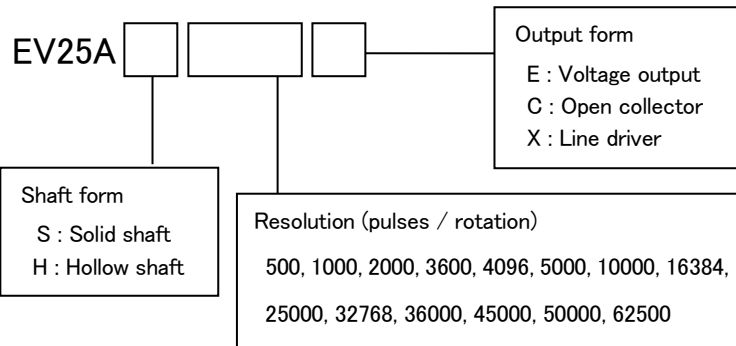


Incremental Rotary Encoder

EV25A Series

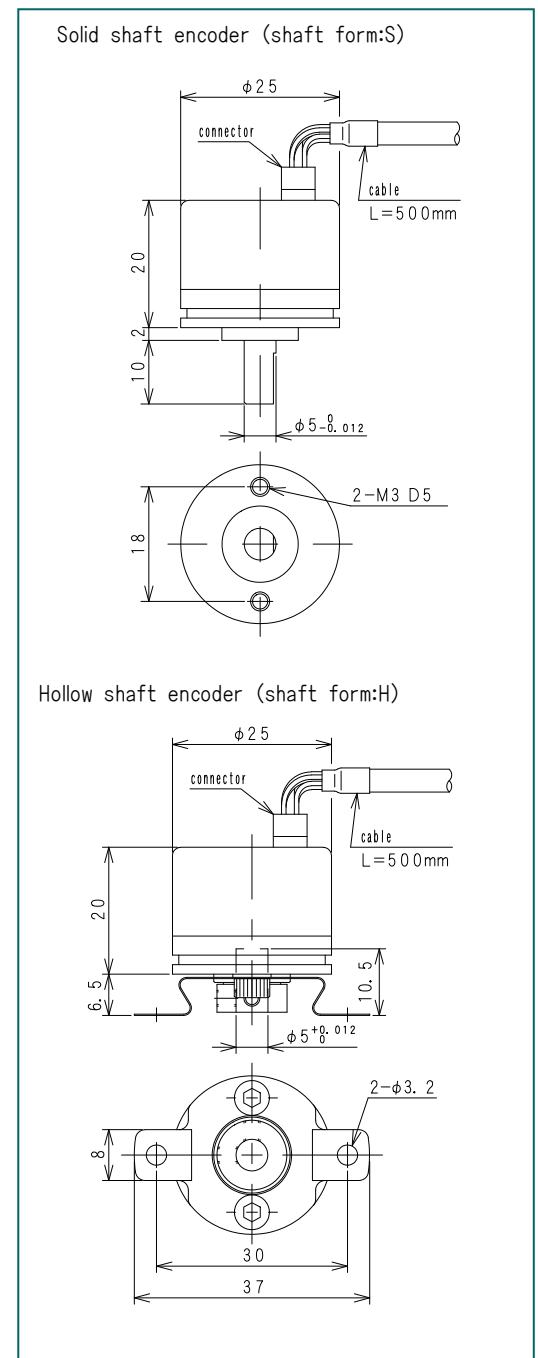
Features

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

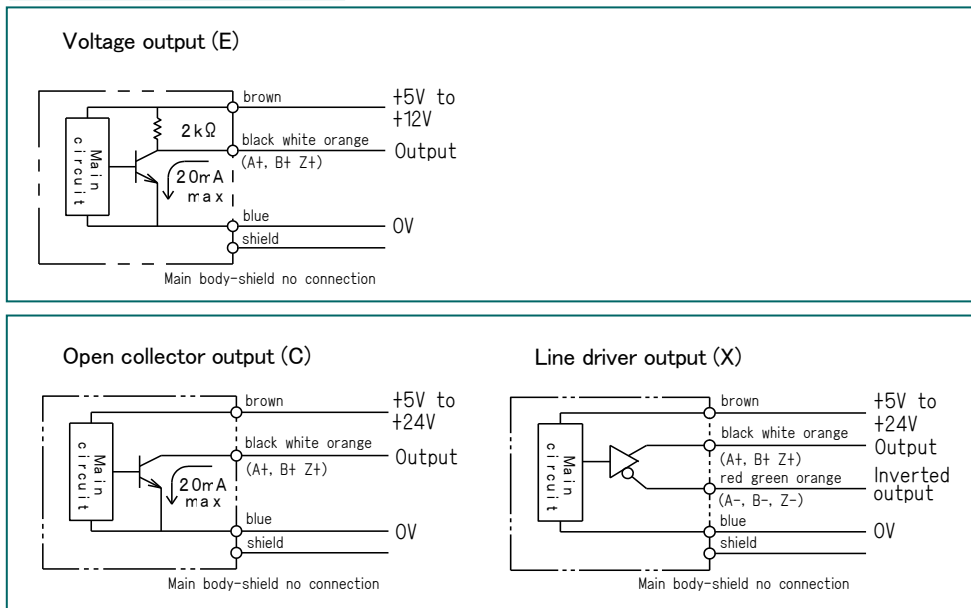


Item	Rating	
Supply voltage	Voltage output	5 to 12 VDC $\pm 10\%$
	Open collector	5 to 24 VDC $\pm 10\%$
	Line driver	5 to 24 VDC $\pm 10\%$
Consumption current	120 mA or less (under no load)	
Detection system	Incremental	
Resolution (pulses/rotation)	See "Resolution" above.	
Output form	Square wave	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)*, 1 MHz (X)	
Starting torque	$1 \times 10^{-3} \text{N}\cdot\text{m}$ (10gf·cm) or less	
