

Sensor Model: 160M50S3
Body Load Rating: 850L5400

I. Overload Capabilities:

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

- Single Axis Loading:

Axis	Maximum Load (lb, in-lb)
F _x	4,200 lb
F _y	4,200 lb
F _z	18,000 lb
M _x	27,500 in-lb
M _y	24,000 in-lb
M _z	19,500 in-lb

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

$$(1) \quad F_x/4200 \quad +F_y/4200 \quad +F_z/18000 \quad +M_x/27,500 \quad +M_y/24000 \quad +M_z/19500 \leq 1$$

$$(2) \quad F_x/5700 \quad +F_y/5900 \quad +F_z/18000 \quad +M_y/24000 \quad +M_z/19500 \leq 1$$

II. Approximate Stiffnesses (+/-20%):

Axis	Stiffness
F _x	1.22e6 lb/in
F _y	1.22e6 lb/in
F _z	9.03e6 lb/in
M _x	31.4e6 in-lb/rad
M _y	31.4e6 in-lb/rad
M _z	10.5e6 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.