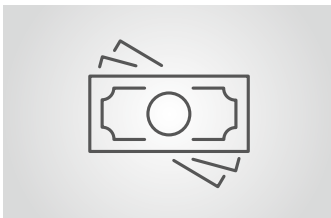




For rapid toll processing

Rapid, reliable, and economical processing of road users is essential when collecting toll charges at bridges, tunnels and on roads. Toll barriers from Magnetic have been specially designed for this situation. The innovative MHTM™ drive at the heart of the barriers is characterised by its speed, lack of maintenance and energy efficiency, and thus keeps long-term costs down. The Toll barriers can be adapted to meet individual requirements: there are five models with opening times of from

1.3–0.3 s, which can be equipped with a variety of control devices, flanges and barrier booms. All barrier boom types can be provided with swing-away flange. In the case of a collision with a vehicle, the barrier boom is released and can be manually re-engaged afterwards. This protects the barrier boom and the drive unit. There is also the optional auto-swing-away flange for the soft boom, which automatically re-engages after a collision with a vehicle.



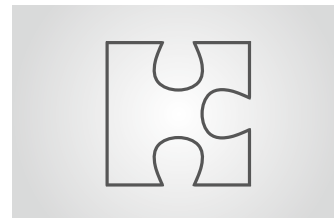
Effective toll processing

Toll barriers from Magnetic are the optimum solution for all toll applications thanks to their speed, reliability and low operating costs.



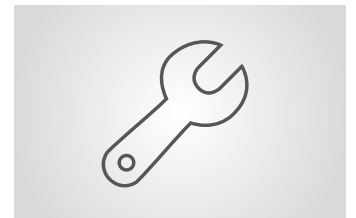
Innovative drive technology

The MHTM™ drive unit operates without maintenance, energy-efficiently and quietly. Its high torque ensures best possible operation even under extreme weather conditions.



Individual configuration

Five models, three control units, three different barrier booms – the Toll barriers can be individually adapted to your requirements. Our staff would be pleased to advise you!



Easy access to components

Two simple hand movements suffice: easy access to the control system and drive unit by removing the hood and front panel. This increases user-friendliness and speeds up commissioning and servicing.

Toll

Toll barrier

- > Opening and closing times down to 0.3 s
- > Very low operating costs thanks to efficient and long-lived MHTM™ drive
- > Highly user-friendly and with optimum accessibility
- > Prizewinning design: German Design Award 2014 and red dot design award 2012
- > Designed for 10 million opening and closing cycles



| Technical Data | Toll | Toll Pro | Toll Pro 2 | Toll HighSpeed | Toll HighSpeed 2 |
|--------------------------------|----------------------|----------------------|----------------------|----------------------|------------------------------|
| Lane width | max. 3.0 m | max. 3.0 m | max. 3.0 m | max. 3.0 m | max. 3.2 m (with 2 barriers) |
| Opening/closing time | 1.3 s | 0.9 s | 0.7 s | 0.6 s | 0.3 s |
| Power consumption | max. 55 W | max. 95 W | max. 225 W | max. 320 W | max. 450 W |
| Drive technology | MHTM™ | MHTM™ | MHTM™ | MHTM™ | MHTM™ |
| Voltage | 85–264 VAC, 50/60 Hz | 85–264 VAC, 50/60 Hz | 85–264 VAC, 50/60 Hz | 85–264 VAC, 50/60 Hz | 85–264 VAC, 50/60 Hz |
| Duty cycle | 100 % | 100 % | 100 % | 100 % | 100 % |
| Housing dimensions (W x D x H) | 315 x 360 x 1115 mm | 315 x 360 x 1115 mm | 315 x 360 x 1115 mm | 315 x 360 x 1115 mm | 315 x 360 x 1115 mm |
| Enclosure rating | IP 54 | IP 54 | IP 54 | IP 54 | IP 54 |
| Temperature range | -30 bis +55 °C | -30 bis +55 °C | -30 bis +55 °C | -30 bis +55 °C | -30 bis +55 °C |
| Weight | approx. 42 kg | approx. 42 kg | approx. 43 kg | approx. 44 kg | approx. 44 kg |

