FEATURES

- **Standard Encoder for Heavy Industrial Applications**
- **Through Shaft up to ø15mm**
- **4 to 5,000 Cycles Per Revolution**
- **Connector or Cable Output**
- **Optional Index Channel**
- **Output Circuitry**
  - **Push-Pull**
  - **Line Driver**
  - **PP/LD Universal Circuit**
- **IP64 Standard**
- **Custom Options Available**
  - **Custom Cable Lengths**
  - **IP67 Protection**
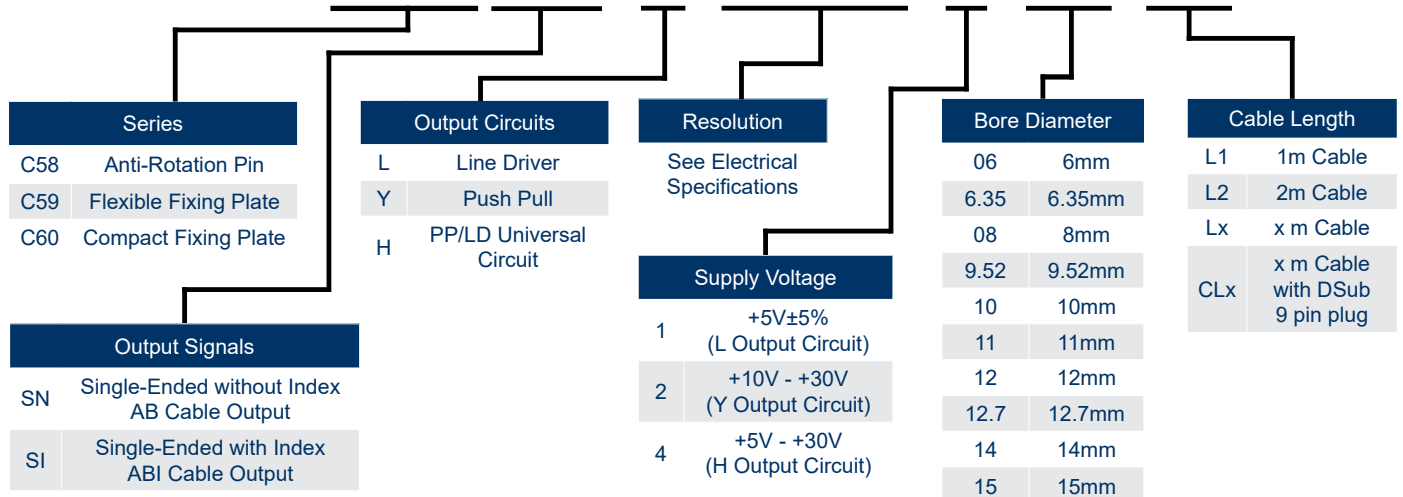 - **Termination Connectors**

DESCRIPTION

The ENC-C58/C59/C60 is a hollow shaft encoder used for heavy Industrial and feedback applications. These encoders are offered with resolutions ranging from 4 to 5000 CPR (model dependent). These encoders fit shaft diameters up to 15mm, but reducing sleeves are available for shaft diameters as small as 6mm. With various mounting options, three output circuitry options, and input voltage ranges, these encoders can be customized to fit your applications needs.

ORDERING INFORMATION

ENC-C58SN-L-1024-1-15-L1

Series	
C58	Anti-Rotation Pin
C59	Flexible Fixing Plate
C60	Compact Fixing Plate

Output Signals	
SN	Single-Ended without Index AB Cable Output
SI	Single-Ended with Index ABI Cable Output
DN	Differential without Index AB, /A /B Cable Output
DI	Differential with Index ABI, /A /B /I Cable Output

Output Circuits	
L	Line Driver
Y	Push Pull
H	PP/LD Universal Circuit

Resolution	
See Electrical Specifications	

Supply Voltage	
1	+5V±5% (L Output Circuit)
2	+10V - +30V (Y Output Circuit)
4	+5V - +30V (H Output Circuit)

Bore Diameter	
06	6mm
6.35	6.35mm
08	8mm
9.52	9.52mm
10	10mm
11	11mm
12	12mm
12.7	12.7mm
14	14mm
15	15mm

| Cable Length	
L1	1m Cable
L2	2m Cable
Lx	x m Cable
CLx	x m Cable with DSub 9 pin plug

