SFMS
SENSORS AND FLUID MANAGEMENT SYSTEMS
AMETEK®



POSITION, SPEED & PROXIMITY

8100 Series Proximity Switch Transducers

Overview

AMETEK Aerospace proximity switch transducers are specially designed to meet the high reliability, long life requirements of commercial aviation applications.

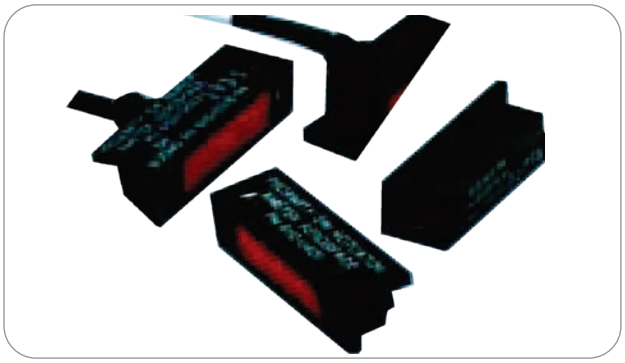
The results are a precise, highly reliable, long life, maintenance-free proximity switch pair. The 8100 Series consists of an actuator (permanent magnet) and a matching sensor module capable of reliable operation over a predetermined switching zone.

The 8100 Series switches are widely used in Boeing (747/757/767/777) aircraft for compartment and door sensing applications.

AMETEK's engineering has been on the leading edge of aerospace technology for decades. Program by program, AMETEK's reputation for innovative product design and development has been built on an extensive line of reliable and high technology products.

Features

- *Form A (SPST-NO)*
- *FAA-PMA Certification*
- *Reed Switch Technology*
- *Positive Snap Action*
- *High Reliability (50,000 hours MTBF with normal (maintenance)*
- *Long Life*
- *Maintenance Free*
- *High Current Output*
- *Minimum Weight*
- *Hermetically Sealed Reed Switch*
- *Environmental Ruggedness*



Specifications

Physical Specifications Characteristics

- *Electrical Wires:* *18 AWG twisted pair, braided*

Dimensions:

- *Sensor:* *1.6 x 0.46 x 0.35 in.*
- *Actuator (magnet):* *1.6 x 0.46 x 0.35 in.*
- *Activation/Deactivation (Switching Zone):* *Minimum actuate: 0.345 in. Maximum deactuate: 0.430 in.*

Electrical Characteristics

- *Contact Form:* *Form A (SPST-NO)*
- *Sensor Output:* *500 mA at 28 VDC into a resistive load 250 mA into an inductive load with a time constant of <10ms 100 mA at 28V into a lamp load*
- *Insulation Resistance:* *10 megohms (minimum)*

Environmental Characteristics

- *Operating Temp. Range:* *-76O to 185OF (-60° to 85°C)*
- *Altitude:* *-1000 ft. to 50,000 ft.*
- *Humidity:* *100% RH @185°F (85°C)*
- *Vibration:* *0.1 in. double amplitude, 10 to 1000 Hz*
  Shock: *50G for shock impulse of 11 milliseconds*
- *Salt, Spray, Rain, Sand and Dust:* *Per MIL-E-5272C*

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