**EAM 58 F - 63 F / G PROFIBUS**

**BLIND HOLLOW SHAFT MULTITURN ABSOLUTE ENCODER**

Industry standard multiturn absolute encoder for factory automation applications.

- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn (8192 ppr) + 12 bit multiturn (4096 turns))
- Power supply up to +28 VDC with Profibus DP as electronic interface
- Intelligent status leds
- Terminal box or M12 connectors for fast setup
- Blind hollow shaft up to 15 mm diameter
- Mounting by stator coupling, spring or anti-rotation pin

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<th>R</th>
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**Specifications**

- Optical sensor technology (OptoASIC + gears)
- 25 bit total resolution (13 bit single turn (8192 ppr) + 12 bit multiturn (4096 turns))
- Power supply up to +28 VDC with Profibus DP as electronic interface
- Intelligent status leds
- Terminal box or M12 connectors for fast setup
- Blind hollow shaft up to 15 mm diameter
- Mounting by stator coupling, spring or anti-rotation pin
ELECTRICAL SPECIFICATIONS

Multiturn resolution
1 ... 4096 turns programmable during commissioning

Singleturn resolution
2 ... 4096 / 2 ... 8192 ppr programmable during commissioning

Power supply
12/28 = 11.4 ... 29.4 V DC

Current consumption
without load 300 mA

Output typ
RS 485 galvanically isolated

Max bus frequency
12 Mbaud

Diagnostic features
frequency warning position warning / alarm please refer to installation guide for more informations

Max frequency
25 kHz LSB

Accuracy
± 1/2 LSB

Counting direction
programmable during commissioning

Start-up time
500 ms

Electromagnetic compatibility
IEC 61000-6-2
IEC 61000-6-4

MECHANICAL SPECIFICATIONS

Bore diameter
ø 8" / 9" / 10" / 12" / 14 / 15 mm

Enclosure rating
IP 54

Max rotation speed
3000 rpm

Shock
50 G, 11 ms (IEC 60068-2-27)

Vibration
10 G, 10 ... 2000 Hz (IEC 60068-2-6)

Moment of inertia
5 x 10^-6 kgm^2

Starting torque
(at +20°C / +68°F) < 0.02 Nm

Body material
EN-AW 2011 aluminum

Shaft material
1.4305 / AISI 303 stainless steel

Housing material
painted aluminium

Bearings
2 ball bearings

Bearings life
10^9 revolutions

Operating temperature
0° ... +60°C (+32° ... +140°F)

Storage Temperature
-15° ... +70°C (+5° ... +158°F)

Fixing torque for collar clamping
1.5 Nm recommended

Weight
650 g (22.93 oz)

CONNECTIONS

Function | S3 connector 5-pin (power supply) | S3 connector 5-pin (line out) | S3 connector 5-pin (line in)
--- | --- | --- | ---
+ Vdc | 2 |  |  
0 Volt | 4 |  |  
signal A (out) | 2 |  |  
signal B (out) | 4 |  |  
signal A (in) | 2 |  |  
signal A (in) | 4 |  |  

S3 connector (M12 5 pins A coded) power supply view solder side FV
S3 connector (M12 5 pins B coded) line out view solder side FV
S3 connector (M12 5 pins B coded) line in view solder side MV

www.eltra-trade.com

www.eltra-encoder.eu

tel: +421 552 601 099
e-mail: info@eltra-trade.com