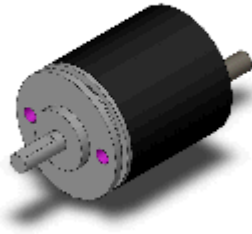


Incremental 25-mm-dia. Rotary Encoder

E6A2-CS5C 360P/R 0.5M

Incremental, Resolution 360P/R, 25-dia., 12 to 24 VDC, NPN open collector, Pre-wired models (0.5 m)



Image

Resolution	360 P/R
Output phases	A
Control output (Output type)	NPN open collector
Connection method	Pre-wired models (Cable_length: 0.5 m)

Ratings/Performance

As of March 3, 2017

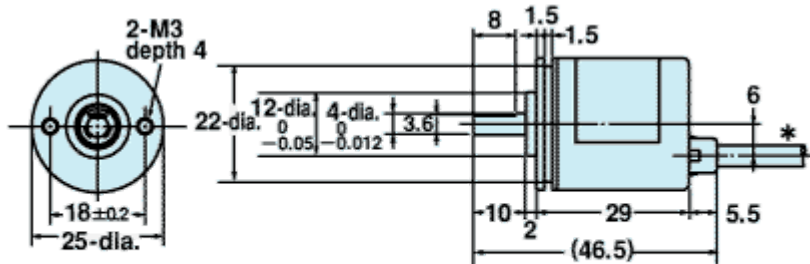
Categorise	Incremental Shaft model
Diameter	25 dia.
Power supply voltage	DC12-10% to 24+15% V (ripple (p-p): 5% max.)
Current consumption	20 mA DC max.
Resolution	360 P/R
Inrush current	Approx. 9 A (Time: Approx. 0.3 ms)
Output phases	A
Control output (Output type)	NPN open collector
Control output (Load power supply voltage)	30 VDC max.
Control output (Load current)	30 mA max. (Sink current)
Control output (Residual voltage)	0.4 VDC max. (at sink current 30 mA)
Max. response frequency	30 kHz
Output duty factor	50±25%
Rise and fall times of output	1 µs max. (Cable length: 0.5 m, output voltage: 5 V, load resistance: 1 kΩ)
Starting torque	1 mN.m max.
Moment of inertia	1 x 10 ⁻⁷ kg.m ² max.
Shaft loading	Radial: 10 N Thrust: 5 N
Max. permissible rotation	5000 r/min
Ambient temperature	Operating: -10 to 55 °C Storage: -25 to 80 °C (with no icing)

Ambient humidity	Operating: 35 to 85% RH Storage: 35 to 85% RH (with no condensation)
Insulation resistance	Between charged parts and the case: 20 MΩ min. at 500 VDC
Dielectric strength	Between charged parts and the case: 500 VAC at 50/60 Hz for 1 min
Vibration resistance	10 to 55 Hz, 1.5-mm double amplitude each in X, Y, and Z directions for 2 h
Shock resistance	500 m/s**2 for 3 times each in X, Y, and Z directions
Degree of protection	IEC: IP50
Connection method	Pre-wired models (Cable_length: 0.5 m)
Material (body)	Aluminum
Material (case)	Aluminum alloy
Material (shaft)	SUS420J2
Material (mounting bracket)	Iron zinc plating
Weight (packed state)	Approx. 35 g
Accessories	Instruction manual, coupling and hex-head spanner

