

Tecnotion presents the HALL Sensor for positioning without encoder

In 2004 Tecnotion has introduced the first analog HALL sensor for the positioning of linear motors without encoder. Based upon the experiences of customers all over the world Tecnotion has extended the capabilities of the HALL sensor. The Second Generation HALL Sensor is available now!

The HALL Sensor is the ideal alternative in positioning processes where cost-effective and accurate linear motor movements are required. The HALL Sensor enables the user to replace optical or magnetic encoders by simply mounting the reading head on the coil unit surface.

The Second Generation HALL Sensor realizes a maximum accuracy of 100 μm with a repeatable accuracy brought up to a level of $\sim 30 \mu\text{m}$ and a resolution down to 5-10 μm .



Tecnotion BV

Marketing & Sales Department

P.O.Box 23, 7600 AA Almelo

The Netherlands

Tel. +31 (0)546 536300

Fax +31 (0)546 536310

sales@tecnotion.com

www.tecnotion.com

The robustly built Second Generation HALL Sensor

- uses the magnet track as the linear scale
- can easily be mounted on Tecnotion's widely used TM, TL, TB and TG iron core motors
- allows a wake-and-shake free motor start
- communicates with practically all standard servo controllers

General specifications

Maximum accuracy 100 μm

Repeatable accuracy $\sim 30 \mu\text{m}$

Resolution 5-10 μm

Power and signal specifications

- a standard +5Vdc 100mA power supply suffices
- $\sim 1 \text{ Vpp}$ SinCos signal
- signal period of 24mm

Cable specifications

3m Lapp Unitronic-FD CP (TP), UL/CSA, $\varnothing 6.8\text{mm}$, flexing: $R=7.5D$

Green: A+ (Cos)

Yellow: A- (Cos)

Blue: B+ (Sin)

Red: B- (Sin)

Brown: +5V

White: gnd

Pink: +5V_sense

Grey: gnd_sense

Shield: GND connected to shield only

The Second Generation HALL Sensor lifts the applicability of your linear motor to the highest level of economical accuracy.

