

Digital Compression Load Cell



FEATURES

- Capacities: 10 - 100 ton
- Digital output via RS-485 or RS-422 interface
- Low profile, multi-column, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 4000d
- Multiple-range versions available
- Internal diagnostics and lightning protection
- 240,000 counts resolution
- Maximum transmission distance 1200m

DESCRIPTION

The SCC is a multi-column, low profile, stainless steel, compression load cell with a digital output signal.

This digital output enables the user to communicate with each SCC independently of the others in the system, thus offering advantages in system setup, system control, corner correction, fault finding and load cell replacement.

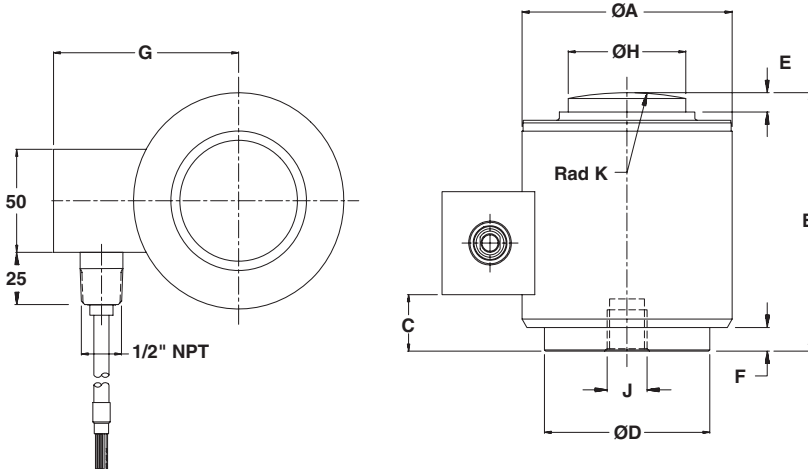
Suitable applications for this product include various types of road and rail weighbridges, and process weighing.

This product meets the stringent Weights and Measures requirements throughout Europe.

APPLICATIONS

- Weighbridges
- Silo hopper weighing

OUTLINE DIMENSIONS in mm



Cable specifications:

Cable length: 10 meters for 10t
20 meters all others

- Excitation + Green
- Excitation - Black
- Rx + Yellow
- Rx - Blue
- Tx + Red
- Tx - White
- Shield Clear

Note: Dimensions are in millimeters

| Capacity (t) | 10, 25 | 40, 60 | 100 |
|--------------|-----------------------|----------------------|-------|
| A | 73.0 | 105.0 | 152.4 |
| B | 82.5 | 127.0 | 184.2 |
| C | 7.0 | 29.0 | 67.5 |
| D | 58.0 | 82.5 | 123.8 |
| E | 6.5 | 8.0 | 23.6 |
| F | 1.8 | 11.0 | 21.8 |
| G | 79.5 | 99.0 | 124.8 |
| H | 31.8 | 58.7 | 79.2 |
| J | M12x1.75 (11 Deep) | M20x2.5 (20 Deep) | |
| K Rad | 152.0 | 152.0 | 432.0 |

SPECIFICATIONS

| PARAMETER | VALUE | | | UNIT |
|---|---|-----------------|-----------------|-------------|
| Standard capacities (E_{max}) | 10, 25, 40, 60, 100 | | | ton |
| Accuracy class according to OIML R-60 | CC | C3 | C4 | |
| Maximum no. of verification intervals (n) | | 3000 | 4000 | |
| Minimum verification interval ($V_{min}=E_{max}/Y$) | | $E_{max}/10000$ | $E_{max}/10000$ | |
| Minimum verification interval, type MR | | $E_{max}/20000$ | $E_{max}/20000$ | |
| Rated output (FSO) | 240,000 | | | counts |
| Tolerance on rated output | 200 | | | ±counts |
| Zero balance | 200 | | | ±counts |
| Combined error | 0.0500 | 0.0200 | 0.0173 | ±% FSO |
| Non-repeatability | 0.0200 | 0.0100 | 0.0090 | ±% FSO |
| Minimum dead load output return | 0.0500 | 0.0167 | 0.0125 | ±% FSO |
| Creep error (30 minutes) | 0.0600 | 0.0245 | 0.0184 | ±% FSO |
| Temp. effect on min. dead load output | 0.0250 | 0.0070 | 0.0070 | ±% FSO/5°C |
| Temp. effect on min. dead load output MR | | 0.0035 | 0.0035 | ±% FSO/5°C |
| Temperature effect on sensitivity | 0.0250 | 0.0050 | 0.0040 | ±% FSO/5°C |
| Compensated temperature range | -10 to +40 | | | °C |
| Operating temperature range | -40 to +80 | | | °C |
| Storage temperature range | -40 to +90 | | | °C |
| Maximum safe over load | 150 | | | % E_{max} |
| Ultimate over load | 400 | | | % E_{max} |
| Maximum safe side load | 10 | | | % E_{max} |
| Deflection at E_{max} | 0.36 max | | | mm |
| Excitation voltage | 12.5 to 18.0 | | | Vdc |
| Maximum excitation voltage | 15 | | | Vdc |
| Maximum current consumption | 80 | | | mA |
| Start up current | 150 | | | mA |
| Insulation resistance | >5000 | | | MΩ |
| Element material (DIN) | Stainless steel 1.4542 | | | |
| Sealing (DIN 40.050 / EN60.529 / IEC 529) | IP66 and IP68 | | | |
| Signal update per second | 25 | | | |
| Baudrate | 9600 | | | Bits/s |
| Transmission type | Asynchronous serial transmission | | | |
| Start bits | 1 | | | |
| Data bits | 7 | | | |
| Stop bits | 1 | | | |
| Parity | Odd | | | |
| Maximum transmission cable length | 1200 | | | m |
| Data transmission interface | RS422 (4 communication wires)/RS485 (2 communication wires) | | | |

FSO - Full Scale Output

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