

EX-GYdT-R Probe

RS422

Compact, flameproof enclosure, with controller



EX-GYdT-R probe is a level or displacement transducer of the flameproof enclosure type which has GYcRS circuit inside. Having the closed structure for sensor head achieves waterproof performance and compact. An explosion protection symbol is Exd II CT6, and you can use it in the most of the explosive gas atmosphere.

Form official approval pass symbol: No. TC16475 (rod diameter $\Phi 10$), No. TC16474 (rod diameter $\Phi 13.8$)

Specifications

Accuracy	Non-linearity	$\leq \pm 0.025\%FS$
	Resolution	(analogue) 16bit (digital) Min.1 μm
	Repeatability	$\leq \pm 0.001\%FS$
	Temp. drift	$\leq \pm 20ppmFS/^{\circ}C$
Environment	Max. Pressure	35MPa (probe rod)
	Operating temp	$-20^{\circ}C \sim +60^{\circ}C$
	Storage temp.	$-40^{\circ}C \sim +80^{\circ}C$
	Vibration	6G (or 40Hz 2mmPP)
	Shock	50G (2msec)
	IP grade	IP67 (STD), IP68 (option)
	Explosion-proof symbol	Exd II CT6

• 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.

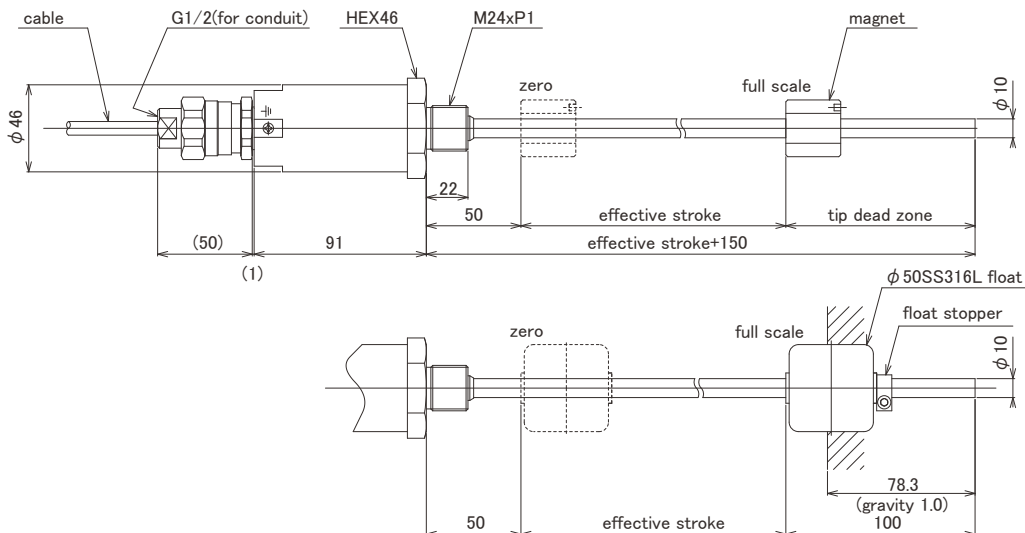
• Resolution depends on associated controller.

◆ associated controller

- analogue output: GYHC (page 52, 53), GYFC2-3 (page 54, 55)
- digital output: GYDC-S1 (page 56, 57), GYDC-05 (page 58, 59)
- IRDS-GY (page 61): When using the IRDM, you can connect with CC-Link, CC-Link IE Field, PROFIBUS, EtherNet/IP, and EtherCAT.
- DC-Q (page 60): MELSEC-Q built-in unit

Dimensions

■ Probe



■ Cable

Wire color	Function
red	sensor power
yellow	N.C.
white	0V
green	Start(+)
blue	Start(-)
black	Stop(+)
brown	Stop(-)

- Please don't use shield wire as earthing wire.
- Please don't ground shield wire in the control board and terminal box.
- Shield should be connected with 0V at user side.

- Material: probe head: SS316, probe rod: SS316
- Select one magnet from group GG (holder material: metal) on page 110.
- The tip dead zone length depends on the selected magnet or float.
- When branching or connecting cables at a dangerous zone, it's necessary to work out in the junction box of flameproof enclosure or increased safety.
- When connecting cables into non-dangerous zone, it's necessary to prevent the explosive atmosphere gas from non-dangerous zone.

■ Probe

EX-GYdT-R□-□-D(RS□-□/□-□-□□ZZ)

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Rod diameter

10: Φ10
14: Φ13.8

② Total rod length

□: □mm

③ Effective stroke

15mm~5000mm

④ Head dead zone

S: 50mm(STD)

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

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

⑤ Tip dead zone

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

• S (STD length) depends on the selected magnet or float in ⑥.

tip DZ	magnet	float
70mm	BA, AS	
100mm	T144, T163,	F40S, F42S, F50S F54S

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

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

⑥ Associated magnet or float

<magnet>

T144 : T14-M4
T163 : T16-M3
BA : No.2KYN-17-LG
AS : No.11S-SUS

<float>

F40S : Φ40SS316(B)
F42S : Φ43 SS316L
F50S : Φ50SS316L
F54S : Φ54SS304

⑦ Cable type

S: standard cable

R: robot cable

W: waterproof cable

⑧ Cable length

□: □m (max. 10m)

(*) In case of using extension cable

sensor cable (m) + extension cable (m) ≤ 200m

• Please consider extension cable on page 112.

⑨ Output

ZZ: depends on external controller