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RoBoard Servo Motor RS-0263

Manual V1.01

The Heart of Robotics

Dec 2010
DMP Electronics Inc.

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Trademarks Acknowledgment

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CHAPTER 1

Introduction

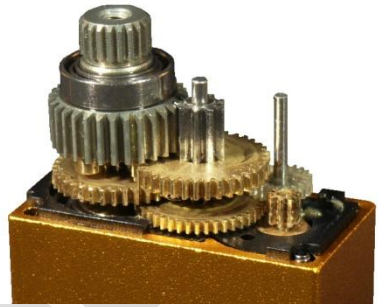
1.1 Packing List

Product Name	Package
RS-0263	RoBoard RC Servo Motor RS-0263
	

1.2 Product Description

The RoBoard RS-0263 is the micro size digital servo dedicated for Robotics, with precise-made metal gears and back horn design, the aluminum chassis design not only exudes an exquisite style but helps operating and making your Robot more active.

- Digital Servo with metal gear & 2BB bearing
- Back-horn design
- Weight: 14.0g
- Torque force: 2.5 kg.cm@6.0V
- Speed: 0.09 sec/60 degrees
- Max voltage: 6.0 V



1.3 Specifications

Electronics Specification

Item	4.8V	6.0V
Operating Speed (at no load)	0.13 sec / 60°	0.09 sec / 60°
Running current (at no load)	150 mA	180 mA
Stall torque (at locked)	1.8 kg-cm	2.5 kg-cm
Stall current (at locked)	1000 mA	1200 mA
Idle current (at locked)	5 mA	5 mA

Mechanical Specification

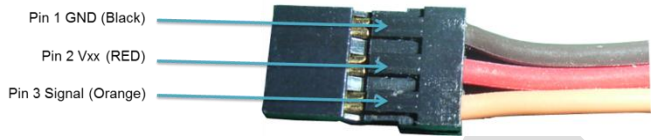
Overall Dimension	See the drawing
Limit angle	220° ±10°
Weight	13.5 ± 0.2g
Connector wire gauge	#26 AWG
Connector wire length	250 ±5 mm
Horn gear spline	21T / Ø 4.97
Horn type	Cross, Big cross, disk, Flat

Control Specification

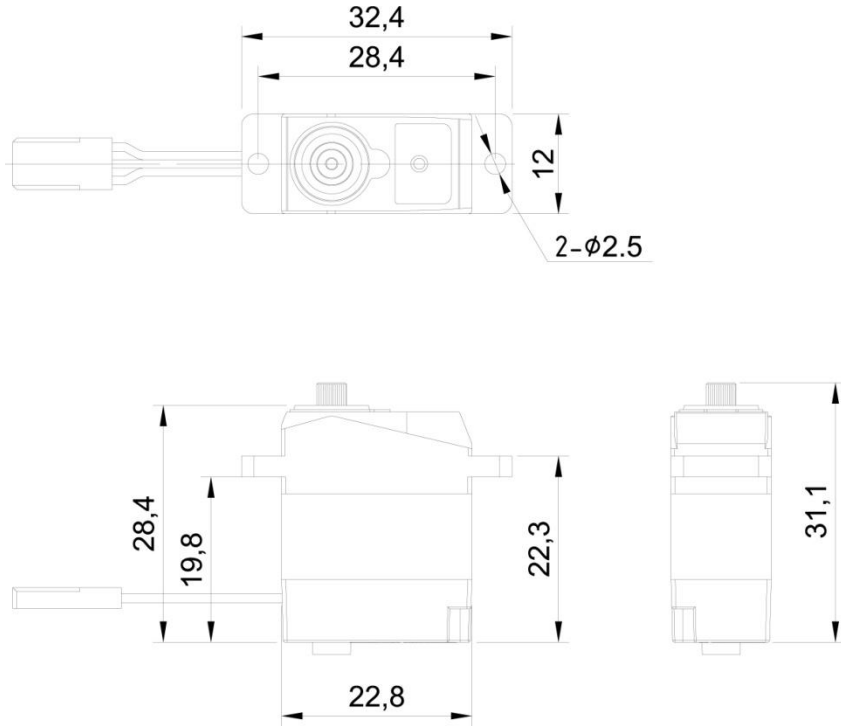
Control system	Pulse width modification
Amplifier type	Digital controller
Operating travel	45° (when 1500 → 2000 usec)
Neutral position	1500 μsec
Dead band width	5 μsec
Rotating direction	Clockwise (when 1500 → 2000 usec)
Pulse width range	750 → 2250 u sec
Maximum travel	Approx. 145° (when 750 → 2250 usec)

1.4 Pin Assignment

The connector pin assignments are as the following



1.5 Dimension



CHAPTER 2

Development Note

Sample and development code

The sample and development code,
Please download from official website: http://www.roboard.com

Warranty

This product is warranted to be in good working order for a period of one year from the date of purchase. Should this product fail to be in good working order at any time during this period, we will, at our option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster. Vendor assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, originality to use this product. Vendor will not be liable for any claim made by any other related party. Return authorization must be obtained from the vendor before returned merchandise will be accepted. Authorization can be obtained by calling or faxing the vendor and requesting a Return Merchandise Authorization (RMA) number. Returned goods should always be accompanied by a clear problem description.