

GYSE-Q Probe

A/B pulse

GPM

Noise
Cancel



**Quasi-incremental output
(detachable probe element)**



GYSE-Q probe has the incremental output (A/B pulse), the resolution is Min.1 μ m (Quad divide). The working principle is based on a sampling detection method, in which pulse frequency is fixed to 250kHz or 500kHz (it depends on resolution). GYSE-Q doesn't output the pulse which continued like a linear encoder, so please be careful. 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.

Specifications

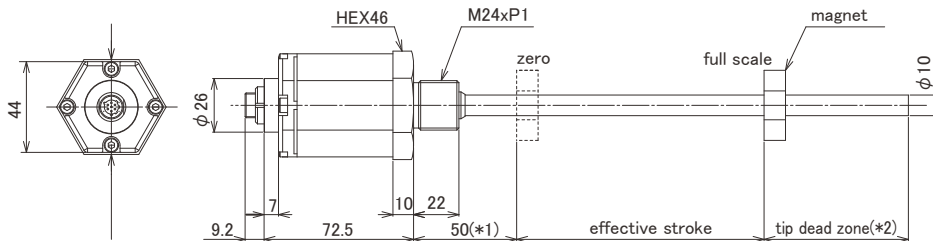
Accuracy	Non-linearity	$\leq \pm 0.025\%FS$ TYP
	Resolution	0.1mm $\sim$ 0.001mm specified
	Repeatability	$\leq \pm 0.001\%FS$ (Min. $\pm 3\mu m$)
	Temp. drift	$\leq \pm 15ppmFS/^{\circ}C$
Output	Position (STD)	A/B pulse, without Z pulse Line driver, pulse freq. 250kHz
	Velocity (Option)	not available
	Alarm	Open drain 50V 0.1A (for lost magnet)
Power supply		+24(± 2)VDC (70mA)
Sampling freq.		STD 1kHz(up to stroke 1000mm)
Environment	Max. Pressure	35MPa(probe rod)
	Operating temp.	-20 $^{\circ}C \sim +75^{\circ}C$
	Storage temp.	-40 $^{\circ}C \sim +75^{\circ}C$
	Vibration	15G (20 $\sim$ 100Hz)
	Shocks	100G (2msec)
IP grade		IP67

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

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

Dimensions

Probe

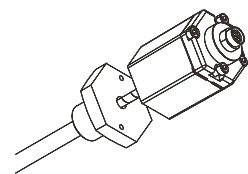


screws (2pcs)
for detachment

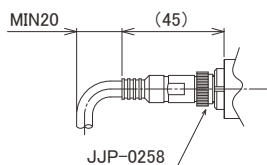
*1) In case of stroke 3001mm or more, head dead zone is 100mm. (Model code ② : 100)

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

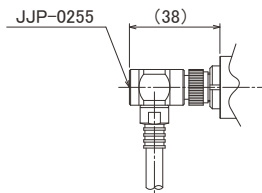
detachable probe element



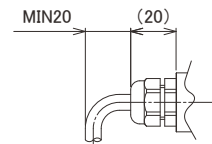
Connector type (straight) (STD)



Connector type (L-shaped) (option)



Pigtail type (option)



- materials ; Probe head : Al alloy, Probe rod : SS304
- magnet : Select one from group GG on page 109
- The tip dead zone length depends on the selected magnet or float.
- connector ; straight or L-shaped (housing parts : BS with Ni plating)
- Applied cable diameter: $\Phi 6.6 \sim \Phi 7.5$, Wire size: 0.5mm²

Cable

Cable color	Pin number	Function
red	1	+24VDC
white	2	0V
blue	3	A+ pulse
green	4	A- pulse
brown	5	B+ pulse
black	6	B- pulse
yellow	7	Alarm

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

