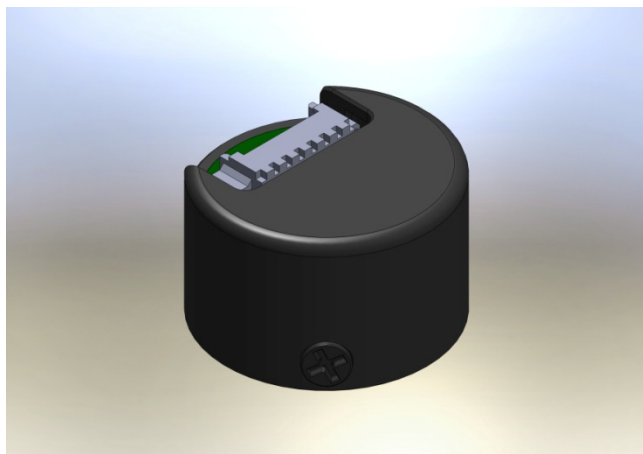


PS20A

Encoder modules



● Application

- Stepping Motor
- Automated Equipment
- Robot arm

● Feature

- Low cost
- Miniature Size
- Easy Mounting

● Resolution

200, 250, 256, 300, 360, 400, 500, 512, 600, 720, 800, 1000, 1024, 1200, 1440, 1600, 2000, 2048, 8192 P/R

● Electrical Spec

Resolution		200 ~ 2048		3000 ~ 8192
Output circuit		Z_VT、Z_OT	Z_LT	Z_LT
Supply voltage		4.5 ~ 5.5V	4.5 ~ 5.5V	4.5 ~ 5.5V
Supply current (Max.)		60mA	80mA	90mA
Signal		A, B, Z	A+, A-, B+, B-, Z+, Z-	A+, A-, B+, B-, Z+, Z-
Rise/fall time (Max.)		100ns	50ns	10ns
Frequency		220kHz	550kHz	1.5MHz
Output voltage	"H"	2.4V min.	2.4V min.	2.4V min.
	"L"	0.4V Max.	0.4V Max.	0.4V Max.
Max. output current		5mA	5mA	5mA

● Mechanical Spec

Hollow Diameter	Φ 2, 3, 4 mm
Housing Material	ABS+PC
Max. R.P.M.	6000 rpm*
Net Weight	30g

*R.P.M = Frequency * 60 / Resolution

● Environmental Spec

Operating Temp.	-20 ~ +85°C
Storage Temp.	-20 ~ +85°C
Operating Humidity	RH 85% Max. non-collecting
Shock	490 m/s ² , 3Dx2 times
Vibration	1.2mm, 10~55KHz, 3Dx30min.
Protection	IP 40

PS20A

Encoder modules

● Connection

Signal : A, B, Z (UL2464 、AWG26 、5pin + Shield)

Molex : 532610671 (Compatible headers)

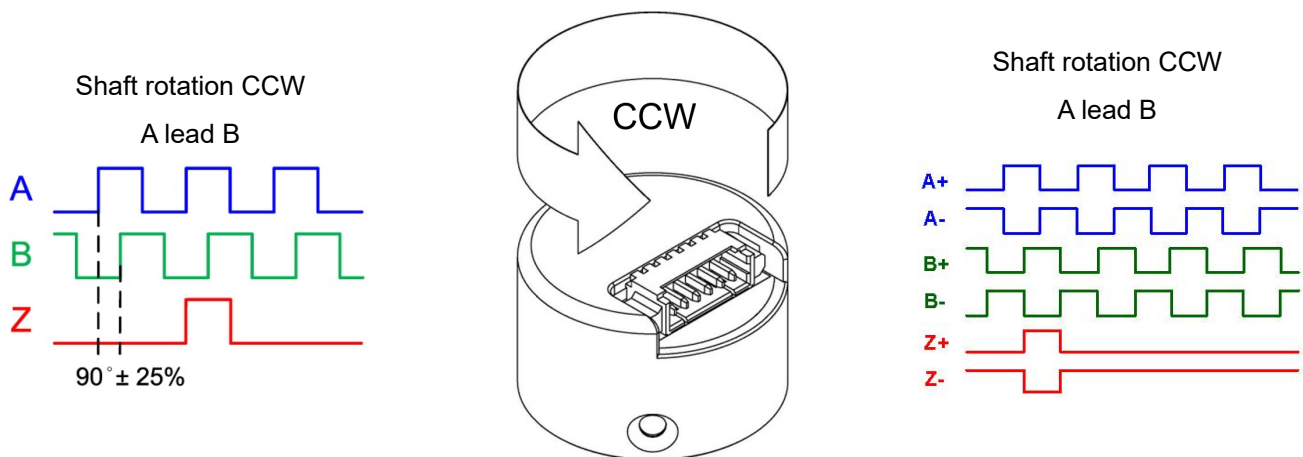
Red	Black	White	Green	Yellow	
Vcc	Gnd	A	B	Z	Shield