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

*Note: Output Circuit option "Y" must be matched with Supply Voltage option "2" (+10V - +30V)
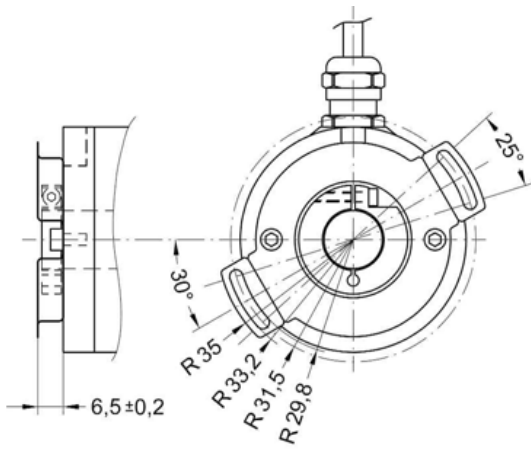
*Note: Output Circuit option "H" must be matched with Supply Voltage option "4" (+5V - +30V)

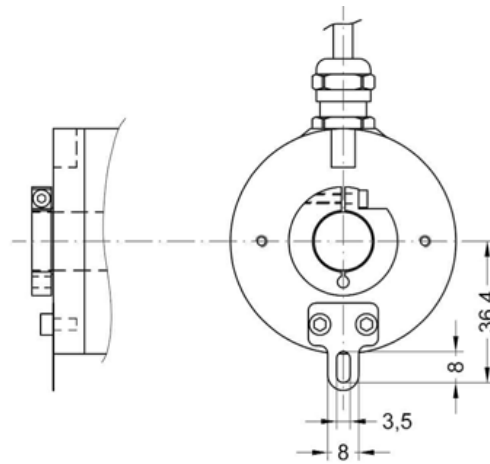*Note: For customization options, please contact our applications engineers.
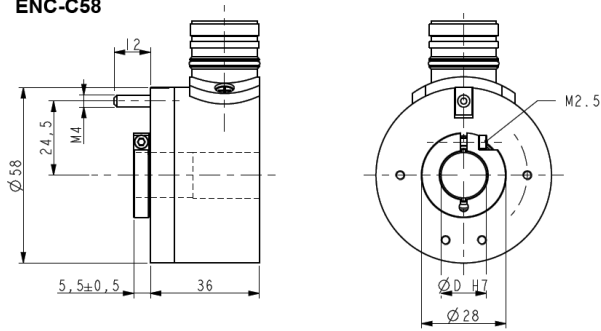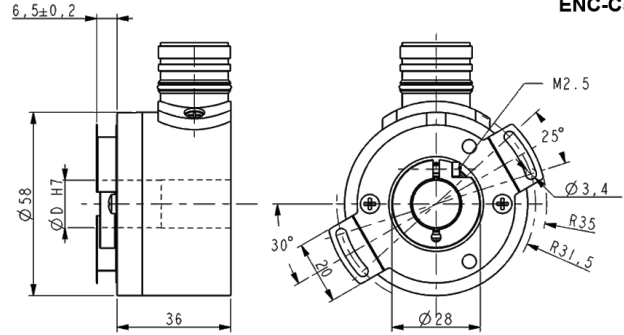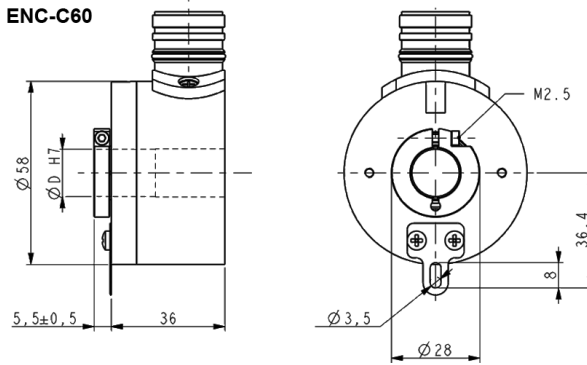
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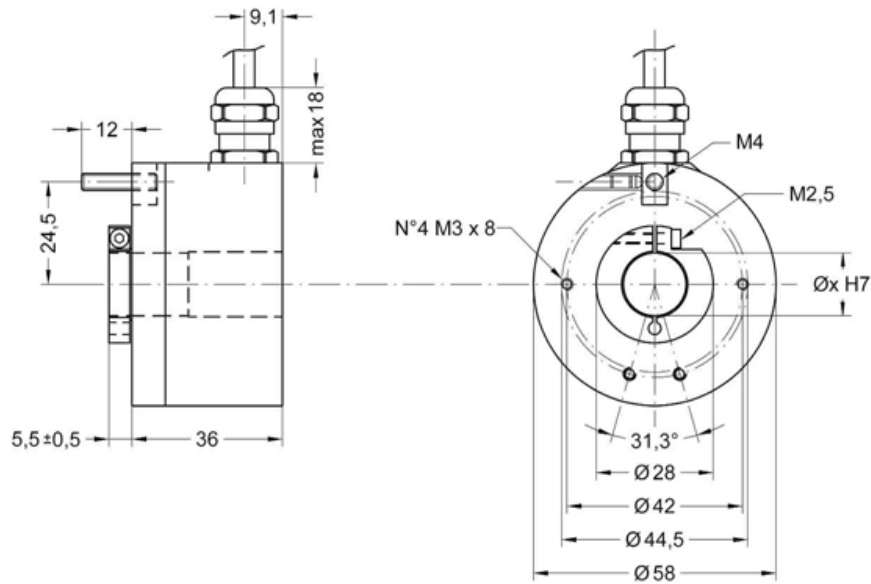
C58

