Aerodynamic Load

Measuring strain on pushrods makes calculation of aerodynamic load.
This vertical force Fz that presses the car downwards is the effect of air pressure P on the frontal surface S corrected by a vertical coefficient Cz.
Fz = P x S.Cz

DownForce and et Pitot

To check or to improve the car S.Cz, the following calculation must be done :

$$S.Cz = \frac{Fz}{P}$$

Attention !

Using car speed instead of Pitot for aerodynamics checks may induce big errors :
A 20°C ambient temperature drift causes a 7% error !
A 5km/h wind causes an 8% error at 250 km/h !

Pitot will always give the true pressure on the car body.

The Pitot measures true speed through the air, this is dependant and will change according to any wind and the direction and force of that wind.