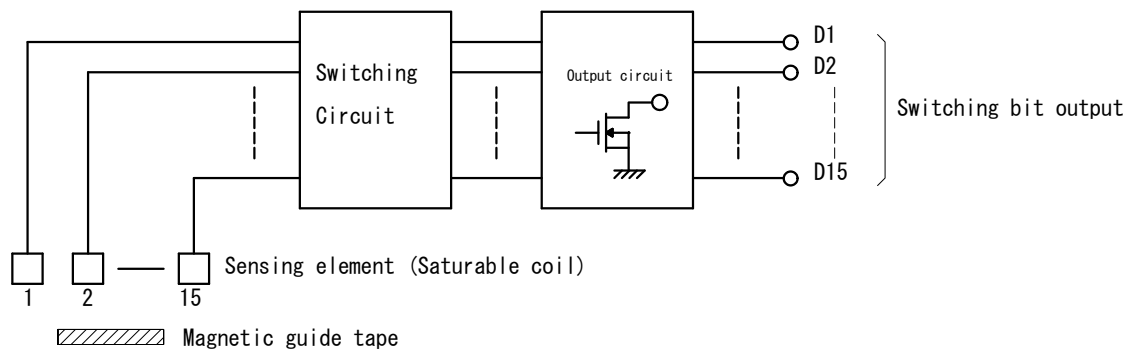


GS-3384A Guide Sensor

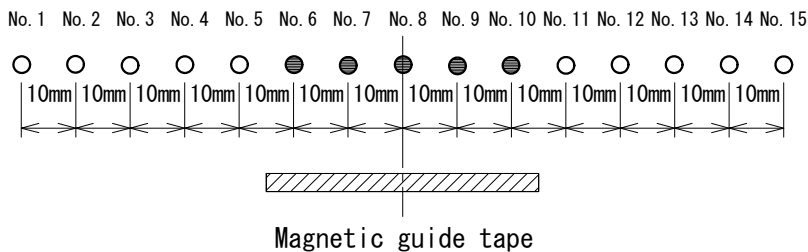
INSTRUCTIONS

1. Summary

GS-3384A is a 15 bits multiple switching output type guide sensor for a magnetic tape navigation AGV. Built-in 15 bits magnetic switches formed a line in every 10mm pitch detect magnetic flux from a magnetic guide tape. The correlation between GS-3384A and a magnetic guide tape can be recognized by output ON/OFF parallel bit pattern.

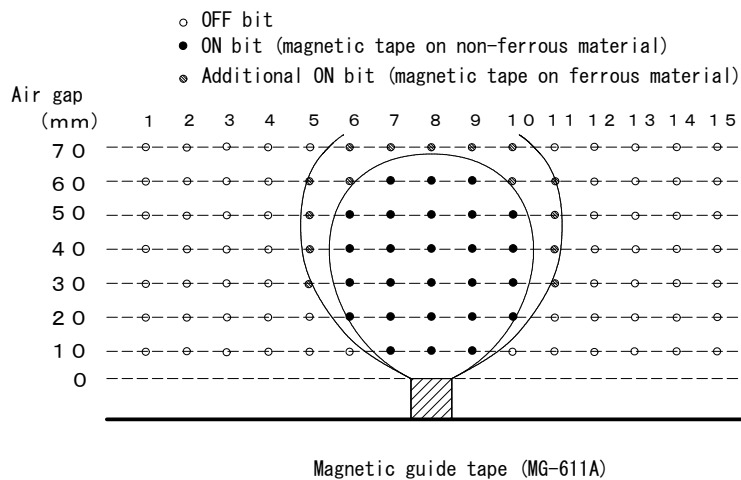
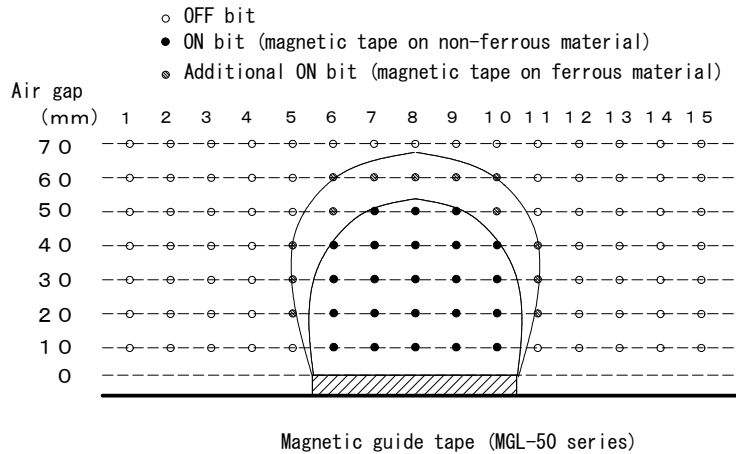


