增量型实心轴编码器 INCREMENTAL SHAFT ENCODER

外径Φ24 EXTERNAL DIAMETER Φ24

特点 FEATURES

Max.diameter Φ24mm
- 超小型外径仅24mm

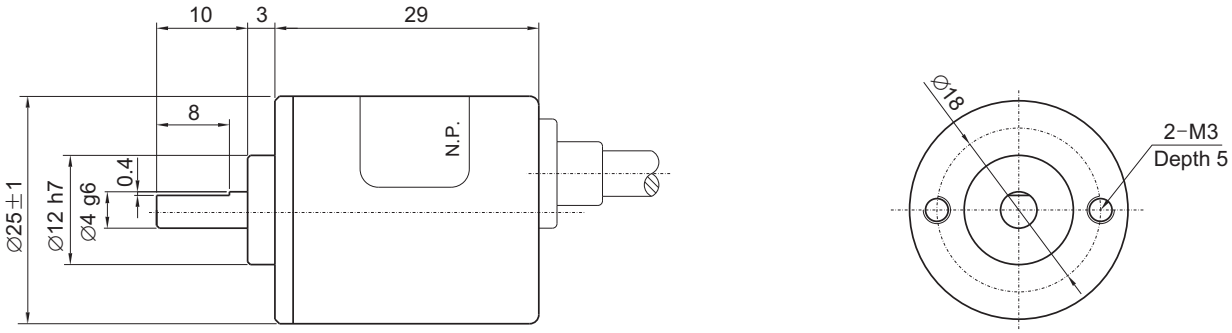
High anti-interference
- 高抗干扰性能

用途 APPLICATION

Automation
- 自动化

Industrial machine
- 工业设备

EX25S



订货说明 ORDERING INFORMATION

EX24S	—	4	E	10-30	F	256	B	M	—	/

轴径d Shaft diameter : 4

出线方式 Cable connection
- E = 电缆后出 Cable axial

电源电压 Supply voltage
- 05 = 05VDC
- 10-30 = 10-30VDC

输出电路 Output circuit
- E = 电压输出 Voltage
- C = 电流输出 Open collector
- F = 推挽输出 Push-pull
- L = 驱动器输出 Line driver TTL
- FL = 驱动器输出 Line driver HTL

脉冲数 Resolution
具体见产品参数表 See Encoder characteristics-Rosolution

输出信号 Output signal
- A = 只输出A路信号 Output only one signal A
- B = 输出A,B两路信号 Output two signals A and B

零位信号 Z signal
- M = Z 信号宽度为1T Z signal width 1T
- 0.5M = Z 信号宽度为0.5T Z signal width 0.5T
- 0.25M = Z 信号宽度为0.25T Z signal width 0.25T

特殊品 S1,S2 …… Special model S1,S2 …

▲没有的项目不标注！ No marked for not exist items!

ENX ELECTRIC 恩晓电气

产品参数 Encoder characteristics

型号 Type	EX24S				
机械参数 Machine characteristics					
最大转速 Max. speed(min^{-1})	6000r/min				
防护等级 Protection rating	IP50				
启动力矩 Starting torque	3x10^{-4} N.m Max..				
重量 Weight	0.05Kg（Without cable）				
最大径向负载 Max.shaft load radial	10N				
最大轴向负载 Max.shaft load axial	5N				
抗冲击 Shock resistance	1000m/s^2,6ms				
抗振动 Vibration resistance	100m/s^2,10...200Hz				
电气参数 Electrical characteristics					
输出电路 1) Output circuit	C	E	F	L	FL
电源电压 Supply voltage	5±0.25VDC,10-30VDC			5±0.25VDC	10-30VDC
消耗电流 Current consumption	80mA			150mA max.	
上升时间 Rise time t_r	1us		200ns	100ns	
下降时间 Fall time t_f	1us		200ns	100ns	
允许负载/通道 Permissible load/channel	Max. 30mA			Max. 20mA	
信号高电平 Single level high	Min.Vcc*70%			Vcc≥ 2.5V	Min.Vcc*70%
信号低电平 Single level low	Max.0.5V		Max.1V	Max.0.5V	
其他参数 Other characteristics					
工作温度 2) Operating temp.	-10℃...+70℃	-20℃...+85℃			
贮存温度 Operating temp.	-20℃...+80℃	-25℃...+100℃			
最高响应频率 Max. Output frequency	100KHz	100KHz	200KHz	400KHz	800KHz
脉冲数 P/R 3) Resolution P/R	1~360	50,100,125,128,200 256,500,512	600,750,800,900,1000 1080,1200,1500	1200,1500,1600,1800 2000,2160,2400,3000	2400,3000,3200,3600 4000,4096,4800,6000

1) 详细电路见 P10 1.3 See detailed circuit P10 1.3
输出波形见 P10~12 1.4 See output waveform P10~12 1.4

2) -40℃...+100℃ 可定制! -40℃...+100℃ can be customized!

3) 特殊脉冲数定做，请咨询工厂。
Special Resolution , when you order it, please consult the factory.

接线表 CONNECTION TABLE

E

输出电路形式 Output circuit	线色 Color	白 White	黑 Black	红 Red	绿 Green	黄 Yellow	粉 Pink	蓝 Blue	橙 Orange	屏蔽 Shield
C,E,F	信号 Signal	Vcc	0V	A	B	Z	–	–	–	–1)
L,FL	信号 Signal	Vcc	0V	A	B	Z	A\	B\	Z\	–1)

*1: G：屏蔽接壳；
Cable shield connect to the cover;
CG：壳与0V间接0. 01u/630V，屏蔽接壳；
Between the cover and 0V connect 0. 01u/630V,cable shield connect the cover;
–：屏蔽不接壳。
Cable shield donn't connect the cover。