

Compression Load Cell

FEATURES

- Capacities: 30, 40, 50, and 60 t
- Self-aligning, stainless steel single column
- Hermetically sealed, IP66/IP68/IP69K
- Type approved up to OIML R60 C6 and NTEP class III L 10000 divisions
- Built-in surge protection tubes (GDTs)
- Current calibration output (SC) ensures easy and accurate parallel connection of multiple load cells
- **Optional**
 - Digital version available (model DSC)

APPLICATIONS

- Weighbridges
- Silo hopper weighing

DESCRIPTION

The ASC is a single column, stainless steel compression load cell.

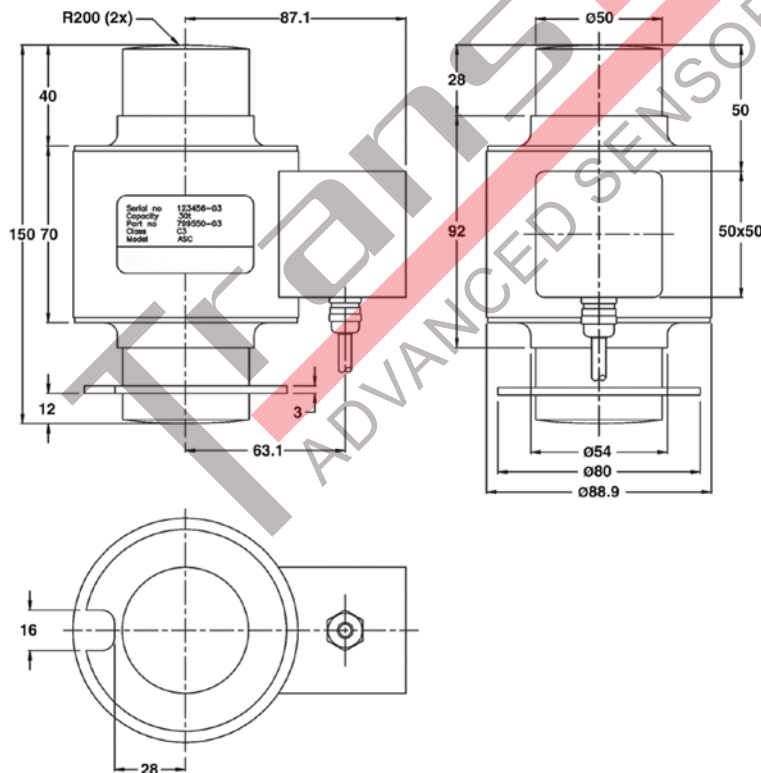


This product is suitable for use in road and rail weigh bridges and process weighing applications.

The welded construction and built-in surge protection ensure that this product can be used successfully in harsh environments.

This load cell meets the stringent Weights and Measures requirements throughout Europe and the USA.

OUTLINE DIMENSIONS in millimeters



Cable specifications

| | |
|---------------|--------------------|
| Cable length: | 15 m |
| Excitation + | Green |
| Excitation - | Black |
| Output + | White |
| Output - | Red |
| Shield | Transparent/Yellow |

Shield is not connected to the load cell body.

Compression Load Cell

| SPECIFICATIONS | | | | | |
|--|------------------------|--------------|------------------|------------------|-----------------|
| PARAMETER | VALUE | | | | UNIT |
| Standard capacities (E_{max}) | 30, 40, 50, 60 | | | | t |
| Accuracy class according to OIML R-60 | NTEP IIIIL | Non-Approved | C3 | C6 | |
| Max. no. of verification intervals | 10000 | | 3000 | 6000 | |
| Min. verification interval ($V_{min}=E_{max}/Y$) | | | $E_{max}/6,000$ | $E_{max}/12,000$ | |
| Min. verification interval, type MR | | | $E_{max}/15,000$ | $E_{max}/30,000$ | |
| Rated output (=S) | 2 | | | | mV/V |
| Rated output tolerance | 0.02 | | | | ±mV/V |
| Zero balance | 1.0 | | | | ±% FSO |
| Combined error | 0.0200 | 0.05000 | 0.0230 | 0.0120 | ±% FSO |
| Non-repeatability | 0.0100 | 0.07 | 0.035 | 0.018 | ±% FSO |
| Minimum dead load output return | 0.015 | 0.0500 | 0.0167 | 0.008 | ±% FSO |
| Creep error (30 minutes) | 0.05 | 0.075 | 0.0245 | 0.0120 | ±% FSO |
| Creep error (20–30 minutes) | 0.030 | 0.0200 | 0.0053 | 0.0026 | ±% FSO |
| Temperature effect on min. dead load output | 0.009 | 0.0250 | 0.0117 | 0.0058 | ±% FSO/5°C (°F) |
| Temp. effect on min. dead load output, type MR | 0.0072 | | 0.0047 | 0.0023 | ±% FSO/5°C |
| Temperature effect on sensitivity | (0.0008) | 0.0250 | 0.006 | 0.0045 | ±% FSO/5°C (°F) |
| Minimum dead load | 0 | | | | % E_{max} |
| Maximum safe overload | 150 | | | | % E_{max} |
| Ultimate overload | 300 | | | | % E_{max} |
| Deflection at E_{max} | 0.5 max. | | | | mm |
| Excitation voltage | 5 to 20 | | | | V |
| Maximum excitation voltage | 25 | | | | V |
| Input resistance | 700±35 | | | | Ω |
| Output resistance | 700±7 | | | | Ω |
| Insulation resistance | ≥5000 | | | | MΩ |
| Compensated temperature range | -10 to +40 | | | | °C |
| Operating temperature range | -40 to +80 | | | | °C |
| Storage temperature range | -40 to +90 | | | | °C |
| Element material | Stainless steel 1.4542 | | | | |
| Sealing (DIN 40.050 / EN60.529) | IP66/IP67/IP69K | | | | |
| SC-Version (current calibration*) | Standard | | | | |

FSO—Full Scale Output

*SC-version: The rated output and the output resistance are balanced in such a way, that the output current is calibrated to within 0.05% of a reference value. This allows easy parallel connection of the load cells.

All specifications subject to change without notice.

Disclaimer

ALL PRODUCTS, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE.

Vishay Precision Group, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "VPG"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

The product specifications do not expand or otherwise modify VPG's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

VPG makes no warranty, representation or guarantee other than as set forth in the terms and conditions of purchase. **To the maximum extent permitted by applicable law, VPG disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.**

Information provided in datasheets and/or specifications may vary from actual results in different applications and performance may vary over time. Statements regarding the suitability of products for certain types of applications are based on VPG's knowledge of typical requirements that are often placed on VPG products. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. You should ensure you have the current version of the relevant information by contacting VPG prior to performing installation or use of the product, such as on our website at vpgsensors.com.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of VPG.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling VPG products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify VPG for any damages arising or resulting from such use or sale. Please contact authorized VPG personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.

Copyright Vishay Precision Group, Inc., 2014. All rights reserved.