

Product Description

The model ALW is a stainless steel subminiature strain gauge based transducer with compensated temperature performance. This type provides measurements up to 20000 lbf with better than $\pm 0.5\%$ (full scale) non-linearity.

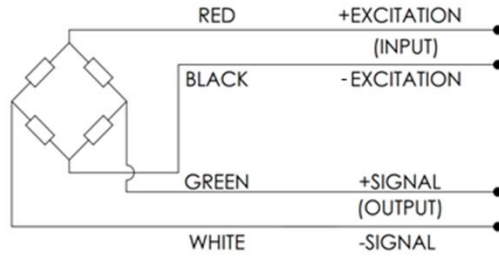
Performance Specifications

- | | |
|-------------------------------|--|
| ▪ CAPACITY | 5 lbf – 2k lbf |
| ▪ RATED OUTPUT (RO) | 0.2mV/V (5lb), 0.4mV/V (10lb), 1mV/V (25lb)
2 mV/V (50-20000lb) nom. |
| ▪ SAFE OVERLOAD | 150 % of R.O. |
| ▪ ZERO BALANCE | $\pm 2\%$ of R.O. |
| ▪ EXCITATION (VDC OR VAC) | 7 MAX |
| ▪ BRIDGE RESISTANCE | 700 Ω nom. |
| ▪ NON-LINEARITY | $\pm 0.5\%$ of R.O. |
| ▪ HYSTERESIS | $\pm 0.5\%$ of R.O. |
| ▪ NONREPEATABILITY | $\pm 0.1\%$ of R.O. |
| ▪ TEMP. SHIFT ZERO | $\pm 0.005\%$ of R.O./ $^{\circ}\text{F}$ (± 0.01 of R.O./ $^{\circ}\text{C}$) |
| ▪ TEMP. SHIFT SPAN | $\pm 0.005\%$ of LOAD/ $^{\circ}\text{F}$ (± 0.01 of LOAD/ $^{\circ}\text{C}$) |
| ▪ COMPENSATED TEMP. | 5 to 160 $^{\circ}\text{F}$ (-15 to 71 $^{\circ}\text{C}$) |
| ▪ OPERATING TEMP | -60 to 200 $^{\circ}\text{F}$ (-51 to 93 $^{\circ}\text{C}$) |
| ▪ MATERIAL | Stainless Steel |
| ▪ IP RATING | IP64 |
| ▪ CALIBRATION TEST EXCITATION | 5 VDC |
| ▪ CALIBRATION (STD) | 5 pt. COMPRESSION |

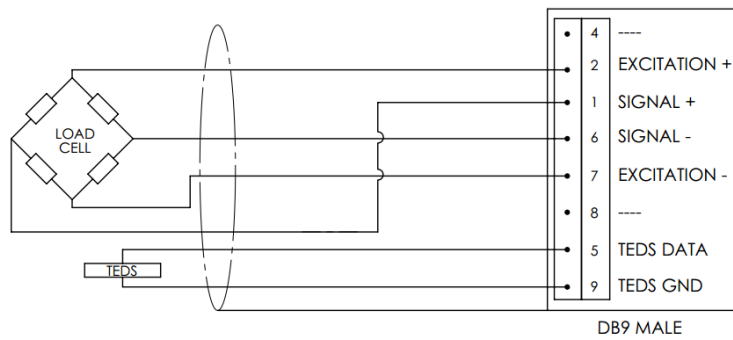
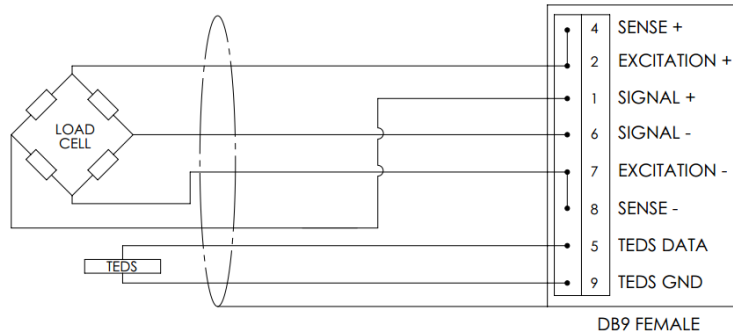
MODEL	WEIGHT (Nom)	DEFLECTION (Nom)
ALW1	0.13 lb [60 g]	0.002" [0.05mm]
ALW2	0.22 lb [100 g]	0.002" [0.05mm]
ALW3	0.50 lb [227 g]	0.002" [0.05mm]
ALW4	1.65 lb [750 g]	0.002" [0.05mm]

