

# Handy Manual Pulse Generator



# HR Series

## Outline

HR series provide you comfort in long time use and safety with various options of switches.

## Features

- Ergonomically designed to be held with one hand
- 3-position (off-on-off) switch available on both sides
- RoHS compliant (box/cord)
- Upper part is free to design and allows various kinds of switches (including emergency stop button) to be set
- HR series also provide you various line-up of switches to be set on the middle part: DP - the digital code switch series, RS400 - the rotary switch series etc.
- Strong plate magnets available on back side. (optional)
- Various types of curl cords provided along with connectors by all sorts of your request

## Specifications

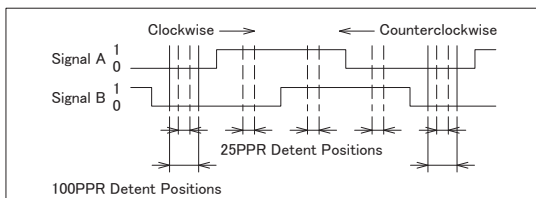
1. Body	
Dimension	190×100×50.5(mm)
Enabling Switch	Available on both sides
Other Features	Logo available on the wheel cover

2. Mechanical specifications	
2.1 Rotary Encoder Unit	

Output Voltage	DC5V±10%, DC12V±10%
Wheel	100 clicks / rotation 100 pulse 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);



\* See RE45B page for details

2.2 Selector Switches
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\* See RS400/DP 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

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

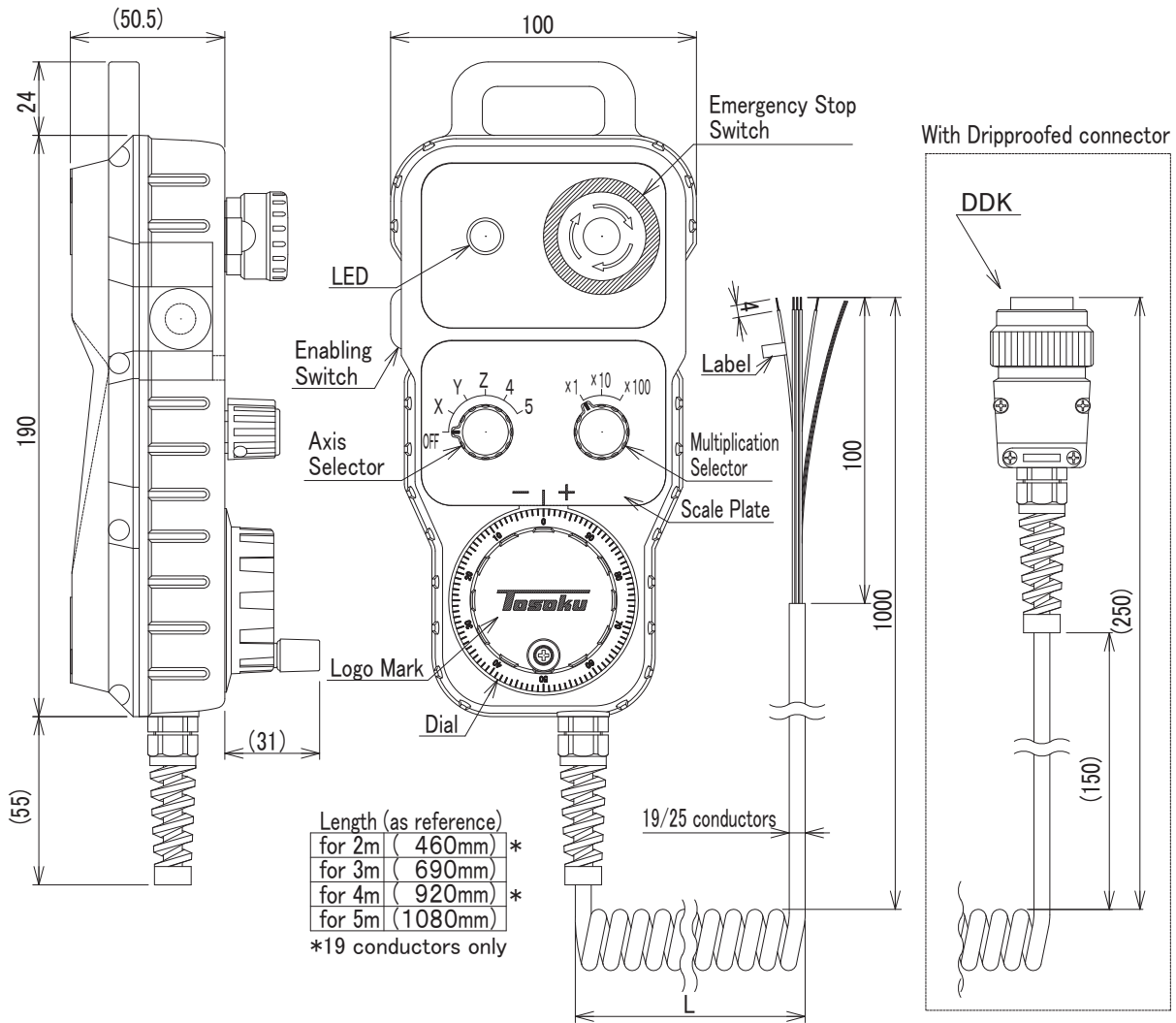
## Warranty

- 1 year from the date of shipment.

