



Position sensors



# Kplus sensors: one sensing range for all metals



Inductive sensors



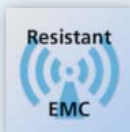
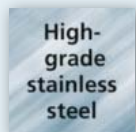
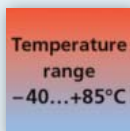
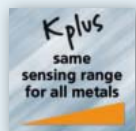
**Uniform sensing range for the reliable detection of all metals**

**Compact dimensions for use in the smallest of space**

**Electromagnetic field immune sensor technology to prevent incorrect switching**

**High-quality stainless steel housing**

**High reliability thanks to protection rating from IP 65 / IP 69K**



## Constant correction factor





Kplus sensors have the same sensing range for all types of metals. They are for example perfectly suited for the detection of aluminium, where conventional sensors show a considerably reduced sensing range. The high switching frequencies enable the monitoring of fast changing switching states.

The resistant stainless steel sleeve allows reliable use in oil and coolant applications. The wide temperature range as well as the high protection ratings enable universal use of the new Kplus sensors.



| Type                                                                 | Total length<br>[mm] | Sensing range<br>[mm] | Installation | Switching frequency<br>[Hz] | Current rating<br>[mA] | Order no. |
|----------------------------------------------------------------------|----------------------|-----------------------|--------------|-----------------------------|------------------------|-----------|
| <b>M12 connector · 3 wire DC PNP · Output function normally open</b> |                      |                       |              |                             |                        |           |
| M12                                                                  | 45                   | 4                     | flush        | 2000                        | 100                    | IFS297    |
| M12                                                                  | 45                   | 8                     | non-flush    | 2000                        | 100                    | IFS298    |
| M12                                                                  | 45                   | 10                    | non-flush    | 2000                        | 100                    | IFS299    |
| M12                                                                  | 60                   | 4                     | flush        | 2000                        | 100                    | IFS304    |
| M12                                                                  | 60                   | 8                     | non-flush    | 2000                        | 100                    | IFS305    |
| M12                                                                  | 60                   | 10                    | non-flush    | 2000                        | 100                    | IFS306    |
| M18                                                                  | 45                   | 8                     | flush        | 2000                        | 100                    | IGS287    |
| M18                                                                  | 45                   | 12                    | non-flush    | 2000                        | 100                    | IGS288    |
| M18                                                                  | 45                   | 15                    | non-flush    | 2000                        | 100                    | IGS289    |
| M18                                                                  | 60                   | 8                     | flush        | 2000                        | 100                    | IGS290    |
| M18                                                                  | 60                   | 12                    | non-flush    | 2000                        | 100                    | IGS291    |
| M18                                                                  | 60                   | 15                    | non-flush    | 2000                        | 100                    | IGS292    |
| M30                                                                  | 45                   | 15                    | flush        | 2000                        | 100                    | IIS281    |
| M30                                                                  | 60                   | 15                    | flush        | 2000                        | 100                    | IIS282    |
| M30                                                                  | 60                   | 22                    | non-flush    | 2000                        | 100                    | IIS283    |
| M30                                                                  | 60                   | 30                    | non-flush    | 2000                        | 100                    | IIS284    |

### Connection technology

| Type                                                                                | Description                          | Order no.     |
|-------------------------------------------------------------------------------------|--------------------------------------|---------------|
|  | Socket, M12,<br>2 m black, PUR cable | <b>EVC001</b> |
|  | Socket, M12,<br>5 m black, PUR cable | <b>EVC002</b> |
|  | Socket, M12,<br>2 m black, PUR cable | <b>EVC004</b> |
|  | Socket, M12,<br>5 m black, PUR cable | <b>EVC005</b> |

### Further technical data

|                             |        |                                                             |
|-----------------------------|--------|-------------------------------------------------------------|
| Operating voltage           | [V DC] | 10...30                                                     |
| Reverse polarity protection |        | •                                                           |
| Short-circuit protection    |        | •                                                           |
| Overload protection         |        | •                                                           |
| Protection rating           |        | IP 65 / IP 66 / IP 67 /<br>IP 68 / IP 69K                   |
| Protection class            |        | III                                                         |
| Ambient temperature         | [°C]   | -40...85                                                    |
| Housing materials           |        | High-grade stainless steel<br>(316L)<br>sensing face<br>LCP |
| Output status indication    | [LED]  | yellow (4 x 90°)                                            |

### Dimensions