Built-in sensing element arrangement ○ =OFF bit ● =ON bit
 (ex. magnetic tape MGL-50 series / airgap 30mm)



2. Operation air gap

Following figures show rough switching patterns of GS-3384A against magnetic tape MGL-50 series and MG-611A at air gap from 10mm to 70mm. Magnetic flux from a guide tape is enlarged when it is on ferrous material. Therefore activating numbers of switches are magnified.



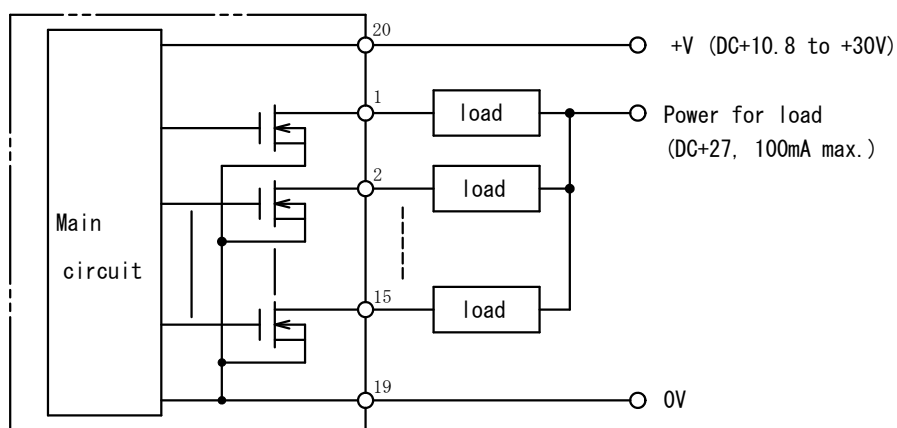
NOTE:

Both magnets should not be embedded in a ferrous material floor, since magnetic flux from guide tape will be greatly reduced when it is buried in ferrous material.

