Encoders

magnetic Encoder, digital outputs,
3 channels, 1 - 1024 pulses

For combination with
Stepper Motors:
DM40100R, DM52100N, DM52100R
Brushless DC-Servomotors:
DM71048R

Series PE32-1024

		PE32-1024	
Lines per revolution	*N*	1 024	
Number of pulses		4 096	
Signal outputs		2 + 1 Index	Channels
Supply voltage (TTL)	U_{DD}	3 ... 5,5	V
Supply current		25	mA
Electrostatic discharge		2 000	V
Operating temperature range		-25 ... +100	°C
Storage temperature range		-40 ... +125	°C
Max. speed		6 000	min^{-1}

Characteristics / Connector information

This encoder uses Hall sensor technology for sensing the magnetic field and is based on the PE32-1024 IC from RLS.

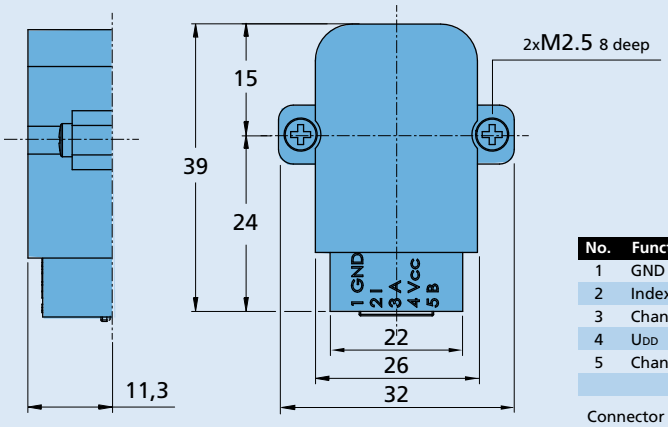
A circular array of sensors detects the perpendicular component of the magnetic field produced by a one pair poles magnet fixed on the rotor.

Sine and cosine signals are generated when the shaft rotates.

From the sine and cosine values, the angular position is calculated with a fast 12 bit interpolator.

The calculated postion is then output in A / B signals. The encoder provides also Z signal.

Connection Encoder



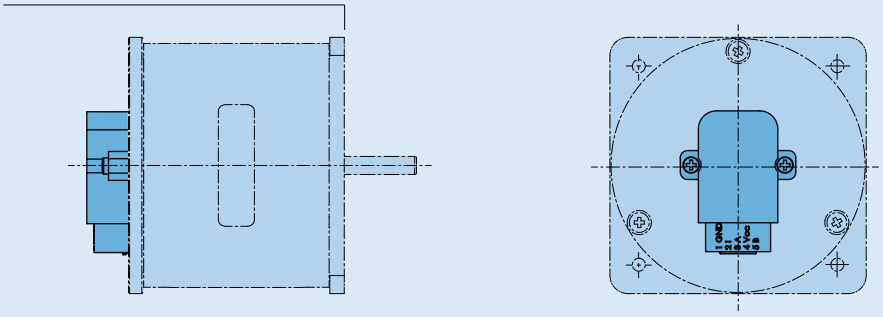
No.	Function
1	GND
2	Index Z
3	Channel A
4	U_{DD}
5	Channel B

Connector grid 2,54 mm

Dimensional drawing

Scale reduced

Example of combination with DM71048R



PE32-1024