



Main Features:

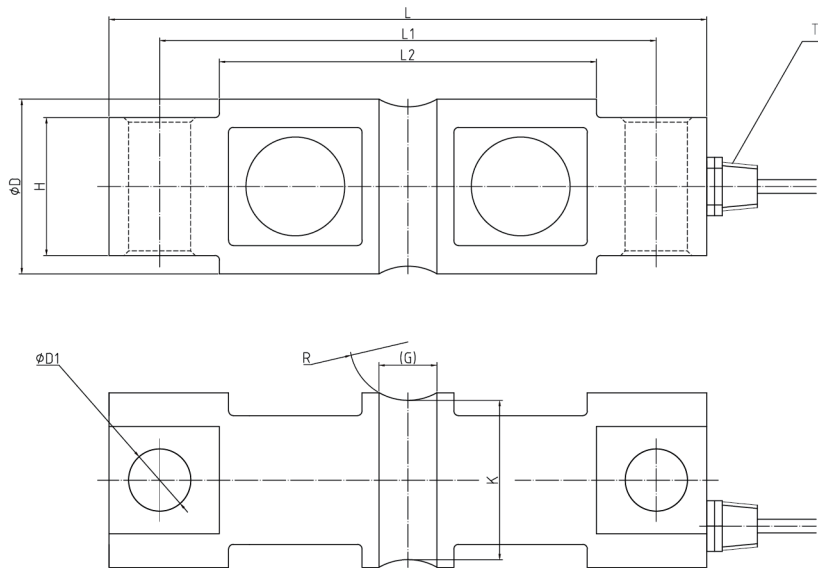
- Material: Alloy steel
- Rated Capacities: 10klb-250klb
- IP Rating: IP68
- Suitable for truck scale, heavy duty hopper scale and other electronic weighing devices.
- High precision by NTEP III L 10000, high reliability.



Product description:

DB903A is a double ended shear beam, both ends loaded, center supported via self-aligning ring groove structure, so that the force can be applied properly. This load cell is suitable for a wide range of truck scales, rail scales and process weighing equipment of tank, bin and hopper scale, etc. It is bolted at both ends.. Fully alloy steel construct, hermetically sealed, which ensure high seals performance of waterproof.

Dimensions (mm&inch):



Rated Capacity	L	L1	L2	φD	φD1	H	(G)	K	R	T
lb/inches										
10K	8.12	6.88	5.24	1.70	0.66	1.12	0.62	1.48	0.50	1/4-18NPT
20K	8.12	6.88	5.24	1.95	0.66	1.12	0.84	1.48	0.50	1/4-18NPT
30K-75K	10.25	8.50	6.48	3.00	1.06	2.37	1.00	2.73	1.00	1/2-14NPT
100K	11.25	9.50	7.48	3.50	1.06	2.50	1.22	3.24	1.50	1/2-14NPT
150K	11.25	9.50	7.48	3.90	1.06	2.80	1.22	3.64	1.50	1/2-14NPT
250K	16.10	13.00	10.00	5.38	1.56	4.60	1.26	5.17	2.00	1/2-14NPT

DB903A Double Beam Load Cell Specifications

Parameter		Units	Specifications				
Model No.			DB903A				
Rated capacity (E _{max})		klb	10 / 20 / 30 / 50 / 75 / 100 / 150 / 250				
Accuracy class ¹⁾²⁾			0.03%				
Min. dead load		lb	0				
Rated output		mV/V	3.0 ± 0.003				
Zero balance		% of E _{max}	± 1				
Repeatability error		% of AL ³⁾	< ± 0.010				
Creep; 30 minute		% of AL	< ± 0.020				
Min. dead load output return (DR); 30 min		% of AL	< ± 0.020				
Temp. effect on	Min. dead load output	% of E _{max} /°C	< ± 0.0014				
	Rated output ²⁾	% of AL/°C	< ± 0.0012				
Temperature range	Compensated	°C(°F)	-10 to +40 [+14 to +104]				
	Operating		-40 to +65 [-40 to +149]				
	Safe storage		-40 to +80 [-40 to +176]				
Excitation voltage	Recommended	V AC/DC	5 ~ 15				
	Maximum		15				
Terminal resistance	Excitation	Ω	766 ± 10				
	Output		700 ± 3				
Insulation resistance @50VDC		MΩ	> 5000				
Breakdown voltage		V AC	> 500				
Seal type / IP rating			Hermetically welded / IP68				
Load limit	Safe	% of E _{max}	140				
	Ultimate		200				
Material	Spring element		Alloy steel nickel plated				
	Cable		Φ6; 4-wire; PVC				
Cable length		m	10-30klb		50-250klb		
			12.0		16.0		
Weight; approx		lb	10K-20K	30K-75K	100K	150K	250K
			7	18	28	34	90
Fatigue life		cycles @E _{max}	> 1,000,000				
Deflection at E _{max} ; approx		mm	< 1.5				
Barometric pressure effect on Zero Output		Vmin/kPa	< 1.0				

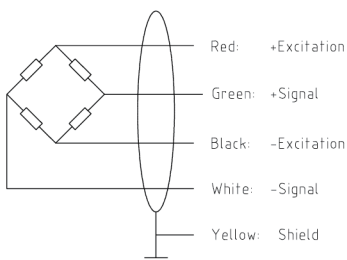
Notes:

¹⁾ Error due to the combined effect of non-linearity and hysteresis

²⁾ The sum of errors due to Temperature Effect on Output comply with the requirements of OIML R60 and NIST HB44

³⁾ AL = Applied Load

Cable Colour Code: (4-wire circuit)



Shield connected to load cell body

Interchangeable Products:

Manufacturer	Model
Vishay Revere transducers	5103
Vishay Celtron	CSB
Rice lake	RL70000