

HANDY PENDANT



Handy Model

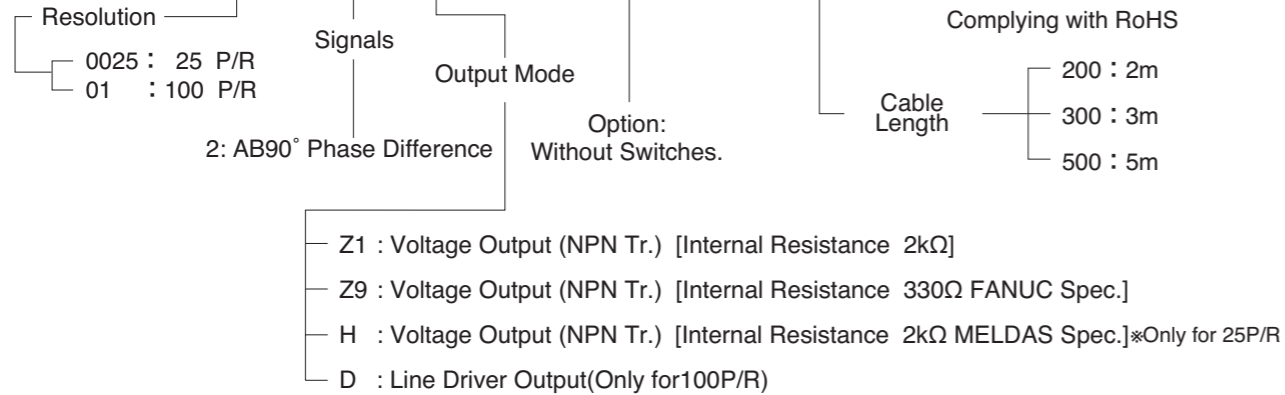
- Reasonable Cost vs. Performance.
- Fit To Hand Holding.

HP-M Model

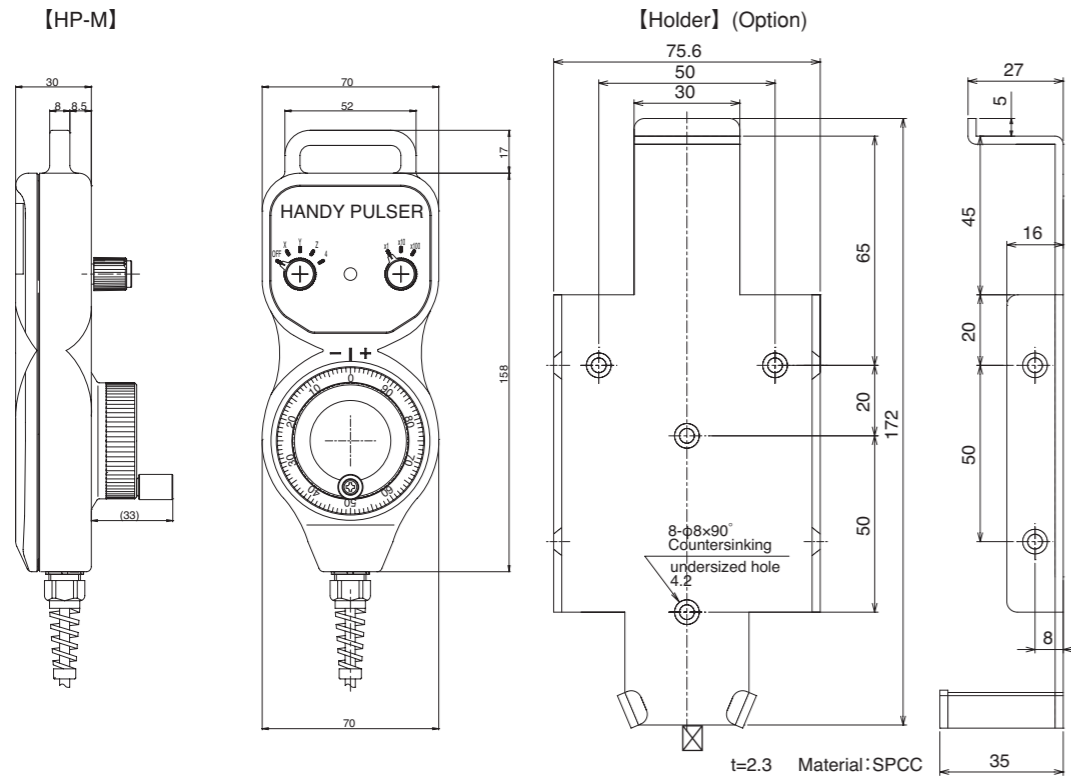


Model

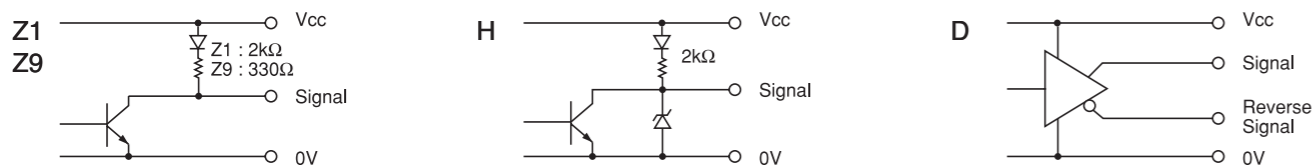
HP-M [] [] -2 [] [] -P L 0 - [] [] [] -00E



