## Handy Manual Pulse Generator

# HM Series





#### Outline

HM series have a variety of switches which can be customized according to your requests. The model is compact and lightweight, which is perfect for accurate and smooth manual operation.

#### **Features**

- Various switches available: Emergency switch (2 positions), side mounted (right/left) enabling switches, 2 rotary switches (as axis and multiplication selector etc.)
- Compact, thin-line and lightweight.
- Strong plate magnets available on back side. (optional )
- RoHS compliant (box/cord)
- Various types of curl cords provided along with connectors of all sorts at your request.

### **Specifications**

1. Body	
Dimension	145×73×35(mm)
LED light	DC24V Green
Enabling Switch	Available on both sides
Logo	Logo available on the wheel cover

2.1 Rotary Encoder Unit	
2. Mechanical specifications	

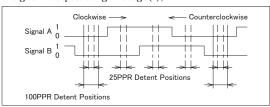
Output Voltage DC5V±10%, DC12V±10%

Wheel 100 clicks / rotation
100 puluse or 25 pulses per rotation

Rotational Durability Over 1,000,000 times

Output Waveform

- 1) Turning the shaft clockwise would generate the signal A when the signal B outputs a low voltage (0);
- 2) Rotating the shaft counter-clockwise would generate the signal A when the signal B outputs a high voltage(1);



<sup>\*</sup> See RE45B page for details

#### 2.2 Selector Switches

MR8A (Rotary switch) 25V15mA (AC/DC) MR8C (Code switch) 15V10mA (AC/DC) \* See MR8A/MR8C pages for details

3. Curl/Straight Cords		
Curl Cord	19/25-conductor shielded cable 19-conductor: select from 2m, 3m, 4m, 5m 25-conductor: select from 3m, 5m (We will select either 19 or 25-conductor in accordance with required functions) For further details, please see the catalogues for curl cords	
Straight Cord	Also available	

4. Connector Unit		
Connector	Dripproofed connector to be attached on the end of the cord optionally provided	

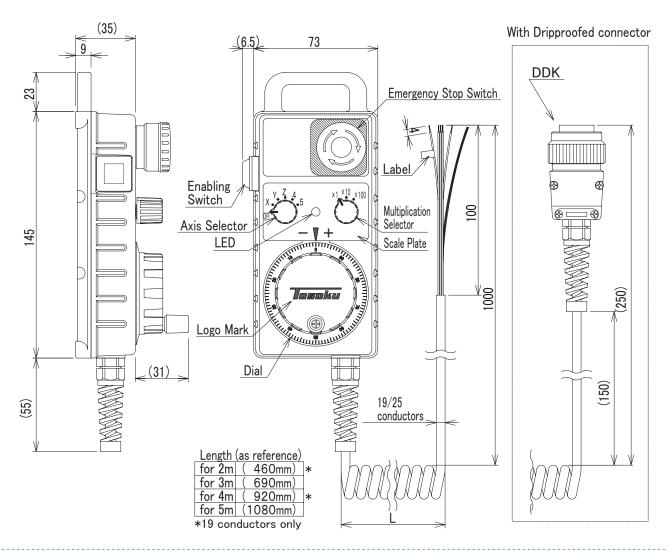
#### **Warranty**

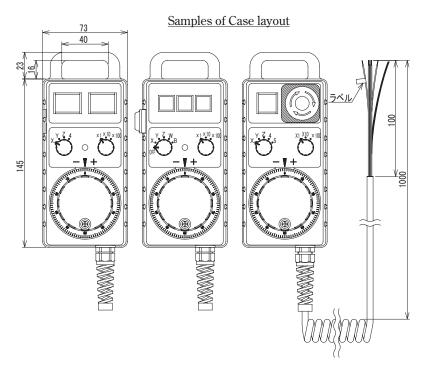
• 1 year from the date of shipment.

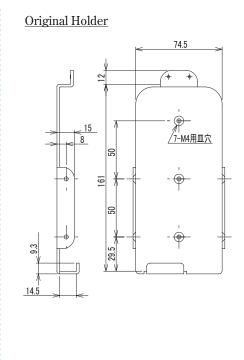
## Dimensions (mm)

HM Unit with curl cord

\* This drawing is an example, it may differ according to number of swithes etc.







## H M series Order Sheet (Print out this page for sending orders.)

We'll hand in to you a drawing in accordance with your order. The drawing shall be approved before starting in on production.

1) Select one from each spec table and fill blank spaces with " ".

	Pulses/Rev.
	100PPR
r	25PPR

<sup>\*25</sup>PPR and yet 100 Clicks/Revolution

Pow	er Supply	Output
	5 <b>V</b>	5V (330Ω Pull Up)
	5 <b>V</b>	Open Collector
	5 <b>V</b>	(for Line Driver)
	12V	5V(2.2kΩ Pull Up)
	12V	12V (2.2k <b>Ω</b> Pull Up)
	12V	Open Collector
	12V-	for Photocoupler
k	24V	(Open Collector)

<sup>\*</sup> Transistor will be "OFF" at every clicked positions.

(For other open collector output models, transistors will be "ON" at every clicked positions.

Logo on the dial	
None	
with "TOSOKU" logo	
with an original logo(	)

2-Position Enabling Switch	
	None
	One on the left
	On both sides

E	Emergency Switch (contacts)	
	None	
	Mounted (	_)

<sup>\* 1</sup> for (NO), 4 for (NC) maximum (1A/4B). Maximum of 4 contacts in total (1A3B or 4B).

Magnet on the backside	
None	
Mounted	

Α	xis Selector/Multiplication Selector Switches
	MR8C type(Gray code switch)
	MR8A type (Selection switch)

Indications for Axis Selector (left)		
e.g.	OFF, X, Y, Z, 4, 5	
Indicat	ions for Multiplication Selector (right)	
e.g.	×1, ×10, ×100	

Curl Cord Length
2m Curl Cord (for only 19-conductor cord)
3m Curl Cord
4m Curl Cord (for only 19-conductor cord)
5m Curl Cord

<sup>\*</sup> We will select either 19-conductor cord or 25conductor cord to cover your requested specs

Waterproofed Connector (for curl cord)
None
Male connector (EBSP2119MG-D, DDK)
Female connector (EBSP2119FGS-D, DDK)

<sup>\*</sup> Fill in both spaces to order both connectors.

#### 2) Other options

Other options to request
(e.g.)
Switches with LED illumination x 2
2 contact selector switch x1



Rotary Encoders Pulse Generators Rotary Switches Code Switches Lever Switches Trackballs

12.2