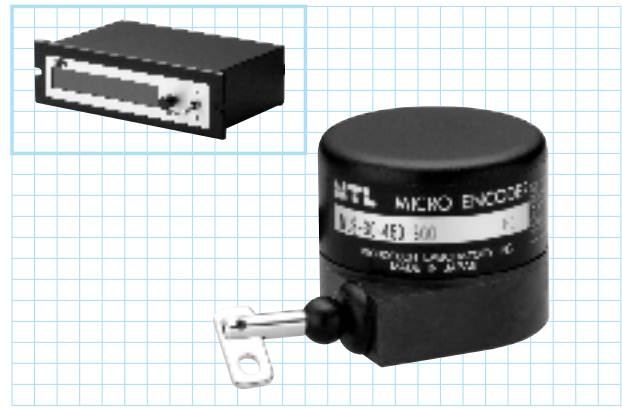
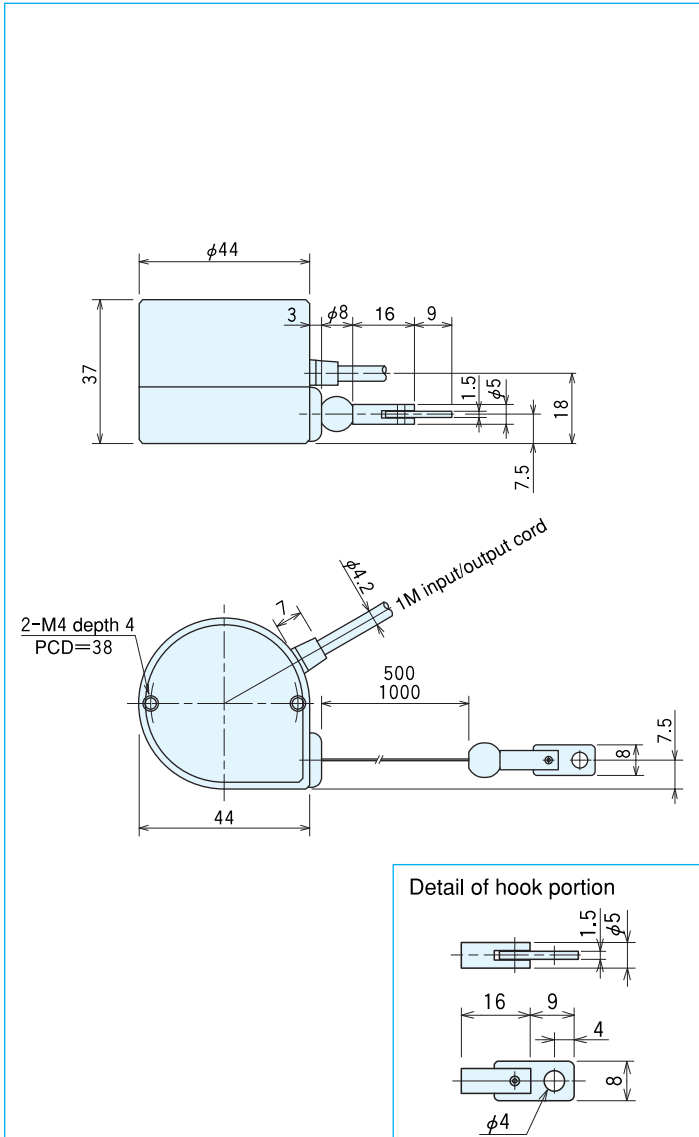


MLS-30 series

[Wire-Type Linear Scale]

Outside dimensions



Specifications/linear scale encoder (detection portion)

Type name	MLS-30-450-500	MLS-30-450-1000	MLS-30-4500-500	MLS-30-4500-1000
Measuring range mm	500	1,000	500	1,000
Output pulse/1mm	5	5	50	50
Stroke speed mm/sec	1,000	1,000	1,000	1,000
Absolute accuracy mm	$\pm 0.05/100\text{mm}$			
Minimum resolution mm	0.2	0.2	0.02	0.02
Supply voltage	DC5~12V $\pm 10\%$ DC24V $\pm 10\%$ (option)		DC5~12V $\pm 10\%$ DC24V $\pm 10\%$	
Current consumption	60mA or less (under no load)			
Output phase	A phase, B phase			
Output form	Square wave			
Output capacity	Sink current 20mA or less, residual voltage 0.5V or less (at 10mA)			
Response frequency	50kHz			
Output phase	A, B phase difference $90^\circ \pm 45^\circ$			
Waveform rise/fall time	2 μsec or less			
Wire tensile force	1.4N~2.9N (150~300gf)			
Working ambient temperature/humidity	0°C~50°C/RH35%~90%			
Storage ambient temperature	-20~80°C			
Vibration resistance	Endurance 10 to 55Hz Double amplitude 2 hours each in X, Y, and Z directions			
Impact resistance	50G			
Cable	Insulated shield wire Outside diameter $\phi 4.2$ 4-core vinyl wire			
Mass	185g			

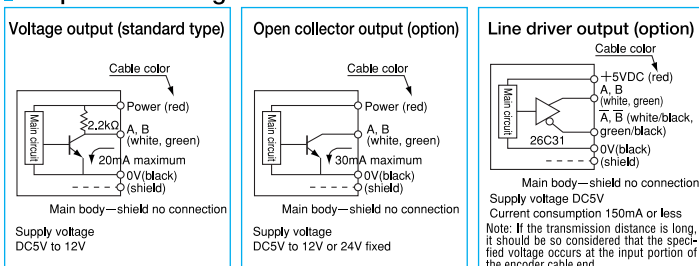
Note: The output pulse or resolution is possible to 4 multiple with the counter.

Specifications/micro linear scale (detecting portion + indicating portion)

Type name	MLS-30-01-500	MLS-30-01-1000	MLS-30-001-500	MLS-30-001-1000
Measuring range mm	500	1,000	500	1,000
Output pulse/1mm	10	10	100	100
Counter accuracy pulse	± 1	± 1	± 1	± 1
Minimum reading	0.1	0.1	0.01	0.01
Power	AC100V 50/60Hz 180mA max			
Counter mode	10 Decimal			
Count indication	0~ ± 999999.9		0~ ± 99999.99	
Reset	Reset switch provided *External signal resetting possible			
External output	*BCD parallel output			
Mass	700g			
Power cord	2m with plug			

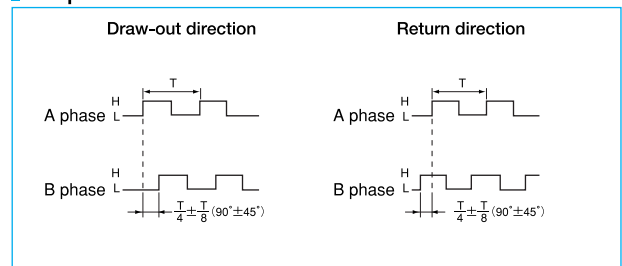
Note: For counter specifications, see DC Series. * indicates option.

Output circuit diagram



A capacitor (0.1 μF) is connected between 0V and FG (frame ground).

Output waveform



Description

SE series

ME series

MGH series

MA series

MXS series

MLS series

MLA series

REH series

MT series

DC series

Setting Option/
Coupling

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