



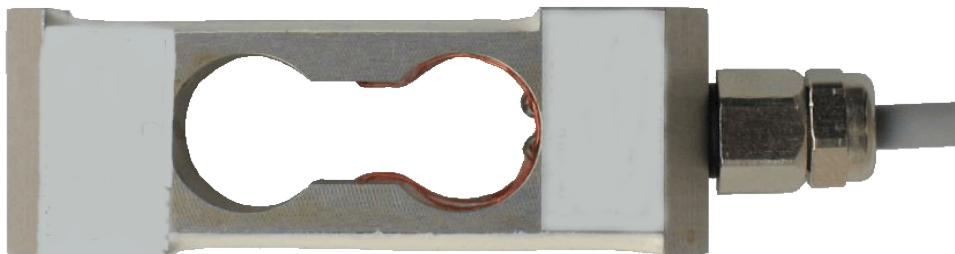
# ESA Messtechnik GmbH

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## Force Transducer Type CL 17pm

### FEATURES:

The double bending beam / single point load cell CL 17pm with 350 Ω strain gauge full bridge are ideally suitable for low range scale designs, platform scales in particular as well as load force measurement applications.



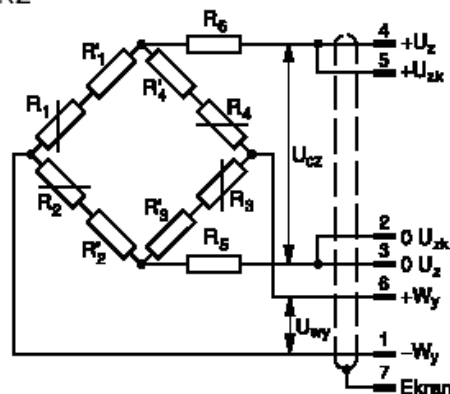
As weighing cells, they are widely accepted in many retail and light industries as well as with postal scale designs. The use of single point load cell results in highly simplified scale and platform designs because mechanical flexure and levers are not needed any more. Type CL 17pm load cells are featuring very high zero stability, and they are available with 1 mV/V or 2 mV/V sensitivity.

