



[Home](#) > [Innovations & Solutions](#) > [Our technologies](#) > Eddy-current position sensor

Eddy-current linear position sensor



carries the printed coil windings.

An eddy-current linear position sensor delivers a signal proportional to the linear position of a metallic cursor fixed to a moving part.

Primary and secondary windings are printed on a common printed circuit (PCB). The primary windings are energized to generate a high frequency magnetic field, which leads to eddy currents in the cursor. The eddy currents modify the coupling between primary and secondary windings depending on the position of the cursor. An ASIC is used to condition the signal, generally mounted on the PCB that also

Electricfil UPCOMING technologies

Characteristics

- Stroke up to 50 mm
- Temperatures up to 150°C
- Typical accuracy: $\pm 2\%$
- Response time: 1 ms
- Airgap up to 2.0 mm
- Size: stroke length + 30 mm
- Integrated diagnostics
- Non-contact sensing
- Totally insensitive to external magnetic fields
- Optional redundancy

Electricfil knowhow

- Reduced weight and size of the ignition function with high energy densities
- Wide range of packages and interfaces
- Fully programmable sensors

Application domains

Transmission

[Clutch
Actuation control](#)

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driver assistance](#)

[Gear selection
indication](#)