# **HPS** SINGLE POINT LOAD CELL



### **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.

## FEATURES:

- Fully welded, stainless steel construction
- Hermetically sealed, IP66 and IP68
- Certified to OIML R-60, 3000d
- ATEX certified versions are available for use in potentially explosive atmospheres
- Comprehensive mounting hole facility
- Moment insensitive, platform size to 350 x 350mm
- CAPACITIES:  $6 \rightarrow 60$ kg



# **HPS: SPECIFICATIONS**

Standard Capacities (=E <sub>max</sub> )	kg	6, 12, 30, 60			
Accuracy Class According to OIML R-60		CC	C1	C2	C3
Max. Number of Verification Intervals (n <sub>lc</sub> )			1000	2000	3000
Minimum Verification Interval (v <sub>min</sub> )			E <sub>max</sub> /5000	E <sub>max</sub> /10000	E <sub>max</sub> /12000
Accuracy According to Type Designation		CC	C1	C2	C3
Combined Error	%S	$\leq$ ± 0.0500	$\leq$ ± 0.0300	$\leq$ ± 0.0230	$\leq$ ± 0.0200
Non-Repeatability	%S	$\leq$ ± 0.0200	$\leq$ ± 0.0200	$\leq$ ± 0.0100	$\leq$ ± 0.0100
Minimum Dead Load Output Return <sup>1</sup>	%S	$\leq \pm 0.0500$	$\leq$ ± 0.0500	$\leq$ ± 0.0250	$\leq$ ± 0.0167
Creep Error (30 Minutes) <sup>1</sup>	%S	$\leq \pm 0.0600$	$\leq$ ± 0.0490	$\leq$ ± 0.0245	$\leq$ ± 0.0245
Creep Error (20-30 Minutes) <sup>1</sup>	%S	$\leq$ ± 0.0200	$\leq$ ± 0.0105	$\leq$ ± 0.0053	$\leq$ ± 0.0053
Temp. Effect on Min. Dead Load Output	%S/5°C	$\leq \pm 0.0250$	$\leq$ ± 0.0140	$\leq$ ± 0.0070	$\leq$ ± 0.0058
Temp. Effect on Sensitivity	%S/5°C	$\leq \pm 0.0250$	$\leq$ ± 0.0080	$\leq$ ± 0.0055	$\leq$ ± 0.0045
Minimum Dead Load	%E <sub>max</sub>	0			
Maximum Safe Over Load	%E <sub>max</sub>	150			
Ultimate Over Load	%E <sub>max</sub>	300			
Maximum Safe Side Load	%E <sub>max</sub>	100			
Deflection at E <sub>max</sub>	mm	0.24±0.02/0.19±0.01/0.15±0.01/0.22±0.03			
Excitation Voltage	V	512			
Maximum Excitation Voltage	V	15			
Rated Output (=S)	mV/V	2			
Tolerance on Rated Output	mV/V	± 0.2			
Zero Balance	%S	≤ ± 1.0			
Input Resistance	Ω	400 ± 6 410 ± 6			
Output Resistance	Ω	350 ± 7			
Insulation Resistance	MΩ	≥ 5000			
Compensated Temperature Range	°C	-10+40			
Operating Temperature Range	°C	-40+80			
Storage Temperature Range	°C	-40+90			
Element Material (DIN)		Stainless Steel 1.4542			
Sealing (DIN 40.050 / EN 60.529)		IP66 and IP68			
Eccentric load effect <sup>2</sup>	%S	0.03			
Recommended Torque on Fixation Bolts	Nm	6			
ATEX options for potentially explosive atmospheres <sup>3</sup>		II2G EEx ib IIC T4/T6 or II1D T70°C or II3G EEx nA II T4/T6 or II3D T70°C			

1 Applies for the temperature range -10 to +40 °C 2 Applies at 50% x Rated Load at 150mm radius.

3 Applies for the temperature range -20 to +40 °C

Accuracy classes C1, C2 and C3 are in agreement with the OIML recommendation R-60.

Correct mounting of the load cells is essential to ensure optimum performance.

Sufficient protection should be given to the load cell to prevent overload from occurring. Protection during transportation of the equipment, to which the load cell is fitted, must be considered.

Further information is available on request.

#### VISHAY REVERE TRANSDUCERS B.V.

Ramshoorn 7 Postbus 6909, 4802 HX Breda The Netherlands Tel: (+31) 76-5480700 Fax: (+31) 76-5412854 E-mail: info@revere.nl

Vishay Revere Transducers part of the Vishay Transducers group www.vishaymg.com



Cable specifications:

20

-

50 24  $\oplus$ 

Cable length	7m
Excitation +	Green
Excitation -	Black
Output +	White
Output –	Red
Sense +	Yellow
Sense -	Blue
Shield	Transparent

Capacity 6.12.30 60 А 18.5 23.5 В Central Load Axis Max. recommended platform size 350mm All Threads M6x1 (8 Deep)

#### Attention:

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

All specifications subject to change without notice

Cable screen is not connected to load cell body.

	25
-22.5 - "B"	
97.5 116.5	

-130-

-107.5-