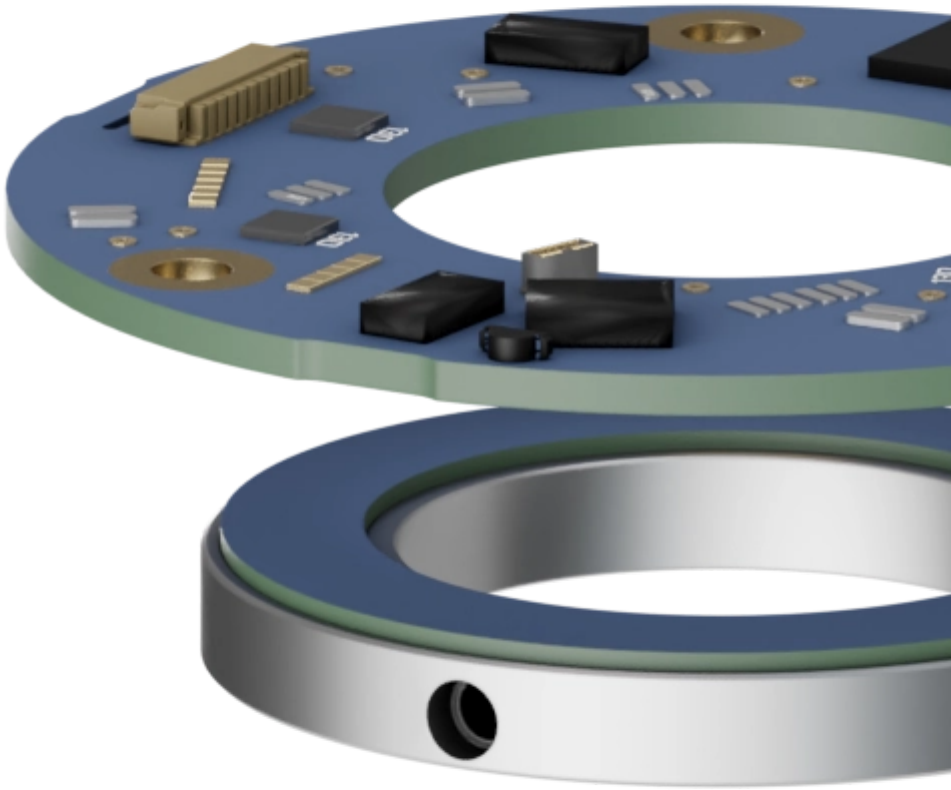
variables/V-color

# Encoder | INDUCTIVE Rotary | IND-ROT-055-C21-WB-AL



## System Data

| | IND-ROT-055-C21-WB-AL |
|---|---|
| **Type** | Axial, frameless, true absolute INDUCTIVE encoder INDUCTIVE-ROTARY-FLUX GmbH (patentpending) |
| **Standard Resolution** | 21 bits, 524’288 2’097’152 ppr(beforex4) cpr(afterx4) |
| **ENOB in entire mounting tolerance range** | 19 bits |
| **High Accuracy** | Enhanced accuracy can be achieved depending on the mounting setup |
| **Standard Accuracy** | ±90”, ±0.025°, ±450µrad |
| **Thickness** | 5.80 |
| **Hysteresis** | none |
| **Repeatability** | 1 resolution count |
| **Position update rate and signal latency** | Real-time |
| **Power-up Time** | max. 0.8 sec |

## Electrical Data

**Supply voltage** Option5V:min.4.35Vdc.max.6Vdc

| | |
|---|---|
| **Reverse polarity protection** | yes |
| **Current Consumption** | max.100mA@ 5Vdc, max. 30mA@24Vdc |

## Mechanical Data

| | |
|---|---|
| **Stator Base Material** | FR4 (CTE~18ppm/°C) |
| **Stator Weight** | 7.00 g |
| **Rotor Base Material** | Stainless steel (CTE~10ppm/°C) |
| **Rotor Weight** | 7.00 g |
| **Vibration** | EN 60068-2-6, 20 g, 55 .. 2000 Hz |
| **Shock** | EN 60068-2-27, 200 g, 6 ms |

## Mounting Tolerances

| | |
|---|---|
| **Nominal Axial (air-gap)** | 0.50 mm |
| **Axial Tolerance** | 0.30 mm (0.20 mm to 0.80 mm) |
| **Radial Tolerances** | 0.20 mm |

## Environmental Data

| | |
|---|---|
| **Temperature Range - Standard Operating** | -20°C .. +85°C |

| | |
|---|---|
| **Temperature Range - Standard Storage** | -20°C .. +85°C |
| **Temperature Range - Extended Operating** | -40°C .. +105°C |
| **Temperature Range - Extended Storage** | -55°C .. +125°C |
| **Ingress Protection** | IP00 |
| **EMC Immunity** | complies with EN IEC 61000-6-2 |
| **EMC Emission** | complies with EN IEC 61000-6-4 |

**Advantages**

- Plug-n-play
- No field calibration required
- Wide mounting tolerances
- High accuracy

**Benefits**

- Low installation cost
- Low integration effort
- Easy installation

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