

Interactive Catalog Replaces Catalog Pages

Honeywell Sensing and Control has replaced the PDF product catalog with the new **Interactive Catalog**. The **Interactive Catalog** is a power search tool that makes it easier to find product information. It includes more installation, application, and technical information than ever before.



**Click this icon to try the new
Interactive Catalog.**

Sensing and Control

Honeywell Inc.

11 West Spring Street
Freeport, Illinois 61032



SUNSTAR自动化 <http://www.sensor-ic.com/> TEL: 0755-83376489 FAX:0755-83376182 E-MAIL:szss20@163.com

ZS-00305-01

ONE PART M12 PROXIMITY SENSOR

Description :

Environment-proof self-contained proximity sensor enclosed in a rugged hermetically sealed ceramic/stainless steel housing, designed to meet the requirements of aerospace applications.

Operation by the Eddy Current Killed Oscillator (ECKO) principle, which is used to detect metallic objects passing in front of the sensing face. Once a target metal is detected, a trigger signal is produced which is then passed through the output conditioning circuitry to give a high or low output, depending on the sensor application.



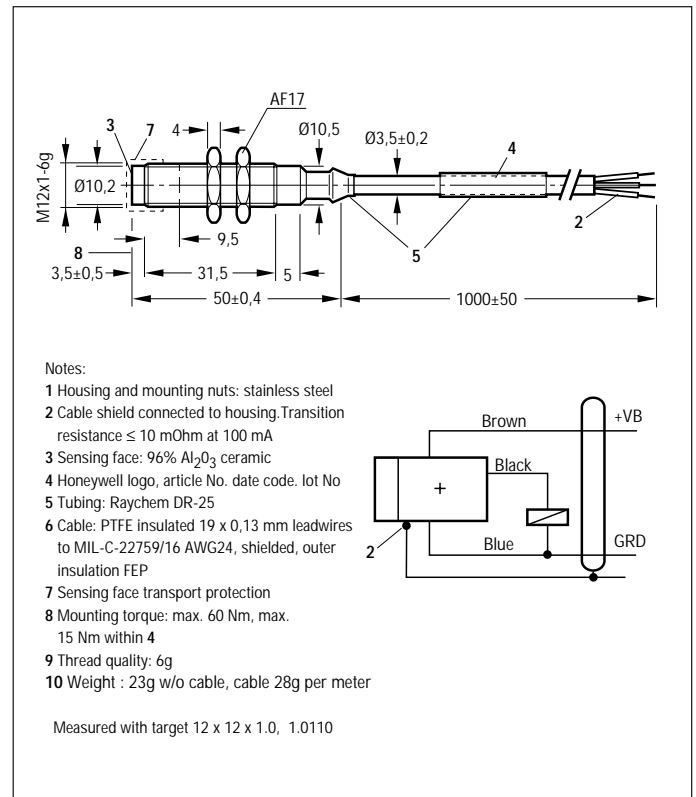
Features :

- All metal sensing
- Small size M12 housing
- High frequency switching
- High level of electronics protection

Typical Applications :

- Aircraft landing gear
- Flight control surfaces
- Aircraft door monitoring

Dimensions in mm (for reference only)



Specifications

		Tests
Sensing Characteristics :		Measuring method (Note 2)
Nominal sensing distance (mm)	4	
Effective sensing distance (mm)	3,6 to 4,4	
Differential travel (%)	2 to 20 @ -25/+70° C, 3 to 30 @ -40/+100° C	
Stability of sensing distance (%)	+15/-5 within -25° C to +70° C +30/-5 within -40° C to +100° C	
Reproduceability (%)	≤1	
Repetition rate of sensing (Hz)	≥2000	
Power-on delay (ms)	≤10	
Power Supply :		
Supply voltage range (V)	18 to 33 DC	
Ripple voltage (V _{ss})	≤7	MIL-STD-1275 A(AT)
Surge voltage (V)	100 V, 50 ms	MIL-STD-1275 A(AT)
Transients (V)	250 V 50 μ	MIL-STD-1275 A(AT)
Burden current (mA)	≤10	
Output Characteristics :		
Voltage drop (V)	≤3	
Residual current (μA)	≤100	
Load current (mA)	≤200 to +70° C lin falling to 100 @ + 100° C	
Environmental Characteristics :		
Operating temperature range (°C)	-40 to +100	IEC 68-2-1/IEC 68-2-2
Storage temperature (°C)	-55 to +100	IEC 68-2-8/IEC 68-2-2
Damp heat, steady	56 days	IEC 68-2-3. Ca
Damp heat, cyclic	+55° C, 6 Cycles	IEC 68-2-30. Db
Rapid change of temperature	-55° C/+85° C, 5 Cycles	IEC 68-2-14. Na
Vibration	10 to 500 Hz, 0,75/100 ms ²	IEC 68-2-6. Fc
Bump	400 ms ² , 6 x 4000 bumps	IEC 68-2-29. Eb
Shock	1000 ms ² /6 ms	IEC 68-2-27. Ea
Salt mist	pH 6,5-7,2 @ +35° C	IEC 68-2-11. Ka
Contamination resistance	Engine and gearbox oil, aviation fuel, sea water, water, ethanol, methanol	Clause 14.3 DEF 133
Icing/freezing rain	Sensing characteristics not affected	521.0 MIL-STD-810D
Leakage (immersion)	98 kPa for 2 hours	512.2 MIL-STD-810D
Tensile (N)	20	IEC 68-2-21.Ua1
Insulation resistance (MOhm)	≥50 @ 500 Vdc	
Insulation voltage (Veff)	≥1000 @ 1 min	
Special Features :		
Reverse polarity supply leads	Yes	
Short circuit protection	Yes	
EMI (Note 1)	Class A3, A4	MIL-STD-461B
EMP (Note 1)	Category B	DEF 07-55, T2,S5
MTBF prediction (hrs)	144000 hrs @ +20° C, NU/GM application	MIL-HDBK 217D
Notes :		
1. CE03, CS01, CS02, CS06, RE01, RE02, RS01, RS02, RS03. 50 kV/m, 130A/m		
2. Unless otherwise stated, tested to or by similarity to Honeywell internal specifications		
Ordering guide		
Listing		Description
ZS-00305-01		Current sourcing