

产品选型手册

Product selection guide



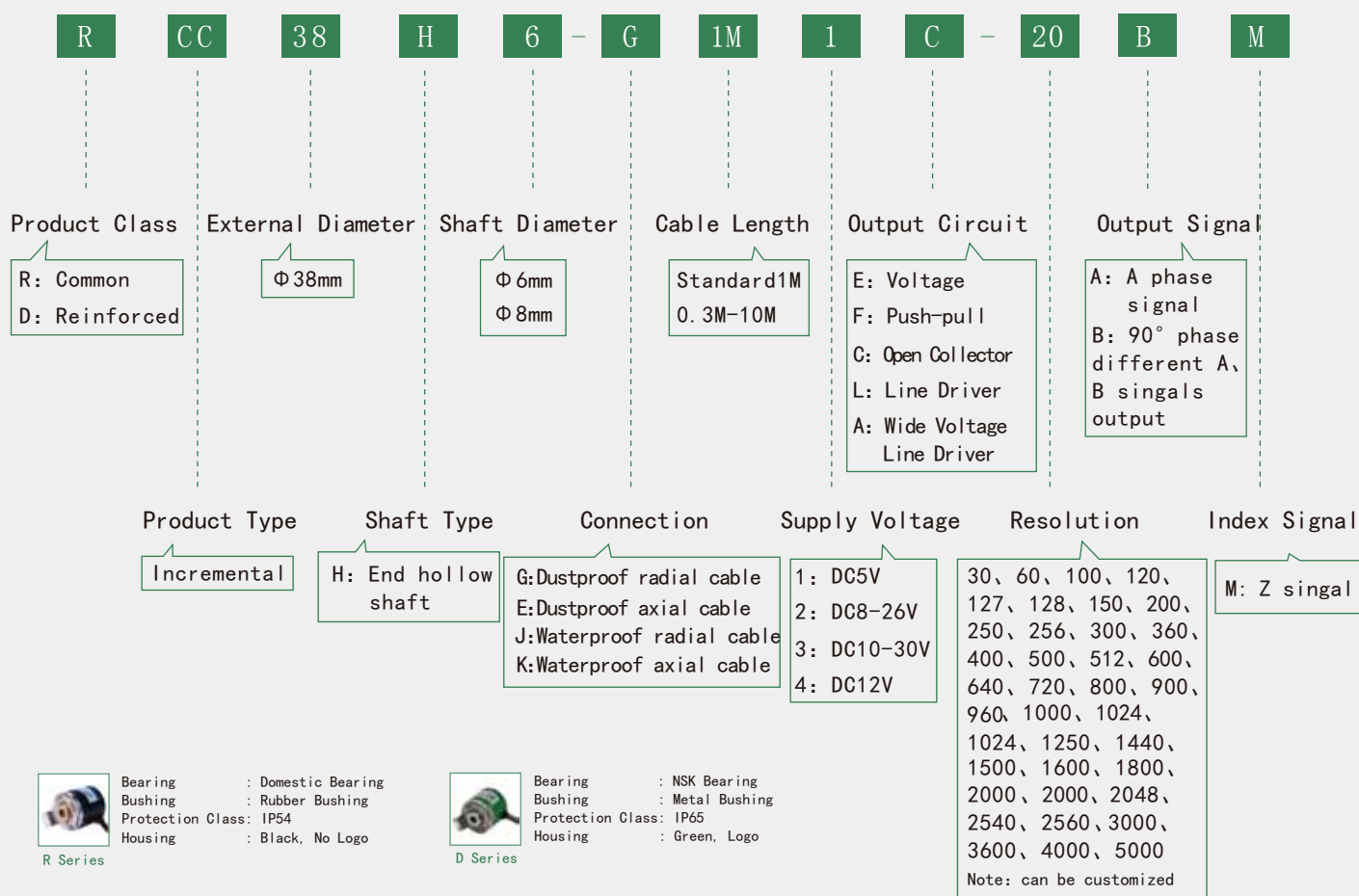
RCC38H · Series

Applications & Features



RCC38H is widely used to control the speed and position of CNC machines such as embroidery machine. Small outer diameter of 38mm, shaft hole 6/8mm optional, cable is divided into two kinds of radial output and axial output. Rugged construction, high reliability, strong anti-jamming performance, long service life.

