



Applications

Bertec Corporation's line of force plates are ruggedly designed to meet any application. The 4060 series is well suited for gait, balance, sports, ergonomic, static, and dynamic analysis. The 4060-05-PT is designed for portability to be used in field applications for clinical and research gait analysis. Strain gage technology, state-of-the-art electronics, innovative mechanical designs, and quality manufacturing have created superior force plates suitable for any clinical or research use.

Design

Each force plate consists of precision-engineered, strain gaged load transducers that precisely measure six components: three orthogonal forces and the moments about each axis. Each plate contains a built-in, 16-bit digital gain amplifier and signal conditioning unit, which make the use of calibration matrices obsolete. You then have the choice of four external amplifiers: digital (AM6500), analog (AM6501, AM6504), or digital and analog (AM6800). This system allows the use of long output cables without any signal degradation. The digital output can be directly plugged into your PC's USB port. Simple installation and a minimum amount of setup time result from this plug and play technology. For the analog output, you have the choice of either six individual BNC type outputs or seven individual bare wire outputs (custom output cables available per request). A software package is offered to enable quick data collection without the hassle of writing your own software. Bertec also has software libraries and device drivers available upon request for researchers who want to develop their own digital data acquisition software.



Unique Features

The 4060-05-PT model incorporates a rugged structure with a very lightweight design for six component load measurements in applications where portability is desired. The sleek 50 mm high profile is created with an aluminum/honeycomb sandwich structure that will withstand years of use. The adjustable foot allows leveling on uneven surfaces for accurate measurements. It is available in a standard load range of 5,000 N, 10,000 N and other custom load ranges. State-of-the-art electronic design internally corrects for cross-talk, so the output is a true reading. Excellent resolution and high natural frequency is standard with Bertec force plates.

Customization

If none of our standard models meet your requirements, years of experience and a willingness to solve any challenge gives Bertec the edge in custom designing a solution for you. We can construct plates of any size for any load capacity, and most can be made waterproof.

At Bertec, our aim is to provide the variety that you want with the quality you deserve. See the back for specific technical specifications for the standard load ranges.





Technical Specifications

Model Designation	FP4060-05-PT
Width, mm (in)	400 (15.75)
Length, mm (in)	600 (23.62)
Height, mm (in)	50 (1.97)
Mass, kg (lb)	8 (18)
Max. Load Fz, N (lb)	5,000 (1,100)
Max. Load Fx, Fy, N (lb)	2,500 (550)
Max. Load Mx, N·m (in·lb)	1,500 (13,300)
Max. Load My, N·m (in·lb)	1,000 (8,900)
Max. Load Mz, N·m (in·lb)	750 (6,600)
Natural Frequency Fz (Hz)	250
Natural Frequency Fx, Fy (Hz)	150
Static Resolution* Fz, N (lb)	±0.5 (0.11)
Resolution** Fz, N/LSB (lb/LSB)	0.09 (0.02)
Linearity, %FSO [†]	0.2

* **Static Resolution** is the peak-to-peak noise amplitude of the static signal

** **Resolution** is given in terms of the sensitivity of the internal digitization and indicates the amount of signal produced (in N or lb) per LSB (least significant bit) of digitized signal.

† **FSO** : Full Scale Output



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DOMINATE YOUR FIELD

FORCE PLATE FP4060-05-PT
Product Information