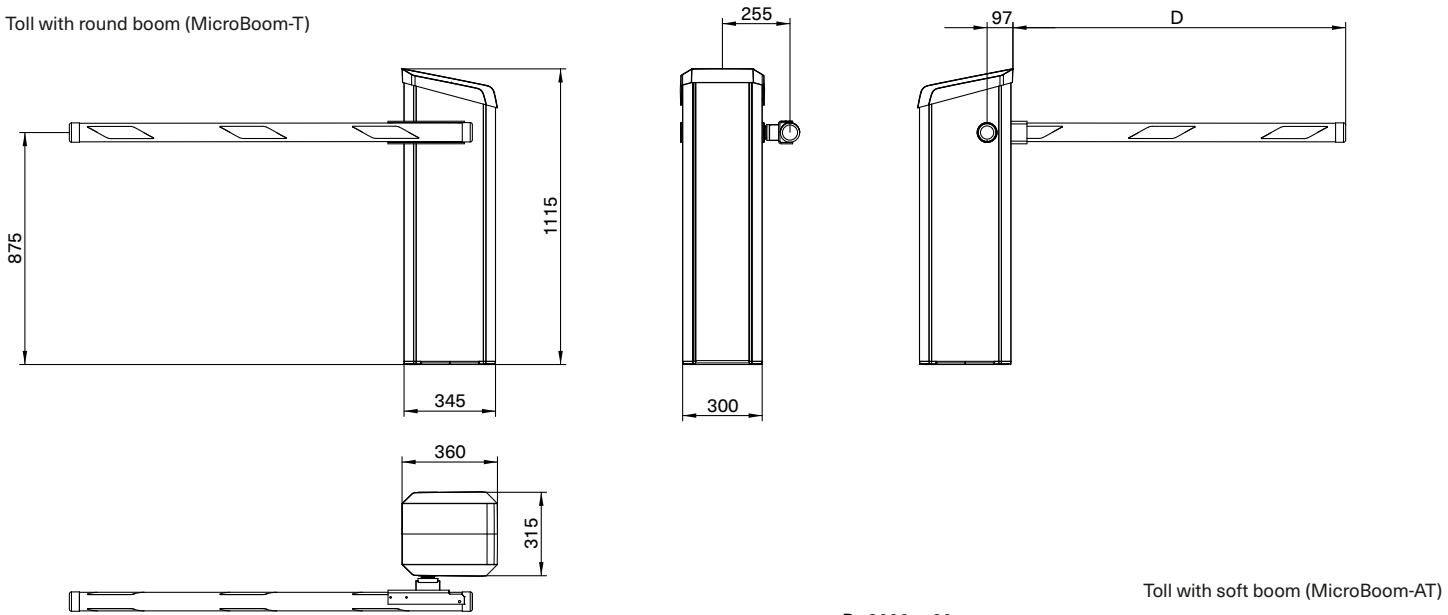
| Features | Toll | Toll Pro | Toll Pro 2 | Toll HighSpeed | Toll HighSpeed 2 |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Standard colour | RAL 2000 | RAL 2000 | RAL 2000 | RAL 2000 | RAL 2000 |
| Barrier boom | 3 models available | 3 models available | 3 models available | 3 models available | 2 models available |
| Control system | 3 models available | 3 models available | 3 models available | 3 models available | 3 models available |
| Number of digital inputs | 8 | 8 | 8 | 8 | 8 |
| Input for safety light barrier with test | 1 | 1 | 1 | 1 | 1 |
| Number of relay/digital outputs | 6/4 | 6/4 | 6/4 | 6/4 | 6/4 |
| Closing speed | adjustable | adjustable | adjustable | adjustable | adjustable |

| Control systems | MGC without loop detector | MGC with loop detector | MGC Pro |
|---------------------------|---------------------------|------------------------|---------|
| 2 detector channels | | ✓ | ✓ |
| Adjustable inputs/outputs | | | ✓ |
| 3 opening speeds | | | ✓ |

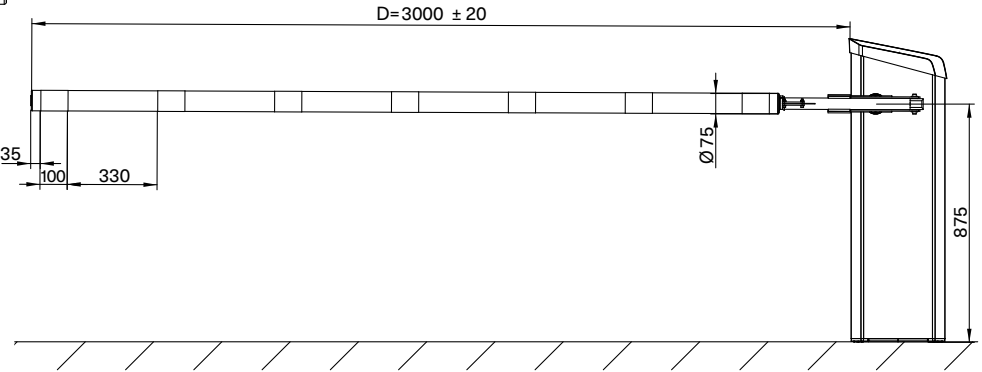
| Options | Toll | Toll Pro | Toll Pro 2 | Toll HighSpeed | Toll HighSpeed 2 |
|------------------------------|----------------|----------------|----------------|----------------|------------------|
| Special colours | ✓ | ✓ | ✓ | ✓ | ✓ |
| Round boom (MicroBoom-T) | up to 3.0 m | up to 3.0 m | up to 3.0 m | up to 3.0 m | up to 1.5 m |
| Octagonal boom (MicroBoom-S) | up to 3.5 m | up to 2.5 m | up to 2.5 m | up to 2.5 m | |
| Soft boom (MicroBoom-AT) | up to 3.0 m | up to 3.0 m | up to 3.0 m | up to 3.0 m | up to 1.5 m |
| Swing-away flange | all booms | all booms | all booms | all booms | all booms |
| Auto-swing-away flange | only soft boom | only soft boom | only soft boom | only soft boom | only soft boom |
| Boom drop contact | ✓ | ✓ | ✓ | ✓ | ✓ |
| Hood light | ✓ | ✓ | ✓ | ✓ | ✓ |
| Key-operated switch | ✓ | ✓ | ✓ | ✓ | ✓ |
| Radio module | ✓ | ✓ | ✓ | ✓ | ✓ |
| Ethernet module | ✓ | ✓ | ✓ | ✓ | ✓ |
| RS485 module | ✓ | ✓ | ✓ | ✓ | ✓ |
| CAN module (counting) | ✓ | ✓ | ✓ | ✓ | ✓ |
| Second detector module | ✓ | ✓ | ✓ | ✓ | ✓ |
| GSM module | ✓ | ✓ | ✓ | ✓ | ✓ |
| Safety light barrier | ✓ | ✓ | ✓ | ✓ | ✓ |
| Battery backup | ✓ | ✓ | | | |

Dimensional drawings

Toll with round boom (MicroBoom-T)



Toll with soft boom (MicroBoom-AT)



The dimensions of the housings are identical for all models.