

Load Cell

FEATURES

- Capacity range: 20000 to 100000 lb (9072 to 45360 kg)
- Tension service
- Operational: -30° to +175°F
- Low deflection
- Environmentally sealed
- FM and CSA approved

APPLICATIONS

- Tensile testing
- Crane scales
- Grain silos
- Suspended vessels

DESCRIPTION

T2P1 load cells, developed by BLH Nobel, are designed for various types of weighing and force measurement. T2P1 load cell construction uses all the advantages of SR-4® strain gages.

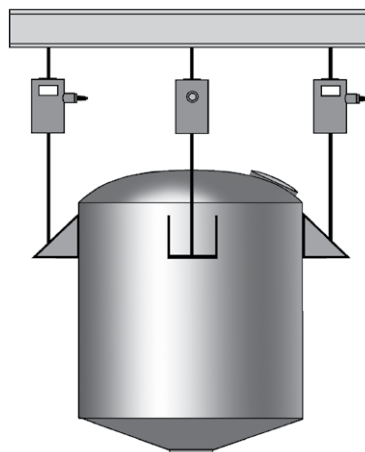
T2P1 Load Cells are fabricated with high strength 'column type' elements that provide output signals of 2mV/V at rated capacity. Each cell is designed for minimum deflection and maximum safe overload during periods of full capacity tension.

Double diaphragm fabrication and gage linearizing combine to offer precision performance and long term

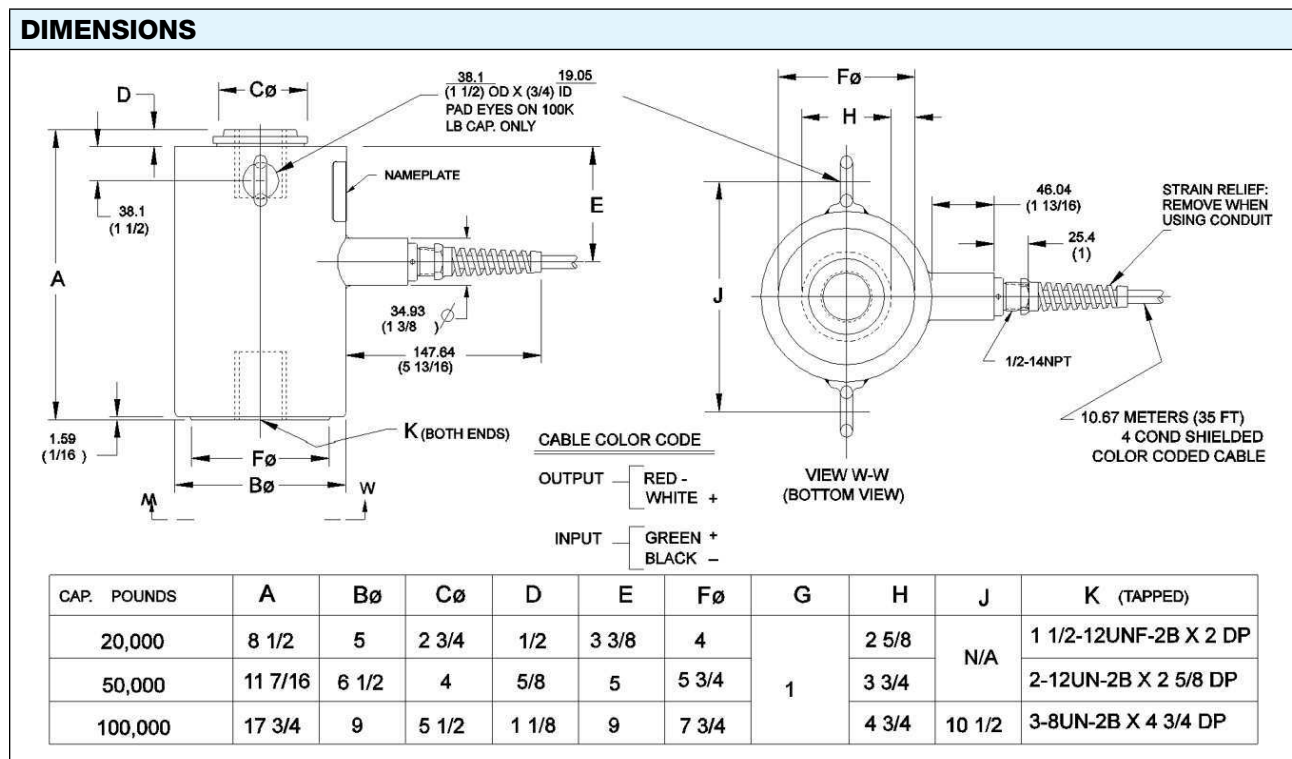
reliability. Low deflection and superior sealing guarantee trouble-free operation. Relatively low mass and small deflection under load, produce excellent frequency response. Overall, T2P1 cells perform superbly in many environments where other transducers cannot.



CONFIGURATION



Load Cell



SPECIFICATIONS

| PARAMETER | VALUE |
|-----------------------------|--------------------|
| PERFORMANCE | |
| Capacities | 20K, 50K, and 100K |
| Rated output (RO) | 2.0 mv/v ±0.10% |
| Combined error (Hys.& Lin.) | ±0.03% F.S. |
| Repeatability—%RO | 0.02 F.S. |
| Creep—%RO (20 min.) | ±0.02% F.S. |
| ELECTRICAL | |
| Recommended excitation | 10 VAC or VDC |
| Maximum excitation | 20 VAC or VDC |
| Zero balance —%RO | 0.02% F.S. |
| Input resistance | 350 ±3.5 Ω |
| Output resistance | 350 ±3.5 Ω |
| Number of bridges | 2 |
| Cable length | 35 ft |

| PARAMETER | VALUE | | |
|---------------------------------|------------------|--------|---------|
| TEMPERATURE | | | |
| Safe range | 15–115°F | | |
| Compensated range | 15–115°F | | |
| Effect on zero balance | ±0.0015% F.S./°F | | |
| Effect on rated output | ±0.0008%/°F | | |
| ADVERSE LOAD RATINGS | | | |
| Safe overload | 150% | | |
| Ultimate overload | 300% capacity | | |
| MECHANICAL DATA | | | |
| | 20K lb | 50K lb | 100K lb |
| Weight (lb) | 25 | 55 | 160 |
| Deflection (in) | 0.0075 | 0.01 | 0.009 |
| Deflection (mm) | 0.191 | 0.254 | 0.229 |
| Nat. Freq. (Hz) @ Eff. Wt. (lb) | 3500/2 | 3100/5 | 2100/25 |

BLH Nobel is continually seeking to improve product quality and performance. Specifications may change accordingly. Many performance specifications are proven on a statistical sample basis.



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.