

Standard Products



VG-P1-3

60 minutes mechanical timer & 3 seconds ringing

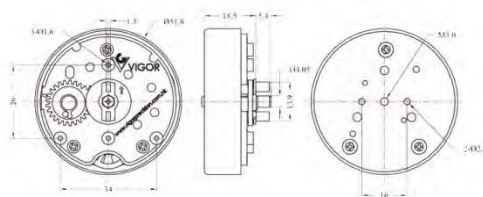
Operating Direction : Clockwise(One circle Max)

Program Range : 1~60 minutes

Ringing Time : ≥ 3 Seconds

Ringing Volume : ≥ 90 dB

Weight : 38.0g



BO-P1A

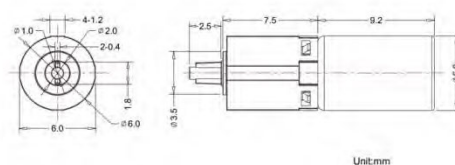
Gear Ratio : 1:25

Operating Voltage : 3.0V DC

Without Loading : 70mA~300mA,
800rpm~1600rpm

Output Torque : 0.01~0.05Kgf.cm

Weight : 1.5 g



Unit:mm



BO-1 (OUTPUT BY ONE SIDE)

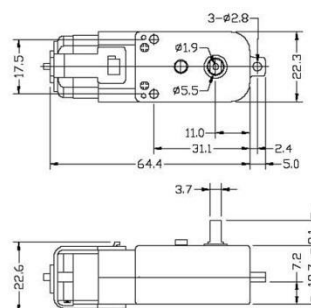
Gear Ratio : 1:48, 1:87, 1:120,
1:180, 1:220, 1:288

Operating Voltage : 3.0~12.0V DC

Without Loading : 40~180mA, 20~180
rpm

Output Torque : 0.8~5Kgf.cm

Weight : 30.0 g





VG-P1-8

60 minutes mechanical timer & 8 seconds ringing

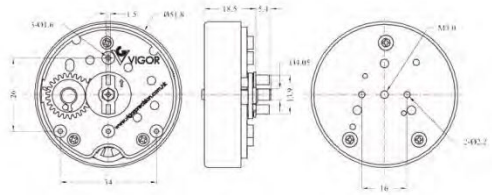
Operating Direction : Clockwise(One circle Max)

Program Range : 1~60 minutes

Ringing Time : ≥ 8 Seconds

Ringing Volume : ≥ 86 dB

Weight : 39.0g



BO-P1B

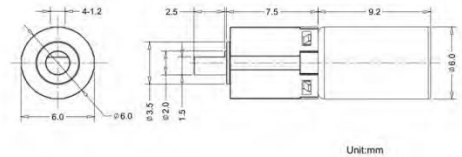
Gear Ratio : 1:25

Operating Voltage : 3.0V DC

Without Loading : 70mA~300mA,
800rpm~1600rpm

Output Torque : 0.01~0.05Kgf.cm

Weight : 1.5 g



BO-1 (OUTPUT BY BOTH SIDE)

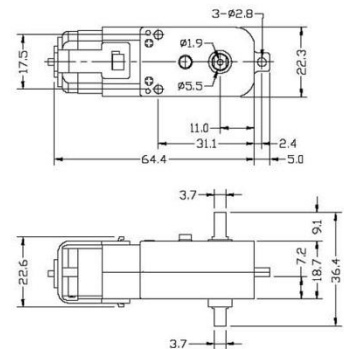
Gear Ratio : 1:48,1:87,1:120,1:180,1:220,
1:288

Operating Voltage : 3.0~12.0V DC

Without Loading : 40~180mA, 20~180 rpm

Output Torque : 0.8~5Kgf.cm

Weight : 30.0 g



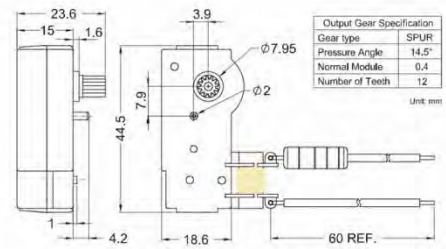


SM-1

A synchronous motor module for electrical timer

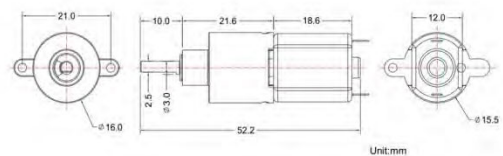
Functions & Features

- 102~132 VAC / 60Hz (Included Resistor);
- Nominal output speed: 1/270 RPM;
- Output torque: $\geq 0.95\text{kgf.cm}$;
- Output direction: Counterclockwise(Looking at the output Pinion);
- Internal clutch;
- Operating conditions:
Temperature: $-10^{\circ}\text{C} \sim +60^{\circ}\text{C}$;
Humidity: 90%;
- Weight: 17g;
- Remarks: Resistor: 18Kohm/2W for 115V AC



