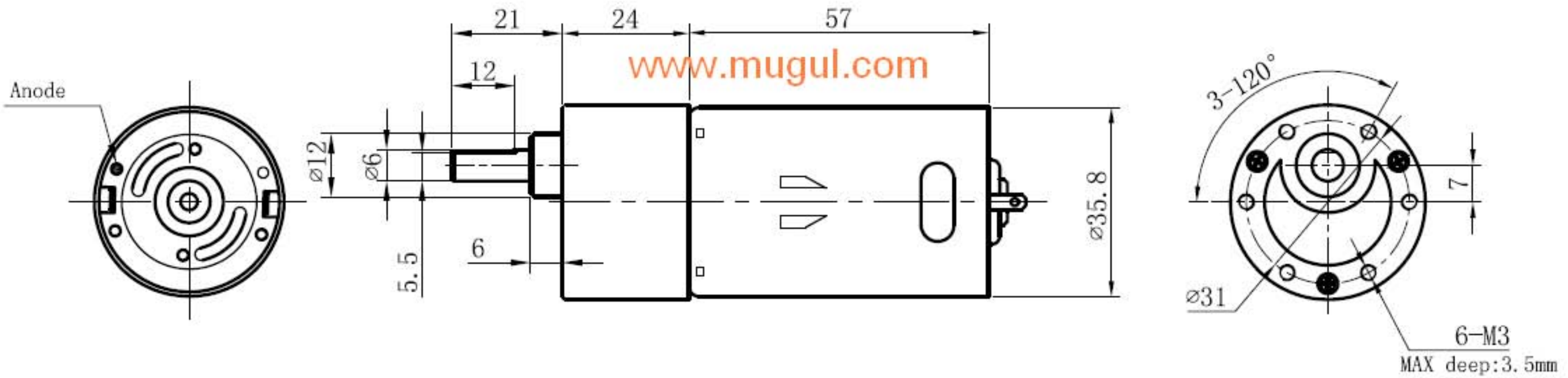


OUTLINE



1. STANDARD IPERATING CONDITIONS

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° 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: $39 \pm 10\%$ rpm

3.1.2 Current: 0.08A (0.16A max)

3.2 On Load

3.2.1 Rated Torque: 6kg. cm

3.2.2 Rated Current: 0.32A (0.45A max)

3.2.3 Rated Speed : $32 \pm 10\%$ rpm