## **Needle Valve** Low Pressure, Single Ferrule 15,000 psi (1034 bar)

10V2 and SW Series ("SpeedBite")

## Principle of Operation:

The Low Pressure (15,000 psi maximum), otherwise known as "SpeedBite" Needle Valves are designed for applications between traditional compression fittings and the Parker Autoclave Engineers' Medium Pressure Cone and Thread products that are designed for high flow and high pressure. SpeedBite Valves are engineered for use with annealed ASTM A269 316 (and similar) Stainless Steel tubing designed by Parker Autoclave Engineers to a controlled hardness. SpeedBite valves employ a bite-type compression style single ferrule that is manually "set". 1-1/4 rotation from tube grip forces the ferrule into tapered seat and causes the leading edge of ferrule to bite into the tubing, creating a shoulder for positive mechanical support of the tubing. When correctly installed, connection strength far exceeds the burst pressure of the tubing utilized.

## Low Pressure Valve Features:

Temperature Rated -100°F (-73°C) to 650°F (343°C)

- Designed for use with Low Pressure "SpeedBite" single ferrule compression fittings and tubing
- 10V2 Series valve design provides for a 1/8" tube size connection
- SW Series valves are constructed for tube sizes from 1/4" to 1/2" OD
- UNS S31600 cold worked 316 SS body construction as standard. (Optional materials available)
- Non-rotating stem prevents stem/seat galling
- Metal-to-metal seating achieves bubble-tight shut-off, longer stem/seat life, greater durability for repeated on/off cycles and excellent corrosion resistance. These valves can be used with liquid and gas.
- PTFE packing below stem threads provides dependable stem and body sealing. Optional packing materials available.
- Choice of Vee (Shutoff) or Regulating (Flow Control) stem tips
- Optional N-Dura Stem and/or Replaceable Seat Coating or Stellite material option for severe service available
- Available in five body patterns

Traceability is ensured by use of heat and purchase order codes etched on valve body that also includes model number, MAWP rating, and material type references. All valves include compression sleeve and gland nut unless requested otherwise. Parker Autoclave Engineers' valves are complemented by a complete line of low pressure fittings, tubing, check valves, relief valves, and line filters.

All Parker Autoclave Engineers products are designed in accordance with ASME B31.3 Chapter IX High Pressure Piping standards.







## 10V2 and SW Series: Pressures to 15,000 psi (1034 bar)



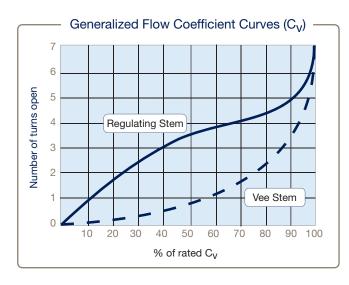
Tube Outside Diameter Size (inches)	Connection Type	Orifice Size Inches (mm)	Rated C <sub>v</sub> *	Pressure Rating psi (bar) @Room Temperature**
1/8 (10V2 Series)	W125	0.094 (2.39)	0.12	15,000 (1034)
1/4	SW250	0.188 (4.77)	0.65	15,000 (1034)
3/8	SW375	0.250 (6.35)	0.95	15,000 (1034)
1/2	SW500	0.375 (9.52)	1.90	10,000 (690)

Notes

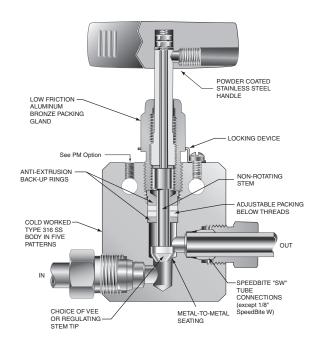
\* C<sub>V</sub> values shown are for 2-way straight valve pattern. For 2-way angle patterns, increase C<sub>V</sub> value 50%.

\*\* Maximum Allowable Working Pressures decrease as temperatures increase see pressure/temperature rating guide in Technical Information section.