Signal : A+, A-, B+, B-, Z+, Z- (UL2464 、AWG30 、8pin + Shield)

JST : SM09B-SRSS-TB (Compatible headers)

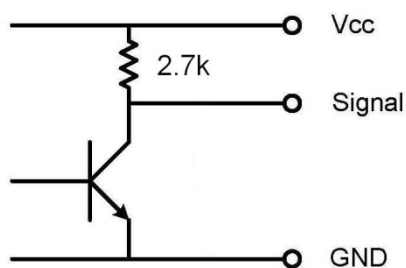
Red	Black	White	White/Black	Green	Green/Black	Yellow	Yellow/Black	
Vcc	Gnd	A+	A-	B+	B-	Z+	Z-	Shield

● Output Waveform

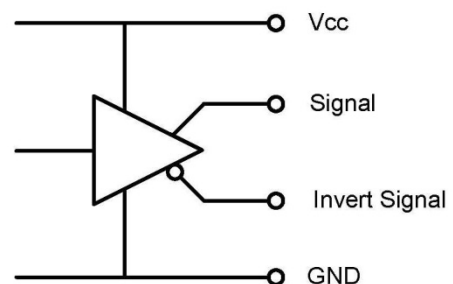


● Output circuit

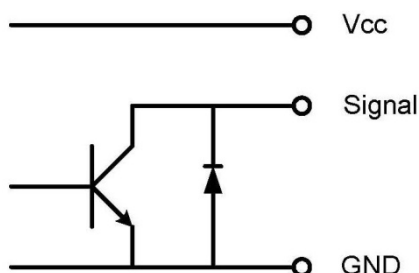
Voltage output



Line driver(AM26C31)