C59

C60

All units are in mm

DIMENSIONSdfs

ENC-C58

ENC-C59

ENC-C60

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

C58 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.
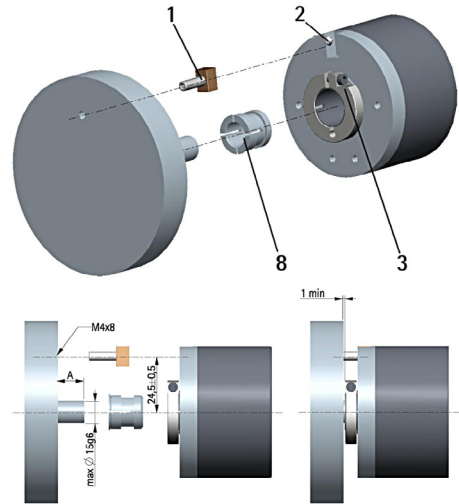
C59 Series

• 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.
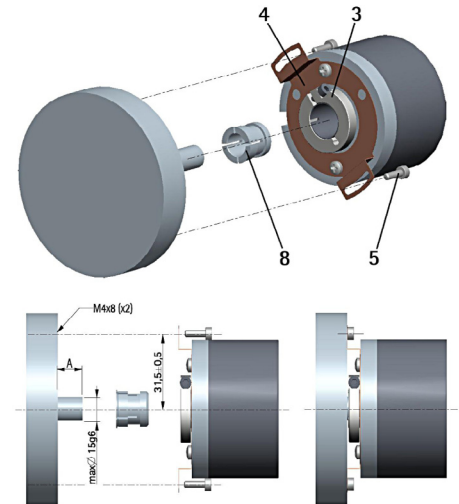
C60 Series

• 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 pin6 is inserted properly into the fixing plate 7.
• Fix the collar 3 to the encoder shaft.
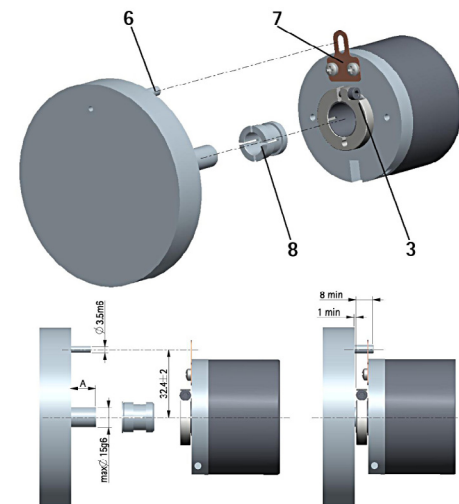
Mechanical Specifications

Housing:	Anti Corodal, UNI EN AW-6082
Shaft Rotational Speed:	6000 RPM Max
Starting Torque at 20°C:	≤1.5 Ncm
Hollow Shaft Diameter:	14, 15 mm
Shaft Loading (Axial, Radial):	30N Max
Moment of Inertia	30 gcm^2
Bearings Life:	10^9 rev. min.
Weight:	0.6625lb

Electrical Specifications

Resolution (Other CPR Upon Request):	4, 5, 10, 12, 15, 16, 20, 24, 25, 30, 35, 36, 40, 45, 50, 60, 70, 80, 90, 100, 120, 122, 125, 142, 150, 180, 200, 236, 250, 256, 267, 300, 314, 360, 400, 410, 433, 435, 471, 500, 600, 635, 720, 784, 875, 900, 1000, 1024, 1250, 1800, 2000, 2048, 2500, 3600, 4000, 4096, 5000
Power Supply :	+5V±5%, +10V to +30V, +5V to +30V
Output Circuits:	Push-Pull, Line Driver, PP/LD
Output Current (Per Channel):	40 mA Max.
Output Frequency:	60 kHz Max.
Input Current:	70 mA Max.
Protection:	Against Inversion of Polarity (Except +5V Version) Outputs are Protected Against Short-Circuit (Except Line Driver Version)
Optoelectronic Life:	100000 Hours Min

Environmental Specifications	Min	Max	Units
Operating Temperature	-20	70	°C
Storage Temperature	-20	80	°C
Protection Level		IP64	
Option		IP65 Protection (3000 RPM Max, Torque 1 Ncm)	

Custom Options

Protection	IP65
Cable Lengths	Up to 100m
EDE9S	9 Pin DSub Mating Connector