

3 WIRE CURRENT SINK INDUCTIVE PROXIMITY SWITCH

- › Compact
- › Lightweight
- › Qualified to DO160G



For harsh environment with current sinking output (NPN) NC (Normally Closed)

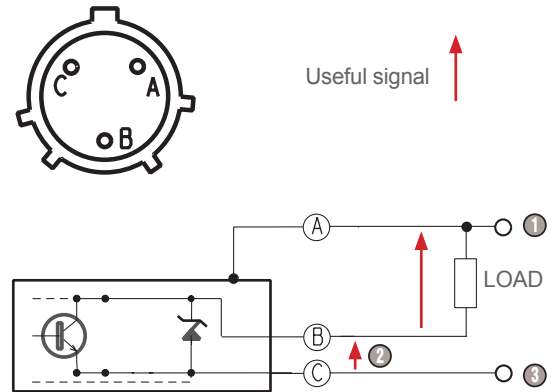
SPECIFICATIONS

CHARACTERISTICS

Temperature	-55 °C ... +75 °C
Actuation (head on)	2.3 mm (0.090 in)
Deactuation (head on)	3.3 mm (0.130 in)
Weight (with accessories)	70 g (0.154 lb) max
Power Supply	16.. 32.5 V
Nominal voltage	28 V $\overline{\text{DC}}$ $\pm 15\%$
Insulation resistance	100 M Ω min under 50 V $\overline{\text{DC}}$
Dielectric strenght	500 V $\overline{\text{DC}}$ leakage current below 1 mA
Electrical continuity	2.5 m Ω max between case and connector
Switching response time	2 ms max
Switching frequency	100 Hz max

CONNECTION

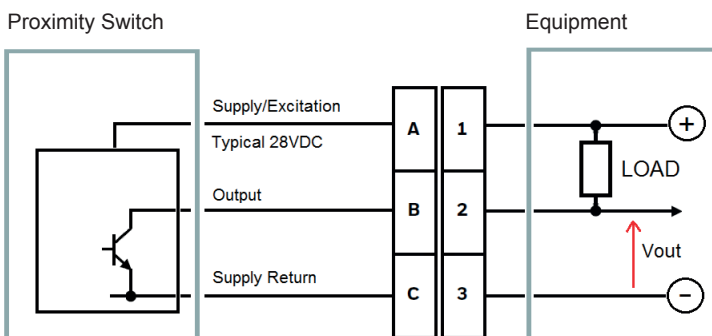
Wiring diagram



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

Normally Closed (NC): i.e. when target is far there is current in the switch thus V out \sim 0 V (see below)

NORMALLY CLOSE OUTPUT

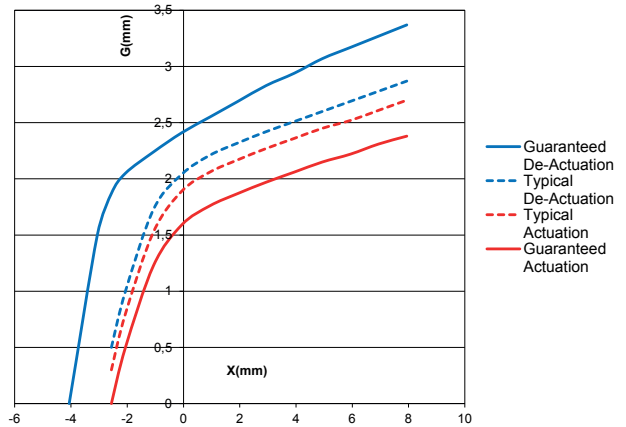
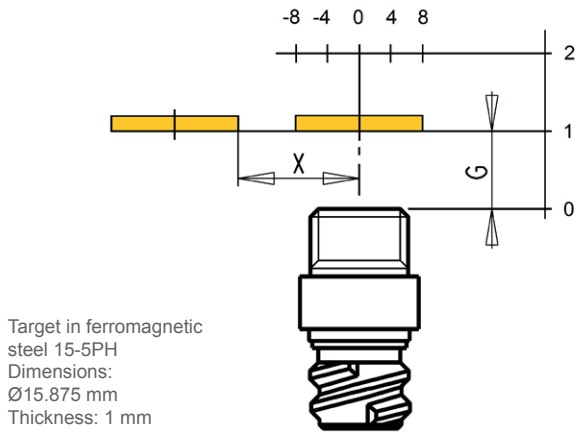


Target Far : transistor is saturated
 V out \sim 0V (below 1.5 V under 100 mA)

Target Near : V out = V+

INDUCTIVE PROXIMITY SWITCH

DETECTION CURVE (SLIDE BY MODE)



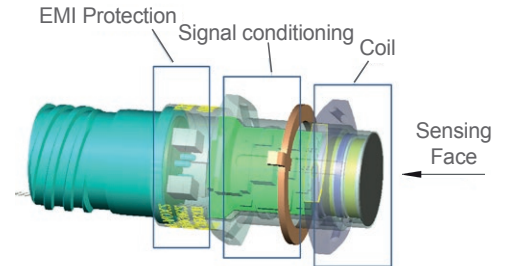
DO-160G section		CATEGORY
4	Operating Low/High temperature	D2
4	Short time operating temperature	D2
4	Altitude	D2
5	Temperature variation	A
6	Humidity	B
7	Shocks and crash safety	B
8	Vibration	S - CURVE E&W
9	Explosive atmosphere	A
10	MIL PRF 8805 F WATERTIGHT SYMBOL 3	
11	Fluids susceptibility	F
12	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 DO-160G		CATEGORY
18	Audio frequency conducted susceptibility	Z
19	Induced susceptibility (DO 160F)	AC
20	Radio frequency susceptibility (radiated and conducted)	Y
21	Emission of radio frequency energy	M
22	Lightning Induced Transient Susceptibility	A3J3L3
24	Icing	A
25	Electrostatic discharge	A

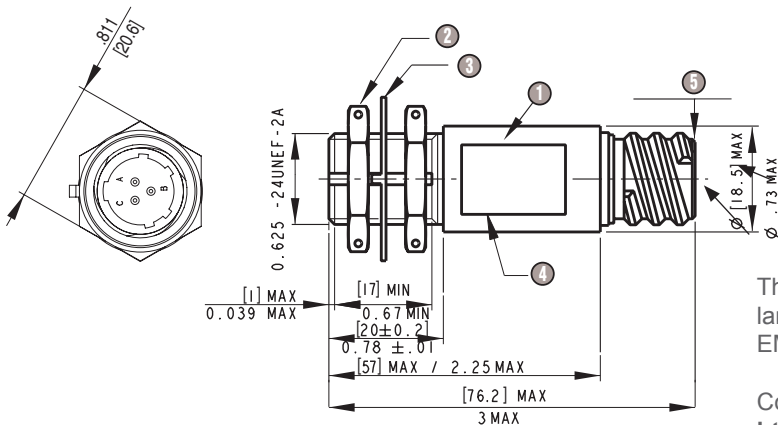
Qualification report available upon request

To ensure EMI compliant:

- 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]



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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