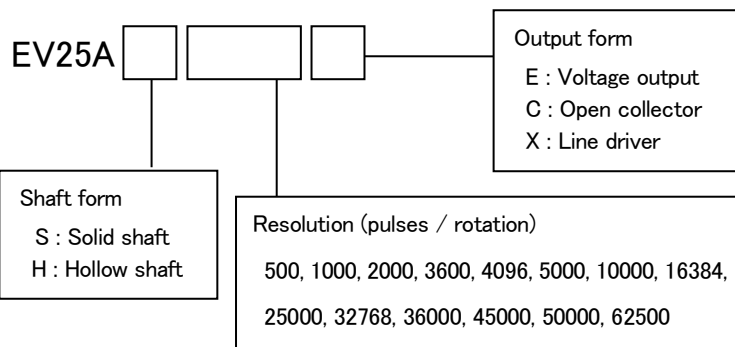


EV25A Series

■ Features ■

- Incremental
- External diameter of 25 mm, depth of 20 mm
- Maximum resolution is 62500

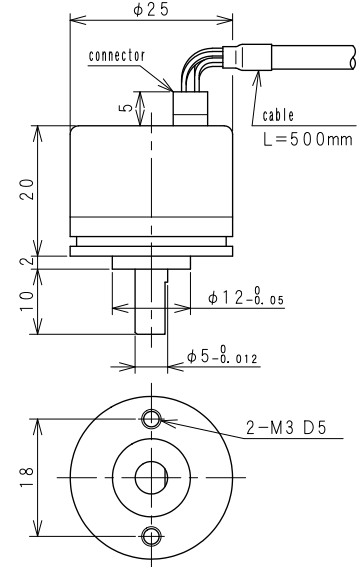


Item	Rating	
Supply voltage	Voltage output	5 to 12 VDC $\pm 10\%$
	Open collector	5 to 24 VDC $\pm 10\%$
	Line driver	5 to 24 VDC $\pm 10\%$
Consumption current	120 mA or less (under no load)	
Detection system	Incremental	
Resolution (pulses/rotation)	See "Resolution" above.	
Output form	Square wave	Voltage output (E)
		NPN Open collector (C) Line driver (X)
Output phases	Phases A, B, and Z	
Output phase difference	A, B phase difference $90^\circ \pm 45^\circ$ (T/4 $\pm$ T/8)	
	Z phase T $\pm$ T/2 (see Output Waveform)	
Maximum response frequency	100 kHz (E and C)*, 2 MHz (X)	
Starting torque	$1 \times 10^{-3} \text{ N} \cdot \text{m}$ (10gf $\cdot$ cm) or less	
Allowable load of shaft (electrical)	Radial	5000 ppr or less 10000 ppr or more
	Thrust	12N 8N
Maximum allowable number of revolutions (mechanical)		6000 r/min
Operating ambient temperature/humidity	0°C to 70°C RH 35% to 90% no dewing	
Storage ambient temperature	-20°C to 80°C	
Protective structure	IP50	
Mass	40 g	

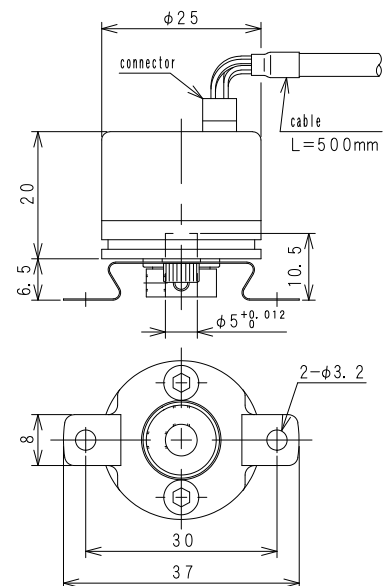
*Using supply voltage 5V, pull-up resistor 2 k Ω and standard cable.



Solid shaft encoder (shaft form:S)

