

Kit Encoder

KCD-BCX3B-1617-JE4F-GRQ



Interface

Interface	BiSS C
Manual Functions	Preset via cable or connector
Interface Cycle Time	$\geq 50 \mu\text{s}$
Diagnostics	Error and Warning Bits, Register Values
Programming Functions	Via config pin: calibration, WIEGAND sensor test, filter selection, preset value, temperature
Remarks	Version 33 or 43: μC STM32G4 or STM32F3

Outputs

Output Driver	RS422
Connector	BM08B-NSHSS-TBT (JST)

Electrical Data

Supply Voltage	4.5 - 5.5 VDC
Power Consumption	$\leq 0.7 \text{ W}$
Clock Input	RS422
Clock Frequency	80 kHz - 10 MHz
Reverse Polarity Protection	No
Short Circuit Protection	No

EMC: Emitted Interference	The kit encoder is a sub-assembly and not to be considered an independent system. Therefore, compliance with CE requirements has to be ensured by the integrator for the overall set-up.
Max. Permissible Electric Speed	12000 1/min
EMC: Noise Immunity	The kit encoder is a sub-assembly and not to be considered an independent system. Therefore, compliance with CE requirements has to be ensured by the integrator for the overall set-up.
MTTF	20 years @ 40 °C

Sensor

Technology	Magnetic
Resolution Singleturn	17 bit
Resolution Multiturn	16 bit
Accuracy (INL)	±0.0878° (≤12 bit)
Code	Binary

Environmental Specifications

Protection Class (Housing)	IP10
Min Temperature	-40 °C (-40 °F)
Max Temperature	+105 °C (221 °F)

Mechanical Data

Housing	Preassembled
Housing Material	Steel
Housing Coating	Cathodic corrosion protection (>720 h salt spray resistance)
Shaft Type	Hub
Kit Shaft Dimension	4 mm
Shaft Material	Brass
Shaft Fastening Options	Shaft Set Screw
Weight	0 (0.00 lb)
Rotor Inertia	≤ 2 gcm ² [≤ 0.01 oz-in ²]
Shock Resistance	≤ 200 g (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	≤ 20 g (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	≤ 30 g (10 Hz - 1000 Hz, EN 60068-2-6)

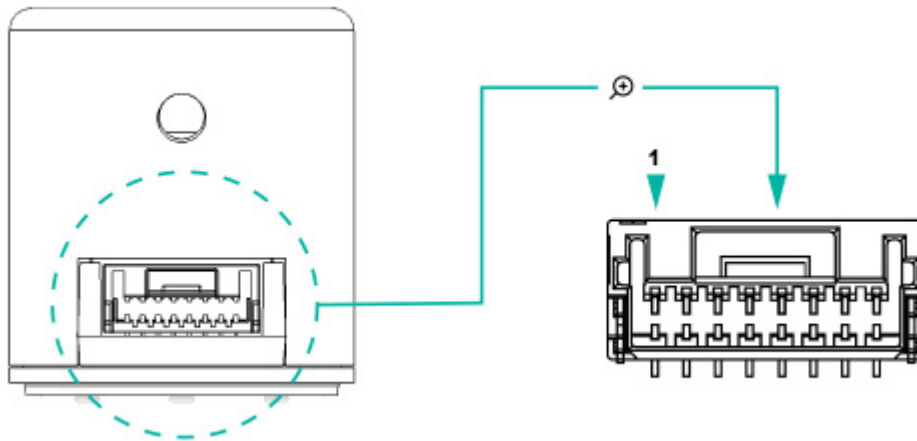
Certification

Data Sheet

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Approval

No CE



Connection Plan

SIGNAL	PIN NUMBER
GND	1
Preset	2
Config	3
Data+	4
Data-	5
Clock-	6
Clock+	7
Power Supply	8

Connector-View on Encoder

Dimensional Drawing

[2D Drawing](#)

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



Contact Us

Data Sheet

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The picture and drawing are for general presentation purposes only. Please refer to the "Download" section for detailed technical drawings. All dimension in [inch] mm. © FRABA B.V., All rights reserved. We do not assume responsibility for technical inaccuracies or omissions. Specifications are subject to change without notice.