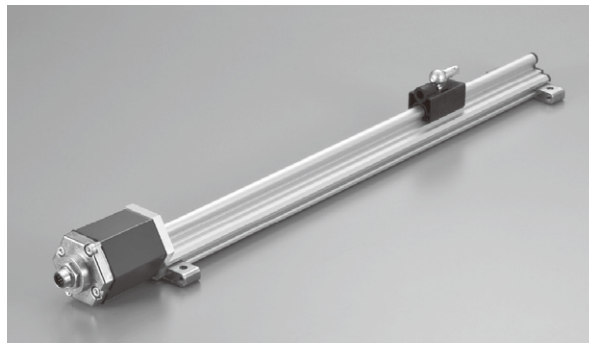


GYSE-R-PF Probe

RS422

High accuracy type (detachable probe element)



This is the linear profile version of GYSE-R. 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.

Specifications

Accuracy	Non-linearity	$\leq \pm 0.025\% \text{FS TYP}$
	Resolution	(analogue) 16bit (with GYHC) (digital) Min.1 μm (with GYDC-05)
	Repeatability	$\leq \pm 0.001\% \text{FS}$
	Temp. drift	$\leq \pm 20 \text{ppmFS}/^{\circ}\text{C}$
Environment	Operating temp.	$-20^{\circ}\text{C} \sim +75^{\circ}\text{C}$
	Storage temp.	$-40^{\circ}\text{C} \sim +75^{\circ}\text{C}$
	Vibration	15G (20 ~ 100Hz)
	Shock	100G (2msec)
	IP grade	IP65
	Cable	Std 1.5m (Option Max.200m)

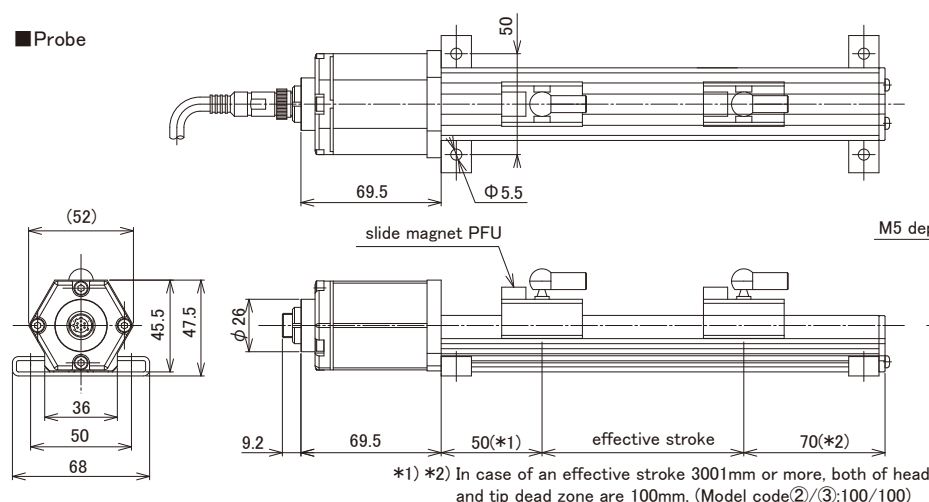
- The above mentioned accuracy applies to sensors with an effective stroke of 300mm or more.
- The specification of stroke less than 300mm is equal that of stroke 300mm.
- Fixing clamps are supplied.
 stroke < 600mm: 2 pcs
 600~1000mm: 3 pcs
 1001~1200mm: 4 pcs
 1501~2000mm: 5 pcs
 One clamp is added
 every 500mm

◆ associated controller

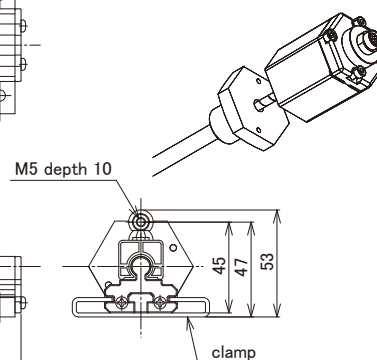
- analogue output: GYHC (page 50–51)
- digital output: GYDC-S1 (page 54–55), GYDC-05 (page 56–57)
- IRDS-GY (page 59) : When using the IRDM, you can connect with CC-Link, CC-Link IE Field, PROFIBUS, EtherNet/IP, and EtherCAT.
- DC-Q (page 58) : MELSEC-Q built-in unit

Dimensions

■ Probe

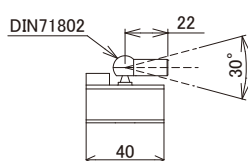


■ detachable probe element

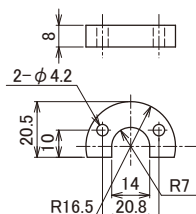


■ magnet

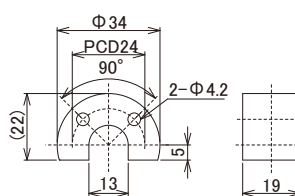
slide magnet
model:PFU
materials:polyacetal



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



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



■ Cable

Cable color	Pin number	Function
red	1	Sensor power
white	2	0V
blue	3	Start(-)
green	4	Start(+)
brown	5	Stop(-)
black	6	Stop(+)
yellow	7	N.C.

- materials ; Probe head : Al alloy, body : Al alloy
- connector ; straight or L-sharped (housing parts : BS with Ni plating)
- Applied cable diameter: $\Phi 6.6 \sim \Phi 7.5$, Wire size: 0.5mm^2

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

■ Probe

GYSE-R-□□□□-□/□-PF-□□-□□-00-□

① ② ③ ④ ⑤ ⑥ ⑦

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.

⑤ Cable connection

CN: connector (STD)

△G□F: pigtail / cable end : free

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

(□: cable length (m), Max.10m) (*)

(△: cable type

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

(*) In case of using extension cable

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

• Please consider extension cable on page 112.

• In case that you need loose mating connector, ordering connector (straight or L-shaped) separately is necessary.

⑥ Output

00: depends on external controller

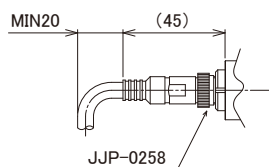
⑦ Clamp

F50: with fixing clamps

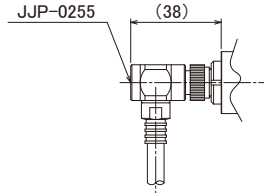
N: without fixing clamps

【Cable connection】

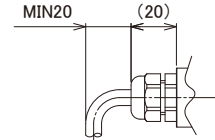
■ Connector type (straight) (STD)



■ Connector type (L-shaped) (option)

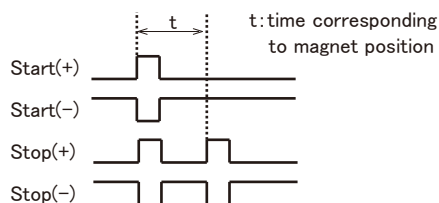


■ Pigtail type (option)



【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.