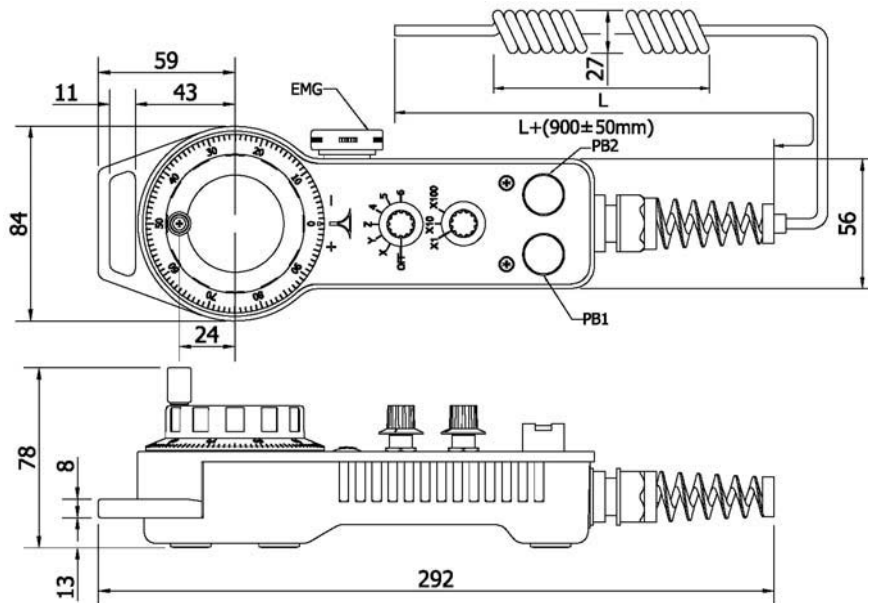


HPG-A-__ - C Pendant hand-Held



ELECTRICAL SPEC. – manual pulse generator

Detection System	Incremental
Output Wave	Square Wave
Standard Number of Pulse Per Revolution	25, 100
Output Phase	AB phase
Electronics	NPN Voltage, NPN Open Collector or Line Driver
Power Supply	DC 8~26V, DC 5V fixed
Current Consumption	< 60 mA
Output Capacity	Sync. Current: 20 mA, Residual Voltage: 0.5V or less
Max. Response	10K Hz
Phase Different	A, B phase different 90°±45° (T/4±T/8)
Wave Form Rise / Fall	2 µs or less

MECHANICAL SPEC. – manual pulse generator

Shaft Loading	Axial: 1 Kg, Radial: 2 Kg
Starting Torque (at 25°C)	260 g-cm
Max. Speed	500 rpm (Maximum); 200 rpm (Continuous)
X.Y.Z. Vibration	10 ~ 50 Hz / 1.5 mm X.Y.Z. 2hr
Shock	50 g per 11 ms
Rotational Life	10 ⁶ cycles (200 rpm)
Weight	1500 g

ENVIRONMENTAL SPEC.

Operating Temp. / Humidity	-10°C ~ 60°C, RH 35% ~ 90% (No Condensation)
Storage Temp.	-20°C ~ 80°C
Protection Grade	IP 64

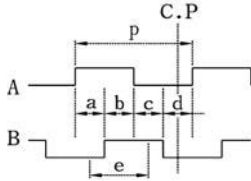
SWITCHES SPEC. (max.)

Rotary Switch		Push Button	Emergency Stop Switch	
Max. Voltage	28V AC/DC max.	AC250V 0.3A, AC 125V 5A	Contact Rating	With AC Load AC250V 0.5A, AC125V 1.0A
Current	10 mA	DC 250V 0.1A, DC24V 5A		With DC Load DC 30V 1.0A
Operating Torque	0.005 ~ 0.02 Nm			Resistance

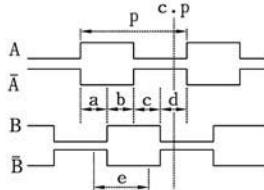
HPG-A-__-C Pendant Hand-held

OUTPUT WAVE FORM (Clockwise rotation is "CW Rotation" looked from the front side)

NPN Voltage / NPN Open Collector



Line Driver



- $P = 1 P/R$; $a, b, c, d = P/4 \pm P/6$
- C.P= click point
(For 25 P/R, C.P is at each position of a, b, c, d.
25 PPR a, b, c, d)
- Point e is recommended as the system switching timing.

ELECTRICAL CONNECTION

	COLOR of WIRE	FUNCTION
DIAL BODY	Brown	+V
	Red	0V
	Orange	CH A
	Pink	CH B
	Yellow	CH /A
	Green	CH /B

	COLOR of WIRE	POINT TO POINT
Axis Switch Selecting	Light Green	OFF
	Blue	X
	Purple	Y
	Gray	Z
	Blue / White	4
	Black	5
Rate Switch Selecting	Brown / White	6
	Red / White	X 1
	Red / Black	X 10
	Orange / White	X 100
Emergency Stop	Black / White	Switch Common
	Pink / Black	Emergency Stop Contact
	Orange / Black	Emergency Stop Contact
	Gray / Black	Emergency Stop Common
Push Buttons	Yellow / Black	Push Button 1 (left)
	Green / White	Push Button 2 (right)
	Green / Black	Push Button Common
Enable Key	White	Enable Key Contact
	Purple / White	Enable Key Common

	BINARY CODE TYPE (PNP)			BINARY CODE TYPE (NPN)		
	Purple	Blue	Light Green	Purple	Blue	Light Green
OFF	0	0	0	1	1	1
X	0	0	1	1	1	0
Y	0	1	0	1	0	1
Z	0	1	1	1	0	0
4	1	0	0	0	1	1
5	1	0	1	0	1	0
6	1	1	0	0	0	1

	Red / White	Brown / White
	X 1	0
X 10	0	1
X 100	1	0

	Red / White	Brown / White
	X 1	1
X 10	1	0
X 100	0	1

ORDERING INFORMATION

HPG - A -	Push Button Qty.	Push Button Action	Emergency Stop	Switch Function	Switch Axis	Supporting Foot	PPR	Electronics	Cable
	A: With PB1 B: With PB1&PB2	1: Alternate Normal Open 1A 2: Alternate Normal Close 1B 3: Momentary Normal Open 1A 4: Momentary Normal Close 1B	C: With EMG Stop (2 x NC contact) and Enable Key [Standard] Momentary Action	P: Point to Point N: Binary Code (PNP) A: Binary Code (NPN) O: Without Switch	6: 6 Axes (OFF-X-Y-Z-4-5-6)	R: Rubber Legs *M: Magnet	A: 100 PPR B: 25 PPR	V: NPN Voltage 8-26Vdc V5: NPN Voltage 5Vdc C: NPN Open-Collector 5-26V L: Line Driver 5Vdc *HL: Line Driver 5-26Vdc	S3: 3 m *S5: 5 m

[Standard] Alternate Action

* OPTION ---