

Incremental Encoder



Special features :

- ▶ Standard design and high-strength metal disk(≤ 1024 CPR) for high vibration and shock resistance
- ▶ Advanced high-reliability optical reading system, good performance in electromagnetic compatibility
- ▶ Overvoltage, overcurrent, surge protection
- ▶ HTL(Push-pull) or TTL(RS422)
- ▶ 10-30V(polarity protection), 5V , Single power supply
- ▶ IP 65(Cable gland)
- ▶ 2 years warranty

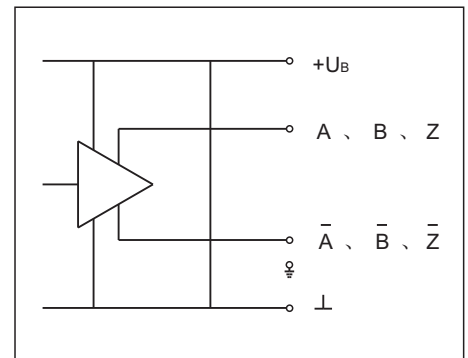
Product application:

- ▶ Applicable for displacement and velocity measurement of heavy equipments under harsh environment

Electrical Specification

Cycles per turn (CPR)	250 256 500 512 900 1000 1024 1200 1250 1500 1800 2000 2048 2500 3000 3600 4096 5000 6000 8192
Out frequency	400KHz
Rise time	Push-pull 250ns ; RS422 100ns
Supply voltage U_B	+5V or +10V~+30V
Current consumption at no-load	Push-pull 50mA; RS422 70mA
Out voltage ($U_B=24V$)	$U_L \leq 1.5V$; $U_H \geq U_B - 3.0V$
Maximum load current per channel	Push-pull 40mA; RS422 20mA
Mark space ratio	1 : 1 $\pm 20\%$
Square wave displacement	$90^\circ \pm 20\%$

Output Circuit



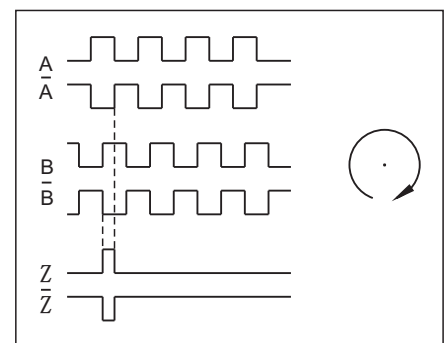
Output styles :

- P** : Push-pull
- R** : RS422 (TTL)
- L** :HTL
- C** : OC

Mechanical Specification

Shaft diameter	$\phi 6 / \phi 8$ Stainless steel
Moment of inertia	$\approx 5 \text{ g cm}^2$
Speed max (Mechanical)	$\leq 6000 \text{ r/min}$
Driving torque	$\approx 0.01 \text{ N} \cdot \text{m}$
Maximum shaft load	Axial 30N; Radial 50N
Vibration resistance	$\leq 10G / 55 \sim 2000 \text{ Hz}$
Shock resistance	$\leq 50G / 6 \text{ ms}$
Permissible encoder temperature	$-20^\circ \text{C} \sim +80^\circ \text{C}$ (-40°C Optional)
Protection class	IP65 (Cable gland) / IP50 (Cable sheath)
Weight	$\approx 0.20 \text{ Kg}$

Output Signals



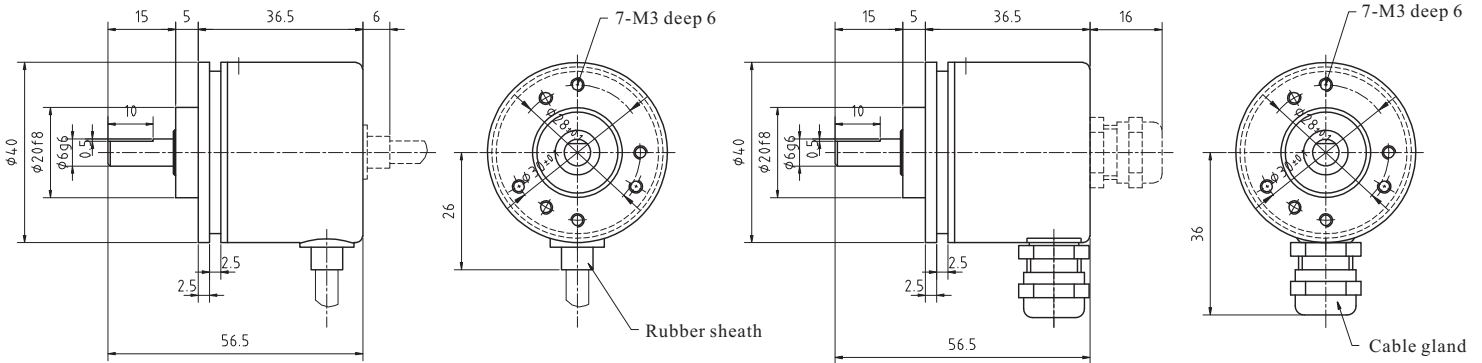
Index width:

