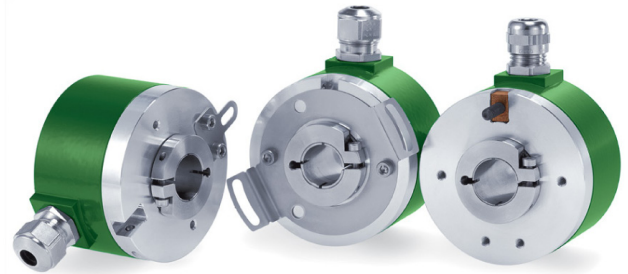


# MC58/ MC59/ MC60 Hollow Shaft Magnetic Encoder Series



## FEATURES

- **Standard Encoder for Heavy Industrial Applications**
- **Hollow Shaft up to  $\varnothing 15\text{mm}$**
- **20 to 10,000 Cycles Per Revolution**
- **Connector or Cable Output**
- **Single-Ended, Differential, or Analog Output**
- **Optional Index Channel**
- **IP65 Standard**
- **Output Circuitry**
  - **Push-Pull**
  - **Line Driver**
  - **PP/LD Universal Circuit**
- **Custom Options Available**
  - **Custom Cable Lengths**
  - **IP67 Protection**
  - **Termination Connectors**

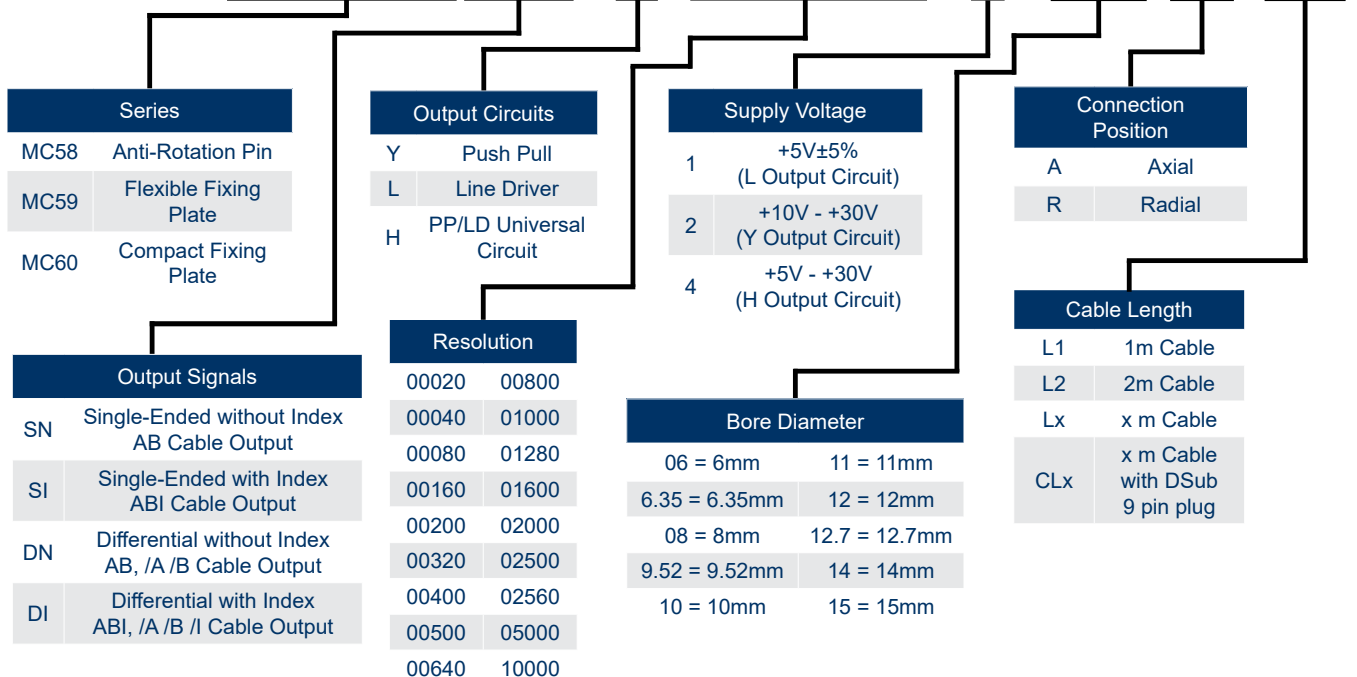


## DESCRIPTION

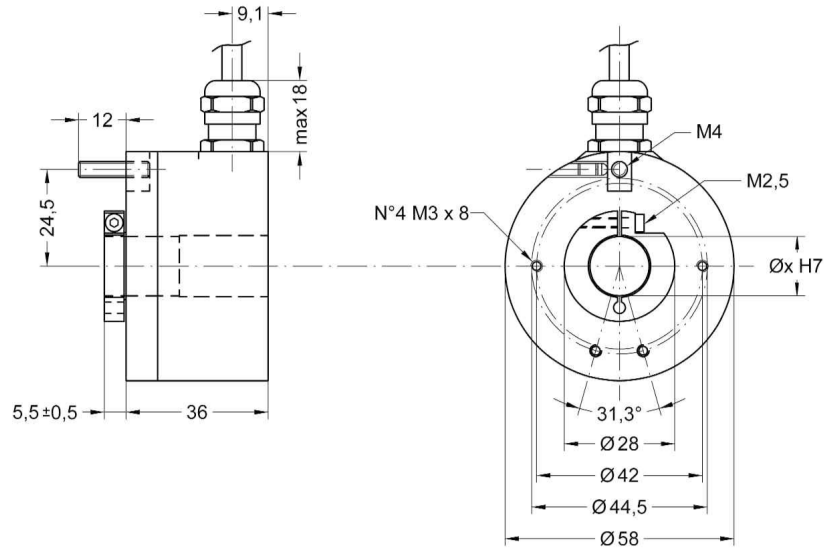
The ENC-MC58/MC59/MC60 is a hollow shaft encoder used for heavy Industrial and feedback applications. These magnetic encoders are offered with resolutions ranging from 20 to 10,000 CPR (model dependent). These encoders fit shaft diameters up to 15mm, but reducing sleeves are available for shaft diameters 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

