

Model GY Series are "Linear Displacement Transducer" employing magnetostrictive phenomena called Wiedemann effect. An ultra-sonic wave is generated by a moving magnet operating near a magnetostrictive wave guide on which the sonic wave propagates up to the head of the transducer. The propagation time is precisely measured by state of the art technology and then the absolute displacement transducer is operational.

Thanks to the Surface Mount Technology, the entire signal processing electronics of GYcAT series is integrated into a transducer head and you can get a voltage or current analog signal proportional to a magnet position only by applying a 24 V dc power supply direct to the transducer.

SPECIFICATION

Resolution	0.01%FS
Non-linearity	±0.05%FS
Temperature drift	40ppmFS/°C
Admissible pressure	350 bar ( 5000 PSI )
Output signal	0 ~10V or 10 ~0V ( 4 ~ 20mA option )
Alarm signal	Open collector 30 V 0.1 A
Power supply	24 V ± 2V 0.1A
Operating temperature	-20 ~ 65°C
Storage temperature	-40 ~ 80°C
Vibration	6 G
Shock	50 G

Connection

1	+24V dc	5	Voltage output
2	SHIELD	6	(Current output)
3	0V	7	Alarm output
4	0V (SIG)		

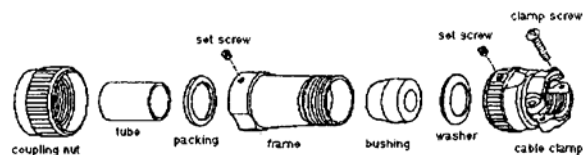
Wiring

We recommend a shielded cable with wire gauge 0.5mm<sup>2</sup> for power lines and 0.3mm<sup>2</sup> for signal lines. Maximum cable length to be 100m. The shield should be connected to 0V at user's controller.

Model Code

GYcAT- □□□-□□□-□□□  
1 2 3 4 5

- 1 : Stroke (mm)
- 2 : Output type
  - A : Voltage Output
  - B : Current Output
- 3 : Direction of output
  - D : Forward ( 0 - 10V or 4 - 20mA )
  - R : Reverse ( 10 - 0V or 20 - 4mA )
- 4 : Thread
  - M : M24 × P 1.0
  - N : M18 × P 1.5
  - U : 3/4 - 16UNF
- ( 5 : Custom order number )



Adjustment of Output

Stroke calibration is carried out in factory. In case you need an adjustment of zero or full scale point at your end, customer is to do outside transducer.

Alarm

When the magnetostrictive signal is missing, GYcAT outputs an alarm signal. An output transistor will turn on while detecting failure.

