

# Two bearing gate barrier TSD 60 / 45 up to 6m / 4.5 sec.



A proven model suitable for heavy-duty use with a boom length up to 6.0 m, easily replaceable circular aluminium boom with a diameter of 90 mm. Running time 4.5 sec.

## **Performance features**

### Housing conception

Modular concept; the basis is particularly robust, galvanised steel chassis with easily replaceable lockable plastic cladding (three-part shells of high grade glass-fibre reinforced plastic).

### Movement sequence

Electromechanical drive. Jolt-free movement sequence (sinusoid; that means, slow starting accelerating and moving slowly into the final position).

### Locking

Internal, mechanical locking of the barrier boom in the respective final position without counter weight. Self-supporting structure. No endsteady or hinge support necessary as in the case of many suppliers on the market.

### **Power failure**

Securing of the premises even in the event of voltage failure. If the sliding clutch is released the barrier boom can easily be raised.

### Boom

Aluminium boom diameter 90mm, colour traffic white (RAL 9016)

### Warning stripes

3M special reflectant red stripes on both sides of the barrier boom.

## Control conception LB/LC/LCF

- LB: Motor contactor circuit for classic gate keeper operation.
- LC: Mircoprocessor control system with slots for two-channel loop detector and radio receiver.
- LCF: Microprocessor control unit with frequency converter for the universal operation of all bebarmatic barriers at 230 V single-phase or 400 V tri-phase power supplies: Gentle starting and soft stop with adjustable speed.

### Voltage

1 x 230 V / 3 x 400 V (optionally)

### Opening Speed about 4.5 sec

## Standard colour of the housing

RAL 5002 (ultramarine) RAL 2004 (orange)

# Weight

about 80 kg

## Area of application

 Suitable for entrances with passenger car and truck traffic, buses etc.

## **Standards**

Barrier units including control system:

- Machinery Directive 98/37/EWG
- EMC Directive 89/336/EWG
- EN 12978: Area if application exclusively for motor vehicle traffic
- EN 13241-1



## **Options**

- Product variant TSD 35/25 faster version up to 3.5m and running time 2.5 sec. on request.
- Self-monitoring impact safeguard
- Flashing lamps
- Magnetic locking system
- Impact fork ( if absolutely required, since self-supporting structure.)
- Lettering/sticker on barrier housing: ,Warning. Barrier closes automatically after each vehicle.<sup>4</sup>
- Special colors: all of the usual RAL colors, price on request



## Accessoires: Control system LB/LC/LP/LCF and detectors



Modular extension by means of: Module 1 LC double detector Module 2 Rolling code radio remote receiver Module 3 LCR relay board

## **Performance features**

LB: Reversing contactor control system for manually controlled barrier systems

- Main switch integrated in the housing
- Service push-button Open-Hold-Closed on the housing cover
- Operation in dead man or latching mode selectable

### LC: Microprocessor control system

- · Main switch integrated in the housing
- Service push-button Open-Hold-Closed on the housing cover
- Freely selectable parameter profiles
- Visualisation of functions by seven-segment displays and LED's
- 2 floating, freely parameterisable relay outputs
- Integrated evaluation for electric safety liner
- CE compliant and tested by TÜV (German Technical Supervisory Agency)
- Temperature range -20 to +50°C ambient temperature
- Interface RS 485
- Wide range power pack; control voltage 24 V DC
- System of protection IP54

## LCF: Microprocessor control unit with frequency converter

All functions as LC, additional:

 For operation with power supplies at 230 V single-phase or 400 V tri-phase

remote receiver

- 3rd relay output
- Gentle starting & soft stopp
- Adjustable speed

## Module 1 Double Detector



## **Performance features**

- Double channel detector for two induction loops in multiplex function
- Micro processor control system with adjustable responsivity
- Automatic adjustment to the connect loops
- Diagnostic system



Module 2 Rolling control radio

### (rolling code)

### **Performance features**

- One-channel detector as plug-in module
- Receiving frequency 433 MHz
- Quartz-controlled digital transmission Permanently changing code for higher
- security (rolling code), 2<sup>66</sup> Range up to 50m depending on
- constructional surroundingsPossibility of storing for up to 300 users
- After start-up radio transmitters can be programmed from outside the installation

## LP: Control system (synchronous operation of two barriers)

- Display of the operating conditions in plain writing
- Limit switch monitoring of both barriers
- Adjustable positive closing
- Double detector
- Optionally 2 securing induction loops or one opening and one securing induction loop each
- Connection for photoelectric barrier for additional securing of the unit
- Individual special programming possible
- Temperature range -10 bis +50°C ambient temperature
- Control voltage 24 V DC
- Type of protection IP 65