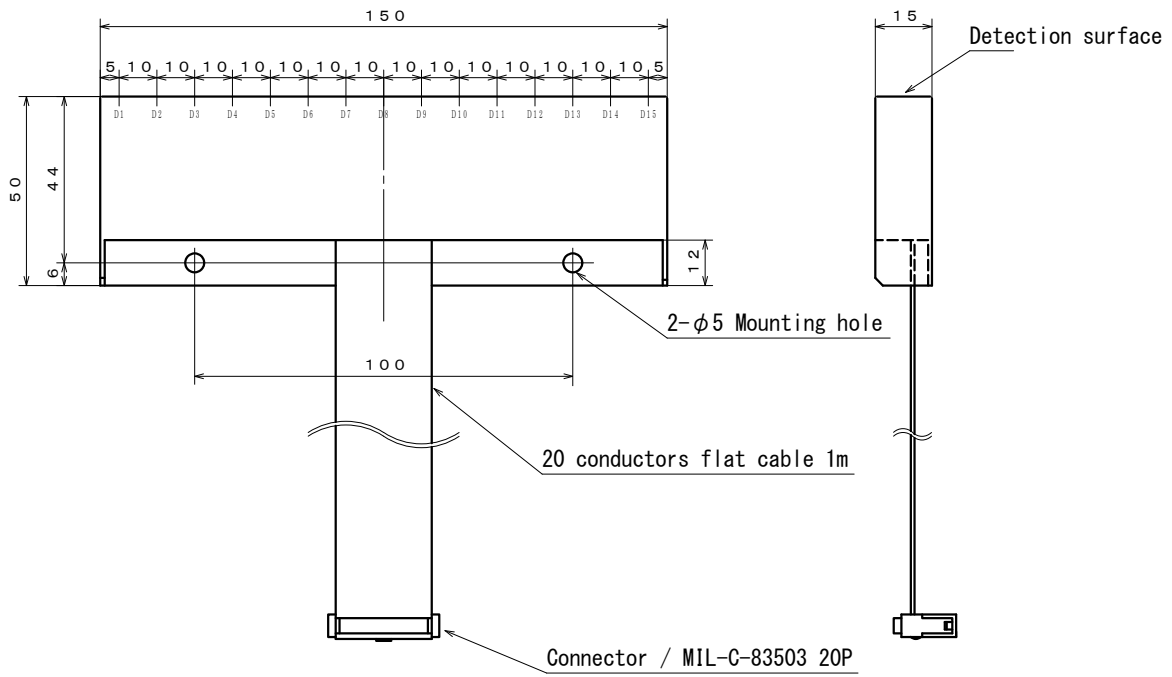
3. Specifications

Items	Contents
Power supply	DC+10.8~+30V max. ripple 1%
Power consumption	30mA max.
Operation temperature	from -10 to +60°C
Operation humidity	from 10% to 90%RH (avoid dew condensation)
Storage temperature	from -30 to +80°C
Operation humidity	from 10% to 90%RH (avoid dew condensation)
Housing	IP-54 (except connector)
Operation Air gap	from 5 to 40mm (with MGL-50 series) from 20 to 50mm (with MG-611A)
Target Magnet	MGL-50 series and MG-611A
Sensitivity	N-pole;0.4mT min. and S-pole;6mT min.
Output	
Element	15 bits
Pitch	10mm at even intervals
Logic	Normally open
Circuit	FET open drain (DC27V max. 100mA max.)
Response	2.5ms

4. Wiring



5. External Dimensions

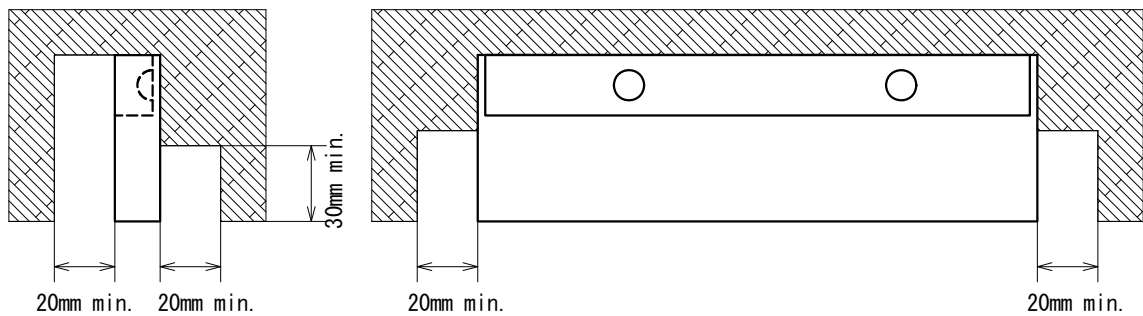


Case: Aluminum t=1 baking finished (black)

