

# MAH-85 series

[Absolute]

- Outside dimensions  $\phi 100 \times 31$  mm  
21 bit absolute encoder
- Resolution: 2097152, SSI interface, Hollow shaft  $\phi 36$



## Specifications

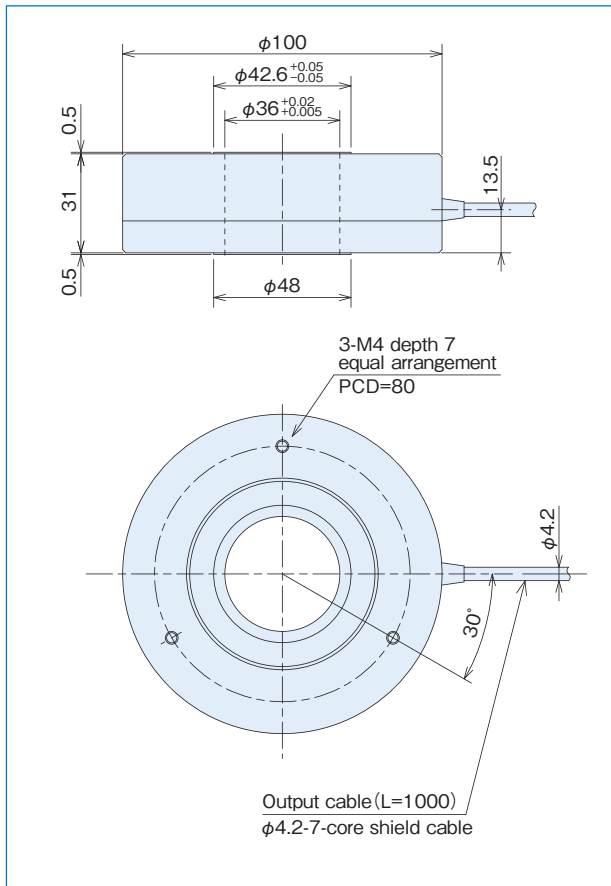
Item	Type name	MAH-85-2097152N1
Supply voltage		DC5V $-5\% \sim +10\%$ (At the edge of encoder cable)
Current consumption		250mA or less (under no load)
Resolution		2097152, 1048576, 524288, 262144
Allowable rotation		1000r/min
Allowable load of shaft (electrical)	Radial	4.9N (0.5kg)
	Thrust	4.9N (0.5kg)
Working temperature/humidity		$0^{\circ}\text{C} \sim +60^{\circ}\text{C}$ / RH35% $\sim 90\%$
Storage temperature		$-20^{\circ}\text{C} \sim +80^{\circ}\text{C}$
Vibration resistance		Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions
Impact resistance		Durability $500\text{m/s}^2$ (about 50G) 3 times each in X, Y, and Z directions
Cable		Outside diameter $\phi 4.2$ 7-core vinyl wire Insulated shield cable AWG28 (length 1m)
Mass		700g
Communication method		RS-422 Communication (four-wire) SSI Format

## Decoder specifications (37×37 PCB)

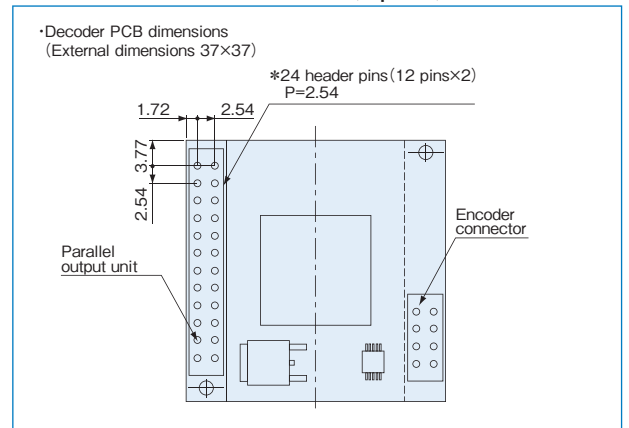
Item	Type name	DECODER- $\triangle\triangle$ bit
Supply voltage		DC5V $\pm 5\%$
Current consumption		60mA or less (310mA or less including encoder)
Parallel data update cycle		$60\mu\text{s}$ (16.7kHz)
Output circuit		NPN open collector output (when using parallel output)
Output capacity		Sink current 20mA or less Load voltage 35V or less Residual voltage 0.4V or less (sink current 10mA)
Logic		Negative logic (H=0, L=1)
Connection		Power supply and parallel signal output by P=2.54 header pins (see diagram below)

$\triangle\triangle$ ...18, 19, 20 (corresponding to the encoder resolution)

## Outside dimensions



## Decoder Outside dimensions (Option)



## Spring flange MEH-85 (Option)