Formula for converting C<sub>V</sub> to volumetric flow can be found in Technical Information section



10V2 and SW Series Flow Curve for Vee and Regulating Stem Valves



To ensure proper fit use Parker Autoclave tubing

### Valve Packing Options:

Standard Parker Autoclave valves with PTFE packing may be operated from 0° (-18°C) to 450°F (232°C). Extreme temperature packing for service from -100°F (-73°C) to 650°F (343°C) by adding the following suffixes to catalog order number.

- B Cryogenic trim materials and PTFE required when below 0°F (-18°C) -100°F (-73°C).
- TG Standard valve with PTFE glass packing -100°F (-73°C) to 600°F (316°C). (See also -B option above when below 0°F (-18°C)
- GY Standard valve with Graphite Yarn packing to 650°F (343°C).

Parker Autoclave Engineers does not recommend compression sleeve connections below -100°F (-73°C) or above 650°F (343°C). For additional valve options, contact your Sales Representative. (See "Technical Brochure" for Pressure/Temperature effect on temperatures above ambient.)



## **Ordering Guide:**

Common valve option details can be found on pages 6 & 7. The part number and option ordering matrix is given below. 10V/SW Series "SpeedBite" valves are furnished complete with connection components, unless otherwise specified.

Building a Part Number: B						
Example Part Number:	SW	4	07	1	-	XX
Ordering Parameters/Options:	Valve Series	Outside Diameter Tube Size	Stem/Seat Type	Body Pattern		Options
Table Reference: (see below)	A	В	С	D		E

A - Valve Series			ly Pattern			
10V	Low Pressure Needle Valve (1/8" Tube Size only)	1	Two-Way Straight			
SW	Low Pressure Needle Valve	2	Two-Way Angle			
		3	Three-Way, Two on Pressure			
B - Out	side Diameter Tube Size	4	Three-Way, One on Pressure			
2	1/8" (10V only)	5 Three-Way, Two Stem Manifold Valve				
4	1/4"		·			
6	3/8"	E - Options (choose as many as necessary)				
8	1/2" (10,000 psi maximum)		For additional valve options see pages 6-7 or contact factory.			
	·	PM	Panel Mount, additional #10-24 screw is supplied			
C - Ste	m/Seal Type (see page 6 for optional Stem Types)	В	All 316 SS materials required when below 0°F (-18°C)			
07	Non-Rotating Vee Stem (on-off service)	TG	PTFE Glass (25%) Packing (to 600°F)			
08	Non-Rotating Regulating Stem (tapered tip for regulating and shutoff)	GY	Graphite Packing (to 650°F)			
87	Vee Stem with Replaceable Seat	HC	Hastelloy C-276***			
88	Regulating Stem with Replaceable Seat	MO	Monel***			

#### Notes:

Valve Manuals can be found on our website at www.Autoclave.com.

Connection, Running and Seating Torques can be found in the product manual or in our Tools and Installation Catalog Section

Valves that have not been cycled for a substantial period of time may require higher initial actuation torque.

Speedbite connections are set by making 1-1/4 turns from WRENCH tight (point beyond finger tight where torque to tighten suddenly increases and sleeve begins to grip tubing.) Installation instructions can be found in Tools & Installation brochure.

\*Replaceable seat option is sold with two (2) seat surfaces  $180^{\circ}$  apart.

## electric actuators are available for these valves, see associated brochures for details. 316 SS valve bodies are cold worked and not suitable for use in NACE (ISO 15156) applications. If required, contact factory for options.

\*\*\* Special Materials often have reduced MAWP ratings, see Technical brochure for assistance and for additional material options.

(See "Technical Brochure" for Pressure/Temperature effect on temperatures above ambient.)

Note: Contact factory for 1/16" tube size or see MVE Series. Pneumatic and

## Basic Repair Kits for 316 SS Material:

			Basic Repair Kit f	or 316 SS Material	
o. –			Outside Dia	meter Tube:	
Stem Type		1/8" (10V2 Series) 1/4" 3/8"			1/2"
	VEE	R10V207	RSW407	RSW607	RSW807
2 Way Straight / 2 Way Angle / 3 Way	REG	R10V208	RSW408	RSW608	RSW808
2 Way Deplesseble Cast and Stem	VEE	R10V2872	RSW4872	RSW6872	RSW8872
2 Way, Replaceable Seat and Stem	REG	R10V2882	RSW4882	RSW6882	RSW8882
2 Way 2 Stam Manifold	VEE	R10V2075	RSW4075	RSW6075	RSW8075
3 Way, 2 Stem Manifold	REG	R10V2085	RSW4085	RSW6085	RSW8085

When ordering for valves bought with additional suffix options, please include those exact suffix codes when ordering repair kit. (Example: the stem for a manual valve is manufactured differently for a pneumatically actuated valve and the repair kit must include the exact actuator suffix codes). Valve Manuals can be found on our website at **www.Autoclave.com**.

