

# CK58/ CK59/ CK60 Blind Hollow Shaft Encoder Series



FEATURES

- **Standard Encoder for Heavy Industrial Applications**
- **Blind Hollow Shaft up to  $\varnothing 15\text{mm}$**
- **2 to 10,000 Cycles Per Revolution**
- **Optional Index Channel**
- **IP64 Standard**
- **Output Circuitry**
  - **NPN Open-Collector**
  - **PNP Open-Collector**
  - **Push-Pull**
  - **Line Driver RS422**
  - **PP/LD Universal Circuit**
  - **Analog 1Vpp Sine/Cosine**
- **Custom Options Available**
  - **Custom Cable Lengths**
  - **IP65 Protection**
  - **Termination Connectors**

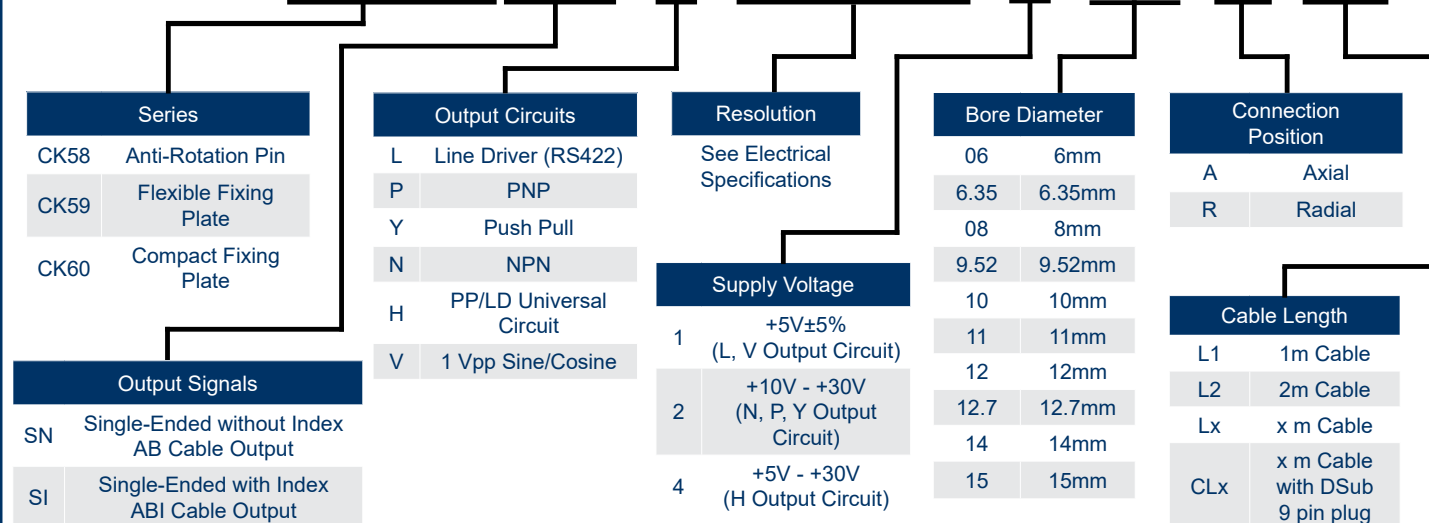


DESCRIPTION

The ENC-CK58/CK59/CK60 series is a blind hollow shaft encoder used for Heavy Industrial Applications. These optical encoders are offered with resolutions ranging from 2 to 10,000 CPR, three mounting options, six output circuitry options, input voltage up to 30VDC, optional index channel, and provide either single-ended, differential, or analog output. These encoders also fit shaft diameters up to 15mm, but reducing sleeves are available for smaller shaft diameters as small as 6mm. With various options to choose from, these encoders can be customized to fit your applications needs.