BO-P2 WITH F030 MOTOR

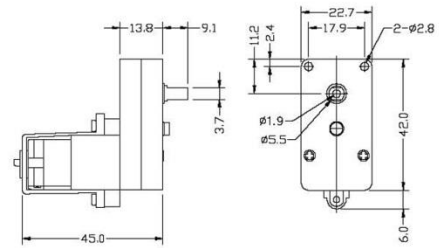
- Gear Ratio : 1:28 1:75
- Operating Voltage : 3.0 ~9.0V DC
- Without Loading : 90~200mA, 75~700 rpm
- Output Torque : 0.05~1.0Kgf.cm
- Weight : 14 g





BO-2 (OUTPUT BY ONE SIDE)

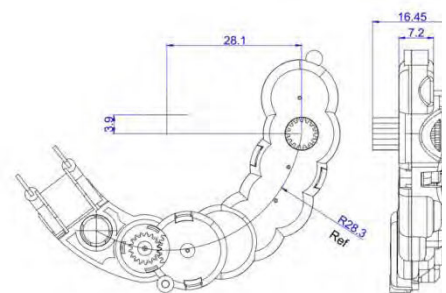
Gear Ratio : 1:48,1:120,1:180,1:220,1:288
 Operating Voltage : 3.0~12.0V DC
 Without Loading : 40~180mA, 18~180 rpm
 Output Torque : 0.8~5Kgf.cm
 Weight : 30.5 g



SM-02 50Hz

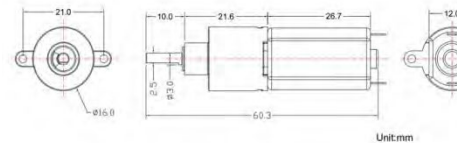
Functions & Features

- 220 VAC / 50Hz(Included Resistor);
- Nominal output speed: 1/600 RPM;
- Output torque: ≥ 0.95 kgf.cm;
- Output direction: Counterclockwise(Looking at the output Pinion);
- Internal clutch;
- Operating conditions:
 Temperature:-10°C~+60°C; Humidity:90%;
- Weight: 12g;



BO-P2 WITH F050 MOTOR

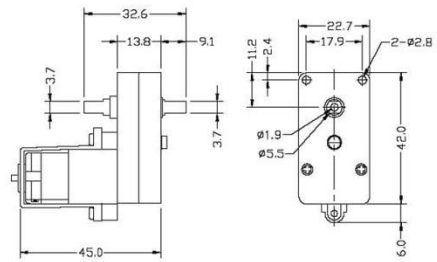
Gear Ratio : 1:28,1:75
 Operating Voltage : 3.0~9.0V DC
 Without Loading : 90~200mA, 75~700 rpm
 Output Torque : 0.2~3.0Kgf.cm
 Weight : 21 g





BO-2 (OUTPUT BY BOTH SIDE)

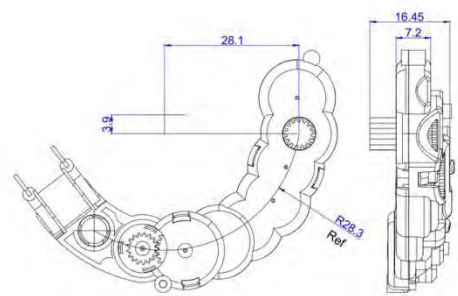
Gear Ratio : 1:48, 1:120, 1:180,
 1:220, 1:288
 Operating Voltage : 3.0~12.0V DC
 Without Loading : 40~180mA, 18~180
 rpm
 Output Torque : 0.8~5Kgf.cm
 Weight : 30.5 g