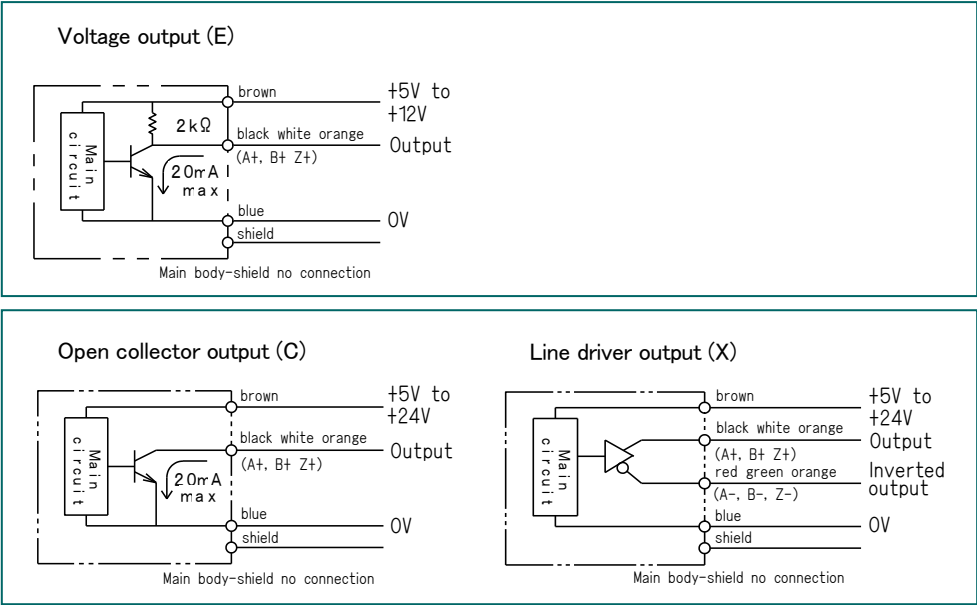


Hollow shaft encoder (shaft form:H)

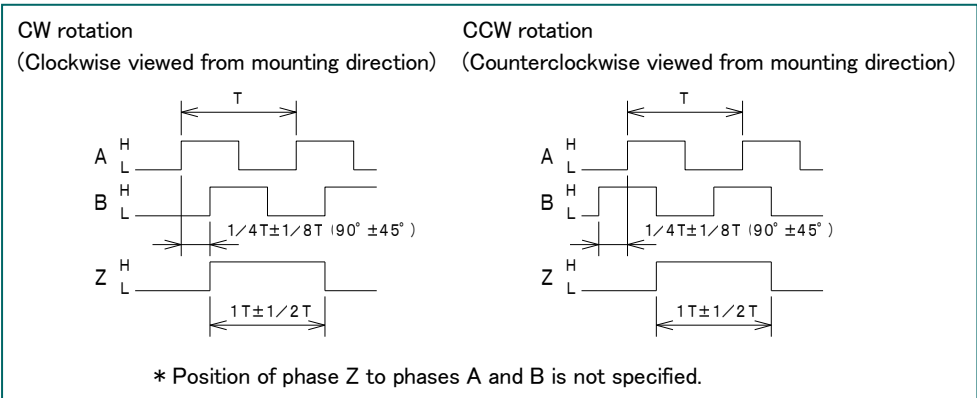


EV25A Series

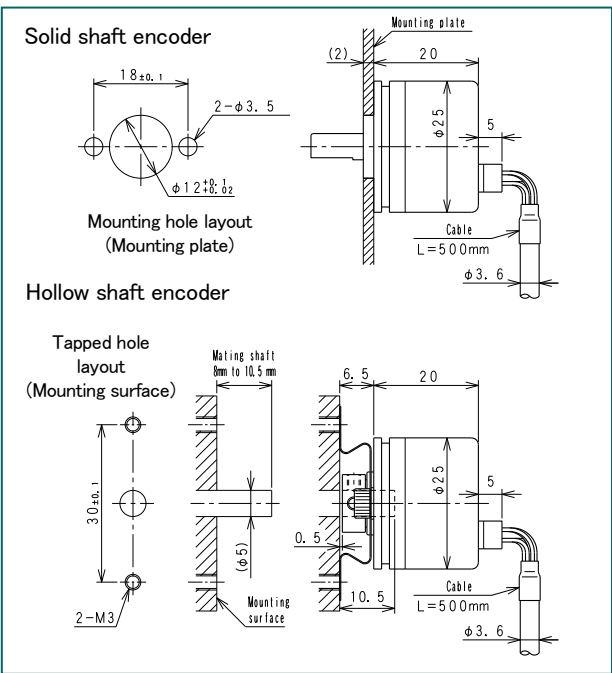
Output circuit diagram



Output waveform



Mounting



Connection

Color	Voltage output Open collector output	Line driver output
Brown	Power supply	Power supply
Blue	0V	0V
Black	Phase A+	Phase A+
Red	—	Phase A-
White	Phase B+	Phase B+
Green	—	Phase B-
Orange	Phase Z+	Phase Z+
Yellow	—	Phase Z-

Cable

3.6-dia.
Heat-resistant shielded vinyl cable
Length 500mm