

Installed BAUER Load Cell



Mobile Data Logger

Contact

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Bauer Spezialtiefbau

Digital BAUER Load Cell (BLC)

Force measurement of anchors and construction components



Description

The **Technical Services** of BAUER Spezialtiefbau GmbH uses the **BAUER Load Cell (BLC)**, an electronic load cell that monitors anchor forces. The low-maintenance BLC is adapted to rough conditions on site; it is dust-resistant, waterproof (IP 67) and can be used in a wide range of temperatures.

The electrical power supply of the BLC, as well as reading and recording of the measurement values, can be carried out either via the Bauer load cell readout unit Type D or the automatic data recording systems Type DL or Type SDL, with an additional display of the total load of all connected load cells. Data transmission is digital.

The measurement values are displayed directly in kN. A manageable number of clearly arranged operating and connection elements means that the readout unit is very easy to use.



This information can be made available to the user online.

Measurement principle

The system of the BLC in combination with the load cell data recording systems Type DL or SDL enables simultaneous display and storage of measurement values from multiple BLCs on a site.



The system enables the simultaneous recording of measurement values from up to 49 BLCs per BUS line on a site.

The following variants are possible:

System A

The measurement data are collected on site with a device DL and SDL. These can be retrieved and further analyzed from the data logger on site. **System B**

The measurement data are transferred by e-mail or in the ftp standard and can be processed further. **System C**

The measurement data are stored in a cloud and processed there. This information is provided to the operator online.

| Type Nominal load/d _/ /H | BLC 1,000/104/100 D | BLC 1,500/125/140 D | BLC 2,000/160/160 D | BLC 3,500/180/180 D | BLC 6,000/0/195 D on request | BLC 10,000/0/283.5 D on request | |
|--|--|---|------------------------|------------------------|------------------------------------|---------------------------------------|--|
| Nominal load (kN) | 1,000 | 1,500 | 2,000 | 3,500 | 6,000 | 10,000 | |
| Resolution (kN) | 1 | 1 | 1 | 1 | 1 | 1 | |
| Weight (kg) | 4,5 | 7 | 12 | 17,4 | 22 | 100 | |
| D _a (mm) | 146 | 176 | 214 | 238 | 170 | 275 | |
| d _a (mm) | 116 | 140 | 180 | 200 | 130 | 189 | |
| d _i (mm) | 104 | 125 | 160 | 180 | 0 | 0 | |
| H (mm) | 100 | 140 | 160 | 180 | 195 | 283.5 | |
| h (mm) | | 40 50 | | | 50 | | |
| D _d (mm) | | 60 72 | | 72 | | | |
| Sensor type/Measure- ment temperature range | Temperature-compensated DMS full bridge / -25 °C to +60 °C | | | | | | |
| Supply voltage | 6 – 24 V DC (open-circuit approx. 20 mA) | | | | | | |
| Total error FS (+-) | <= 1% (verified by calibration record) | | | | | | |
| Output/Interface | RS 4 | RS 485 bus, standard bus address 01 / 460800 baud, 8 bit, 1 stop bit, none parity | | | | | |