

GYMR6-PF Probe

AC
RS422

**High accuracy flat head type
(detachable probe element)**



This is the linear profile version of GYMR6. Between probe and controller, RS-422 differential line driver transmission, providing robustness against electrical noise, is used. In combination with a digital output controller, Min.1 μ m resolution is possible. The inside probe element can be detached from the outer housing. And by auto calibration function, a difference in the output when you change the probe is adjusted automatically.

仕様

Accuracy	Non-linearity	$\leq \pm 0.025\%FS$ TYP
	Resolution	(analogue) 16bit (digital) Min.1 μ m
	Repeatability	$\leq \pm 0.001\%FS$
	Temp. drift	$\leq \pm 20ppmFS/^{\circ}C$
Environment	Operating temp.	$-20^{\circ}C \sim +80^{\circ}C$
	Storage temp.	$-40^{\circ}C \sim +80^{\circ}C$
	Vibration	15G (20~100Hz)
	Shock	100G (2msec)
	IP grade	IP65

- 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.

• Fixing clamps are supplied.

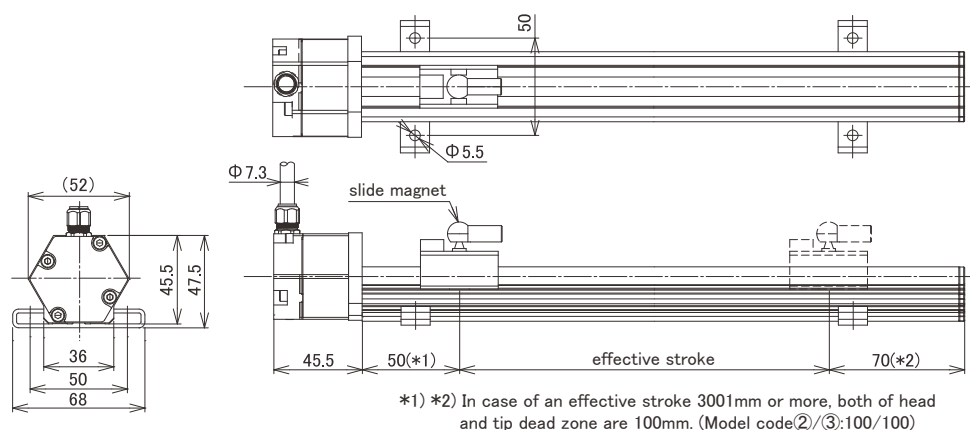
stroke	< 600mm: 2 pcs	
	600~1000mm: 3 pcs	
	1001~1500mm: 4 pcs	One clamp is added
	1501~2000mm: 5 pcs	every 500mm

◆ associated controller

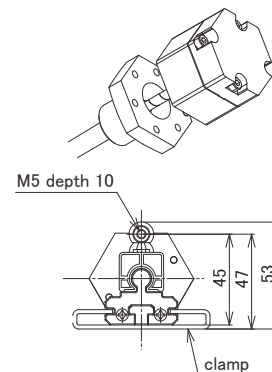
- analogue output: GYHC (page 52, 53), GYFC2-3 (page 54, 55)
- digital output: GYDC-S1 (page 56, 57), GYDC-05 (page 58, 59)
- IRDS-GY (page 61): When using the IRDM, you can connect with CC-Link, CC-Link IE Field, PROFIBUS, EtherNet/IP, and EtherCAT.
- DC-Q (page 60): MELSEC-Q built-in unit

Dimensions

■ Probe

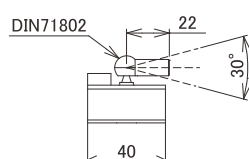


■ detachable probe element

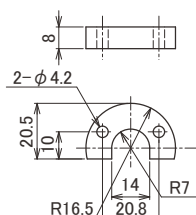


■ magnet

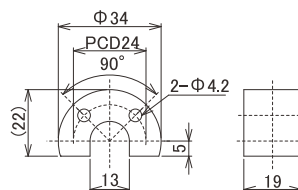
slide magnet
model: PFU
materials: polyacetal



floating magnet
model: No.5N-UK
materials: MC nylon



floating magnet
model: No.5PFT-LG
materials: SS304



■ Cable

Wire color	Function
red	Sensor power
white	0V
blue	Start(-)
green	Start(+)
brown	Stop(-)
black	Stop(+)
yellow	N.C.

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

• materials ; Probe head : Al alloy, body : Al alloy

■ Probe

GYMR6 - - / - **PF** - - - **00** -

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① Effective stroke

15mm~7500mm

② Head dead zone

S: 50mm (STD)

: mm (option) (specified by customers)

• Possible Min. length depends on the selected magnet.

③ Tip dead zone

S: 50mm (STD)

: mm (option) (specified by customers)

• Possible Min. length depends on the selected magnet.

④ Associated magnet

PFU : PFU slide magnet

FE : No.5N-UK

BP : No.5PFT-LG

- Please consult if you select a magnet of other than above.
- This Model code means only specifying associated magnet.
- When you need a magnet, please order separately.

⑥ Cable connection

△G□F: pigtail / cable end : free

△G□A: pigtail / cable end : with connector for relay

△G□FC: pigtail / cable end : with connector for GYFC2/3

(: cable length (m), Max.10m) (*)

(△ : cable type

S: standard, H: high temp. cable, R: robot cable, UL : cUL cable)

(*) In case of using extension cable

sensor cable (m) + extension cable (m) ≤ 200m

• Please consider extension cable on page 112.

⑥ Output

00: depends on external controller

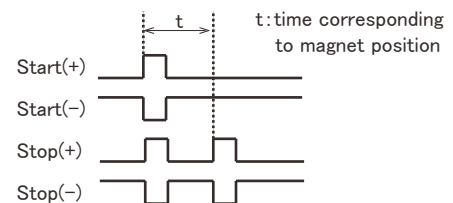
⑦ Clamp

F50: with fixing clamps

N: without fixing clamps

【Start/Stop-Interface】

- ◆ In case of using probe only,
probe outputs digital signals (start/stop) using RS422 differential line drivers. In response to user's interrogation (start) pulse, probe provides stop pulse.



【Auto calibration function】

- ◆ In combination with the controller (GYDC-S1, GYDC-05, GYHC) having auto calibration function, a difference in the output when you change the probe is adjusted automatically.