

GYRHP-MRA Probe

Analogue

GPM

Noise
Cancel

**Pressure resistance rod : 70MPa, heavy duty type
(Alli-in-one, analogue output)**



GYRHP-MRA, which is different from conventional GY series, achieved pressure-resistant 70MPa (rod) by redesign in head and rod part. Standard of protection grade is IP67, but you can select water-proof type (IP68) or cable conduit type (IP69K) by option. It is all-in-one and its output is voltage or current. With the captive software (GPM), zero and gain adjustment is possible at the user.

Specifications

Accuracy	Non-linearity	$\leq \pm 0.025\%FS$ TYP
	Resolution	$\leq 0.1mm$
	Repeatability	$\leq \pm 0.1mm$
	Temp. drift	$\leq \pm 20ppmFS/^{\circ}C$
Output	Voltage output	0~10V or 10~0V (output current : Max. 5mA, load : Min. 2k Ω)
	Current output	4~20mA or 20~4mA (load : Max. 500 Ω)
	Alarm output	Open drain 50V 0.1A (for magnet missing)
Environment	Power supply	+24(± 2)VDC (60mA)
	Sampling freq.	Std 1kHz (up to stroke 1000mm)
	Max. Pressure	70MPa (probe rod)
	Operating temp.	-20 $^{\circ}C$ ~+75 $^{\circ}C$
	Storage temp.	-40 $^{\circ}C$ ~+75 $^{\circ}C$
	Vibration	20G (10~100Hz)
	Shock	100G (2msec) / 800G (option)
	IP grade	IP67 (STD), IP68 / IP69K (option)

• 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.

Model

Probe

GYRHP-MRA-□□□□-□/□-F12-□□-□□-□-□

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Effective stroke

15~1000mm

② Head dead zone

S: 50mm (STD)

□: □mm (specified by customers)

• Possible Min. length depends on the selected magnet.

③ Tip dead zone

S: 70mm (in case ⑤ is BA)

100mm (in case ⑤ is T163)

□: □mm (specified by customers)

④ Mount/Rod diameter

F12: pressure-resistant flange, rod $\Phi 12$ (STD)

⑤ Associated magnet

BA : No.2KYN-17-LG (STD)

T163 : No.T16-M3

• Please consult if you select a magnet of other than above.

• This Model code means only specifying associated magnet, please order separately.

⑥ Cable connection

○△G□◇F: pigtail / cable end : free (STD)

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

WP3G□◇F: pigtail of water proof cable / cable end : free

WP3G□◇A: pigtail pf water proof cable / cable end :
with connector for relay

○: pigtail type (S : standard, C : cable conduit)

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

□: cable length (m) Max.10m (*)

◇: head shape type (L : radial, S : axial)

(*) In case of using extension cable,

voltage output : sensor cable (m) + extension cable (m) $\leq 10m$

current output : sensor cable (m) + extension cable (m) $\leq 100m$

⑦ Position output

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)

I Z/F: option (specified current) (for example I5.2/20 : 5.2~20mA)

[Z=output at zero position, F=output at full position (tip side)]