As of March 3, 2017

Dimensions

As of March 3, 2017



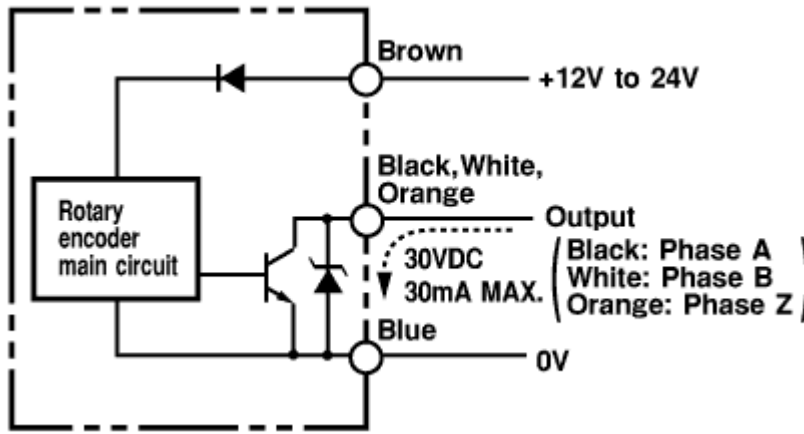
*4-dia. Vinyl-insulated round cable with 5 conductors
(conductor cross section: 0.14mm², insulator diameter: 0.9mm)
Standard length: 500mm

Caution: All units are in millimeters unless otherwise indicated.

As of March 3, 2017

Output circuit diagram

As of March 3, 2017



As of March 3, 2017

Connected specification chart

As of March 3, 2017

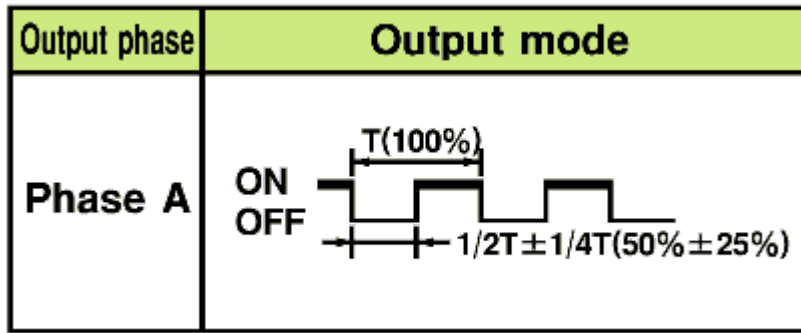
Color	Terminal
Brown	Vcc
Black	Phase A
White	Phase B
Orange	Phase Z
Blue	0V(COMMON)

- *1. The white and orange wires of the single type (E6A2-CS□□) do not output signals (no connection).
- *2. The orange wire of the reversible type (E6A2-CW□□) does not output signal (no connection).

As of March 3, 2017

Timing chart

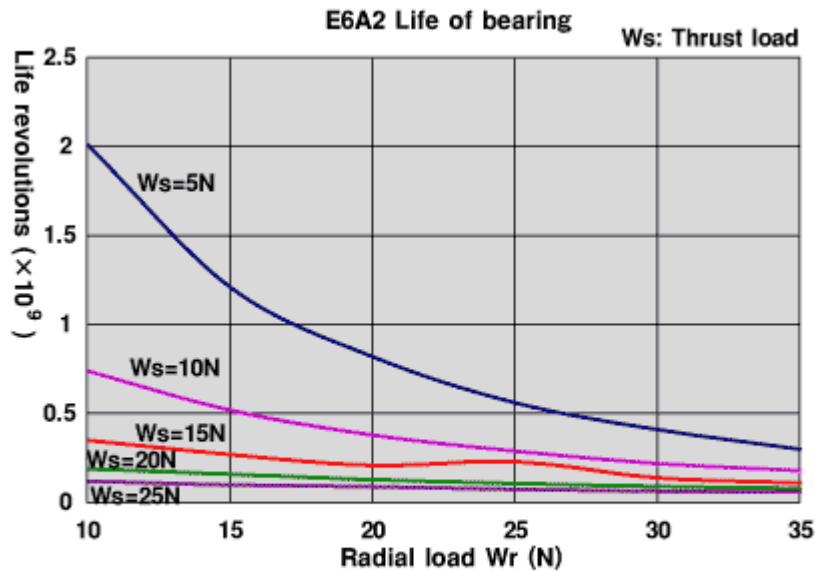
As of March 3, 2017



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Life of rotary encoder bearings

As of March 3, 2017



[Compute outline]
 It calculates based on the specification load and the dimension of the bearing of the use bearing.

As of March 3, 2017