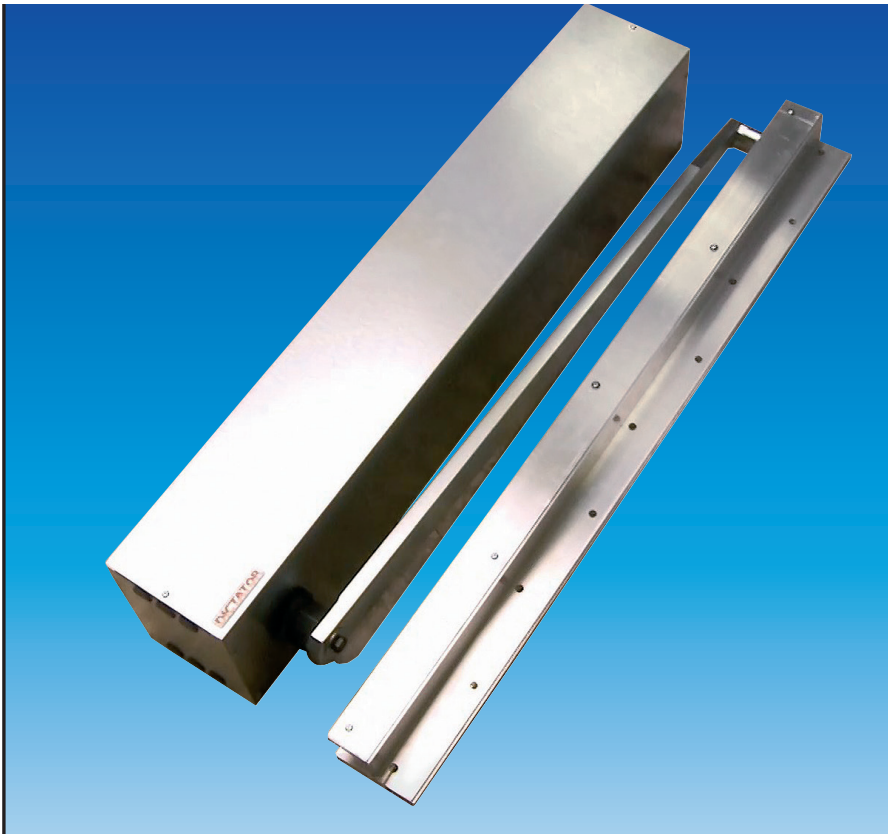


Technical Manual DICTAMAT 310-21



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You can find the current version of our manual on our website under «Downloads»:
<https://en.dictator.de/products/door-drives-gate-drives/operators-hinged-doors/>

I. Safety Instructions



Observance of the operating instructions is a prerequisite for trouble-free operation and the fulfilment of any warranty claims. In the event of damage caused by failure to observe the operating instructions, the warranty claim will become void. The manufacturer or distributor assumes no liability for consequential damage resulting from this and for damage to property or persons caused by improper handling or failure to observe the safety instructions.

This technical manual contains important information on service. It should therefore be kept in the vicinity of the system.

In addition to the technical manual, please observe the warning and safety signs on the system.

The DICTAMAT door drive was designed exclusively for the automatic operation of hinged doors combined with a DICTATOR door drive control. **The manufacturer or distributor assumes no liability for applications outside the defined application purposes or application limits.**

Regular maintenance is a prerequisite for the long-term and safe operation of the DICTAMAT door operator. This must be carried out by trained specialists. If it is neglected or carried out by unauthorised persons, the manufacturer or distributor cannot be held liable for damage and its consequences. We recommend that you conclude a maintenance contract with your sales partner.

Subsequent interventions and modifications to the DICTAMAT door operator may only be carried out by authorised specialists. If faults which lead to dangerous conditions cannot be rectified immediately, the operator of the system must be informed and the system must be shut down if necessary. Repairs must be carried out as soon as possible.

The electrical connections must be made by an authorised specialist. For the correct dimensioning of the motor supply lines, the relevant installation regulations must be observed.

Checks Before Starting Installation

A) Is the door operator complete?

