

Encoders

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

For combination with
Stepper Motors:
DM40100R, DM52100N, DM52100R

Series PE32-1024

		PE32-1024	
Lines per revolution	<i>N</i>	1 024	
Number of pulses		4 096	
Signal outputs		2 + 1 Index	Channels
Supply voltage (TTL)	<i>U_{DD}</i>	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 AM4096 IC from RLS.

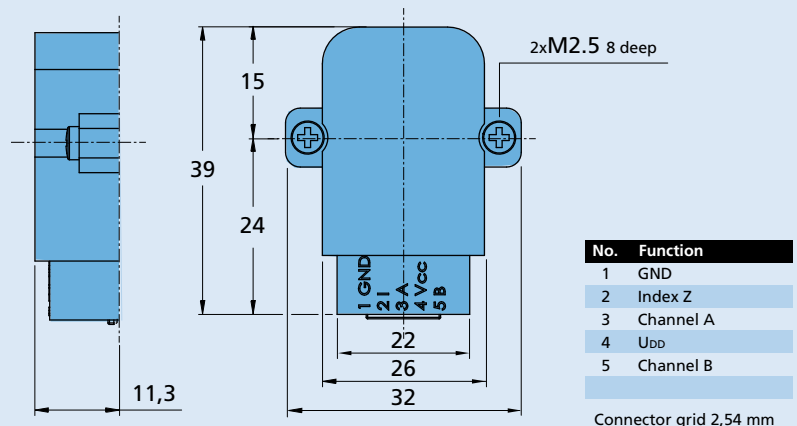
A circular array of sensors detects the perpendicular component of the magnetic field produced by a one pole pair of the magnet.

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 position is then output in A / B signals. The encoder provides also Z signal as index.

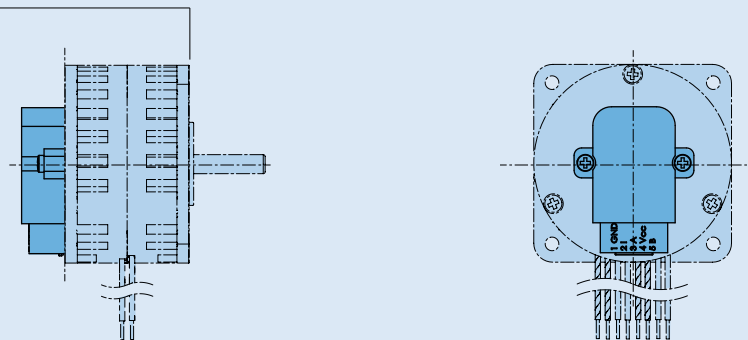
Connection Encoder



Dimensional drawing

Example of combination with DM52100N

Scale reduced 



PE32-1024