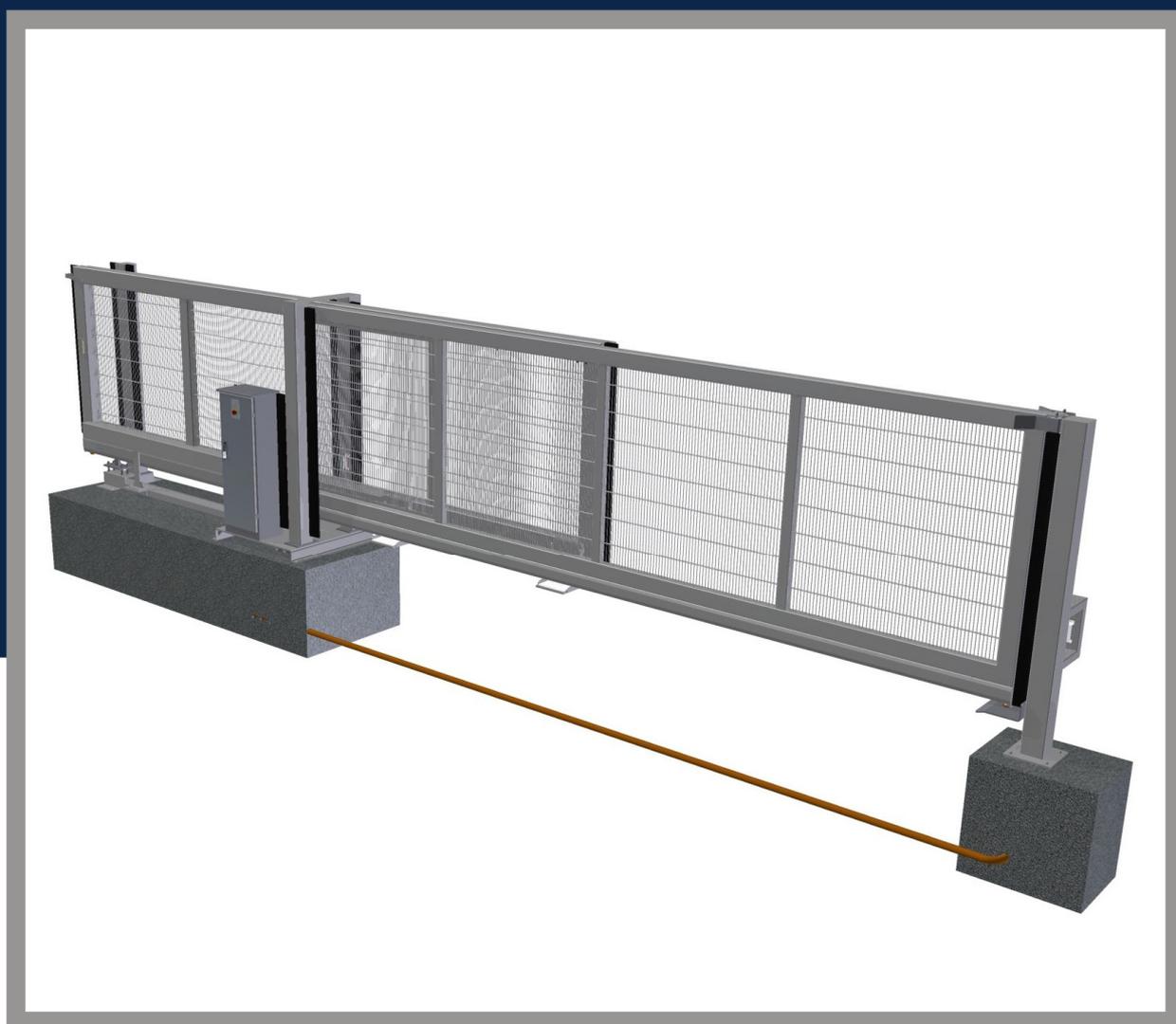


Telescopic Sliding Gate - self-supporting TSTF-165



for clear widths from 6 to 8 m

TELESCOPIC SLIDING GATE - TSTF-165

Telescopic Sliding Gates – self-supporting TSTF-165 are a special solution for securing access areas of properties with no swivel range and limited lateral opening areas.

