

**NEW**

Handy Manual Pulse Generator

**Tosoku**

# HE Series

## OutLine

The new HE series Handy MPG is a smart ergonomic design that provides a compact and sleek shape. In order to comply with IEC safety regulations, both sides are able to install a 3-position enabling switch. The front panel can be equipped with a emergency push button and two other related function push buttons. In order to facilitate the use of both large and small machines, this Handy MPG is also specially designed with an LCD display for the convenience of the operator to operate nearby.



## Features Description

- Ergonomically designed and compact to be held with one hand
- 3-position (OFF-ON-OFF) enable safety or normal push button switch can be mounted on both sides
- LCD display is an option for this HE model
- LCD screen data display can be connected through I/O and communicate with CNC controller
- HE series are available for Fanuc, Mitsubishi and Siemens
- Newly developed 6mm shaft EPP rotary switch or digital code switch is available for selection. The mechanical durability and electrical life of these switches are greatly enhanced due to the new design.
- Strong plate magnet is available as standard on the back side
- RoHS compliant
- IP65 box structure
- Provide customerized "LOGO"



## HE Specification



### Body

Operating Temperature	0°C~+60°C ( can't with condensation )
Storage temperature	-10°C~+70°C ( can't with condensation )
IP Rating	IP65
LED light	24Vdc

### Rotary Encoder Unit

Pulse	100 pulse /rotation、 25 pulse/rotation
Click	100 clicks/rotation
Input Voltage	5Vdc
	12Vdc
	5V(Differential output)
	24V(Optocoupler Output)
Rotational Durability	Over 1,000,000 times
LOGO	Logo available on the wheel cover

### Selector switches

Output	Digital code
	Switch (Max up to 7 segments)
Text	Standard or upon request
Durability	At least 50,000 strokes

### Curl/straight Cords

Length	2M(19 core)
	3M(19 or 25 core)
	4M(19 core)
	5M(19 or 25 Core)
Other	Available upon request

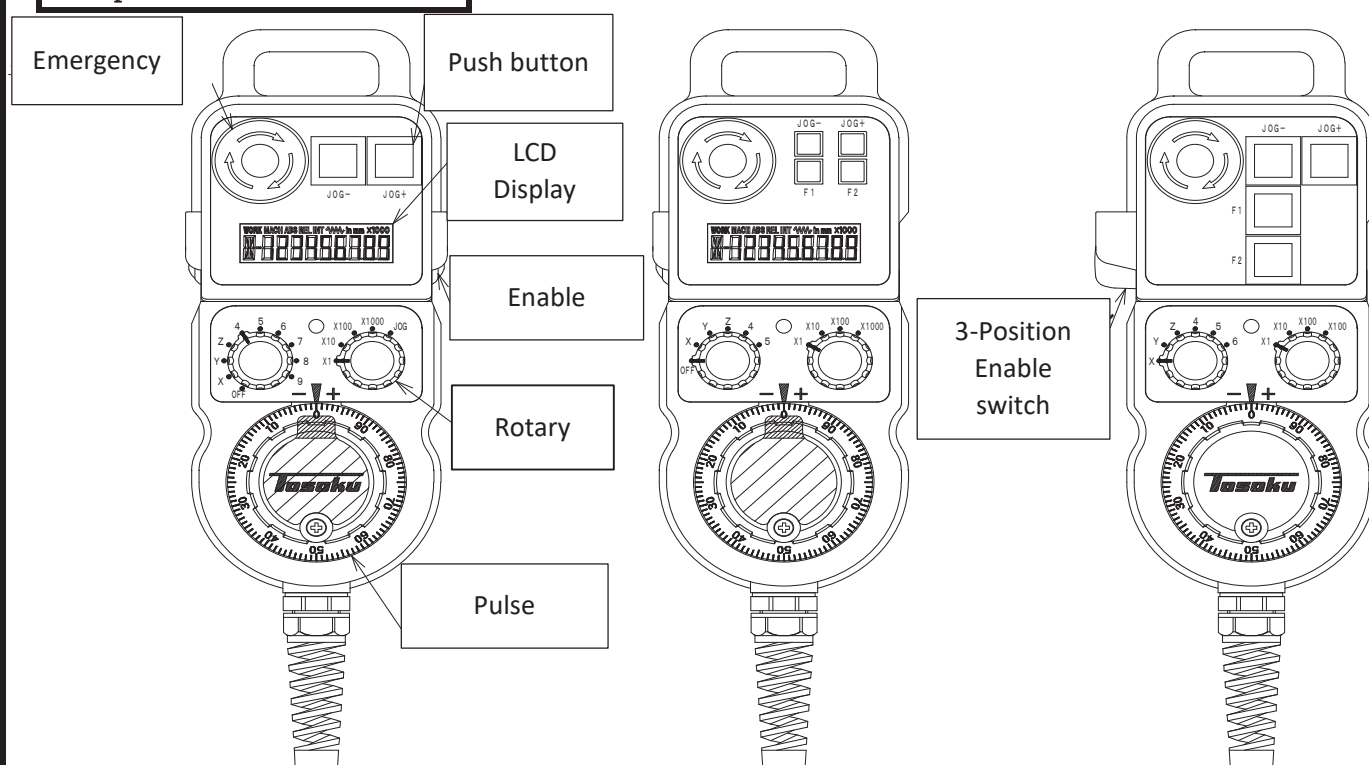
### LCD Display Screen

Input Voltage	24V±10%, under 300mA
Input	Rated 10mA( Under 50mA)

