

# 产品选型手册

Product selection guide



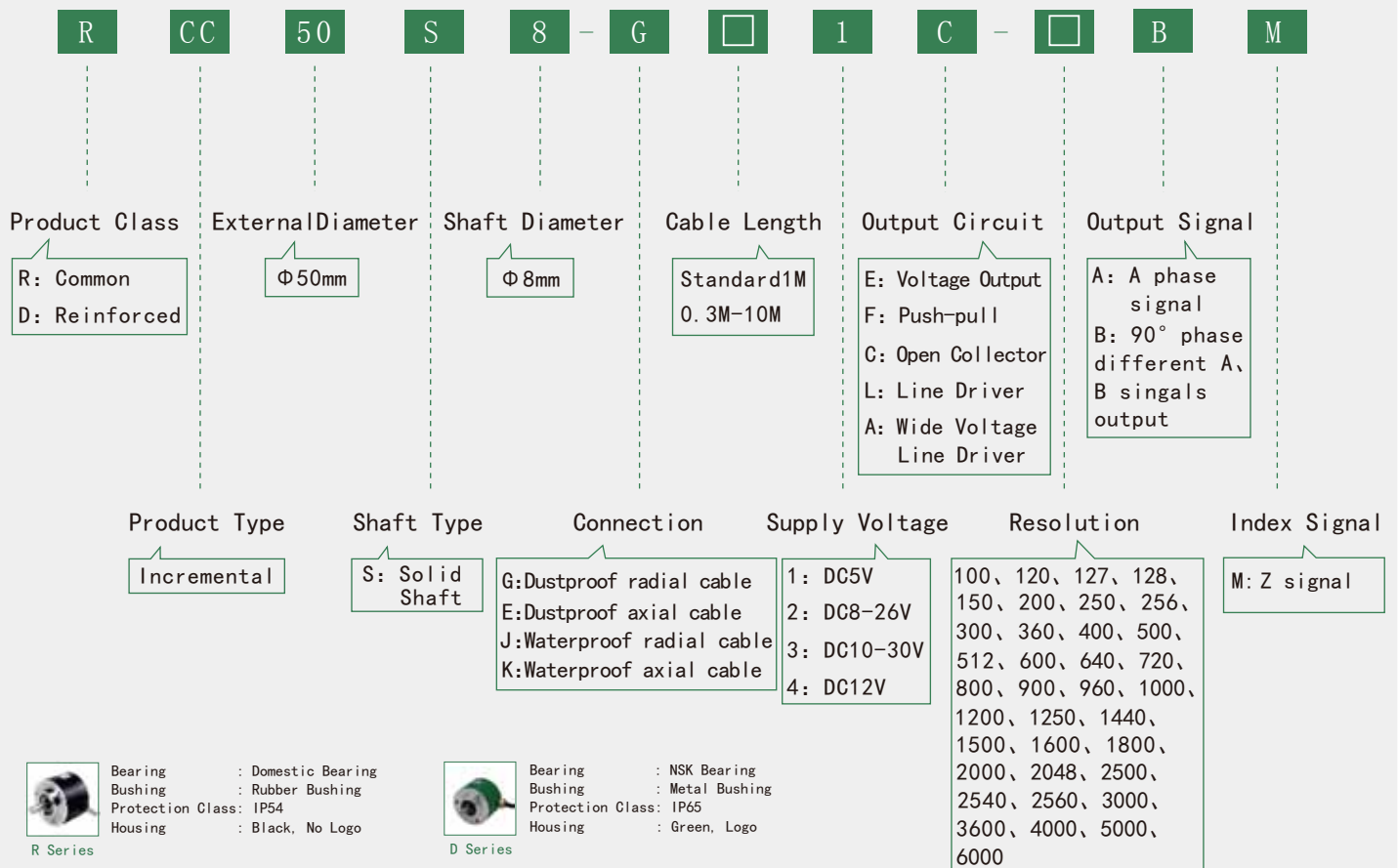
RCC50S · Series

# Applications & Features



RCC50S, 50mm External Diameter; Various kinds of termination; Wide application range.  
The grating divided into metal grating and glass grating, the max resolution up to 6000ppr.  
Optoelectronic devices with high reliability, long life, strong anti-interference ability, wide range of operating temperature.

## 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 <sub>H</sub>	V <sub>L</sub>			
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
	10-30						
	12						
F (Push-pull)	5±0.25	≤80	>3.5	≤0.7	≤500	≤100	0-300
	8-26	≤120	>VCC-2.5	≤0.7	≤500	≤100	0-300
	10-30						
	12						

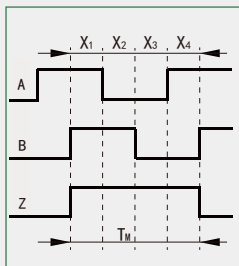
C (Open Collector)	5±0.25	≤60	>VCC-2.5	≤0.7	≤500	≤100	0-300
	8-26						
	10-30						
	12						
L (Line Driver)	5±0.25	≤100	>3.5	≤0.7	≤200	≤200	0-300
A (Wide Voltage Line Driver)	8-26	≤60	>VCC-2.5	≤0.7	≤500	≤100	0-300
	10-30						
	12						

## Output Circuit

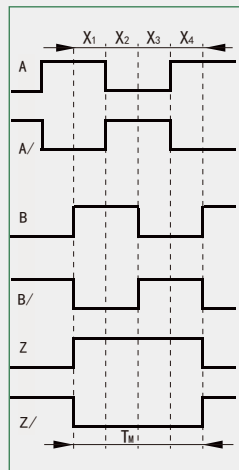
E (Voltage)		F (Push-pull)		C (Open Collector)	L, A (Line Driver)
5V	8-26V	5V	8-26V		
				L: 26C31	A: ET7272B

Note: C, F output is shorted to ground protection diode.

## Output Waveform



Waveform for C, E, F output



Waveform for L, A output

Wave Ratio	: $X1+X2=0.5T \pm 0.1T$ $X2+X3=0.5T \pm 0.1T$
Phase Different	: $Xn \geq 0.125T$ ( $n=1, 2, 3, 4$ )
Absolute Angle Error	: $\leq 0.2T$
Cycle Error	: $\leq 0.05T$
$T=360^\circ / N$ ( $N$ =lines count per revolution)	
Width of Z signal	
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、 $T_m=0.5T \pm 0.25T$	
$T_m=0.25T \pm 0.125T$	
$T_m=0.25T \pm 0.125T$	

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

## Mechanical Specifications

Max Speed (r/min)	Starting Torque (N. M)	Max Load (N)		Rotary Inertia (kgm <sup>2</sup> )	Weight (kg)
		Radial	Axial		
6000	$1 \cdot 10^{-3}$	30	20	$4 \cdot 10^{-6}$	≈0.19