SM-02 60Hz

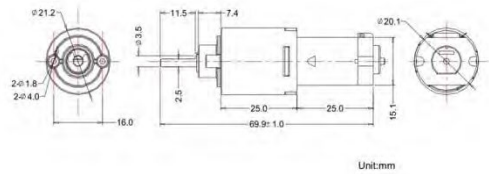
Functions & Features

- 110 VAC / 60Hz(Included Resistor);
- Nominal output speed: 1/720 RPM;
- Output torque: ≥ 0.95 kgf.cm;
- Output direction:
Counterclockwise(Looking at the output
Pinion);
- Internal clutch;
- Operating conditions:
Temperature:-10°C~+60°C;
Humidity:90%;
- Weight: 12g;



BO-P3 WITH F130 MOTOR

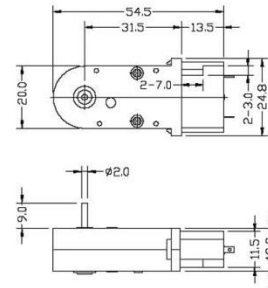
Gear Ratio : 1:96
 Operating Voltage : 3.0~9.0V DC
 Without Loading : 150~550mA, 50~200
 rpm
 Output Torque : 0.5~4.0Kgf.cm
 Weight : 33g





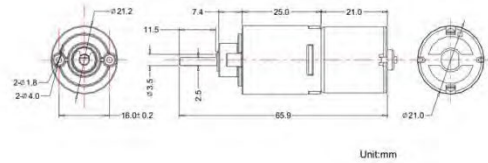
BO-3 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:120,1:180
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 40~100mA, 80~120 rpm
 Output Torque : 0.4~1.0Kgf.cm
 Weight : 18.8 g



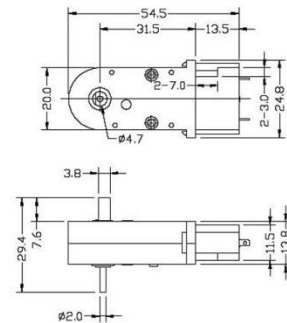
BO-P3 WITH R140 MOTOR

Gear Ratio : 1:96
 Operating Voltage : 3.0~9.0V DC
 Without Loading : 150~550mA, 50~220 rpm
 Output Torque : 0.5~5.0Kgf.cm
 Weight : 35g



BO-3 (OUTPUT BY BOTH SIDE)

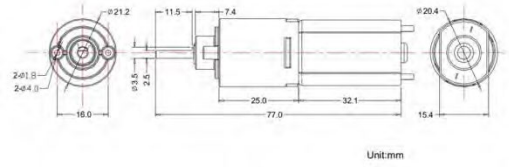
Gear Ratio : 1:120,1:180
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 40~100mA, 80~120 rpm
 Output Torque : 0.4~1.0Kgf.cm
 Weight : 19.5 g





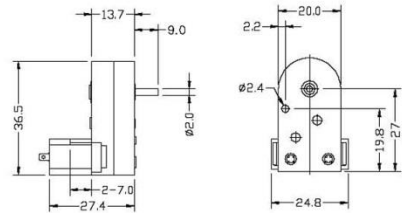
BO-P3 WITH F180 MOTOR

Gear Ratio : 1:96
 Operating Voltage : 3.0~12.0V DC
 Without Loading : 150~550mA, 50~220 rpm
 Output Torque : 1.0~5.0Kgf.cm
 Weight : 46g



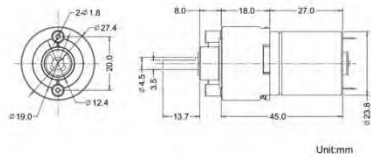
BO-5 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:120, 1:180
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 40~100mA, 80~120 rpm
 Output Torque : 0.4~1.0Kgf.cm
 Weight : 18.5 g



BO-P5 WITH R260 MOTOR

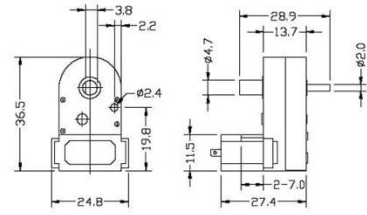
Gear Ratio : 1:40, 1:70
 Operating Voltage : 3.0~9.0V DC
 Without Loading : 150~550mA, 70~400 rpm
 Output Torque : 1.0~8.0Kgf.cm
 Weight : 48g





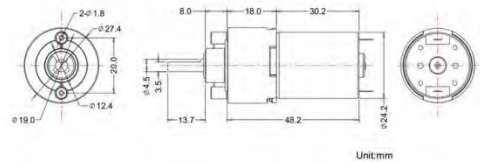
BO-5 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:120,1:180
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 40~100mA, 80~120 rpm
 Output Torque : 0.4~1.0Kgf.cm
 Weight : 18.6 g