Connection, Running and Seating Torques can be found in the product manual or in our Tools and Installation Catalog Section



## 10V2 and SW Series Dimensions:

2 Way Straight								
				Catalog Number				
Stem Type	VEE REG		10V2071 10V2081	SW4071 SW4081	SW6071 SW6081	SW8071 SW8081		
Outside Dia	meter Tube		1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)		
Orifice D	iameter		0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)		
Dimension inches (m		A	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)		
		В	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)		
		с	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)		
	<b>→</b>	D	1.06 (26.92)	1.62 (41.15)	1.62 (41.15)	2.38 (60.45)		
		D1	0.81 (20.57)	1.19 (30.23)	1.19 (30.23)	1.75 (44.45)		
	M G	Е	1.38 (35.05)	2.00 (50.80)	2.00 (50.80)	2.88 (73.15)		
	- Ļ1	F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)		
		G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		
-A	+ <sup>+ - +</sup>	G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)		
		H*	3.75 (95.25)	4.50 (114.30)	4.50 (114.30)	5.95 (151.37)		
			0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)		
		N	0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)		
Block Th	ickness		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		

3 Way,			2 on Pre	essure				
				Catalog Number				
Stem Type	VEE REG		10V2073 10V2083	SW4073 SW4083	SW6073 SW6083	SW8073 SW8083		
Outside Diam	ieter Tube		1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)		
Orifice Dia	ameter		0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)		
Dimensions inches (mn		A	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)		
		в	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)		
		с	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)		
FF	→	D	1.06 (26.92)	1.62 (41.15)	1.62 (41.15)	2.38 (60.45)		
	M G	D1	0.81 (20.57)	1.19 (30.23)	1.19 (30.23)	1.75 (44.45)		
│ H N │ │ │ │ │ │ │		Е	1.69 (42.93)	2.62 (66.55)	2.62 (66.55)	3.62 (91.95)		
D V	$ \stackrel{\uparrow}{\overset{\downarrow}}_{-1}$	F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)		
	tri È	G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		
	」 <u> </u> ↓	G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)		
——A—	•	H*	4.06 (103.12)	5.18 (131.57)	5.13 (130.30)	6.70 (170.18)		
			0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)		
		N	0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)		
Block Thic	kness		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		

2 Way Angle								
			Catalog Number					
Stem Type	VEE REG		10V2072 10V2082	SW4072 SW4082	SW6072 SW6082	SW8072 SW8082		
Outside Diar	meter Tube		1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)		
Orifice D	iameter		0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)		
Dimensior inches (m		A	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)		
		в	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)		
		с	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)		
│FF		D	0.81 (20.57)	1.19 (30.23)	1.19 (30.23)	1.75 (44.45)		
M- +-+	-M_G	D1	NA					
		Е	1.56 (39.62)	2.43 (61.72)	2.19 (55.63)	3.38 (85.85)		
¢ Į		F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)		
	t <b>c</b> ∣	G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		
B−	+	G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)		
A	<b>→</b>	H*	3.94 (100.08)	5.00 (127.00)	5.00 (127.00)	6.45 (163.83)		
			0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)		
		N	0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)		
Block Th	ickness		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)		

