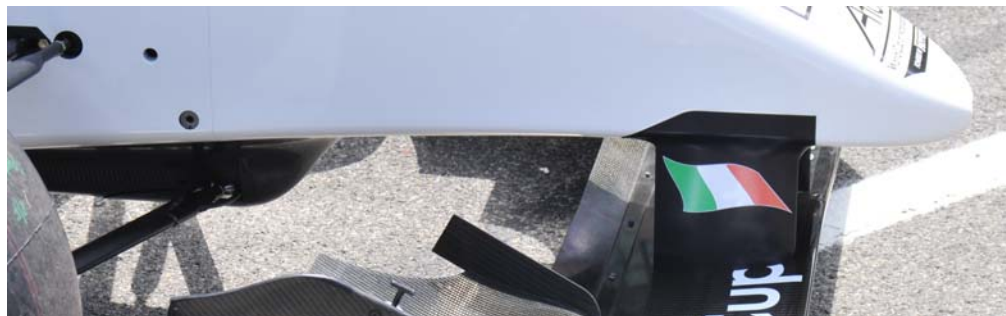


front wing pillar loadcell

The BERU f1systems Front Wing Pillar Loadcell is designed to mount within the standard front wing pillar space envelope to measure front wing aero forces during on track testing.

With new regulations banning full scale wind tunnel testing this new loadcell provides invaluable data for front wing aero design and car set-up.

One loadcell is fitted within each of the wing pillars and from the data obtained from the loadcells, it is possible to determine Lift, Drag, and Centre of Pressure. Aero shrouds are fitted to the loadcells to provide protection and ensure the correct aero profile remains, these are designed and fitted by the customer with guidance from BERU f1systems. The loadcells provide 3 pure outputs, Lift, Drag and Pitching moment (F_z , F_x and M_y) and from these, the Centre of Pressure can be calculated.



Each loadcell is individually designed for each chassis manufacturer. From a supplied space envelope of the current wing pillars we are able to adapt the design of the loadcells to suit, taking into consideration the customers preferred fixing arrangements for mounting the loadcell in the structure. We can also mount our High Precision Amplifiers (0 to 5V) local to the loadcell thus reducing any signal noises.

Telephone +44 (0)1379 646200

Email: Simon.Roberts@bf1systems.com

www.bf1systems.com

Specification

Electrical

- Component ranges,
 F_z – 4000N
 F_x – 500N
 M_y – 300Nm
(combinations of and others available on request)
- Local or remote amplification available
- Typical component cross talk <1%
- Repeatability <0.5%
- Thermal zero shift over compensated range 0.1%
- Thermal sensitivity shift over compensated range 0.1%

Please note that specification figures are nominal and change with each specific application

