

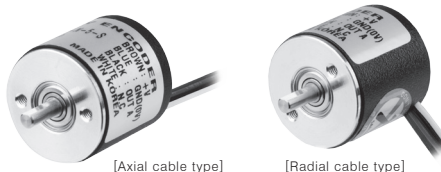
E18S Series

Diameter ø18mm Shaft type Incremental Rotary Encoder

■ Features

- Diameter ø18mm of miniature and weight 10g of ultra-light rotary encoder
- Easy installation at narrow space
- Small moment of inertia
- Power supply: 5VDC ±5%

NEW



[Axial cable type]

[Radial cable type]

■ Applications

- Suitable for office machine such as ATMs, bill counters, copy machines

⚠ Please read "Caution for your safety" in operation manual before using.



■ Ordering information

E18S	2.5	200	1	N	5	R
Series	Shaft diameter	Pulse/1Revolution	Output phase	Output	Power supply	Cable
Diameter ø18mm, shaft type	2 : ø2mm 2.5 : ø2.5mm	100, 200, 300, 400	1 : A	N: NPN open collector output V: Voltage output	5 : 5VDC ±5%	R: Axial cable type S: Radial cable type

■ Specifications

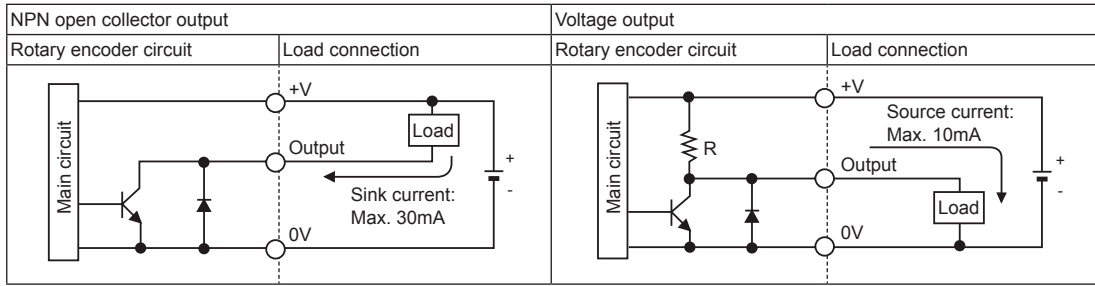
Item	Diameter ø18mm shaft type of incremental rotary encoder		
Resolution (P/R)	100, 200, 300, 400 (not indicated resolutions are customizable)		
Electrical specification	Output phase	A phase	
	Control output	NPN open collector output	Load current: Max. 30mA, Residual voltage: Max. 0.4VDC
		Voltage output	Load current: Max. 10mA, Residual voltage: Max.0.4VDC
	Response time (rise/fall)	NPN open collector output	Max. 1µs
		Voltage output	Max. 1µs
	Max. response frequency	25kHz	
	Power supply	5VDC ±5%(ripple P-P: max. 5%)	
	Current consumption	Max. 50mA (disconnection of the load)	
	Insulation resistance	Min. 100MΩ(at 500VDC megger between all terminals and case)	
	Dielectric strength	500VAC 50/60Hz for 1 min.(between all terminals and case)	
Connection	Cable type(axial cable, radial cable)		
Mechanical specification	Starting torque	Max. 10gf·cm(10×10 ⁻⁴ N·m)	
	Moment of inertia	Max. 0.5g·cm ² (5×10 ⁻⁸ kg·m ²)	
	Shaft loading	Radial : 200gf, Thrust : 200gf	
	Max. allowable revolution ^{*1}	6000rpm	
Vibration	1.5mm amplitude at frequency of 10 to 55Hz(for 1 min.) in each of X, Y, Z directions for 2 hours		
Shock	Max. 50G		
Environment	Ambient temperature	-10 to 70°C, storage: -20 to 80°C	
	Ambient humidity	35 to 85%RH, storage: 35 to 90%RH	
Protection	IP50(IEC standard)		
Cable	ø0.98mm, 4-wire, Length: 150mm, flat ribbon cable (AWG26, Core diameter: 0.16mm, Number of cores: 7, Insulator out diameter: ø0.98mm)		
Accessory	ø2mm coupling(supplied only for ø2mm shaft diameter model)		
Approval	CE		
Unit weight	Approx. 34.2g(approx. 12g) ^{*2} / Accessory: Approx. 1.2g		

※1: Make sure that. Max response revolution should be lower than or equal to max. allowable revolution when selecting the resolution.
 [Max. response revolution(rpm)= $\frac{\text{Max. response frequency}}{\text{Resolution}} \times 60 \text{ sec}$]

※2: The weight with packaging and the weight in parentheses is only unit weight.

