

Sensor Model: 75E20S
Body Load Rating: 650L5000

I. Overload Capabilities:

All overload values are for no damage, no re-calibration required.

- Single Axis Loading:

Axis	Full Scale Load (lb, in-lb)	Max. Safe Load (lb, in-lb)
F _x	650 lb	4,100 lb
F _y	650 lb	4,100 lb
F _z	1300 lb	12,500 lb
M _x	5000 in-lb	20,000 in-lb
M _y	5000 in-lb	20,000 in-lb
M _z	5000 in-lb	17,000 in-lb

- Combined Loading:

Both equations must be satisfied at all times.

$$F_x/4400 + F_y/4100 + F_z/12500 + M_x/20000 + M_z/17000 \leq 1$$

$$F_x/4100 + F_y/4400 + F_z/12500 + M_y/20000 + M_z/17000 \leq 1$$

II. Approximate Stiffnesses:

Axis	Stiffness
F _{x,y}	0.98e6 lb/in
F _z	7.6e6 lb/in
M _{x,y}	38e6 inlb/rad
M _z	12e6 inlb/rad

III. Notes:

- When subjected to the above static loads, this sensor should not be damaged. However due to possible limitations on the ability of the mounting bolts to maintain frictional lock-up between the sensor and surfaces to which it is mounted, sensor readings may exhibit a temporary shift in zero point and/or an increase in hysteresis.
- In determining safe dynamic or shock loads the total energy imparted into the sensor must be considered. Traveling stress waves may potentially combine to produce a maximum stress above the static maximum.