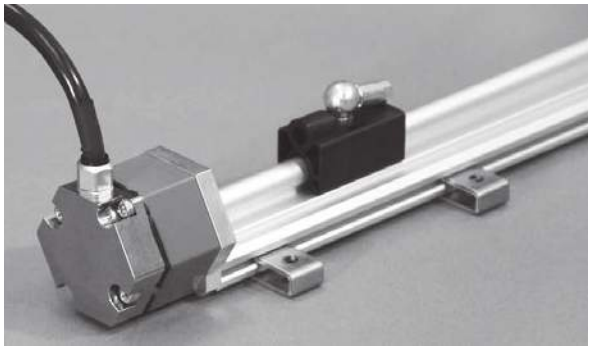
GYMRA-PF Probe

Analogue

GPM Noise Cancel

Flat head type, analogue output (detachable probe element)



This is the linear profile version of GYMRA. The output is voltage or current. 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	≦±0.025%FS TYP
	Resolution	≦0.1mm
	Repeatability	≦±0.1mm
	Temp. drift	≦±20ppmFS/℃
Output	Voltage output	0～10V or 10～0V (output current : Max.5mA, load : Min.2kΩ)
	Current output	4～20m or 20～4mA (load : Max.500Ω)
	Alarm	Open drain 50V 0.1A (for magnet missing)
Power supply		+24(±2)VDC (60mA)
Sampling freq.		Std 1kHz (up to stroke 1000mm)
Environment	Operating temp.	−20℃～+75℃
	Storage temp.	−40℃～+75℃
	Vibration	15G (20～100Hz)
	Shock	100G (2msec)
	IP grade	IP65

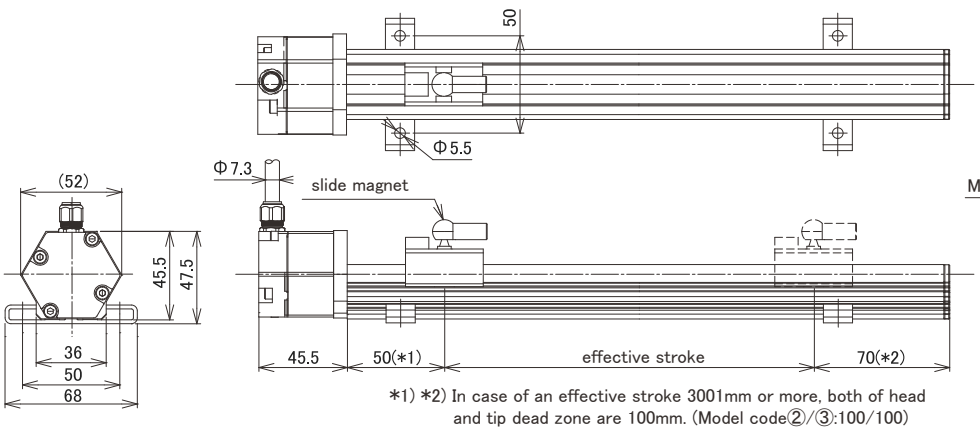
・The above mentioned accuracy applies to sensors with an effective stroke of 300mm or more.
・The specification of stroke less than 300mm is equal that of stroke 300mm.

・Fixing clamps are supplied.
stroke ＜600mm : 2 pcs
600～1000mm : 3 pcs
1001～1500mm : 4 pcs
1501～2000mm : 5 pcs

One clamp is added every 500mm

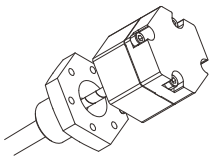
Dimensions

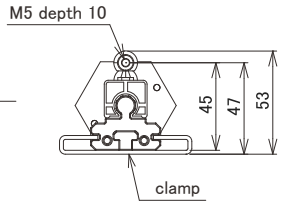
■Probe



*1) *2) In case of an effective stroke 3001mm or more, both of head and tip dead zone are 100mm. (Model code②/③:100/100)

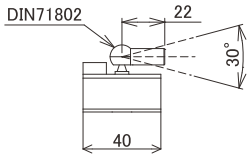
■detachable probe element



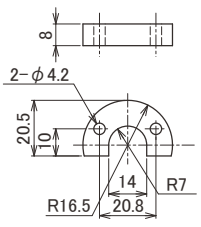


■magnet

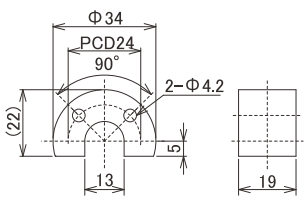
slide magnet
model : PFU
materials : polyacetal



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



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



・materials ; Probe head : Al alloy, body : Al alloy
・cable length ; Max.10m (0-10V output), Max.100m (4-20mA output)

■Cable

Wire color	Function
red	+24VDC
white	0V
blue	(Voltage)
green	COM1
brown	(Current)
black	COM2
yellow	Alarm

・Shield should be connected with 0V at user side.
・In case you select the voltage output, you can't use the brown and black wires.
・In case you select the current output, you can't use the blue and green wires.

■Probe

GYMRA-□□□□-□/□-PF-□□-□□-□-□

①　②　③　④　⑤　⑥　⑦

①Effective stroke
15～7500mm

②Head dead zone
S：50mm（STD）
□：□mm（option）（specified by customers）

・Possible Min. length depends on the selected magnet.

③Tip dead zone
S：70mm（STD）
□：□mm（option）（specified by customers）

・Possible Min. length depends on the selected magnet.

④Associated 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.

⑤Cable connection
△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, UL : cUL cable）

（*）In case of using extension cable
Voltage output : sensor cable (m) + extension cable (m) ≦ 10m
Current output : sensor cable (m) + extension cable (m) ≦ 100m
・Please consider extension cable on page 113.

⑥Position output（OUT1）
AD：0～10V（When magnet moves toward tip, output increase）
AR：10～0V（When magnet moves toward tip, output decrease）
BD：4～20mA（When magnet moves toward tip, output increase）
BR：20～4mA（When magnet moves toward tip, output decrease）
V Z/F：option (specified voltage)
(for example V1/5：1～5V, V9.5/0.5：9.5～0.5V)
I Z/F：option (specified current)
(for example I5.2/20：5.2～20mA, I18/5：18～5mA)

【Z=output at zero position, F=output at full position】

⑦Clamp

F50　：with fixing clamps
N　：without fixing clamps