

# DIGITAL PRESSURE INDICATOR

3 DIGITS - DPI / RPI / DPG



## KEY FEATURES

- + Vacuum, Low and High Pressure Indication options
- + 3-Digit Super Bright LED Display
- + Ambient Light Sensor
- + I/O Driver integrated for Alarms, Regulation, Etc. – Optional
- + CAN Bus Interface
- + Multiple sensor input
- + Wide Viewing Angle

DPI types of Digital Pressure Indicators are designed to display system pressure using a 3 - digit ultra-bright LED display where multiple pressure sensors can be connected.

The unit standardly uses -1..24 bar, 0..25 bar or 0..60 bar pressure sensors. The sensor input is widely configurable and can be used for 0.5-4.5 V and 0-10 V transducers or 4-20 mA transmitters.

Optionally, an I/O driver can be integrated for activating warning output, regulating the system pressure, etc.

The Digital Pressure Indicator can be used as a stand-alone system or as a part of MMX system connected via CAN bus to IO Controller. Several slave-remote pressure indicators (RPI) can be connected to a main indicator (DPI) to show the same value on different locations.

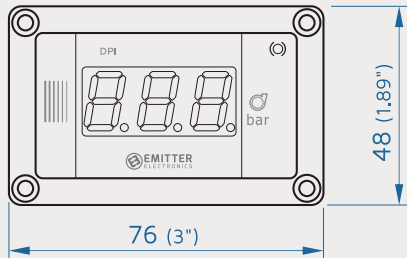


## SPECIFICATIONS

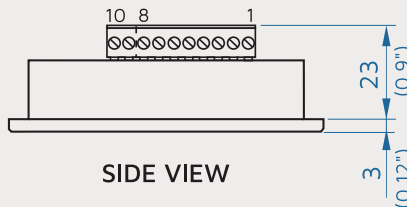
|                          |                                                                                  |
|--------------------------|----------------------------------------------------------------------------------|
| <b>POWER</b>             |                                                                                  |
| Supply Voltage           | 8-32 V DC                                                                        |
| Current                  | 0.5 A maximum, no outputs active                                                 |
| Electrical Protection    | overvoltage, transients, reverse polarity                                        |
| <b>INTERFACES</b>        |                                                                                  |
| CAN                      | 1 x CAN                                                                          |
| CAN termination          | 120 ohm, DIP switch                                                              |
| <b>I/O</b>               |                                                                                  |
| Sensor input             | 0.5-4.5 V standardly, 0-5V, 0-10V, 4-20 mA, resistive                            |
| Digital Input            | configurable active low/high levels 0..Ub with solder pad on PCB, protected      |
| Digital Output           | <i>*Only version with integrated I/O driver</i>                                  |
| OUT1                     | positive switching (high-side), max. 2 A (Low water warning)                     |
| OUT2                     | positive switching (high-side), max. 2 A (Autofill-Hysteresis)                   |
| Loads                    | Inductive, capacitive, resistive                                                 |
| Miscellaneous            | protection from short circuit and overload                                       |
| <b>ENVIROMENT</b>        |                                                                                  |
| IP Class (IEC529)        | IP67 front panel, IP20 from the back                                             |
| EMC Conformity           | EN61000-6-2 noise immunity<br>EN61000-6-4 radiation of interference              |
| Temperature Range        | storage -40° to +85°C (-40° to 185°F)<br>operating -40° to +85°C (-40° to 185°F) |
| <b>ENCLOSURE</b>         |                                                                                  |
| Housing Material         | aluminium                                                                        |
| Mounting                 | in-dash, with 4 screws M3 or 3.5 mm (#8) tapping screws                          |
| Mating Connector         | Terminal block 8- or 10-way depending of options selected                        |
| <b>MISCELLANEOUS</b>     |                                                                                  |
| LED display              | 3 - digit                                                                        |
| Reading resolution       | @P<30 bar: 0.1 bar, @P>30 bar: 1 bar                                             |
| Day/Night operation      | automatic – integrated ambient light sensor                                      |
| <b>SIZE &amp; WEIGHT</b> |                                                                                  |
| W x H x D                | 48 x 76 x 26 mm with connector                                                   |
| Weight                   | 0.10 kg                                                                          |

