

**Sensor Model: 75E20A4**  
**Body Load Rating: 500L3750**

**I. Overload Capabilities:**

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

- Single Axis Loading:

Axis	Max. Safe Load (lb, in-lb)
$F_x$	2,900 lb
$F_y$	2,900 lb
$F_z$	9,200 lb
$M_x$	14,900 in-lb
$M_y$	14,900 in-lb
$M_z$	12,200 in-lb

- Combined Loading:  
Both equations must be satisfied at all times.

$$F_x/3000 + F_y/2900 + F_z/9200 + M_x/14900 + M_z/12200 \leq 1$$

$$F_x/2900 + F_y/3000 + F_z/9200 + M_y/14900 + M_z/12200 \leq 1$$

**II. Approximate Stiffnesses:**

Axis	Stiffness
$F_{x,y}$	0.597e6 lb/in
$F_z$	4.48 e6 lb/in
$M_{x,y}$	23.5 e6 in-lb/rad
$M_z$	7.87e6 in-lb/rad

**III. Notes:**

- When subjected to the above static loads, this sensor will not be damaged. However due to possible limitations on the ability of the mounting bolts to maintain frictional lock-up between the sensor and the 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.