

产品选型手册

Product selection guide



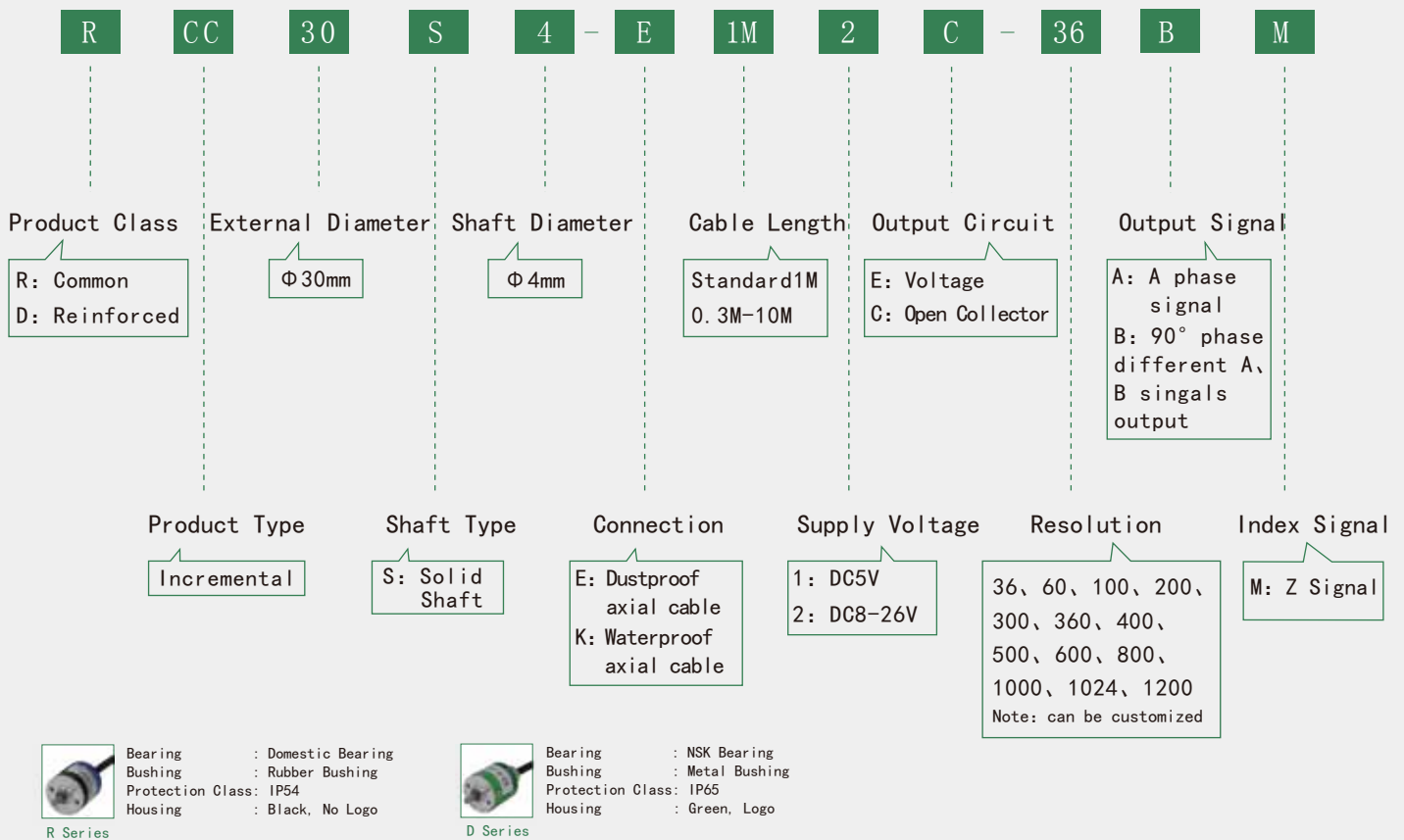
RCC30 · Series

Applications & Features



RCC30S is widely used in automatic control, automatic measurement, as the rotation angle and rotation speed measuring sensors. Small size, light weight, excellent performance, suitable for small space. Compact size, resolution up to 1200 pulses.

