Load measuring pin

Chracteristics



Force measuring device for existing installations without mechanical modification

Capacity 0 ... 100 kg up to 0 ... 2000 t

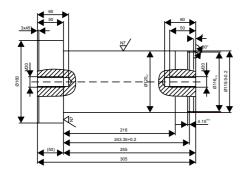
Output strain gauge full bridge optionally 2 strain gauge full bridges redundant optionally 0 - 10 V; 0 (4) - 20 mA

Protection IP 65 (optionally up to IP 68)

Accuracy up to 0,1 % of end scale value

Suitable for AK4 in conjunction with a TÜV approved measuring amplifier

Technical explanation



Example for a customized manufacturing

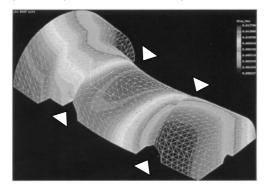
According to a technical drawing of an existing load pin in an installation a computer-generated calculation simulates a nominal load of 20 t.

The two diagrams are showing the mechanical changes and the spots of maximum strain of the load pin to be manufactured. At these spots the sensing elements will be

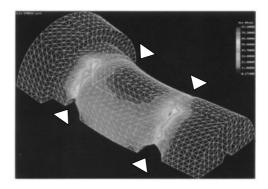


If fixing the sensors

Graphical representation of computer calculation



Linear shifting at a load of 20 t



Stress charge at a load of 20 t

Applications

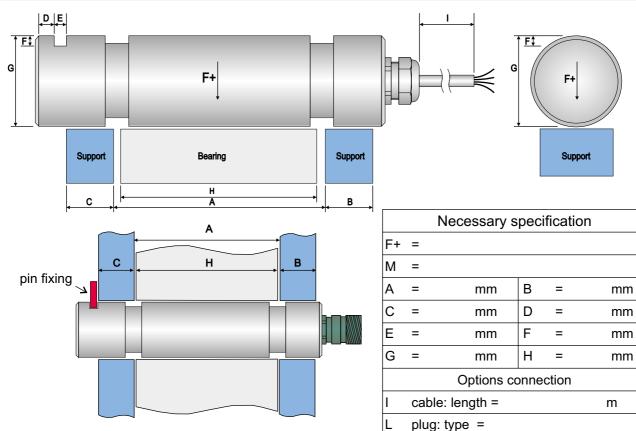
For use in all ranges where forces have to be measured, e.g. in theatre- and entertainment technics, in crane installations and loading plants in ports, in airport technics, construction of vehicles and terotechnology.







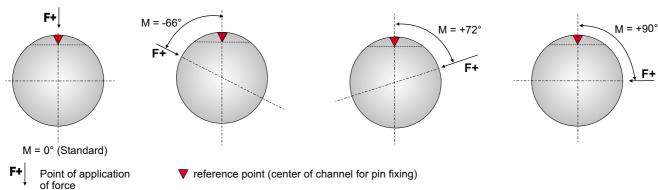
Dimensions



Load measuring pins are custom-made, every dimension is possible. The electrical connection is carried out with a plug or a connected cable.

M = Angle of point of application of force (Standard = 0°)

The manufacturing of the standard model of the load measuring pin is started out from a point of application of force perpendicular to the reference point (center of channel for pin fixing). If this is not possible on the basis of existing local facts, the angle of the shifting has to be indicated.



Applications





