

## Single-Point Load Cell

## FEATURES

- Capacities: 6–60 kg
- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 3000d
- Comprehensive mounting hole facility
- Moment insensitive, platform size to 350 x 350 mm
- **Optional**
  - ATEX and FM certified versions are available for use in potentially explosive atmospheres
  - IP69K full hermetic construction with true glass to metal seal



## APPLICATIONS

- Food platforms
- Process weighing
- Multi-head packaging machines
- Marine hybrid scales

## DESCRIPTION

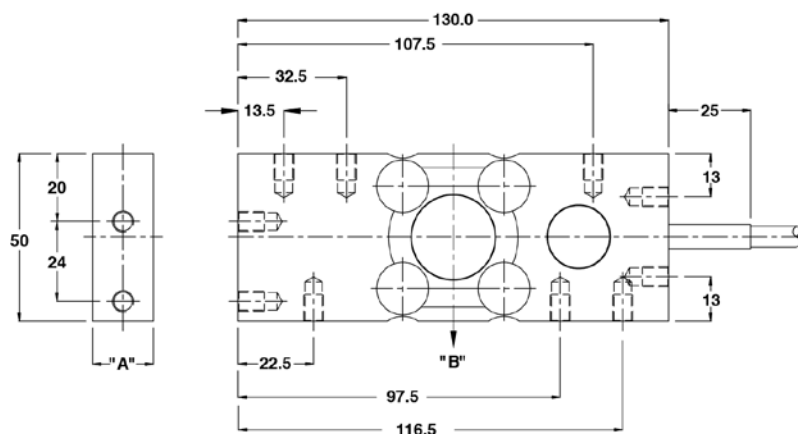
The HPS is a unique fully welded all stainless steel single point (moment insensitive) load cell.

This product is suitable for low capacity platform scales, multi-head packaging machines, check weighers, loss-in-weight feeders, belt scales, and general process weighing applications.

The unique construction ensures that this product can be used successfully in harsh environments found in the food, chemical, and allied industries.

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

### OUTLINE DIMENSIONS in millimeters



### Cable specifications

Cable length: 7m

|              |             |
|--------------|-------------|
| Excitation + | Green       |
| Excitation - | Black       |
| Output +     | White       |
| Output -     | Red         |
| Sense +      | Yellow      |
| Sense -      | Blue        |
| Shield       | Transparent |

Cable screen is not connected to the load cell body.

| Capacity (kg)                            | 6, 12, 30         | 60   |
|------------------------------------------|-------------------|------|
| A                                        | 18.5              | 23.5 |
| B                                        | Central load axis |      |
| Max. recommended platform size<br>350 mm |                   |      |
| All threads M6x1 (8 Deep)                |                   |      |

### Single-Point Load Cell

| SPECIFICATIONS                              |                                               |                 |                          |
|---------------------------------------------|-----------------------------------------------|-----------------|--------------------------|
| PARAMETER                                   | VALUE                                         |                 | UNIT                     |
| Standard capacities ( $E_{max}$ )           | 6, 12, 30, 60                                 |                 | kg                       |
| Accuracy class according to OIML R-60       | Non-Approved                                  | C3              |                          |
| Max. no. of verification intervals          |                                               | 3000            |                          |
| Min. verification interval ( $V_{min}$ )    |                                               | $E_{max}/12000$ |                          |
| Rated output ( $=S$ )                       | 2                                             |                 | mV/V                     |
| Rated output tolerance                      | 0.2                                           |                 | ±% mV/V                  |
| Zero balance                                | 1.0                                           |                 | ±% FSO                   |
| Combined error                              | 0.0500                                        | 0.0200          | ±% FSO                   |
| Non-repeatability                           | 0.0200                                        | 0.0100          | ±% FSO                   |
| Minimum dead load output return             | 0.0500                                        | 0.0167          | ±% applied load          |
| Creep error (30 minutes)                    | 0.0600                                        | 0.0245          | ±% applied load          |
| Temperature effect on min. dead load output | 0.0250                                        | 0.0058          | ±% FSO/5°C (°F)          |
| Temperature effect on sensitivity           | 0.0250                                        | 0.0045          | ±% applied load/5°C (°F) |
| Eccentric load effect*                      | 0.03                                          |                 | ±% FSO                   |
| Minimum dead load                           | 0                                             |                 | % $E_{max}$              |
| Maximum safe overload                       | 150                                           |                 | % $E_{max}$              |
| Ultimate overload                           | 300                                           |                 | % $E_{max}$              |
| Maximum safe side load                      | 100                                           |                 | % $E_{max}$              |
| Deflection at $E_{max}$                     | 0.24±0.02 / 0.19±0.01 / 0.15±0.01 / 0.22±0.03 |                 | mm                       |
| Excitation voltage                          | 5 to 12                                       |                 | V                        |
| Maximum excitation voltage                  | 15                                            |                 | V                        |
| Input resistance                            | 400±6                                         | 400±6           | Ω                        |
| Output resistance                           | 350±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 (DIN)                      | Stainless steel 1.4542                        |                 |                          |
| Sealing (DIN 40.050 / EN60.529)             | IP66 and IP68                                 |                 |                          |
| Recommended torque on fixation bolts        | 6                                             |                 | N*m                      |

\* Applies at 50% x Rated Load at 150 mm radius

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, "Vishay Precision Group"), 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 Vishay Precision Group's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

Vishay Precision Group 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, Vishay Precision Group 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 Vishay Precision Group's knowledge of typical requirements that are often placed on Vishay Precision Group 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.

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

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