New Product Information

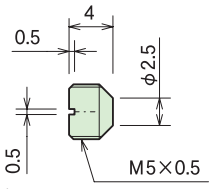
SUS Threaded Screw Mag

AG0010

Features

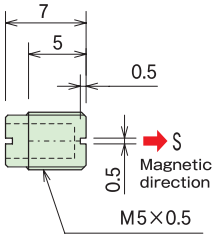
- Small-sized electric field generator, powerful even buried to the top in iron unit
- Press: high integrity sensor for detecting bottom dead point

AGM5 SS Diagram



Set screw
(for double locking)

AG0010 S Diagram

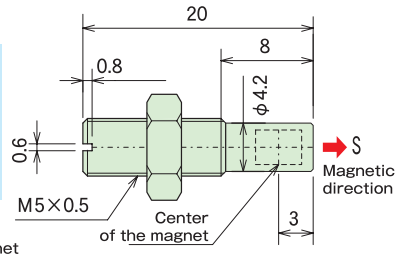


Case:SU303
Magnet:
Rare earth magnet

How to install

- Screw a Mag into an M5x0.5 tapped hole and bond.
- Press a Mag into aϕ4.8 drilled hole.
- Fix a mag in a through tapped hole with AGM5 SS (see figure C)

AG0010 L Diagram



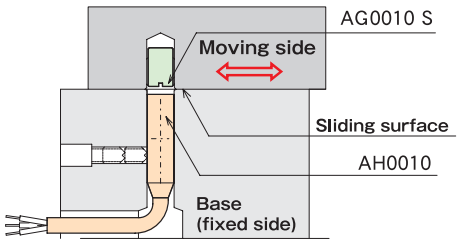
Case:SUS303
Magnet:
Rare earth magnet

How to install

Screw a Mag into an M5x0.5 tapped hole firmly and secure it with a locknut.

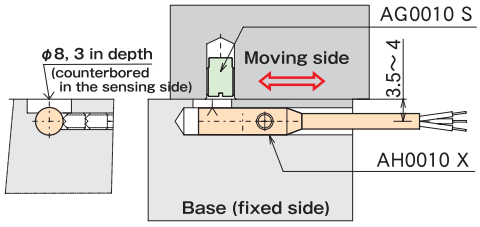
Examples of proper usage

A Example of being embedded in a sliding surface of a machine



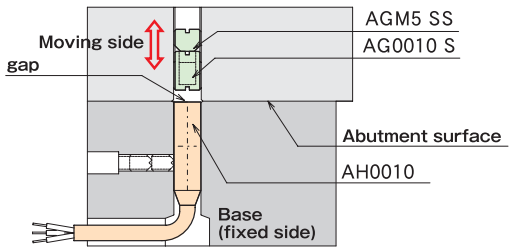
1.Drill aϕ5 hole in a base (fixed side) and place an AH0010 switch in to the extent until the tip (sensing face) is countersunk by 0 ~ 0.5.
2.On the moving side, screw an AG0010S in an M5x0.5P tapped hole, or press it into a ϕ4.8 drilled hole.
3.By slide-moving the movable side with having a gap of 0.5 between mag and switch, the switch is being turned on for the width of approx. 4mm.
4.A parallel misalignment up to ±0.8 (vertical against the moving direction) between mag and switch will not affect the operational stability .
5.The switch operates with an error margin of 0.01 or less.

B Example of being embedded in a sliding surface of machine



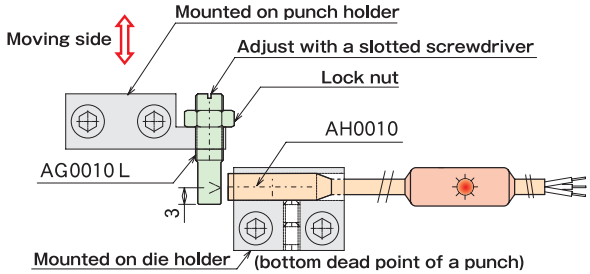
1.AH0010X is aϕ5 cave hole installation type as shown in the figure.
2.By slide-moving the mag side, the switch is being turned on for the width of approx. 3mm.
3.The operating point can be fine-adjustable (±0.6mm) by regulating the switch position.
4.Parallel misalignment up to ±05 can be absorbed.
5.The switch operates with an error margin of 0.015 or less.

