

# Through Hole Load Cell

DM-SENSORS

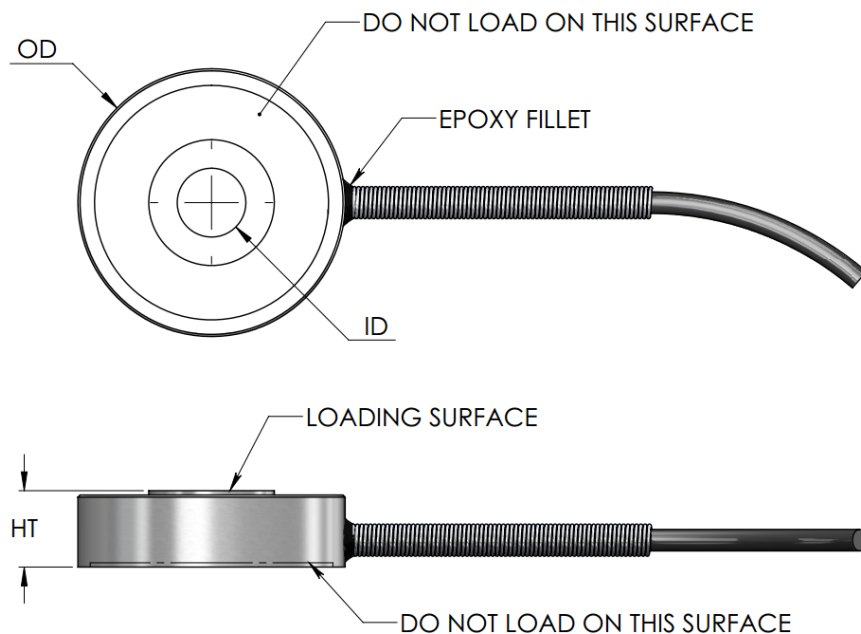
The model IFFALW is a stainless steel sub-miniature strain gauge based transducer with compensated temperature performance. This type provides measurements up to 20000 lbs with better than  $\pm 0.5\%$  (full scale) non-linearity.



## Specification

Parameter	Range
Capacity	5 lbf – 20k lbf (20 N - 89 kN)
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
Input resistance	770 $\Omega$ nom., 350 $\Omega$ nom for ALW1
Non-linearity	$\pm 0.5\%$ of R.O.
Hysteresis	$\pm 0.5\%$ of R.O.
Non-repeatability	$\pm 0.1\%$ of R.O.
Temp. Shift zero	$\pm 0.005\%$ of R.O./ $^{\circ}\text{F}$ ( $\pm 0.01$ of R.O./ $^{\circ}\text{C}$ )
Temp. Shift span	$\pm 0.005\%$ of LOAD/ $^{\circ}\text{F}$ ( $\pm 0.01$ 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

## Dimensions (inch)



MODEL	OD	ID	SCREW SIZE	HT	CAPACITIES (lbf)											
					5	10	25	50	100	250	500	1k	2k	5k	7.5k	10k
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												
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

