› Inductive Proximity Switch

2 Wire Current Sink

Non Contact Detection

Part Number: 84792000

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

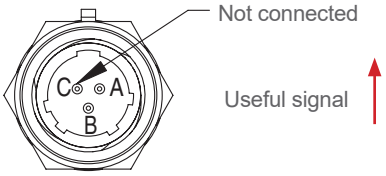
For harsh environment with current loop output NO (Normally Open)

SPECIFICATIONS

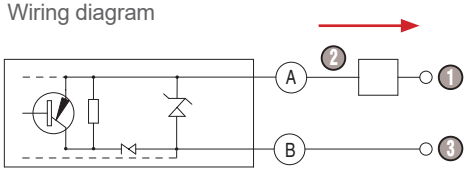
CHARACTERISTICS

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
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

ELECTRICAL CHARACTERISTICS

POWER SUPPLY*			LOAD**		
Nominal	**Min.**	**Max.**	**Nominal**	**Min.**	**Max.**
28 V⎓	16V	32.5V	750Ω	400Ω	1000Ω

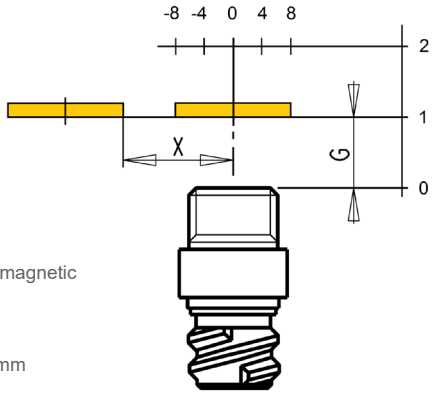
* Power Supply is measured between positive node and negative node (cf diagram on the right)
** Tolerance 5%

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).

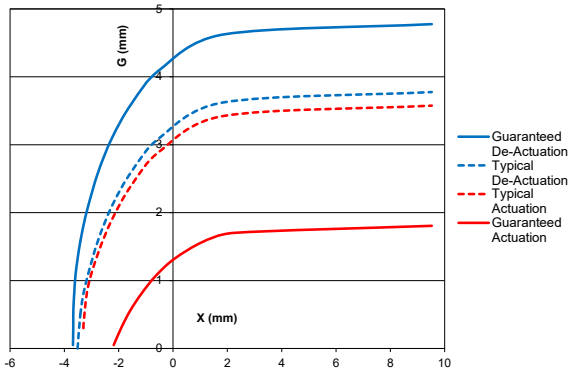
OUTPUT STATES AND PERMANENT BUILT IN TEST INFORMATION (PBIT)

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

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

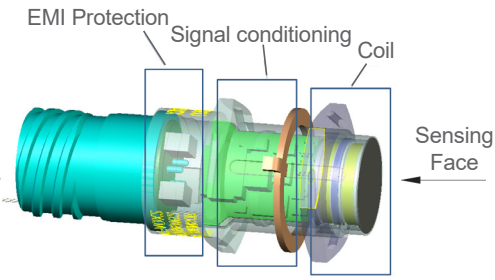
DO-160G section		CATEGORY
19	Induced signal susceptibility	ZW
20	Radio frequency susceptibility (radiated and conducted)	Y
21	Emission of radio frequency energy	M
22	Lightning Induced Transient Susceptibility	B3H3L3
24	Icing	A
25	Electrostatic discharge (DO 160D)	A

Qualification report available upon request

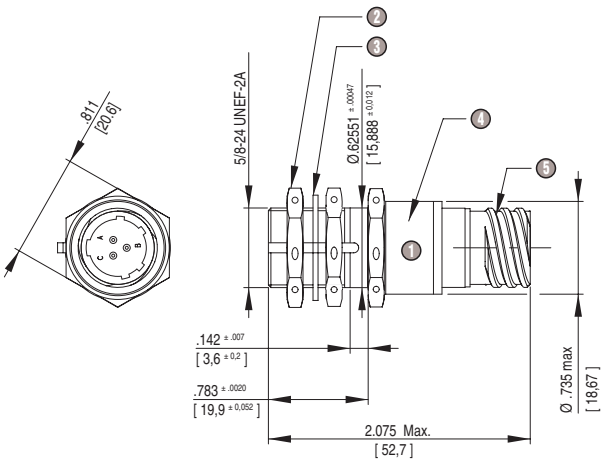
To ensure EMI compliancy:

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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