

DATA SHEET | ENGLISH



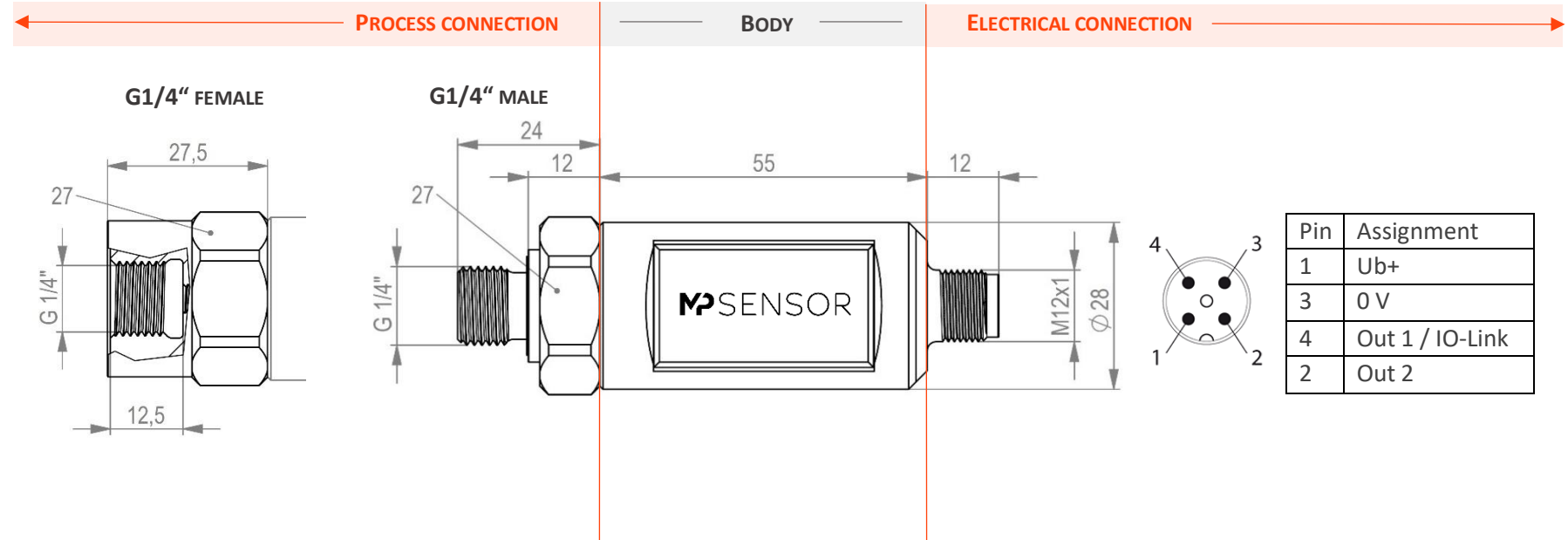
Industry 4.0 ready IO-Link sensor with TFT touch screen and a new, innovative operating concept.

Ultra-compact design for use in the tightest of spaces.

Fully configurable outputs (switching output / analog / IO-Link).

Extended display and diagnostics options through 160x80px display.

Virtual, dual scroll wheel.



| Pin | Assignment |
|-----|-----------------|
| 1 | Ub+ |
| 3 | 0 V |
| 4 | Out 1 / IO-Link |
| 2 | Out 2 |

General data

| | |
|--------------------------|--|
| Display | 0,96" TFT touch display, breakproof installation |
| Switching status display | 1x color indication per OUT |
| IO-Link status display | color display |
| Protection class rating | IP65 / IP67 / IP68 |
| Protection level | III |
| Expected lifetime | 100 Mio. load changes |
| Pressure type | relative pressure |
| Measuring cell type | ceramic |
| MTTF (40°C) | 478 years (continuous operation) |

