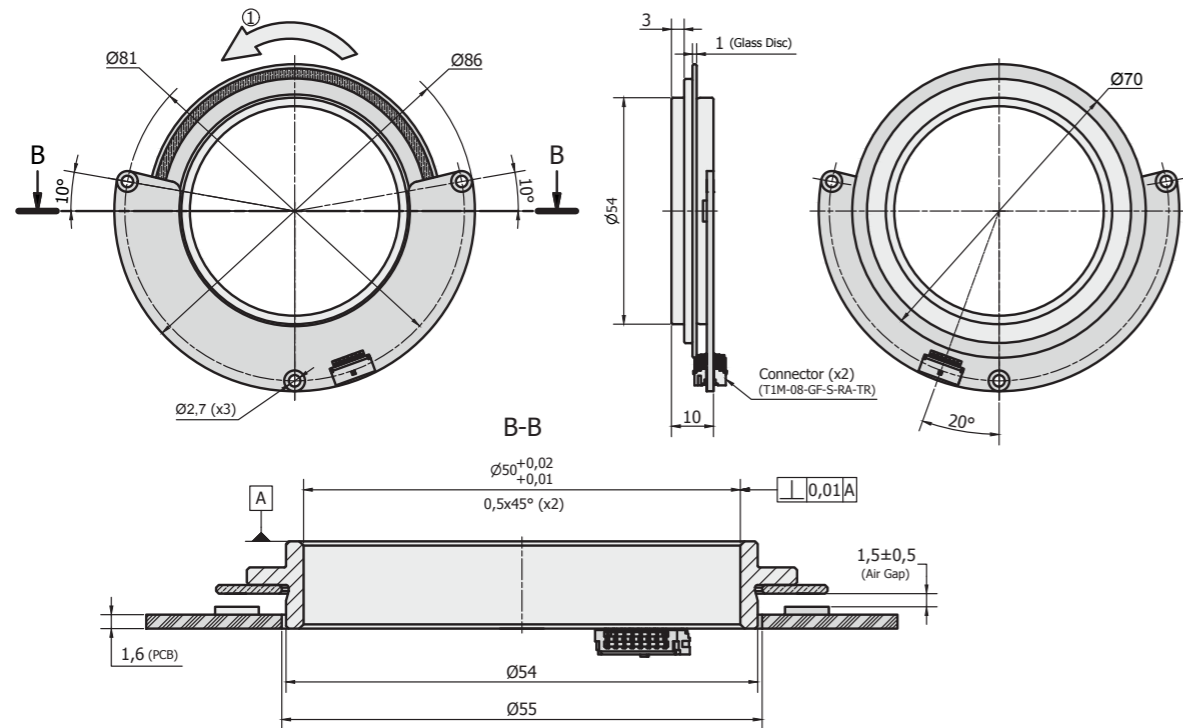


The Encoder-AN is a high-resolution, singleturn absolute encoder with a 22 Bit BiSS C interface. The encoder consists of several optical reflectance sensors arranged at an angle of 180 degrees to each other.

This allows to eliminate mechanical errors in the application, such as the runout of the measured shaft, by using subsequent electronics.



MECHANICAL DATA

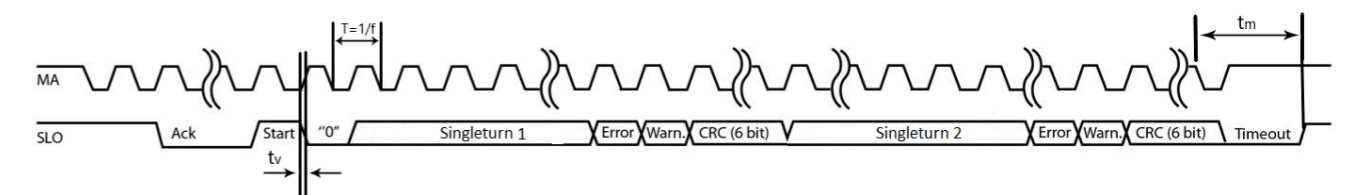
Permissible axial motion of measured shaft	0.03 mm	Permissible vibration (55 to 2000 Hz)	$\leq 100 \text{ m/s}^2$
Permissible radial runout of measured shaft	0.03 mm	Permissible shock (11 ms)	$\leq 200 \text{ m/s}^2$
Moment of inertia of rotor	$< 30 \times 10^{-6} \text{ kgm}^2$	Operating temperature	-40 - 100°C
Maximum weight	0.05 kg	Storage temperature	-40 - 100°C
Type of protection (IEC 529)	IP00		
Maximum humidity (non-condensing)	98 %		

ELECTRICAL DATA

Resolution	22 bit	Monoflop time	timeout + T/2 us
Output code	Binary	Rise and fall time	4 - 15 ns
Data interface	BiSS-C	Analog signals	$\sim 1\text{Vpp}$ (1024ppr)
Accuracy	$\leq \pm 20''$	Cutoff frequency	$< 240 \text{ kHz}$
Supply voltage	+5V $\pm 5\%$	Amplitude output voltage	0.6 - 1.2 V
Supply current	80 - 220 mA	Maximum output current	22 mA
Start up time	13 ms	Light source	LED
Scan ratio of T	40 - 60 %		
Time lag	80 ns		

INTERFACE

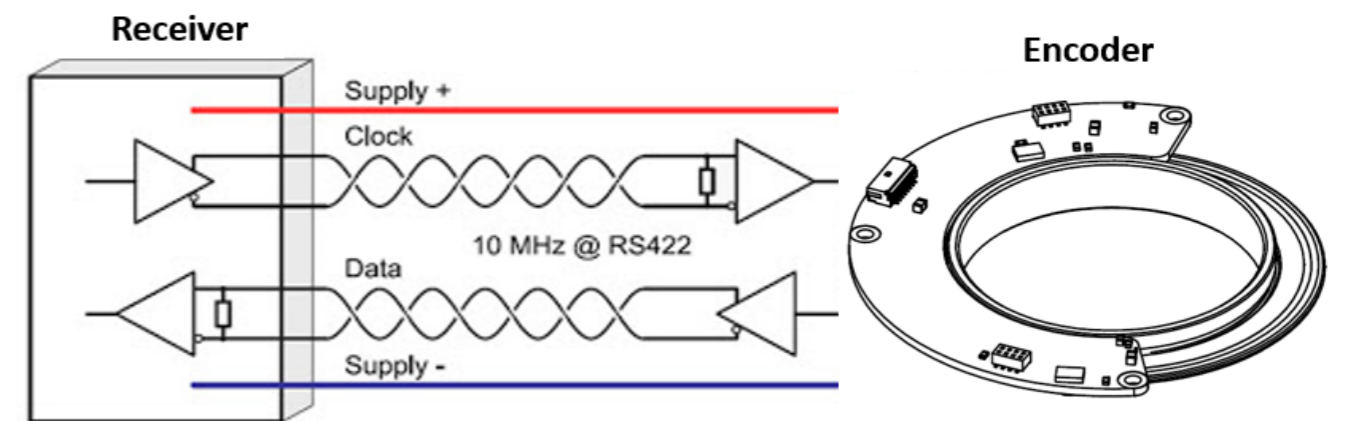
DATA TRANSFER BISS-C



The position data increases when the shaft rotates in the direction shown in the drawing

DESCRIPTION	DATA
T_{timeout}	0.075 us - 24 us
Clock frequency	62.4 kHz - 20 MHz

TYPICAL OPERATING CIRCUIT FOR BISS-C



This is just one example of a tailor made encoder kit. For other mechanical, electrical configurations or different interface options please contact us directly: sales@precizika.com