

Traversing Systems



Fig 1: 3D-Traversing System based on isel linear stages and ILA DC-motor modules



Fig 2: 3D-Traversing System based on OWIS linear stages and ILA DC-motor modules

Overview

ILA R&D offers customized systems of traversing units that fit any application, enabling us to build a suitable system, even if the space at the customer's side is challenging. The figures 1 and 2 are showing examples of how the linear stages can be arranged. The whole traversing system can be customized according to your requirements.

Our traversing systems are based on OWIS traverse units for travel paths up to 200 mm and on isel units for larger travel paths from 200 mm up to 2000 mm. ILA R&D is using only DC servo motors, which are more accurate and reliable compared to the other available motors. In addition, we are designing our own DC driver boards based on Maxon Motors reliable technology.

The traversing systems are well bundled in all ILA R&D products through the in-house designed controllers, holders and software. They are therefore suitable for completely automatized measurement sessions.

Specifications

Based on isel linear stages

	narrow unit	broad unit
Aluminium profile housing	75 × 75 mm (W x H)	150 × 75 mm (W x H)
Available travel paths	200 mm ... 2 m (*)	200 mm ... 2 m (*)
Profile length	280 mm + travel path	280 mm + travel path
Total length incl. motor	500 mm + travel path	500 mm + travel path
Material	AlMgSiO, 5F22	AlMgSiO, 5F22
Weight	~7.6 kg/m	~12.8 kg/m
Limit switches	With 2 mechanical limit/ reference switches	With 2 mechanical limit/ reference switches
Surface finish	Naturally anodized (E6/EV1)	Naturally anodized (E6/EV1)

(*) in steps of 100 mm

Based on OWIS linear stages

Aluminium profile housing (incl. motor)	90 × 42 mm (W x H)
Available travel paths	70, 95, 145, 195 and 295 mm
Profile length	75 mm + travel path
Total length incl. motor	230 mm + travel path
Material	Deformation-resistant aluminium
Weight	~2.5 kg/m
Limit switches	With 2 mechanical limit/reference switches
Surface finish	Reflection-poor, black anodized (E6/EV6)

Accessories

- Traverse Controller for controlling of up to 4 linear stages via software and/or buttons on front panel of the controller
- Standalone traversing software *TAG (Traverse Auto Grid)* for fully automatized traversing from a connected PC
- Traversing software is already fully integrated in our *LDA Control Qt* software for LDA measurements