

# **Inductive Proximity Sensor/Switch Datasheet**

## **CGT2-8GM Series Cylinder-shape Proximity Sensor with**

# **Longer Sensing Distance**

### Introduction

- Inductive proximity switch is a device for realizing the non-electrical measurement by inductive winding or the change of coefficient of mutual induction.
- It has high resolution and accuracy for the monitoring and measurement of presence, movement and position of metallic objects.
- The operating distance of the sensor depends on the coil's size as well as the target's shape, size and material.
- It is divided into two categories according to the working state:
  - NO Normal Open type,
  - NC Normal Close type

#### **Features:**

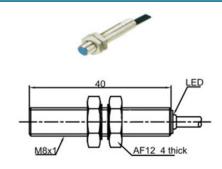
- ◆ Longer sensing distance, can be installed in narrow space, mechanical tolerances or through the protective flim used in detection.
- Power supply reversal connection protection; short-circuit protection, can directly connect with PLC
- Newly added current over-load protection; the elements are made of imported chip
- ◆ Long service life, high reliability and strong resistance property to environment
- Red LED indicates that it's available to detect the sensor operating state
- ◆ Full thread shape to enlarge the installation space; can use wrench and clamp directly
- Countermeasure to improve the housing intensity and to solve disconnection
- ◆ IP67 protection structure(IEC specification)

Ordering Part Number:			
Model	<b>Detection distance</b>	Switch point function	Working voltage
CGT2-8GM-N1	2mm±10%	NPN NO	DC6-36V
CGT2-8GM-N2	2mm±10%	NPN NC	DC6-36V
CGT2-8GM-P1	2mm±10%	PNP NO	DC6-36V
CGT2-8GM-P2	2mm±10%	PNP NC	DC6-36V
CGT2-8GM-D1	2mm±10%	DC NO	DC10-30V
CGT2-8GM-D2	2mm±10%	DC NC	DC10-30V
CGT2-8GM-A1	2mm±10%	AC NO	AC90-250V
CGT2-8GM-A2	2mm±10%	AC NC	AC90-250V



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## **Structure Parameter:**



Technical Parameter:		
Rated action distance (Sn)	2mm	
Installation	Flush-mounting	
Reliable movement distance (Sa)	0~1.7mm	
Response frequency (N.P)	0.4kHZ	
Response frequency (D)	0.5kHZ	
Response frequency (A)	25HZ	
Hysteresis (H)	Typical values%	
Reverse polarity protection	Yes	
Short circuit protection	Pulse	
Working current (I <sub>L</sub> )	0~300 mA	
Insulation impedance	$50 \mathrm{M}\Omega$	
Leakage current (Ir)	0~0.5mA typical values 0.1uA, 25°C	
No-load current (I <sub>D</sub> )	≤15mA	
Indicator light	Red LED	
environment temperature	-25°C~70°C (248-343K)	
Connection form	2m, PVC	
Shell material	Brass, Nickel plating	
Induction surface	PBT	
Protection grade	IP65	
Standard	EN 60947-1:2004	

### Remarks:

- Inductive proximity sensors detect the metallic objects.
- > The detection distance may fluctuate with the different materials of the detected target. Custom design in the different rated input current and the output voltage are available.
- ▶ Both the configuration parameters and the cable length can be customized. Standard cable length 2M.
- > If no explicit requirement for the output polarity, the proximity sensor will be supplied based on NPN mode.

WARNING: Incorrect wiring may cause damage to the sensor.

