

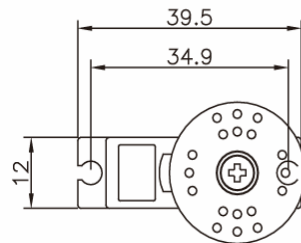
HYPERION ATLAS - PROGRAMMABLE DIGITAL SERVOS

Hyperion Part Number >>>	HP-DS12ACP	HP-DS12HCP	HP-DS12SCP	HP-DS13ACB	HP-DS13TCB	HP-DS13TMB	HP-DS20UMD	HP-DS20FMD	HP-DS20SMD	HP-DS20HMD
Weight	16.9g	17.3g	17.3g	17.9g	17.9g	19.2g	53g	53g	49g	49g
Dimensions mm	29.5 x 12 x 26	29.5 x 12 x 26	29.5 x 12 x 26	29.5 x 12 x 26	29.5 x 13 x 27.6	29.5 x 13 x 27.6	40.0 x 19.5 x 37.8	40.0 x 19.5 x 37.8	40.0 x 19.5 x 37.8	40.0 x 19.5 x 37.8
Speed sec/60 deg 4.8v/6.0	0.16/0.13	0.13/0.10	0.15/0.12	0.16/0.13	0.20/0.16	0.20/0.16	0.23/0.18	0.17/0.13	0.19/0.15	0.15/0.11
Gear Train Primary Material	CarbonPoly	CarbonPoly	CarbonPoly	CarbonPoly	CarbonPoly	Metal	Metal	Metal	Metal	Metal
Bearing	Plain	Plain	Plain	top ball	top ball	top ball	double ball	double ball	double ball	double ball
Dynamic torque Kg/cm 4.8v/6.0	2.6/3.2	1.7/2.0	2.0/2.4	2.6/3.2	3.6/4.2	3.6/4.2	11.6/13.8	7.0/8.2	4.9/6.3	3.6/4.7
Holding torque Kg/cm 4.8v/6.0	5.2/6.4	3.4/4.0	4.0/4.8	5.2/6.4	7.2/8.4	7.2/8.4	20.9/23.5	14.0/16.4	9.8/12.6	7.2/9.4
Required Pulse	2.5 - 5 Volt Peak to Peak Square Wave									
Operating Temp	-20 to +60 Degree C									
Current Drain (4.8V)	7.0mA/idle, 150mA noload operating			7.0mA/idle, 150mA noload operating			7.0mA/idle, 230mA noload operating		7.0mA/idle, 170mA noload operating	
Current Drain (6.0V)	7.0mA/idle, 170mA noload operating			7.0mA/idle, 170mA noload operating			7.0mA/idle, 300mA noload operating		7.0mA/idle, 200mA noload operating	
Stall Current (4.8V)	680mA			680mA			1500mA		830mA	
Stall Current (6.0V)	800mA			800mA			2000mA		1100mA	
Minimum Input Voltage	3.5V under load									
Maximum Input Voltage	Unloaded input voltage should never exceed 7.8V, loaded input voltage max 6.4V									
Motor Type	3-Pole Cored Metal brush								5-Pole Cored Carbon brush	
Drive	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL	Direct DIGITAL
Connector Wire Gauge	25AWG	25AWG	25AWG	25AWG	25AWG	25AWG	22AWG	22AWG	22AWG	22AWG
Connector Wire Strand Count	30EA	30EA	30EA	30EA	30EA	30EA	60EA	60EA	60EA	60EA

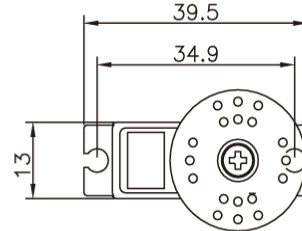
PROGRAMMABLE PARAMETERS via HP-AT-PRGUSB 3pin Adapter (\$17.95) or EMETER v2 (est Aug 2007, price tba)

Rotation in Degrees	Adjustable 30 to 140 degrees total (i.e. 15 to 70 degrees each way), 90 degree default (45 each way)									
Reverse	Clockwise/CounterClockwise, Clockwise default									
Speed	1% to 100% of Rated Speed (100% default)									
Servo Center	+/- 127uS (0 default, center at 1500uS)									
DeadBand Width	0 uS to 16 uS (2 uS default)									
Compatibility	Utility allows selection of common Transmitter brands, to insure compatibility and default centering									

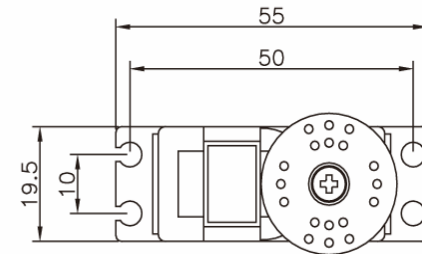
- Normal Torque and Speed A
- HighTorque/Speed Blend, Mod Current F
- High Torque/Less Speed T
- UltraHigh Torque/Low Speed U
- Very High Speed/Low Current H
- High Speed/Med Torque/Low Current S
- Carbon+Metal Gears C
- Metal Gear M
- Plain Bearings P
- Top Ball Bearing B
- Twin Ball Bearing D



DS-12 SERIES



DS-13 SERIES



DS-20 SERIES

