

SCC SMART COMPRESSION CELL



DESCRIPTION:

The SCC, Smart Compression Cell 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.

FEATURES:

- Digital output via RS485 or RS422 interface
- Low profile, multi-column, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, **4000d**
- Internal diagnostics
- Internal lightning protection
- 240,000 counts resolution
- Maximum transmission distance 1200m
- **CAPACITIES: 10 → 100 t**

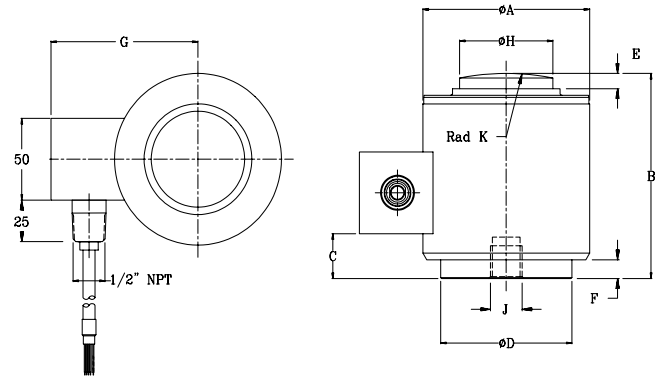
SCC: SPECIFICATIONS

| Standard Capacities (=E _{max}) | t | 10, 25, 40, 60, 100 ² | | | |
|--|-------------------|----------------------------------|-------------------------|-------------------------|-------------------------|
| Accuracy Class According to OIML R-60 | | CC | C2 | C3 | C4 |
| Max. Number of Verification Intervals (n _{ic}) | | | 2000 | 3000 | 4000 |
| Minimum Verification Interval (V _{min}) | | | E _{max} /10000 | E _{max} /10000 | E _{max} /10000 |
| Minimum Verification Interval Type MR | | | | E _{max} /20000 | E _{max} /20000 |
| Combined Error | %S | ≤± 0.0500 | ≤± 0.0230 | ≤±0.0200 | ≤±0.0173 |
| Non-Repeatability | %S | ≤± 0.0200 | ≤± 0.0100 | ≤±0.0100 | ≤±0.0090 |
| Minimum Dead Load Output Return ¹ | %S | ≤± 0.0500 | ≤± 0.0250 | ≤±0.0167 | ≤±0.0125 |
| Creep Error (30 Minutes) ¹ | %S | ≤± 0.0600 | ≤± 0.0245 | ≤±0.0245 | ≤±0.0184 |
| Creep Error (20-30 Minutes) ¹ | %S | ≤± 0.0200 | ≤± 0.0053 | ≤±0.0053 | ≤±0.0039 |
| Temp. Effect on Min. Dead Load Output | %S/5°C | ≤± 0.0250 | ≤± 0.0070 | ≤±0.0070 | ≤±0.0070 |
| Temp. Effect on Min. Dead Load Output MR | %S/5°C | | | ≤±0.0035 | ≤±0.0035 |
| Temp. Effect on Sensitivity | %S/5°C | ≤± 0.0250 | ≤± 0.006 | ≤±0.0050 | ≤±0.0040 |
| Minimum Deadload | %E _{max} | 0 | | | |
| Maximum Safe Overload | %E _{max} | 150 | | | |
| Ultimate Overload | %E _{max} | 400 | | | |
| Maximum Safe Sideload | %E _{max} | 10 | | | |
| Deflection at E _{max} | mm | 0.36 max. | | | |
| Excitation Voltage | Vdc | 12.5...18.0 | | | |
| Recommended Excitation Voltage | Vdc | 15 | | | |
| Maximum Current Consumption | mA | 80 | | | |
| Start-up Current | mA | 150 | | | |
| Rated Output | counts | 240,000 | | | |
| Tolerance on Rated Output | counts | ≤± 200 | | | |
| Zero Balance | counts | ≤± 200 | | | |
| Insulation Resistance | MΩ | ≥± 5000 | | | |
| Element Material (DIN) | | Stainless Steel 1.4542 | | | |
| Sealing (DIN40.050 / EN60.529 / IEC 529) | | IP66/68 | | | |
| Signal Update per Second | | 25 | | | |
| Baudrate | bits/s | 9600 | | | |
| Transmission type | | Asynchronous serial transmission | | | |
| Start Bits | | 1 | | | |
| Data Bits | | 7 | | | |
| Stop Bits | | 1 | | | |
| Parity | | Odd | | | |
| Maximum Transmission Cable Length | m | 1200 | | | |
| Data Transmission Interface | | RS485 / RS422 | | | |
| Compensated Temperature Range | °C | -10 → +40 | | | |
| Operating Temperature Range | °C | -40 → +80 | | | |
| Storage Temperature Range | °C | -40 → +90 | | | |

- 1 Applies for the temperature range -10 to +40 °C
 2 C1 and C2 class only

Accuracy classes C2, C3 and C4 are in agreement with OIML recommendation R-60. **Accuracy C1 is also available.** Correct mounting of the load cells is essential to ensure optimum performance.

Further information is available on request.



Cable specifications:

Cable length : 20m (10m for 10t version).

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

Cable screen is connected to load cell body through a capacitor.

All specifications subject to change without notice

| Capacity | 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 |

Attention:

Dimensions: mm.

All dimension tolerances according to ISO 2768m, unless otherwise specified.

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