GYDC-05 Controller

High-end Digital Controller
For GY transducers

GYDC-05 controller enables digital output of 1 μm resolution and also analogue output.

Other features are as options,

-Additional analogue output of magnet velocity

-SSI output and incremental output

GYDC-05 controller can be used with:

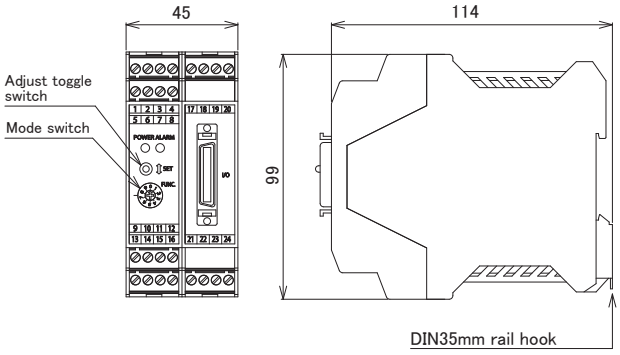
GYcRS/GYMR5/GYFRS/GYGS/GYPM/GYHR/GYcRP probes.

Specifications

	Standard	Option
Digital output (position)	Parallel Binary (Gray code user-configurable) Negative logic(「1」at transistor on)	Incremental output (RS422 line drivers)
		SSI output
	Resolution:0.01mm/bit (Probe:GYcRS、MR5、FRS)	0.1、0.05、0.005、0.002、0.001mm/bit
	Resolution:0.1mm/bit (Probe:GYGS、PM、HR、cRP、KM)	0.01mm/bit (Probe:GYHR)
Analogue output (position)(OUT1)	0～10V (output current:Max.5mA、load:Min.2kΩ)	4～20mA (load:Min.500Ω)
	Resolution:16bit(1/65536) (Probe:GYcRS、MR5、FRS)	
	Resolution:0.01%FS (Probe:GYGS、PM、HR、cRP、KM)	
Velocity output (OUT2)		±10V or 4～20mA
Alarm output	Open collector 0.1A 30VDC (Cable disconnection and magnet drop)	
Power supply	+24VDC±5%(＜160mA)	
Frequency resp.	Std 1kHz(depending on stroke) sampling	
Temp drift	±10ppmFS/℃	
Operating Temp	0℃～+65℃	
Storage Temp	-20℃～+75℃	

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

Dimensions



Standard:with mating connector 10136-3000PE(Sumitomo 3M)
Option:mating connector with 3m cable

Model No.

GYDC-05□-□□-□-□□□□-Z□-□/□-□
①②③④ ⑤ ⑥⑦⑧⑨

①Digital output
1:Standard(parallel、negative logic、binary code)
2:Incremental output (250kHz)
5A:SSI asynchronous
5S:SSI synchronous

②Resolution
D2:0.1mm
D3:0.05mm
D4:0.01mm(Standard)
D5:0.005mm
D7:0.002mm
D8:0.001mm

③Direction of output (toward probe tip)
D:output data increase
R:output data decrease

④Probe
RS:GYcRS probe
R5:GYMR5 probe
FS:GYFRS probe
GS:GYGS probe
PM:GYPM probe
RP:GYcRP probe
KM:GYKM probe
HR:GYHR probe
②Resolution 0.1mm(D2) only

⑤Effective stroke(mm)

⑥Dead zone length of probe head side(mm)

⑦Analogue position output(OUT1)

AD	0～10V(Std)
AR	10～0V
BD	4～20mA
BR	20～4mA
CD or CR□□ bipolar output [ex] CD10 CR05	□□V～□□V -10V～+10V +5V～-5V
V Z/F [ex] V1/5 V9.5/0.5	custom order 1～5V 9.5～0.5V
I Z/F [ex] I5.12/20 I20/5.38	custom order 5.12～20mA 20～5.38mA

※Z=Zero position
F=Full scale position

⑧Option:Analogue output(OUT2)
・position output:see ⑦
・velocity output(Note1)
VA[ ] ±10V
WB[ ] 4～20mA
[ ]:max velocity (1.00～999mm/sec)
(ex.9R99:max velocity=9.99mm/sec)
・N:No option

⑨Magnet and Float

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

F28S :Φ28SS316 float
F30S :Φ30SS316 float
F40S :Φ40SS316(B) float
F42S :Φ42.5SS316 float
F50S :Φ50SS316 float
F54S :Φ54SS304 float
F25N :RF-A10 plastic float
F28N :RF-A6 plastic float
FL□ :other float

(Note1)
VA:When magnet stops, output is 0V. When moving toward probe tip, +10V.
WB:When magnet stops, output is 4mA. When moving in any direction, 20mA.