2 WIRE CURRENT SINK INDUCTIVE PROXIMITY SWITCH

› Compact
› Lightweight
› Qualified to DO160G
› Built in Test

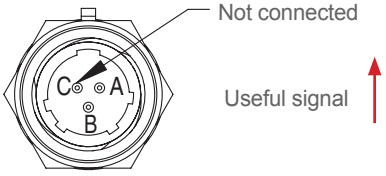
For harsh environment with current loop output NO (Normally Open)

SPECIFICATIONS

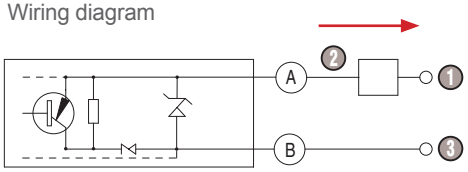
CHARACTERISTICS

Temperature	-55 °C ... +85 °C
Actuation (head on)	1.8 mm (0.071 in)
Deactuation (head on)	4.7 mm (0.185 in)
Weight (with accessories)	70 g (0.154 lb) max
Power Supply	16..32.5 V⎓ with load adaptation
Nominal voltage	15 V⎓ ± 10 %
Insulation resistance	≥ 100 MΩ under 500 V⎓
Dielectric strenght	1000 V∿ / 50 Hz. leakage current below 1 mA
Electrical continuity	2.5 m Ω max between case and connector
Switching response time	5 ms max
Switching frequency	100 Hz max

CONNECTION



Wiring diagram



1. Positive node
2. V out
3. Negative node

Normally Open (NO): i.e. when target is far there is no current (zero current) in the switch ; because of BIT, current is close to zero through the switch ~ 2 mA (see below).

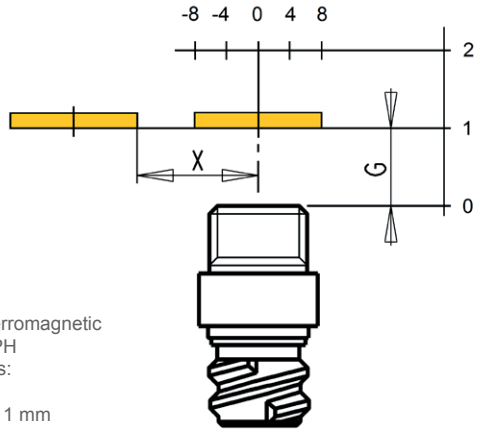
OUTPUT STATES AND PERMANENT BUILT IN TEST INFORMATION (PBIT)

Load Current*	< 1 mA	1 mA < I < 3 mA	3 mA < I < 6 mA	6 mA< I < 12 mA	I >12 mA
Output state	Proximity Switch failure or external wiring open	Target far	Proximity Switch internal failure	Target near	Proximity Switch internal failure or external short circuit

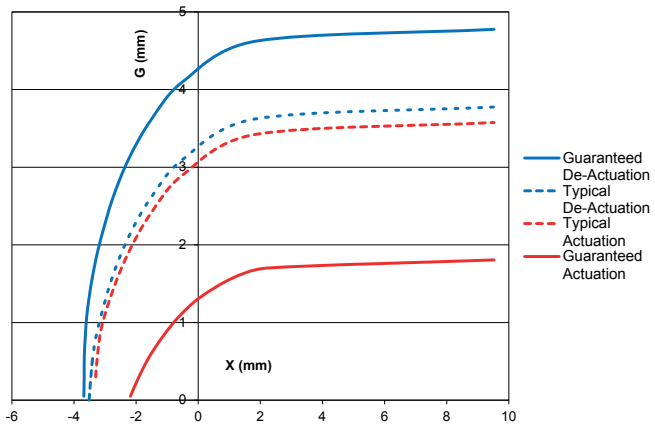
* Load = 400 Ω ± 5%

INDUCTIVE PROXIMITY SWITCH

DETECTION CURVE (SLIDE BY MODE)



Target in ferromagnetic steel 17-4PH
Dimensions:
Ø16 mm
Thickness: 1 mm



DO-160G section		CATEGORY
4	Operating Low/High temperature	D2
4	Short time operating temperature	D2
4	Altitude	D2
5	Temperature variation	A
6	Humidity	C
7	Shocks and crash safety	B
8	Vibration	S - CURVE W&E1
9	Explosive atmosphere	H
10	MIL PRF 8805 F WATERTIGHT SYMBOL 3	S
11	Fluids susceptibility	F
12	Sand and dust	S
13	Fungus	F
14	Salt spray	S
15	Magnetic effect (DO 160D)	A
16	Power Input (DO 160D)	Z
17	Voltage Spike	A
18	Audio frequency conducted susceptibility (DO 160D)	Z

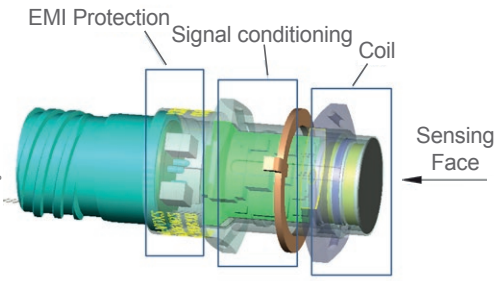
DO-160G section		CATEGORY
19	Induced signal susceptibility	ZW
20	Radio frequency susceptibility (radiated and conducted)	Y
21	Emission of radio frequency energy	M
22	Lightning Induced Transient Susceptibility	B3H3L3
24	Icing	A
25	Electrostatic discharge (DO 160D)	A

Qualification report available upon request

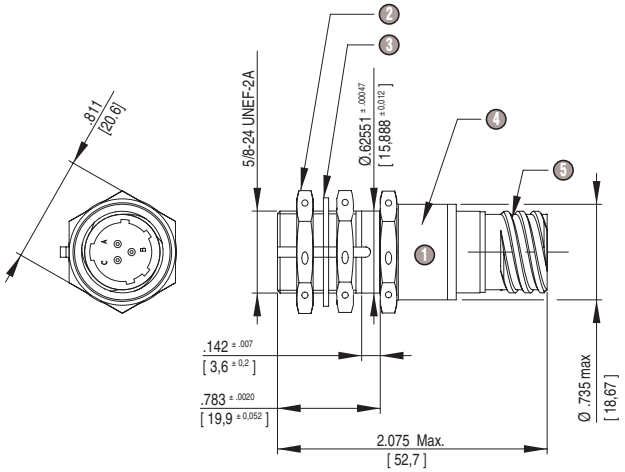
To ensure EMI compliancy:

1) The harness of the proximity switch must use AWG 24 (minimum diameter) twisted and shielded wires

2) Wiring external to fuselage must have a 360° shielded bond



DIMENSIONS inch [mm]



1. AISI 304L Stainless Steel body
2. Stainless steel nut MS 21340-05 or equivalent
3. Stainless steel lock washer MS 25081-C6 or equivalent
4. Laser marking
5. Connector D38999/25YA98PN to mate with D38999-26KA98SN

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

Contact our Specialist Distributors:
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