

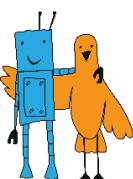
РОБОФИНИСТ

« HUMANOID SPRINT » CONTEST RULES

Version 3.0 dated July 20, 2017.

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1. General provisions

1.1. Task Description

A robot must cover the start-to-finish distance within the shortest possible time.

1.2. Field Specifications

The field is a track enclosed with borders from both sides.

Track color is random.

Border color is random.

Track width is no less than 70 mm.

Border height is 20 cm.

Start-to-finish distance is 200 cm.

2. Robot Specifications

A robot is a two-legged walking humanoid capable of moving its center of mass in order to maintain balance while walking.

The robot must have:

a head;

two hands;

two legs.

A robot foot is its integral part contacting the floor surface.

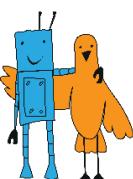
When walking, the balancing foot's joint angle must exceed 90 degrees. If this requirement is violated at any moment, the robot will not be considered walking anymore.

The feet may be of any length and form, provided the following requirements are adhered to:

the maximum length (size) of a foot must be less than 50% of its overall leg length;

the maximum foot length must be less than 20 cm;

the left and right feet contours must not overlap each other.



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The leg size is determined by the distance from the foot/floor contact point to the leg/upper body coupling point.

Each hand's length must not exceed the overall leg length.

3. Procedure of the Competition

Each team is given at least two attempts (the exact number is defined by the jury on the competition day).

The total task completion time must not exceed 3 minutes.

During the start, all parts of a robot must be located behind the start line.

The robot must be turned on or initialized manually upon command of a judge at the competition start, after which the robot must be fully autonomous.

The task is ended upon command of a judge after a robot crosses the finish line.

A robot is considered as having crossed the line, if the better part of its body is located behind it.

The judge may as well decide for an early termination of an attempt.

During the competition, competitors are not allowed to touch the robot's body or the field.

Remote control and commanding the robot are prohibited.

3.1. Termination of the Task Execution

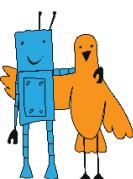
Task execution may be halted and the stopwatch may be stopped in the following situations:

If the robot falls and does not stand up in 10 seconds;

If the Contest or the General Competition Rules are violated;

If the task time elapsed.

3.2. Ineligibility Conditions



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In the following cases the robot will be disqualified:

the robot is non-autonomous (the human is in control of the robot);

during the attempt the participant has touched the field and/or the robot.

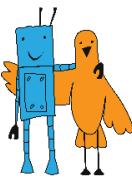
4. Procedure to Determine the Winner

The time of the best attempt is counted.

The team is considered the winner if:

their robot has covered the start-to-finish distance in the shortest time.

In case none of the robots have reached the finish line, the winner is the team whose robot has covered the longest distance.



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5. Revision History

№	Doc. No.	Date	Note	Previous version	Update version
1	2	3	4	5	6
1.	3.0	20.07.17	Entire text changed	Based on version 2.0	
2.					
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