Allowable load of shaft (electrical)	Radial	5000 ppr or less 12N
	Thrust	More than 10000 ppr 8N 6N 4N
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	

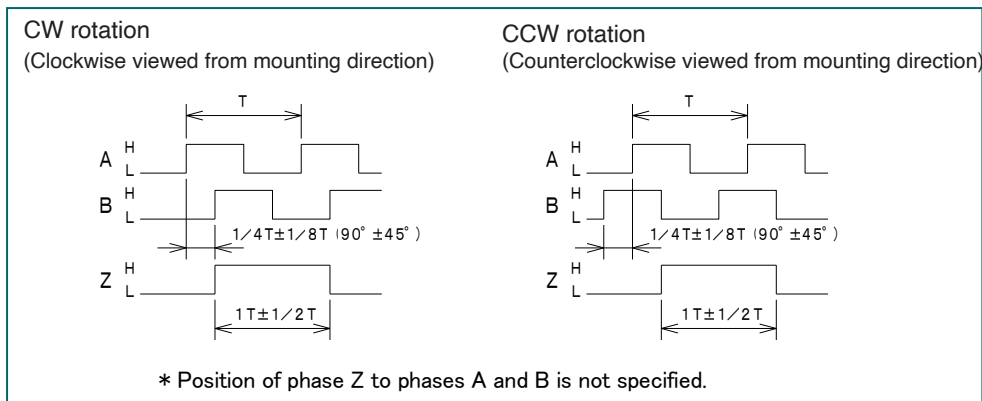
*Using supply voltage 5V, pull-up resistor 2 k Ω and standard cable.



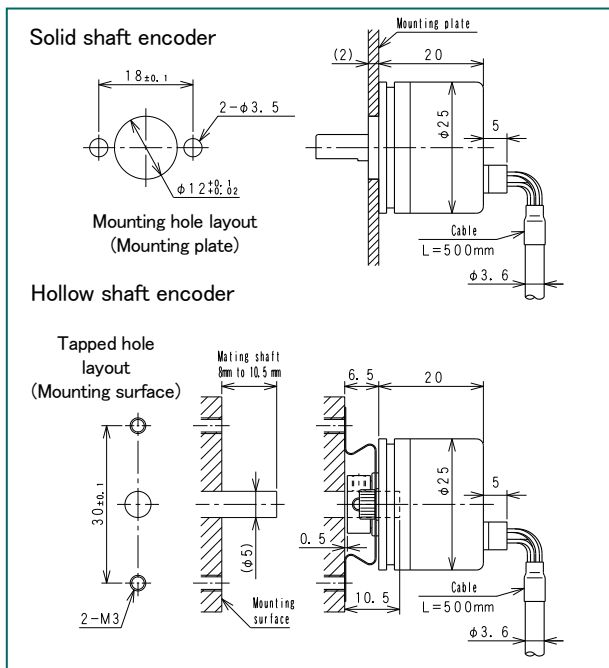
Output circuit diagram



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

TASHIKA CO., LTD.

1-12, Kaiyo-cho, Ashiya, 659-0035, JAPAN Tel: +81-797-23-9035 Fax: +81-797-23-2105
e-mail: sales@tashika.co.jp URL: www.tashika.co.jp

DUE TO CONTINUOUS PRODUCT IMPROVEMENT, THE DESIGN AND TECHNICAL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE