

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**
 - FM Approved, ATEX and UKCA certified versions 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

The 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.

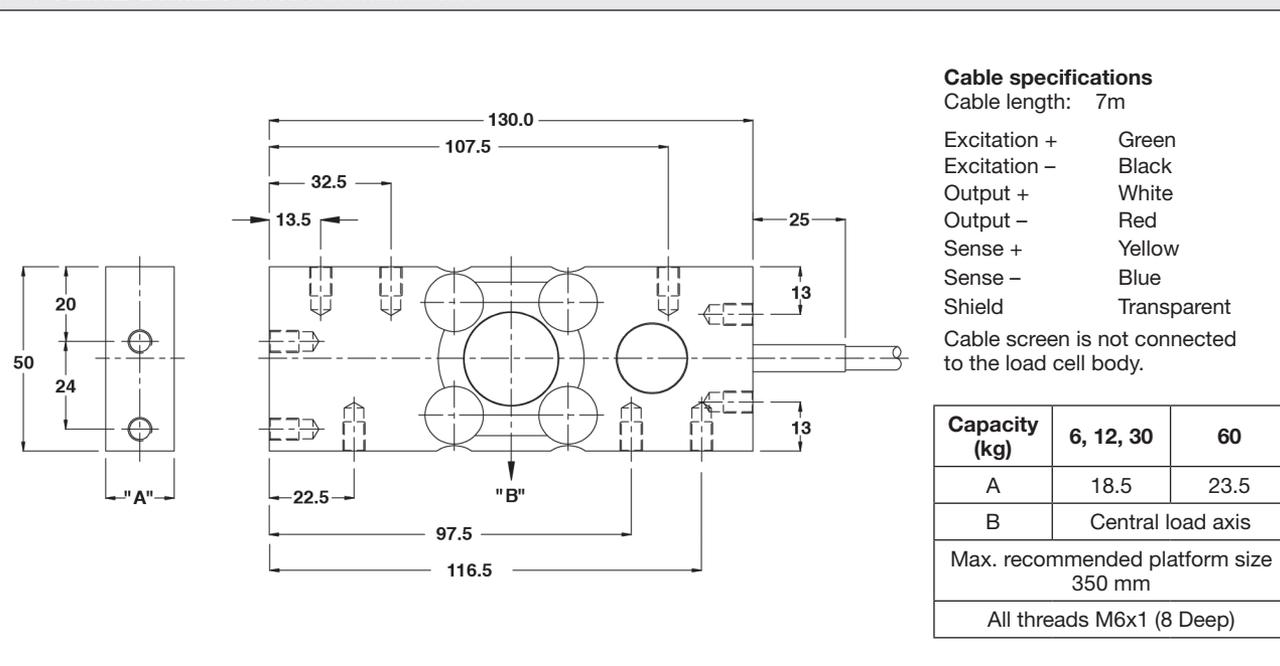
DESCRIPTION

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

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

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

OUTLINE DIMENSIONS in millimeters



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.

CERTIFICATION MARKINGS

ATEX & UKEX Markings (For Zone 1, 2 and Zone 21, 22)

II 2 G Ex ib IIC T6...T4 Gb
 II 2 D Ex ib IIIC T70°C Db
 II 2 D Ex tb IIIC T70°C Db

II 3 G Ex ic IIC T6...T4 Gc or Ex nA IIC T6...T4 Gc
 II 3 D Ex ic IIIC T70°C Dc or Ex tc IIIC T70°C Dc

FM Approval Markings (USA and Canada)

IS Class I, II, III, Division 1, Groups A, B, C, D, E, F and G;
 NI Class I, Division 2, Groups A, B, C, and D;
 DIP Class II, III, Division 2, Groups F and G;
 T4;
 Ta = -25°C to +40°C;



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.