Displacement/force transducer optimization

Go to the Sensorica Technical Education for more learning experiences

This is a co-creation document, make sure you respect the Content rules

Contents

Goals

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Materials

description	pictures

displacement calibration device	
stereomicroscope	
reusable fiber connector	

Software

Use Tibi's Mosquito program. During measurements you need to set the acquisition rate and averaging.

Procedure

description	pictures
insert the optical fiber into the variable connector • push the clamp to open access to the fiber • insert the fiber into the device, until it comes out of the ferule • pull the fiber a bit inside the ferrule and release the clamp to hold the fiber in place • use a ST Corning connector and a sleeve to push the fiber flush with the	

surface of the ferrule, insert both connectors into the sleeve, push the clamp to release the fiber and push the fiber until it reaches the end, release the clamp to hold the fiber in place ● disconnect the reusable ST connector from the sleeve.	
place the reusable St connector on the displacement calibration device.	
push the tip of the transducer using the micrometer and record the signal.	