

# P90

## Severe Environment Pressure Switch

### OVERVIEW

The Whitman Controls P90 Severe Environment Pressure switches are built to operate in harsh conditions and are typically used in vehicle applications both off road and on. As these switches are NEMA 6 rated, they are weather proof and briefly submersible. Ideal use is on log skidders, tractors, handi-vans, cranes and numerous other applications where shock, vibration and weather are of primary concern.

### KEY FEATURES

- Shock resistant up to 150G
- Vibration durability of 10Hz to 2,000Hz @ 10G's
- Water resistant up to 1,000 PSIG high pressure spray
- Cold Storage up to -67oF (-55oF)
- NEMA 6 Rated: Weather-proof and briefly submersible
- Set point options: Factory set to customer specification, non-adjustable
- Extensive operating temperature range
- Wide range of electrical interfaces available
- SPDT or SPST availability

### SPECIFICATIONS

- **Set Point Range:** 0.75 to 400 PSIG
- **Max System Pressure:** 600 PSIG
- **Temperature Range:** -40oF to +257oF (-40oC to +125oC)
- **Amps:** 1-11 Amps Max
- **Sensor Element:** Diaphragm
- **Weight:** 7.0 oz
- **Cycling:** Not to exceed 20 CPM
- **Wetted Parts:**  
**Diaphragm:** Viton  
**Lower Body:** Zinc alloy, chromate finish  
**Standard Thread:** 1/8" NPT  
**Optional Threads:** 12-20 SAE, other fittings available in quantities



### SENSOR CODE AND PERFORMANCE CHARACTERISTICS

Table A			Table B	
SENSOR CODE	MAXIMUM SYSTEM PRESSURE*	SET POINT REPEATABILITY	SET POINT RANGE	
	PSIG	PSIG	DECREASING PSIG	INCREASING PSIG
1	600	± 0.75	0.75 - 3.0	2.0 - 4.25
2	600	± 1.0	3.0 - 6.0	4.2 - 8.0
3	600	± 2.0	6.0 - 20.0	7.0 - 24.0
4	600	± 5.0	12.0 - 47.0	14.0 - 50.0
5	600	± 10.0	30.0 - 110.0	38.0 - 125.0
6	600	± 20.0	75.0 - 270.0	85.0 - 270.0
7	600	± 40.0	100.0 - 330.0	125.0 - 400.0

\*Exceeding sensor capacity may cause shift in set point

CAUTION: Customer Media and environment must be compatible with construction materials as outlined above