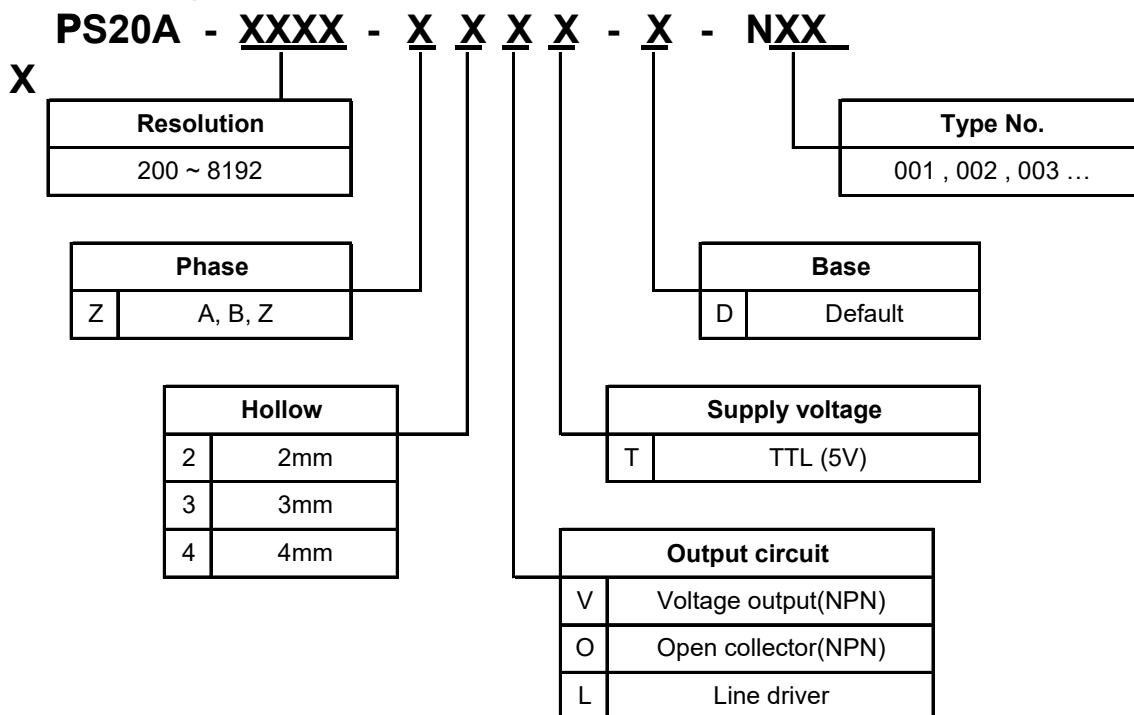
Open collector



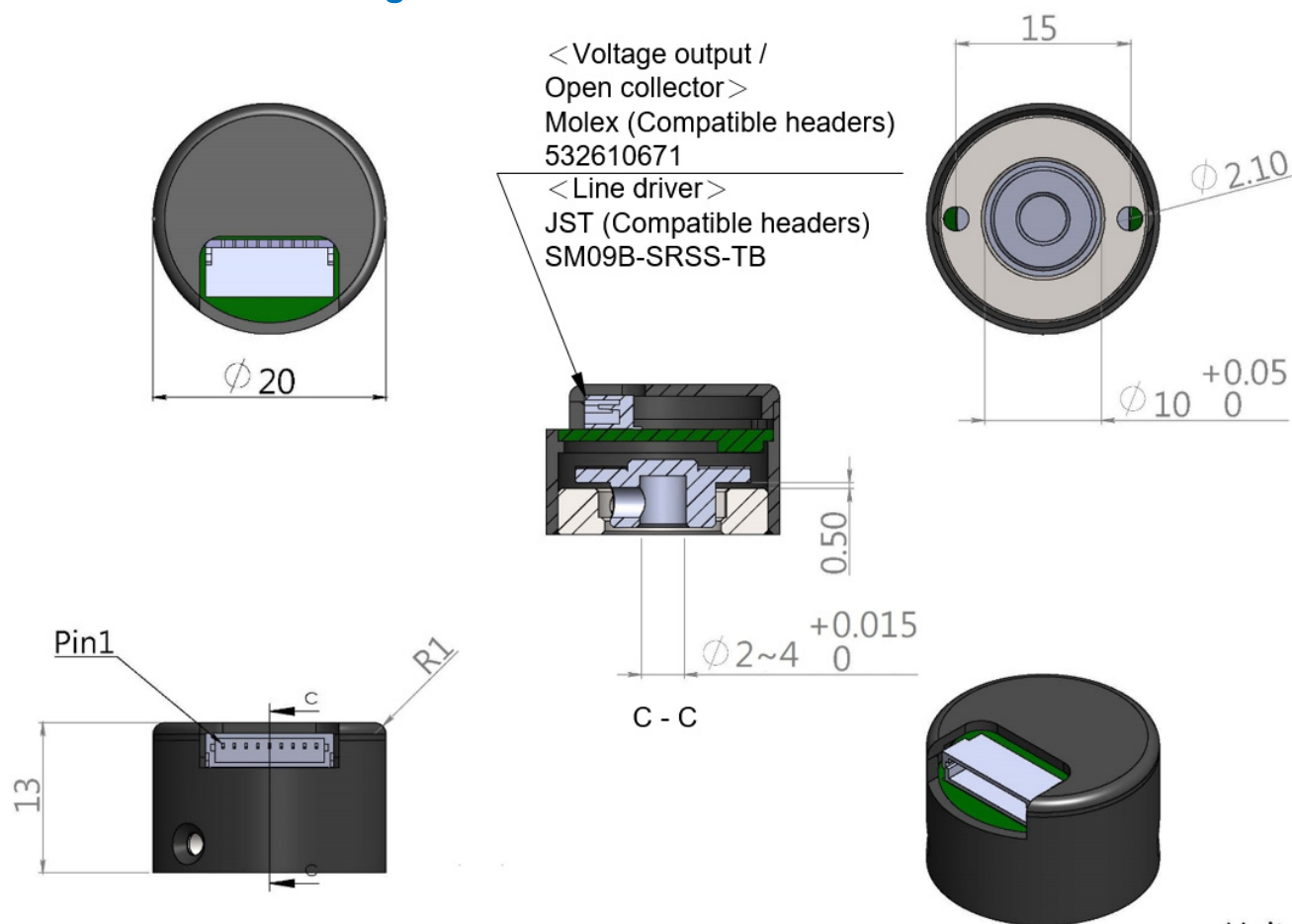
PS20A

Encoder modules

● Ordering Information



● Mechanical Drawing



PS20A

Encoder modules

● Cable Introduction

< Voltage output / Open collector >

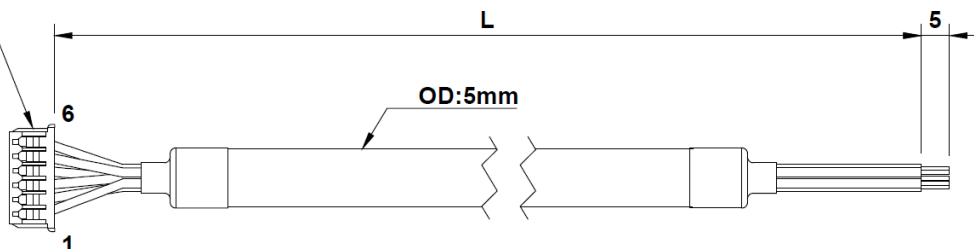
Molex (Compatible housing)