ORDERING INFORMATION

## ENC-CK58SN-L-02500-1-12-R-L1

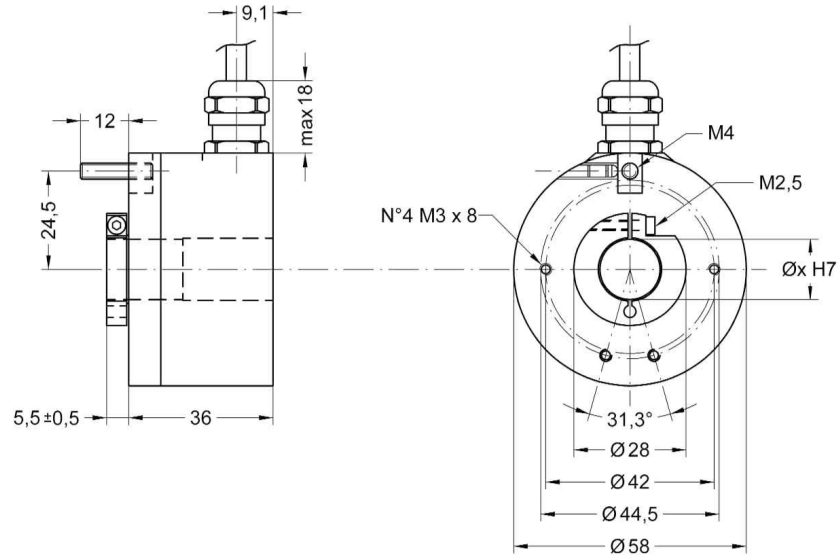


\*NOTE: Output Circuit option "L" or "V" must be matched with Supply Voltage option "1" (+5V±5%)

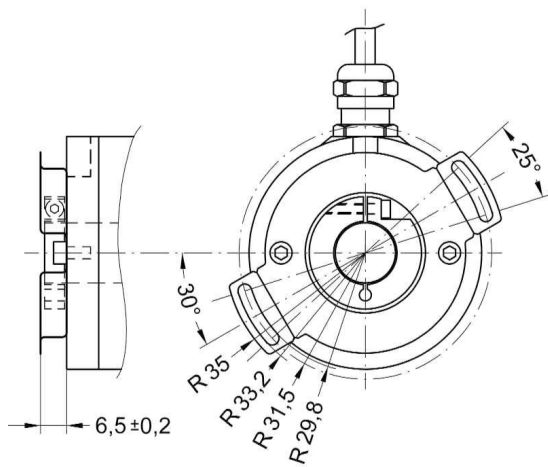
\*NOTE: Output Circuit option "N", "P", or "Y" must be matched with Supply Voltage option "2" (+10V - +30V)

\*NOTE: Output Circuit option "H" must be matched with Supply Voltage option "4" (+5V - +30V)