C Proximity stop switch



1.The embedding style is suited for applications to, e.g. press die, die-casting, jigs.
2.The gap length where the switch is turned on instantaneously upon touching the abutment surface is approx. 2.5mm.
3.As an example, in order to detect an erratic insertion of a 0.2t plate, adjust the gap to the width where the switch is turned on with the clearance to the abutment surface from 0.1 to 0.05, and fix the switch at the position with an AGM5 SS set screw.
4.The switch operates with an error margin of 0.01 or less.

D Punch: high precision monitoring sensor for bottom dead point



1.Best applied to press die, jigs, etc. for monitoring the bottom dead point with high precision.
2.Economical monitoring system with high precision and high integrity
3.The switch operates with an error margin of 0.005 or less.

Product Number

Product Number	Specifications
AG0010 S	Threaded screw style electric field generator S
AG0010 L	Threaded screw style electric field generator L
AGM5 SS	Set screw for locking

New Product Information

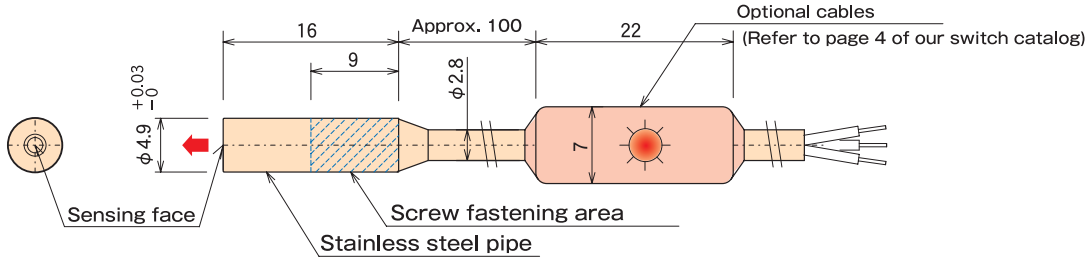
Magnetic Proximity Switch

AH0010

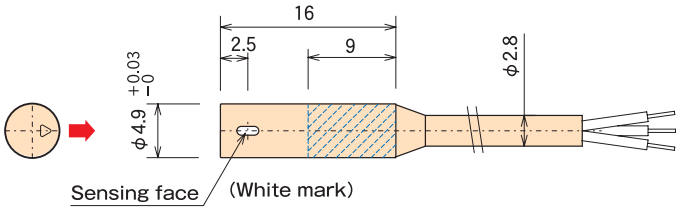
Features

- Smallest magnetic proximity switch; protected in stainless steel pipe housing.
- The switch can operate fully embedded in a ϕ5 hole of an iron base.
- Press: for low cost monitoring device to detect bottom dead point with high sensitivity
- Highly reliable proximity-type stopper switch
- Good for outdoor use with benefits of dust tightness, resistance to water and oil, and vibration proof.

AH0010 Diagram



AH0010 X Diagram



Precautions

1.Do not bend the cable at the inside angle of R5 or less. Do not apply tension of 5N or more.
2.After embedding the switch into a ϕ5 hole, fix the rear half of the flank with a set screw of M3 or less. Do not apply more than 0.2Nm torque, or the circumference can be damaged and the switch will be stuck within.
3.Careful handling is required. Do not crush or deform the circumference.

Specifications

P N	AH0010	AH0010 X
Sensing pole	S-pole	
Magnetic sensitivity	3.5~4.5mT (35~45Gauss)	
Response time	5μ sec or less	
Supply voltage	DC5~24V (Refer to CNC-1 in Page 1 of our switch catalog for circuit diagram)	
Output form	NPN Open collector, A operation (Turned on, when sensing object approaching)	
Output current	15mAMAX (A maximization to 80mA is available with an optional cable)	
Consumption current	10mA max.(sensing circuit side)	
Withstand voltage	AC1000V Between live part and case (tested at 1500V, for 20 sec.)	
Cable length	A 1m cable included as standard equipment (400 yen/m for cable extension)	
Operating temperature range	−20℃~85℃	
Operating humidity range	20%~95%(Equivalent to IP67)	
Resistance to vibration	10~55Hz 1.5mm double vibration for 2H to each directions of X, Y, Z.	
Resistance to impact	500m/s^2 3 times to each directions of X,Y,Z.	
Fastening screw	e.g., fix the flank of the rear part with a M3 set screw at the torque of 0.2Nm or less. Apply a proper loosening prevention treatment; e.g., using glue adhesion.	

Product Number

Product Number	Specifications
AH0010	Direction of magnetic sensing:Tip
AH0010 X	Direction of magnetic sensing:Sideways

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