

## GYPE2K Probe

### Probe rod $\Phi 4$



The GYPE2K probe is a sensor characterized in a fine rod and a small head. A fine rod (outside diameter  $\Phi 4$ ) and a small head expand the design flexibility of the equipment.

### Specifications

Accuracy	Non-linearity	$\leq \pm 0.05\%FS$ TYP
	Resolution	(analogue) $\leq 0.03\%FS$ (digital) 0.1mm
	Repeatability	$\leq \pm 0.03\%FS$
	Temp.drift	$\leq \pm 0.01\%FS/^{\circ}C$
Environment	Max. Pressure	18MPa (probe rod, static for 10 min.)
	Operating temp.	$-20^{\circ}C \sim +80^{\circ}C$
	Storage temp.	$-40^{\circ}C \sim +80^{\circ}C$
	Vibration	3G (or 40Hz 1mmPP)
	Shock	20G (2msec)
	IP grade	IP64

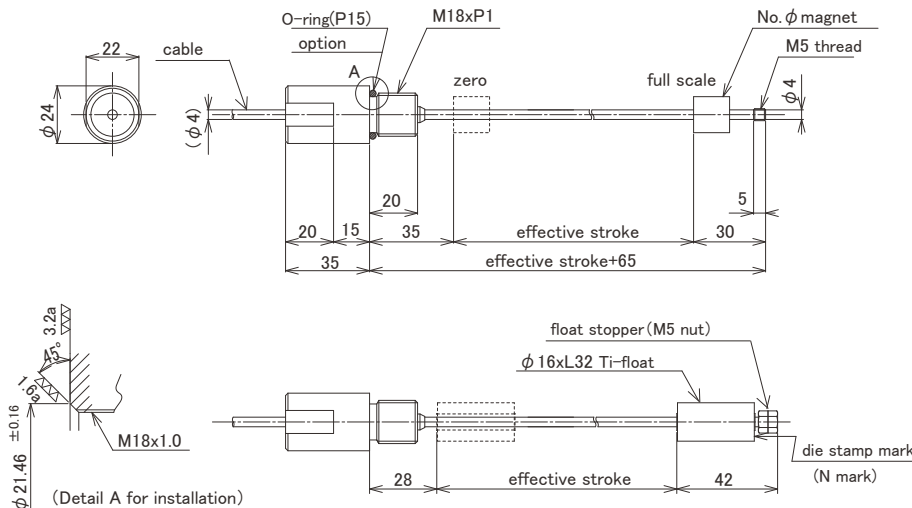
- The above mentioned accuracy applies to sensors with an effective stroke of 100mm or more.
- The specification of stroke less than 100mm is equal that of stroke 100mm.

#### ◆ associated controller

- analogue output : GYHC (page 52, 53)
- digital output : GYDC-S1 (page 56, 57), GYDC-05 (page 58, 59)

### Dimensions

#### ■ Probe



#### ■ Cable (robot cable)

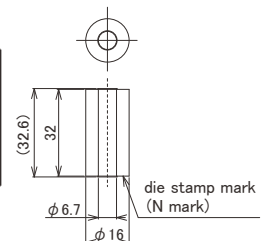
Wire color	Function
shield	shield
white	sensor signal
black	0V
red	sensor power

• shield should be connected to shield terminal of the controller.

#### ■ Ti float

	$\Phi 16 \times L32$ Ti float
Volume	5.31cm <sup>3</sup>
Mass	4.17g
float gravity	0.79 ( $\pm 0.03$ )
Pressure	2MPa
Material	Ti (titanium)

Because of the float  $\Phi 16$ , it is possible to install it in the container with the probe of which thread is M18.



- Material probe head: SS316, probe rod: SS316
- Standard magnet: No.  $\Phi$ , float: Ti-float
- The M5 screw installed in the rod tip can be used as float stopper or to fix the sensor.
- When the sensor rod part is to be sealed, O ring should be used, refer to detail A drawing.

## ■ Probe

**GYPE2K-**     **-**  **/**  **-Y4-**   **-**   **-00**

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⑦

### ① Effective stroke

15mm~250mm

### ② Head dead zone

S: 35mm (No. Φ magnet)

28mm (Ti float)

:  mm (option) (specified by customers)

• Possible Min. length depends on the selected magnet or float.

### ③ Tip dead zone

S: 30mm (No. Φ magnet)

42mm (Ti float)

:  mm (option) (specified by customers)

• Possible Min. length depends on the selected magnet or float.

### ④ Thread/Rod diameter

Y4 : M18xP1.0, rod Φ4 (STD)

### ⑤ Associated magnet or float

<magnet>

MG0 : No. Φ (STD)

<float>

FL21 : Ti

- This Model code means only specifying associated magnet or float.
- When you need a magnet or float, please order separately.

### ⑥ Cable connection

GF: pigtail / cable end : free

GA: pigtail / cable end : with connector for relay

( : cable length (m))

- Cable length is Max. 5m and the specified length can not be changed at user's side. Not possible to make it short or add extend cable. It is possible to cut cable and attach terminal stand or relay connector without changing total cable length.
- Please consider extension cable on page 112.

### ⑦ Output

00: depends on external controller