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FEETECH (Fitec) FS90R Continuous Rotation Servo (9g)

Price: $4.84

Quantity in Stock:118

Availability: Ships same day*
Product Code: AD314

Qty: [1]

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(//cdn3.volusion.com/btfzd.umflq/v/vspfiles/photos/AD314-2.jpg?1479573168)

LARGER IMAGE (//cdn3.volusion.com/btfzd.umflq/v/vspfiles/photos/AD314-2.jpg?1479573168)

(http://www.addicore.com:80/FS90R-Servo-p/ad314.htm)   (http://www.addicore.com:80/FS90R-Servo-p/ad314.htm)

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The FS90R is a special servo made for continuous rotation. It can make full revolutions forward or backward, which makes it great for projects such as driving wheels on a small robot. We also sell the 60mm wheels with tires (/product-p/ad315.htm) made specifically for this servo.

With traditional servos you can control which position (angle of revolution) the servo's arm moves to. With the same control signals used to control traditional servos you can control the FS90R servo's shaft to be stationary or rotating either clockwise (CW) or counterclockwise (CCW) and the speed of rotation. The signal you would use to tell a traditional servo to go to its middle position, 1.5ms pulse signal (position "90" when used with the Arduino Servo library), will cause the FS90R to stop, a 2ms pulse signal (position "180") will cause the FS90R to rotate full speed counterclockwise, and a 1ms pulse signal (position "0") will cause the FS90R to rotate clockwise at full speed.

The FS90R servo includes an adjustment potentiometer to calibrate the middle-point (stopped) setting. Calibrate this setting by sending a 1.5ms (1500µs) pulse signal (position "90" when used with the Arduino Servo library), then slowly turn the middle-point adjustment potentiometer until the servo stops rotating. Access the middle-point adjustment potentiometer by inserting a small screwdriver into the hole in the bottom of the servo, see diagram below.

The servo's cable has a standard JR-style connector on the end.

PRODUCT CONTENTS:

- 1 — FEETECH (formerly Fitec) FS90R Continuous Rotation Servo
- 1 — straight single-ended servo horn
- 1 — straight double-ended servo horn
- 1 — winged straight double-ended servo horn
- 1 — four-pointed star servo horn
- 1 — round servo horn
- 1 — servo horn screw
- 2 — FS90R servo mounting screws

BOTTOM VIEW

Middle-Point (Stopped) Adjustment Potentiometer

SPECIFICATIONS:

	Operating Voltage	
	4.8V	**6.0V**
Stall Torque	1.3 kg/cm (18.09 oz/in)	1.5 kg/cm (20.86 oz/in)
Max Speed	110 RPM	130 RPM
Idle Current	5 mA	6 mA
No Load Running Current	100 mA	120 mA
Stall Current	550 mA	650 mA
Operating Voltage Range	4.8V to 6V	
Pulse Width Range	700 to 2300 µs	
Dead Band Width	90 µs	
Stop Signal	1500 (±45) µs	
CW Rotation Signal Range	700 to 1500 µs	
CCW Rotation Signal Range	1500 to 2300 µs	
Internal Gears	Plastic	
Cable Length	23 cm (9.06")	
Dimensions (detailed dimensions)		
Length	32.6 mm (1.28")	
Width	12.5 mm (0.49")	
Height	27.3 mm (1.08")	
Weight (of servo itself)	9 g (0.32 oz)	
Weight (including horns and screws)	15.1 g (0.53 oz)	

WE ALSO CARRY AN FS90R COMPATIBLE WHEEL (/PRODUCT-P/AD315.HTM)

(/product-p/ad315.htm)

CONNECTOR PINOUT:

Ground
+V, Power
Signal
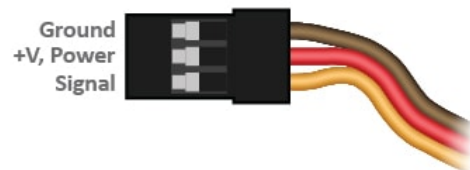
RESOURCES:

- FS90R Servo Datasheet (http://bit.ly/FS90R-Data)
- Arduino Servo Library Tutorials
  - Knob (http://arduino.cc/en/Tutorial /Knob#.UwrL7PldWT8): control the servo's speed and direction of rotation with a potentiometer
  - Sweep (http://arduino.cc/en/Tutorial /Sweep#.UwrL7fldWT8): spins the servo's shaft one direction and then the other direction

