# Inductive Proximity Switch 3 Wire Current Sink Non Contact Detection

# Part Number: 84793050

> Compact Proking > Lightweight > Qualified to DO160G For harsh environment with current sinking output (NPN) NC (Normally Closed) SPECIFICATIONS **CHARACTERISTICS** CONNECTION Temperature -55 °C ... +75 °C Wiring diagram Actuation (head on) 2.3 mm (0.090 in) Useful signal Deactuation (head on) 3.3 mm (0.130 in) Weight (with accessories) 70 g (0.154 lb) max 0 🛈 A **Power Supply** 16.. 32.5 V LOAD Nominal voltage 28 V .... ±15 % ♦ 🕐 -0 🚯 Insulation resistance 100 M $\Omega$  min under 50 V----(1)Positive node **Dielectric strenght** 500 V --- leakage current below 1 mA  $\bigcirc$ V out (3)Negative node 2.5 mΩ max between case and **Electrical continuity** connector Normally Closed (NC): i.e. when target is far there is Switching response time 2 ms max current in the switch thus V out ~ 0 V (see below) Switching frequency 100 Hz max

# NORMALLY CLOSE OUTPUT



Target Far : transistor is saturated V out ~ 0V (below 1.5 V under 100 mA)

Target Near : V out = V+



# **Inductive Proximity Switch**

# **DETECTION CURVE (SLIDE BY MODE)**



| DO-160G<br>section |                                       | CATEGORY      |
|--------------------|---------------------------------------|---------------|
| 4                  | Operating Low/High temperature        | D2            |
| 4                  | Short time operating temperature      | D2            |
| 4                  | Altitude                              | D2            |
| 5                  | Temperature variation                 | А             |
| 6                  | Humidity                              | В             |
| 7                  | Shocks and crash safety               | В             |
| 8                  | Vibration                             | S - CURVE E&W |
| 9                  | Explosive atmosphere                  | A             |
| 10                 | MIL PRF 8805 F WATERTIGHT<br>SYMBOL 3 |               |
| 11                 | Fluids susceptibility                 | F             |
| 12                 | Sand and dust                         | S             |
| 13                 | Fungus                                | F             |
| 14                 | Salt spray                            | S             |
| 15                 | Magnetic effect                       | A             |
| 16                 | Power input (DO 160D)                 | Z             |
| 17                 | Voltage Spike                         | A             |



| RTCA<br>DO-160G |  | CATEGORY |
|-----------------|--|----------|
| 18              | Audio frequency conducted<br>susceptibility                | Z        |
| 19              | Induced susceptibility (DO 160F)                           | AC       |
| 20              | Radio frequency susceptibility<br>(radiated and conducted) | Y        |
| 21              | Emission of radio frequency energy                         | Μ        |
| 22              | Lightning Induced Transient<br>Susceptibility              | A3J3L3   |
| 24              | lcing  | A        |
| 25              | Electrostatic discharge                                    | A        |

Qualification report available upon request

### To ensure EMI compliant:

 The harness of the proximity switch must use AWG 24 (minimum diameter) twisted and shielded wires
Wiring external to fuselage must have a 360° shielded bond



# DIMENSIONS inch [MM]



- AISI 303 Stainless Steel body
- ② 2 Stainless steel nuts MS21340-05
- Stainless steel lock washer MS25081-C6
- Laser marking
- Connector D38999/25YA98PN to mate with D38999-26KA98SN or D38999/26MA98SN

This product is used today in aerospace thrust reverse and landing gear applications. Modifications on threading, connector, EMI performance, or environment category are possible.

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