3 Way, 1 on Pressure							
	Catalog Number						
Stom Tuno	VEE REG		10V2074 10V2084	SW4074 SW4084	SW6074 SW6084	SW8074 SW8084	
Outside Diameter	Tube		1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)	
Orifice Diamete	er		0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)	
Dimensions: inches (mm)		A	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)	
		в	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)	
		С	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)	
+F+		D	0.81 (20.57)	1.19 (30.23)	1.19 (30.23)	1.75 (44.45)	
G <sub>1</sub> M⊣-→⊢M		D1	NA				
H N G	<del>.</del>	Е	1.55 (39.62)	2.43 (61.72)	2.43 (61.72)	3.38 (85.85)	
	Ė  ⁺E	F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)	
	<u> </u>	G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)	
← A ← B →		G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)	
		H*	3.94 (100.08)	5.00 (127.00)	5.00 (127.00)	6.45 (163.83)	
		М	0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)	
		N	0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)	
Block Thickness	;		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)	

G - Packing Gland mounting hole drill size • G1 - Bracket mounting hole size • H\* - Dimension is with stem in closed position All dimensions for reference only and subject to change • For prompt service, Parker Autoclave stocks select products. Consult factory.

4

## 10V2 and SW Series Dimensions:

2 Way Angle / Replacable Seat							
			Catalog Number				
Stem Type	VEE REG		10V2872 10V2882	SW4872 SW4882	SW6872 SW6882	SW8872 SW8882	
Outside Diame	eter Tube		1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)	
Orifice Dia	meter		0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)	
Dimensions inches (mm		A	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)	
		в	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)	
⊦F		с	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)	
		D	0.81 (20.57)	1.19 (31.32)	1.19 (31.32)	1.75 (44.45)	
	M G	D1	1.28 (32.51)	1.88 (47.75)	2.19 (55.62)	2.50 (63.50)	
	⊨ p†	Е	1.56 (39.62)	2.25 (57.15)	2.25 (57.15)	3.25 (82.55)	
	t⊂ C	F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)	
	<u> </u>	G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)	
<u> </u>		G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)	
A		H*	4.50 (114.30)	5.75 (146.05)	5.75 (146.05)	7.51 (190.75)	
		м	0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)	
			0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)	
Block Thick	kness		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)	

	3 Way, 2 Stem Manifold							
			Catalog Number					
Stom Typo	/EE REG	10V2075 10V2085	SW4075 SW4085	SW6075 SW6085	SW8075 SW8085			
Outside Diameter	ſube	1/8 (3.18)	1/4 (6.35)	3/8 (6.35)	1/2 (12.70)			
Orifice Diamete	r	0.094 (2.39)	0.187 (4.75)	0.250 (3.18)	0.375 (9.53)			
Dimensions: inches (mm)	Α	1.50 (38.10)	2.00 (50.80)	2.00 (50.80)	2.50 (63.50)			
	в	0.75 (19.05)	1.00 (25.40)	1.00 (25.40)	1.25 (31.75)			
+F⊧	С	0.31 (7.87)	0.38 (9.65)	0.47 (11.94)	0.53 (13.46)			
	D	1.12 (28.45)	1.68 (42.67)	1.68 (42.67)	2.56 (65.02)			
	D1	0.81 (20.57)	1.19 (30.23)	1.19 (30.23)	1.75 (44.45)			
	P1 E	2.25 (57.15)	3.38 (85.85)	3.38 (85.85)	5.12 (130.05)			
	F	3.00 (76.20)	3.00 (76.20)	3.00 (76.20)	4.00 (101.60)			
	G	0.62 (15.79)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)			
	G1	0.17 (4.32)	0.22 (5.59)	0.22 (5.59)	0.34 (8.64)			
	H*	4.63 (117.60)	5.94 (150.88)	5.94 (150.88)	8.20 (208.28)			
	м	0.56 (14.22)	0.62 (15.75)	0.62 (15.75)	0.69 (17.53)			
	N	0.31 (7.87)	0.38 (9.65)	0.38 (9.65)	0.50 (12.70)			
Block Thickness		0.62 (15.75)	0.75 (19.05)	0.75 (19.05)	1.00 (25.40)			

G - Packing Gland mounting hole drill size • G1 - Bracket mounting hole size • H\* - Dimension is with stem in closed position All dimensions for reference only and subject to change • For prompt service, Parker Autoclave stocks select products. Consult factory.

