

CONTACTLESS LINEAR MEMBRANE SENSOR MMP



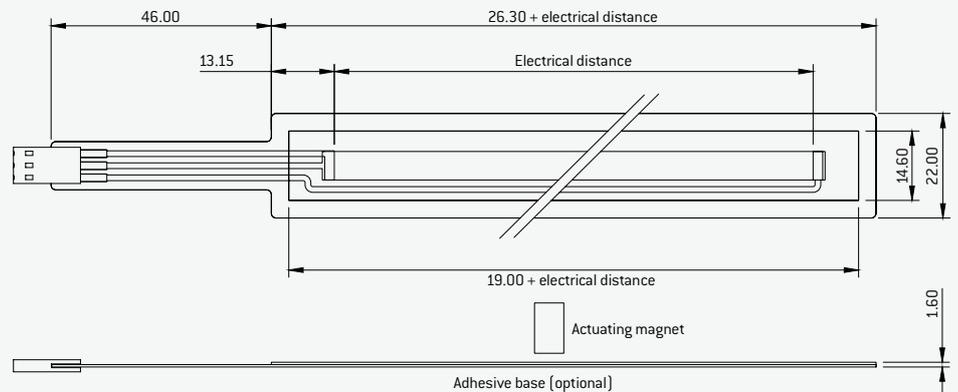
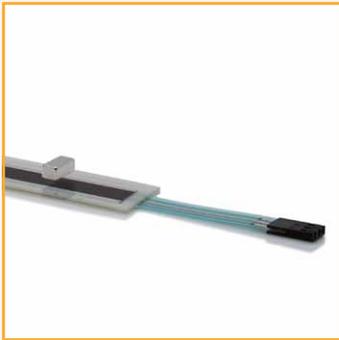
The technology of the MMP series is based on the MTP series. The linear, contactless Metallux membrane sensors can be used for position sensing in a wide range of applications. The contactless measurement is performed by means of a layer of metal foil integrated in the sensor and a magnet positioned at a set distance from the sensor.

FEATURES

- Contactless magnetic coupling
- Flat design
- IP 65, electrical connection and plug excluded
- Long lifetime

APPLICATIONS

- Linear position sensing, for instance in cylinders
- Servo systems
- Industrial applications



ELECTRICAL SPECIFICATIONS

| | |
|---|---------------------------------|
| Resistance range (Rn) | 2.5 k Ω /100 mm distance |
| Resistance tolerance | $\pm 30\%$ |
| Electrical distance | 50 – 500 mm |
| Independent linearity | $\pm 2\%$ ** |
| Resolution | < 0.1mm ** |
| Load resistance | > 100* Rn |
| Max. load current in case of fault | 5 mA |
| Typical supply voltage | 5 VDC |

Mechanical and electrical characteristics are customizable. Specifications are subject to change without notice. * Others on request. ** Specifications may deviate according to temperature and installation conditions.

MECHANICAL SPECIFICATIONS

| | |
|--|-----------------------|
| Lifetime | 50 million cycles |
| Travel speed | ≤ 3 m/sec. * |
| Cable connection | L: 46 mm; W: 10.16 mm |
| Max. measuring distance from magnet to sensor | 2 mm |
| Type of mount | Adhesive film |

AMBIENT CONDITIONS

| | |
|------------------------------|--|
| Operating temperature | -10° C – +70° C ** |
| Protection class | IP 65 according to DIN EN 60529, electrical connection and plug excluded |

MATERIALS

| | |
|-------------------|----------------|
| Substrates | PET, PEEK, FR4 |
|-------------------|----------------|

ELECTRICAL CONNECTION

Female crimp contacts, Crimpflex solder pads* (Poka Yoke)

SAMPLE ORDER

| Part no. | Type series | Resistance range | Elect. measuring range | Elect. connection |
|------------|------------------------------------|------------------|------------------------|-----------------------|
| E090100100 | MMP | 2.5 K | 100 mm | Female crimp contacts |
| H907040001 | Block magnet 10 x 5 x 4 mm, 80° C | | | |
| H907040004 | Block magnet 10 x 5 x 4 mm, 150° C | | | |