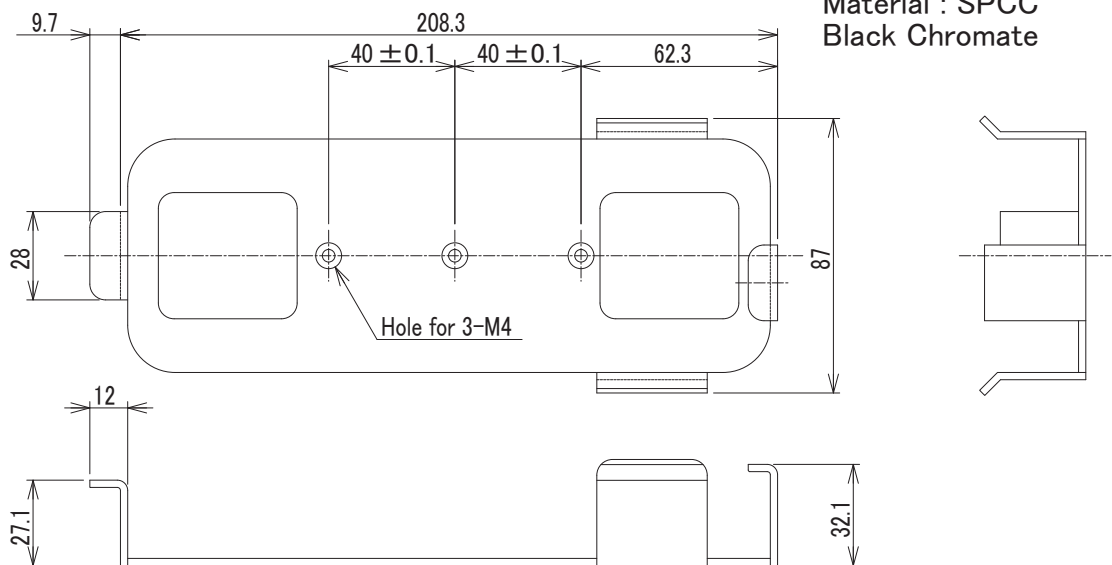
# Dimensions (mm)

HR Unit with curl cord

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



Original Holder



# H R 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.	
<input type="checkbox"/>	100PPR
* <input type="checkbox"/>	25PPR

\*25PPR and yet 100 Clicks/Revolution

Power Supply	Output
<input type="checkbox"/>	5V 5V(330Ω Pull Up)
<input type="checkbox"/>	5V Open Collector
<input type="checkbox"/>	5V (for Line Driver)
<input type="checkbox"/>	12V 5V(2.2kΩ Pull Up)
<input type="checkbox"/>	12V 12V(2.2kΩ Pull Up)
<input type="checkbox"/>	12V Open Collector
* <input type="checkbox"/>	12V- for Photocoupler
24V	(Open Collector)

\* 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	
<input type="checkbox"/>	None
<input type="checkbox"/>	with "TOSOKU" logo
<input type="checkbox"/>	with an original logo( )

3-Positions Enabling Switch (contacts)	
<input type="checkbox"/>	None
<input type="checkbox"/>	One on the left( )
<input type="checkbox"/>	On both sides( )

\* Assigned contacts should be 2 or less for normally open (NO) and 2 or less for normally closed (NC). (2A2B maximum.)

Emergency Switch (contacts)	
<input type="checkbox"/>	None
<input type="checkbox"/>	Mounted ( )

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

Magnet on the backside	
<input type="checkbox"/>	None
<input type="checkbox"/>	Mounted

Axis Selector/Multiplication Selector Switches	
<input type="checkbox"/>	Gray code switch
<input type="checkbox"/>	Binary code switch
<input type="checkbox"/>	Selection switch

Indications for Axis Selector (left)

e.g.	OFF, X, Y, Z, 4, 5
<input type="checkbox"/>	

Indications for Multiplication Selector (right)

e.g.	x1, x10, x100
<input type="checkbox"/>	

Curl Cord Length	
<input type="checkbox"/>	2m Curl Cord (for only 19-conductor cord)
<input type="checkbox"/>	3m Curl Cord
<input type="checkbox"/>	4m Curl Cord (for only 19-conductor cord)
<input type="checkbox"/>	5m Curl Cord

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

Waterproofed Connector (for curl cord)	
<input type="checkbox"/>	None
<input type="checkbox"/>	Male connector (EBSP2119MG-D, DDK)
<input type="checkbox"/>	Female connector (EBSP2119FGS-D, DDK)

\* 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
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
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<input type="checkbox"/>	



- Rotary Encoders
- Code Switches
- Pulse Generators
- Lever Switches
- Rotary Switches
- Trackballs