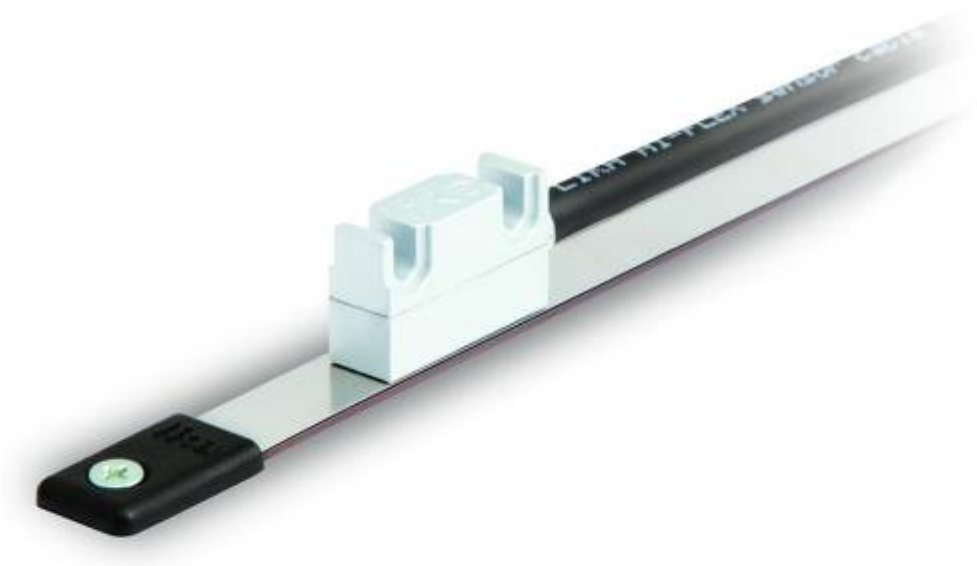
Encoder type

This page describes the **encoder type** of the GDM linear unit. The unit can be equipped with different types of linear encoders.

The GDM linear unit can be equipped with different types of linear encoders: incremental, digital, and absolute Hiperface.

Incremental magnetic SIN/COS 1Vpp (default)



Performance

Parameter	Value
Repeatability	+/- 1 increment (with 12 Bit ⇒ ±1 micron)
Accuracy	max 1% of period length (with MT10 ⇒ ±10 microns)
Power consumption	25mA typ, 50mA max

Pinout

Function	Cable wire colors
0 VDC	Black
+5VDC±5%	Red
SIN+	Yellow
SIN-	Blue
COS+	Green
COS-	Orange
Shielding	Shield

Notes

- The default encoder is the incremental magnetic SIN/COS 1Vpp. - Digital and absolute Hiperface encoders are available on request. - The pinout table shows the cable wire colors for the SIN/COS signals. - Verify the encoder type and the resolution against the application requirements.

From:
https://www.nilab.at/dokuwiki/ - **NiLAB GmbH Knowledgebase**

Permanent link:
https://www.nilab.at/dokuwiki/doku.php?id=en:gdm_linear_axes:encoder

Last update: **2026/09/11 07:54**