### Functional Push button Option

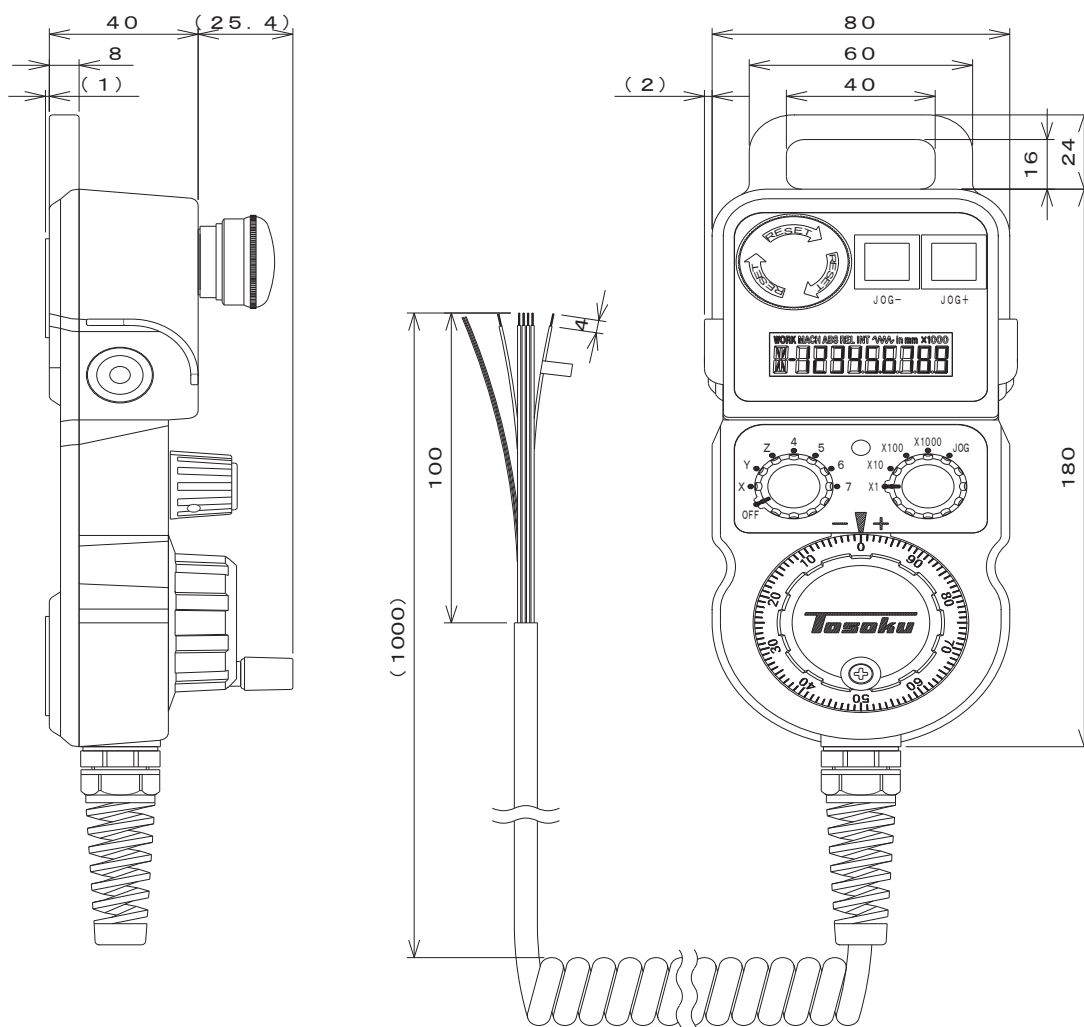
The maximum push button can be designed on the operating panel is: EMG \*1, Enable \*2, Special function \* 2

