General purpose, multi turn encoder
Single turn, high accuracy
Multi turn, high performance version

#encoder #profinet #singleturn #multiturn @likaelectronic
EM58 • HS58 • HM58 PT

Series

- EM58 series general purpose multi turn
- HS58 high accuracy single turn series
- HM58 high performance multi turn series
- Fast and precise optical sensing
- Optical multi turn part
- Encoder profile PNO No 3.162 V4.1
- Dynamically assigned IP address via DCP
- Stainless steel version available on request

### Environmental Specifications

Shock: 100 g, 6 ms
Vibrations: 10 g, 5-2000 Hz
Protection: IP65
Operating temperature range: -25°C +85°C [-13°F +185°F]
Storage temperature range: -40°C +100°C [-40°F +212°F]

### Mechanical Specifications

Dimensions: see drawing
Shaft diameter: Ø 6, 8, 9.52, 10, 12 mm
Hollow shaft diameter: Ø 14, 15 mm
Reducing sleeves BR1-xx from Ø 15 mm to: Ø 6, 8, 9.52, 10, 11, 12 mm
Shaft loading (axial, radial): 40 N max.
Shaft rotational speed: 6000 rpm max.
Bearings life: 400 x 10⁶ rev. min.
(10⁶ rev. min. with shaft loading of 20 N max.)
Weight: ~ 350 g (12.3 oz)

### Electrical Specifications

Resolution: HS: 262144 cpr
EM: 8192 cpr x 16384 turns
HM: 65536 cpr x 16384 turns
Accuracy: HS, HM: ± 0.007° - EM: ± 0.5°
Counting frequency: 150 kHz max.
Power supply: +10V +30V
Power consumption: 1,7 W max.
Interface: Profinet IO
Programmable parameters: see user manual
Communication modes: RT2, RT3 (isochronous)
Cycle time: ≥ 1ms
Protection: against inversion of polarity and short-circuit
EMC: electro-magnetic immunity, according to: EN 61000-4-2
EN 61000-4-4
Optoelectronic life: 100,000 h min.

### Materials

Flange: anticorodal, UNI EN AW-6082
Housing: anticorodal, UNI EN AW-6082
Bearings: ABEC 5
Shaft: stainless steel, non magnetic, UNI EN 4305
Light source: GaAl diodes

### Accessories

- PAN/PGF: flexible couplings
- BR1: reducing sleeves
- LKM-386: fixing clamps
- EC-M12ME-EC-GN-5: M12 cordset with 5 m cable
- EC-M12ME-EC-GN-10: M12 cordset with 10 m cable
- EXC-M12ME-EC-GN-5-RJ8-EC: M12+RJ8 cordset w/ 5 m cable
- EXC-M12ME-EC-GN-10-RJ8-EC: M12+RJ8 cordset w/ 10 m cable
- EC-M12PP-LK-PBS-5: M12 power supply cordset with 5 m cable
- EC-M12PP-LK-PBS-10: M12 power supply cordset with 10 m cable
### Order code - Single turn

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- **RESOLUTION**
  - 18 = 262144 cpr
- **SHAFT DIAMETER**
  - 6 = 6 mm
  - 8 = 8 mm
  - P9 = 9.52 mm, 3/8”
  - 10 = 10 mm
  - 12 = 12 mm
  - 14 = 14 mm (HSCxx)
  - 15 = 15 mm (HSCxx)

### Order code - Multi turn

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- **RESOLUTION**
  - 13/16384 = 8192 cpr x 16384 turns (EMxx)
  - 16/16384 = 65536 cpr x 16384 turns (HMxx)
- **SHAFT DIAMETER**
  - 6 = 6 mm
  - 8 = 8 mm
  - P9 = 9.52 mm, 3/8”

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