

Stainless Steel, Multi-Column Compression Load Cell



FEATURES

- Rated capacities of 50000 to 200000 pounds, 23 to 91 metric tons
- Stainless steel, welded seal construction
- Multi-column monolithic element design
- 35 feet [10.7 m] standard cable length
- Three times side loading tolerance relative to similar competitive products
- Reduced eccentric loading sensitivity
- Integral conduit adaptor

This load cell is rated intrinsically safe by

the Factory Mutual System (FM); making it

suitable for use in potentially explosive

environments. This load cell is certified for

Legal For Trade applications by both

American NTEP and International OIML

standards.

- Replacement for models RTI 792 and BLH C2P1
- Trade certified for NTEP Class III: 5000d, IIIL: 10000d and OIML R-60 3000d
- Welded Sensorgage[™] sealed to IP66/67 standards
- Cell Guard™ two year warranty

DESCRIPTION

VISHAY

GROUP

The 65088-114 is a high capacity, stainless steel compression load cell.

The unique four column design offers excellent insensitivity to eccentric loads. This design is suitable for use in truck scales, rail scales and silo weighing applications.

This product's stainless steel construction, welded seals and IP67 rating ensure ultimate survivability under harsh conditions.

OUTLINE DIMENSIONS in inches [mm]

1/16" CHAMFER "D" SPHERICAL "T" THREAD ON A Ø"G" B.C. Ø"В X 45° RADIUS @ 90° APART 4 PLACES Ø"C "A' 4 CONDUCTOR; 22 AWG. CABLE; SHIELDED & BLACK JACKETED; 35 FOOT [10.7 m] STANDARD Wiring LENGTH OR PER SALES ORDER + Excitation Green - Excitation Black CONDUIT ADAPTOR +Output White 1/2-14 NPT - Output Red VIEW "A-A' CAPACITY Α в С D Е E G т DEFLECTION WEIGHT 50K 1.17 4.50 1.25 8.00 0.75 7.50 2.38 3/8-24 UNF-2B x .63 DEEP 0.003 15.0 2.00 5.75 1/2-20 UNF-2B x .75 DEEP 100K 1.75 12.00 0.87 9.13 4.00 0.006 35.0 200K 2.93 7.50 2.50 12.00 0.97 11.63 5.50 5/8-18 UNF-2B x 1.00 DEEP 0.006 55.0 [23 t] [29.7] [114.3] [31.7] [203.2] [19.0] [190.5] (60.5]3/8-24 UNF-2B x .63 DEEP [0.1] [6.8] [45 t] [50.8] [146.0] [44.5] [304.8] [22.1] [231.9] [101.6] 1/2-20 UNF-2B x .75 DEEP [0.2] [15.9] 3/8-24 UNF-2B x .63 DEEP [91 t] [74.4] [190.5] [63.5] [304.8] [24.6] [295.4] [139.7] [0.2] [25.0] Capacities are in pounds [kg/t]. Deflection is ± 10%. Certified drawings are available.

 Document Number: 11593
 Technical contact in Americas: lc.usa@vishaypg.com, Europe: lc.ur@vishaypg.com, www.vishaypgloadcells.com

 Revision: 12-Feb-10
 China: lc.china@vishaypg.com, Taiwan: lc.eur@vishaypg.com, www.vishaypgloadcells.com

Approved

APPLICATIONS

- Truck scales
- Railroad track scales
- Tank, bin and weighing applications

Sensortronics

Stainless Steel, Multi-Column Compression Load Cell



SPECIFICATIONS

PARAMETER	VALUE				UNIT
Bated capacities	50K, 100K, 200K				lbs
	23 t, 45 t, 91 t				kgs/metric tons
Full scale output (FSO)	$2.0 \pm 0.50\%$				mV/V
Accuracy class	NTEP III	NTEP IIIL	Standard	OIML R60	
Max. no. of verification intervals	5000	10000		3000	
	multiple	multiple			
Combined error	-		≤ 0.03		% FSO
Nonlinearity			≤ 0.03		% FSO
Hysteresis			≤ 0.02		% FSO
Creep error (20 minutes)			≤ 0.03		% FSO
Temperature effect on zero			≤ 0.0015		% FSO/°F
Temperature effect on output			≤ 0.0008		% of load/°F
Non-repeatability	≤ 0.1				% FSO
Zero balance	≤ 1.0				% FSO
Insulation resistance at 50 VDC	> 1000				MΩ
Compensated temperature range	14 to 104 (-10 to 40)				°F (°C)
Operating temperature range	0 to 150 (-18 to 65)				°F (°C)
Storage temperature range	-60 to 185 (-50 to 85)				°F (°C)
Input resistance	350 ± 3.5				Ω
Output resistance	350 ± 3.5				Ω
Recommended excitation voltage	10				VDC
Maximum excitation voltage	25				VDC
Safe sideload	30				% of rated capacity
Safe overload	150				% of rated capacity
Ultimate overload	300				% of rated capacity
Sealing	IP66/67				
Material					
Element	15-5 PH stainless steel				
Canister	304 stainless steel				

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.