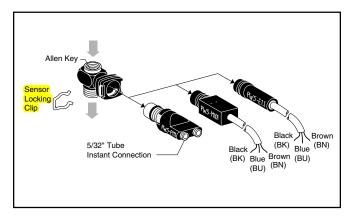


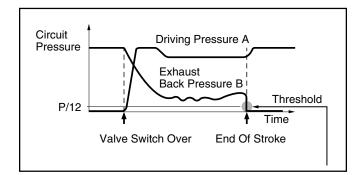
# Application

The threshold sensor provides electrical or pneumatic feedback information on pneumatic cylinder status. These devices monitor the back pressure of the cylinder's exhausting chamber. When the cylinder stops, the back pressure drops and the threshold sensor provides the desired output. Ideal for variable stroke applications. The banjo fitting and the feedback element are two separate subassemblies, giving the user flexibility between electrical, electronic and pneumatic outputs as feedback.



# Mounting

Banjo fittings in 10-32 to 1/2" pipe sizes are designed to be installed directly into actuator ports (up to 5" bore cylinders). The banjo fitting can accommodate other functional fittings and components such as right angle flow control valves or blocking valves. Banjo fittings screw into actuators using an Allen wrench or 5/16" hex head wrench for 10-32 size. Electrical or pneumatic feedback element snaps into place using a locking clip.



#### **Model Selection**

Banjo Sockets (with Sensor Clip)			
Port Size (NPT)	Model Number	Wrench	
10-32	PWSB1557	5/16" Hex	
1/8"	PWSB1887	3/16" Allen	
1/4"	PWSB1997	5/16" Allen	
3/8"	PWSB1337	3/8" Allen	
1/2"	PWSB1227	1/2" Allen	
Port Size (BSP)	Model Number	Wrench	
M5	PWSB155	5/16" Hex	
1/8"	PWSB188	3/16" Allen	
1/4"	PWSB199	5/16" Allen	
3/8"	PWSB133	3/8" Allen	
1/2"	PWSB122	1/2" Allen	

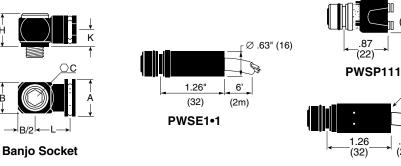
### Operation

Pneumatic sensors have a continuous pressure signal applied to the sensor device. Electrical sensors have a continuous electrical signal applied to the sensor device. The threshold sensor assembly mounted directly into the cylinder port provides an output signal S, which can be pneumatic or electrical, when the falling back pressure in the exhausting chamber of the cylinder reaches the operating threshold (approximately 6-9 PSIG). (The device is a normally passing device. The output is only on when there is nearly zero pressure at the cylinder.)

Plug-in Sensors				
Output	Model Number Connection			
Pneumatic	PWSP111	5/32" Instant*		
Electrical	PWSM1012	3 x 20 Ga. Cable (6 ft)		
Electronic	PWSE101	3 x 28 Ga. Cable (6 ft) NO		
Electronic	PWSE111	3 x 28 Ga. Cable (6 ft) NC		

\* Use Semi-rigid Nylon or Polyurethane Tube

## Dimensions



**PWSM1012** 

(32)

.87 (22)

∕18 x 24

.79

(20)

			·			
Model	Α	В	С	н	K	L
PWSB1557	.98"	.43"	5/16" Hex	.79"	.40"	.67"
I WODIOO/	(25)	(11)	5/10 HCX	(20)	(10)	(17)
PWSB1887	.98"	.63"	3/16" Allen	.71"	.40"	.79"
1 1 1001	(25)	(16)	S/TO Allen	(18)	(10)	(20)
PWSB1997	.98"	.83"		.71"	.40"	.87"
1 0001997	(25)	(21)	S/TO Allen	(18)	(10)	(22)
PSWB1337	.98"	1.10"	3/8" Allen	.79"	.47"	.98"
10001007	(25)	(28)	5/6 Allen	(20)	(12)	(25)
PWSB1227	.98"	1.30"	1/2" Allen	.93"	.55"	1.02"
1 11001227	(25)	(33)		(24)	(14)	(26)

# **Specifications**

Current Rating (PWSM1012) 5 VA, 250 VAC 5W, 48 VAC

#### Materials

Body Thermoplastic
Mounting Screw
& Threads Brass

**Maximum Operating Frequency** 10 Hz Number of Operations with Dry Air at 90 PSI (6 bar) and 68°F (20°C) – Frequency 1 Hz 10 Million

#### **Operating Pressure** 0 to 150 PSIG (0 to 10 bar)

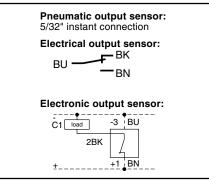
Output Flow Rate (PWSP111) 3 SCFM at 90 PSIG

Pilot Pressure (PWSP111) >64 PSIG (4.4 bar) Spare Sensor Locking Clip

PPRW01 (1 Lot of 50 Pieces)

Temperature Operating 32°F to 122°F (0°C to + 50°C) Storage -22°F to 140°F (-30°C to +60°C) **Threshold Pressure** 6 to 9 PSIG (.4 to .6 bar) Voltage Range (PWSM1012) 12 - 240 VAC 12 - 48 VDC

# **Operating Assembly** and Connection



Universal Description	Electrical		Fluid Power		
	Function	Symbol	Function	Symbol	
Normally Non-Passing (NNP)	Normally Open (N.O.)		Normally Closed (N.C.)	2-Way 3-Way	
Normally Passing (NP)	Normally Closed (N.C.)	<b></b> 0	Normally Open (N.O.)		



Parker Hannifin Corporation Pneumatic Division Richland, Michigan