Inductive Proximity Sensor/Switch Datasheet

CGT8-18GM Series Cylinder-shaped 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	Detection distance	Switch point function	Working voltage
CGT8-18GM-N1	8mm±10%	NPN NO	DC6-36V
CGT8-18GM-N2	8mm±10%	NPN NC	DC6-36V
CGT8-18GM-N4	8mm±10%	NPN NO+NC	DC6-36V
CGT8-18GM-P1	8mm±10%	PNP NO	DC6-36V
CGT8-18GM-P2	8mm±10%	PNP NC	DC6-36V
CGT8-18GM-P4	8mm±10%	PNP NO+NC	DC6-36V
CGT8-18GM-D1	8mm±10%	DC NO	DC10-30V
CGT8-18GM-D2	8mm±10%	DC NC	DC10-30V
CGT8-18GM-A1	8mm±10%	AC NO	AC90-250V
CGT8-18GM-A2	8mm±10%	AC NC	AC90-250V

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Structure Parameter:
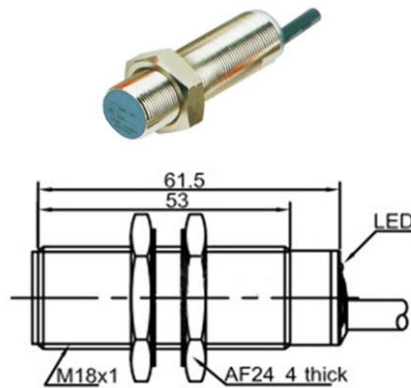
Technical Parameter:

Rated action distance (Sn)	8mm
Installation	Flush-mounting
Reliable movement distance (Sa)	0~7mm
Response frequency （N.P）	0.4kHz
Response frequency （D）	0.5kHz
Response frequency （A）	25Hz
Hysteresis (H)	Typical values%
Reverse polarity protection	Yes
Insulation impedance	50MΩ
Short circuit protection	Pulse
Working current (I_L)	0~300 mA
Leakage current (Ir)	0~0.5mA typical values 0.1uA, 25℃
Indicator light	Red LED
environment temperature	-25℃~70℃(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.