

PRECISION FATIGUE RESISTANT LOAD CELL

UNIVERSAL / TENSION OR COMPRESSION

SWP SERIES

CAPACITY RANGES:

1,000, 2,000, 3,000,
5,000, 10,000, 20,000,
50,000 LBS.

Our SWP Series low profile load cells are an excellent choice for applications that require ultra stiffness and resistance to extraneous bending and side load forces. For tension and/or compression applications, the load cell is bolted down to a flat surface and center loaded, utilizing the thru tapped hole. Load buttons or load bearing compression only applications are offered in our accessories section. For in line tension applications, we recommend our tension base (-TB option) for hardness, flatness, stiffness, and alignment. The SWP Series load cell and the -TB (tension base) are manufactured from heat treated 17-4ph stainless steel. The same high quality full bridge strain gage installation is utilized in all our force and torque measuring products.



Options

TB0-SWP135	Tension Base (1K - 3K)
TB1-SWP1020	Tension Base (5K - 20K)
TB2-SWP-50K	Tension Base (50K)



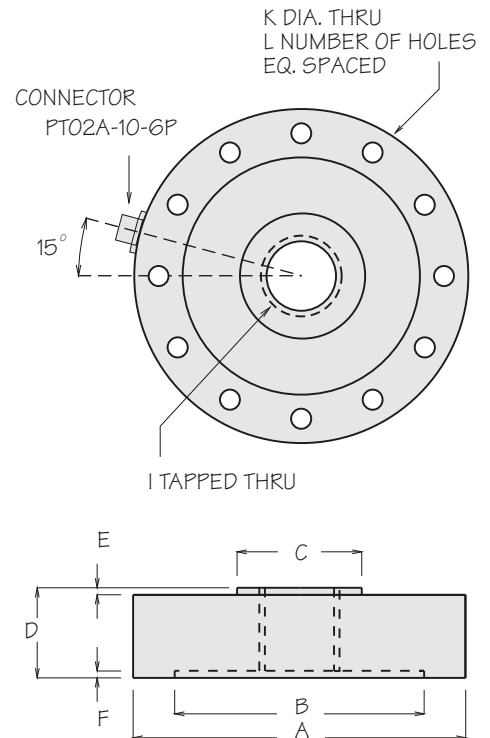
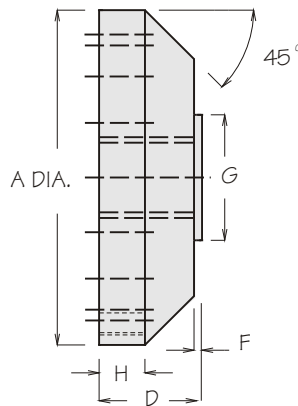
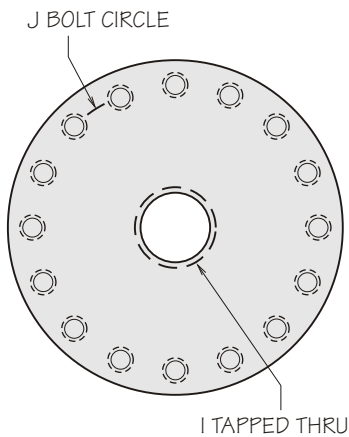
*Shown fastened to
OPTION -TB1
Tension Base*

SPECIFICATIONS

Rated Output (R.O.):	2 mV/V nominal
Nonlinearity:	0.05% of R.O.
Hysteresis:	0.05% of R.O.
Nonrepeatability:	0.05% of R.O.
Zero Balance:	1.0% of R.O.
Compensated Temp. Range:	60° to 160°F
Safe Temp. Range:	-65° to 200°F
Temp. Effect on Output:	0.005% of Load/°F
Temp. Effect on Zero:	0.005% of R.O./°F
Terminal Resistance:	700 ohms nominal
Excitation Voltage:	10-20 VDC
Safe Overload:	150% of R.O.
Deflection:	0.001 inches @ R.O.
Fatigue Life One Direction:	100 x 10 ⁶
Fatigue Life Bidirectional:	50 x 10 ⁶

NATURAL RINGING FREQUENCY

MODEL	Hz
SWP-1K	4,000
SWP-2K	5,700
SWP-3K	7,300
SWP-5K	8,700
SWP-5K	6,500
SWP-10K	7,400
SWP-20K	8,500
SWP-50K	10,000



DIMENSIONS (INCHES)

MODEL	CAPACITY LBS.	A DIA.	B DIA.	C DIA.	D	E	F	G DIA.	H	I THREAD	J	K	L
SWP-1K	1,000	4.125	2.775	1.650	1.375	.125	.050	1.250	.500	5/8-18 UNF	3.500	.281	8
SWP-2K	2,000	4.125	2.775	1.650	1.375	.125	.050	1.250	.500	5/8-18 UNF	3.500	.281	8
SWP-3K	3,000	4.125	2.775	1.650	1.375	.125	.050	1.250	.500	5/8-18 UNF	3.500	.281	8
SWP-5K-4	5,000	4.125	2.775	1.650	1.375	.125	.050	1.250	.500	5/8-18 UNF	3.500	.281	8
SWP-5K	5,000	6.000	4.260	2.500	1.750	.125	.050	2.250	.810	1 1/4-12 UNF	5.125	.406	12
SWP-10K	10,000	6.000	4.260	2.500	1.750	.125	.050	2.250	.810	1 1/4-12 UNF	5.125	.406	12
SWP-20K	20,000	6.000	4.260	2.500	1.750	.125	.050	2.250	.810	1 1/4-12 UNF	5.125	.406	12
SWP-50K	50,000	8.000	5.000	3.140	2.000	.125	.050	3.140	.810	1 3/4-12 UNF	6.500	.531	16