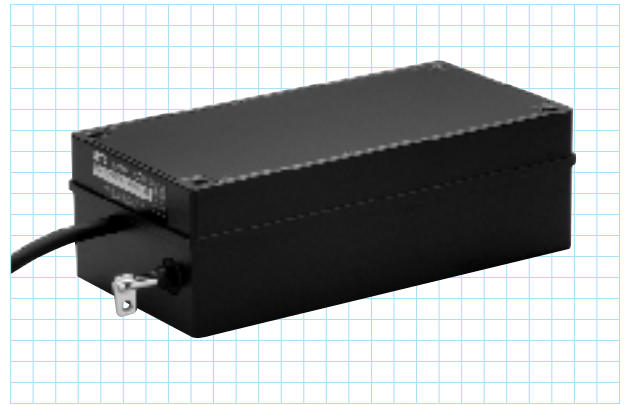
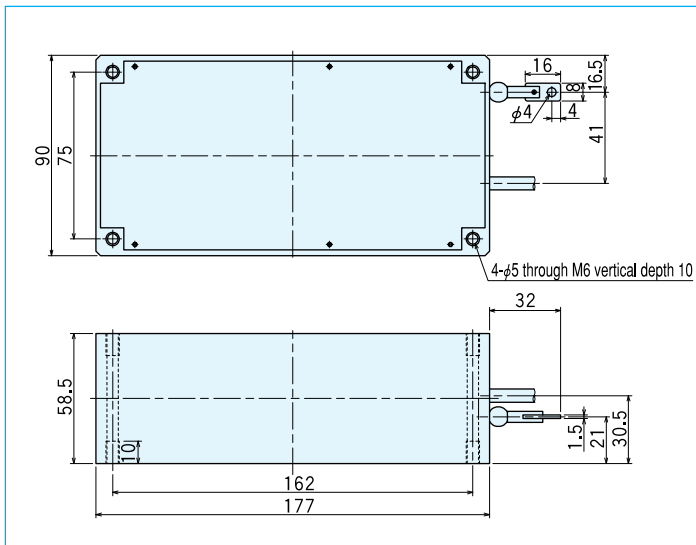


# MLA-50 series

[Absolute Linear Scale]



## Outside dimensions



## Specifications

Item	Type name	MLA-50-4096
Supply voltage		1:DC5V±10% 2:DC12V±10% 4:DC24V±10%
Current consumption		70mA or less (under no load), 100mA or less (under no load)
Output code		G:gray code N:pure binary code
Logic		Negative logic (H=0, L=1)
Output circuit		NPN open collector
Output capacity		Sink current 20mA or less Residual voltage 0.5V or less (at 10mA)
Maximum response frequency		10kHz
Working temperature		0°C~60°C
Storage temperature		-20°C~80°C
Vibration resistance		Durability 55Hz, double amplitude 1.5mm 2 hours each in X, Y, and Z directions
Impact resistance		Durability 500m/s <sup>2</sup> (about 50G) 3 times each in X, Y, and Z directions
Cable		Outside dia. φ6.8 19-core vinyl wire Insulated shield cable (length: 1m)

## Specifications/Absolute Linear Scale

Type name	MLA-50-4096-216	MLA-50-4096-200	MLA-50-4096-400	MLA-50-4096-1000	MLA-50-4096-2000	MLA-50-4096-4000
Measuring range mm	216	200	400	1,000	2,000	4,000
Output pulse/mm	4,096/216	20	10	4	2	1
Stroke speed mm/sec	500	500	1,000	1,000	1,000	1,000
Accuracy mm	±0.1/100mm					
Min. resolution mm	0.053	0.05	0.1	0.25	0.5	1
Wire dia. mm	0.6	0.9	0.9	0.9	0.9	0.8
Wire cutting load kg	7	70	70	70	70	60
Material of wire	SUS304					
Tensile strength of wire	3.9N~6.8N (400gf~700gf)					
Material of spring	Spring steel					
Origin adjustment	—	Free				
Material of pulley	SUS303 Auto-return structure					
Outside dimensions	MLS50	As per outside dimension diagram				

## Connection MLA-50

Type/ code color	MLA-50-4096G MLA-50-4096N
Black	0V (COMMON)
Red	Power
Red/black	Rotating direction indication input
Brown	Output 2 <sup>0</sup>
Brown/black	Output 2 <sup>1</sup>
Orange	Output 2 <sup>2</sup>
Orange/black	Output 2 <sup>3</sup>
Yellow	Output 2 <sup>4</sup>
Yellow/black	Output 2 <sup>5</sup>
Green	Output 2 <sup>6</sup>
Green/black	Output 2 <sup>7</sup>
Blue	Output 2 <sup>8</sup>
Blue/black	Output 2 <sup>9</sup>
Purple	Output 2 <sup>10</sup>
Purple/black	Output 2 <sup>11</sup>
Gray	No connection
Gray/black	No connection

## I/O circuit diagram