- Door operator
- Lever arm with roller
- Guide rail
- Control unit

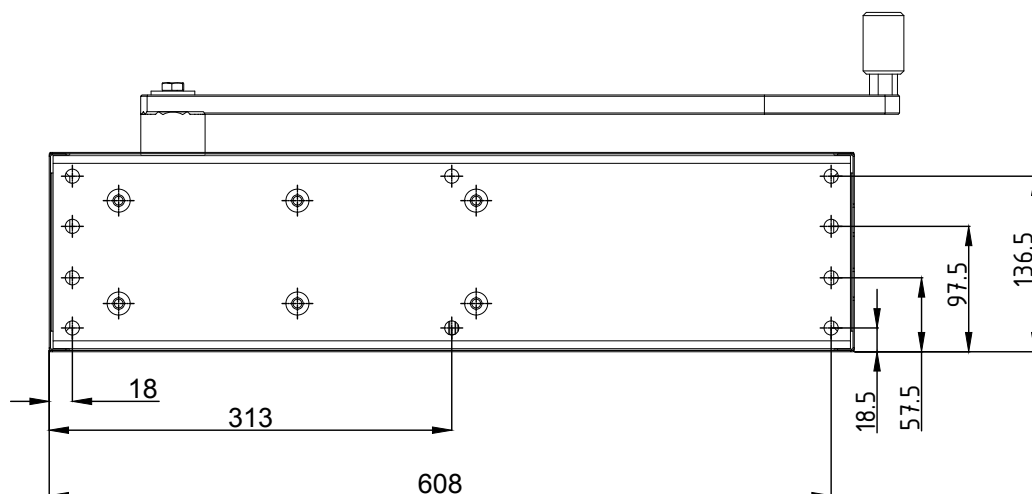
B) Check the smooth running of the door

II. Mounting

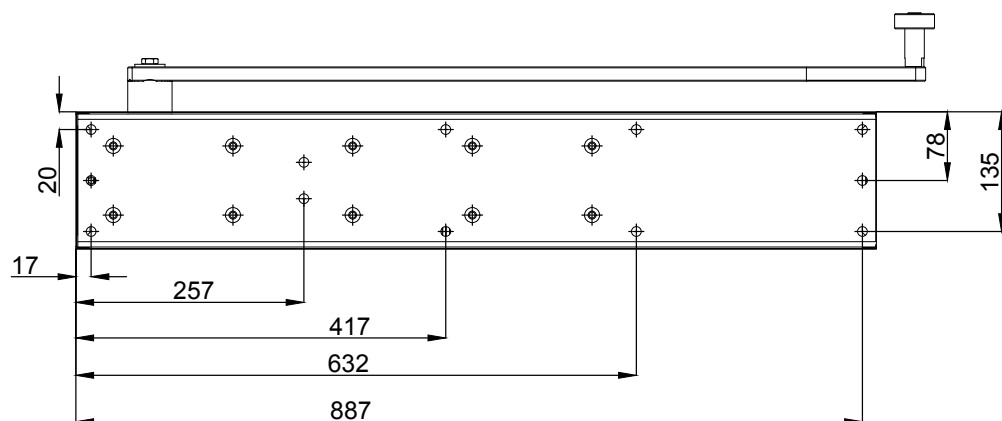
Mounting of the operator

The drive can be mounted on the lintel or on the door leaf.
See drawings for drilling pattern for mounting holes.

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DICTAMAT 310-21 XXL



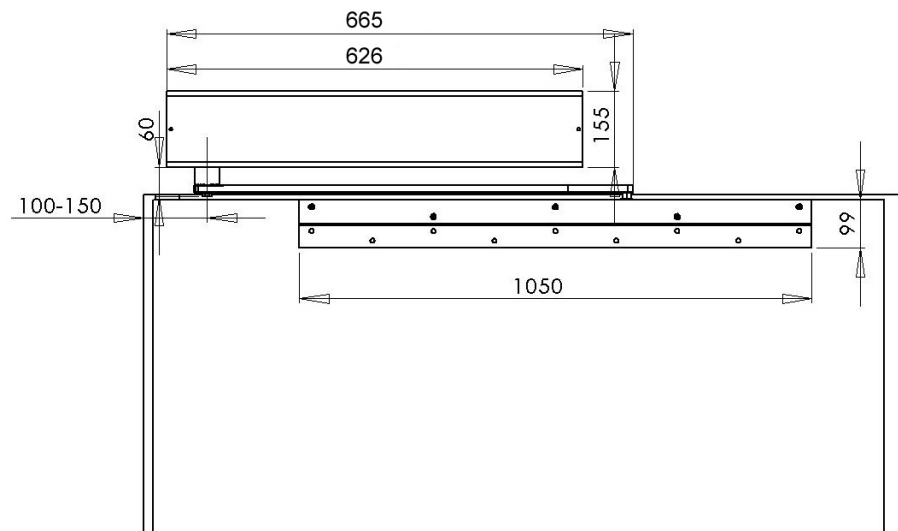
The door operator weighs 30 kg or 50 kg in the XXL version. In addition, the forces of max. 700 Nm to be transmitted to the door must be taken into account when mounting the drive. Sufficient stability of the fixing on the wall or door must be ensured by the customer.