510210600

500798000

Color:

- 1.Red
- 2.Black
- 3.White
- 4.Green
- 5.Yellow
- 6.Shield



<Wire spec>

AWG26 · UL2464 · Sprial shielding

Cable length : 305 、 500mm

< Line driver >

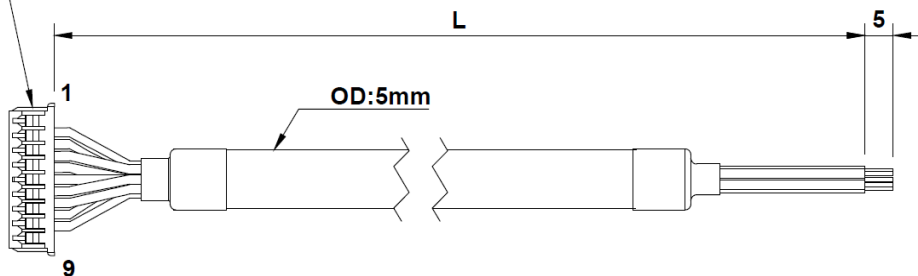
JST (Compatible housing)

SHR-09V-S-B

SSH-003T-P0.2-H

Color:

- 1.Red
- 2.Black
- 3.White
- 4.Whi/Bla
- 5.Green
- 6.Gre/Bla
- 7.Yellow
- 8.Yell/Bla
- 9.Shield



Stranded type:

- 1.Red+Black
- 2.White+Whi/Bla
- 3.Green+Gre/Bla
- 4.Yellow+Yell/Bla

<Wire spec>

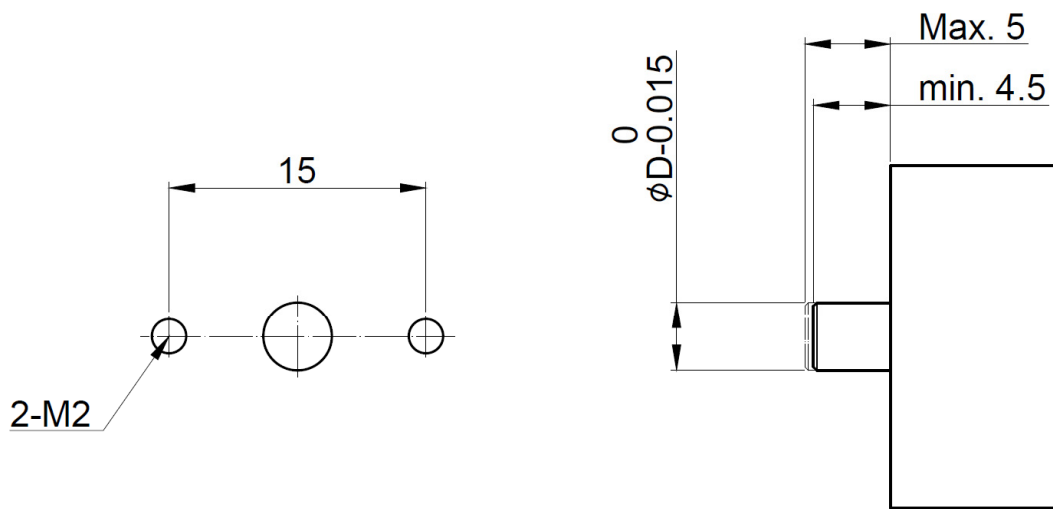
AWG30 · UL2464 · Sprial shielding

Cable length : 150 、 305 、 500mm

PS20A

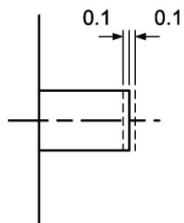
Encoder modules

● Setting Dimension

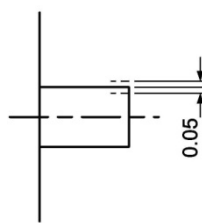


Unit :mm

Axial assembly tolerance



Radial assembly tolerance



Concentric angle tolerance