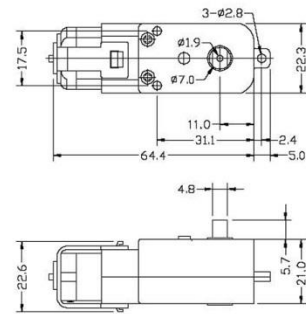
BO-P5 WITH R280 MOTOR

Gear Ratio : 1:40,1:70
 Operating Voltage : 3.0~12.0V DC
 Without Loading : 150~550mA, 70~400 rpm
 Output Torque : 1.0~12.0Kgf.cm
 Weight : 63g



BO-7 (OUTPUT BY ONE SIDE)

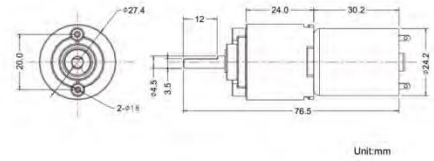
Gear Ratio : 1:120,1:200
 Operating Voltage : 3.0~12V DC
 Without Loading : 40~230mA, 25~100 rpm
 Output Torque : 2~12Kgf.cm
 Weight : 31.8g





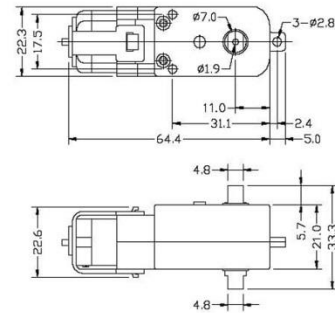
BO-P6 WITH R280 MOTOR

Gear Ratio : 1:120
Operating Voltage : 3.0~24.0V DC
Without Loading : 150~560mA,
60~200 rpm
Output Torque : 2.0~15.0Kgf.cm
Weight : 66g



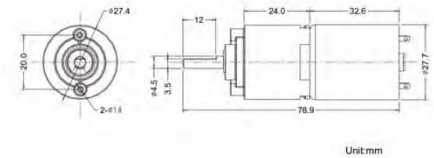
BO-7 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:120,1:200
Operating Voltage : 3.0~12V DC
Without Loading : 40~230mA, 25~100
rpm
Output Torque : 2~12Kgf.cm
Weight : 31.9g



BO-P6 WITH R360 MOTOR

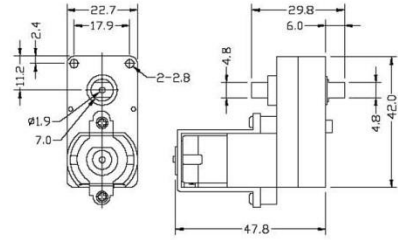
Gear Ratio : 1:120
Operating Voltage : 3.0~24V DC
Without Loading : 150~560mA,
60~200 rpm
Output Torque : 2.0~26.0Kgf.cm
Weight : 78g





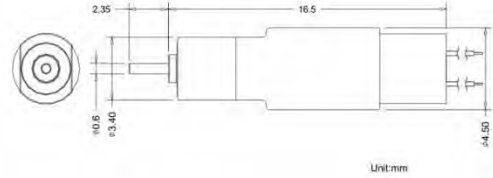
BO-8 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:120,1:228
 Operating Voltage : 3.0~12V DC
 Without Loading : 40~230mA,
 22~100 rpm
 Output Torque : 2~12Kgf.cm
 Weight : 33.0g



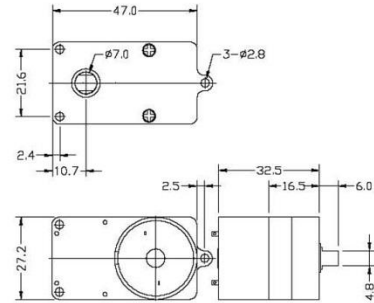
BO-P8

Gear Ratio : 1:120
 Operating Voltage : 2.5~3.5V DC
 Without Loading : 70~150mA,
 150~380 rpm
 Output Torque : 0.006~0.020Kgf.cm
 Weight : 0.5g



BO-10 (OUTPUT BY ONE SIDE)

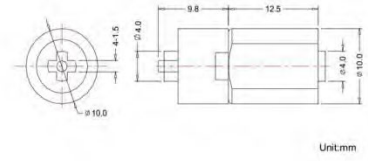
Gear Ratio : 1:220
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 10~60mA, 5~25
 rpm
 Output Torque : 0.6~1.9Kgf.cm
 Weight : 36.0g





