



## INTELLIGENT TRANSMITTER WITH DIGITAL INDICATION BUS-CAPABLE / KEY-PROGRAMMABLE 4...20 mA OUTPUT

LEO 3  
a Mano 2000 product

LEO 3 is a micro-processor based transmitter with digital double-display for pressure (top display) and for the output signal (bottom display). The display is powered from the 4...20 mA current loop.

The following functions can be executed with the front keys:

**MAX/MIN:** Activating the right key brings the Max.- and Min.-values to the lower display. After 5 seconds, the analog signal is indicated again.

**RESET:** With RESET, the Max.- and Min.-values are set to actual.

**ZERO SET:** The zero is set to the applied pressure.

**ZERO RES:** Restores the instrument back to factory settings.

**UNITS:** The pressure values can be displayed in the following units:  
bar, mbar/ hPa, kPa, MPa, PSI, kp/cm<sup>2</sup>.

### PROGRAMMING THE ANALOG OUTPUT VIA THE FRONT KEYS:

**OUTP SETT:** This sub-menu is used to configure the analog output within the compensated range.

**ZERO:** Executing ZERO when pressure is applied sets the analog output to 4 mA.

**FS:** Executing FS when pressure is applied sets the analog output to 20 mA.

**FACT SETT:** The analog output is set back to factory settings.

### PROGRAMMING BY PC:

The communication with the BUS-capable instrument takes place with the KELLER PROG30/READ30 software and the K106 converter via the RS 485 interface, allowing to read out the pressure values and the instrument characteristics. The analog output can be programmed without applying pressure to the instrument.



### SPECIFICATIONS

Pressure Ranges, Resolution:

|     | Range           | Resolution |
|-----|-----------------|------------|
| PAA | 0...4 bar abs.  | 1 mbar     |
| PAA | 0...30 bar abs. | 10 mbar    |
| PA  | 0...300 bar     | 100 mbar   |
| PA  | 0...700 bar     | 200 mbar   |

|                               |                             |
|-------------------------------|-----------------------------|
| Accuracy (0...50°C)           | typ. 0,1 %, max. 0,2 % FS   |
| Storage Temperature           | -10...60 °C                 |
| Compensated Temperature Range | 0...50 °C                   |
| Supply                        | 8...28 V DC                 |
| Output                        | 4...20 mA (2 wire) / RS 485 |
| Measuring Rate                | up to 90 times/sec.         |
| Display Rate                  | 2 times/sec.                |
| Pressure Connection           | G 1/4"                      |
| Electrical Connection         | Binder 723 (back entry)     |
| Protection, CEI 529           | IP65                        |
| Diameter x Height x Depth     | 76 x 125 x 50 mm            |
| Weight                        | ≈ 210 g                     |

### PLUG ASSIGNMENT

| Output           | Function  | Binder 723 |
|------------------|-----------|------------|
| 4...20 mA        | OUT / GND | 1          |
| 2 Wire           | +Vcc      | 3          |
| Program-<br>ming | RS485A    | 4          |
|                  | RS485B    | 5          |

Subject to alterations

6/01