Due to the lateral opening of the extendable gate leaves along a fence or wall the passing area is not limited spatially. Through a specially developed chain hoist method, the 2nd door leaf is driven by means of corresponding deflection rollers. With every opening and closing procedure, the second door leaf covers twice the distance of the first door leaf. Despite the different speeds, however, the gate wings reach the end position at the same time.

The **self-supporting Telescopic Sliding Gate TSTF-165** can be delivered manually operated for low-frequented security areas as well as power-operated in dead man's control or self-retaining control. All gates can be controlled by all common access control systems and they are a solution for critical structural property entrance areas.

Attributes:

- reliable securing of outdoor areas with a medium vehicle frequency
- compact construction with reduced lateral space requirements (factor 0.8 x clear passage)
- short opening and closing times
- clear optics by vandalism proof integration of all power unit components
- power emergency release not exposed but integrated into the drive cubicle and therefore tamper-resistant
- duty cycle: 60%, industrial standard
- various options, for example, enhancement as a lock

Note:

During the decision-making process for the right gate system the modern **Folding Swing Gates** of the **Garant Series** should be also considered, because the performance criteria are similar but there are even more design and combination options.

Use for vehicle separation with concurrent protection against unauthorised persons, especially in areas that are vulnerable:

- authority facilities
- industrial plants and power plants
- military facilities
- supply facilities
- airports (aviation security area)

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Versions / Names:

TSTF-165 Telescopic Sliding Gates – self-supporting

Geometrical Key Figures:

	TSTF-165-6000	TSTF-165-8000
opening width	6000 mm	8000 mm
variable gate height	2000 to 3000 mm	2000 to 3000 mm
ground clearance	100 mm	100 mm
lateral opening space	5000 mm	6500 mm
running gear	self-supporting 165 T	self-supporting 165 T
frame, reinforcement	RT* 120/100, ST* 80	RT* 140/120, ST* 80
filling	double bar	double bar
mesh width	25/200 mm	25/200 mm
twin portal	ST* 150 mm	ST* 150 mm
drive motor	3x230/400 V, 50 Hz, 0.75 kW self-locking gear, magnetic brake, frequency converters (optional)	3x230/400 V, 50 Hz, 1.5 kW self-locking gear, magnetic brake, frequency converters
opening time	approx. 15 seconds	approx. 20 seconds

* RT = rectangular tube, ST = square tube

The **self-supporting Telescopic Sliding Gate TSTF-165** is manufactured as an assembly unit consisting of gate leaf, guiding portal, slam post, running gear, drive unit, control, safety and operating components. The **gate leaves** are welded torsion-resistant and dimensioned according to the static requirements. The gate leaf extension ensures the optimal intake of the static load. The filling is welded in between the upper, lower and lateral beam. In the opening area the gate leaf is guided by two spherical step and roller bearings inside the lower beam. The second telescopic gate leaf is carried and guided by the lateral mounted roller units of the first gate leaf. These adjustable roller sets are equipped with ball bearing mounted and maintenance-free polyamide rollers and ensure the smooth running and the exact adjustment of the gate. Thus, the gate is also guided off the floor in the opening area. The second gate leaf is directly driven by a specially designed chain hoist procedure by means of pulleys.

The **gate guide** consists of a twin portal made of steel tube profiles with a rainproof head plate and a lateral roller guide with 2 guide rollers on adjustable V2A bolts.

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The **slam post** consists of a steel tube profile with a rainproof head plate and a reset entry fork.

