

### Electronic torque meter CL 165

- Precise torque moment measurement
- Small dimensions
- LCD display
- RS interface
- Program CL165.EXE for visualization and storing measurement results in PC
- Three year warranty and after market service



Electronic torque meter CL 165 is designed for torque moment on stationary (not rotating) elements. Device has additional functions: tare, minimum and maximum and hold on for measurement result.

The CL 165 device is controlled by an integrated program, which parameters can be modified by User. They are stored in electrically programmable read-only EE-PROM memory and trip-out of supply voltage doesn't result in losing data.

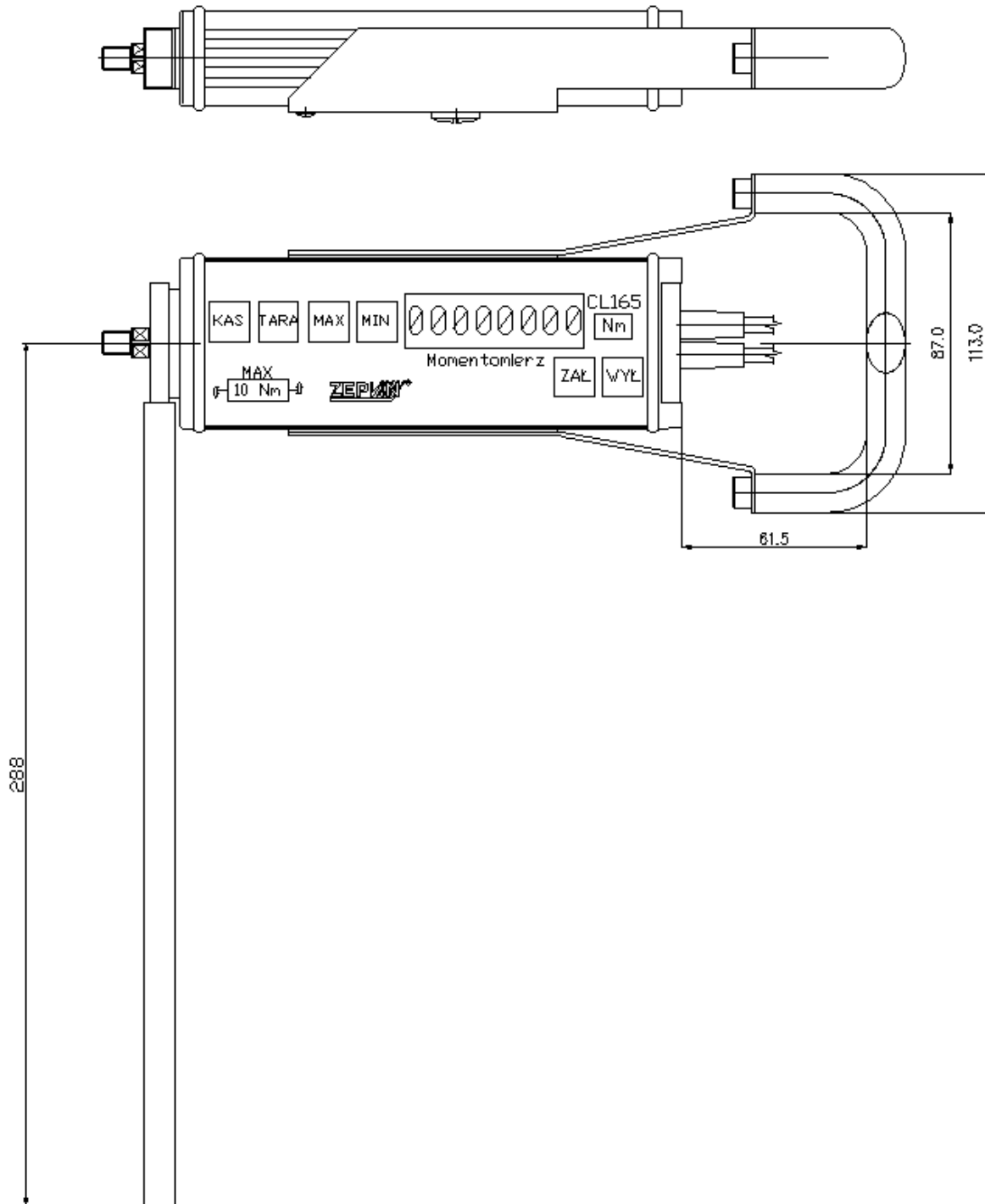
Program procedures analysing measuring results allow to find extreme values and to signalize overflow of two comparator thresholds. CL 165 can be optional provided with RS 485 or RS 232 connection to transmit measurement results to devices and computer systems.

#### Specification:

|                                  |  |
|----------------------------------|--|
| Measuring range                  |  |
| Overload capacity                | max. 50% of measuring range                                  |
| A/C converter resolution         | 60000 graduations + sign                                     |
| Maximal measuring error for 20°C | < 0,0015% + force sensor error                               |
| Temperature measuring error      | < 0,02%/10K + force sensor error                             |
| Single measurement time          | 0,2 sec.   |
| Display updating time            | 0,4 sec.   |
| Averaging                        | arithmetic average from 1÷8 measurements                     |
| Additional functions             | minimum and maximum, tare                                    |
| Tare                             | 0÷100% of nominal value                                      |
| Display                          | LCD with illuminated 8 characters                            |
| Digit height                     | 10 mm  |
| Maximal indication               | ±99999   |
| Acoustic signal                  | buzzer   |
| Communication outputs (option)   | in series RS 485 (or optional RS 232)                        |
| Number of comparator thresholds  | 2  |
| Signal for comparator thresholds | double sound signal from buzzer                              |
| Transmission parameters          | 4800 bauds, 8 data bits, 2 stop bits, without parity control |
| Supply                           | +6V (5 batteries 1,2V)                                       |
| Power consumption from batteries | < 70mA during operation and < 0,02mA when out of operation   |
| Operating range between charging | ca 10 hours of continuous use                                |
| Signal of discharging            | singular sound signal from buzzer every second               |
| Charging time                    | 14 ÷ 16 hours  |
| Temperature range                | 0 ÷ 50 °C  |
| Relative humidity                | 20 ÷ 80%   |

# Torque meter CL 165

## Dimensions:



The CL 165 set includes:

- |   |       |
|---|-------|
| 1. Electronic torque meter CL 165             | 1 pcs |
| 2. Feeder for battery charging (4 WZS 12/250) | 1 pcs |
| 3. RS cable (option)                          | 1 pcs |
| 4. Operating manual                           | 1 pcs |
| 5. Warranty sheet                             | 1 pcs |

Manufacturer

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