SENSITEC
KÖRBER SOLUTIONS

PRODUCT INFORMATION

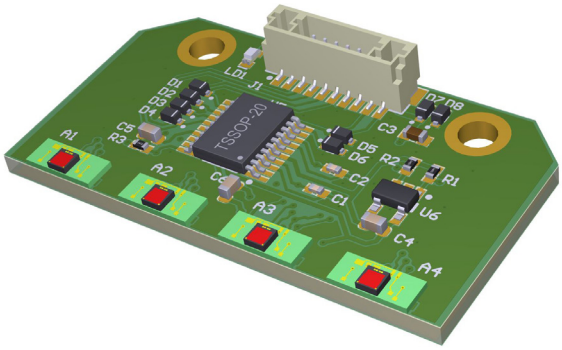
EMI7913

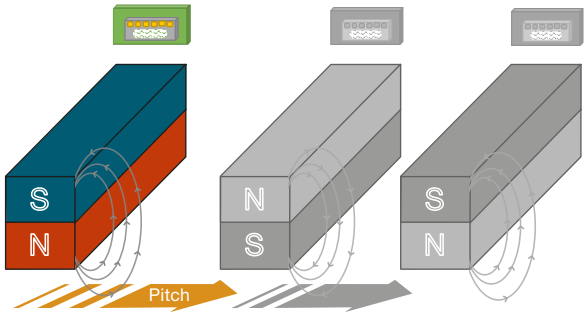
Incremental Sensor Module for Linear-Motors

Introduction

The sensor module EMI7913 is based on the Multi FixPitch concept and combines 4 AMR FreePitch sensors with an interpolation ASIC.

The sensors on the module are aligned with the motor magnets (e. g. linear motor). The motor magnets become the magnetic scale – no additional scale component is needed. The arrangement of the sensors ensure good and stable signal quality.
An adaption of the product variants to the respective customer motor magnets is the base of this concept.





Features

- Robust signals through a clever array arrangement
- 1 V_{SS} differential signal for even high dynamic applications
- Realized via Sensitec xMR technologie with almost none hysteresis
- As an expert in a field of position sensors we provide you our system and production know-how for your customized encoder
- External tracking of the supply voltage via connector pins

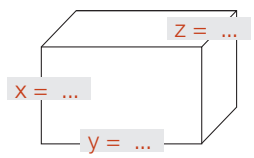
Applications

Incremental encoder concept for direct measurement on the stator magnet in various industrial applications for example:

- Linear motors
- Tubular motors
- Versatile industrial transport systems

Status

Order your customized evaluation board for testing and qualification, needed information:

Pitch [mm]	Mounting space [mm]	Output type
	 Housing needed?	Digital Analog

Technical Data

Parameter	Value	Unit
Supply voltage	5.0	V
Operating temperature	-25 ... 85	°C
Absolute accuracy [1]	< 175	µm
Repeatability [1]	± 5	µm
Air gap	$\approx \frac{\text{Pitch}}{2}$	mm
Output signal		
Digital type	TTL	-
Analog type	0.8 ... 1.2	V

[1] 12 mm pitch.

RoHS-Compliant www.sensitec.com