Electrical drive: The three-phase motor (230/400 Volt, 50 Hz) for industrial continuous operation is combined with a maintenance-free, low-noise worm gear which runs in an oil bath. The three-phase current geared motor, which is built into a separate lockable **control cabinet**, is equipped with a slip clutch. The locking functions via the self-locking worm gear and a magnetic brake. A sprocket and an adjustable and spring-loaded draw-bench chain which is attached to the gate leaf provides the driving force. The control (24 V) consists of a microprocessor control, including a proximity limit switch. A key switch **Open/ Close** with **Emergency-Stop** button is attached inside the control cabinet.

Easily accessible components: All components necessary for the operation are accommodated safely in the drive gate post, which simplifies the assembly, commissioning and maintenance significantly.

Control: Microprocessor-control unit and frequency converter

Mains connection: three-phase 3x230/400 V, 50 Hz, **Control voltage:** 24 V DC

Power consumption: approx. 1.5 kW (without accessories), duty cycle: 60 %, class 3

Protection class: IP 54

Control functions of the power-operated version:

- **Gate-Stop** as well as **Gate-Open** and **Gate-Close** (self-locking) between the end positions
- remote operability which is secured by floating contacts
- serial transfer of status signals of the gate statuses **Gate-Open**, **Gate-Closed** and **Collective Alarm**
- all gate typical components are connectable and controllable in various logics

Power failure/ Damage: By releasing the slip clutch in the profile cylinder locked drive post a manual operation is possible.

Base plate for gate leaf and power unit control column serial:

- up to 125 mm upper edge area with spacious cable entry,
- pairwise arrangement of dowel holes and levelling screws for an optimal perpendicular and flush assembly

TELESCOPIC SLIDING GATE - TSTF-165

TORWERK– Long-lasting corrosion protection in 4 steps:



The coating thickness is 260 µm, all requirements on corrosion protection stresses according to DIN EN 12944-2- C4 (long protective effect) are met.

First-class haptics due to:

- a hermetically welded construction
- a surface free of zinc cavities
- welding seams that are ground flatly (mitre corners) after zinc coating
- no warping of the surface because of zinc cavities

Environmentally friendly procedure:

- no use of solvents
- recycling of oversprays

Options:

Colour design/ labelling:

Gate posts and gate leaves are designable in colour tones according to RAL/DB.

Signaller:

- LED- rotating beacon (serial)
- LED-light - red/ green (optional)
- **Reflexite** contour marking from microprismatic foils with a high reflection value, high visibility even from sharp angles, on the gate's lower beam inside and outside (optional)

Safety:

- TÜV approved safety device, self-monitoring, according to European gate standards DIN EN 12978 + 12453 for power-operated gates, consisting of double chamber pressure strips on the main and secondary locking edges and the electronic analysis unit
- 2 light barriers (optional), consisting of sender and receiver in different heights outside between the gate posts as additional security device

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- 2-channel induction loop detector

Climb over protection and accessories:

- serrated band 45 mm high
- steel tips 50 x 10 mm, 50 mm space

Control elements:

- key switch **Open–Close** outside and key switch **Open–Emergency Stop–Close** inside (serial)
- radio remote control (optional)
- key switch **On–Off** (optional)
- timer (optional)
- code card reader and other communication systems available on demand

