

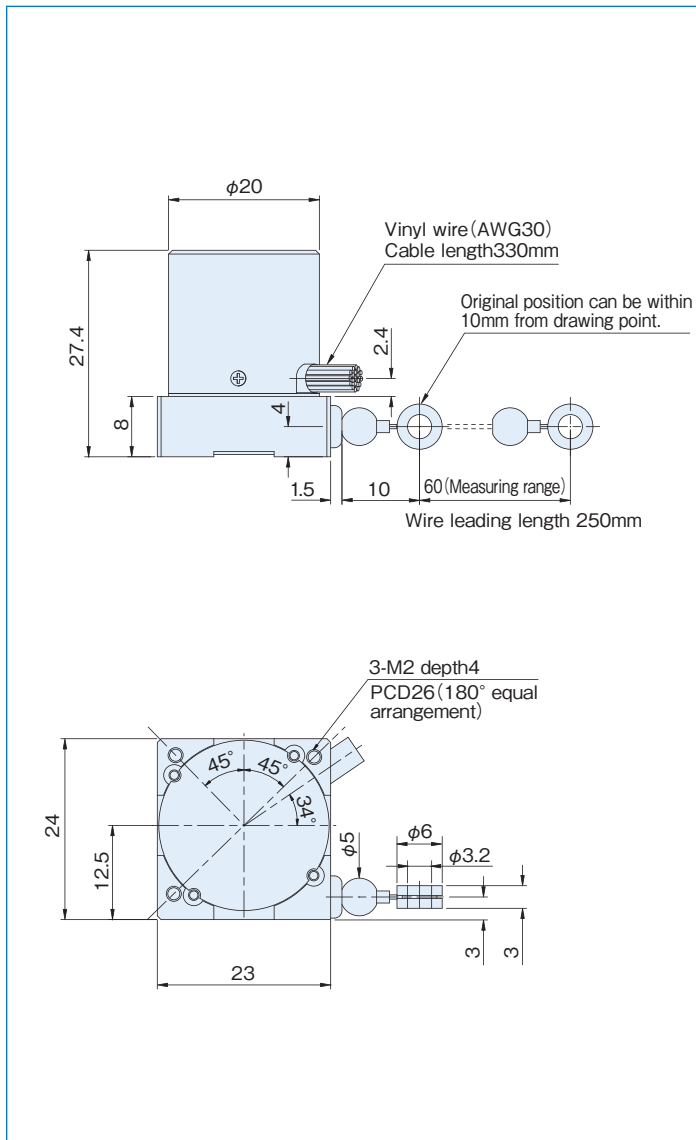
# MLA-17 series

[Absolute Linear Scale]

- ▶ Smallest in the series: Outside dimensions 23×24×27.4 (H)
- ▶ Measuring range: 60mm (\*Max. 250mm)
- ▶ Main Applications: Robot Machine, small actuator, conductor apparatus, manipulator, Jack-up controller for building industry and etc.

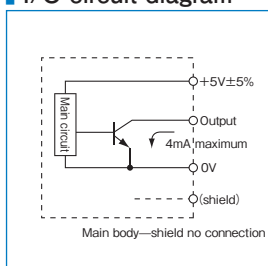


## Outside dimensions



Note: Usage warning: The wire may stop midway through retracting. When this happens, slowly pull out the full length and then slowly retract again before using.

## I/O circuit diagram



## Specifications

Type name	MLA-17- <input type="text"/> <input type="text"/> 1-60
Item	Pulse number 1,024 (G, N) or 1,000 (B)      Output code ●G=Gray code ●N=Pure binary code ●B=BCD code
Supply voltage	DC5V±5%
Current consumption	80mA or less (under no load)
Output code	G:gray code    N:pure binary code    B:BCD code
Logic	Negative logic (H=0, L=1)
Output circuit	NPN open collector
Output capacity	Sink current each bit 4mA max
Maximum response frequency	20kHz
Measuring range	60mm (Please refer to the output signal image)
Output pulse number/mm	1,024 / 60 (G, N), 1,000 / 60 (B)
Minimum resolution	G (N): 0.059mm    B: 0.06mm
Stroke speed	250mm/sec
Wire tensile force	0.29N~0.59N (30~60gf)
Working ambient temperature/humidity	0°C~+50°C / RH35%~90% (no dewing)
Storage ambient temperature	-20~+80°C
Vibration resistance	Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions
Impact resistance	50G 3 times each in X, Y, and Z directions
Cable	Vinyl wire (AWG30) Cable length 330mm
Mass	40g

## Connection

Type/code color	MLA-17-1024 G1-60	MLA-17-1024 N1-60	MLA-17-1000 B1-60
Black	0V (COMMON)		
Red	5V ±5%		
Brown	Output 2 <sup>0</sup>		Output 2 <sup>0</sup>
Brown / Black	Output 2 <sup>1</sup>		Output 2 <sup>1</sup>
Orange	Output 2 <sup>2</sup>		Output 2 <sup>2</sup>
Orange / Black	Output 2 <sup>3</sup>		Output 2 <sup>3</sup>
Yellow	Output 2 <sup>4</sup>		Output 2 <sup>0</sup> ×10
Yellow / Black	Output 2 <sup>5</sup>		Output 2 <sup>1</sup> ×10
Green	Output 2 <sup>6</sup>		Output 2 <sup>2</sup> ×10
Green / Black	Output 2 <sup>7</sup>		Output 2 <sup>3</sup> ×10
Blue	Output 2 <sup>8</sup>		Output 2 <sup>0</sup> ×10 <sup>2</sup>
Blue / Black	Output 2 <sup>9</sup>		Output 2 <sup>1</sup> ×10 <sup>2</sup>
Purple	—		Output 2 <sup>2</sup> ×10 <sup>2</sup>
Purple / Black	—		Output 2 <sup>3</sup> ×10 <sup>2</sup>

## Output signal is an image form

