

# CE SERIES

## INCREMENTAL ROTARY ENCODER

Outside Diameter 30mm (Shaft  $\Phi 4$ ) PCD 22

Economical

Voltage output type

Suitable for General or Industrial Applications

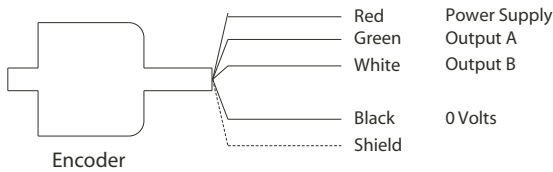


### STANDARD MODELS

PPR	Serial Number	CE (30 $\phi$ )
	60	CE - 60
	100	CE - 100
	200	CE - 200
	250	CE - 250
	300	CE - 300
	360	CE - 360
	400	CE - 400
	500	CE - 500

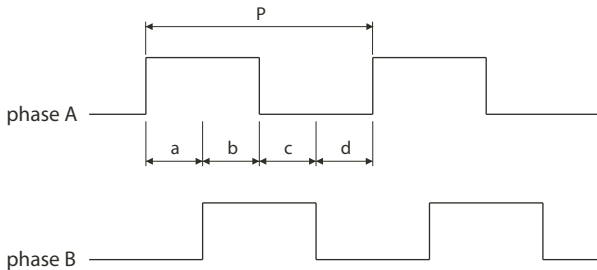
Add "S" at the end of Model No. for 1 signal output (only signal A).  
ex. CE-100S

### CONNECTIONS

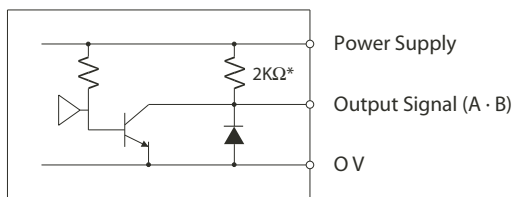


### OUTPUT WAVEFORM

→ clockwise rotation when viewed from the top of the shaft.



### OUTPUT WIRING



### HANDLING GUIDE

- To protect an encoder from any shock or vibration that may be caused by the joining machine, put the center of encoder's shaft and machine's shaft together without aberration and inclination. Use our coupling models for the right joining.
- Be sure to wire the encoder correctly as a wrong wiring may cause the inner circuit breakdown.
- Do not wire the cable parallel with other power lines from the protection against the noise.
- Use a shield wire for the extension of cable.

### SPECIFICATIONS

		CE
Electrical	Power Supply	5 ~ 12V DC $\pm 5\%$
	Output Signal	Voltage / 90° Quadrature x 2 Signals
	Output Voltage	Logic 1 = 4 to 11VDC (Reduced -1V from Power Supply) Logic 0 = 0.5VDC or less
	Maximum Response	60 KHz
	Current Consumption	40 mA maximum (20 mA for S Type)
	Sink Current	20 mA maximum
	Output Impedance	2 K $\Omega$
	Operating Temperature	-10°C ~ +70°C
	Mechanical	Maximum Speed of Shaft Input
Maximum of Inertia of Shaft		2g·cm <sup>2</sup> Maximum
Starting Torque		10gf·cm Maximum
Angular Speed		1 × 10 <sup>5</sup> rad / sec <sup>2</sup>
Maximum Radial Loading		1 Kg
Maximum Axial Loading		0.5 Kg
Vibration		10Hz to 50Hz • 1.5mm•2h
Shock		50 G / 11 ms
Weight (Approximately)		100 grams