External Dimension



Output Circuit



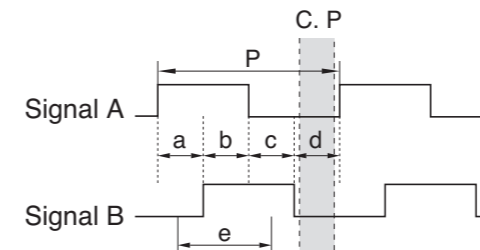
Electrical Spec

Manual Pulse Generator

TYPE		Z1	Z9	H	D
Power Supply(Vcc)		DC+4.5V~13.2V	DC5V±10%	DC12V±10%	DC5V±5%
Current Consumption		60mA Max	80mA Max	60mA Max	150mA Max
Resolution		100P/R		25P/R	100P/R
Output Voltage	"H"	Vcc-1V Min		+5V±10%	2.5V Min
	"L" ※1	0.5V Max			
Maximum Frequency Response		5kHz			
Rise & Fall Time		1 μs Max		1.5 μs Max	200ns Max
Maximum Sink Current		20 mA Max (As L level)			

※1) at Maximum Sink Current

Wave Form



$$P = \frac{1}{\text{Resolution}}$$

$$a, b, c, d = \frac{P}{4} \pm \frac{P}{6}$$

Wave Ratio (Duty): 50 ± 25(%)

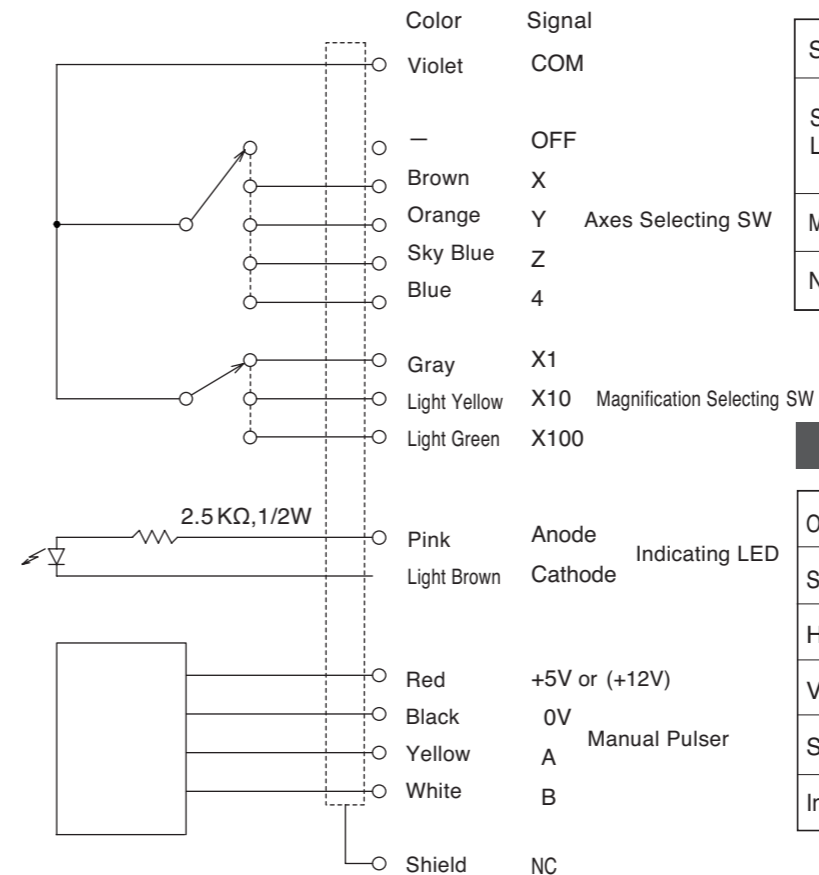
C. P = Click Point

For mode 25P/R click point is at each position of a,b,c,d.

※1) Inverted Output is available for 2D type.

※2) Point "e" is recommended as the system switching timing.

Electrical Connections



Mechanical Spec

Starting Torque	6.9x10 ⁻³ N·m~2.9x10 ⁻² N·m	
Shaft Loading	Thrust	9.8N
	Radial	19.6N
Maximum Permissible Speed	200min ⁻¹	
Net Weight(Without Cable)	450g Max	

Environmental Spec

Operating Temperature	-10°C~+60°C
Storage Temperature	-20°C~+70°C
Humidity	RH 85% Max No Condensation
Vibration	10~55 Hz / 1.5mm X, Y, Z Each 2h
Shock	490m/s ² , 11ms X, Y, Z Each 3 times
Ingress Protection	IP65(for Box)