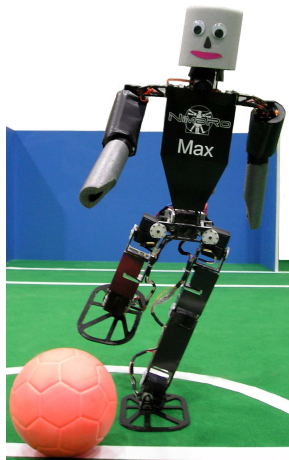


NimbRo TeenSize 2006 Specifications

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TeenSize robot Max of team NimbRo.

- Name of robot: Max
- Height: 75cm
- Weight: 2.4kg
- Walking speed: up to 30cm/s
- Number of degrees of freedom (DOF): 19

Actuators:

- Futaba S9152 digital servo
 - 5× per leg and 1× in the trunk
 - Torque: 200 Ncm
 - Speed: .19 sec/60°
- JR DS8811 digital servo
 - 1× per leg (hip yaw)
 - Torque: 190 Ncm
 - Speed: .12 sec/40°

- Futaba S9152 digital servo
 - 5× per leg, 1× in the trunk
 - Torque: 200 Ncm
 - Speed: .19 sec/60°

Sensors:

- Lifeview FlyCam 1.3M CF-camera
 - Resolution: e.g. 320×240
 - Frame rate: 5 fps
 - Optics: ultra-wide-angle lens
- Analog Devices dual-axis accelerometer ADXL203
 - Range: ±1.5g
- Analog Devices rate gyros ADXRS 150/300
 - Range: , ±150/300 deg/s
- Devantech CMPS03 electronic compass
 - Resolution: 0.1°

Processing boards:

- Fujitsu Siemens Computers Pocket Loox 720
 - Processor: Intel PXA-272
 - Speed: 520MHz
- Elektronikladen ChipS12 board
 - 3× (in each shank and in the chest)
 - Processor: Motorola MC9S12C32
 - Speed: 24MHz



TeenSize robot Fritz of team NimbRo.

- Name of robot: Fritz
- Height: 120cm
- Weight: 6kg
- Walking speed: up to 10cm/s
- Number of degrees of freedom (DOF): 16

Actuators:

- Tonegawa PS-050 digitalized servo
 - 5× per leg
 - Torque: 110 kg·cm
 - Speed: .18 sec/60°
- Futaba S9152 digital servo
 - 3× per arm
 - Torque: 200 Ncm
 - Speed: .19 sec/60°

Sensors:

- Logitech QuickCam Pro 4000, modified
 - 2×, front and back
 - Resolution: e.g. 320×240
 - Frame rate: 30 fps
 - Optics: ultra-wide-angle lens

Processing boards:

- Sony Vaio U750P
 - Processor: Intel Pentium-M ULV
 - Speed: 1.1GHz
- Elektronikladen ChipS12 board
 - 3× (in each thigh and in the hip)
 - Processor: Motorola MC9S12C32
 - Speed: 24MHz