

THROTTLE POSITION AND INDUSTRIAL CONTROL SENSOR MODULES

9800 SERIES THROTTLE POSITION/ AND INDUSTRIAL CONTROL SENSOR MODULES

The Duncan 9800 Series Sensor is designed for rugged, continuous under hood environments. Features include high temperature, stable materials; insert molded integral connector/body design to eliminate weak/stress points or leaks during engine wash-down or water exposure.

To meet a variety of mounting area needs and interconnection requirements, fourteen standard models are available. For engineering assistance or special configurations of the 9800 Series to meet specific applications, contact a Duncan representative or the factory.

ELECTRICAL SPECIFICATIONS

Active Electrical Rotation: 85° ±2° (See Fig. 1) Total Resistance: 5,000 ohms ±20% Linearity: Std ±2.0% over active electrical rotation (See Fig. 1) Spec. ±0.5% over active electrical rotation (See Fig. 1) Power Rating At 70°C:

0.15 Watts

Shaft Rotation Direction:

CW Models: female-9801, 9805, 9811 male-9803, 9807, 9813 leadwire-9831 CCW Models: female-9802, 9806, 9812 male-9804, 9808, 9814 leadwire-9832

MECHANICAL SPECIFICATIONS

Mechanical Rotation (Nominal):

120° (Except 130° for 9831, 9832)

Mechanical Life: 1,000,000 full cycles, 5,000,000 dither cycles Stop Strength: 0.68 Nm max.

Torque: 0.11 Nm max. Mounting Torque: 1.35 Nm max.

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits: -40°C to +135°C Humidity: 95% @ 38°C

Vibration: 15 G's, 50 to 1,000 Hz. 2 Hrs. each plane Shock: 50 G's

9811 (CW) 9812 (CCW)





MODELS 9811-9814 90° CONNECTOR STYLE





SPRING RETURN ORIENTATION:

Spring returns slider to counter-clockwise end on CW sensors. Spring returns slider to clockwise end on

MATING CONNECTOR/INTERFACE INFORMATION:

Sensor Female Connector Mates With Packard Electric Weather Pack Connector

- -Three-way Tower with Seal (1 required) P/N 12015793
- -Male Pin (3 required) P/N 12033674 (for 18 AWG wire)
- -Wire Cable Seal (3 required) P/N 12015284

Note: Custom Drive-Arm/Actuator Configurations Available Most specifications may be altered to meet specific requirements

Notes: Nominal Midpoint of Mechanical Rotation for CCW Rotation. 1 2 3 4 Nominal Midpoint of Mechanical Rotation for CW Rotation. Nominal 10% Output Position for CCW Rotation. Nominal 10% Output Position for CW Rotation. Both Driving Blades and Shaft are Shown in Midpoint Position. 5 6 All Dimensions and Values Shown in Metric.