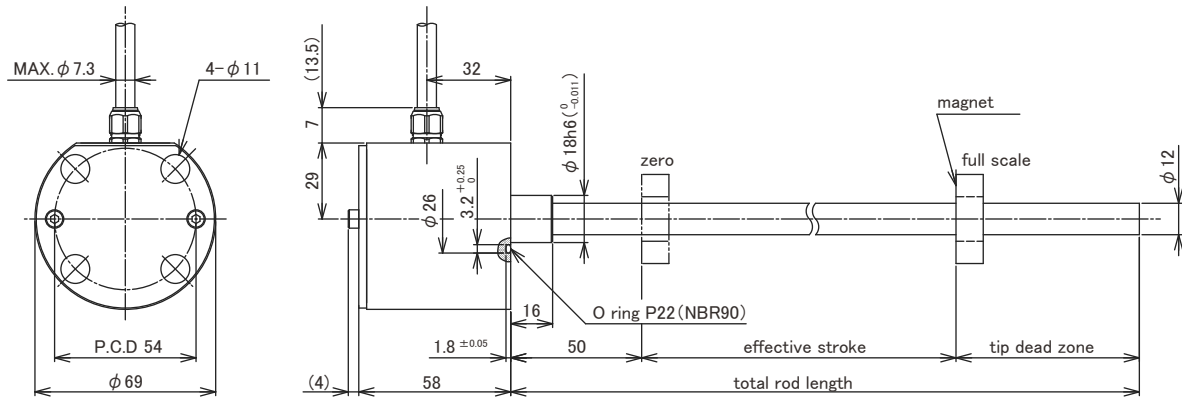
⑧ Option

blank: without option

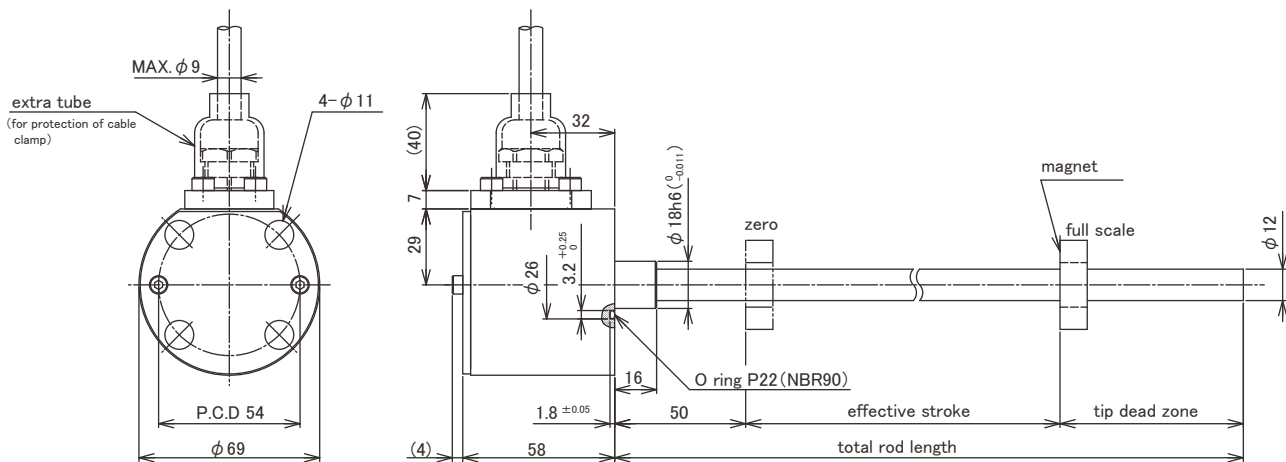
SRT: SRT option (800G)

Dimensions (radial type)

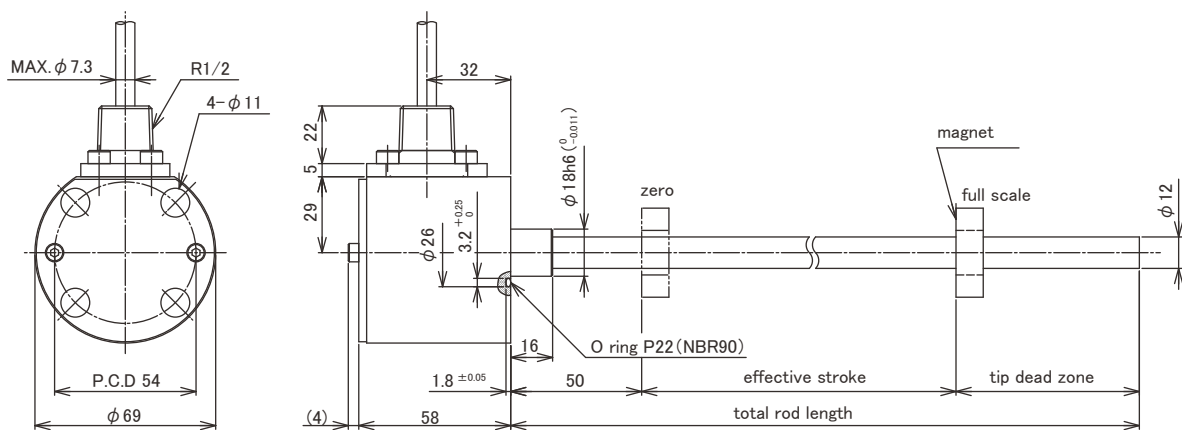
■ Radial / pigtail type (IP67) (Standard)(SSG□L*)



■ Radial / water proof type (IP68)(WP3G□L*)



■ Radial / conduit type (IP69K)(with conduit cable)(CSG□L*)



■ Model of extension cable

CL-PMRA-□-□□-□□

① ② ③ ④ ⑤

① Probe

PMRA: GYRHP-MRA

② Cable type

S : Standard cable
H : High temp. cable
R : Robot cable
W : Water proof cable

③ Cable length (m)

④ Cable end (sensor side)

