

**Sensor Model: 67M25A**  
**Body Load Rating: 50L130**

**I. *Overload Capabilities:***

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

- Single Axis Loading:

Axis	Full Scale Load	Maximum Safe Load
F <sub>x</sub>	50 lb	200 lb
F <sub>y</sub>	50 lb	200 lb
F <sub>z</sub>	100 lb	870 lb
M <sub>x</sub>	130 in-lb	500 in-lb
M <sub>y</sub>	130 in-lb	500 in-lb
M <sub>z</sub>	130 in-lb	430 in-lb

- Combined Loading:

All 3 equations must be satisfied at all times (all values are lbs or in-lbs).

$$\begin{array}{rclclclcl}
 F_x/200 & +F_y/200 & +F_z/870 & +M_x/700 & +M_y/700 & +M_z/430 & \leq 1 \\
 F_x/270 & +F_y/210 & +F_z/870 & +M_x/1900 & +M_y/500 & +M_z/430 & \leq 1 \\
 F_x/210 & +F_y/270 & +F_z/870 & +M_x/500 & +M_y/1900 & +M_z/430 & \leq 1
 \end{array}$$

**II.**

***Approximate Stiffnesses:***

Stiffnesses are estimated to be accurate within  $\pm 20\%$ .

Axis	Stiffness
K <sub>Fx</sub>	73e3 lb/in
K <sub>Fy</sub>	73e3 lb/in
K <sub>Fz</sub>	730e3 lb/in
K <sub>Mx</sub>	470e3 in-lb/rad
K <sub>My</sub>	470e3 in-lb/rad
K <sub>Mz</sub>	130e3 in-lb/rad