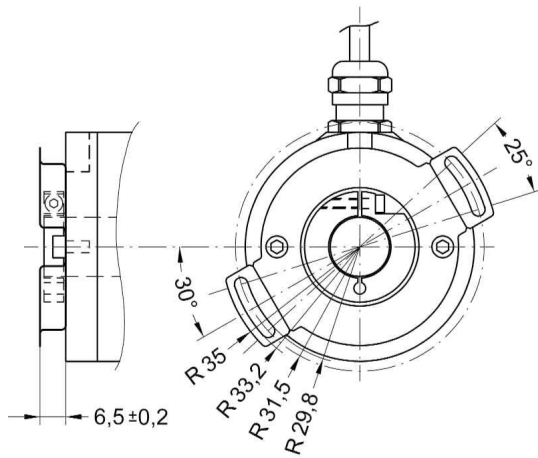
# ENC-MC58SN-L-02500-1-15-R-L1



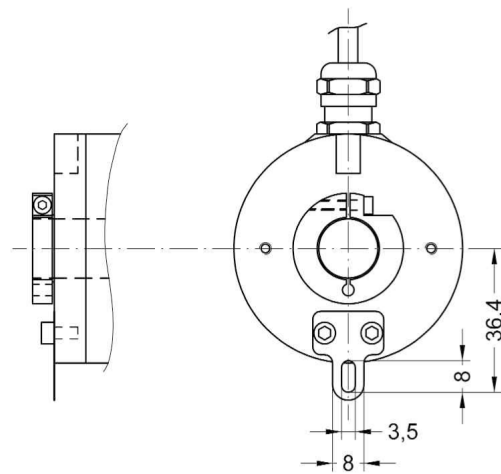
L011132



ENC-MC58



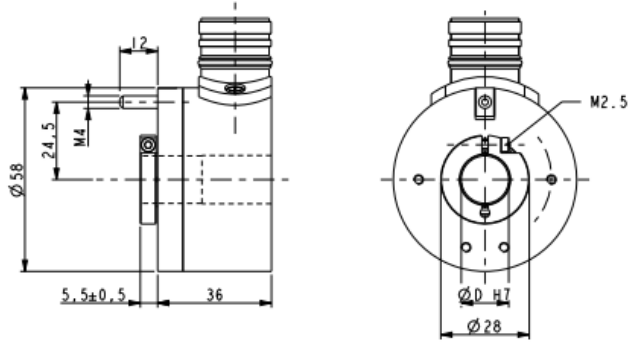
ENC-MC59



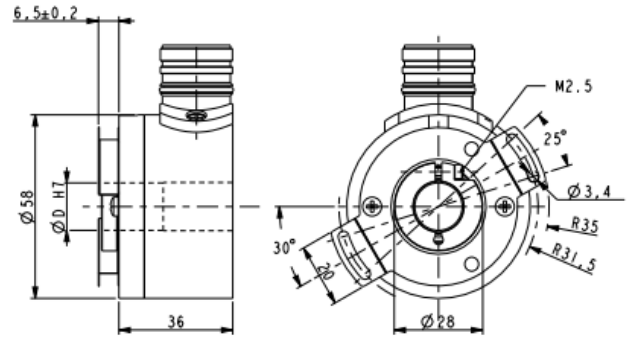
ENC-MC60

All units are in mm

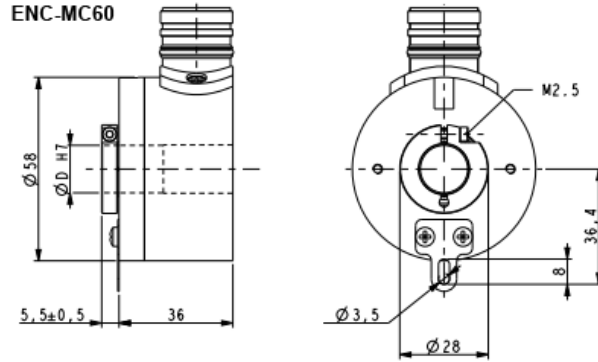
ENC-MC58



ENC-MC59



ENC-MC60

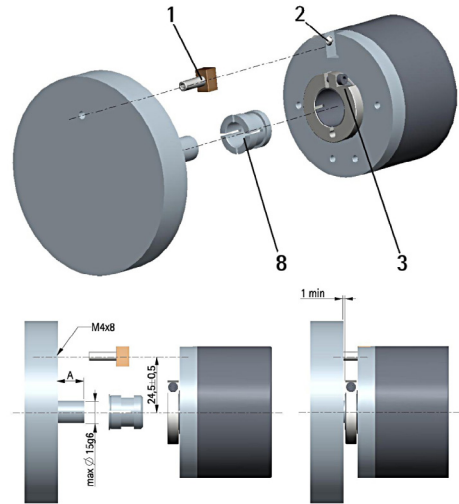


Differential Pinout	
Color	Description
Yellow	A
Blue	/A
Green	B
Orange	/B
White	I
Grey	/I
Red	+VDC
Black	OVDC
Shield	Shield

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

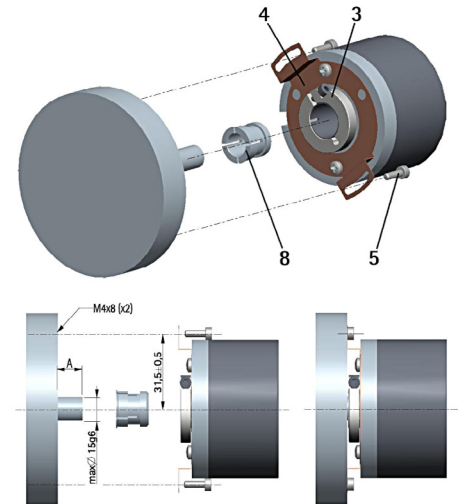
### MC58 Series

- 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.



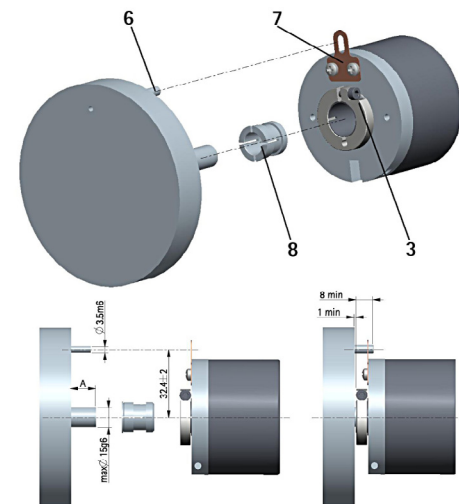
### MC59 Series

- 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.



### MC60 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
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 <sup>2</sup>
Bearings Life:	10 <sup>9</sup> rev. min.
Weight:	0.6625lb

### Electrical Specifications

Resolution (CPR): *Other CPR Upon Request	20, 40, 80, 160, 200, 320, 400, 500, 640, 800, 1000, 1280, 1600, 2000, 2500, 2560, 5000, 10000
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:	500 kHz Max.
Input Current:	60 mA Max.
Protection:	Against Inversion of Polarity (Except +5V Version) Outputs are Protected Against Short-Circuit (Except Line Driver Version)

Environmental Specifications	Min	Max	Units
Operating Temperature	-25	85	°C
Storage Temperature	-25	85	°C
Protection Level		IP64	
Option		IP67 Protection (Only with Cable Output)	

### Custom Options

Protection	IP67
Cable Lengths	Up to 100m
EDE9S	9 Pin DSub Mating Connector