

## IXARC Absolute Rotary Encoder

### UCD-LK00B-1516-G10G-PAV



#### Interface

Interface	IO-Link Specification V1.1
Profile	Smart Sensor Profile 2nd Edition
Diagnostics	Device Status, Internal Temperature, Operating Hours Counter, Movement Hours Counter, Power Cycles Counter
Features	Position and Velocity Output, 5x SW CAM, Connector Pin 2 as Preset, Reset or HW CAM
Transmission Rate	COM3 230,4 kBaud
Interface Cycle Time	2.3 ms
Programming Functions	Singleturn and Total Resolution, Velocity Filter, Preset Value, HW and SW CAM, Counting Direction, Pin 2 I/O-Configuration

#### Electrical Data

Supply Voltage	18 - 32 VDC
Start-Up Time	< 1 s
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	283 years @40 °C

#### Sensor

Data Sheet

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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)
Code	Binary

### Environmental Specifications

Protection Class (Shaft)	IP68/IP69K
Protection Class (Housing)	IP68/IP69K
Operating Temperature	-40 °C (-40 °F) - +85 °C (+185 °F)
Humidity	98% RH, no condensation

### Mechanical Data

Housing Material	Stainless Steel V4A (1.4404, 316 L)
Housing Coating	No Coating
Flange Type	Synchro, $\varnothing$ 42 mm Heavy Duty
Flange Material	Stainless steel V4A (1.4404, 316 L)
Shaft Type	Solid, Length = 20 mm
Shaft Diameter	$\varnothing$ 10 mm (0.39")
Shaft Material	Stainless Steel V4A (1.4112, 440 B), hardened
Max. Shaft Load	Axial 300 N, Radial 300 N
Minimum Mechanical Lifetime ( $10^8$ revolutions with Fa/Fr)	7.6 (300N / 300 N), 10 (270 N / 270 N), 200 (100 N / 100 N)
Friction Torque	$\leq 3$ Ncm @ 20 °C (4.2 oz-in @ 68 °F)
Max. Permissible Mechanical Speed	$\leq 6000$ 1/min
Shock Resistance	$\leq 200$ g (half sine 11 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 30$ g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 30$ g (10 Hz - 1000 Hz, EN 60068-2-6)
Length	64,9 mm (2.56")
Weight	400 g (0.88 lb)

### Electrical Connection

Connection Orientation	Axial
Connector	M12, Male, 5 pin, a coded, with LED



## Product Life Cycle

Product Life Cycle	New
Approval	CE + cULus

## Connection Plan

SIGNAL	CONNECTOR	PIN NUMBER
Power Supply	Connector 1	1
GND	Connector 1	3
Digital Input / Output	Connector 1	2
IO-Link C/Q	Connector 1	4
Not Connected	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 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

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More

Displays

AP21-00 SSI Display

AP21-DA SSI Display (4 dig. + analog o/p)

DiMod-P SSI Display

Configuration/Programming Tools

SSI2USB Adapter DB15 (VA01)

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