

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# 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:

 $5,000 \text{ ohms } \pm 20\%$ 

Linearity:

Std  $\pm 2.0\%$  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:

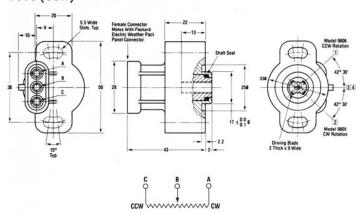
15 G's, 50 to 1,000 Hz.

2 Hrs. each plane

Shock:

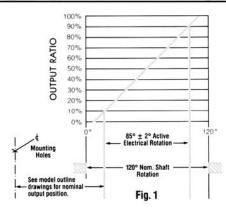
50 G's

### 9805 (CW) 9806 (CCW)



MODELS 9805-9808 OFFSET CONNECTOR STYLE





#### SPRING RETURN ORIENTATION:

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

Spring returns slider to clockwise end on CCW sensors.

#### 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

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