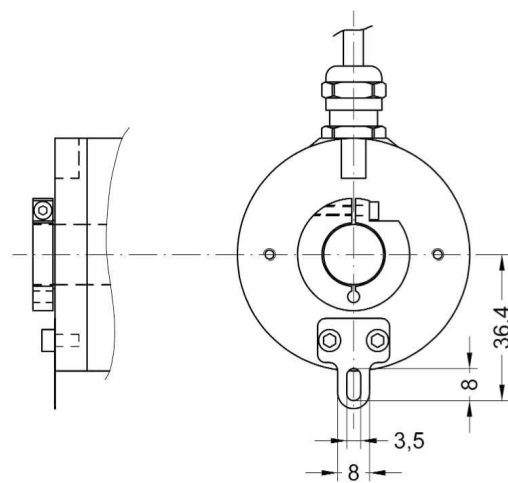
DIMENSIONS



ENC-CK58



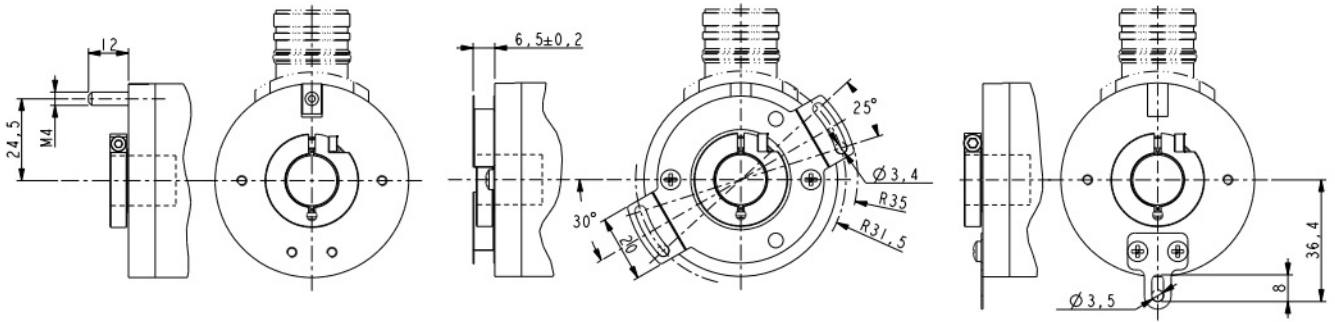
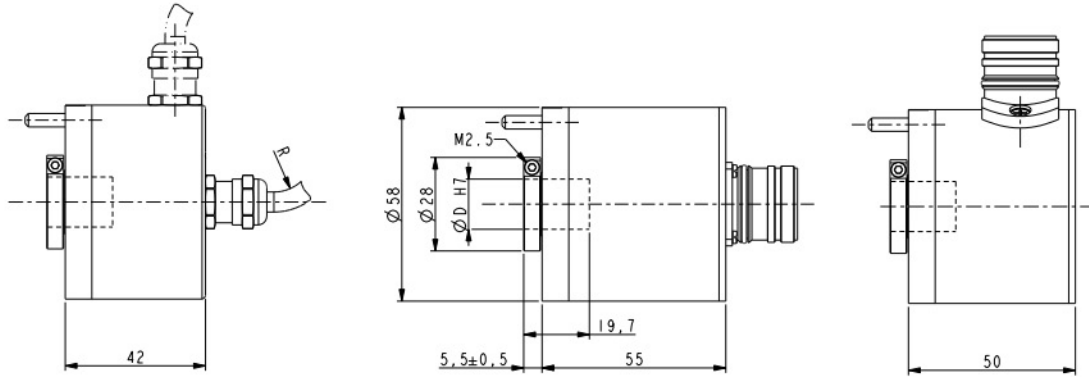
ENC-CK59



ENC-CK60

All units are in mm

DIMENSIONS



ENC-CK58

ENC-CK59

ENC-CK60

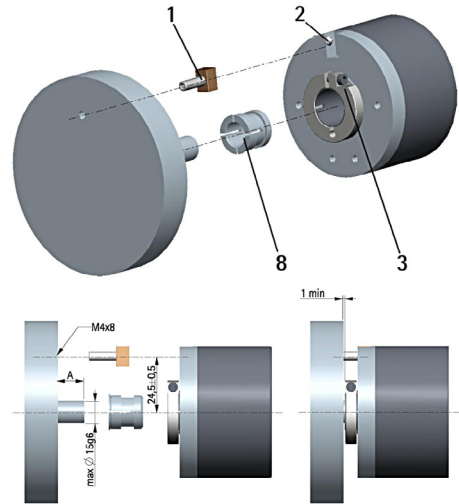
CONNECTOR INFORMATION

Differential Pinout	
Color	Description
Yellow	A
Blue	/A
Green	B
Orange	/B
White	I
Grey	/I
Red	+VDC
Black	OVDC
Shield	Shield

Single-Ended Pinout	
Color	Description
Brown	A
Blue	B
White	I
Red	+VDC
Black	OVDC
Shield	Shield

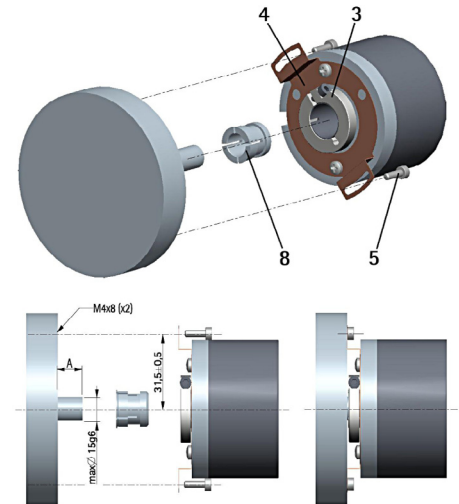
### CK58 Series

- Fasten the anti-rotation pin 1 to the rear of the motor.
- Mount the encoder on the motor shaft using the reducing sleeve 8, avoid forcing the encoder shaft.
- Insert the anti-rotation pin 1 to the slot on the flange of the encoder; this ensures its place by grub screw 2.
- Fix the collar 3 to the encoder shaft.



