Bertec Overview

The output from a Bertec force plate includes the forces and moments acting at the point of contact where a load is applied. Force plates with a JMP or VP designation output three channels of data: one vertical force (Fz) and two moments (Mx, My). All other force plates output six channels of data, including forces and moments in three directions (Fx, Fy, Fz, Mx, My, Mz).

Exceeding the maximum load that is outlined by Bertec, may cause the force plate to behave nonlinearly. The overload capacity is 50%, this means the force plate can withstand up to 1.5 times the rated load without permanent damage. However, when using analog data, any load exceeding the rated limit may not be accurately measured.

Bertec Force Plate Coordinate System

The origin of the coordinate system is located at the center of the top surface of the force plate. The standard coordinate system is defined as follows:

The positive Y-axis points away from the force plate connector.

The X-axis points to the left when facing in the direction of the positive Y-axis.

The Z-axis points downward, following the right-hand rule.

All moment directions are also defined according to the right-hand rule.

Bertec Force Plate Dimensions

Bertec's force plate: FP4060-xx

Force Plate Footprint