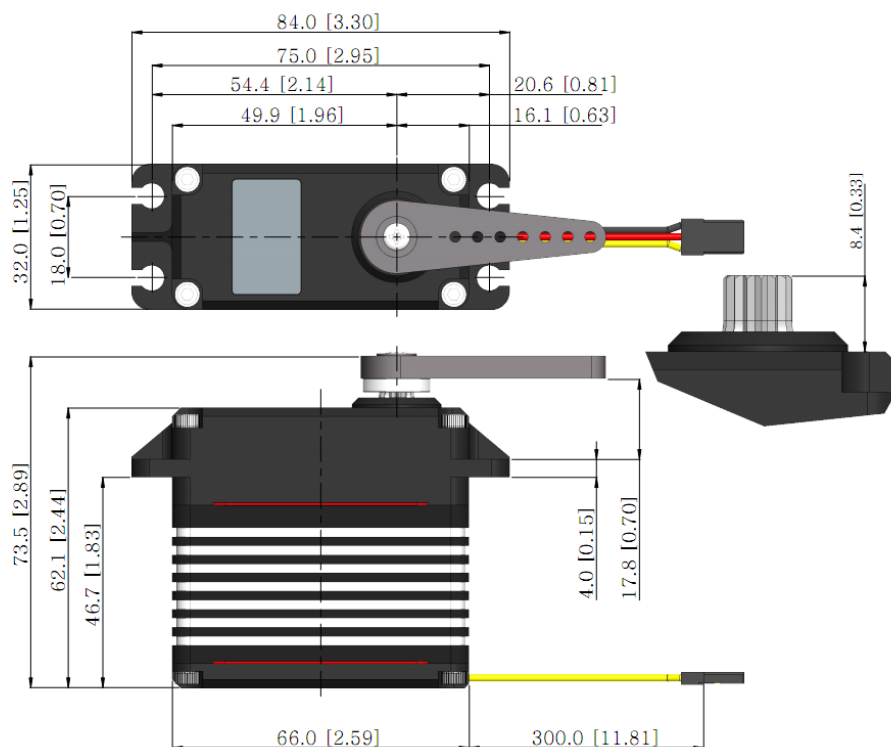


# GENERAL SPECIFICATION OF MDR845WP DIGITAL MEGA SCALE MULTI ROTATION SERVO

|                              |   |                            |                            |
|------------------------------|---|----------------------------|----------------------------|
| Control system               | +PULSE WIDTH CONTROL 1500usec NEUTRAL   |                            |                            |
| Operating voltage range      | 4.8 V ~ 8.4V  |                            |                            |
| Operating temperature        | -20°C ~ +70°C (-4°F ~ +158°F)   |                            |                            |
| Test voltage                 | At 4.8V   | At 6.0V                    | At 7.4V                    |
| Operating speed at no load   | 0.26sec/60°   | 0.21sec/60°                | 0.17sec/60°                |
| Stall torque                 | 32.5kg·cm<br>(453.82oz.in)  | 40.5kg·cm<br>(565.53oz.in) | 50.0kg·cm<br>(698.19oz.in) |
| Idle current at stopped      | 30mA  | 30mA                       | 30mA                       |
| No load Running current      | 1,100mA   | 1,250mA                    | 1,600mA                    |
| Stall current                | 6,000mA   | 7,000mA                    | 10,000mA                   |
| Dead band width              | 2usec   | 2usec                      | 2usec                      |
| Input signal                 | +5.0V 1500usec±400usec (±600usec WITH TRIM)   |                            |                            |
| Operating travel             | ±1800° /ONE SIDE PULSE TRAVELING 600usec  |                            |                            |
| Direction                    | CLOCK WISE/PULSE TRAVELING 1500 TO 2100usec   |                            |                            |
| Motor type                   | CORED CARBON BRUSHS   |                            |                            |
| Potentiometer type           | MAGNETIC ROTARY ENCODER   |                            |                            |
| Amplifier type               | DIGITAL AMPLIFIER WITH MOSFET DRIVE   |                            |                            |
| Case dimensions              | 66.0x32.0x62.0mm(2.59x1.259x2.44in)   |                            |                            |
| Weight                       | 227g(8.00oz) (±10%)   |                            |                            |
| Gear set                     | 1 Metal Plastic & 3 Hardened steel  |                            |                            |
| Ball Bearing                 | Dual Ball Bearing / MR148   |                            |                            |
| Horn gear spline             | 15 SEGMENT / Ø7.7   |                            |                            |
| Gear train backlash          | Max 0.5°  |                            |                            |
| Gear Material                | 1 METAL-KARBONITE, 4 STEELS   |                            |                            |
| Connector wire length        | 300mm(11.81in)  |                            |                            |
| Connector wire stand counter | 80EA(20AWG)   |                            |                            |
| Waterproof                   | IP68  |                            |                            |
| Features                     | High resonance & Programmable digital amplifier with mosfet drive<br>Durable steel gears with Dual Ball Bearing<br>Waterproof & Dust resistance (IP68)<br>Heat Sink for Motor |                            |                            |
| Applications                 | INDUSTRY, ROBOTICS & SPECIAL EFFECTS  |                            |                            |



UNIT : mm [inch]