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H13 1.4

Motor Specs and Drivetrain Parameters

Motor Specs

Applied Voltage (V)	Spec Voltage (V)	Free Speed (RPM)	Stall Torque (N*m)	Stall Current (Amp)	Free Current (Amp)
12	12	5310	2.43	133	2.7

Drivetrain Characteristics

Gearboxes in Drivetrain	Motors per Gearbox	Drive Wheel Dia. (in)	Contact Coeff of Friction	Total Robot Weight (lbs)	Weight on Driven Wheels	Speed Loss Constant	Drivetrain Efficiency
2	2	6	1.4	120	100%	81%	90%

Drivetrain Ratios - Individual Stages & Overall Gearing

General Reductions:

	Driving Gear	Driven Gear	Reduction
Stage 1	12	56	0.2143
Stage 2	12	22	0.5455
Stage 3	1	1	1.0000
Stage 4	1	1	1.0000
Stage 5	1	1	1.0000

Overall Gear Reduction	
0.1169	8.6 : 1

Gearbox & Drivetrain Outputs

1-Speed Drivetrain 2-Speed Drivetrain Rotary Mechanism Linear Mechanism Intake Mechanism

Ready 85% 10:00 PM 5/10/2011