The outer edge of the drive should be approximately above the hinge side of the door.

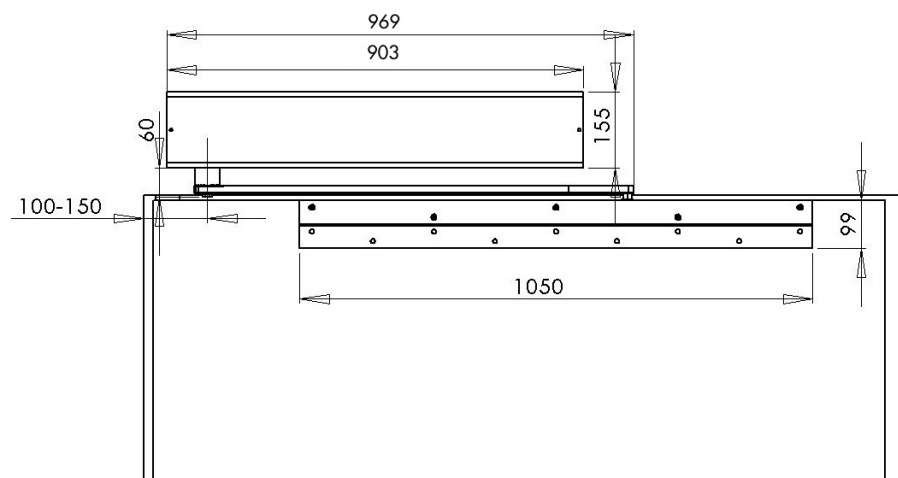
The guide rail is attached flush to the top of the door leaf.

The lever arm must be greased with Vaseline during installation.

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DICTAMAT 310-21 XXL



ATTENTION:

Please make sure that the drive lever arm is exactly horizontal and parallel to the top edge of the door. The lever roller must slide in the rail without tilting when opening the door.

III. Electrical Connection

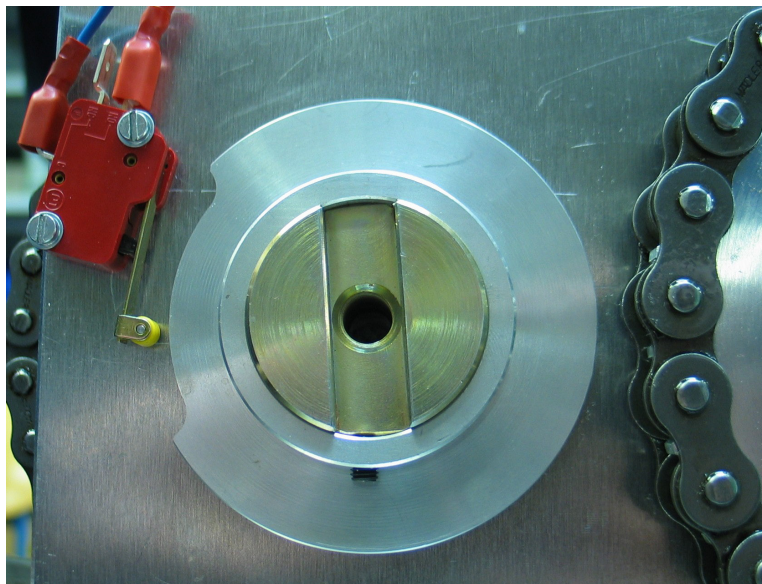
The electrical connections must be made by an authorised specialist.

