## Hitec HS422 Servo

## SKU:SER0002



## INTRODUCTION

The HS-422 has been around for a while and for a good reason, durability and the ability to be easily modified. For inexpensive robotic applications this the perfect servo. It can easily be modified for wheeled applications since the output shaft is supported on the botton and top with bronze bushings and the potentiometer is indirect drive. The circuit board is also seperate from the motor so the potentiometer can be easily accessed. Simply a great servo at a great price.

## SPECIFICATION

- Control System: +Pulse Width Control 1500usec Neutral
- Required Pulse: 3-5 Volt Peak to Peak Square Wave
- Operating Voltage: 4.8-6.0 Volts
- Operating Temperature Range: -20 to +60 Degree C
- Operating Speed (4.8V): 0.21sec/60 at no load
- Operating Speed (6.0V): $0.16 \mathrm{sec} / 60^{\circ}$ at no load
- Stall Torque ( 4.8 V ): $45.82 \mathrm{oz} / \mathrm{in}$. (3.3kg.cm)
- Stall Torque (6.0V): $56.93 \mathrm{oz} / \mathrm{in}$. (4.1kg.cm)
- Operating Angle: 45 Deg. one side pulse traveling 400 usec
- 360 Modifiable: Yes
- Direction: Clockwise/Pulse Traveling 1500 to 1900usec
- Current Drain (4.8V): $8 \mathrm{~mA} / \mathrm{idle}$ and 150 mA no load operating
- Current Drain (6.0V): 8.8mA/idle and 180 mA no load operating
- Dead Band Width: 8usec
- Motor Type: 3 Pole Ferrite
- Potentiometer Drive: Indirect Drive
- Bearing Type: Dual Oilite Bushing
- Gear Type: Nylon
- Connector Wire Length: 11.81" (300mm=11.81in)
- Dimensions: See Schematics
- Weight: $1.6 \mathrm{oz}(45.5 \mathrm{~g})$



A = .780" $(19.82 \mathrm{~mm}=0.78 \mathrm{in})$
$B=.530^{\prime \prime}(13.47 \mathrm{~mm}=0.53 \mathrm{in})$
C $=1.33^{\prime \prime}(33.79 \mathrm{~mm}=1.33 \mathrm{in})$
D = . 400 " ( $10.17 \mathrm{~mm}=0.4 \mathrm{in}$ )
$\mathrm{E}=.380^{\prime \prime}(9.66 \mathrm{~mm}=0.38 \mathrm{in})$
F = 1.19" (30.22mm=1.19in)
G = .460" (11.68mm=0.46in)
H = 1.05" ( $26.67 \mathrm{~mm}=1.05 \mathrm{in}$ )
$\mathrm{J}=2.08^{\prime \prime}$ ( $52.84 \mathrm{~mm}=2.08 \mathrm{in}$ )
$K=.368^{\prime \prime}(9.35 \mathrm{~mm}=0.37 \mathrm{in})$
L = .172" (4.38mm=0.17in)
M = 1.57" (39.88mm=1.57in)
$X=.120^{\prime \prime}(3.05 \mathrm{~mm}=0.12 \mathrm{in})$

## SHIPPING LIST

- Hitec HS422 Servo x1

