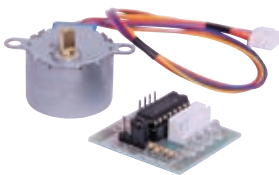


**Metal Gear MG90S 180° Micro Servo**

The MG90S is a 180° metal gear servo for accurate positioning when turning wheels or pivoting sensors etc on robotic vehicles. Includes 240mm interface cable and 3 interface arms. 4.8-6V operating voltage. Size: 22.8x12.2x28.5mm.

Price Each	RRP	4+	6+
Z 6444	13.95	12.55	11.15

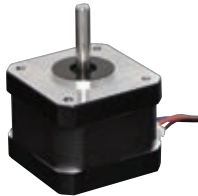
**5V Stepper Motor & ULN2003 Module**

5V 64-step 28BYJ-48 stepper motor with ULN2003 interface board suitable for interfacing with Arduino based projects. A, B, C, D four-phase LED indicates the status of the stepper motor work. 5VDC input.

Price Each	RRP	2+	4+
Z 6330	9.95	8.95	7.95

**200 Step Stepper Motor & Lead**

12V 200-step 1.8° 48BYG stepper motor with interface lead. 2 phase type. 0.23Nm holding torque. 5mmØ shaft. NEMA17 M3 mounting hole pattern (31mm). Size: 42x42x34 (25mm shaft). 1m lead.



Price Each	RRP	5+	10+
J 0070 SM-42BYG011-25	37.50	34.50	31.75

**Micro N20 Geared Motors**

A very small geared motor with 3-12V input voltage. 3Ø x 10Lmm shaft. Size: 12W x 12H x 34L (inc shaft). 1.6A at stall. Torque: J 0051 5kg/cm, J 0054 2kg/cm. Suits J 0102.

Price Each	RRP	5+	10+
J 0051 298:1 22.5-90RPM	17.25	15.75	13.75
J 0054 150:1 50-200RPM	17.25	15.75	13.75
J 0049 Mounting bracket	4.55	4.10	3.60

**Low Torque F130 Hobby Motor**

A 13,500RPM flat top & bottom hobby motor commonly found in slot cars, robotics kits, toys and much more! 8.64gcm torque @ max efficiency.

Price Each	RRP	5+	10+
J 0022 1.5V	4.00	3.60	3.15
J 0024 3V	4.00	3.60	3.15

**High Torque F260 Hobby Motor**

10,000RM rated hobby motor commonly found in robotics kits, toys and much more! 3-12VDC operation. 4.5V constant nominal operating voltage. 22.42gcm torque @ max efficiency.

Price Each	RRP	5+	10+
J 0026	5.45	4.95	4.35

**48:1 Geared Motor**

A geared motor with lightweight plastic housing. 5mm double flat shaft. 0.8kg/cm torque. Suits J 0101 rubber wheel. Max 130rpm no load. 1.5A stall. 3-6V.

Price Each	RRP	5+	10+
J 0016 3-6V	6.85	6.15	5.45

**Driveshafts**

Metal driveshafts for making customised drive designs in robots, etc.

Price Each	RRP	4+	10+
J 0005 Steel 75x2mm	0.75	0.60	0.50
J 0007 Aluminium 300x3.2mm	1.00	0.90	0.80

**Vibration Motor****NEW!**

A surface mount miniature 2.7V vibration motor for projects requiring haptic feedback.

Price Each	RRP	6+	10+
JA0070 2.7V	4.55	3.95	3.60

**Plastic Wheel For 3mm Shaft**

A plastic wheel with rubber tyre for robotics projects. 65Ø x 26Wmm. Suits motors with flat 3mm shaft such as J 0051/54.



Price Each	RRP	5+	10+
J 0102	4.55	3.90	3.45

**Plastic Wheel For 5mm Shaft**

A plastic wheel with rubber tyre for robotics projects. 65Ø x 26Wmm. Suits motors with double flat 5mm shaft (such as J 0016).



Price Each	RRP	5+	10+
J 0101	4.55	3.90	3.45

**Mecanum Wheel Robotics Base Kit**

This aluminium chassis features mecanum wheels fitted to individual motors allowing omnidirectional movement of your own custom robot design. The aluminium base is pre-drilled with a variety of holes for mounting sensors and control boards. Size: 260L x 162Wmm.

Price Each	RRP	2+	4+
K 1094 4WD	49.95	44.95	39.95

**Robot Builders Motorised Base Kit**

Available in either 2WD or 4WD configuration this robotic vehicle chassis features individual motors for each wheel, fitted with encoding wheels for integration with control sensors. It's the ideal base for your own Arduino powered robo-car design. The acrylic perspex chassis is pre-drilled with a variety of holes for mounting sensors, control boards etc. Includes 4xAA battery holder.

Price Each	RRP	2+	4+
K 1090 2WD	39.75	35.75	31.75
K 1092 4WD	51.25	46.25	40.95

**Robot Builders Gearbox Base**

Provides an excellent foundation for your own robot design. Contains 2 motors and all necessary parts required for a robot gearbox. Wheels and feet are provided depending on how you want your robot to get around! Comprehensive instructions are provided so just about anyone can build it.

Price Each	RRP	5+
K 1102	19.95	17.95