OPTION V DC OPERATED WHEEL TORQUEMETERS

Option V Converts mV/V MCRT® 27000T Torquemeters to DC In-DC Out Operation

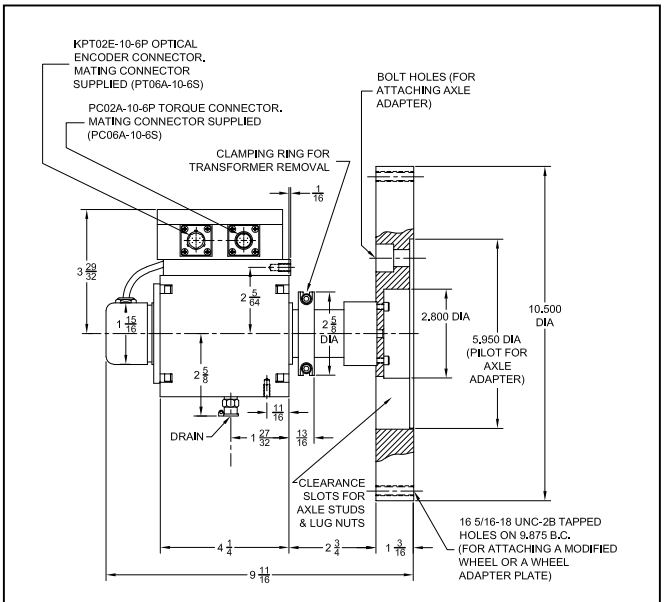
- ***Dual ±5 Volt Outputs***
- ***Single Supply Operation***
- ***NIST Traceable Calibration***
- ***Retains Basic Sensor Features***

The Code V Option converts any Model MCRT® 27000T mV/V Wheel Torquemeter to a DC Operated Wheel Torquemeter. That is, one powered by a single, unregulated dc supply (including vehicle power) and which produces dual, filtered ±5V outputs. Except for the rotary transformer stator housing (see sketches below), dimensions are unchanged. Other specifications and characteristics, per Bulletin 7800, are unchanged.

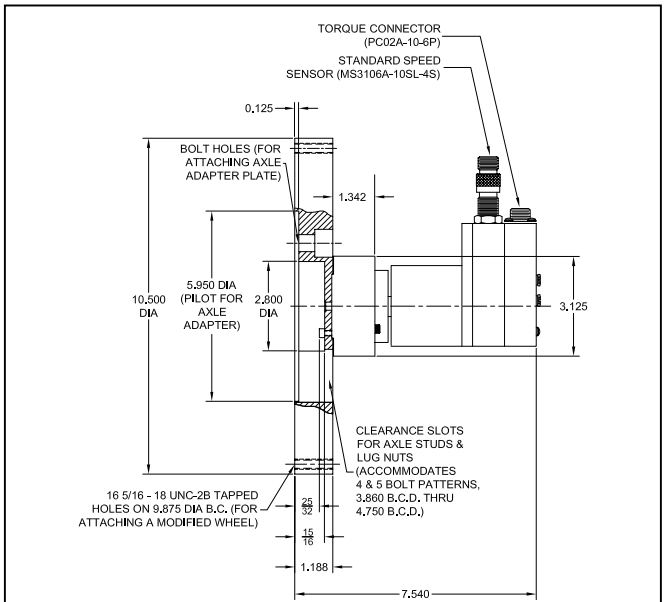
Option V Specification Summary

Nonlinearity (end point, % of F.S.)	≤±0.10	Storage Temperature Range (deg. F.)	-65 to +225
Hysteresis (% of F.S.)	≤±0.10	Output, Full Scale CW Torque	+5 V on each output
Nonrepeatability (% of F.S.)	≤±0.05	Output, Full Scale CCW Torque	- 5 V on each output
Error (combined nonlinearity, hysteresis, & repeatability, % of F.S.)	≤±0.15	Minimum Resistive Load (Ohms)	10,000
Rotational Effect on Zero (% of F.S.)	≤±0.025	Maximum Capacitive Load (µF)	0.05
Calibration Error (% o F.S. @ 75 deg. F., traceable to NIST)	≤±0.05	Nominal Overrange (% of F.S.)	33
Output Tracking (Difference between dual outputs, % of F.S.)	≤±0.1	Measurement Bandwidth(2 outputs, always on)	dc to 1 and dc to 500 Hz
Effect of Radial, Bending & Clamping Loads	Per Bulletin 7800	Output Noise (rms, % of F.S.)	0.01% on 1 Hz output 0.1% on 500 Hz output
Zero Drift (% of F.S./deg. F.)	≤±0.003	Zero and Span Control Ranges (nominal % of F.S.)	±5% for each
Span Drift (% of Rdg./deg. F.)	≤±0.003	Supply Voltage (Fused and reverse polarity protected)	10.5 to 24 Volts dc
Compensated Temperature Range (deg. F.)	+75 to +175	Supply Current	90 mA, nominal
Minimum Usable Temperature Range (deg. F)	-25 to +185	Power Supply Effect	<0.01% of F.S. per Volt

Specifications are subject to change without notice.



MCRT® 27820V/27840V Outline – with optional encoder



MCRT® 27830V/27835V Outline – with speed pickup

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