Wiring

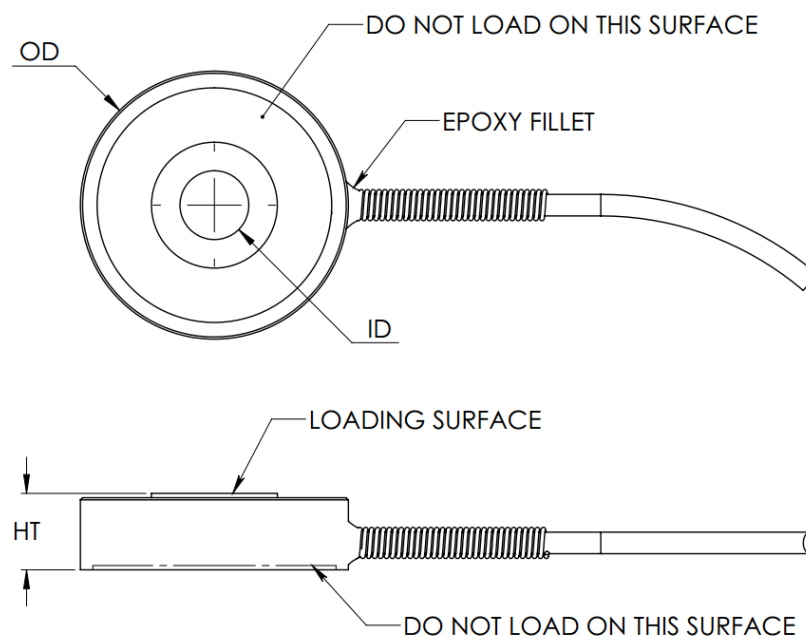
- Model ALW1 is provided with a #32 AWG 4-conductor braided shielded cable with outer jacket, 0.086" [2.2 mm] diameter. Model ALW2, ALW3 & ALW4 are provided with a #24 AWG 4-conductor braided shielded cable with outer jacket, 0.126" [3.2 mm] diameter. There is no connection between the shield and the sensor body. For additional protection, the cable is contained within a stainless steel spring for strain relief purposes.
- Standard cable lengths are 3ft, 5ft and 10ft. See Order Details section.
- These load washers are offered with DB9 Male, DB9 Female and without connector. See Order Details section.
- Standard wire configuration as shown below.



- For connector versions, pin configuration as shown below.



Dimensions (inch)

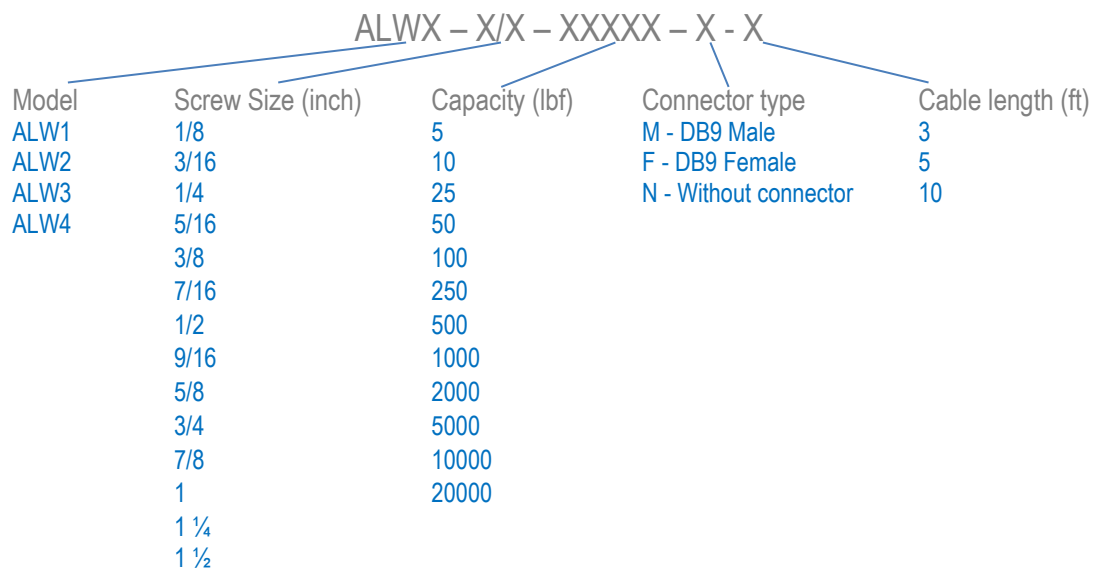


	OD	ID	SCREW SIZE	HT	CAPACITIES (lbf)												
					5	10	25	50	100	250	500	1k	2k	5k	7.5k	10k	20k
ALW1	1	0.136	1/8	0.28													
	1	0.201	3/16	0.28													
	1	0.266	1/4	0.28													
	1	0.332	5/16	0.28													
	1	0.397	3/8	0.28													
ALW2	1.5	0.397	3/8	0.5													
	1.5	0.469	7/16	0.5													
	1.5	0.531	1/2	0.5													
	1.5	0.656	5/8	0.5													
ALW3	2	0.136	1/8	0.63													
	2	0.201	3/16	0.63													
	2	0.266	1/4	0.63													
	2	0.332	5/16	0.63													
	2	0.397	3/8	0.63													
	2	0.469	7/16	0.63													
	2	0.531	1/2	0.63													
	2	0.594	9/16	0.63													
ALW4	3	0.136	1/8	1													
	3	0.201	3/16	1													
	3	0.266	1/4	1													
	3	0.332	5/16	1													
	3	0.397	3/8	1													
	3	0.469	7/16	1													
	3	0.531	1/2	1													
	3	0.594	9/16	1													
	3	0.656	5/8	1													
	3	0.781	3/4	1													
	3	0.906	7/8	1													
	3	1.031	1	1													
	3	1.281	1 1/4	1													
3	1.531	1 1/2	1														

	Common capacities
	Available on request

Oder Details

To order a specific load washer required, compile and quote a unique part number from the illustration below



EX: ALW1-1/4-50-F-5

OPTIONAL Special cable lengths and pin configurations on request