Part Number



Electrical Specifications

Output Circuit	Supply Voltate 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
	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						

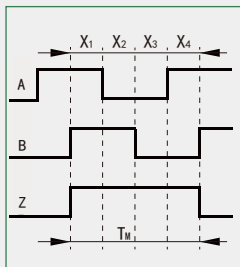
C (Open Collector)	5±0.25	≤60	>VCC-2.5	≤0.7	≤500	≤100	0-300
	8-26						
	10-30						
	12						
L (Line Driver)	5±0.25	≤100	>3.5	≤0.7	≤200	≤200	0-300
A (Wide Voltage Line Driver)	8-26	≤60	>VCC-2.5	≤0.7	≤500	≤100	0-300
	10-30						
	12						

Output Circuit

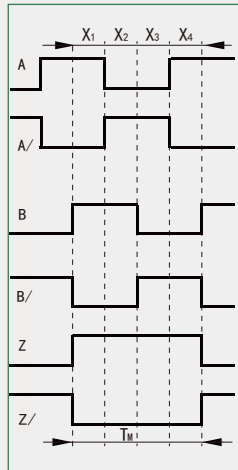
E (Voltage)		F (Push-pull)		C (Open Collector)	L, A (Line Driver)
5V	8-26V	5V	8-26V		

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

Output Waveform



Waveform for C, E, F output



Waveform for L, A output

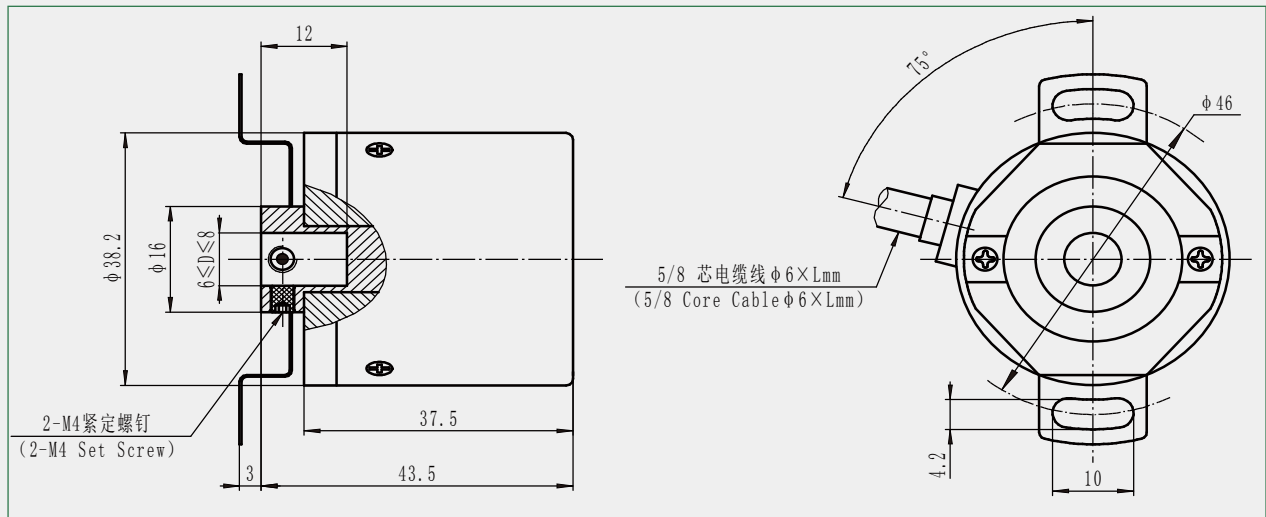
- Wave Ratio : $X1+X2=0.5T \pm 0.1T$
 $X2+X3=0.5T \pm 0.1T$
- Phase Different : $Xn \geq 0.125T$ ($n=1, 2, 3, 4$)
- Absolute Angle Error: $\leq 0.2T$
- Cycle Error : $\leq 0.05T$
- $T=360^\circ / N$ (N =lines count per revolution)
- Width of Z signal
- $T_m=1T \pm 0.5T$
 - $T_m=nT \pm 0.1T$ ($n \geq 2$)
- The phase relationship of Z signal and A, B signal is not stipulated.
- $T_m=0.5T \pm 0.25T$
 - $T_m=0.25T \pm 0.125T$
 - $T_m=0.25T \pm 0.125T$

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 ²)	Weight (kg)
		Radial	Axial		
6000	1*10 ⁻³	30	20	4*10 ⁻⁶	≈0.135

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	Brown	White	Grey	Yellow	Orange	Shield
E (Voltage)	Vcc	0V	A		B		Z		G
F (Push Pull)	Vcc	0V	A		B		Z		G
C (Open Collector)	Vcc	0V	A		B		Z		G
L、A (Line Driver)	Vcc	0V	A	A	B	B	Z	Z	G

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