



TPG+

STYLE

The Total Pressure Governor Plus (TPG+) places vital pump and engine control information in one easy-to-use compact package. Engine information including oil pressure, temperature, pump hours, fuel rate and engine hours. It is available with one touch. The TPG+ has large intake and discharge pressure displays eliminating the need for separate master gauges saving valuable pump panel space. It utilizes the J1939 CAN bus for engine control but also has an analog throttle output for those engines that do not support CAN control.

Features

The Total Pressure Governor Plus (TPG+) is an SAE J1939 Controller Area Network (CAN) device that controls engine speed using data communications directly to the engine ECU or through with an analog control signal. By operating on the J1939 network, the governor is able to monitor engine RPM and other pertinent data directly from the engine ECU. Engine information is available directly so that NFPA required instrumentation is delivered through a single unit saving panel space and delivering engine specific warnings as determined by each engine manufacturer. Control algorithms are optimized to take advantage of the J1939 CAN data to yield crisp and accurate control of engine and subsequently pump speed and pressure output. On units with starting with software version 7.xx the Governor when first installed and powered will step through an CAN Auto BAUD rate detection sequence. Once the Governor determines which BAUD rate the CAN bus is running on it will save it to memory. For engines that may not support the data link control, an analog output signal is available to provide precise control of the engine speed and pressure. The TPG+ saves pump panel space by incorporating easy to read numeric displays for Pump Intake pressure, Pump Discharge pressure, and engine RPM in accordance with NFPA standards.

Applications/Solutions

- Fire OEMs
- Firefighting - Airport (ARFF)
- Firefighting - Industrial
- Firefighting - Structural
- Firefighting - Wildland Forestry



Specifications

Country of Manufacture	US
Weight	33.8 oz (958.2 g)
Width	7.5" (190.5mm)
Height	6.0" (152.4mm)
Depth	2.312" (58.74mm)
Operating Pressure	300 - 600 PSI (20.68 Bar - 41.37 Bar)
Volts	+9VDC ... +32VDC
Amperage	400 mA (13.8 VDC) / 215 mA (27.6 VDC)
Can Specification	SAE J1939: 125, 250, 500 Kbits/second
Engine	Cummins, Mercedes, PGN0, Analog, PWM, Volvo FE/FL, Volvo FM/FH, Scania BWS, Scania BCI, FAW, MAN
Enviromental Range	IP 67



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Electrical protection

- Internal thermal fuse (2500mA on pin 1 of black 12-pin connector)
- 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

- Immunity to Radiated Electromagnetic Fields– Bulk Current Injection (BCI) method, Class C device SAE J1113-4
- Reverse voltage protection on power leads (pins 1 and 12 of black 12-pin connector), 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

- 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

- 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)