# Model DSR

Celtron



# **Double-Ended Shear Beam**

#### FEATURES

- Capacities 1k–75k lbs
- Double-ended center-load shear beam design
- Rationalized outputs
- Free of horizontal movement
- Insensitive to side load
- Electroless nickel-plated alloy tool steel
- Optional
  - $\circ$  Hermetically sealed available
  - $\circ$  Stainless steel available
  - FM approval available

#### APPLICATIONS

• Silo/hopper/tank weighing

#### DESCRIPTION

The double-ended mounting provides good restraint to possible movement of the tanks and, in many cases, eliminates the need for check rods.



The shear beam design gives excellent performance for high capacity loading.

The output is rationalized to facilitate multiple-cell application.

DSR is constructed of alloy tool steel and is potted to IP67 providing excellent protection against moisture and humidity.

#### **OUTLINE DIMENSIONS** ØD1 ØD R Rad н 1k lbs-50k lbs Cable Length: 24.6'/7.5m 12 w 11 12 ØD1 R Rad Wiring + Excitation Red Excitation Black w 75k lbs + Signal Green Cable Length: 24.61/7.5m Signal White CAPACITY L L L2 W Н H1 D D1 R 1k / 1.5k / 2k / 2.5k / 190.5 158.8 35.4 31.7 31.7 31.7 12.7 5.0 mm -3k / 5k lbs 1.25 0.20 (inch) 7.50 6.25 1.39 1.25 1.25 0.50 -10k / 15k / 20k / 222.3 mm 190.5 50.0 36.6 49.3 -50.8 20.6 5.0 25k lbs 0.20 8.75 7.50 1.97 1.44 1.94 2.00 0.81 (inch) -342.9 292.1 82.6 62.0 74.7 4.6 76.2 33.3 5.0 mm 50k / 75k lbs 13.50 11.50 3.25 2.44 2.94 0.18 3.00 1.31 0.20 (inch)



## Model DSR

Celtron

### **Double-Ended Shear Beam**

SPECIFICATIONS		
PARAMETER	VALUE	UNIT
NTEP/OIML accuracy class	Non-Approved	
Y = E <sub>max</sub> /V <sub>min</sub>	5000	Maximum available
Standard capacities (E <sub>max</sub> )	1k, 1.5k, 2k, 3k, 5k, 10k, 15k, 20k, 25k, 50k, 75k	lbs
Rated output-R.O.	3.0	mV/V
Rated output tolerance	0.25	±% of rated output
Zero balance	1	±% of rated output
Non-linearity	0.030 (SS: 0.07%)	±% of rated output
Hysteresis	0.030 (SS: 0.07%)	±% of rated output
Non-repeatability	0.02	±% of rated output
Creep error (20 minutes)	0.030	±% of rated output
Zero return (20 minutes)	0.030	±% of rated output
Temperature effect on min. dead load output	0.0026	±% of rated output/°C
Temperature effect on sensitivity	0.0015	±% of applied load/°C
Compensated temperature range	-10 to +40	°C
Operating temperature range	–20 to +60	°C
Safe overload	150	% of R.C.
Ultimate overload	300	% of R.C.
Excitation, recommended	10	VDC or VAC RMS
Excitation, maximum	15	VDC or VAC RMS
Input impedance	770±10	Ω
Output impedance	700±5	Ω
Insulation resistance	>5000	ΜΩ
Construction	Nicke-plated alloy steel	
Environmental protection	IP67	

All specifications subject to change without notice.

FM Approval

Intrinsically Safe: Class I, II, III; Div. 1 Groups A-G Non-Incendive: Class I; Div. 2 Groups A-D



Vishay Precision Group

## 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, "Vishay Precision Group"), 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 Vishay Precision Group's terms and conditions of purchase, including but not limited to, the warranty expressed therein.

Vishay Precision Group 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, Vishay Precision Group 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 Vishay Precision Group's knowledge of typical requirements that are often placed on Vishay Precision Group 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.

No license, express, implied, or otherwise, to any intellectual property rights is granted by this document, or by any conduct of Vishay Precision Group.

The products shown herein are not designed for use in life-saving or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay Precision Group products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay Precision Group for any damages arising or resulting from such use or sale. Please contact authorized Vishay Precision Group 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.