

GYSE-A Probe

Analogue

GPM

Noise
Cancel



**High performance analogue output
(detachable probe element)**



GYSE-A is a high performance analog output probe, and has the high resolution of 16bit. It has also velocity output. Using two pcs of magnet on the probe as another option, detecting each magnet position or relative distance between the two is possible. The inside probe element can be detached from the outer housing, and with the captive software (GPM), zero and gain adjustment is possible at user side. The sensor inside element flexible option is available and also most suitable for the exchange when space is small.

Specifications

Accuracy	Non-linearity	$\leq \pm 0.025\%FS$ TYP
	Resolution	16bit (1/65536)
	Repeatability	$\leq \pm 0.001\%FS$ (Min. $\pm 3 \mu m$)
	Temp. drift	$\leq \pm 20ppmFS/^{\circ}C$
Output	Position (STD)	0~10V (output current : Max.5mA, load : Min.2k Ω) or 4~20mA (load : Max.500 Ω)
	Velocity (Option)	$\pm 10V$ (output current : Max.5mA, load : Min.2k Ω) or 4~20mA (load : Max.500 Ω)
	Alarm	Open drain 50V 0.1A (for magnet missing)
	Power supply	+24(± 2)VDC (80mA)(*1)
Environment	Sampling freq. (*2)	Std 1kHz (total rod length : up to 1250mm)
	Max. Pressure	35MPa (probe rod)
	Operating temp.	-20 $^{\circ}C$ ~+75 $^{\circ}C$
	Storage temp.	-40 $^{\circ}C$ ~+75 $^{\circ}C$
	Vibration	15G (20~100Hz)
	Shock	100G (2msec)
	IP grade	IP67

• The above mentioned accuracy applies to sensors with an effective length of 300mm or more.

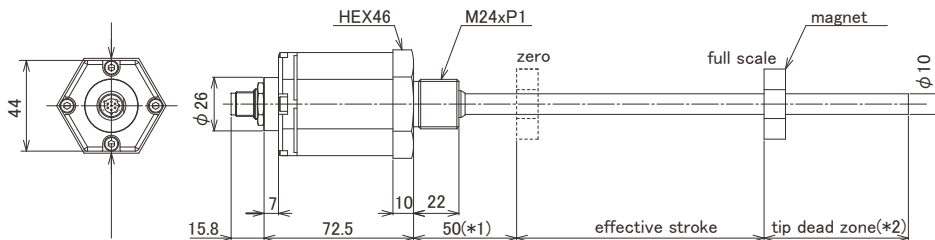
• The specification of stroke less than 300mm is equal that of stroke 300mm.

(*1) The consumption current is 100mA in case of adding OUT2 option (Model ⑧).

(*2) Sampling freq. is available to Max. 3.75kHz by option. It depends on the total rod length (shows in Model ⑨), and the consumption current increases.

Dimensions

Probe

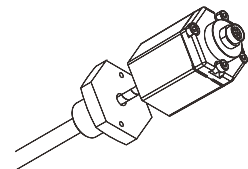


screws (2 pcs)
for detachment

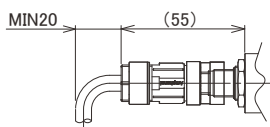
*1) In case of 3001mm or more, head dead zone is 100mm. (Model code ② : 100)

*2) In case of 3001mm or more, tip dead zone is standard length + 30mm. (Model code ③ : 100/120/130)

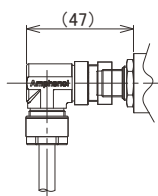
detachable probe element



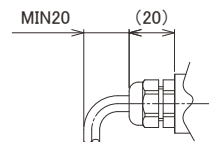
Connector type (straight)



Connector type (L-shaped)



Pigtail type



In case of connector type, connector dimensions are different from the existing product. Please refer to page 109 for the existing one.

- materials ; Probe head : Al alloy, Probe rod : SS304
- magnet ; Select one from group GG on page 110
- The tip dead zone length depends on the selected magnet or float.
- connector : Amphenol (materials : glass fiber reinforced plastic)
- Suitable cable diameter: $\Phi 4.0 \sim \Phi 7.0$, Wire size: 0.14 ~ 0.82mm².
- cable length ; Max.10m (0~10V output), Max.100m (4~20mA output)

Cable

Wire color	Pin number	Function
red	1	+24VDC
white	2	0V
blue	3	OUT1
green	4	COM1
brown	5	OUT2
black	6	COM2
yellow	7	Alarm

• shield should be connected to FG of user's unit.