### TECHNICAL SPECIFICATIONS:

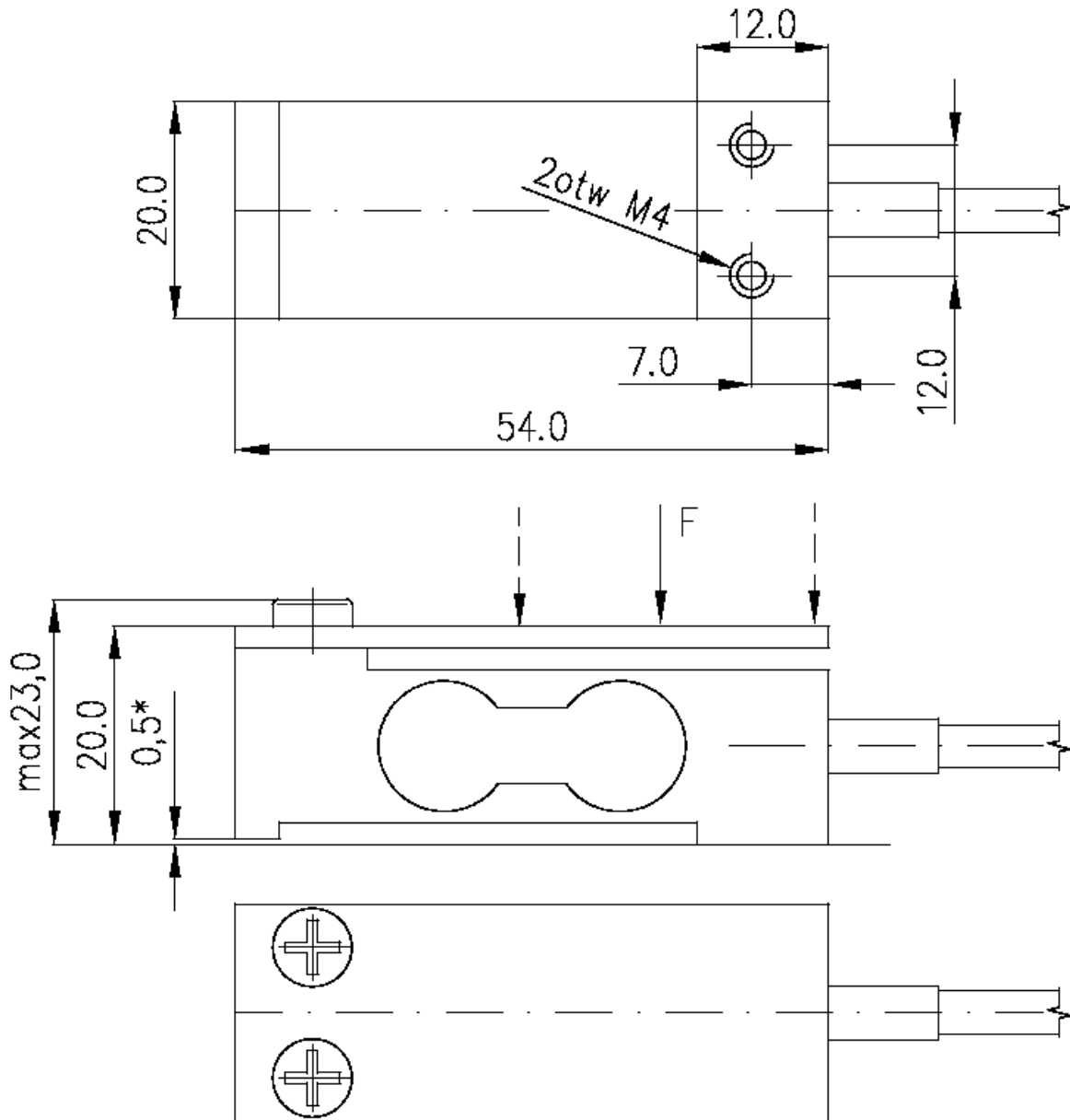
|  |            |                                      |
|--|------------|--------------------------------------|
| Range  | [kN]       | 0,01; 0,02; 0,05; 0,1; 0,2; 0,5; 1   |
| Accuracy                                     | %          | 0,05 or 0,1 (referred to full scale) |
| Sensitivity                                  | [mV/V]     | 1 - R1, 2 - R2                       |
| Nominal supply voltage                       | [VDC]      | 10                                   |
| Input resistance                             | [Ω]        | 410 +10                              |
| Output resistance                            | [Ω]        | 350 + 5                              |
| Operating temperature range                  | [°C]       | -20 to 100                           |
| Compensated temperature range                | [°C]       | 20 to 90                             |
| Zero drift                                   | [%/30 min] | ≤ 0,03                               |
| Hysteresis after unloading from nominal load | [%]        | ≤ 0,03                               |
| Temperature effect on sensitivity            | [%/10K]    | ≤ 0,05                               |
| Temperature effect on zero                   | [%/10K]    | ≤ 0,05                               |
| Maximum strain                               | [mm]       | 0,5                                  |
| Overload                                     | [%]        | 50                                   |
| Isolation resistance                         | [GΩ]       | ≥40                                  |
| Connectors                                   |            | O-Ring gland (O1)                    |
| Protection system                            |            | IP67                                 |
| Dimensions                                   |            | See drawing below                    |
| Weight                                       | kg         | 0,42                                 |
| Spring element material                      |            | Aluminium or steel                   |
| Cable length                                 |            | 3 m (standard) or other optional     |

Circuit diagram for the Force Transducer CL 17pm:

R1, R2



**DIMENSIONS:**



**ORDER INFORMATION:**

**CL17pm-0,5 kN-0,1-R2-10-O1-1**

- Measuring Range \_\_\_\_\_
- Accuracy Class \_\_\_\_\_
- Configuration / Sensitivity (R1 or R2) \_\_\_\_\_
- Excitation \_\_\_\_\_
- Connectors (O1) \_\_\_\_\_
- Wire Length in m \_\_\_\_\_