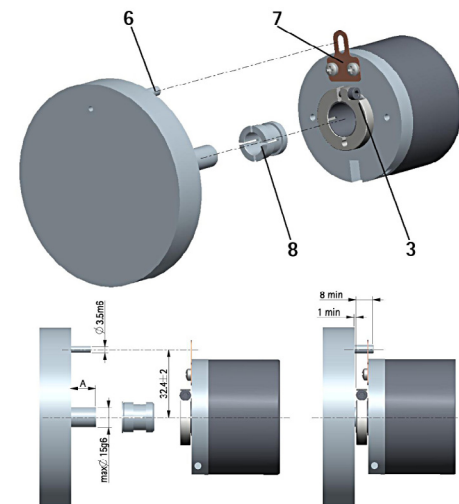
### CK59 Series

- Mount the encoder on the motor shaft using the reducing sleeve 8, avoid forcing the encoder shaft.
- Fasten the fixing plate 4 to the rear of the motor using two M4 cylindrical head screws
- Fix the collar 3 to the encoder shaft.



### CK60 Series

- Fix the tempered pin 6 to the rear of the motor
- Mount the encoder on the motor shaft using the reducing sleeve 8, avoid forcing the encoder shaft.
- Make sure the anti-rotation pin 6 is inserted properly into the fixing plate 7.
- Fix the collar 3 to the encoder shaft.



### Mechanical Specifications

Housing:	Anti Corodal, UNI EN AW-6082
Connection:	M23 Connector or 1m Cable Output
Shaft Rotational Speed:	6000 RPM / 12000 Temporary
Starting Torque at 20°C:	≤1 Ncm
Hollow Shaft Diameter:	14, 15 mm
Reducing Sleeves from Ø 15mm to:	6, 8, 9.52, 10, 11, 12 mm
Shaft Loading (Axial, Radial):	50N Max
Bearings Life:	10 <sup>9</sup> rev. min.
Electrical Connections:	M23 Connector or Cable Output 1m
Options:	Additional Cable, DSub 9 Pin Inline Connector
Weight:	0.6625lb

### Electrical Specifications

Resolution (CPR) (Output Circuit N,P,Y,L,H):	2, 4, 5, 6, 10, 12, 15, 16, 18, 20, 24, 25, 30, 35, 36, 39, 40, 45, 50, 60, 64, 70, 80, 90, 100, 120, 122, 125, 127, 128, 160, 142, 150, 180, 200, 216, 236, , 240, 250, 254, 256, 267, 270, 300, 314, 360, 375, 400, 410, 433, 435, 471, 500, 512, 600, 625, 628, 635, 720, 750, 784, 800, 875, 900, 946, 1000, 1024, 1068, 1200, 1250, 1270, 1440, 1500, 1800, 2000, 2048, 2250, 2400, 2500, 2600, 2700, 3000, 3500, 3600, 4000, 4096, 5000, 6000, 8192, 9000, 10000
Resolution (CPR) (Output Circuit V):	500, 512, 1000, 1024, 1250, 2000, 2048, 2500
Counting Frequency:	100kHz Max
Output Circuits:	NPN, PNP, Push-Pull, Universal Circuit, Sine/Cosine
Power Supply :	+5V±5%, +10V - +30V, +5V - +30V, (Sine/Cosine Only +5V±5%)
Consumption:	Typ. 70 mA, 100 mA Max
Output Current (Each Channel):	40 mA Max
Protection:	Against Inversion of Polarity and Against Shortcut (Except L, V Output)
EMC:	Electro-Magnetic Emission (According to EN 61000-6-4) Electro-Magnetic Immunity (According to EN 61000-6-2)
Optoelectric Life:	100,000 hrs min
Option:	Counting Frequency up to 300kHz, Line Driver 24/5V

Environmental Specifications	Min	Max	Units
Operating Temperature	-25	85	°C
Storage Temperature	-25	85	°C
Protection Level		IP64	

### Accessories

EDE9S	9 Pin DSub Mating Connector
-------	-----------------------------