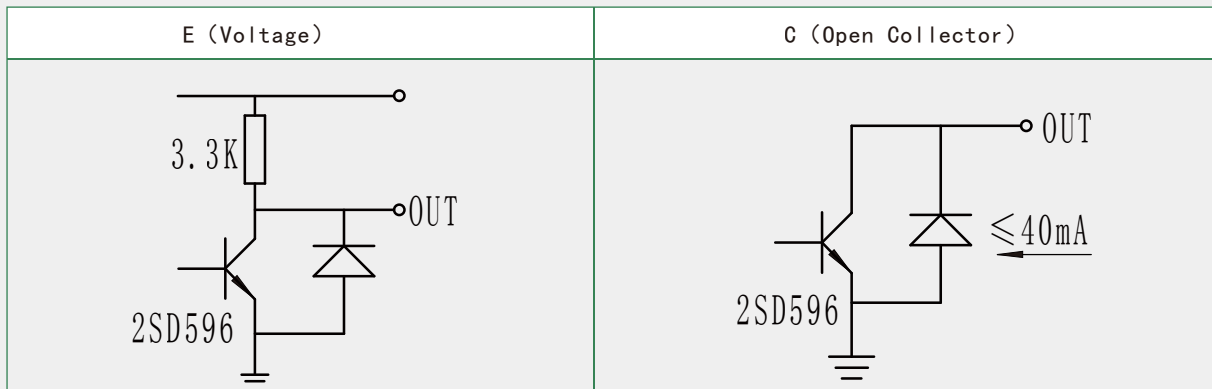
Part Number



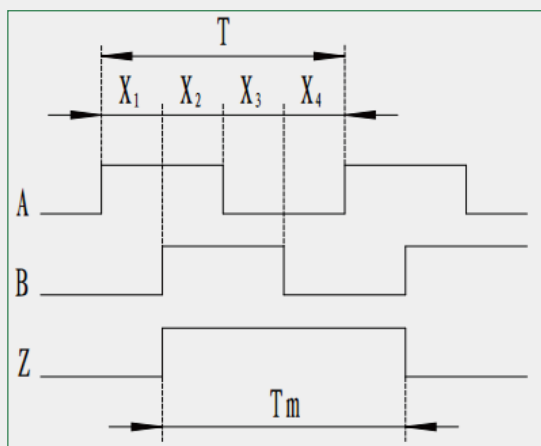
Electrical Specifications

Output Circuit	Supply Voltage DC (V)	Current Requirement (mA)	Output Voltage (V)		Rise Time (ns)	Fall time (ns)	Frequency Response (kHz)
			V _H	V _L			
E (Voltage)	5±0.25	≤80	>3.5	≤0.7	≤500	≤100	0-300
	8-26	≤120	>VCC-2.5	≤0.7	≤500	≤100	0-300
C (Open Collector)	5±0.25	≤60	>VCC-2.5	≤0.7	≤500	≤100	0-300
	8-26						

Output Circuit



Output Waveform



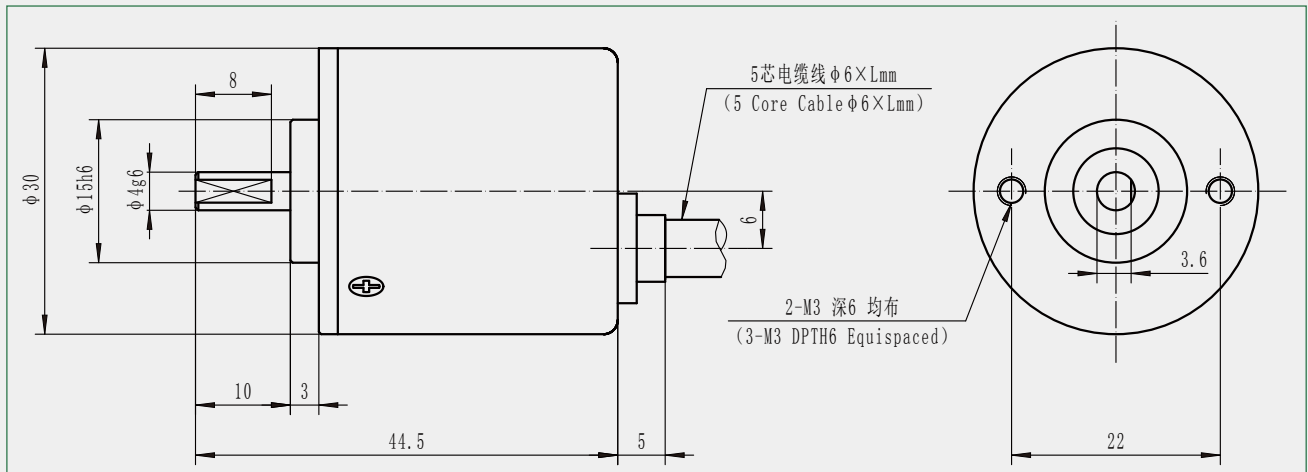
The picture shows the clockwise (CW) waveform from the shaft side.

- Wave Ratio : $X_1+X_2=0.5T \pm 0.1T$
 $X_2+X_3=0.5T \pm 0.1T$
- Phase Different : $X_n \geq 0.125T$ ($n=1, 2, 3, 4$)
- Absolute Angle Error: $\leq 0.2T$
- Cycle Error : $\leq 0.05T$
- $T=360^\circ / N$ (N =lines count per revolution)
- 1、 $T_m=1T \pm 0.5T$
 $T_m=nT \pm 0.1T$ ($n \geq 2$)
 The phase relationship of Z signal and A, B signal is not stipulated.
- 2、 $T_m=0.5T \pm 0.25T$
 $T_m=0.25T \pm 0.125T$
 $T_m=0.25T \pm 0.125T$

Mechanical Specifications

Max Speed (r/min)	Starting Torque (N. M)	Max Load (N)		Rotary Inertia (kgm ²)	Weight (kg)
		Radial	Axial		
6000	1×10^{-3}	15	10	5×10^{-8}	≈ 0.09

Dimension



Environmental Specifications

Operating Temperature (°C)	-20~+85	
Storage Temperature (°C)	-30~+95	
Relative Humidity	35~85%RH no condensation	
Impact Resistance (m/s ²)	50 (Three times each on x, y, z directions, each time lasts 6ms)	
Vibration Resistance (m/s ²)	20 (10~200Hz, 2h on x, y, z directions)	
Protection Class	Common IP54	Reinforced IP65

Connections

Cable Color	Red	Black	Green	White	Yellow	Shield
E (Voltage)	Vcc	0V	A	B	Z	G
C (Open Collector)	Vcc	0V	A	B	Z	G

