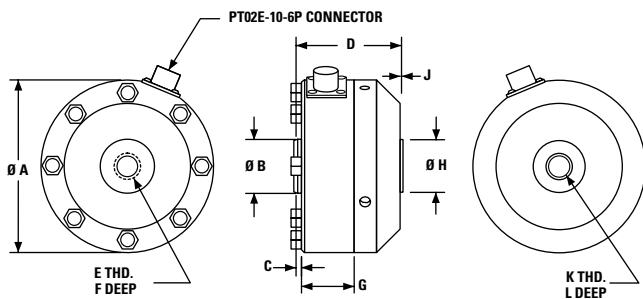


## MODEL 3140 SERIES

Tension and compression 500 lbs. to 100K lbs.



**Consult factory  
for specials.**

### FEATURES :

- 500 lbs. through 100,000 lbs.
- Universal tension and compression loading
- High accuracy
- Low profile
- 150% FS safe overload capability
- Available in single or optional dual bridge configuration
- Metric sizes available

The Model 3140 load cell series has been designed for general-purpose use in demanding applications in automotive, aerospace and military markets. These new tension/compression load cells are direct replacements for other low profile models.

Some advantages of these new load cells are: compact size, high accuracy, low cost and availability.

### PERFORMANCE SPECS : 3140 SERIES SPECIFICATIONS

<b>Output at rated capacity (500 to 2K):</b>	2
<i>millivolts per volt, nominal</i>	
<b>Output at rated capacity (5K to 100K):</b>	4
<i>millivolts per volt, nominal</i>	
<b>Maximum nonlinearity error:</b>	± 0.06%
<i>of full scale output</i>	
<b>Maximum hysteresis error:</b>	± 0.06%
<i>of full scale output</i>	
<b>Maximum non-repeatability:</b>	± 0.01%
<i>of full scale output</i>	
<b>Zero balance:</b>	± 1.0%
<i>of full scale output</i>	
<b>Input resistance: ohms</b>	350 +40/-3.5
<b>Output resistance: ohms</b>	350 ± 3.5
<b>Temperature range, operating: °F</b>	-65 to +200
<b>Temperature range, compensated: °F</b>	+70 to +170
<b>Temperature effect on output:</b>	± 0.0015%
<i>of rated output per °F</i>	
<b>Temperature effect on zero:</b>	± 0.0015%
<i>of rated output per °F</i>	
<b>Static overload capacity: of rated capacity</b>	150%

MODEL NUMBER	CAPACITY LBS.	ØA	ØB	C	D	E THD	F	G	ØH	J	K THD	L
3143-500	500	4.12	1.29	0.13	2.50	1/2-20 UNF 3B	1.12	1.25	1.25	0.03	1/2-20 UNF 3B	0.88
3143-1K	1,000	4.12	1.29	0.13	2.50	1/2-20 UNF 3B	1.12	1.25	1.25	0.03	1/2-20 UNF 3B	0.88
3143-2K	2,000	4.12	1.29	0.13	2.50	1/2-20 UNF 3B	1.12	1.25	1.25	0.03	1/2-20 UNF 3B	0.88
3144-5K	5,000	4.12	1.29	0.13	2.50	5/8-18 UNF 3B	1.12	1.25	1.25	0.03	5/8-18 UNF 3B	0.88
3144-10K	10,000	4.12	1.29	0.13	2.50	5/8-18 UNF 3B	1.12	1.25	1.25	0.03	5/8-18 UNF 3B	0.88
3145-25K	25,000	6.06	2.34	0.13	3.50	1 1/4-12 UNF 3B	1.50	1.63	1.25	0.03	1 1/4-12 UNF 3B	1.50
3145-50K	50,000	6.06	2.58	0.13	3.50	1 1/4-12 UNF 3B	1.50	1.63	2.25	0.03	1 1/4-12 UNF 3B	1.50
3146-100K	100,000	8.00	3.76	0.25	4.50	1 3/4-12 UNF 3B	2.25	2.25	3.00	0.03	1 3/4-12 UNF 3B	1.75

Dimensions are in inches.

### SENSOR CHARACTERISTICS : 3140

MODEL NUMBER	NOMINAL LOAD LIMIT CAPACITY F <sub>z</sub>		STATIC OVERLOAD CAPACITY % OF NOM. CAPACITY	STATIC EXTRANEIOUS LOAD LIMITS			DEFLECTION AT NOM. LOAD LIMIT INCHES	RINGING FREQUENCY Hz
	LBS.	NEWTONS		SHEAR F <sub>x</sub> OR F <sub>y</sub> LBS.	BENDING M <sub>x</sub> OR M <sub>y</sub> LB. INCHES	TORQUE M <sub>z</sub> LB. INCHES		
3143	500	2K	150	200	200	200	0.002	3,500
	1K	5K	150	400	400	400	0.002	4,900
	2K	10K	150	800	800	800	0.002	6,900
3144	5K	22K	150	2,000	2,000	2,000	0.004	4,500
	10K	45K	150	4,000	4,000	4,000	0.004	6,600
3145	25K	110K	150	10,000	10,000	10,000	0.004	4,500
	50K	200K	150	25,000	25,000	20,000	0.004	4,900
3146	100K	500K	150	50,000	50,000	40,000	0.006	4,100

LOAD CELLS  
GENERAL PURPOSE