



Linear Robot Track type AL50-500-0.1

The linear motor is a robot on an axis composed of a duralumin base plate on which two linear rolling tracks, a linear synchronous motor, a linear encoder, power cables, tracks limiters, cables support bracket and protective bellows.

Linear motors CLM 32-57-56 are synchronous, with permanent magnets, brushless, ironless, in bilateral construction. The continuous force is 50 N. The maximum force is 150 N.

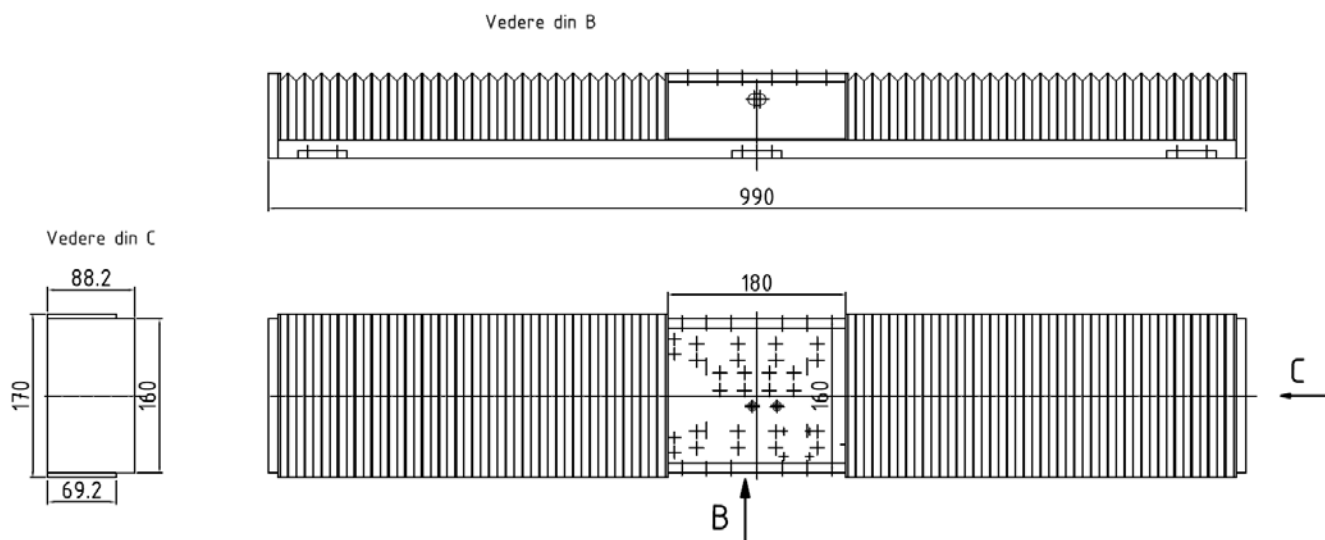
The motor has an ironless winding, representing the active part that moves at the same time with the load. The passive part is made of two identical metal plates positioned face to face on the inside of which are fixed the permanent magnets with alternating polarity. There is no mechanical contact between the two parts. The motor is powered with three-phase sinusoidal voltages. Since there is no iron in the active part, there are no iron losses in the motor, there are no parasitic drag forces between the magnets and the iron teeth, the magnetic attraction forces between the active part and the passive part are zero, unlike other motors which use permanent magnets.

This type of linear axis is used in applications which require high dynamics and high accuracy due to the low weight of the active part.

The movement is controlled (force, position, speed) by a digital servo drive. The precision of the motion is given by the precision of the encoder.

Characteristics

Travel length	500 mm
Maximum speed	1 m/s
Continuous force	50 N
Maximum load	50 kg
Accuracy	+/- 4 μ m
Precision	1 μ m
Weight (without load)	30 kg



Dimensions in mm

