

## IXARC Absolute Rotary Encoder

### UCD-C901B-0013-Y10S-PRM



#### Interface

Interface	SAE J1939
Profile	J1939 specific
Manual Functions	Programmable
Features	Round Axis
Transmission Rate	min. 20 kBaud, max. 1 MBaud
Interface Cycle Time	$\geq 1$ ms
Programming Functions	Resolution, preset, direction, node ID, baud rate

#### Outputs

Output Driver	Transceiver (ISO 11898), Galvanically Isolated by Opto-Couplers
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#### Electrical Data

Supply Voltage	9 - 30 VDC
Power Consumption	$\leq 1.2$ W
Start-Up Time	<500 ms
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	240 years @ 40 °C

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**Sensor**

Technology	Magnetic
Resolution Singleturn	13 bit
Accuracy (INL)	$\pm 0.0878^\circ$ ( $\leq 12$ bit)
Code	Binary

**Environmental Specifications**

Protection Class (Shaft)	IP66/IP67
Protection Class (Housing)	IP66/IP67
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Storage Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

**Mechanical Data**

Connection Cap Material	None
Housing Material	Steel
Housing Coating	Wet coating (RAL 9006 White Aluminium) + Cathodic corrosion protection (>720 h salt spay resistance)
Flange Type	Synchro, $\varnothing$ 58 mm (Y)
Flange Material	Aluminum
Shaft Type	Solid, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
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)	420 (20 N / 40 N), 145 (40 N / 60 N), 100 (40 N / 80 N), 55 (40 N / 110 N)
Rotor Inertia	$\leq 30$ gcm <sup>2</sup> [ $\leq 0.17$ oz-in <sup>2</sup> ]
Friction Torque	$\leq 5$ Ncm @ 20 °C, (7.1 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 3000$ 1/min
Shock Resistance	$\leq 100$ g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 10$ g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 10$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	56,7 mm (2.23")
Weight	325 g (0.72 lb)

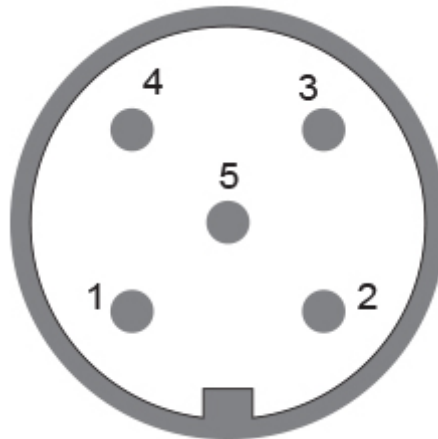
**Electrical Connection**

Connection Orientation	Radial
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Connection Type	Cable / Connector
Connector	M12, Male, 5 pin, a coded

### Product Life Cycle

Product Life Cycle	New
Approval	CE + cULus



### Connection Plan

SIGNAL	PIN NUMBER
Power Supply	2
GND	3
CAN High	4
CAN Low	5
CAN GND	1

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

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M12, 5pin A-Coded, Female

More

Couplings

Coupling Disc Type-10-12

Coupling Bellow Type-10-10

Coupling Bellow Type-06-10

Coupling Bellow Type-08-10

Coupling Bellow Type-10-12

Coupling Bellow Type-10-(1/4")

Coupling Bellow Type-10-(3/8")

Coupling Jaw Type-06-10

Coupling Jaw Type-08-10

Coupling Jaw Type-10-12

Coupling Jaw Type-10-(1/4")

Coupling Jaw Type-10-(3/8")

Coupling Jaw Type-10-10

Coupling Disc Type-06-10

Coupling Disc Type-10-10

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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