

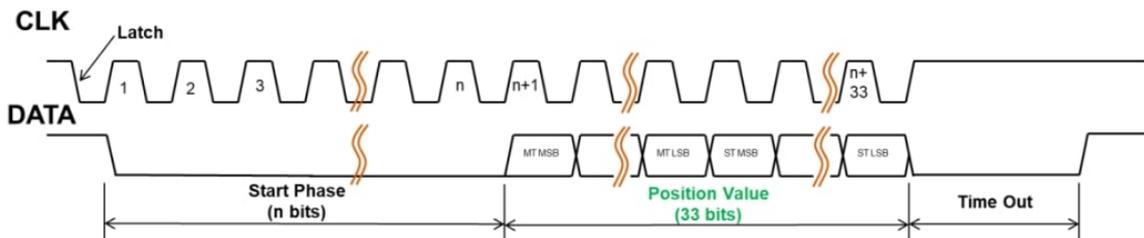
Kit Encoder

KCD-S1X3B-1617-JE4F-GRQ



Interface

Interface	SSI
Manual Functions	Preset via cable or connector
Interface Cycle Time	$\geq 50 \mu\text{s}$
SSI Format	0000000MMMMMMMMMMMMMMMMSSSSSSSSSSSSSSSSSSSS
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	≤ 0.7 W
Clock Input	RS422
Clock Frequency	300 kHz - 1 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

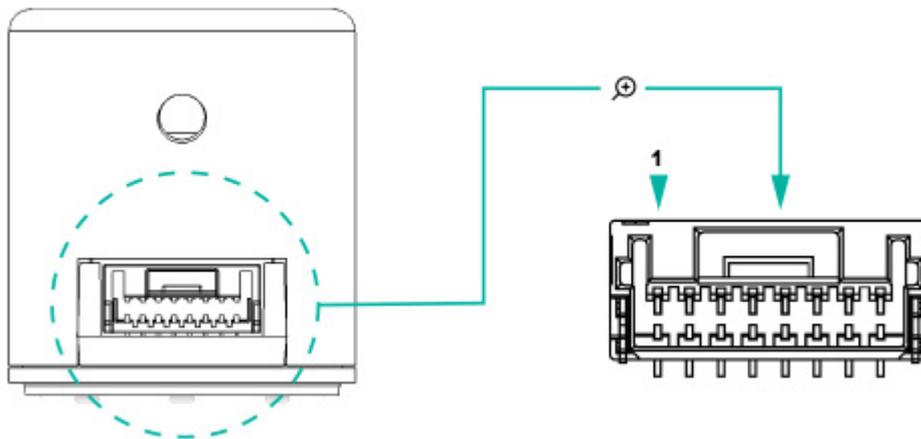
Data Sheet

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Weight	0 (0.00 lb)
Rotor Inertia	$\leq 2 \text{ gcm}^2$ [$\leq 0.01 \text{ oz-in}^2$]
Shock Resistance	$\leq 200 \text{ g}$ (half sine 6 ms, EN 60068-2-27)
Permanent Shock Resistance	$\leq 20 \text{ g}$ (half sine 16 ms, EN 60068-2-29)
Vibration Resistance	$\leq 30 \text{ g}$ (10 Hz - 1000 Hz, EN 60068-2-6)

Certification

Approval	No CE
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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

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.