- Signal A and Signal B are 90° quadrature

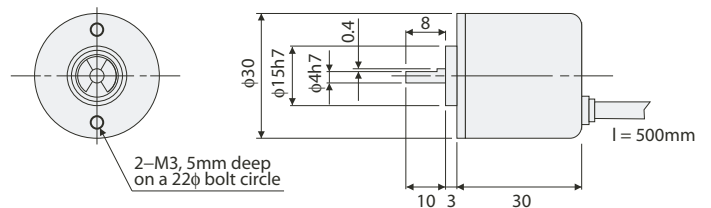
$$P = \frac{1}{PPR}$$

- Accuracy

$$a \cdot b \cdot c \cdot d = \frac{P}{4} \pm \frac{P}{8}$$

$$h = P \pm \frac{P}{2}$$

### DIMENSIONS



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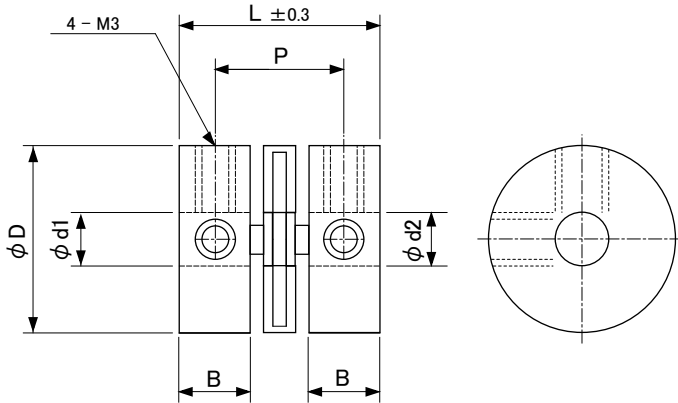
URL: <http://www.lineseiki.com>

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## ACCESSORIES for ROTARY ENCODERS

### COUPLING

#### ● Dimensions (mm)



Model	d1	d2	D	L	P	B
C-44	4	4	14	15	9.5	5
C-46	4	6	15	16	9.8	5.5
C-55	5	5	14	15	9.8	5.2
C-56	5	6	15	16	9.8	5.5
C-66	6	6	15	16	9.8	5.5
C-68	6	8	18	18	13	5.5
C-88	8	8	18	18	13	5.5

※ Please confirm the diameter of the rotating shaft and the diameter of the encoder's shaft.

#### ● Specification

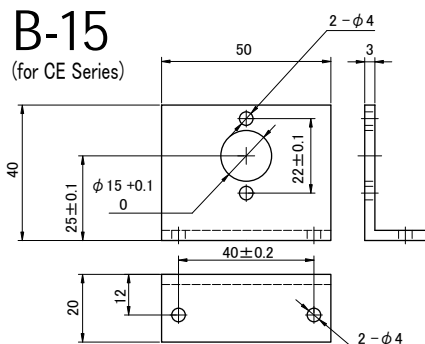
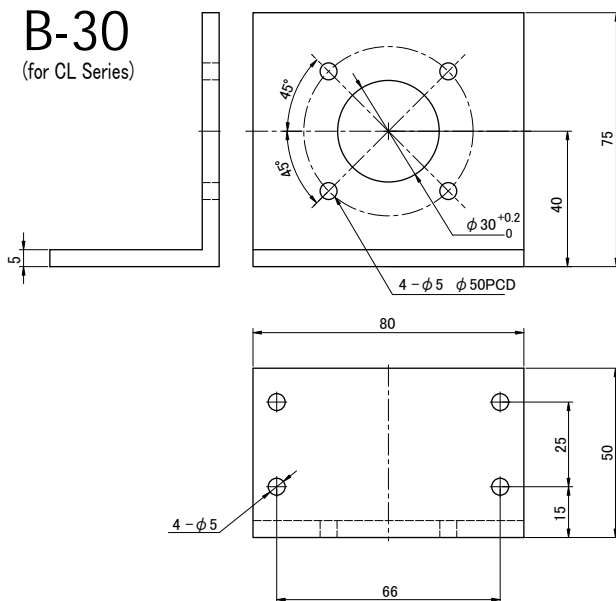
Model	Rated Torque	Curved Angle of Shaft	Setting Screw	Torque for Screw	Material	Color	Weight	
C-44	0.5 Nm	5° max	M3 x 4 4pcs	200m Nm	Polyacetal	Black	2.4g	
C-46	0.7 Nm						3.0g	
C-55	0.7 Nm						2.7g	
C-56	0.7 Nm						3.0g	
C-66	0.8 Nm						Glass Fiber Reinforced PBT	4.0g
C-68	1.0 Nm							
C-88	1.0 Nm							

※Temp.Range : -20 ~ +60°C

### MOUNTING BRACKET

※Bracket is not used for CB Series. B-15 only used for CE Series.

#### ● Dimensions (mm)



#### ● Material : Aluminum

#### ● Installation Method

