

MFX - Operating instructions

Measuring arms for use in climatic chamber from -50°C to $+350^{\circ}\text{C}$



P r e c i s i o n t e s t i n g o f l i n e a r s t r a i n

Installation

The fastening of the MFX has to be done central and right-angled with respect to the test axis. Long holes in the fixing plate allow corrections even later on.

Fastening measuring heads

The measuring heads are removable. They have to be mounted to the carriages of the MFX from inside the temperature cabinet through a suitable slit by means of the small guiding pins, which also prevent wrong mounting. Upper and lower measuring heads are interchangeable. The measuring heads have to be fixed with the 2 knurled screws. The knurled screws finally must be tightened up with the 3 mm diameter pin tool. ($\frac{1}{4}$ of a turn max.)

Alignment of the measuring arms

The alignment has to be done in order to ensure the same knife edge distance (L_e) on the right / left side of the measuring arms. Therefore the measuring arms have to be moved to the position "open". Then the 2 knurled fastening screws of the measuring heads have to be let off slightly ($\frac{1}{4}$ of a turn). Now the measuring arms have to be aligned in front of the knife edges, so that there is no gap on both sides of the arms, when they are pushed gently together by hand. In this position the knurled screws have to be tightened. This alignment has to be checked again and if necessary corrected.

Maintenance

The MFX extensometer normally is maintenance free. However in dirty environments it may be necessary to clean the columns and ball bearings inside the housing. Therefore the housing has to be removed. Columns and bearings have to be cleaned with a cloth soaked in alcohol or acetone. Care has to be taken not to wash any solvent into the bearings. The whole guiding system has to be kept dry and free of grease.

The pin bearings of the measuring arms as well as the opening mechanic have to be applicated with a high temperature grease from time to time. This grease is available with our part number S 07972.

Sample dimensions

Round samples	up to \varnothing 50 mm
Square samples	up to 40 x 40 mm
Rectangular samples (width / thickness)	200 / 30 mm