PRODUCT DATASHEET

# ES-EN-C13-S010-B18

Industrial Sensing Component

Hollow Magnetic Encoders | 45 mm Standard-Profile Hollow Magnetic Encoder Series

## Product Overview

Industrial Sensing Component with accuracy 0.05 °, axis count 1 and battery Mode Current 35 µA.

## Key Specifications

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Accuracy | 0.05 | ° |
| Axis count | 1 | |
| Battery Mode Current | 35 | µA |
| Battery Supply | 2.7 to +3.6 | V |
| Bore diameter | 18 | mm |
| Current Consumption | 60 | mA |
| Installation Method | Axial hollow | |
| Encoder Type | Absolute Magnetic Encoder | |
| FPC Connection Available | Yes / 1 | |

# Technical Specifications

| PARAMETER | SPECIFICATION | UNIT |
|---|---|---|
| **PERFORMANCE** | | |
| Accuracy | 0.05 | ° |
| Documented speed threshold | 20000 | rpm |
| Maximum Rotation Speed | 20000 | rpm |
| Temperature Drift | 0.01 | ° per 3 °C |
| Update Frequency | 27 | kHz |
| Angle Resolution Options | 16 or 17 | bit |
| Repeatable Accuracy | 0 to ±1 | bit |
| **ELECTRICAL** | | |
| Battery Mode Current | 35 | µA |
| Current Consumption | 60 | mA |
| FPC Connection Available | Yes / 1 | |
| Wire-to-Board Connection Available | Yes / 1 | |
| Battery Supply | 2.7 to +3.6 | V |
| Startup Time | 15 | ms |
| Supported Output Interfaces | SSI; BiSS-C; RS485; RS422; T485; BUS; PERIOD | |

# Technical Specifications

| PARAMETER | SPECIFICATION | UNIT |
|---|---|---|
| **ELECTRICAL** | | |
| Power Supply | 4.5 to +5.5 | V |
| **MECHANICAL** | | |
| Bore diameter | 18 | mm |
| Mechanical profile | Standard Profile | |
| Stator outside diameter | 45 | mm |
| Series Size | 20 | mm class |
| Rotor Inner Diameter | 18 | mm |
| Stator Mounting Pitch Diameter | 36 | mm |
| Stator Shield Outer Diameter | 30 | mm |
| Mechanical Configuration | Standard | |
| Stator Outer Diameter | 45 | mm |
| **ENVIRONMENTAL** | | |
| Operating Temperature Options | -40 to 85; -40 to 105; -40 to 125 | °C |
| **CONFIGURATION** | | |
| Installation Method | Axial hollow | |
| Encoder Type | Absolute Magnetic Encoder | |
| **ADDITIONAL SPECIFICATIONS** | | |
| Axis count | 1 | |

# Dimensional & Integration Overview

## Mechanical Overview

| PARAMETER | VALUE | UNIT |
|---|---|---|
| Bore diameter | 18 | mm |
| Mechanical profile | Standard Profile | |
| Stator outside diameter | 45 | mm |
| Series Size | 20 | mm class |
| Rotor Inner Diameter | 18 | mm |
| Stator Mounting Pitch Diameter | 36 | mm |

View Product Online  Request Engineering Data  Request a Quote

01 Specifications are subject to change without notice. Verify the current product configuration before final design release.

02 2D drawings, CAD files and integration documentation are controlled documents and are supplied separately on request.