FOAM SYSTEMS | CAFSystems™ | FIRE PUMPS

PRESSURE GOVERNOR

Waterous Pressure Governors operatate in one of two control modes, PRESSURE or RPM; maintaining steady pump discharge pressure by controlling the engine speed or by holding a selected engine RPM. Discharge pressure or engine RPM do not vary when switching between modes. A throttle ready LED illuminates when the interlock signal is recognized.

In PRESSURE Mode the governor automatically regulates the discharge pressure at the level set by the operator within+/- 2.5% of full-scale.

In RPM Mode the governor maintains the engine RPM at the level set by the operator except in the event of a discharge pressure increase. The governor limits a discharge pressure increase in RPM mode to a maximum of 30 psi.

Other safety features include recognition of no water conditions with an automatic programmed response and a push button to return the engine to idle.

The Pressure Governor is available in ruggedized push button model, easily operated with gloved hands.

Ruggedized Push Buttons

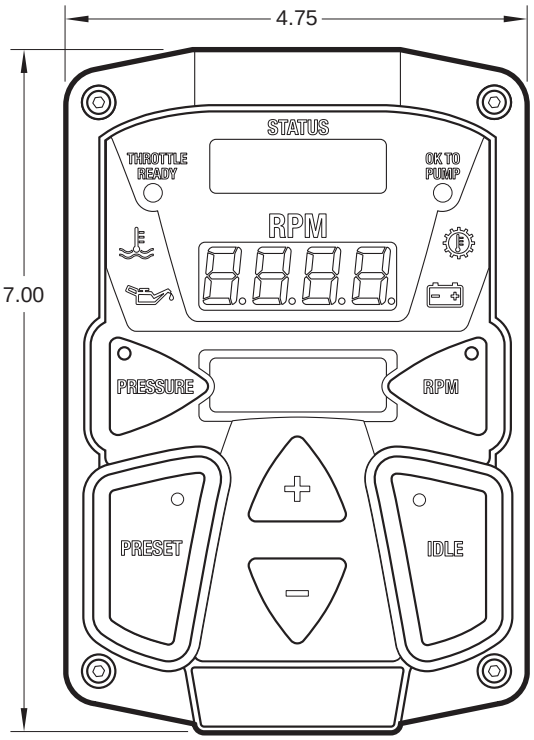
Engine Compatability

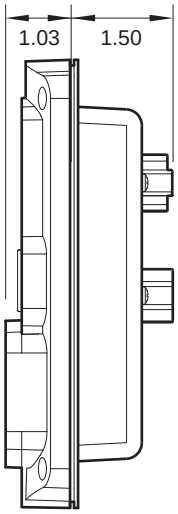
- Cummins J1939
- Detroit Diesel
- Navistar
- Cat J1939
- Mack J1939
- Scania
- Ford
- Generic PNG0 and analog interfaces

- Programmable preset, interlocks, units and alarm settings
- 300psi or 600psi discharge pressure sensors
- Programmable start in either RPM or pressure mode
- Ambient light detection for automatic adjustment of display intensity for day/night operation
- Red IDLE button returns engine to idle speed
- Recognition of no, low or changing water conditions with automatic engine control response
- Automatically limits increase of pressure at discharge when in Pressure Mode
- NFPA interlock signal LED indicators
- J1939 CAN bus engine information and control
- Programable high idle operation
- Automatic low hydrant pressure alarm (<20psi) is armed when connected to a pressurized water source
- Two-Year Warranty

GOVERNOR SPECIFICATIONS

Operating Voltage	+9VDC to 32VDC
Current consumption at 13.8 VDC with no loads	500mA
Current consumption at 27.6 VDC with no loads	300mA
Maximum Output Current	Sensor (+5VDC) = 250mA (polythermal fuse protected to 300mA) Alarm Active = 700mA (ground polarity output)
Temperature Range	-40°C to + 85°C (-40°F to +185°F)
Ingress Protection	IP67
CAN Specification	SAE J1939, 125, 250, or 500 Kbits/second
Electrical Protection	Internal thermal fuse CAN bus protected for heavy duty trucks (24V) Transient voltage protected to SAE J1113 specification for heavy duty trucks (24V) Load dump voltage protected to SAE J1113 specification for heavy duty trucks (24V)
Electrical Performance (designed to meet)	Immunity to Radiated Electromagnetic Fields– Bulk Current Injection (BCI) method, Class C device SAE J1113-4 Reverse voltage protection on power leads, Class C device ISO 16750-2 Jump start on power leads, Class C device ISO 16750-2 Immunity to conducted transients on power leads, Class C device (24V) SAE J1113-11 Immunity to Electrostatic Discharge – powered and unpowered modes SAE J1113-13 Immunity to radiated electromagnetic fields SAE J1113-21 Conducted emission on power leads (level 3 limits) SAE J1113-41 Radiated emissions, absorber-lined shielded enclosure (level 2 limits) SAE J1113-41 Reset behavior on voltage drop 24V, Class C device ISO 16750-2
Environmental Performance (designed to meet)	Exposure to fungus MIL-STD-810F (method 508.5) SAE J1455 (sec 4.6) Thermal shock SAE J1455 (sec 4.1.3.2) Exposure to humidity MIL-STD-810F (method 507.4) Thermal shock due to splash Class 1 (STD-0001) Steam cleaning SAE J1455 (sec 4.4) Exposure to salt spray atmosphere/fog SAE J1455 (sec 4.3) Exposure to splash due to chemicals and oils SAE J1455 (sec 4.4) Exposure to outdoor UV ISO 4892-2 (method A)
Mechanical Performance (designed to meet)	Resonance dwell SAE J1455 (sec 4.9.4.1) Random vibration SAE J1455 (sec 4.9.4.2) Mechanical shock SAE J1455 (sec 4.10.3.4)





Side View

DIAGNOSTICS

Status Indicators	Engine RPM; four daylight bright LED digits more than 1/2" high Check engine and stop engine warning LEDs Engine oil pressure; shown on a tricolor green/yellow/red icon Engine coolant Temp; shown on a tricolor green/yellow/red icon Transmission Temp: shown on a tricolor green/yellow/red icon Battery voltage; shown on a tricolor green/yellow/red icon Pressure and RPM operating mode LEDs Pressure / RPM setting Throttle ready LED Ok To Pump LED

Warning Messages and Indicators	Warning Messages and Indicators High Battery Voltage Low Battery Voltage High Transmission Temperature Low Engine Oil Pressure High Engine Coolant Temperature Out of Water (visual alarm only) No Engine Response (visual alarm only)