

Co-Planar Beam Load Cell

FEATURES

- Capacity range: 7.5–250 kg
- Only 2.5–8 mm high
- Very low profile
- Aluminum construction
- IP65 protection
- 1000Ω input impedance
- Provides freedom in rectangular scale size design
- Matched output and current calibration circuitry
- Eliminates need for spyder in typical bench top scales



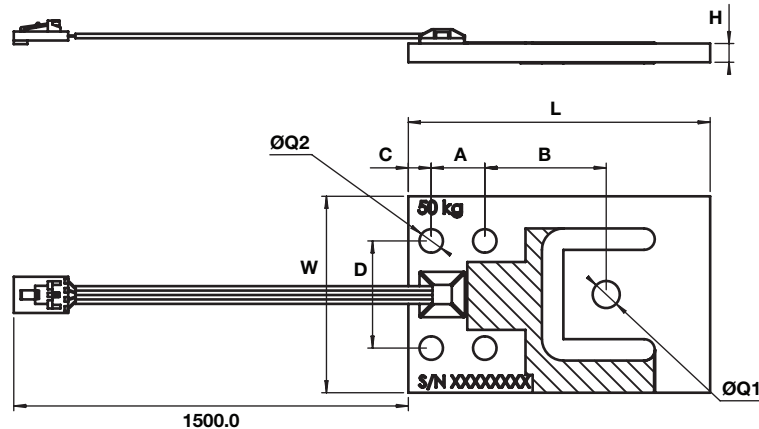
APPLICATIONS

- Personal scales
- Commonly used in low profile infant and adult medical scales
- Large and medium low profile platform scales
- Airport baggage scales
- Postal scales

DESCRIPTION

The Model 380 is a very low profile planar beam design, allowing direct mounting in low profile platform scales. The range of capacities and low profile make the Model 380 most suitable for use in a wide range of applications.

OUTLINE DIMENSIONS in millimeters



Type	L	A	B	C	D	W	H	Q1	Q2
PB-7.5 kg	70	14	28	4.9	27.8	39	2.5	5.1	5.1
PB-15 kg	70	14	28	4.9	27.8	39	4.1	6.2	5.1
PB-37.5 kg	76.2	15	29.3	6	30	44.5	4.8	6.2	6.6
PB-50 kg	84.5	15	34	6.4	30	55	5.3	7.6	6.6
PB-75 kg	84.5	15	34	6.4	30	55	6.4	7.6	6.6
PB-150 kg	107.5	22.8	45.9	7.8	44.5	70	8	5/16UNC	8.1
PB-250 kg	107.3	22.9	45.8	7.9	44.5	70	10.0	9.1	8.1

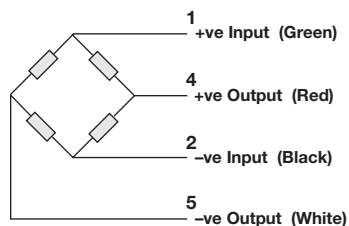
Co-Planar Beam Load Cell

SPECIFICATIONS				
PARAMETER	VALUE			UNIT
Rated capacity—R.C. (E_{max})	7.5, 37.5, 50, 75, 150, 250			kg
Accuracy class	E	G4	H5	
OIML Accuracy class	NA	C3	C4	
Maximum no. of intervals (n)	NA	3000	4000	
$Y = E_{max}/V_{min}^*$	NA	7500*	7500*	
Rated output—R.O.	1.0			mV/V
Rated output tolerance	0.10	0.001		±mV/V
Zero balance	0.10			±mV/V
Creep, 30 min.	0.074	0.024	0.018	±% of load
Zero return, 30 min.	0.05	0.0167	0.0125	±% of load
Temperature effect on output	0.002	0.001	0.00075	±% of load/°C
Temperature effect on zero	0.007	0.00186	0.00186	±% of R.O./°C
Input impedance	1160±15			Ω
Output impedance	1000±10			Ω
Insulation resistance	5000			MΩ
Temperature range, compensated	-10 to +40			°C
Temperature range, safe	-30 to +70			°C
Maximum safe central overload	300			% of R.C.
Ultimate static overload	400			% of R.C.
Safe side load	200			% of R.C.
Cable type	4 conductors, 26AWG, flat, PVC			
Cable length	1.5			m
Color code	+Exc: Green, +Sig: Red, -Exc: blk, -Sig: wht			
Construction	Aluminum, RTV potting			
Environmental protection	IP65			
Outline dimensions drawing	378.000.003			

* Consult factory for higher Y values availability

All specifications subject to change without notice.

Wiring Schematic Diagram



The load cell is provided with a 4 conductor ribbon cable and with optional AMP#103957-4 connector

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.