

## Model MDB

Celtron

# **Miniature Double-Ended Beam**

#### **FEATURES**

- Capacities: 10-50 t
- High side load tolerance
- · Electroless nickel-plated alloy tool steel
- Surge protection optional for 10 t to 50 t
- Optional
  - o Hermetically sealed available
  - FM approval available

#### **APPLICATIONS**

- Truck/rail scales
- Silo/hopper/tank weighing

#### DESCRIPTION

MDB is designed for truck and rail scales in high capacities with low profile. The design of loading through a ball is insensitive to side load.



MDB is constructed of alloy steel and is fully potted and sealed with special chemical compounds to IP67 providing excellent protection against water and moisture attack. MDB Hermetically-Sealed is constructed to IP68 providing excellent protection against corrosive and wash-down environments.

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CAPACITY		L	L1	L2	H	H <sub>1</sub>	H <sub>2</sub>	Ø	Ø1	W	W1	T	T <sub>1</sub>
10 / 20 / 25 / 30 t	mm	240	125	80	230	11	20	88	30	135	100	4-Ø18	2-M24
	(inch)	9.45	4.92	3.15	8.85	0.43	0.79	3.46	1.18	5.31	3.94		
40–50 t	mm	340	160	124	261	11	20	98	40	160	124	4-Ø21	4-M24
	(inch)	13.38	6.30	4.88	10.28	0.43	0.79	3.86	1.57	6.30	4.88		

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SPECIFICATIONS								
PARAMETER	VALUE	UNIT						
NTEP/OIML accuracy class	Non-Approved							
Maximum no. of intervals (n)	3000							
Y = E <sub>max</sub> /V <sub>min</sub>	5000	Maximum available						
Standard capacities (Emax)	10000, 20000, 25000, 30000, 40000, 50000	kg						
Rated output – R.O.	2.0	mV/V						
Rated output tolerance	0.2	±% of rated output						
Zero balance	1	±% of rated output						
Non-linearity	0.030	±% of rated output						
Hysteresis	0.030	±% of rated output						
Non-repeatability	0.020	±% 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	٥C						
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						
Cable length	13.5	m						
Construction	Nickel-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



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