

# P|Prox: detection with micrometre precision

Accurate detection of distances to metallic surfaces

- Non-contact, inductive detection principle, suitable for all types of metal
- Ready for use out of the box, high repeatability
- Simple 1-point or even more accurate 3-point calibration possible
- Robust industrial design for a wide range of applications



## ifm - close to you!

| Type<br>[mm]   | Installation | Measuring range<br>[mm] | Adjustable switch point<br>[mm] | Order no. |
|----------------|--------------|-------------------------|---------------------------------|-----------|
| M8 x 1 x 60    | flush        | 0.051.5                 | 0.051.5                         | IEP200    |
| M8 x 1 x 60    | non-flush    | 0.053                   | 0.053                           | IEP201    |
| M12 x 1 x 60   | flush        | 0.22                    | 0.21.9                          | IFP200    |
| M12 x 1 x 60   | non-flush    | 0.44                    | 0.43.8                          | IFP201    |
| M18 x 1 x 60   | flush        | 0.55                    | 0.54.75                         | IGP200    |
| M18 x 1 x 60   | non-flush    | 0.88                    | 0.87.6                          | IGP201    |
| M30 x 1.5 x 60 | flush        | 110                     | 19.5                            | IIP200    |
| M30 x 1.5 x 60 | non-flush    | 1.515                   | 1.514.25                        | IIP201    |

#### Inexpensive alternative to expensive measuring systems

Many industrial applications require accurate detection of distances to metallic surfaces, for example, sheet metal detection in the automotive industry or distances at grinding mills in the food sector. In these applications, the new distance sensors are an inexpensive and powerful alternative to expensive measuring systems.

#### Accurate distance detection

Using an inductive and, thus, non-contact detection principle, these sensors detect distances in the micrometre range and provide them as distance values via IO-Link. The type of metal has no influence on the measured value. Only the shape factor of the target influences the possible measuring range and the accuracy of the sensor. The sensor is factory calibrated and ready for immediate use. Thanks to 1-point or the even more accurate 3-point calibration, IO-Link guarantees high accuracy even with deviating target shape factors.

#### **Robust design**

The sensors are available in 60 mm long industry standard M8, M12, M18 or M30 housings for flush or non-flush mounting. Moreover, the sensors are magnetic field resistant and have a stainless steel threaded sleeve. As a result, they have a high protection rating of up to IP69K and can be easily used in demanding environments.

| Technical data             |                      |                                  |  |  |
|----------------------------|----------------------|----------------------------------|--|--|
| Communication interface    | IO-Link              |                                  |  |  |
| Type of transmission       | COM2<br>(38.4 kbaud) |                                  |  |  |
| IO-Link revision           | 1.1                  |                                  |  |  |
| SIO mode                   | yes                  |                                  |  |  |
| Required master port class | A                    |                                  |  |  |
| Min. process cycle         | [ms]                 | 3.2                              |  |  |
| Ambient temperature        | [°C]                 | -2570                            |  |  |
| Indication                 | 4x yellow LED        |                                  |  |  |
| Protection rating          |                      | IP65, IP66,<br>IP67, IP68, IP69K |  |  |

### **BEST FRIENDS**



moneo|configure free Software for parameter setting of the IO-Link infrastructure



**IO-Link interface** For setting the parameters of IO-Link devices on the PC



IO-Link masters Field-compatible masters with Profinet interface



For further technical details, please visit: ifm.com/fs/IEP200