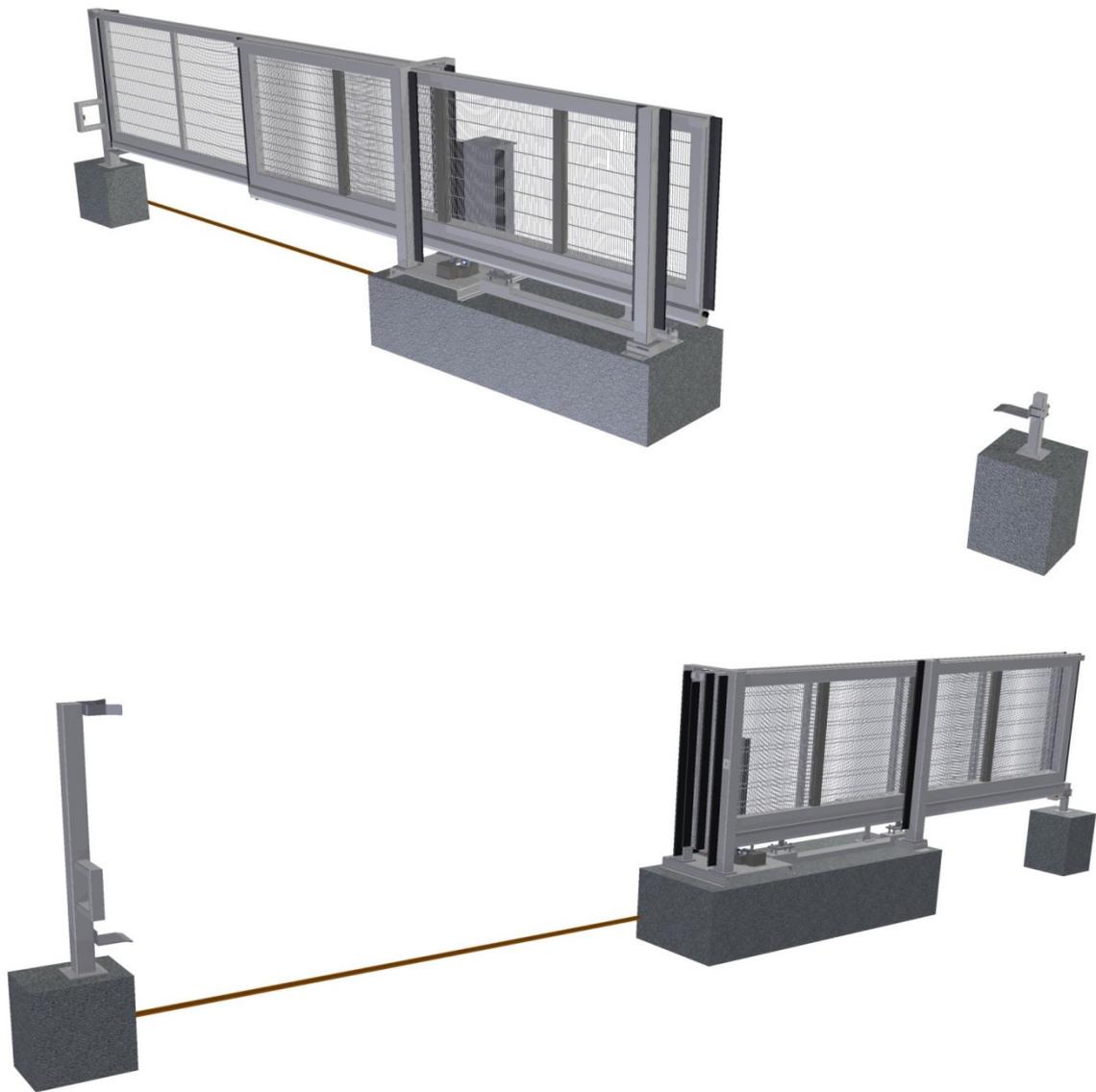
Design gate leaves:

- instead of a close meshed filling, optionally closed sheet metal filling or perforated steel plate filling in a powder-coated version

Torwerk-assembly service:

Every configured **TSTF-165** is completely pre-assembled at the factory and internally wired and as far as possible connected before it is delivered. The assemblers only need to unload the sliding gate onto the foundation on-site, adjust it, level it using the levelling screws and anchor it with the provided dowels. A qualified gate technician needs to adjust the leaf mechanism and the end position switch-off if necessary. A qualified electrician connects the gate to the power supply, to the external control elements, to light barriers as well as to possible induction loops. The self-supporting telescopic sliding gate is ready for operation. The time-consuming reading of manuals and sorting of components and fasteners are reduced to a minimum.

TELESCOPIC SLIDING GATE - TSTF-165



Construction: Maik Brunner

Electrotechnical Equipment: Stefan Carl / Matthias Martius

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