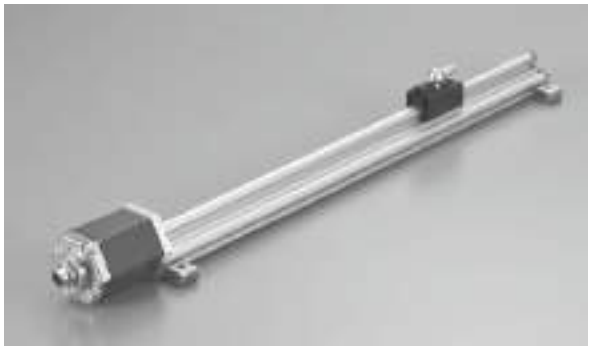
GYSE-A-PF Probe

Analogue

GPM | Noise Cancel | CE

High performance analogue output (detachable probe element)



This is the linear profile version of GYSE-A. It is a high performance analog output probe, and has the high resolution of 16bit. It has also velocity output. Using two pcs of magnet on the probe as another option, detecting each magnet position or relative distance between the two is possible. 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

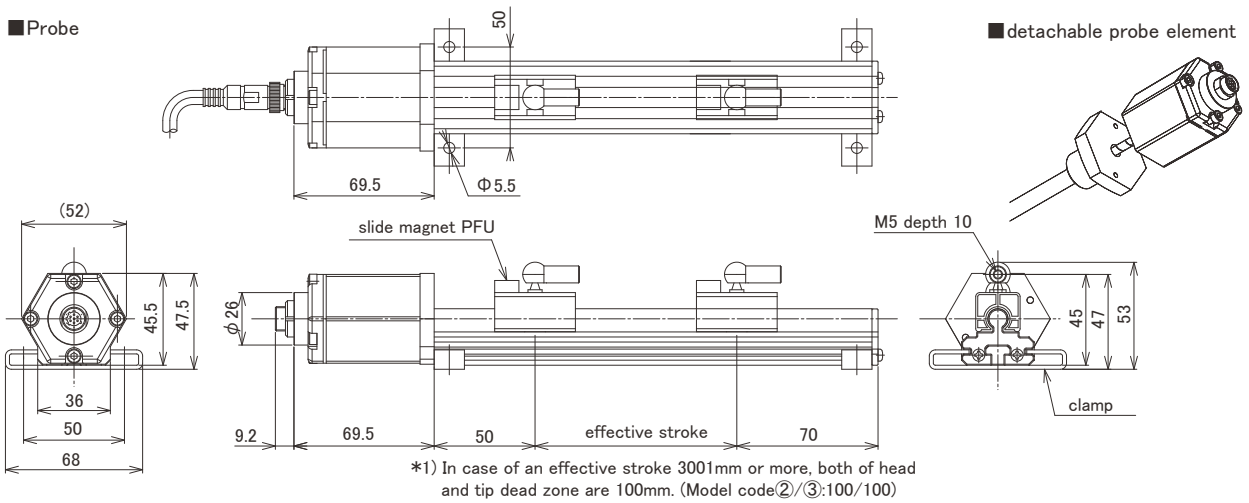
Accuracy	Non-linearity	≦±0.025%FS TYP
	Resolution	16bit(1/65536)
	Repeatability	≦±0.001%FS (Min. ±3μm)
	Temp. drift	≦±20ppmFS/℃
Output	Position (STD)	0～10V(output current : Max.5mA, load : Min.2kΩ) or 4～20mA(load : Max.500Ω)
	Velocity (Option)	±10V(output current : Max.5mA, load : Min.2kΩ) or 4～20mA(load : Max.500Ω)
	Alarm	Open drain 50V 0.1A (for magnet missing)
Power supply		+24(±2)VDC (70mA)
Sampling freq.		Std 1kHz(total body length : up to 1250mm)
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.
(*) Sampling frequency : Max. 3.75kHz (It depends on the total body length (shows in Model ⑧), and the consumption current increases.)

・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

Dimensions

■Probe

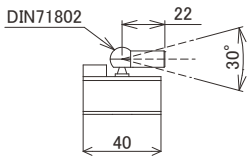


■detachable probe element

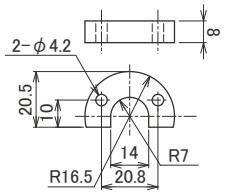
*1) In case of an effective stroke 3001mm or more, both of head and tip dead zone are 100mm. (Model code②/③:100/100)

■magnet

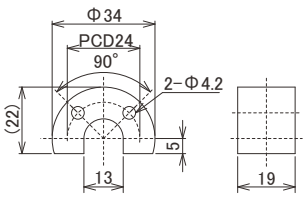
slide magnet
model : PFU
materials : polyacetal



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
・connector ; straight or L-sharped (housing parts : BS with Ni plating)
・Applied cable diameter : Φ6.6～Φ7.5、Wire size : 0.5mm²
・cable length ; Max.10m (0-10V output), Max.100m (4-20mA output)

■Cable

Cable color	Pin number	Function
red	1	+24VDC
while	2	0V
blue	3	OUT1
green	4	COM1
brown	5	OUT2
black	6	COM2
yellow	7	Alarm

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

■Probe

GYSE-A-□□□□-□/□-PF-□□-□□-□/N-□-□

①　②　③　④　⑤　⑥　⑦　⑧　⑨

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：50mm（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
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
Voltage output : sensor cable (m) + extension cable (m) ≦ 10m
Current output : sensor cable (m) + extension cable (m) ≦ 100m
・Please consider extension cable on page 112.
・In case that you need loose mating connector, ordering connector (straight or L-shaped) separately is necessary.

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）
CD□□：bipolar output（−□V～+□V）
（for example CD10：−10V～+10V）
CR□□：bipolar output（+□V～−□V）
（for example CR05：+5V～−5V）
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】

⑦Option : Analogue output（OUT2）
・N：without option（STD）
・Position output：select from ⑥
・Velocity output（Note1）
VA[　]：±10V
WB[　]：4～20mA
[　]：max. velocity（1.00～999 mm/s）
<ex.9R99 : max. velocity = 9.99 mm/s>

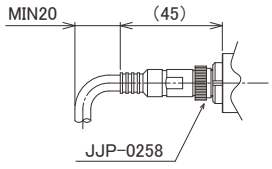
（Note1）
VA : When magnet stops, output is 0V.
When moving toward probe tip, +10V.
WB : When magnet stops, output is 4mA.
When moving in any direction, 20mA.

⑧Option
blank：without option
X2：2kHz sampling (total body length : Max. 750mm)
X3：3kHz sampling (total body length : Max. 600mm)
X4：3.75kHz sampling (total body length : Max. 450mm)

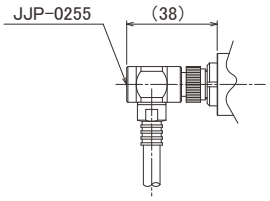
⑨Clamp
F50　：with fixing clamps
N　：without fixing clamps

【Cable connection】

■Connector type（straight）（STD）



■Connector type（L-shaped）（option）



■Pigtail type（option）