

GYcAT4 Probe

Analogue

Noise Cancel



Analogue output
(replacement model for GYLT, GYLS)



Replacement model for GYLS (0~10V output), GYLT(4~20mA output).

Linearity : $\leq \pm 0.05\%$ FS.

current consumption is 100mA.

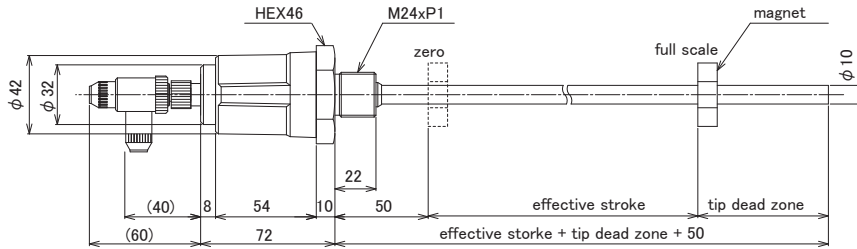
Specifications

Accuracy	Non-linearity	$\leq \pm 0.05\%$ FS TYP
	Resolution	$\leq 0.01\%$ FS
	Repeatability	$\leq \pm 0.01\%$ FS
	Temp. drift	$\leq \pm 40$ ppmFS/°C
Output	Voltage output	0~10V or 10~0V (output current: Max.5mA, load: Min.2kΩ)
	Current output	4~20mA or 20~4mA (load: Max.500Ω)
	Alarm output	not available
Power supply		+24(±2)VDC (100mA)
Sampling freq.		Std 1kHz (up to stroke 1000mm)
Environment	Msx. 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 (10kPa, 30min)

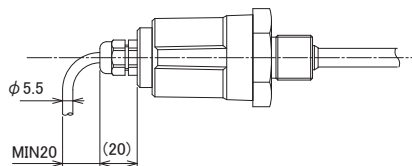
*The above mentioned accuracy applies to sensors with an effective stroke of 300 mm or more.

Dimensions

■ probe



■ Pigtail type (Option)



- Material probe head: Al diecast, probe rod: SS304
- Standard magnet: No.2PN. Other magnets are available from Magnet Grouping「B」(P.33).
- The tip dead zone length (70mm) depends on the magnet or float type.
- The length of the cable should be less than 10m in case of using the voltage output type and 100m in case of using the current output type.
- Connector: Omron XS2C-D4S1 (straight type) or D4S2 (L type) (Material: PBT plastic)
- Applied cable diameter: $\phi 5 \sim \phi 6$
- Wire size: 0.18~0.75mm²

■ Connection

Cable color	Pin number	Function
red	1	+24VDC
white	2	0V
black	3	OUT
green	4	COM

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

Probe

GYcAT4-□-□/□-□-□-□-□-□

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Effective stroke

15~3500mm

② Thread dead zone

S: 50mm(STD)

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

③ Tip dead zone

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

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

tip DZ	magnet	float
70mm	M2P, M2PN, M0, M0SM, M11, M3	F25N, F28N
90mm		F28S, F30S
100mm	T142(144), T162(163)	F40S, F42S, F50S

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

④ Thread/Rod diameter

M : M24xP1.0, rod Φ10(STD)

N : M18xP1.5, rod Φ10

U : 3/4-16UNF-3A, rod Φ10

M8 : M24xP1.0, rod Φ8

N8 : M18xP1.5, rod Φ8

U8 : 3/4-16UNF-3A, rod Φ8

M14: M24xP1.0, rod Φ13.8

⑤ Associated magnet or float

<magnet>

M2P : No.2P (STD)
 M2PN : No.2PN
 M0 : No.Φ
 M0SM : No.ΦSPM
 M0LM : No.ΦLPM
 M3 : No.3
 M11 : No.11
 M11N : No.11N
 T142 : No.T14-M2
 T144 : No.T14-M4
 T162 : No.T16-M2
 T163 : No.T16-M3
 MG□ : other magnet

<float>

F28S : Φ28 SS316
 F30S : Φ30 SS316L
 F40S : Φ40 SS316(B)
 F42S : Φ42.5 SS316
 F50S : Φ50 SS316
 F54S : Φ54 SS304
 F25N : RF-A10 plastic
 F28N : RF-A6 plastic
 FL□ : other float

⑥ Cable connection

CN: connector(STD)

G□F: pigtail / cable end : free

G□A: pigtail / cable end : with connector for relay
 (□: cable length(m))

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)

CD□□: bipolar output(-□V~+□V)

(for example CD10: -10V~+10V)

CR□□: bipolar output(+□V~-□V)

(for example CR05: +5V~-5V)

⑧ Option (see page 75~77)

blank: without option

H0: probe rod 100°C

Ordering loose connector only.

CN-OM-0-□

└ S: straight
 └ L: L-shaped

※When ordering connector with cable,
 please refer to Page 80.