

## CBM磁编码器 Magnetic Encoder

### ● 产品结构特征 Product Features

在直流电机的尾部可以配置旋转式磁编码器。

磁编码器是速度、角度、位置检测的数字式传感器。磁编码器在强磁性材料表面上记录了若干个等间隔的磁极作为刻度标尺，标尺旁边相对放置了霍尔元件，能检测出磁通的变化，再通过信号转换，处理成为方波电信号输出。

输出方波分为单通道和双通道。双通道能够检测双向的信号，即能够实施正、反转两个方向的控制。

旋转式磁编码器具有转速高、响应快、防尘、防油、抗震动等特点，成本低、安装调试方便、抗干扰能力强的特点，适合长线输出。

Rotary Magnetic Encoders can be equipped at the end of DC motors.

Magnetic encoders are digital sensors testing the speed, angle and location. Several equi-spaced magnetic poles as level scales are recorded on the surface of strong magnetic materials. And beside the level scales are hall elements, which can detect the changes of magnetic flow, and by signal transmission, outputting in a form of square wave.

Square wave output has two forms: single channel and two channels. Two channels can detect two-way signals. That is, it can control two directions(CW and CCW).

Rotary Magnetic Encoders have the following features: high speed, fast respond, dustproof, oil-proof, anti-vibration, low cost, easy and convenient for installation and debugging, good antijamming capability, suitable to long-line output.



### ● 编码器型号和规格 Encoder Model and Specifications

编码器型号 Model	适合配置电机直径 Suitable Motor Diameter	编码器直径 Encoder Diameter	编码器长度 Encoder Length	旋转一周的脉冲数和通道数 PPR per Rotation and Channels			
				可选的磁极数 Optional Magnetic Poles	一周的脉冲数 PPR per Rotation	最多的脉冲数 Max. PPR	通道数 Channels
CBM30	Φ28~32	Φ30	15	4、8、16	2、4、8	8	2通道/1通道 2 channles/1 channel
CBM36	Φ36~42	Φ36	18.5	4、8、16	2、4、8	8	2通道/1通道 2 channles/1 channel
CBM40	≥Φ45	Φ40	18	4、8、16、24	2、4、8、12	12	2通道/1通道 2 channles/1 channel

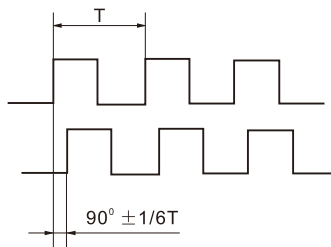
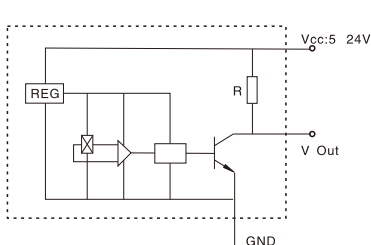
### ● 编码器使用环境条件 Operation Environment

使用相对湿度：20% ~ 85%RH，使用温度范围：-40℃~ 85℃。

Relative Humidity (RH) :20% ~ 85%RH Temperature Range:-40℃~ 85℃

### ● 电气特性 Electrical Characteristics

规格特性 Specifications	代号 Code	测试条件 Test Condions	最小 Min	基准 Criterion	最大 Max.	单位 Unit
输入电压 Supply Voltage	Vcc		4.5	-	24	V
输入电流 Supply Current	Icc		-	20	22	mA
输出电流 Output current	Ic	Vce= 4.5V to 24V	-		20	mA
输出漏电电流 Output Leakage Current	Icex	Gauss<-170; Output open; 25℃	-		20	μA
输出上升时间 Output Rise Time	tr		-	0.2	1.5	μS
输出下降时间 Output Fall Time	tf		-	0.5	1.5	μS



### ● 接线说明 Wiring Instructions

信号 Signal:A,B,

线色 Color	黑 Black	蓝 Blue	红 Red	绿 Green
说明 Description	Gnd	A+	Vcc	B+

说明：磁编码器需使用独立的供电电源，不要与直流电机共用电源，避免信号受到干扰。

Remarks: Magnetic Encoders Need to Use Standalone Power Supply. Please Do Not Share Power Supply With DC Motor to Avoid Signal Interference.