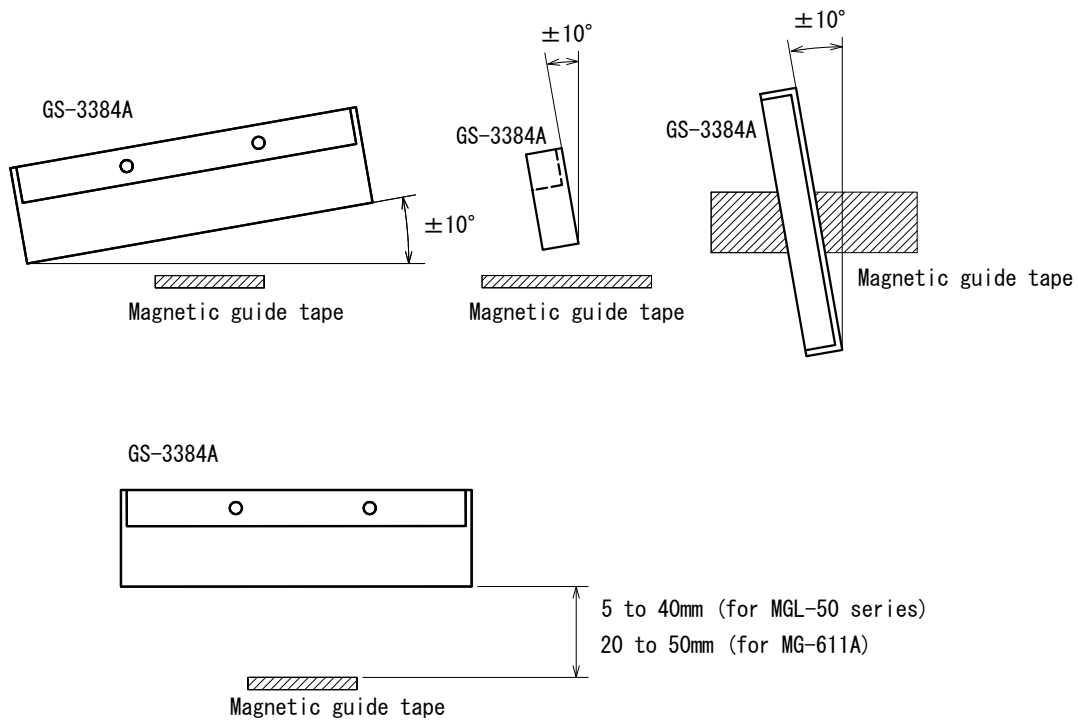
Pin No.	Contents	Pin No.	Contents
1	D1 out	11	D11 out
2	D2 out	12	D12 out
3	D3 out	13	D13 out
4	D4 out	14	D14 out
5	D5 out	15	D15 out
6	D6 out	16	Not connected
7	D7 out	17	Not connected
8	D8 out	18	Not connected
9	D9 out	19	0V
10	D10 out	20	+V

6. Mounting

- (1) GS-3384A should keep distance from magnetism generators such as a motor. Vicinity of a ferrous material causes GS-3384A inaccurate output. In case of mounting GS-3384A on ferrous material, keep distance from the material as follows.



- (2) Maximum fluctuation



7. Notices

- Wire input/output cable separately from power line.
- Strong tension or repeatable bending to input/output cable may cause snapping of wires.
- Keep away for water since the housing is neither water nor splash proof.
- Keep away from solvent chemicals (acetone, thinner) since a case or a cable may deformed by those substances.
- In case of connecting inductive loads such as relays on a data code output terminal, apply spark killers to the noise generating elements.

8. Warranty

Goods are warranted (exchange or repair) return to factory basis against defects in workmanship and material for a period of one year from a date of delivery.

The damage caused by following reasons is out of the warranty.

- (1) Inappropriate installation and usage.
- (2) Abnormal effect from peripheral equipment.
- (3) Alternation or repair without us.
- (4) Force majeure.

The Induced damage is out of the warranty.

9. Range of service

Prices on the price list are not including following fees. Consult us for the fees.

- (1) Adjustment, instruction and presence at installation.
- (2) Maintenance and repair.
- (3) Technical advice and training.

* Specifications are subject to change without notice. *