

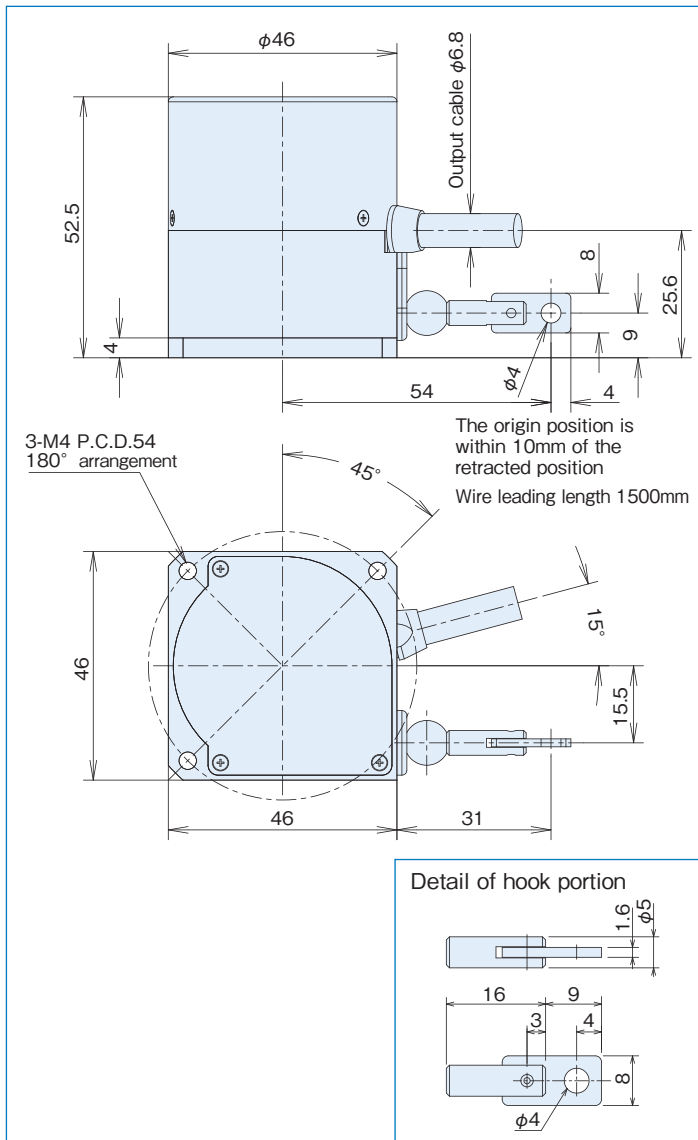
MLA-37 series

[Absolute Linear Scale]

- Outside dimensions ■ 46×52.5mm
- Length measurement resolution: 0.1mm.
Length measurement distance: 1,500mm

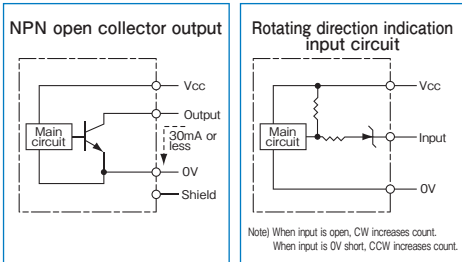


Outside dimensions



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-37-1024 <input type="checkbox"/> C <input type="checkbox"/> -1500
Item	Output code ● G=Gray code ● N=Pure binary code Output logic (No entry, N) Supply voltage (1, 5)
Supply voltage	1:DC5V±5% 5:DC12V-10%~24V+15%
Current consumption	150mA or less (under no load)
Output	Parallel output (Gray code or pure binary code)
Output logic	Standard: Negative logic (*Positive logic selectable)
Output circuit	NPN open collector output
Maximum response frequency	10kHz
Measuring range	1500mm
Minimum resolution	0.1mm
Stroke speed	500mm/sec
Absolute accuracy	±0.1%FS
Wire tensile force	0.98N~3.92N (100gf~400gf)
Working ambient temperature/humidity	0°C~+50°C / RH35%~90%
Storage ambient temperature	-20°C~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	Outside dia. φ6.8 20-core vinyl wire Insulated shield cable AWG28 (length 500mm)
Mass	350g or less (excluding cable)

*Output origin position (address 0) within 10mm of the extension start point.
(Note 1) 3-M4 PCD54 can also be used as a φ3.5 hole for M3 mounting.

Connection

Cable color	Output signal	Cable color	Output signal
Brown	2 ⁰	Purple	2 ¹⁰
Brown/Black	2 ¹	Purple/Black	2 ¹¹
Orange	2 ²	Gray	2 ¹²
Orange/Black	2 ³	Gray/Black	2 ¹³
Yellow	2 ⁴	White	2 ¹⁴
Yellow/Black	2 ⁵	White/Black	2 ¹⁵
Green	2 ⁶	Red	Vcc
Green/Black	2 ⁷	Black	COMMON
Blue	2 ⁸	Shield (*)	Cable shield
Blue/Black	2 ⁹	-	-

(*) shielding cable is non-connected in encoder.