

## Operating and installation instructions

# Portal axis

### LM 10 PE

#### Items included in the delivery

The linear module is supplied fully packaged. A listing of delivery contents can be found in the catalog entitled „Domino handling components“.



#### Note:

Deliveries must be checked to ensure they are complete and in perfect condition.

#### Technical data

Please see catalog: „Domino handling components“

#### Safety notes:



#### Warning:

When installing the module, you must switch the power supply off. Both local and product-specific safety instructions must be observed without fail.

#### Installation and integration of LM 10 PE

##### Preliminary work

The stop blocks are used as safety stops if the programmed end positions are overshoot.

##### General setup, fig 1

1. Loosen screws (1) of stop block (2).
2. Remove centering rings (3).



#### Note:

The centering rings have an internal thread.

To remove or relocate the rings, you can use a screw with the same thread.

3. Slide sliding blocks (4) to required mounting position
4. Also relocate centering rings (3).
5. Refit stop block (2).

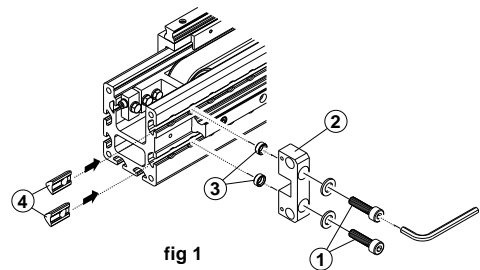


fig 1

##### Electrical connection of LM 10 PE, fig 2

##### Limit switch (end position monitoring, reference position)

1. Fit limit switch type IFFM 08P3701 (1) with M3 screw to angle (2).
2. Fit and loosely fix angle (2) with limit switch to module (3) using screw and M5 sliding block.
3. Move carriage body (4) up to end stop (5).
4. Slide angle with limit switch in such a way that a gap of approx. 5 to 10 mm remains between the end stop and the carriage body.
5. Finally fix angle in place.



#### Note:

Fit angle with limit switch in such a way that a gap of approx. 5 to 10 mm remains between the end stop and the carriage body.

##### Motor connection



#### Warning:

DANGER! During motor installation, the power supply must be switched off without fail.

1. Remove safety cover (6) for motor shaft if necessary and fit it again on the rear side.
2. Fit and connect motor.



#### Note:

The motor is to be installed and connected according to the manufacturer's instructions!

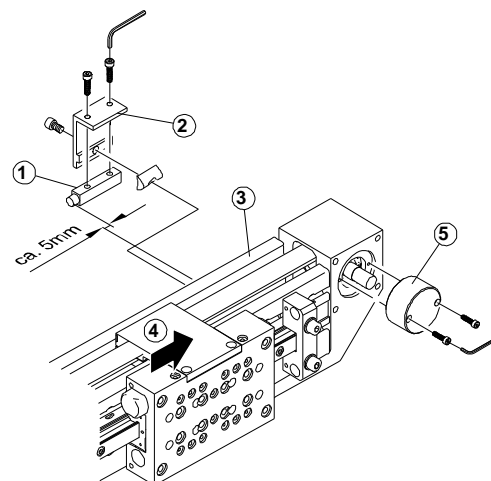


fig 2

### Adjustment of toothed belt, fig 3

1. Pull off safety cover (1).
2. Loosen fastening screw (2) (SW 10).
3. Tension belt with M4 straining screw (3).



**Note:**

The belt should be tensioned in such a way that it can be twisted up to 45° without much resistance!

4. Retighten fastening screw (2).
5. Replace safety cover (1).

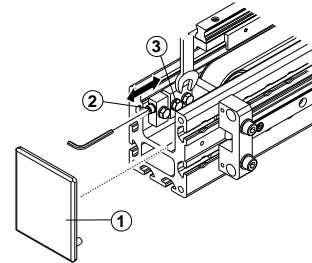


fig 3

### Remedying faults

Problem	Cause/Remedy
Module does not move	<ul style="list-style-type: none"> <li>▪ Carriage body is mechanically blocked</li> <li>▪ Motor control system is switched off, brake is applied</li> </ul>
Travel path incorrect	<ul style="list-style-type: none"> <li>▪ Check motor control system</li> <li>▪ Belt not tensioned enough, retension belt</li> </ul>
Module moves jerkily or too quickly	<ul style="list-style-type: none"> <li>▪ Check motor control system; control parameters are incorrect or load is too great (see data sheet in catalog).</li> </ul>
Module moves too slowly	<ul style="list-style-type: none"> <li>▪ Check motor control system</li> </ul>
The motive power is declining	<ul style="list-style-type: none"> <li>▪ Clean and lubricate module</li> </ul>

### Maintenance and lubrication instructions

To ensure perfect operation of the module the following must be observed:

- The compressed air must be filtered, dry, oiled or oilless.
- Modules must be inspected and cleaned regularly.

#### Guides:

We recommend that you do the following periodically/once a month: clean all shiny guide parts, check them for corrosion and if necessary lightly lubricate them with grease or lubricating oil according to DIN 51825, K2K (no synthetic greases).

#### Relubricating:

The lubrication interval for the guide is 2 million cycles with a stroke < 400 mm. In the case of a stroke > 400 mm, 1 million cycles.

The lubricating nipple is located on the side of the carriage body. If the nipple is inaccessible, lubricate by directly applying the lubricant (grease as per DIN 51825, K2K) onto the guide tracks and then sliding the carriage in and out several times by hand (repeat procedure 3 to 4 times).



**Note:**

However, adverse operating conditions (dust, aggressive fluids, vibration, high speeds, impact stress, corrosion, etc.) can necessitate cleaning and relubricating at an earlier stage.