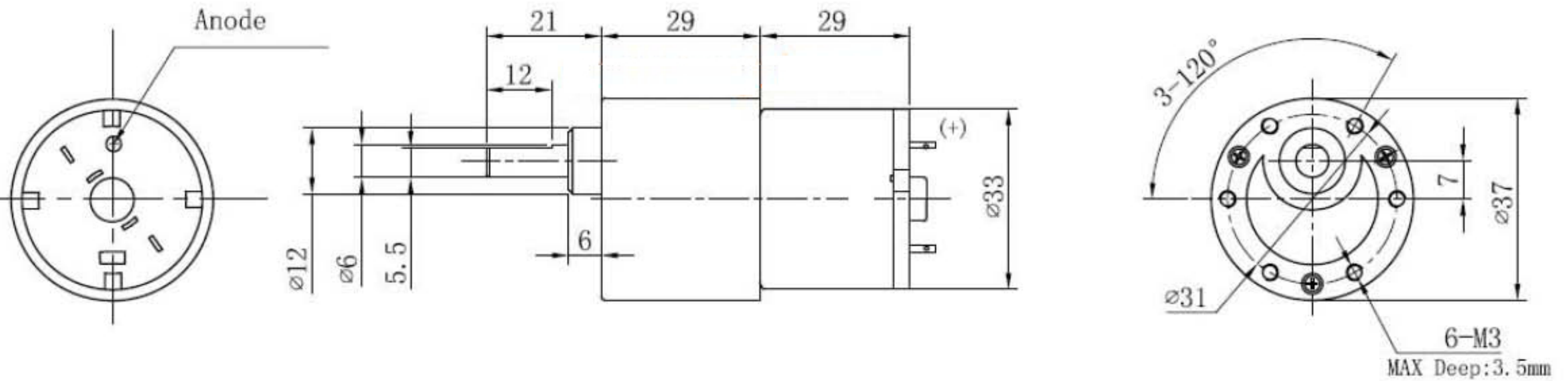


## OUTLINE



### 1. STANDART OPERATING CONDITIONS

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

### 2. MEASURING CONDITIONS

- |     |                 |  |
|-----|-----------------|--|
| 2.1 | RATED VOLTAGE:  | DC 12V                                   |
| 2.2 | TEMPERATURE:    | $27^\circ \text{ C}$                     |
| 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 :  | $3.0 \pm 10\% \text{ rpm}$ |