

MODEL 3173

Tension and compression 200 lbs. to 3,000 lbs.



3173 WITH TENSION BASE



**Consult factory
for specials.**

FEATURES :

- High accuracy
- Low deflection
- Proven fatigue resistant design and performance
- Low full-scale capacity
- Low profile
- Minimal sensitivity to extraneous loading

The Model 3173 is the newest member of a low profile tension and compression family of load cells. The Model 3173 covers the lower capacity ranges of 200 pounds force to 3,000 pounds force, while exhibiting the superior characteristics of stiffness and low profile. These load cells are well suited to materials testing machines and other applications requiring a rugged load sensor.

PERFORMANCE SPECS :

3173

SPECIFICATIONS

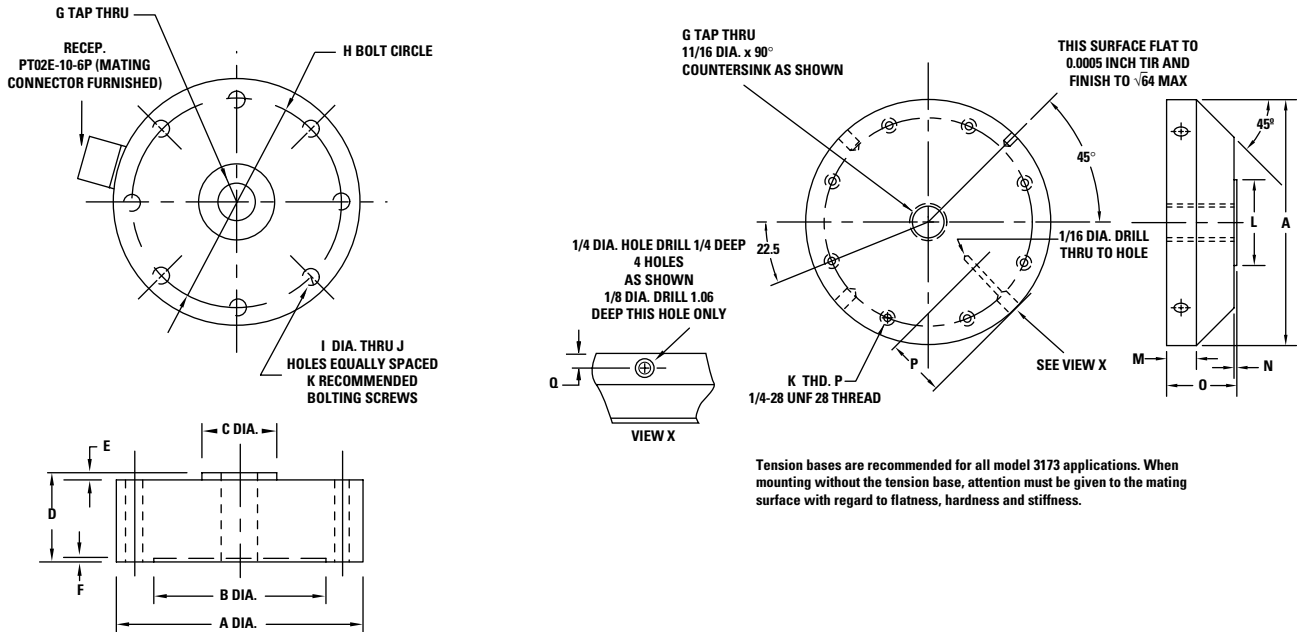
Capacity: lbs.	200, 500, 1K, 2K, 3K
Output: millivolts per volt, nominal	1.50
Output: millivolts per volt, nominal (2K and 3K units)	2.00
Overload: at rated capacity	150%
Nonlinearity best fit: of rated output	$\leq \pm 0.05\%$
Creep: in 20 minutes of rated output	$\leq \pm 0.025\%$
Hysteresis: of rated output	$\leq \pm 0.05\%$
Repeatability: of rated output	$\pm 0.02\%$
Input resistance: nominal, ohms	700
Output resistance: nominal, ohms	700
Excitation voltage: maximum	20V
Temperature range, compensated: °F	+70 to +170
Temperature range, usable: °F	-65 to +200
Temperature effect on output: of reading per °F	$\leq 0.002\%$
Temperature effect on zero: of rated output per °F	$\leq 0.002\%$
Fatigue life: 0 to full fatigue load (cycles x 10 ⁶)	≥ 100
Fatigue life: full fatigue tension to full fatigue comp. (cycles x 10 ⁶)	≥ 50
Deflection: at rated capacity (200-1K)	.003 inch
Deflection: at rated capacity (2K-3K)	.001 inch



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MODEL NUMBER	CAPACITY lbs. (N)	DIMENSIONS						G English (Metric)	H in. (cm.)	I in. (cm.)	NO. OF HOLES J	BOLTING SCREWS K	DIMENSIONS					
		A in. (cm.)	B in. (cm.)	C in. (cm.)	D in. (cm.)	E in. (cm.)	F in. (cm.)						L in. (cm.)	M in. (cm.)	N in. (cm.)	O in. (cm.)	P in. (cm.)	Q in. (cm.)
3173	200-3K	4.12	2.85	1.27	1.37	0.12	0.06	5/8-18 UNF-3B	3.50	0.28	8	1/4-28 hexhead	1.25	0.50	0.03	1.13	0.87	0.25
3173-101	(900-13.5K)	(10.47)	(7.24)	(3.23)	(3.48)	(0.31)	(0.15)	(M16 x 15mm-6H)	(8.89)	(0.71)	8	1 1/2 inches long	(3.18)	(1.27)	(0.08)	(2.87)	(2.21)	(0.64)

Tighten to
200 in. lbs.



Tension bases are recommended for all model 3173 applications. When mounting without the tension base, attention must be given to the mating surface with regard to flatness, hardness and stiffness.

SENSOR CHARACTERISTICS : 3173

MODEL NUMBER	NOMINAL LOAD LIMIT CAPACITY F_z		STATIC OVERLOAD CAPACITY % OF NOM. CAPACITY	FATIGUE CAPACITY % OF NOM. CAPACITY	STATIC EXTRANEIOUS LOAD LIMITS			DEFLECTION AT NOM. LOAD LIMIT INCHES	RINGING FREQUENCY H_z
	LBS.	NEWTONS			SHEAR F_x OR F_y LBS.	BENDING M_x OR M_y LB. INCHES	TORQUE M_z LB. INCHES		
3173	200	1K	150	100	4,471	185	3,477	0.003	1,500
	500	2K	150	100	15,625	466	5,208	0.003	2,440
	1K	5K	150	100	15,500	911	7,750	0.003	3,900
	2K	10K	150	100	4,000	2,133	1,523	0.001	5,500
	3K	15K	150	100	5,166	2,818	2,214	0.001	7,200