

Automatic mechanical haptics test on high-quality control elements



Contact

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Sector

- Special purpose construction

Product name

- Precision miniature load cells

Features

- Measuring ranges of 0 to 2.5 N and 0 to 100 kN
- Temperature compensator for range -55 °C to 200 °C
- Excellent long-term stability, designed for high load cycles
- Minor construction cost due to simple installation and insensitivity to outside forces

Task

Inspecting the tactile behavior entails the precise measurement of the most minute operational forces, click ratio, blocking loads, et al.

Specific Requirement

- Small forces
- Insensitivity to lateral forces
- Quick reactions so it can recognize lock-in positions

Solution

The precision miniature pressure sensor should be installed between a linear unit operated with an electric multiphase motor and a tappet. This ensures the exact and sensitive activation of the switch and pushbutton, whose actuating force, switch points, stop points and release points should be defined. Any lateral forces on the sensor axis which might be caused by the "soft" placement of operating elements are absorbed by the supporting diaphragms inside the sensor and kept away from the actual sensing element. This prevents them from having any influence on the sensor results.