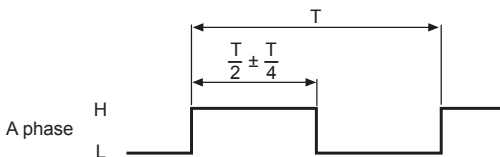
※Environment resistance is rated at no freezing or condensation.

■ **Control output diagram**

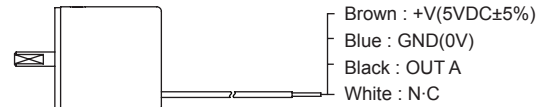


■ **Output waveform**

● NPN open collector output / Voltage output

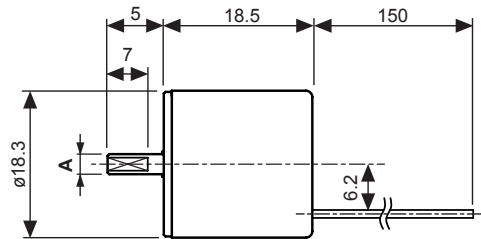
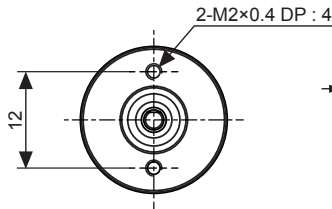


■ **Connections**



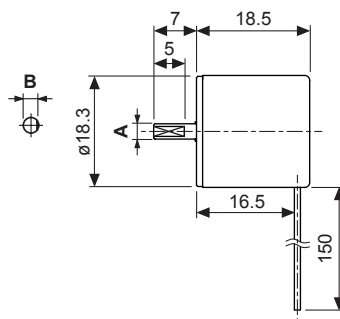
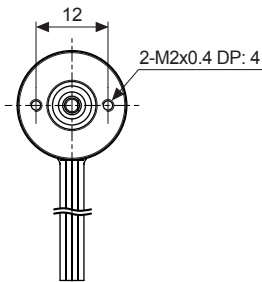
■ **Dimensions**

◎ Axial cable type



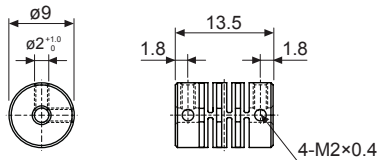
(unit : mm)

◎ Radial cable type



Model	A	B
E18S-2	Ø2.0 ^{-0.004} _{-0.02}	1.7
E18S-2.5	Ø2.5 ^{-0.004} _{-0.02}	2.2

● Coupling(E18S)



- Parallel misalignment: Min. 0.15mm
- Angular misalignment: Min. 2°
- End-play: Min. 0.2mm

※ For terminology of parallel, angular misalignment, and end-play, refer to the F-77 page.

(A)	Photo electric sensor
(B)	Fiber optic sensor
(C)	Door/Area sensor
(D)	Proximity sensor
(E)	Pressure sensor
(F)	Rotary encoder
(G)	Connector/Socket
(H)	Temp. controller
(I)	SSR/Power controller
(J)	Counter
(K)	Timer
(L)	Panel meter
(M)	Tacho/Speed/Pulse meter
(N)	Display unit
(O)	Sensor controller
(P)	Switching mode power supply
(Q)	Stepper motor& Driver&Controller
(R)	Graphic/Logic panel
(S)	Field network device
(T)	Software
(U)	Other

进口光电编码器 18mm 微型编码器奥托尼克斯代理商韩国 Autonics 旋转编码器型号:

E18S2-100-1-N-5-R; E18S2-200-1-N-5-R; E18S2-300-1-N-5-R; E18S2-400-1-N-5-R;
E18S2-360-1-N-5-R; E18S2-600-1-N-5-R; E18S2-1024-1-N-5-R;

E18S2-100-1-N-5-S; E18S2-200-1-N-5-S; E18S2-300-1-N-5-S; E18S2-400-1-N-5-S;
E18S2-360-1-N-5-S; E18S2-600-1-N-5-S; E18S2-1024-1-N-5-S;

E18S2-100-1-V-5-R; E18S2-200-1-V-5-R; E18S2-300-1-V-5-R; E18S2-400-1-V-5-R;
E18S2-360-1-V-5-R; E18S2-600-1-V-5-R; E18S2-1024-1-V-5-R;

E18S2-100-1-V-5-S; E18S2-200-1-V-5-S; E18S2-300-1-V-5-S; E18S2-400-1-V-5-S;
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