straight · A : Angle Pattern	· Nil : FKM for SS316 NBR for Brass · NB : NBR · VT : FKM · KA : FFKM		· S6 : 316 Stainless Steel · BS : BRASS

Handle Option

- **Nil** : SMTV1, 2 Series Standard for Locking Screw Handle
SMTV3 Series Standard for Round Handle
- **SH** : SMTV1, 2 Series
- **AH** : SMTV1 Series
- **VH** : SMTV1, 2, 3 Series



SMTV1, 2 Standard
Locking Screw
Handle



SMTV3 Standard
Round Handle



SH
Slotted Handle



AH
Adjustable Torque
Handle



VH
Vernier Handle