## DICTAMAT 700 <br> Fire Protection Door Operator

Opening Motor, Hold Open System and Damping
The DICTAMAT 700 door operator automatically opens fire protection doors with one or two leaves and also serves as hold open system.

The powerful threephase current motor pulls the door open. So even heavy doors with counter weight can be equipped with this operator. The force is transmitted to the door by a $\varnothing 4 \mathrm{~mm}$ steel rope.

In the event of alarm the smoke detector interrupts the power supply to the electromagnet and the door closes automatically. The magnetic brake system controls the closing speed over the complete distance.

The DICTAMAT 700 door operator, as described on the following pages, has been tested and approved for the use on fire protection doors by the National Material Testing Office in Dortmund/Germany (MPA-NRW).

For large and heavy doors the DICTAMAT 700 is also available with a stronger motor and chain transmission. Furthermore a special explosion-proof execution is available. Please ask for more information and detailed advice.

## Selection Criteria



- For doors with unlimited operating distance
- Motor pulling force in opening direction: max. 800 N
- For doors up to max. 1800 kg
- Closing by counter weight provided on site
- For up to 200 cycles per day
- Position control: separate limit switches
- Operating options with E8 control system and frequency converter: OPEN, STOP,

CLOSE, automatic closing, relay contact


## Dimensions DICTAMAT 700

## Dimensions Accessories

## Components Included

## Dimensions, Components Included

The door operator is fixed by its mounting bracket from below directly to the rail (near the end)
The following diagram shows the door operator with part no. 700505. The left type 700501 is exactly mirror-inverted.
When installing the operator on heavy doors we generally recommend to mount it at the end of the rail where the door is in the closed position.


The drawings of the accessories (rope tensioner, idler pulley and additional rope fixing device for doors with two leaves) you will find on the pages 05.014 .00 and 05.016.00. For the dimensions and technical data of the other components (dampers, push buttons, safety and operating elements, smoke detectors) please see the chapters Damping Engineering, Door \& Gate Operators and Fire Door Control Solutions of this catalogue.

Door operator (three-phase current motor, electromagnet, magnetic brake system) Mounting bracket with threaded counter plate for fixing to the rail 25 m steel rope $\varnothing 4 \mathrm{~mm}$ with rope tensioner, compensation spring and fixing bracket Idler pulley with mounting bracket for fixing directly to the rail


## Technical Data, Control System

The DICTAMAT 700 door operator can be mounted with its angle bracket to any commercial rail. The electromagnet keeps the door open in the desired position until its power supply from the control system is interrupted by an alarm from a smoke detector or a hand release switch. When installing the explosion-proof model, the ex-magnet is installed separately at the end of the door. Please use a push-to-lock key (part no. 700132) to make sure the door closes completely if the alarm is set off by a hand switch. The door operator is supplied ready to install, including idler pulley, rope, rope tensioner and fixing bracket. The electrical wiring should only be carried out by a professional.

## Technical Data DICTAMAT $\mathbf{7 0 0}$

| Opening force of the motor | 800 N |
| :--- | :--- |
| Opening speed | about $0.2 \mathrm{~m} / \mathrm{s}$ (at 50 Hz ) |
| Closing speed | adjustable between $0.08-0.2 \mathrm{~m} / \mathrm{s}^{* *}$ |
| Voltage / Nominal current | $230 / 400 \mathrm{~V} / 1.33 / 0.75 \mathrm{~A}$ |
| Motor rating | 0.18 kW |
| Driving torque | 70 Nm |
| Duty cycle | $50 \% \mathrm{ED}$ |
| IP rating | IP $00 / \mathrm{IP} 54$ on demand |
| Weight (without accessories) | 23 kg |
| ** The closing speed is adjusted directly at the door operator. It is controlled by the |  |
| magnetic brake system until reaching the final position. |  |

## E8 Control System with Separate Frequency Converter



The DICTAMAT 700 is operated with the E8 control system with frequency converter. Detailed information is to be found starting on page 05.027.00. In Germany you have additionally to use the approved AR 20 cutoff relay, which in case of an alarm cuts off the power supply of the operator to ensure the closing of the door.
The following functions are possible:

- Deadman OPEN, CLOSE: Door opens/closes as long as the switch is pressed. The deadman function can be adjusted separately for OPEN and CLOSE.
- Impulse OPEN: Door opens completely after pressing the switch shortly or actuating a pull switch.
- Impulse CLOSE: Door closes completely after pressing the switch shortly.
- Alternating impulse OPEN / CLOSE: After each impulse the door moves to the opposite final position.
- STOP: Door stops as soon as the STOP switch is pressed.
- Automatic closing: After reaching the position OPEN the door closes automatically after a time pre-set between 1 and 180 seconds.


## Further adjustment possibilities:

- Safety equipment
- Function relay contact (e.g. for the connection of a sirene, warning flashligt etc.)
- Operation characteristics of the motor: Distance for the crawling speed before the final position OPEN, crawling speed OPEN


## Functions in case of alarm:

- Normal operating functions: deactivated
- Closing: In case of an alarm the closing command has priority.
- Safety equipment SHE: It is adjustable, whether in case of an alarm no safety equipment is active or whether the door stops as long as the safety equipment is actuated and then continues to close.



## Functioning, Accessories, Order Information

The 400 V three-phase motor opens the door either in deadman operation or on impulse. The electromagnet keeps the door open until its power supply is interrupted by a smoke detector or a hand release switch. The door then automatically closes by a counter weight. The closing speed is controlled by the magnetic brake system. The motor force is transmitted by a steel rope fixed to the door with a special fixing bracket which also tensions and secures the rope. The idler pulley is also fixed to the rail.

## Diagram of a Sliding Fire Door with DICTAMAT 700



Fire protection sliding door with a DICTAMAT 700
If the DICTAMAT 700 is used in combination with the E8 control system with frequency converter, we recommend to install 3 limit switches, one each for the positions CLOSED, Crawling Speed OPEN, OPEN.

## Order Information Door Operators

# Order Information <br> Required Accessories 

| DICTAMAT 700 (installation at right end of rail) | part no. 700501 |
| :--- | :--- |
| DICTAMAT 700 (installation at left end of rail) | part no. 700505 |
| E8 control system with | part no. 730111 |
| Frequency converter (in a separate casing) | part no. 730114 |
| AR 20 cutoff relay | part no. 040582 |
| Limit switch (break contact) | part no. 700156 |

## Order Information Further Accessories

| DICTATOR RM 2000 / RM 3000+ smoke detector | see Fire |
| :--- | :--- |
| Door Control Solutions |  |
| Additional fixing bracket for doors with two leaves | part no. 700476 |
| Free-running system (door catch and special rope tensioner) | on request |
| EDHa / EDHM hydraulic dampers | beginning page 05.065 .00 |
| Operating and safery equipment | beginning page 05.071 .00 |

