# Support jack load cell, type 0101

## For the exact measurement of supporting forces

BROSA support jack load cells reliably monitor the forces acting on stabiliser cylinders. Thanks to the special design of the sensors they are extremely unsusceptible against angular force transfers and shear forces. This allows for the precise measurement of the axial force at each individual supporting point, even in case of uneven or inclined surfaces. The support jack load cells ensure the optimum stabilisation of emergency vehicles or mobile machines at all times. Thanks to the robust design with high-quality materials the sensors are ideally suited for permanent operation. A calibration that corresponds to the respective installation situation ensures precise measurement and thus high measuring accuracy.

### Applications

- Mobile cranes
- Fire trucks
- Concrete pumps

### Features

- Customer-specific design
- Unsusceptible against angular force transfer
- Integrated amplifier
- High overload capacity
- Durable design (verification on request)
- Temperature compensated
- High EMC resistance

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## Technical data

| | |
|---|---|
| Accuracy | ≤ 1.0 % FS |
| Measuring range | 100 kN to 1500 kN |
| Limit load | ≥ 150 %, optional 300 % |
| Breaking load | ≥ 300 %, optional 500 % |
| Linearity error | ≤ 1.0 % FS |
| Hysteresis | ≤ 1.0 % FS |
| Reproducibility | ≤ 0,1 % FS |
| Temperature range | -40 to +80 °C |
| Temperature coefficient | ≤ 0,0035 % / °K |
| Supply voltage | 9 to 36 VDC |
| Output signal | 4 to 20 mA, optional redundant<br>CANopen, optional Safety<br>PROFINET, optional PROFIsafe<br>IO-Link, optional redundant PL c |
| Degree of protection | IP 67, optional IP 69, according to DIN EN 60529 |
| Interference immunity | Up to 200 V/m HF, 100 mA BCI<br>according to ISO 11452, DIN EN 61000-4, ISO 7637 |
| Interference emission | DIN EN 55025 |
| Climatic tests | DIN EN 60068-2 |
| Vibration resistance | DIN EN 60068-2 |
| Electrical connections | M12x1, 5-pins |
| Electrical protection | Reverse polarity protection, overvoltage protection and short-circuit protection |
| Material | Stainless steel |

## Options

| | |
|---|---|
| Safety classification according to DIN EN ISO 13849-1 | PL c, PL d (PL e*) |
| Explosion protection | ATEX Ex i |
| Ex classification | II 2G Ex ib IIC T4 Gb / IECEx Ex ib IIC T4 Gb |
| Passive Design | Output ~ 1 mV / V |

Other requirements can be implemented by agreement.
* When used in higher-level systems according to DIN EN ISO 13849-1

ISO 9001
ISO 14001
2014/34/EU