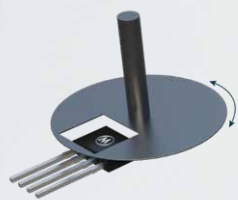


2-3-WIRE INDUXIS® LATCH & SWITCH

MLX92442

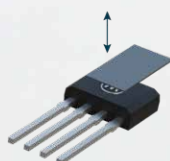
The MLX92442 is a revolutionary inductive latch & switch designed to detect the presence of an electrically conductive target (e.g. metal). This novel solution, called **induxis®**, overcomes traditional bulky inductive designs and reduces component count (no PCB/no external coils, no magnet/no holder). The smart switch/latch operation is established by simply defining the motion and the shape of the target.



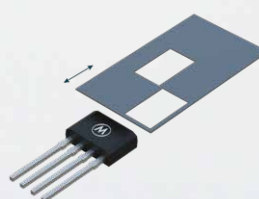
Rotary



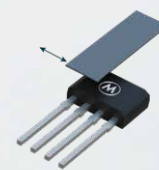
Rotary speed sensing



Push



Linear differential



Linear

Key features

- ✓ Induxis® Innovative technology
- ✓ Stray-field immune
- ✓ Integrated coils and no need for PCB
- ✓ Wide operating voltage: 3.5 V to 18 V
- ✓ Operating temperature: -40°C to 150°C
- ✓ Airgaps of up to 1.5 mm
- ✓ Push-button with memory functionality
- ✓ Current wire interface (2-wire) or open drain output (3-wire)
- ✓ ISO26262 ASIL A SEooC (Safety Element out of Context)
- ✓ Packages, RoHS compliant
 - TO92-4L (VK), through-hole (THD)
 - SOIC-8 (DC), surface mount (SMD)
- ✓ Protections
 - Reverse supply voltage
 - Under-voltage lockout
 - Thermal
 - Integrated self-diagnostic functions

Induxis®

- ✓ Contact-less
- ✓ Magnet-less
- ✓ Strayfield immune
- ✓ Integrated coils

Sensing metal has never been easier!

Applications



- Charging flap
- Hood/Trunk latch
- Brake light switch
- Door lock & handle
- Inverter Interlock
- Seatbelt buckle
- Seat positioning
- Transmission applications
- Gear tooth sensing
- Speed-sensing (motorcycles)
- Bank angle sensor (motorcycles)
- Push-button / Radio-button



www.melexis.com/MLX92442

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