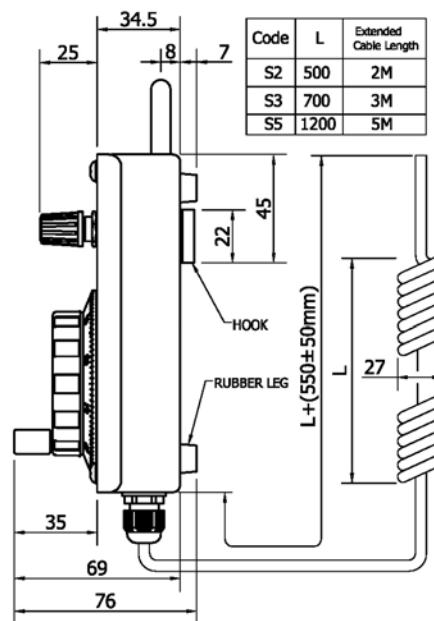
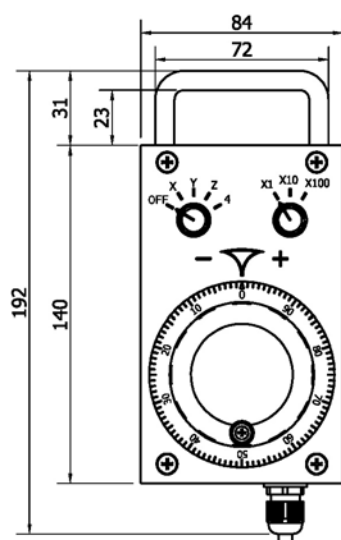


HPG-B

PENDANT HAND-HELD



ELECTRICAL SPEC. - manual pulse generator

Detection System	Incremental 增量型
Output Wave 輸出波形	Square Wave 方波
Standard Number of Pulse Per Revolution 解析	25, 100
Output Phase 輸出相	AB phase
Electronics 電路特性	Voltage 電壓型, Open Collector 電流型 or Line Driver 差動式
Power Supply 供應電源	DC 8~26V, DC 5V fixed
Current Consumption 消耗電流	< 60 mA
Output Capacity 輸出容量	Sync. Current: 20 mA, Residual Voltage: 0.5V or less
Max. Response 最大響應頻率	10K Hz
Phase Different 相位差	A, B phase different 90°±45° (T/4±T/8)
Wave Form Rise / Fall 波形上下時間	2 μs or less

SWITCHES SPEC.

Max. Voltage 最大電壓	DC 30V max.
Current 電流範圍	30 mA
Switch Cycle (Life) 旋鈕壽命	> 25,000 cycles

MECHANICAL SPEC.

Shaft Loading 軸荷重	Axial 軸向: 1 Kg, Radial 徑向: 2 Kg
Starting Torque (at 25°C) 起動轉矩	260 g-cm
Max. Speed 最大機械容許速度	500 rpm (Maximum 瞬間容許速度); 200 rpm (Continuous 連續容許速度)
X.Y.Z. Vibration 震動	10 ~ 50 Hz / 1.5 mm X.Y.Z. 2hr)
Shock 衝擊	50 g per 11 ms
Rotational Life 回轉壽命	10 ⁶ cycles (200 rpm)
Weight 重量	≤ 1500 g

ENVIRONMENTAL SPEC.

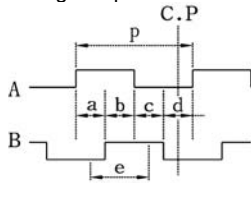
Operating Temp. / Humidity 操作溫度/濕度	-10°C ~ 60°C, RH 35% ~ 90% (No Condensation)
Storage Temp. 儲存溫度	-20°C ~ 80°C
Protection Grade 保護等級	IP 64

HPG-B

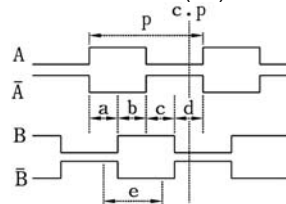
PENDANT HAND-HELD

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

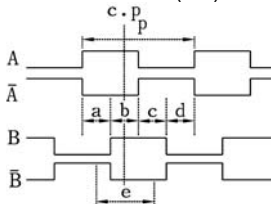
Voltage / Open Collector



Line Driver (CL)



Line Driver (CH)



- $P = 1 P/R$; $a, b, c, d = P/4 \pm P/6$
- C.P= click point 停止點信號
(For 25 P/R, C.P is at each position of a, b, c, d. 25 PPR 的停止點信號在 a, b, c, d 各個位置。)
- Point e is recommended as the system switching timing.
e 點為建議信號讀取/切換的範圍。

