

# High Accuracy Compression Load Cell

## FEATURES

- Capacities 5–50 t
- Stainless steel construction
- OIML R60 and NTEP approved
- IP68 protection
- **Optional**
  - EEx ia IIC T6 hazardous area approval
  - FM and IECEx approvals available



## APPLICATIONS

- Truck scales
- Hopper for process weighing
- Tank and silo weighing
- Harsh environment



## DESCRIPTION

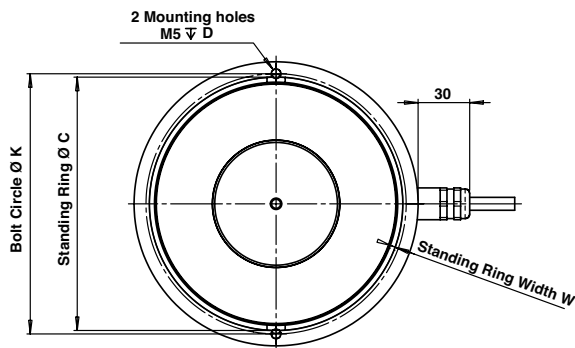
The Model 220 is a low profile bending ring load cell designed for high capacity weighing applications, including weighbridges, tanks, silos and high capacity platform scales as well as force measurement.

Its small physical size, combined with high accuracy and low cost, makes this load cell ideally suited for modern

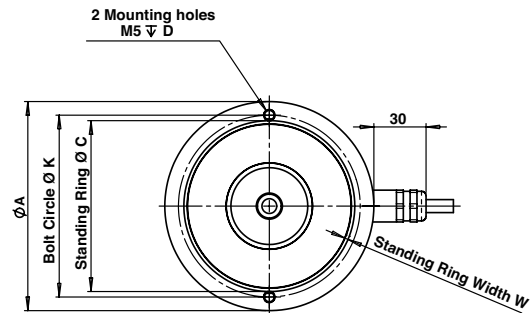
low profile designs in both approved applications and process weighing.

This high accuracy load cell has factory Mutual approval and is OIML R60 approved to 6000 divisions. For hazardous environments, this load cell has an EEx ia IIC T6 approved option. When combined with Tedea-Huntleigh mounting accessories, this load cell will provide a simple, accurate and reliable weighing system.

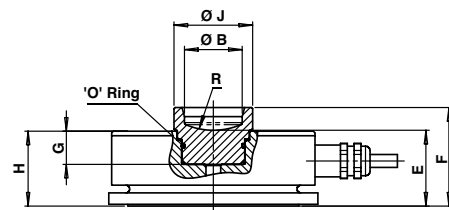
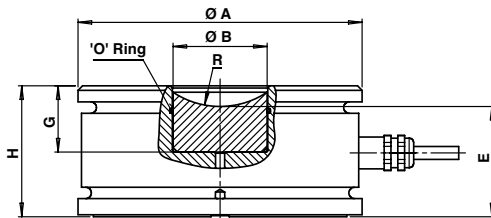
## OUTLINE DIMENSIONS in millimeters



20 t, 30 t, 50 t



5 t, 10 t



	A	B	C	D	E	F	G	H	J	K	W	R
5 t	80.0	25.4	71.0	7.0	33.4	43.4	20.0	30.0	34.6	70.0	1.0	31.0
10 t	92.0	25.4	75.2	6.0	33.4	43.4	14.6	33.0	34.6	80.0	1.5	31.0
20 t, 30 t	110.0	28.4	101.0	7.5	39.1		26.3	50.1		102.0	1.5	31.0
50 t	125.0	41.4	111.5	8.0	48.5		29.2	57.7		114.5	2.3	37.3

High Accuracy Compression Load Cell

SPECIFICATIONS					
PARAMETER	VALUE				UNIT
Rated capacity—R.C. ( $E_{max}$ )	5000, 10000, 20000, 30000, 50000***				kg
NTEP/OIML accuracy class	NTEP	C1	C3*	C4**	
Maximum no. of intervals (n)	10000 IIL multiple	1000	3000	4000	
$Y = E_{max}/V_{min}$	11000	5000	14000	14000	
Rated output—R.O.	2.0				mV/V
Rated output tolerance	0.1				±% of rated output
Zero balance	2				±% of rated output
Zero return, 30 min.	0.0330	0.0500	0.0170	0.0125	±% of applied load
Total error (per OIMP R60)	0.0200	0.0500	0.0200	0.0150	±% of rated output
Temperature effect on zero	0.0023	0.0028	0.0010	0.0010	±% of rated output/°C
Temperature effect on output	0.001	0.0020	0.0010	0.0008	±% of applied load/°C
Temperature range, compensated	-10 to +40				°C
Temperature range, safe	-30 to +70				°C
Maximum safe central overload	150				% of R.C.
Ultimate central overload	300				% of R.C.
Excitation, recommended	10				VDC or VAC RMS
Excitation, maximum	20				VDC or VAC RMS
Input impedance	1065±60				Ω
Output impedance	1025±20				Ω
Insulation resistance	>2000				MΩ
Cable length	5 m (5 t), 10 m (10 and 20 t), 20 m (30 and 50 t)				m
Cable type	6-wire, braided, polyurethane, double floating screen				Standard
Construction	Stainless Steel				
Environmental protection	IP68				

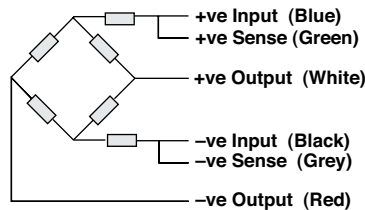
\* 20% utilization

\*\* 40% utilization

\*\*\* Capacities 5–20 t available in C6 45% utilization

All specifications subject to change without notice.

Wiring Schematic Diagram





## 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](http://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.