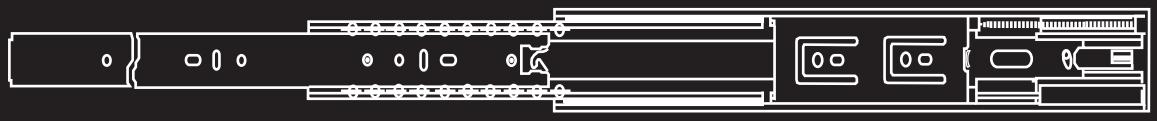
Eurimex



LINEAR GUIDING
OLM
INSTRUCTIONS FOR USE

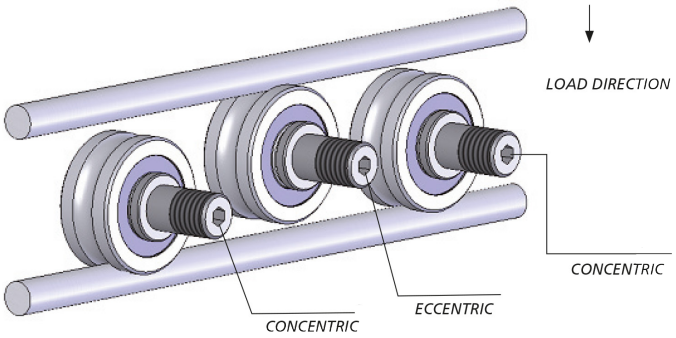
Version V16.1

General instructions for use

CONSTRUCTION PRINCIPLE OF THE CURSORS

The cursors are provided with 3 pivot-pins.
The two side pins are fixed and work on a side of the rail, the central one is eccentric and therefore adjustable. It works on the opposite side of the rail..

IMPORTANT
ARRANGE THE CURSOR SO THAT THE SIDE PINS LIE ON THE RAIL SIDE WHERE THE LOAD WORKS!



SETUP OF THE CURSOR-RAIL CLEARANCE

The eccentricity of the central pin allows adjusting the pre-load and the cursor-rail clearance.

IMPORTANT
PAY THE MAXIMUM ATTENTION DURING THE SETUP PHASE: TOO HEAVY PRE-LOADS DRASTICALLY REDUCE THE LIFE OF THE LINEAR SYSTEM!

HOW TO SET:
The adjustment of the eccentric pins shall be carried out rotating the shaft counterclockwise. In such a way any vibration that may occur during working will tend to tighten the threaded coupling.

1. *Insert the cursor into the rail being sure that the fastening nut of the eccentric pin is lightly loosened so that a "forced rotation" of the pin itself is allowed.*

2. *Insert the socket head screw into the pin and rotate counterclockwise until the cursor-rail clearance is completely reset, anyway avoiding the pre-load.*

3. *Move the cursor evaluating pre-load and motion, which shall be sliding smoothly and not stick slipping, being sure that the cursor has no clearance in any point of the rail.*

4. *Lock the nut keeping the pin position fixed by means of the socket head screw.*

5. *Check the motion again, in negative case repeat setup.*

NOTE: OMET supplies the product with the theoretically most suitable adjustment to guarantee the declared features.

LUBRIFICATION

BEARING LUBRICATION
The bearings are life-long lubricated and shielded on both sides.

RAIL LUBRICATION
As to the rail type OLM-A and OLM-B (completely in aluminum) no kind of lubrication is required, since the occurring contact is plastic (bearing coating) on aluminum.
For the rails type OLM-C (aluminum rail with steel insertions) it is necessary to have a lubricating film on the bars to avoid a direct contact between the metallic surfaces and protect from corrosion.
The lubrication interval depends on a lot of factors among which temperature, speed and use conditions (loads, assembly of the rail so that the cursor slides more or less free). As an indication a re-lubrication is recommended every 50 Km run.

USE TEMPERATURES

All the tests carried out at OMET laboratory refer to room temperatures.
In general a working temperature included between –20 and +60°C is recommended, even if everything depends on the use conditions (speed, type of cycles, exposure time to such temperatures, …)

ASSEMBLY INSTRUCTIONS

In the case of parallely assembled rails it is important to check parallelism to avoid an overload of the bearings or a too high clearance of the cursor to compensate the parallelism error that theoretically does not have to be higher than a 0,1-0,2 mm.
After assembling the whole linear system it is recommended to let the cursor slide on the rails by hand. The motion shall prove to be soft and without hindrances. A wrong assembly heavily jeopardize the capacity features of the cursor-rail system.

Personalized charge test

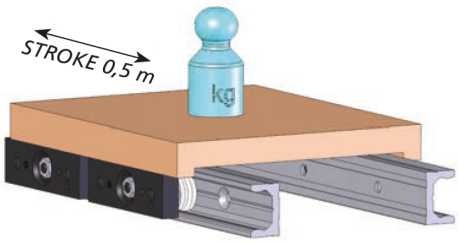
OMET "Practical Test" laboratory is able to carry out customized tests. The final applications of the cursor-rail system are infinite and very different from one another.

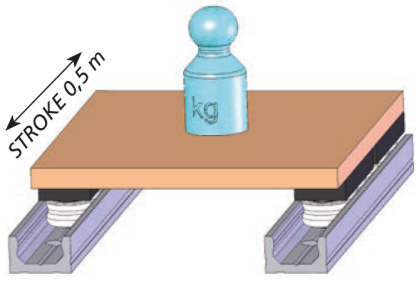
- ***HORIZONTAL, VERTICAL AND OBLIQUE MOTIONS***
- ***TYPE OF LOADS*** *(axial, radial, moments)*
- ***ACCELERATIONS*** *(taking to dynamic loads due to inertia forces and creating instantaneous very heavy loads)*
- ***RAIL ARRANGEMENT, NUMBER OF CURSORS, ...***
- ***USE CONDITIONS***

The above mentioned are only some of the features defining a linear system.

Noticeably in a laboratory it is not possible to recreate all these variables; there are testing machines anyway, conceived and designed by OMET, that can simulate various use situations. During the tests the parameters that might cause the life end of the cursor-rail system are constantly monitored.

Here are some examples.

HORIZONTAL MOTION LOAD ON THE CURSOR: RADIAL	PRODUCT	CYCLES	SPEED (m/min)	COVERED Km AT TEST END	LOAD ON SINGLE CURSOR (Kg)
	T,5001,03AE	Continuous cycle alternate with motion reversions that do not create instantaneous loads	20	250	35
	RESULT OF THE CONTROL *Minimal wear on the plastic ring that does not jeopardize the use.*				

HORIZONTAL MOTION LOAD ON THE CURSOR: RADIAL	PRODUCT	CYCLES	SPEED (m/min)	COVERED Km AT TEST END	LOAD ON SINGLE CURSOR (Kg)
	T,5001,03AE	Continuous cycle alternate with motion reversions that do not create instantaneous loads	20	250	35
	RESULT OF THE CONTROL *A minimal wear that does not jeopardize the use is noticed on the plastic ring after 40 Km.* *After 250 Km the cursor has not taken any type of clearance*				