- 0** : No Index
- 1** : 1 T
- 2** : 1/2 T
- 4** : 1/4 T

Remark

$$\text{Speed max (Electronic)} = \frac{f_{\text{max}} * 60 * 10^3}{\text{CPR}} \quad (f_{\text{max}} = \text{Out frequency})$$

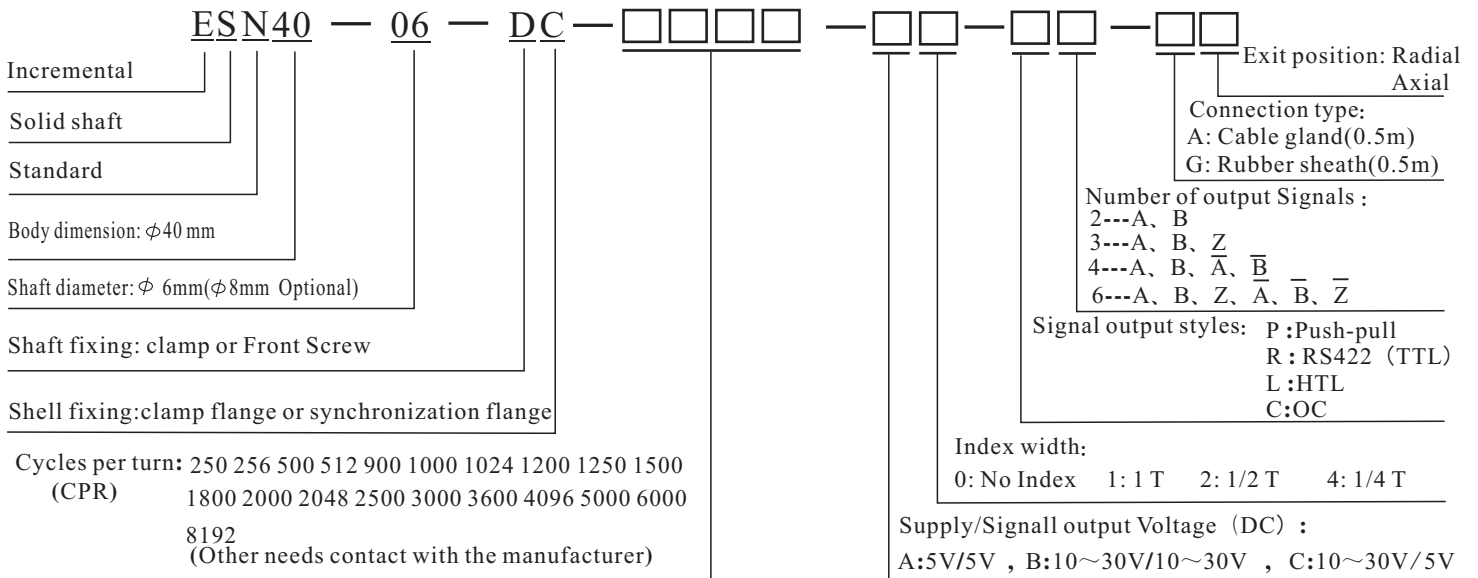
■ Dimensions



■ CONNECTION

颜色 Colour	红 RED	黑 BLK	棕 BRN	蓝 BLU	灰 GRA	黄 YEL	绿 GRN	白 WHT	屏蔽线 SHLD
信号 Signal	+Vdc	0V	A	B	Z	\bar{A}	\bar{B}	\bar{Z}	Body

■ Ordering Information



Remarks : Technical modifications reserved.

■ Guarantee

2 years warranty within the conditions of Normal use and maintenance.



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