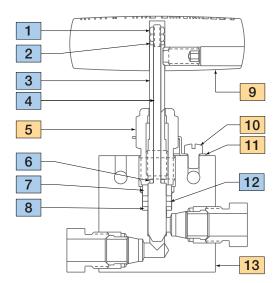
## Material of Construction:

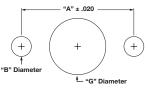
Item #	Description	Material
1	Hex Nut	300 Series SS
2	Thrust Washer	17-4 PH
3	Stem Sleeve	304 SS
4	Vee Stem (3/8" SW shown)	316 SS
5	Packing Gland	AMPCO 18
6	Thrust Washer	17-4 PH
7	Packing Washer	AMPCO 45
8	Bottom Washer	316 SS
9	Handle Assembly	316 SS
10	Fill HD Screw, #10-24	18-8 SS
11	Locking Device	302 SS
12	Packing	PTFE
13	Valve Body, (3/8" SW shown)	CW 316/316L SS
•	Replaceable Seat	17-4 PH

Typical spare parts found in Repair Kits ( • indicates part not shown)

## Panel Hole Sizes:

Valve Size	Inches							
valve Size	А	В	Screw Size	G				
10V2	1.12	.22	#10-24	.62				
4 and 6	1.25	.22	#10-24	.75				
8	1.375	.22	#10-24	1.00				
Use suffix -PM for extra mounting hardware								





Needle Valve Panel Mount



5

# Valve Options: (For Actuator Options please reference specific Actuator brochure)



## **Pneumatic Valve Actuators:**

The need to control process and vent valves from a remote location makes air operated valves a vital component to many processing operations. All Parker Autoclave Engineers' valves are available with piston type actuators. Five sizes of air actuators (light, mini-light, medium, heavy duty or extra heavy, single and double stage) are offered to meet the service requirements of Parker Autoclave Engineers' Low, Medium and High Pressure needle valves. Both air-to-open (normally closed) and air-to-close (normally open) designs are included in the product line. Optional air to open AND close actuators available upon request. Please see our Pneumatic Valve Actuator Brochure to help size the proper actuator for your application.



## **Electric Valve Actuators:**

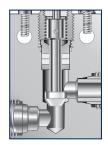
Remotely controlling process flow at high pressure enhances safety and lowers labor costs. Parker Autoclave Engineers developed a flow control valve available in several models including weatherproof and explosionproof options.

The Electrically Actuated Shut-off/Flow Regulating Actuator (FRC Series) is available for all sizes of 10V2 and SW Series "SpeedBite" valves up to full working pressure. Explosion proof version is rated for hydrogen service and can withstand wide process temperature ranges.

## Stem Options:

Most Parker Autoclave Engineers' valves are available with either Vee (on-off) or Regulating (Flow Control) Stems in our standard valve body seat or with our optional replaceable seat as shown below:

#### **VEE Stem**



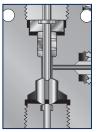
The Vee stem is used for direct on-off, metal-to-metal shut-off with quick-opening flow characteristics.

#### **Regulating Stem**

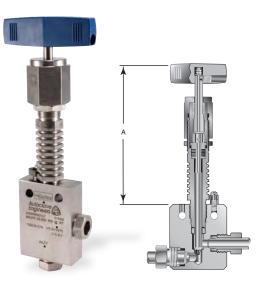


In some applications, more precise flow control is required than is possible with a Vee stem. For these cases, Autoclave offers a non-rotating, two-piece regulating stem which can be used for both control and shut-off. While it is not as precise as the control associated with the MicroMetering stem, especially with smaller flows, it does offer substantially better control than the Vee stem.

## Replaceable Seat



Replaceable seat option is only available with Right-Angle Style body. Replaceable seat is supplied as standard with an additional seat - rotate to use second side. Can be used with either stem type. Options include Stellite material or N-Dura coating to increase service life.



## High/Low Temperature Extension:

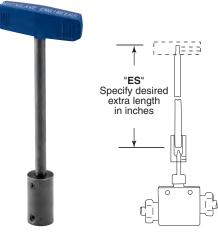
Not typically needed for 10V2/SW Series valves as temperature range does not exceed the barriers below, but option is shown for consideration.