DIMENSIONS (units in mm)
Click on image to view full size

2-R1.0   11.8
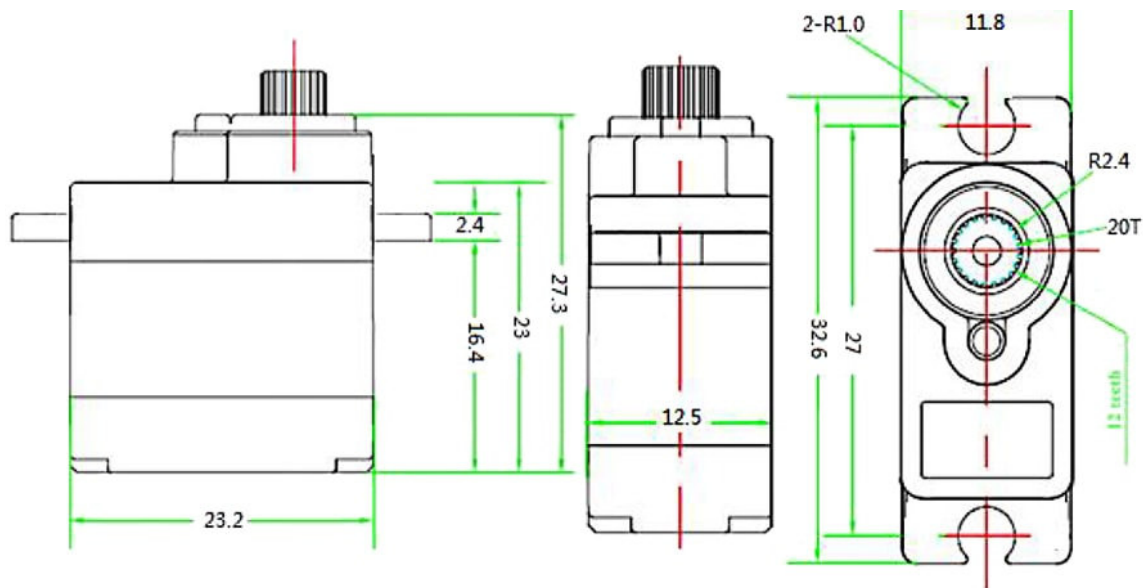
(https://c2.staticflickr.com/6/5531/31085648116_1d4ed1bd84_b.jpg)

RECOMMENDED ACCESSORIES

WHEEL FOR FS90R SERVO
(60X8MM)
(HTTPS://WWW.ADDICORE.COM
/FS90R-SERVO-WHEEL-
P/AD315.HTM)
$2.35

(https://www.addicore.com
/FS90R-Servo-Wheel-
p/ad315.htm)

RELATED ITEMS

TT STYLE GEAR MOTOR (HTTPS://WWW.ADDICORE.COM /TT-STYLE-GEAR-MOTOR-P/AD479.HTM)	WHEEL FOR FS90R SERVO (60X8MM) (HTTPS://WWW.ADDICORE.COM /FS90R-SERVO-WHEEL-P/AD315.HTM)	FEETECH (FITEC) FS90MG METAL GEARED SERVO WITH ACCESSORIES (HTTPS://WWW.ADDICORE.COM /FS90MG-METAL-GEARED-SERVO-P/AD296.HTM)	FEETECH (FITEC) FS90 9G MINI SERVO WITH ACCESSORIES (HTTPS://WWW.ADDICORE.COM /FS90-MINI-SERVO-P/113.HTM)
$1.99	$2.35	$5.85	Sale Price: $3.99
(https://www.addicore.com/TT-Style-Gear-Motor-p/ad479.htm)	(https://www.addicore.com /FS90R-Servo-Wheel-p/ad315.htm)	(https://www.addicore.com /FS90MG-Metal-Geared-Servo-p/ad296.htm)	(https://www.addicore.com/FS90-Mini-Servo-p/113.htm)

WHEEL FOR TT MOTOR (HTTPS://WWW.ADDICORE.COM /WHEEL-FOR-TT-MOTOR-P/AD480.HTM)	TT SERIES LIGHT CHOPPER (HTTPS://WWW.ADDICORE.COM /TT-SERIES-LIGHT-CHOPPER-P/AD492.HTM)
$0.50	$0.25
(https://www.addicore.com /Wheel-for-TT-Motor-p/ad480.htm)	(https://www.addicore.com/TT-Series-Light-Chopper-p/ad492.htm)

CUSTOMER REVIEWS

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0 of 0 people found the following review helpful:

★★★★★ good servo, great price   February 12, 2018

By: Lane Hauck from San Diego, CA United States

I need a reversible DC motor that is geared down to provide significant torque. I could buy a DC motor, H-bridge driver and gearbox. Better yet, I use this little gem and control it via Arduino like any other servo. A couple lines of code set the speed and direction. Addicore price is as good as any I could find on the web and delivery is fast.

Was this review helpful? Yes   No

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*Shipping details available on our Shipping info page (https://www.addicore.com/articles.asp?ID=57)

(https://verify.authorize.net /anetseal /?pid=0c13ab60- f5d7-43d0-8d3e- f251ca798959& rurl=https%3A //www.addicore.com /FS90R-Servo- p/ad314.htm)

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