

## IXARC Absolute Rotary Encoder

### UCD-M200B-1516-Y06S-PRM



#### Interface

Interface	Modbus RTU
Programming Functions	Resolution, preset, direction, node ID, baud rate

#### Outputs

Output Driver	Line Driver RS485
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#### Electrical Data

Supply Voltage	10 - 30 VDC
Reverse Polarity Protection	Yes
Short Circuit Protection	Yes
EMC: Emitted Interference	DIN EN 61000-6-4
EMC: Noise Immunity	DIN EN 61000-6-2
MTTF	350 years @ 40 °C

#### Sensor

Technology	Magnetic
Resolution Singleturn	16 bit
Resolution Multiturn	15 bit
Multiturn Technology	Self powered magnetic pulse counter (no battery, no gear)
Accuracy (INL)	$\pm 0.0878^\circ$ ( $\leq 12$ bit)
Sense Signal (Default)	Clockwise shaft movement (front view on shaft)

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Code	Binary
<b>Environmental Specifications</b>	
Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation
<b>Mechanical Data</b>	
Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spray resistance)
Flange Type	Synchro, ø 58 mm (Y)
Flange Material	Aluminum
Shaft Type	Solid, Length = 10 mm
Shaft Diameter	ø 6 mm (0.24")
Shaft Material	Stainless Steel V2A (1.4305, 303)
Max. Shaft Load	Axial 40 N, Radial 110 N
Minimum Mechanical Lifetime (10 <sup>8</sup> revolutions with Fa/Fr)	400 (20 N / 40 N)
Rotor Inertia	≤ 30 gcm <sup>2</sup> [≤ 0.17 oz-in <sup>2</sup> ]
Friction Torque	≤ 5 Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	≤ 3000 1/min
Shock Resistance	≤ 100 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	≤ 10 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 10 g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	56,7 mm (2.23")
Weight	315 g (0.69 lb)
<b>Electrical Connection</b>	
Connection Orientation	Radial
Connector	M12, Male, 5 pin, a coded
<b>Product Life Cycle</b>	
Product Life Cycle	New
Approval	CE + cULus


**Connection Plan**

SIGNAL	CONNECTOR	PIN NUMBER
GND	Connector 1	3
Power Supply	Connector 1	2
Signal GND	Connector 1	1
RS485 A +	Connector 1	4
RS485 B -	Connector 1	5

**Connector-View on Encoder**  
**Dimensional Drawing**
[2D Drawing](#)
**Accessories**
**Connectors & Cables**

POS M12 5pin-A Female+5m PUR Cable  
 POS M12 5pin-A Female+2m PUR Cable  
 POS M12 5pin-A Female+10m PUR Cable  
 10m PUR Cable, 5pin, A-Coded, f IP69K  
 M12, 5pin A-Coded, Female

More

**Couplings**

Coupling Bellow Type-06-06  
 Coupling Bellow Type-06-10  
 Coupling Bellow Type-06-08  
 Coupling Bellow Type-06-(3/8")  
 Coupling Bellow Type-06-(1/4")  
 Coupling Jaw Type-06-06

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- Coupling Jaw Type-06-10
- Coupling Jaw Type-06-08
- Coupling Jaw Type-06-12
- Coupling Jaw Type-06-(1/4")
- Coupling Jaw Type-06-(3/8")
- Coupling Disc Type-06-06
- Coupling Disc Type-06-10
- More
- Adapter Flanges
- Mounting Bracket for Synchro Flange w/ fixtures
- Clamping Rings
- Clamp Disc w/ Eccentric Hole-4pcs
- Clamp Disc w/ Centred Hole-4pcs

**Got questions? Need an individual solution? We are here to help!**

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