- -HT High Temperature
- -LT Low Temperature

Outside Diameter Tube Size (inches)	Dimensions "A" inches (mm)
1/8"	5.38 (137)
1/4"	5.50 (140)
3/8"	5.50 (140)
needed) 1/2"	6.31 (160)
	Tube Size (inches) 1/8" 1/4" 3/8"

HT option code includes Graphite (-GY) packing

LT option code includes 316 SS Trim material and PTFE packing



## ES Stem Extender:

Stem extenders are offered for High and Low temperature operation or to extend through panel or barricade.

To order valve with Stem Extender, add "**ES-**" and length (6", 12", 18", 24") to beginning of valve part number e.g. ES12-SW6071. Other lengths to special order.

To order Stem Extender only, provide valve model prefix e.g. ES12-SW6. Handle not included – use same provided with original valve.



## Needle Valve Clam Shell Handle Lockout:

(order separately using part numbers shown below, padlock not included)

Clam Shell Handle locks are provided to lockout valves in open or closed position preventing unauthorized personnel from actuating valve during shutdown or emergency situations. This clamshell design is available in four (4) sizes dependent on handle length:

P/N AE004855 – 1" to 2.5" handle length P/N 90088 – 2.5" to 5.0" handle length P/N 90194 – 6.5" to 10" handle length P/N AE004350 – 8" to 13" handle length



#### Parker Worldwide

#### North America

**USA** – Corporate, Cleveland, OH Tel: +1 256 896 3000

USA – IPD, Huntsville, AL Tel: +1 256 881 2040 ipdcct@parker.com

USA – IPD, (Autoclave), Erie, PA Tel: +1 814 860 5700 ipdaecct@parker.com

**CA** – Canada, Grimsby, Ontario Tel +1 905-945-2274 ipd\_canada@parker.com

#### **South America**

**AR** – Argentina, Buenos Aires Tel: +54 3327 44 4129 falecom@parker.com

**BR** – Brazil, Diadema, SP Diadema, SP Tel: +55 11 4360 6700 falecom@parker.com

**CL** – Chile, Santiago Tel: +56 (0) 2 2303 9640 falecom@parker.com

MX – Mexico, Toluca Tel: +52 722 275 4200 contacto@parker.com

#### Asia Pacific

AU – Australia, Dandenong Tel: +61 (0)2 9842 5150 customer.service.au@parker.com

**CN** – China, Shanghai Tel: +86 21 2899 5000 INGtechnical.china@parker.com

HK – Hong Kong Tel: +852 2428 8008

IN - India, Mumbai Tel: +91 22 6513 7081-85

ID – Indonesia, Tangerang Tel: +62 2977 7900 parker.id@parker.com

**JP** – Japan, Tokyo Tel: +(81) 3 6365 4020 infophj@parker.com

**KR** – South Korea, Seoul Tel: +82 2 559 0400 parkerkr@parker.com

MY – Malaysia, Selangor Tel: +603 784 90 800 parkermy@parker.com

**SG** – Singapore, Tel: +65 6887 6300 parkersg@parker.com

**TH** – Thailand, Bangkok Tel: +66 2 186 7000 phthailand@parker.com

**TW** – Taiwan, Taipei Tel: +886 2 2298 8987 enquiry.taiwan@parker.com

VN – Vietnam, Hochi Minh City Tel: +848 382 508 56 parker\_viet@parker.com

#### Europe, Middle East, Africa

**AE** – UAE, Dubai Tel: +971 4 812 7100 parker.me@parker.com

AT – Austria, Wiener Neustadt Tel: +43 (0)2622 23501-0 parker.austria@parker.com

AT – Eastern Europe, Wiener Neustadt Tel: +43 (0)2622 23501 900 parker.easteurope@parker.com