ELECTRICAL CONNECTION

DIAL BODY		COLOR of WIRE	FUNCTION
		Brown 棕	+V
		Red 紅	0V
		Orange 橘	CH A
		Pink 粉紅	CH B
		Yellow 黃	CH /A
		Green 綠	CH /B

Axis SW Selecting		POINT TO POINT	GRAY CODE TYPE (negative logic)																								
		OFF	<table border="1"> <tr> <td></td> <td>Light Green</td> <td>Blue</td> <td>Purple</td> </tr> <tr> <td>OFF</td> <td>1</td> <td>1</td> <td>1</td> </tr> <tr> <td>X</td> <td>0</td> <td>0</td> <td>1</td> </tr> <tr> <td>Y</td> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>Z</td> <td>1</td> <td>0</td> <td>1</td> </tr> <tr> <td>4</td> <td>1</td> <td>1</td> <td>0</td> </tr> </table>		Light Green	Blue	Purple	OFF	1	1	1	X	0	0	1	Y	0	1	1	Z	1	0	1	4	1	1	0
	Light Green	Blue	Purple																								
OFF	1	1	1																								
X	0	0	1																								
Y	0	1	1																								
Z	1	0	1																								
4	1	1	0																								
	Light Green 淺綠	X																									
	Blue 藍	Y																									
	Purple 紫	Z																									
	Gray 灰	4																									

Rate SW Selecting		POINT TO POINT	GRAY CODE TYPE (negative logic)												
		X 1	<table border="1"> <tr> <td></td> <td>Brown /White</td> <td>Red / White</td> </tr> <tr> <td>X 1</td> <td>0</td> <td>0</td> </tr> <tr> <td>X 10</td> <td>0</td> <td>1</td> </tr> <tr> <td>X 100</td> <td>1</td> <td>0</td> </tr> </table>		Brown /White	Red / White	X 1	0	0	X 10	0	1	X 100	1	0
	Brown /White	Red / White													
X 1	0	0													
X 10	0	1													
X 100	1	0													
	Brown/White 棕/白	X 10													
	Red/White 紅/白	X 100													
	Red/Black 紅/黑	Switch Common													
	Orange/White 橘/白														

ORDERING INFORMATION

HPG - B	Switch Option 旋鈕選項	Switch Code 旋鈕設定	Pulse/Revolution 解析	Electronics 電路特性	Cable Length 電線長度																																
	<table border="1"> <tr> <td></td> <td>Axis Switch 軸向開關</td> <td>Rate Switch 倍率開關</td> </tr> <tr> <td>A</td> <td>*</td> <td>*</td> </tr> <tr> <td>B</td> <td>-</td> <td>-</td> </tr> </table>		Axis Switch 軸向開關	Rate Switch 倍率開關	A	*	*	B	-	-	<table border="1"> <tr> <td>P</td> <td>Point to point</td> </tr> <tr> <td>G</td> <td>Gray Code</td> </tr> </table>	P	Point to point	G	Gray Code	<table border="1"> <tr> <td>25</td> <td>25 PPR</td> </tr> <tr> <td>100</td> <td>100 PPR</td> </tr> </table>	25	25 PPR	100	100 PPR	<table border="1"> <tr> <td>V</td> <td>Voltage 8~26Vdc</td> </tr> <tr> <td>V5</td> <td>Voltage 5Vdc</td> </tr> <tr> <td>C</td> <td>Open Collector 5~26V</td> </tr> <tr> <td>L</td> <td>Line Driver 5Vdc - Click Point 停止點信號 CL: low CH: high</td> </tr> <tr> <td>HL</td> <td>Line Driver 5~26Vdc - Click Point 停止點信號 CL: low CH: high</td> </tr> </table>	V	Voltage 8~26Vdc	V5	Voltage 5Vdc	C	Open Collector 5~26V	L	Line Driver 5Vdc - Click Point 停止點信號 CL: low CH: high	HL	Line Driver 5~26Vdc - Click Point 停止點信號 CL: low CH: high	<table border="1"> <tr> <td>S2</td> <td>2 m</td> </tr> <tr> <td>S3</td> <td>3 m</td> </tr> <tr> <td>S5</td> <td>5 m</td> </tr> </table>	S2	2 m	S3	3 m	S5
	Axis Switch 軸向開關	Rate Switch 倍率開關																																			
A	*	*																																			
B	-	-																																			
P	Point to point																																				
G	Gray Code																																				
25	25 PPR																																				
100	100 PPR																																				
V	Voltage 8~26Vdc																																				
V5	Voltage 5Vdc																																				
C	Open Collector 5~26V																																				
L	Line Driver 5Vdc - Click Point 停止點信號 CL: low CH: high																																				
HL	Line Driver 5~26Vdc - Click Point 停止點信號 CL: low CH: high																																				
S2	2 m																																				
S3	3 m																																				
S5	5 m																																				