

GYcRS Probe

RS422

High performance probe



Between probe and controller, RS-422 differential line driver transmission, providing robustness against electrical noise, is used. In combination with a digital output controller, Min.1 μ m resolution is possible.

Specifications

Accuracy	Non-linearity	$\leq \pm 0.025\%$ FS TYP
	Resolution	(analogue) 16bit (digital) Min.1 μ m
	Repeatability	$\leq \pm 0.001\%$ FS
	Temp. drift	$\leq \pm 20$ ppmFS/ $^{\circ}$ C
Environment	Max. Pressure	35MPa (probe rod)
	Operating temp.	-20° C $\sim$ $+80^{\circ}$ C
	Storage temp.	-40° C $\sim$ $+80^{\circ}$ C
	Vibration	6G (40Hz 2mmPP)
	Shock	100G (2msec)
	IP grade	IP67

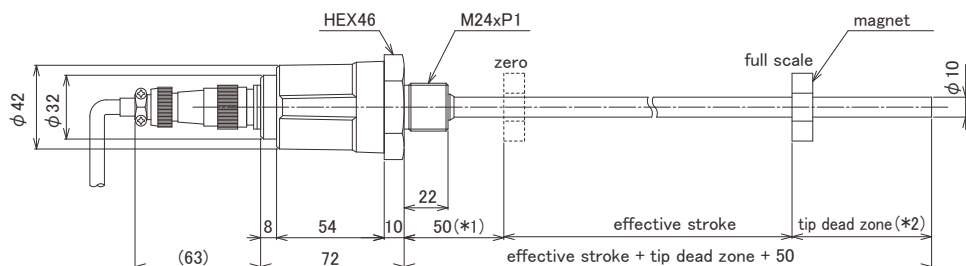
- The above mentioned accuracy applies to sensors with an effective stroke of 300mm or more.
- The specification of stroke less than 300mm is equal that of stroke 300mm.
- resolution depends on associated controller

◆ 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

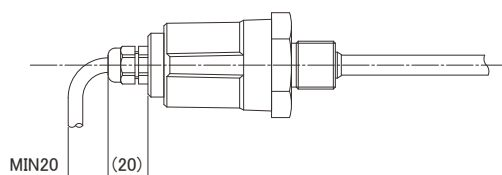
■ Probe



*1) In case of an effective stroke 3001mm or more, head dead zone is 100mm. (Model code ② : 100)

*2) In case of an effective stroke 3001mm or more, tip dead zone is "standard length + 30mm". (Model code ③ : 100/120/130)

■ Pigtail type



- materials ; Probe head : Al alloy, 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: Sanwa SNW-1607-PCF (Material: zinc alloy fluoroplastic)
- Applied cable diameter: Φ 6.6 $\sim$ Φ 7.5, Wire size: 0.5mm²

■ Cable

Wire color	Pin number	Function
red	1	Sensor power
yellow	2	N.C.
white	3	0V
green	4	Start(+)
black	5	Stop(+)
blue	6	Start(-)
brown	7	Stop(-)

- shield should be connected to shield terminal of the controller.

