

SPD-700

Digital Tachometer/ Rate Meter

Solid-state and self-powered, the SPD-700™ Series meter operates directly from magnetic pickups and pulsers. No AC or DC power is required. Signal and power are derived from the signal source.

2-Year Warranty

FEATURES

- Self-powered: can be used in remote locations. Not sensitive to line noise, spikes, or grounding.
- Intrinsically safe system when used with qualified Dynalco magnetic pickups. (See Third Party Approvals.)
- Begins operating at speeds as low as 50 RPM (with appropriate gear and pickup). Lowest frequency range limited by gate time and corresponding display.
- Field-calibrated by jumper-selecting a gate time range, and by adjusting the vernier potentiometer accessible through a normally covered hole on the front of the instrument.
- Digital ease of readability with large 0.5 inch high digits. Greater accuracy and resolution than analog instruments.



- Displays RPM or any other rate information such as FPM or GPM.
- Display contrast ratio increases with increasing ambient light; eliminates LED fade-out under high ambient light conditions.
- Ideal for indoor installations; for outdoor use a weatherproof enclosure is required.
- Highly immune to sour gas that so easily attacks the springs and other components of analog meters.
- Physically interchangeable in mounting holes and cutouts with standard 4½-inch rectangular analog meters.

Third Party Approvals

The SPD-700 Series is approved for use in Class I, Div. 1, Grps. A, B, C, D hazardous locations when used with Dynalco magnetic pickups M134, M135, M139, or M204. Also, Groups C and D locations when used with Dynalco magnetic pickups M160, M201, M202, M231, or M233.

WARNING: Substituting components or connecting unauthorized equipment to the input signal terminals may impair intrinsic safety.

SPECIFICATIONS

External Power Requirements: No external power required. All models are signal powered. Signal derived from pickups, pulsers, shaft encoders, etc.

Input Signal Voltage: Minimum signal amplitude: 2 Vrms (6 volts peak-to-peak). Typical threshold: approximately 1.5 Vrms. Maximum permissible signal is 13 Vrms (40 volts peak-to-peak). Typical tachometer input resistance is 20 k Ω at 4.5 volts peak-to-peak; 100 Ω at 40 volts peak-to-peak.

Note: No danger of over voltage when operating from magnetic pickups. The internal resistance and inductance of a pickup-combined with the collapsing input resistance of the tachometer at signals above 9 volts peak-to-peak limits the pickup output voltage to well below unsafe values.

Input Signal Frequency: Maximum input signal frequency 12,000 Hz. Lowest input frequency limited by gate time and corresponding numerical display.

Isolated Circuit: All circuitry is totally floating; i.e. totally isolated and insulated from the case and from ground.

Display: 4 active digits (0000 to 9999). Non-blinking LCD display. Optional decimal point can be placed after the 1st, 2nd, or 3rd digit.

Temperature Range: Operating: 0°F to +165°F (-18°C to +74°C) **Stability of Reading:** $\pm 0.0050\%/^{\circ}\text{F}$ ($\pm 0.0028\%/^{\circ}\text{C}$); no change with signal amplitude for signal levels above 2.5 Vrms.

Readout Accuracy: 0.1% of reading.

Field-Selectable Gate Time Ranges:

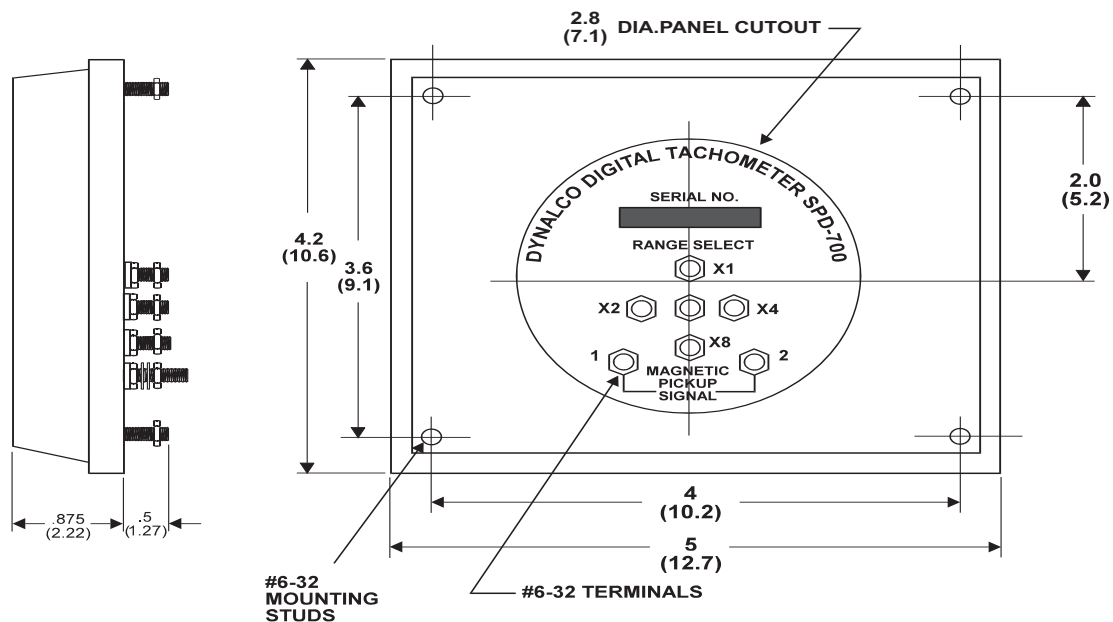
SPD-700: from 0.26 to 5.7 seconds

SPD-708: from 0.13 to 2.85 seconds

This accommodates calibrations for an extremely broad range of corresponding pulses per second.

Weight: 1 lb (0.45 kg)

For outdoor use, the SPD-700 should be in a weatherproof enclosure.



DYNALCO



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