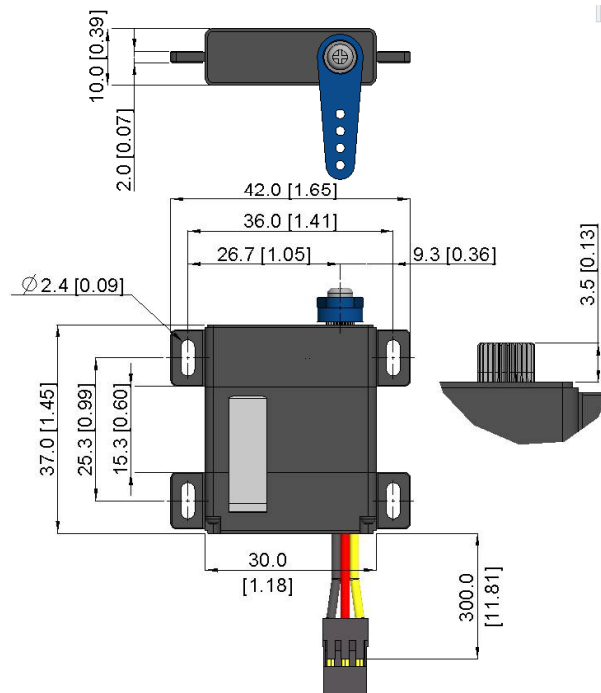


GENERAL SPECIFICATION OF MD145SW



UPDATE : 2019-04-12

Control System	Pulse Width Modulation(PWM)	Left / 900usec	Neutral / 1,500usec	Right / 2,100usec
Position Sensor Type	Contactless encoder			
Operating Voltage Range	4.8V ~ 7.4V			
Motor Type	Cored			
Controller(MCU)	32Bits			
Voltage	At 4.8V	At 6.0V	At 7.4V	
No Load Speed	0.21sec/60° (285°/sec)(47RPM)	0.17sec/60° (352°/sec)(59RPM)	0.14sec/60° (428°/sec)(71RPM)	
Stall Torque	3.9kg·cm (54.45oz.in)	4.9kg·cm (68.42oz.in)	6.0kg·cm (83.78oz.in)	
Standing Current	30mA	30mA	30mA	
No Load Running Current	120mA	150mA	180mA	
Stall Current	1,600mA	2,000mA	2,500mA	
Dead Band Width	2usec	2usec	2usec	
Operating Travel	Default	±40°	1100 ~ 1900usec	
		±60°	900 ~ 2100usec	
	Programmable	±165°	600 ~ 2400usec	
Operating Temperature Range	-20°C ~ +60°C (-4°F ~ +140°F)			
Vibrations at No Load	MIL-STD-810G 514.6C-VII			
Storage Temperature Range	-30°C ~ +80°C (-31°F ~ +176°F)			
Connector Wire Length	300mm(11.81in)			
Outline Dimensions	30.0 x 10.0 x 37.0 (±0.2mm) (1.18 x 0.39 x 1.45 in)			
Weight	27.7g (0.977oz) (±10%)			
Ball Bearing	Dual Ball Bearing / MR85			
Case Material	Engineering Plastic			
Gear Material	1 Metal+Plastic & 4 Metal Gears			
Gear Train Backlash	Max 0.5°			
Horn Gear Spline	M25T (25 Segment Ø5.0)			
Splined Horns	MS-ML25			
Dust & Water Protect Class	-			



UNIT : mm(Inch)