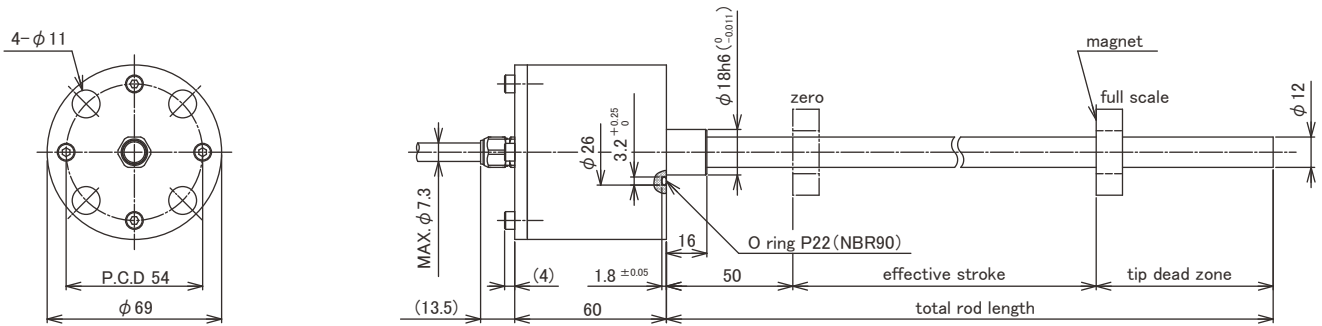
F : free
S : with straight connector

⑤ Cable end (controller side)

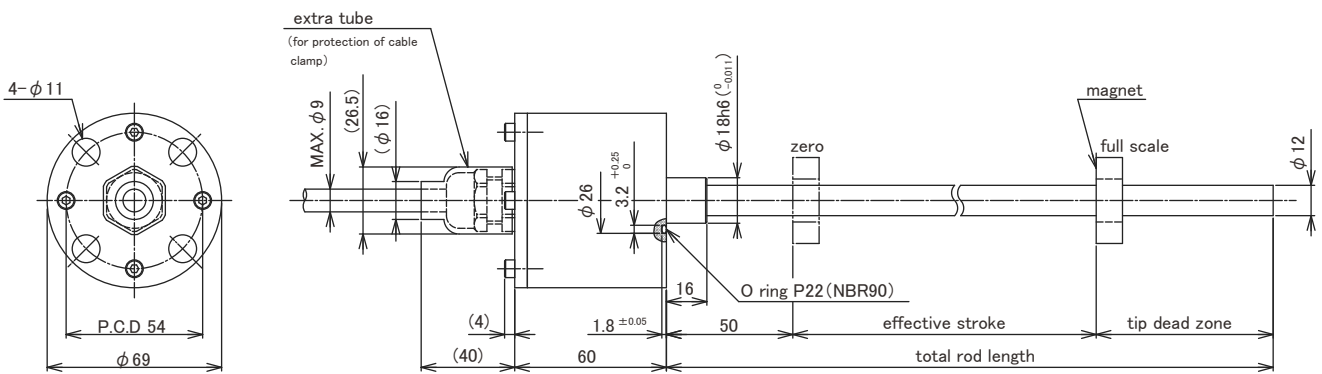
F : free
A : with connector for relay

■ Dimensions (axial type)

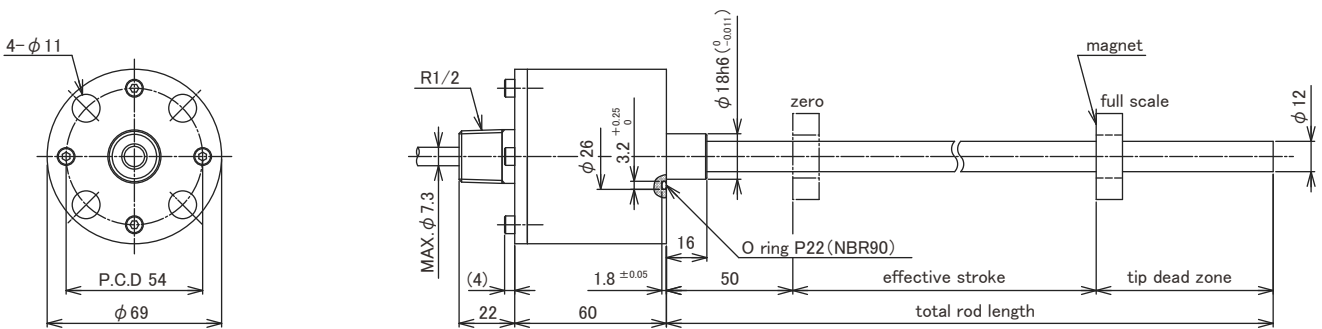
■ Axial / pigtail type (IP67)(SSG□S*)



■ Axial / Water proof type (IP68)(WP3G□S*)



■ Axial / conduit type (IP69K)(with conduit cable)(CSG□S*)



■ 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 your 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.