### Example

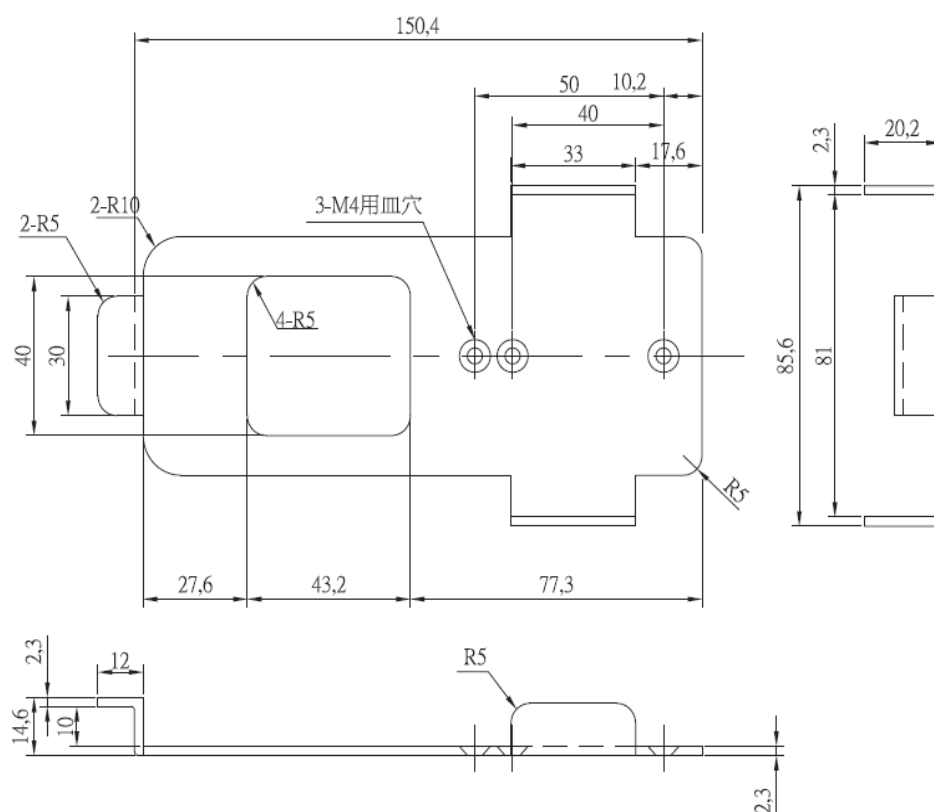




## External Dimension

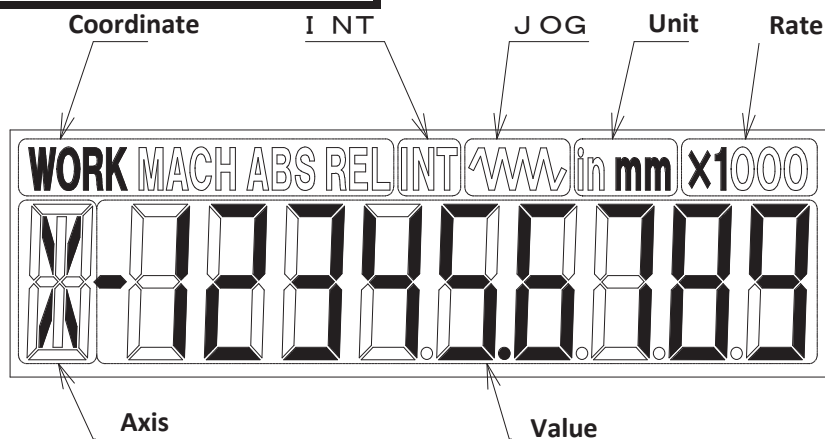


## Mounting Plate



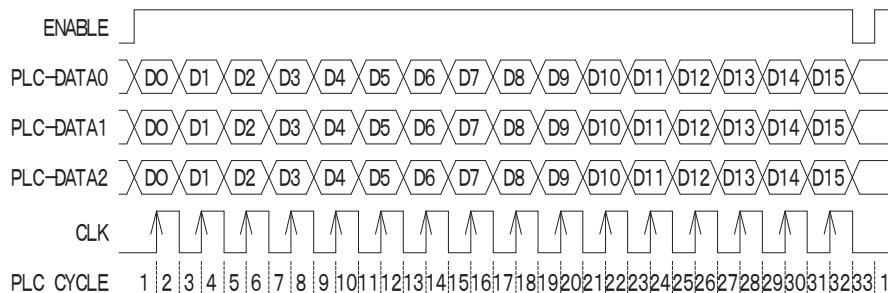


## LCD Display screen



LCD Display Contents		
1	Axis	A~Z , 0~9
2	Value	-999999999 ~ 999999999
3	Coordinate	WORK MACH ABS REL (ワーク座標) (機械座標) (絶対座標) (相対座標)
4	Rate	x1 x10 x100 x1000
5	Unit	i n mm
6	J OG	W W
7	I NT	I NT

## Transfer data for display



	D15	D14	D13	D12	D11	D10	D9	D8	D7	D6	D5	D4	D3	D2	D1	D0
PLC-DATA0	Value upper 16 bits)															
PLC-DATA1	Value lower 16 bits)															
PLC-DATA2																

PLC-DATA2 D15, 14, 13 = 000: \*\*\*\*\* 100: \*\*\*\*\*  
 001: \*\*\*\*\* \* 101: \*\*\*\*\*  
 010: \*\*\*\*\* \*\*  
 011: \*\*\*\*\* \*\*\*

PLC-DATA2 D12, 11 = 00: WORK 01: MACH 10: REL 11: ABS  
 PLC-DATA2 D10 = 0: mm 1: i n  
 PLC-DATA2 D9~7 = 000: x1 001: x10 010: x100 011: x1000 100: JOG  
 PLC-DATA2 D6~1 = D6~D1に格納したデータにより、軸を表示する。  
 000000 ~ 001001 : 0 ~ 9  
 010000 ~ 101011 : A ~ Z  
 PLC-DATA2 D0 = 0: None 1: I NT