

Easydic Series Shaft Incremental Encoder EV28



Description

Small economical shaft encoder EV28 is widely used in light industries where space for sensor installation is a concern. The resolution is up to 600, and with its small size, light weight, and high precision, it fully meets the controlling requirements of the modern light industries. With the different shaft lengths available, the product can be used in a wide variety of industrial environments. It's one of the most recommended choices in consideration of performance and cost.

Features

- Flexible coupling connection avoids damage to the encoder
- Stainless steel shaft $\Phi 4$, $\Phi 5$ ensures high stability and protection
- Metal housing for better shock resistance
- Protection class IP50
- Reverse connection protection
- Short circuit protection
- Cable output, waterproof rubber end

Mechanical Characteristics

Shaft diameter (mm)	$\Phi 4/\Phi 5g6$
Protection acc. to EN 60529	IP50
Speed (r/m)	6000, continuous
Max. load capacity of the shaft	5N axial, 10N radial
Shock resistance	30G/ 11ms
Vibration resistance	6G 10...2000Hz
Bearing life	10^9 revolution
Moment of inertia	approx. $0.7 \times 10^{-6} \text{kgm}^2$
Starting torque	$<0.01 \text{Nm}$
Body material	AL-alloy UNI9002-5
Housing material	AL-alloy UNI9002-5
Operating temperature	$-20^\circ\text{C} \dots +80^\circ\text{C}$
Storage temperature	$-30^\circ\text{C} \dots +85^\circ\text{C}$
Weight	100g

Resolution:

50, 100, 200, 300, 360, 500, 600

Electrical Characteristics

Output circuit	Push-pull	RS422	RS422
Resolution	Max. 600ppr	Max. 600ppr	Max. 600ppr
Supply voltage (Vdc)	10-30V/5-30V	5V	10-30V
Power consumption (no load)	$\leq 125 \text{mA}$	$\leq 80 \text{mA}$	$\leq 80 \text{mA}$
Permissible load (channel)	$\pm 80 \text{mA}$	$\pm 50 \text{mA}$	$\pm 50 \text{mA}$
Pulse frequency	Max. 300kHz	Max. 300kHz	Max. 300kHz
Signal level high	Min. $U_b - 1.5 \text{V}$	Min. 3.4V	Min. 3.4V
Signal level low	Max. 0.8V	Max. 0.4V	Max. 0.4V
Rise time T_r	Max. 1 μs	Max. 200ns	Max. 200ns
Fall time T_f	Max. 1 μs	Max. 200ns	Max. 200ns

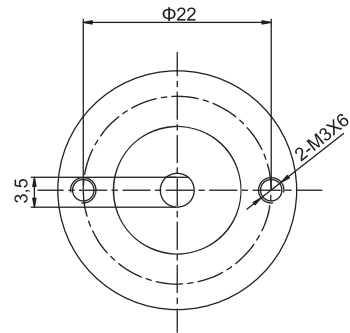
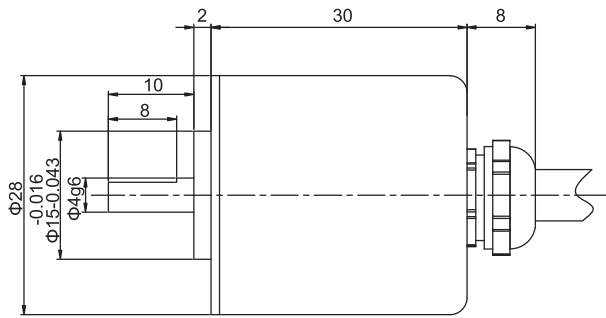
Terminal Assignment

Signal	0V	+ U_b	A	\bar{A}	B	\bar{B}	Z	\bar{Z}	Shield
Color	WH	BN	GN	YE	GY	PK	BU	RD	\perp

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Dimension (mm)

EV28



Order Code

EV	28	A	4	—	L5	P	A	—	500	XXXX
Series	Housing diameter 28mm=housing diameter	Shaft diameter 4=Φ 4 mm 5=Φ 5 mm	Shaft diameter A=Φ 15 mm clamping flange		Encoder Output & Power Supply ¹⁾	Standard cable length P= 0.5m	Outlet direction A=axial		Resolution Pulse/r ≤600 Note: for available pulse options please contact the company for further information	XXXX=Special code Customized cable length CN00XX=cable length e.g. CN0010=1m CN0015=1.5m CN0020=2m
EV=Typydic incremental					L5=RS422 L6=RS422 H6=Push-pull HTL (with reverse sign) H6=Push-pull HTL (without reverse sign) Please refer to output circuit structure and wiring for output configuration				5Vdc 10...30Vdc 10...30Vdc 10...30Vdc	

1) When UB=5V, short-circuit to channel, 0V, or +UB is permitted;
When UB is greater than 5V, short-circuit to channel or 0V is permitted