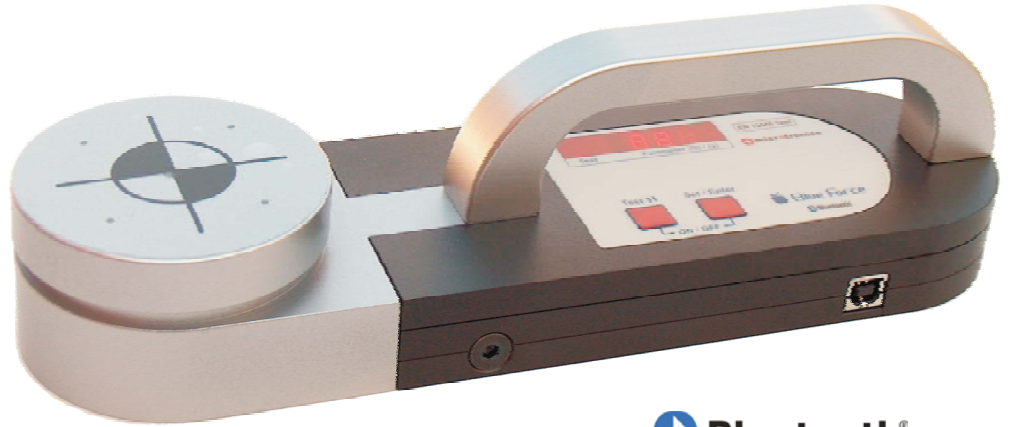


- **Blue Force** is a measuring instrument for impact forces on automatic closures, based on **EN 12445 / EN 12453** norms.
- Microtronics proposes an instrument that is unique in its kind, because it makes use of **Bluetooth®** technology, that allows **wireless connection** with PC, notebook, or **PocketPC** !
- It is **simple to use**: thanks to only two buttons, it is possible to scroll saved tests, view parameters, delete them, transmit diagrams, remake measurements, etc.
- Blue Force has two working modes: thanks to the internal memory, it can work in **autonomous manner**, saving up to 50 tests, and showing directly on led-display the four main parameters (Fd, Td, Fs, Fe) for each measure.



- Besides, thanks to the special mode PCLINK and the Bluetooth® technology, the Blue Force can work together with a PocketPC or a PC, **displaying immediately the force diagram** and showing directly the **final result of the test!**
- For the coupling with a PocketPC (optional), Microtronics proposes an appropriate **Kit Pocket-PC**, that includes the software BlueForcePDA pre-installed and ready to be used.



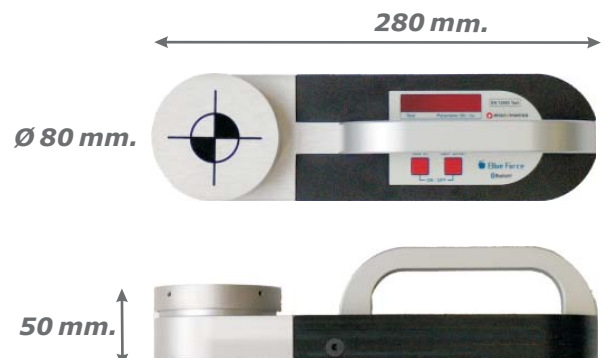
Speed Force



- Speed Force maintains the same mechanical characteristics of the more famous *Blue Force*, locating itself in a **lower cost/use** zone.
- Connect Speed Force to a PC is very easy, because it works with with **USB port**.
- Of course, like Blue Force, it is possible to turn 180° and upside down the handle, to make is suitable for every measurement.
- On the rear of Instruments, it is present a special seat, that permits to fix the extensions-accessories (optionals), together with the handle in its original position.

TECHNICAL DATA:

- | | |
|-----------------------------------|--|
| ■ DIMENSIONS: | 280mm. X 80mm. X 50mm. (WxDxH) ± 5% |
| ■ WEIGHT: | 1,8 Kg ± 10% |
| ■ POWER: | standard 9V battery |
| ■ BLUEFORCE INTERFACE: | BLUETOOTH ®- USB 1.1 |
| ■ SPEEDFORCE INTERFACE: | USB 1.1 |
| ■ MEASURE TIME INTERVAL: | 6 sec. sampling 1Ksmp/s |
| ■ CURRENT ABSORBED: | min. 4mA, average 12mA, max. 80mA |
| ■ FORCE RANGE: | 0 ÷ 2000 N (mechanical block on 2100N) |
| ■ ACCURACY from da 0 a 400 N: | 1% E.O.S. |
| ■ ACCURACY from da 400 a 1000 N: | 2% E.O.S. |
| ■ ACCURACY from da 1000 a 1400 N: | 4% E.O.S. |
| ■ ACCURACY from da 1400 a 2000 N: | 5% E.O.S. |



■ Linear Extension



■ Angular Extension



- During the use, the instrument has to be supported in way to not alter the results of measures.
- The optional accessories, (thanks to the fast-joint mechanism), permit to carry out measures by using only one hand, while with the other hand it is possible to drive the opening/closing device.
- Two versions are available:
 - The Linear Extension, for measures at 30 or 50 cm. and Angular Extension, for measures from 0,5 mt. to 2,5 mt.

- The materials used for manufacturing are the right balance between: practicality, lightness and usability (Anodized Aluminium, Steel and Plastic Polymer).

- Detail: junction of angular accessory (on the right), rapid joint (on center), extended handle (on the left).

