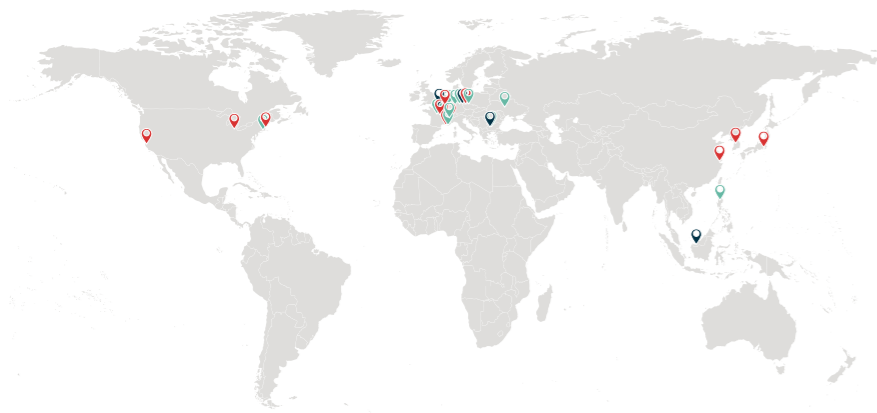# Melexis
INNOVATION WITH HEART

## International Presence

**www.melexis.com/sales-contact**

Europe, Middle East and Africa
sales_europe@melexis.com
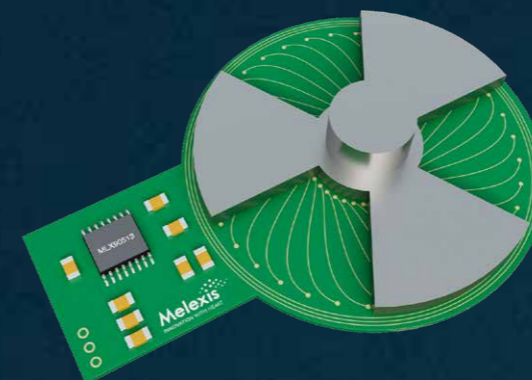
Asia and Oceania
sales_asia@melexis.com
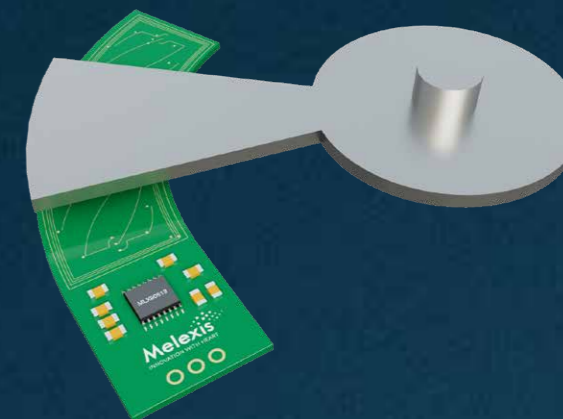
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📍 Research & Development
📍 Sales & Applications
📍 Manufacturing

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# Melexis
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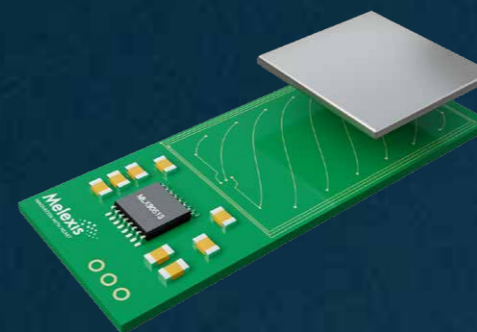
Rotary (360°)

Arc

Linear (<30cm)

## SELECTION GUIDE

# INDUCTIVE POSITION SENSOR

*We offer state of the art inductive position sensor interfaces to address new challenges such as e-machines, e-brake booster and e-steering type of applications.*

## Inductive position sensing - primarily intended for standalone applications

| Part Number/Ordering Code | Status | Motions | | | | Input range min - max | Data rate | Supply | Idd | Output | | | | | | Operating temperature | Angular processing | Package | (A)SIL ready | Strayfield immunity ISO11452-8 | AEC-Q100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | End-of-shaft (on-axis) | Through-shaft (off-axis) | Side-shaft (off-axis) | Linear | [mV] | [kHz] | [V] | [mA] | Ratiometric analog | PWM | SENT | SPC | note | Resolution [bit] | [○C] | | SMD TSSOP-16 | | | |
| MLX90513GGO-CAA-100 | prod | √ | √ | √ | √ | 2.5 - 100 | 7 | 5 | 10 | √ | √ | √ | | | 16 | -40...160 | yes | √ | C | infinite | √ |
| MLX90513GGO-CAA-180 | prod | √ | √ | √ | √ | 2.5 - 100 | 7 | 5 | 10 | √ | √ | √ | √ | | 16 | -40...160 | yes | √ | C | infinite | √ |

## Inductive motor position sensing - intended for motor positioning solution with inductive resolver intereface

| Part Number/Ordering Code | Status | Motions | | | | Input range min - max | Rotor speed max | Rotor acceleration | Supply | Idd | Output | | | Operating temperature | Angular processing | Package | (A)SIL ready | Strayfield immunity ISO11452-8 | AEC-Q100 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | End-of-shaft (on-axis) | Through-shaft (off-axis) | Side-shaft (off-axis) | Linear | [mV] | [k e-rpm] | [k e-rpm/s] | [V] | [mA] | differential sinus / cosinus | note | Resolution [bit] | [○C] | | SMD TSSOP-16 | | | |
| MLX90510GGO-BBA-100 | prod | √ | √ | √ | | 5 - 100 | 240 | 480 | 5 | 15 | √ | compensated | sin / cos | -40...160 | yes | √ | C | infinite | √ |
| MLX90510GGO-BBA-101 | prod | √ | √ | √ | | 5 - 100 | 240 | 3600 | 5 | 15 | √ | compensated | sin / cos | -40...160 | yes | √ | C | infinite | √ |
| MLX90510GGO-BBA-102 | prod | √ | √ | √ | | 5 - 100 | 240 | 12000 | 5 | 15 | √ | compensated | sin / cos | -40...160 | yes | √ | C | infinite | √ |
| MLX90517GGO-AAA-100 | prod | √ | √ | √ | | 5 - 100 | 660 | - | 5 | 15 | √ | raw | sin / cos | -40...160 | no | √ | C | infinite | √ |



End of shaft



Through shaft



Side of shaft



Target
Inductive sensor interface
Coils set



TSSOP-16 (GO)

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