Drag Race Competition Rules

1. COMPETITION TRACK

Track width – 50 cm ±1 cm, narrowing to 39 cm ±1 cm at the timing sensors.
The track surface is made of components joined in such a way that gaps and unevenness are minimized as much as the surface allows.
The track base is white, with a straight black line in the centre (±0.5 cm / 1 m), with a width of 1.5–2 cm.
Track length is 12 m ±2 m.
At the end of the track there is a black zone at least 1.5 m long for stopping the robot.

2. ROBOT REQUIREMENTS

The robot must be autonomous.
Maximum robot dimensions are 25cm × 25cm × 1m (length × width × height).
Maximum robot weight is 5kg.
The maximum allowed voltage in the robot is 48 V.
The robot must have a start/stop button or a remote control (recommended).
Any other communication with the robot during the run is prohibited, except for remote power on/off.
The robot must be designed so that it can be activated after the judge's signal (a ~2 s delay before movement is recommended so the owner can step back).
The robot may be equipped with EDF or other active devices to improve traction.
The robot must not be sensitive to environmental conditions such as lighting, smoke, sound, laser effects, or other event elements.
During the event, the use of camera flashes and other intense light sources is prohibited.
Note: the track may be illuminated using incandescent, halogen, CFL, CCFL, LED, or other dimmable light sources.

The robot is prohibited from:

a) changing its size.

b) damaging the track surface, barriers, timing equipment, or INJURING PEOPLE.

c) emitting gases, liquids, or dust.

3. COMPETITION FORMAT

The competition format is determined by the tournament organizers based on the number of participants and is published on www.roboklubas.lt.

The competition takes place in two stages:

a) Qualification stage. During qualification, participants may perform an unlimited number of attempts, using a live queue system, making one attempt at a time and then returning to the end of the queue.
b) Final stage. The four fastest participants advance to the final stage. The organizers may adjust the number of finalists or cancel the final depending on the number of participants who complete the track. (If the final is not held, winners are determined based on qualification run times.)
In the final, the participant with the worst qualification time starts first.
In the final stage, each participant has 5 minutes and an unlimited number of attempts. Time starts when the robot crosses the start line for the first time. The last attempt is counted if the robot crosses the start line before the 5-minute limit expires.
The participant who records the best time in the final stage becomes the winner of this event.

Driving order:

Before the attempt, the participant must place the robot at the start line.

After the judge's signal, the robot is started.

A run is not counted if the robot completely leaves the line during the run and drives using the side barrier (short contacts are allowed).

A robot that leaves the line must independently return to it.

Each run time is measured from the moment the robot crosses the start line until it crosses the finish line.

All parts of the robot must cross the start/finish lines.

A robot is considered to have crossed the start or finish line if the automatic timer is triggered (the sensor detection height above the track surface is 2 cm ±1 cm).

A 3-minute limit applies to each attempt.

If the robot fails to cross the start and/or finish line within the 3-minute limit, the attempt is not counted, and the participant may rejoin the queue for a new attempt.

4. ORGANIZATION

The robot must be registered before the competition.

During registration, the robot is assigned a number which the participant must attach to the robot in a visible place. Compliance with the requirements of Section 2 is also checked.

The competition schedule is published on www.roboklubas.lt.

All disputed issues arising during the competition are resolved by the head judge.