The DICTAMAT door operator is supplied with a 2 m long set of connection cables to the controller for connection to the control unit series Square 940.

DICTAMAT with incremental encoder: 1 motor cable, 1 connection cable incremental encoder, 1 cable brake, 1 cable thermal contact motor, 1 cable reference switch

To exclude any interference, shielded cable is used. If you need to extend the cable, please refer to the instructions in the manual of the control unit. There are already screwed connections on the cable. The cable is already fully wired at the drive (only for controller series Square 940) and only needs to be connected in the control unit. For the connection in the control unit, please refer to the connection diagram in the manual of the control unit (controller series SQUARE 940).

For information on setting the final positions, speeds etc. refer to the manual of the control system used!



Reference switch

The switching cam is to be mounted in such a way that the reference switch switches at an opening angle of approx. 45° and remains switched on when the door is opened further.

Attention! The reference switch may only switch once during a complete door movement!

Status of switch contact:

Door CLOSED: Switch not operated. Switch contact open

Door OPEN: Switch operated, switching contact closed

IV. Commissioning

For commissioning the controller, please use the separate manual of the SQUARE 940/940-2.

Adjusting the Switching Cam of the DICTAMAT 310-21

The switching cam is to be mounted in such a way that the reference switch switches at an opening angle of approx. 45° and remains switched on when the door is opened further.

1. Open door 45°
2. Remove the cover plate on the switching cam (see figure 1)
3. Loosen the locking screw of the switching cam with hexagon socket of size 2.5 and turn the switching cam manually so that the flank of the switching cam is directly in front of the roller of the limit switch (see figure 2)
4. Retighten the cam locking screw
5. Remount the cover plate on the switching cam

ATTENTION! The reference switch may **only switch once** during a complete door movement!

Status of switch contact:

Door CLOSED: Switch not operated, switching contact open

Door OPEN: Switch operated, switching contact closed

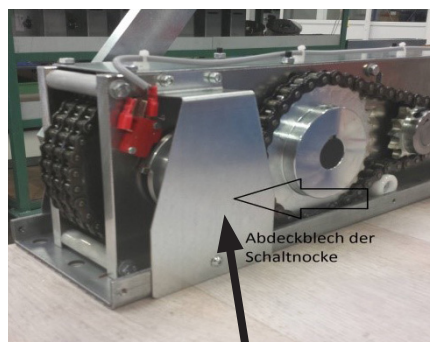


Fig. 1

Cover plate on the switching cam

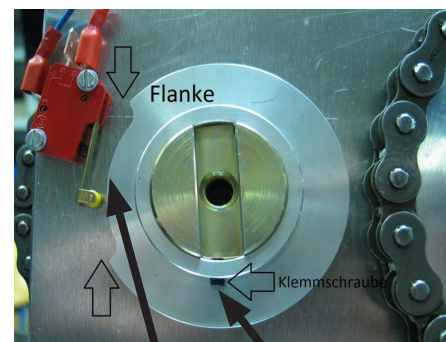


Fig. 2

Flank

Locking screw

V. Maintenance

To ensure proper operation of the door and a long service life of the drive, the entire system should be checked and serviced monthly. The following checks should be carried out:

- a) **Is the entire door area kept free in OPEN and CLOSE direction?**
If necessary, apply or renew floor markings.
- b) **Check all door and operator fastenings.**
- c) **Check the door for damage:**
 - bent closing edges and
 - bent frames (possibly prevent complete closing)
- d) **Check fittings for damage:**
Lock, lock latch, door handle etc.
- e) **Check connection cables for damage.**
- f) **Check drive chain for damage and wear.**
- g) **Check final positions OPEN/CLOSED.** (Does the operator switch off?)
- h) **Check the opening and closing speed.** (Are the guidelines observed?)
(Too fast doors are extremely dangerous at the closing edge.)
- i) **Check the functioning of all hand buttons and safety elements (light barriers, etc.).**
- j) **All defective parts must be replaced or repaired immediately.**
- k) **The results of the maintenance, inspection and repair work carried out must be entered in the maintenance logbook and the operator must be informed of the results.**

We recommend maintenance after 1 year / 100 000 operations at the latest.