

GBM三通道光栅编码器

Three channels Optical Kit Encoder

● 产品结构特征 Product Features

在伺服电机、直流电机、步进电机的尾部可以配置光栅编码器。

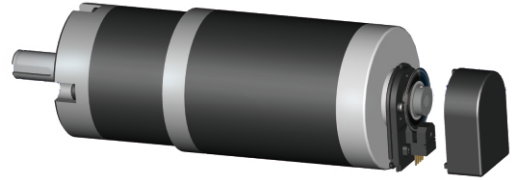
光栅编码器是高精度的速度、角度、位置检测的数字式传感器。LED发出的光透过牢固安装在电机轴上的光栅编码盘，接收器（光电管）把明交替的变化转化为电子脉冲，并在控制器中进行放大和处理。由于受到齿轮间隙或传动带误差的影响，直流电机、步进电机选择编码器一般不超过500线。

光栅编码器分为双通道和三通道。三通道作为增量式编码器，直接利用光电转换原理输出三组方波脉冲A、B和Z相。

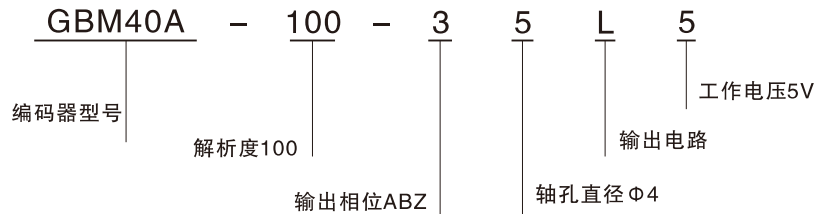
Optical Kit Encoders can be equipped at the end of servo motors, DC motors and stepping motors.

Optical Kit Encoders are high precision digital sensors testing the speed, angle and location. Light from LED goes through grating coding dish which is tightly installed on the motor shaft, the receptor(phototube) turns the change of brightness alternation into pulse and amplify and handle it in the controller. Because of the influence of gear backlash or driving belt error, DC motors and stepping motors use optical kit encoders which are less than 500 lines.

Optical Kit Encoders can be divided into two categories: two channels and three channels. As incremental encoder, Three channels encoder can directly output three sets of square wave pulse(A, B and Z phase) by adopting Photoelectric Conversion Principle.



● 型号说明 Model Description



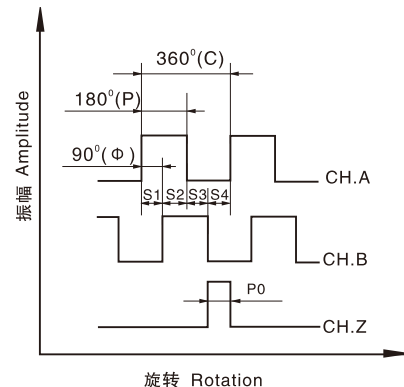
● 可选择型号 Model Description

型号 Type	解析度范围 Resolution	输出相位 Phase	安装轴孔直径 Shaft OD (mm)	输出电路 Output circuit	工作电压 Supply voltage	安装尺寸 Mounting Diameter
GBM30B	50~1024CPR	3:ABZ	Φ4~Φ8	L:Line driver	5V	Φ19.05 / M2.5
GBM302C	50~1024CPR	3:ABZ	Φ4~Φ8	L:Line driver	5V	Φ19.05 / M2.5
GBM22A	200 CPR、256CPR	3:ABZ	Φ4	L:Line driver	5V	Φ16.86 / M2
GBM28A	100~1025CPR	3:ABZ	Φ4~Φ6.35	L:Line driver	5V	Φ34 / M3
GBM40A	100~4000CPR	3:ABZ	Φ4~Φ8	L:Line driver	5V	Φ46 / M3

● 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: -20 °C ~ 80 °C.
Relative Humidity (RH) :20% ~ 85%RH Temperature Range:-20 °C ~ 80 °C

● 输出波形 Output Waveform



● 接线说明 Wiring Instructions

信号 Signal: A,B,Z

针位 Pin	9	8	7	6	5	4	3	2	1
线色 Color	红 Red	黑 Black	白 White	白/黑 W/B	绿 Green	绿/黑 G/B	黄 Yellow	黄/黑 Y/B	
说明 Description	Vcc	Gnd	A+	A-	B+	B-	Z+	Z-	Shield

说明: 光栅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: Optical Kit Encoders Need to Use Standalone Power Supply. Please Do Not Share Power Supply With DC Motor to Avoid Signal Interference.