



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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DFROBOT
DRIVE THE FUTURE



DRS - 0201 HerkuleX Smart Servo

SKU:SER0033

HerkuleX DRS-0201 is state of the art modular smart servos incorporating motor, gear reducer, control circuitry and communications capability in one single package. Through metal brush coreless DC motor, it can provide torque up to 24kg.cm at 7.4v.

Equipped with a lot of adapting pieces including Horn, Horn Bolt(BHT 2.6X8), Wheel Horn Bushing, Wheel Horn Washer, Wheel Horn Bolt(PHM 3X8), Cable Guard, I-type Joint, L-type Joint, L-type Joint(Single Nut), Bracket Bolt(PHM 2X5), Joint Bolt(PHM 2X5), Wire Harness(200mm) and with it's amazing structure, DRS-0201 is extremely easy to assemble. Two connectors attached to each servo allows serial connection as well as parallel connection if required.

It carries different Control Algorithms like PID, Feedforward, Trapezoidal Velocity Profile so on and so forth, which makes the movement smoothly and precisely. By Using UART Serial communications ,we can lightly change the speed, position, LED, operational compliance, stop and operational status of up to 254 servos simultaneously at once. Meanwhile we can get the feedback such as internal temperature, position, and overload sensors.

Servos are capable of diagnosing seven different types of errors which are then indicated by the LED. And we can directly control the RGB of the LED for diagnostics and decorative purposes. It's especially suitable to mechanical arms, robots, joints and etc.

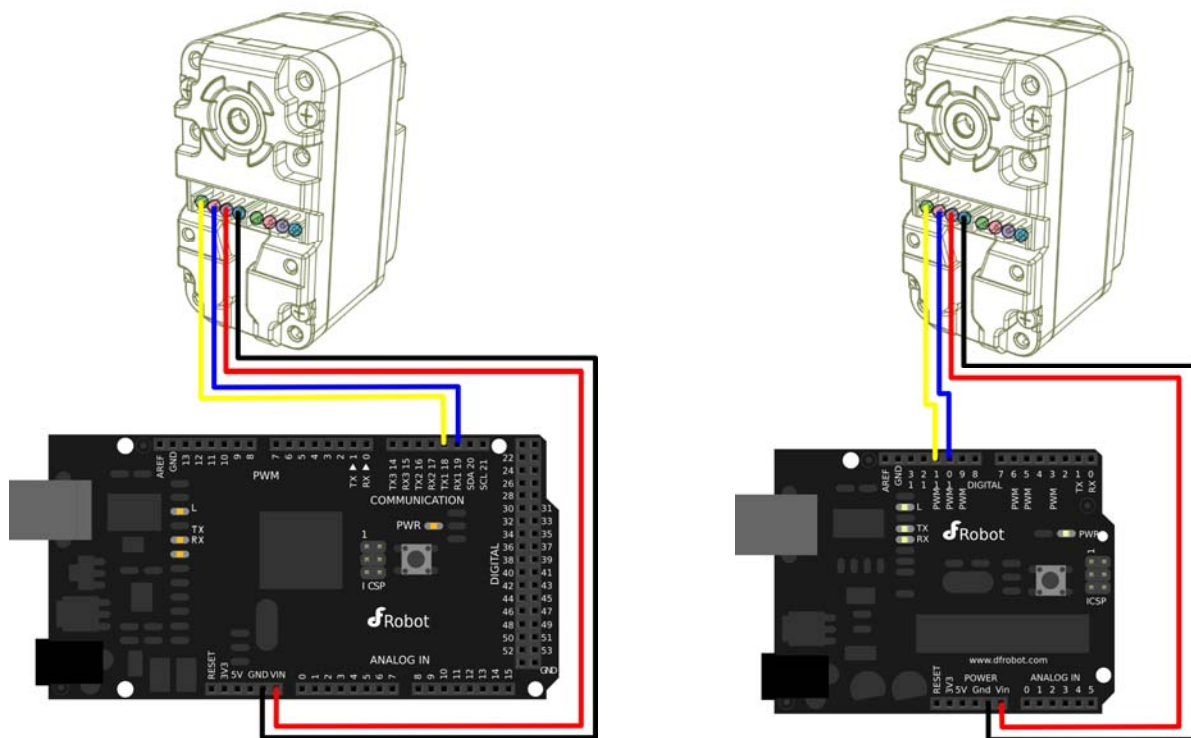
Mechanical specification

- Metal Brush Coreless DC Motor
- A lot of adapting pieces
- Rotation angle range: 320° Continuous Rotation
- Resolution: 0.325°
- Stall torque: 24kg.cm (7.4v)
- Maximum Speed: 0.147s/60° (7.4v)
- Gear: 1:266, Heavy Duty Metal
- Size: 45mm(W) x 24.0mm(D) x 31mm(H)
- Weight: 60g

Electrical specification

- Working Voltage: 7~12VDC(Optimized 7.4V)
- Rated Current: 670mA @ 7.4V : 2.2kg.cm
- Communication Link: Full Duplex Asynchronous Serial(TTL Level), Binary Packet, Multi Drop
- Multi control through Servo ID: 0 ~ 253, 254(Broadcast only)
- Maximum Baud Rate: 0.67Mbps
- Feedback: Position, Speed, Temperature, Load, Voltage etc.
- Various Control Algorithm: PID, Feedforward, Trapezoidal Velocity Profile, Velocity Override, Torque Saturator & Offset, Overload Protection, Neutral Calibration, Dead Zon

Cable definition



Black : GND Red : VDD(7.4V) Blue : TXD Yellow: RXD

SHIPPING LIST

- Herkulex DRS-0201 Servo x1

