

ROUND J

BASIC CHARACTERISTIC

Thanks to its modern robust design, safe and effective running together with high-quality constructive processing **ROUND-J** turnstile is the most often used device in entrance control systems. Stainless design of the main turnstile parts guarantees a long-life running in interior or exterior. Turnstile **ROUND-J** is the bi-directional turnstile with electronic control, by its 120° rotation ensures the comfortable, easy and safe access to one person. Turnstile **ROUND-J** can be equipped with motor drive unit, afterwards it is a quiet, motorized user-friendly turnstile.

Up-to-date control electronics enables easy setting of its turnstile operating mode and at the same time it makes possible the

communication with different types of identification systems including manual control. To ensure the access of immobile persons and at the same time to realize safety regulations then turnstile **ROUND-J** can be suitably completed by PEGAS gates and together they make compact and complex entrance control system.

Motor drive unit MT

Turnstile ROUND-J motor drive unit is characteristic by its high comfort, reliable and service-free running:

- Effective blocking system in combination with motor-driven unit
- Automatically adapts the rotation speed of passing persons
- High level of security is provided by prompt turnstile movement stopping at the moment of obstruction detection
- Silent and fluent running
- The possibility to set smooth final phase of rotation.

Motor drive unit is supplied in two variants.

- 1) **FAIL-LOCK: turnstile is blocked during the power failure**
- 2) **FAIL-SAFE: the turnstile is unblocked for the free passing during the power failure**

TURNSTILE MATERIALS AND SURFACE TREATMENT:

Central column: stainless tube \varnothing 168mm with handrails made from stainless tubes \varnothing 30mm (standard: polished)

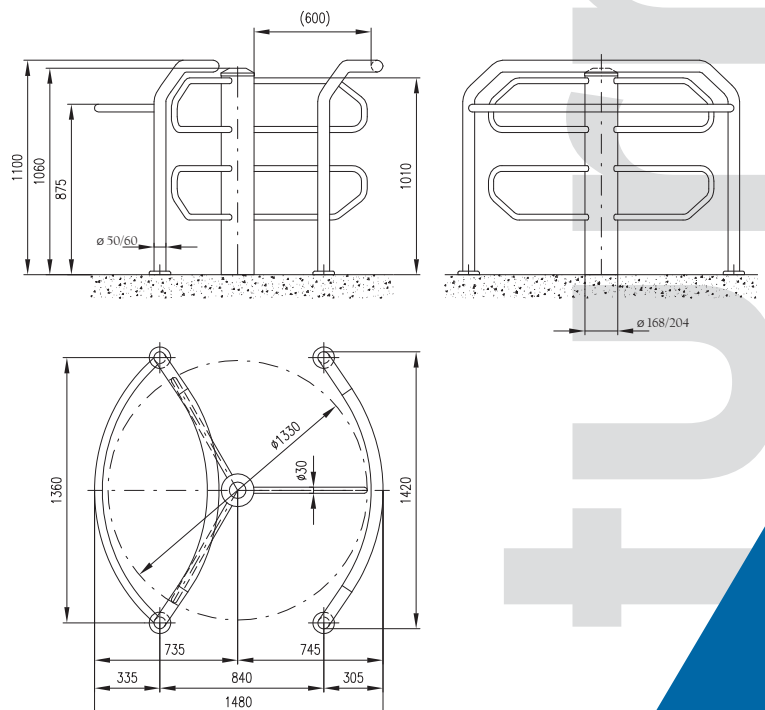
Guiding banister: stainless tube \varnothing 60mm (standard: polished)

Other mechanical parts of turnstile are finished by galvanic zincing or blackening.

INTERFACE:

Turnstiles are controlled by microprocessor control electronics that communicates with superior control system by the help of the following input and output TTL signals:

- For each passage direction one activating input
- Output for signalling situation the turnstile in operation (BUSY)
- Two outputs signalling the actual passage through turnstile in existing direction (especially used for ANTIPASSBACK function)
- Input for permanent activation of free passing in existing direction and enables the time setting to realize the passage through turnstile at 6 or 10s (Time-out).
- Control electronics are equipped with switch-off acoustic position signals the turnstile is running (BUSY). Control unit is protected against the short-circuit, overloading or mismatch of polarity.



Turnstile operation during power cut

FAIL-SAFE unit: turnstile will be automatically unblocked during power cut and it freely turns in both directions through the transfer mechanism.

FAIL-LOCK unit: In using the backup device it is possible to ensure the turnstile standard functions during the time of 6 hours without possibility of automatic unblocking and free turning.

Operating modes

By external signal from identification system or remote control panel it is possible to turn round the turnstile 120° and by that way enable the passing to one person. For each way of direction it is possible to define different operating modes:

1. **free passage**
2. **controlled passage**
3. **permanently blocked**

This setting can be set-up for any direction eventually for both directions at the same time.

BASIC TECHNICAL PARAMETERS

Scheme of drive unit electric parameters

Type of drive unit	Rated supply voltage	Power supply at the basic turnstile mode		
		Standby	BUSY	Transit
FAIL-LOCK motor	12VDC	0,8W	10W	20 - 30W
FAIL-SAFE motor	12VDC	1W	1W	15 - 20W

- standard range of working temperatures +10° ...+50°C
- Range of working temperature with heating module: -25° ... +50°C
- Range of storage temperatures: 0° ... +50°C
- Maximum relative humidity 80% (non-aggressive environment)
- MCBF: 3.000.000 cycles (number of cycles before error)

The number of passages, depending on type of control electronics, operating mode and the way of identification of passing people, is between 15 to 30 persons per minute.

Increase of power supply on motor drive unit with automatic warming is 24W. The power supply can be also increased by using the accessories.



ACCESSORIES

Columns and holders for accessories:

Columns and holders for placing the readers of identification systems or other accessories (for example: TrafficLight information panel).

TrafficLight information panel:

- information about the turnstile trafficability in set direction
- information about transit permission based on evaluation of identification system

Touch control panel:

- turnstile manual control
- turnstile manual unblocking

Back-up accumulator:

During a power failure the accumulator ensures the turnstile will work for a minimum of 6 hours of continuous operation.

Counter:

Turnstile can be equipped with the passage counter.

Identification systems:

For verification of access right of passing persons it is possible to connect to these turnstiles **ROUND - J** any type of barcode, magnetic card, proximity card, smartcard, biometric reader etc.

Outdoor design:

Automatic heating of motor drive unit controlled by thermosensor.

Specific variants:

Central column is made from tube Ø 204mm – overall dimensions (w x h x d) 1520 x 1420 x 1100 mm