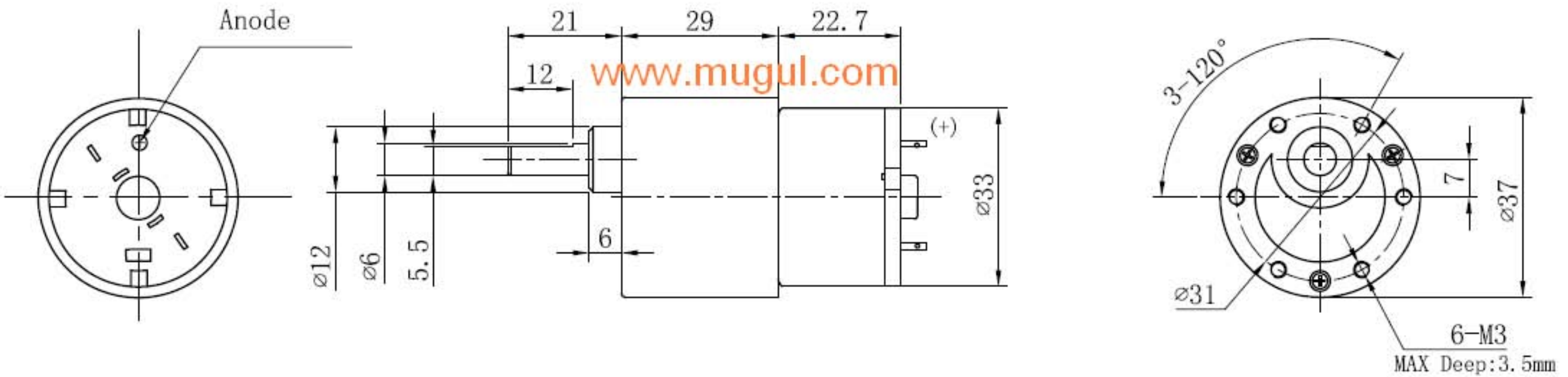


OUTLINE



1. STANDATD OPERATING CNDITIONS

- 1.1 RATED VOLTAGE: www.mugul.com DC 12V
- 1.2 OPERATING TEMPERATURE: $-10-+60^{\circ} C$
- 1.3 DIRECTION ROTATION: CLOCKWISE WHEN VIEWING MOTOR OUTPUT SIDE
WITH POSITIVE VOLTAGE APPLIED TO POSITIVE (RED) TERMINAL

2. MEASURING CONDITIONS

- 2.1 RATED VOLTAGE: DC 12V
- 2.2 TEMPERATURE: $27^{\circ} C$
- 2.3 HUMIDITY: 65%RH
- 2.4 MOTOR POSITION: MOTOR TO BE HELD WITH SHAFT HORIZONTALLY

3. ELECTRICAL CHARACTERISTICS (at initial stage after 30 seconds run-in)

- 3.1 No Load
 - 3.1.1 Speed: $3.9 \pm 10\% \text{rpm}$
 - 3.1.2 Current: 0.03A (0.09A max)
- 3.2 On Load
 - 3.2.1 Rated Torque: 8kg. cm
 - 3.2.2 Rated Current: 0.12A (0.2A max)
 - 3.2.3 Rated Speed : $3.0 \pm 10\% \text{rpm}$