Ordering information

5 - 10 - X 1 3 X - XXX X XX

| | | | | | |
|---------------------------|---|-------------|-------|------------------------|-----|
| <i>Process connection</i> | | | | <i>Firmware</i> | |
| G1/4" M (male) | 1 | | | Standard | 00 |
| G1/4" F (female) | 5 | | | Customized | >00 |
| <i>Sealings</i> | | | | <i>Pressure range*</i> | |
| NBR (=standard) | 1 | -1...1 bar | 001 2 | | |
| FKM | 2 | -1...5 bar | 005 2 | | |
| EPDM | 3 | 0...10 bar | 010 0 | | |
| | | 0...16 bar | 016 0 | | |
| | | 0...25 bar | 025 0 | | |
| | | 0...40 bar | 040 0 | | |
| | | 0...100 bar | 100 0 | | |
| | | 0...250 bar | 250 0 | | |
| | | 0...400 bar | 400 0 | | |
| | | 0...600 bar | 600 0 | | |

Electrical data

| | |
|--|--|
| Electrical connection | Connector M12x1, 4-pole |
| Operating voltage | 9...30 VDC (13...30 VDC for analog output) (UL: class 2 source only) |
| Current consumption [Ub] | < 30 mA |
| Short-circuit / reverse polarity prot. | yes / yes |
| Output | |
| Out 1 (Pin 4) | PNP/NPN/PP or IO-Link |
| Out 2 (Pin 2) | PNP/NPN/PP or analog (0-10V / 1-10V / 4-20mA) |
| Max. output current | max. 200 mA per output |
| Output voltage | Ub - 2,0V |
| Response time | < 3 ms |

Accuracy

| | |
|--------------------------------------|---------------------------------------|
| Total accuracy (23°C) | ± 0,5% FS (LP) |
| max. temperature error (-25...+80°C) | ± 1,5% FS (<100bar); ± 2,5% (≥100bar) |
| Long-term drift | ≤ 0,1% FS / a |
| Repetition accuracy | 0,1% FS |

Programming options

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|------------------------|--|
| Outputs | Switching/re-switching points; start/end value for analog output; hysteresis/window mode; normally closed/ normally open contact; switch-on/switch-off delay |
| Display | Display mode (simple / detail. / off); color behavior; rotation; brightness; update rate; screen lock |
| Measuring value | Units; Damping; Resolution |

Diagnosis

| | |
|----------------|--------------------------------------|
| Pressure peaks | Counter, adjustable threshold, reset |
| Counters | Switching operations; load changes; |

Materials (wetted parts)

| | |
|---------------------------|--|
| Material fluid connection | stainless steel 1.4404 |
| Material measuring cell | ceramic Al ₂ O ₃ 96% |
| Material seals | see ordering information |

Materials (non-wetted parts)

| | |
|------------------|---------------------------------|
| Material housing | stainless steel 1.4305 |
| Material display | glass (breakproof installation) |
| Sealing display | PE |

Mechanical data

| | |
|---------------------------------|------------------------------|
| Wrench size pressure connection | 27 |
| Weight | 191g (G1/4"M); 244g (G1/4"F) |

Pressure range

| Measuring range* [bar] | 1 | 5 | 10 | 16 | 25 | 40 | 100 | 250 | 400 | 600 |
|-------------------------|---|----|----|----|----|-----|-----|-----|-----|-----|
| Overload press.** [bar] | 2 | 10 | 20 | 40 | 40 | 100 | 150 | 375 | 500 | 750 |
| Burst pressure** [bar] | 3 | 20 | 35 | 60 | 60 | 140 | 300 | 500 | 650 | 900 |

*more measuring ranges available on request, UL certified only up to ≤150 bar

** increased overload resistance available on request

Operating conditions

| | |
|-----------------------------|---|
| Operating temperature | Operation: -25° ...+80°C Fluid: -25° ...+100°C Storage: -30° ...+85°C |
| Range of application | Fluid group 2 media only |
| EMC / interference immunity | EN61000-6-2 and EN61326-2-3 |
| EMC / interference emission | EN61000-6-4 and EN61326-2-3 |
| Vibration resistance | DIN EN 60068-2-6: 20G, 10-2000 Hz, XYZ |
| Shock resistance | DIN EN 60068-2-27: 50G, 11ms, XYZ |