## DIMENSIONS

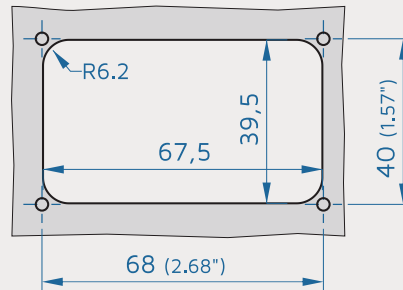
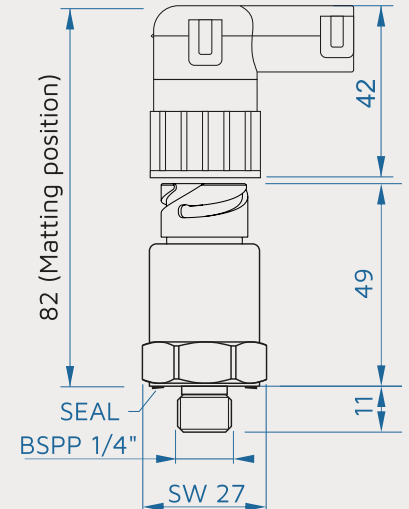
FRONT VIEW



SIDE VIEW

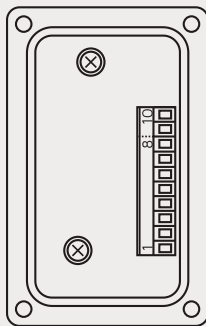


PANEL CUT-OUT

PRESSURE SENSOR  
S-PTXX

## CONNECTIONS

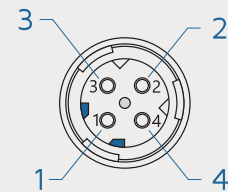
REAR VIEW



CONNECTION TERMINAL BLOCK 8/10-WAY

| PIN | Description                   |
|-----|-------------------------------|
| 1   | BATTERY + ("15")              |
| 2   | BATTERY - (GND)               |
| 3   | CAN L                         |
| 4   | CAN H                         |
| 5   | SENSOR [V]/[MA] VCC+          |
| 6   | SENSOR [V]/[MA] SIGNAL        |
| 7   | SENSOR [V] GND                |
| 8   | DIGITAL IN1 +/-               |
| 9   | OUT1 HIGH SIDE 2 A (OPTIONAL) |
| 10  | OUT2 HIGH SIDE 2 A (OPTIONAL) |

TRANSDUCER OEM



CONNECTION TWIST LOCK (ISO 15170)

| PIN | VOLTAGE SENSOR  | CURRENT SENSOR |
|-----|-----------------|----------------|
| 1   | BATTERY +       | BATTERY +      |
| 2   | GND             | SIGNAL 4-20 MA |
| 3   | SIGNAL 0.5-4.5V | N/C            |
| 4   | N/C             | N/C            |

## PRODUCT CODE

SET of DPI-main indicator, pressure sensor

Ordering code example:

|   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|--|
| D | P | G | - | 0 | 0 | 2 | 5 | - | R | H |  |
|---|---|---|---|---|---|---|---|---|---|---|--|

|                                                                                 |                     |                                            |                         |
|---------------------------------------------------------------------------------|---------------------|--------------------------------------------|-------------------------|
| MEASURING RANGE<br>0024: -1 .. 24 BAR<br>0025: 0 .. 25 BAR<br>0060: 0 .. 60 BAR | OUT1<br>R: OUTPUT 1 | OUT2<br>H: HYST. xx/xx %<br>R: ADD. OUTPUT | SPECIAL<br>MODIFICATION |
|---------------------------------------------------------------------------------|---------------------|--------------------------------------------|-------------------------|

Main Indicator

|   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|
| D | P | I | - | 0 | 0 | 2 | 5 | U | 4 | R | H |
|---|---|---|---|---|---|---|---|---|---|---|---|

|                                                                                 |                                                                      |                     |                                            |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|--------------------------------------------|
| MEASURING RANGE<br>0024: -1 .. 24 BAR<br>0025: 0 .. 25 BAR<br>0060: 0 .. 60 BAR | SENSOR INPUT /<br>PROBE<br>U4: 0,5-4,5V<br>U1: 0-10 V<br>I2: 4-20 MA | OUT1<br>R: OUTPUT 1 | OUT2<br>H: HYST. xx/xx %<br>R: ADD. OUTPUT |
|---------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------|--------------------------------------------|

Remote Indicator

|   |   |   |   |   |   |   |   |   |   |   |  |
|---|---|---|---|---|---|---|---|---|---|---|--|
| R | P | I | - | 0 | 0 | 2 | 5 | - | R | H |  |
|---|---|---|---|---|---|---|---|---|---|---|--|

|                                                                                 |                     |                                            |                         |
|---------------------------------------------------------------------------------|---------------------|--------------------------------------------|-------------------------|
| MEASURING RANGE<br>0024: -1 .. 24 BAR<br>0025: 0 .. 25 BAR<br>0060: 0 .. 60 BAR | OUT1<br>R: OUTPUT 1 | OUT2<br>H: HYST. xx/xx %<br>R: ADD. OUTPUT | SPECIAL<br>MODIFICATION |
|---------------------------------------------------------------------------------|---------------------|--------------------------------------------|-------------------------|