AZ – Azerbaijan, Baku Tel: +994 50 2233 458 parker.azerbaijan@parker.com

**BE/LU** – Belgium, Nivelles Tel: +32 (0)67 280 900 parker.belgium@parker.com

**BG** – Bulgaria, Sofia Tel: +359 2 980 1344 parker.bulgaria@parker.com

**BY** – Belarus, Minsk Tel: +48 (0)22 573 24 00 parker.belarus@parker.com

CH – Switzerland, Etoy Tel: +41 (0) 21 821 87 00 parker.switzerland@parker.com

**CZ** – Czech Republic, Klecany Tel: +420 284 083 111 parker.czechrepublic@parker.com

**DE** – Germany, Kaarst Tel: +49 (0)2131 4016 0 parker.germany@parker.com

**DK** – Denmark, Ballerup Tel: +45 43 56 04 00 parker.denmark@parker.com ES – Spain, Madrid Tel: +34 902 33 00 01 parker.spain@parker.com

**FI** – Finland, Vantaa Tel: +358 (0)20 753 2500 parker.finland@parker.com

FR – France, Contamine s/Arve Tel: +33 (0)4 50 25 80 25 parker.france@parker.com

**GR** – Greece, Athens Tel: +30 210 933 6450 parker.greece@parker.com

HU – Hungary, Budapest Tel: +36 223 885 470 parker.hungary@parker.com

IE – Ireland, Dublin Tel: +353 (0)1 466 6370 parker.ireland@parker.com

IT – Italy, Corsico (MI) Tel: +39 02 45 19 21 parker.italy@parker.com

**KZ** – Kazakhstan, Almaty Tel: +7 7273 561 000 parker.easteurope@parker.com

NL – The Netherlands, Oldenzaal Tel: +31 (0)541 585 000 parker.nl@parker.com

NO – Norway, Stavanger Tel: +47 66 75 34 00 parker.norway@parker.com

PL – Poland, Warsaw Tel: +48 (0)22 573 24 00 parker.poland@parker.com **PT** – Portugal, Leca da Palmeira Tel: +351 22 999 7360 parker.portugal@parker.com

RO – Romania, Bucharest Tel: +40 21 252 1382 parker.romania@parker.com

**RU** – Russia, Moscow Tel: +7 495 645-2156 parker.russia@parker.com

SE – Sweden, Spånga Tel: +46 (0)8 59 79 50 00 parker.sweden@parker.com

**SK** – Slovakia, Banská Bystrica Tel: +421 484 162 252 parker.slovakia@parker.com

SL – Slovenia, Novo Mesto Tel: +386 7 337 6650 parker.slovenia@parker.com

**TR** – Turkey, Istanbul Tel: +90 216 4997081 parker.turkey@parker.com

**UA** – Ukraine, Kiev Tel: +48 (0)22 573 24 00 parker.ukraine@parker.com

**UK** – United Kingdom, Warwick Tel: +44 (0)1926 317 878 parker.uk@parker.com

**ZA** – South Africa, Kempton Park Tel: +27 (0)11 961 0700 parker.southafrica@parker.com

#### ! CAUTION !

Do not mix or interchange component parts or tubing with those of other manufacturers. Doing so is unsafe and will void warranty.

Parker Autoclave Engineers Valves, Fittings, and Tools are not designed to interface with common commercial instrument tubing and are designed to only connect with tubing manufactured to Parker Autoclave Engineers AES specifications. Failure to do so is unsafe and will void warranty.

#### WARNING

FAILURE, IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and a subring that all performance, safety and warning requirements of the product show a subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

#### **Offer of Sale**

The items described in this document are available for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. Any sale contract entered by Parker will be governed by the provisions stated in Parker's standard terms and conditions of sale (copy available upon request).

©2019 Parker Hannifin Corporation | Autoclave Engineers is a registered trademark of the Parker Hannifin Corporation

Literature #: 02-0102SE

November 2019



Instrumentation Products Division Autoclave Engineers Operation 8325 Hessinger Drive Erie, PA 16509-4679 Tel: 814 860 5700 Fax: 814 860 5811 www.autoclave.com www.parker.com/jpd Instrumentation Products Division Division Headquarters 1005 A Cleaner Way Huntsville, AL 35805 USA Tel: 256 881 2040 Fax: 256 881 5072 Parker Hannifin Manufacturing Ltd. Instrumentation Products Division, Europe Riverside Road Pottington Business Park Barnstaple, UK, EX31 1NP, UK Tel: 44 1271 313131 Fax: 44 1271 373636



s standard terms and conditions of sale (copy a