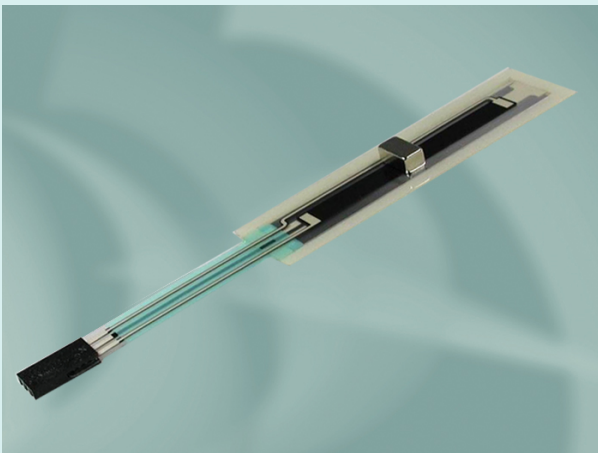


Membrane Sensor - linear contactless magnetic MMP



Operational Description

Advanced development of already approved Meta-Pot membrane sensor product range. An integrated ferromagnetic carrier matrix is driven by a permanent magnet.

Features

- magnetic contactless coupling
- flat design
- IP 65, except for electr. connection
- long life time

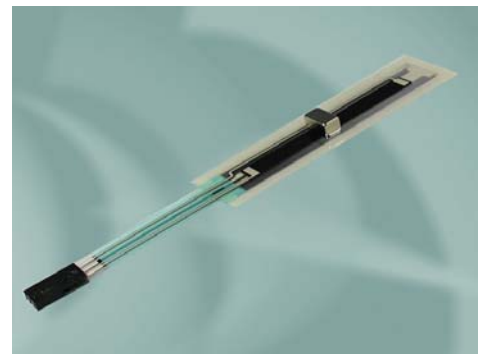
Applications

- Position sensing, e. g. in a cylinder
- Servo-systems
- Industrial applications
- Automotive

Metallux AG

Robert-Bosch-Str. 29
D-71397 Leutenbach
Tel: +49 (0) 7195/5980-0
Fax +49 (0) 7195/5980-300
www.metallux.de
info@metallux.de

MMP contactless foil sensor - linear



metallux.de

technology matters

Electrical Characteristics

| | |
|--|--|
| Resistance range (Rn) | 2,5 k Ω / 100 mm stroke |
| Resistance tolerance | \pm 30% |
| Effective electrical strokes | 50, 100, 200, 300, 400, 500 mm |
| Independent linearity | \pm 2% - \pm 5% depending on the temperature range |
| Repeatability | <0,1% |
| Hysteresis | <1,5% |
| Resolution | <10 μ m |
| Wiper load | >100* Rn |
| Max. wiper current | 5mA |
| Temperature coefficient of output signal | \pm 100 ppm |

Mechanical Characteristics

| | |
|--------------------------------|---|
| Lifetime | 100.000.000 cycles |
| Sensor | Length: 26,3mm + electrical stroke Width: 22mm; Height < 2mm |
| Max. operating speed | \leq 3m/s |
| Connection tape | L: 46mm; W: 10,16mm |
| Max. distance sensor to magnet | 2mm (1) |
| Assembly | selfadhesive foil |

Environmental Characteristics

| | |
|-----------------------|--------------------------------------|
| Operating temperature | A (-20°C...+ 60°C), B(-20°C...+85°C) |
| Protection class | IP65, except electr. access and plug |

Material

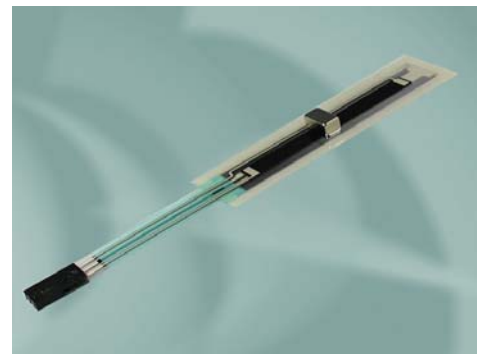
| | |
|-----------|---------|
| Substrate | PET,FR4 |
|-----------|---------|

Connection

Crimp connector, crimp soldering, others on request

(1) with supplied magnet

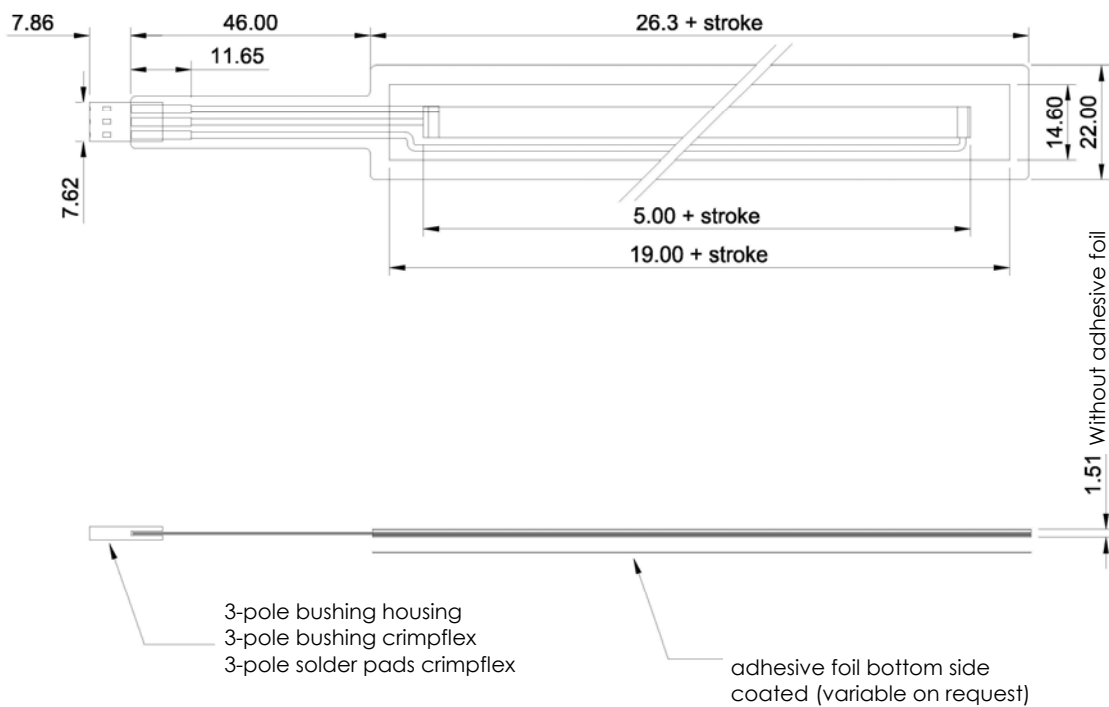
MMP contactless foil sensor - linear



metallux.de

technology matters

Graph



Operation drawing



Specifications subject to change

How to order

| | | | | |
|---|--|---|---|--|
| M M P | L | 1 0 0 | A | 1 |
| type MMP- contactless magnetic foil sensor | fixation L - Linear translatory | measuring lengths 50mm - 1,25K 100mm - 2,50K 200mm - 5,00K 300mm - 7,50K 400mm - 10,00K 500mm - 12,50K | temperature resistance A - 20°C + 60°C B - 20°C + 85°C | possible connections 1 - bushing housing 2 - bushing crimpflex 3 - solder pads crimpflex |