

bf1 systems Suspension Top Mount Loadcell

The bf1systems Suspension Top Mount Loadcell is intended to mount to the top of the damper assembly and features a monoball bearing which can be sized to suit the damper being used.

Four standard fixing points are featured on the top of the loadcell which can be used to mount the loadcell to a custom designed suspension top mount.

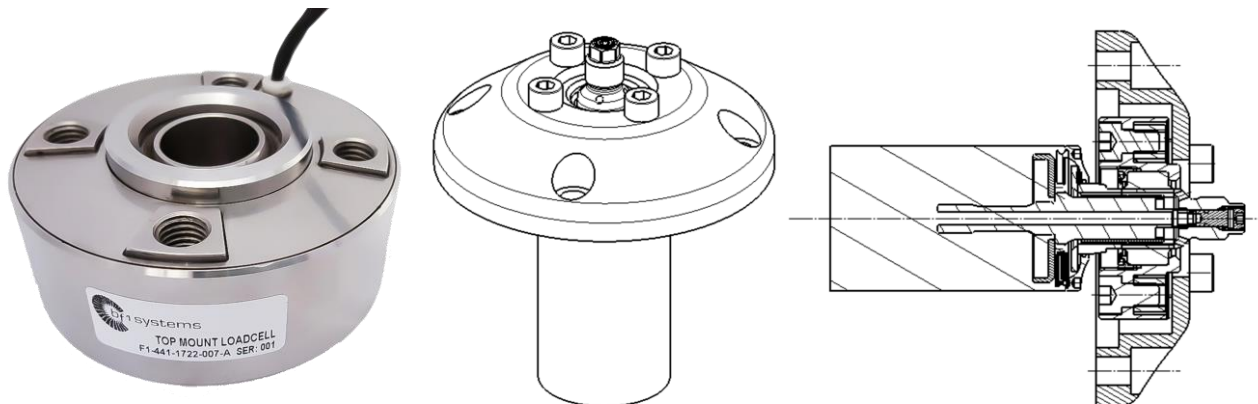
The multi strain gauge installation on this loadcell helps to counteract any errors due to alignment changes between the damper and the loadcell throughout suspension travel. The loadcell can be supplied with an integral 0-5V amplifier for connection to the cars data logger system.

Each loadcell is temperature compensated for offset and gain changes and is individually calibrated. Safe operating temperature ranges are up to 125°C. Higher temperature ranges can be specified upon request.

bf1systems have extensive experience with the design of force measurement products in applications such as, pushrods, pullrods, bump stops, 3rd dampers, tie rods, wishbones and steering column and driveshaft torque.

bf1systems capabilities include:

- In house design and FEA facilities
- Full in house environmental calibration
- Many years loadcell design experience and integration into automotive applications
- Supply of microprocessor controlled, temperature compensated amplifiers
- Supply of inline amplifiers
- Full re-calibration and repair facilities



Specification

Electrical

- 7 - 18 Volt supply range
- Non-ratiometric output, supply voltage changes do not affect the output.
- Supply current <30mA
- High level 0 - 5V output, no requirement for additional strain gauge amplifiers
- Combined non-linearity, hysteresis and repeatability <0.3% FSO
- Thermal zero shift over compensated range 0.1% FSO
- Thermal sensitivity shift over compensated range 0.2% FSO

Environmental

- Compensated temperature range 20°C to 125°C
- Operating temperature range 20°C to 125°C
- Sealed to IP67