All-in-one Series

GYMA Probe







Compact analogue output (4-20mA only)



GYMA has the same appearance as GYMS (compact head) and is all-in-one series. We achieved downsizing of all-in-one series by the latest circuit design. GYMA has high reliability with IP67 like GYMS. Only 4-20mA output is available.

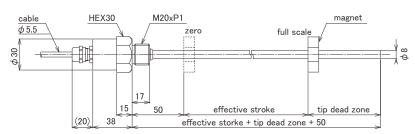
Specifications

Accuracy	Non-linearity	≦±0.025%FS TYP
	Resolution	≦0.1mm
	Repeatability	≦±0.1mm
	Temp. drift	≦±0.03%FS/°C
Output	Voltage output	not available
	Current output	4~20mA or 20~4mA
		(load:Max.500 Ω)
	Alarm output	not available
Power supply		+24(±2)VDC (100mA)
Sampling freq.		Std 1kHz(up to stroke 1000mm)
Environment	Max. Pressure	35MPa(probe rod)
	Operating temp.	-20°C~+80°C
	Storage temp.	-40°C∼+80°C
	Vibration	6G(or 40Hz 2mmPP)
	Shock	50G(2msec)
	IP grade	IP67

- 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.

Dimensions

■probe



■Straight connector type

Straight connector L shape connector (61) 40.4

■L shape connector type

40.4

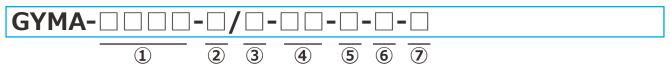
■Cable

Pin	Function	
number		
1	+24VDC	
2	0V	
3	OUT	
4	COM	
_	shield	
	number 1 2	

•Shield should be connected with 0V at user side.

- •Material: Probe head: SS304, Probe rod: SS304
- •magnet : Select one from group GG on page 110
- •The tip dead zone length depends on the selected magnet or float.
- Connector : Omron XS2C-D4S1 (straight connector) or D4S2 (L type) (material : PBT plastic)
- •Suitable cable diameter : Φ 5 \sim Φ 6, Wire size : 0.18 \sim 0.75mm²
- cable length: Max. 100m

■ Probe



1 Effective stroke

15~3000mm

2 Head dead zone

S:50mm(STD)

□: □mm(option)(specified by customers)

•Possible Min. length depends on the selected magnet or float.

3Tip dead zone

S:70mm/90mm/100mm(STD)

•S (STD length) depends on the selected magnet or float in (5).

tip DZ	magnet	float
70mm	M2PN, M0SM, M0LM,	F25N, F28N
	M3, M11N, BA	
90mm		F28S, F30S
100mm	T144, T163	F40S, F42S, F50S, F54S

☐: ☐mm(option)(specified by customers)

4Thread/Rod diameter

J8 : M20xP1.0, rod Φ8(STD)

L8 : M16xP2.0, rod $\Phi 8$ E8 : M20xP1.5, rod $\Phi 8$

N : M18xP1.5, rod Φ10

U :3/4-16UNF-3A, rod Φ 10

K6 : M16xP1.5, rod Φ6

*In case of an effective stroke 1001mm or more, the rod $\Phi\,10$ should be used.

5 Associated magnet or float

<magnet> M2PN: No.2PN F28S : Φ28 SS316L M0SM : No. ΦSPM F30S Ф30 SS316L M0LM:No.ΦLPM F40S Φ40 SS316(B) F42S Φ43 SS316L М3 : No.3 M11N : No.11N F50S : Ф50 SS316L : Ф54 SS304 T144 :No.T14-M4 F54S F25N : RF-A10 plastic T163 :No.T16-M3 :RF-A6 plastic F28N : No.2KYN-17-LG BA

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

•In case of an effective stroke 2001mm or more, "No.2KYN-17-LG" magnet (page 110) would be recommended.

6 Cable connection

 $G \square F$: pigtail / cable end : free

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

 $(\Box : cable length(m), Max. 10m)(*)$

CN: connector

(*) In case of using extension cable

Current output : sensor cable (m) + extension cable (m) ≤ 100m

•Please consider extension cable on page 113.

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

Position output (OUT1)

BD:4~20mA (When magnet moves toward tip, output increase)

BR: 20~4mA (When magnet moves toward tip, output decrease)

[•]Possible Min. length depends on the selected magnet or float.