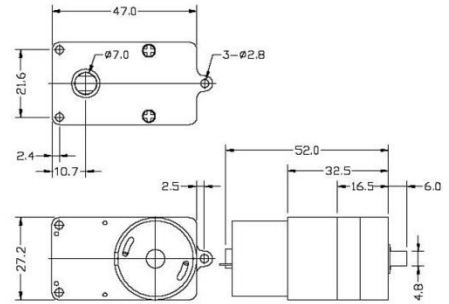
BO-P17 WITH 1012FE MOTOR

Gear Ratio : 1:171
 Operating Voltage : 1.5~6.0V DC
 Without Loading : 70~200mA,
 30~150 rpm
 Output Torque : 0.03~0.5Kgf.cm
 Weight : 4g



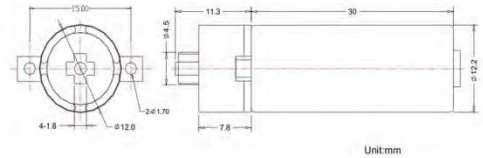
BO-10-R370 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:220
 Operating Voltage : 3.0~12.0V DC
 Without Loading : 10~60mA,
 5~25rpm
 Output Torque : 3.0~8.0Kgf.cm
 Weight : 67.0g



BO-P19 WITH 1230RE MOTOR

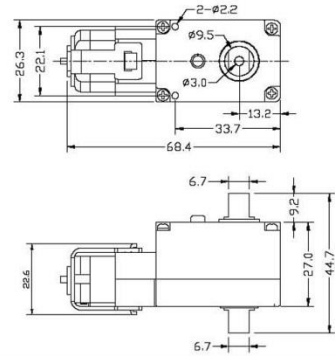
Gear Ratio : 1:120
 Operating Voltage : 3.0~6.0V DC
 Without Loading : 70~260mA,
 50~200 rpm
 Output Torque : 0.5~2.0Kgf.cm
 Weight : 14g





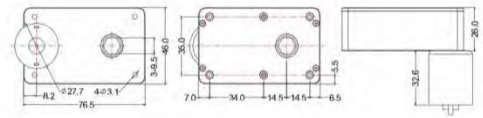
BO-20 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:214
Operating Voltage : 4.5~12.0V DC
Without Loading : 140~600mA,
40~100rpm
Output Torque : 13~15Kgf.cm
Weight : 50.0g



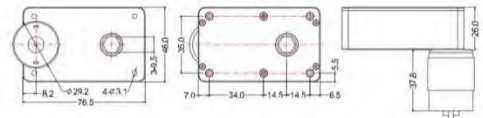
BO-26A (GEARBOX)

Gear Ratio : 1:81, 1:133,
1:292, 1:371
Operating Voltage : 6.0~24.0V DC
Without Loading : 90~550mA,
10~210rpm
Output Torque : 20~80Kgf.cm
Weight : 120g



BO-26B (GEARBOX)

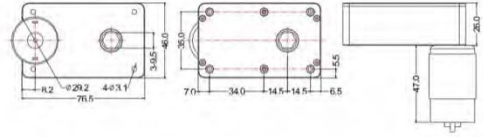
Gear Ratio : 1:81, 1:133,
1:292, 1:371
Operating Voltage : 6.0~24.0V DC
Without Loading : 90~550mA,
10~210rpm
Output Torque : 20~80Kgf.cm
Weight : 143g





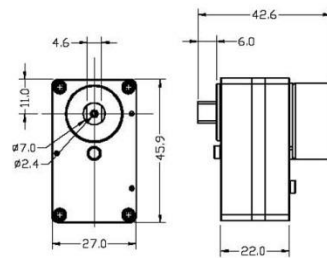
BO-26C (GEARBOX)

Gear Ratio : 1:81, 1:133,
 : 1:292, 1:371
 Operating Voltage : 6.0~24.0V DC
 Without Loading : 90~550mA,
 : 10~210rpm
 Output Torque : 20~100Kgf.cm
 Weight : 162g



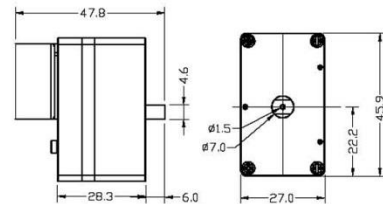
BO-28 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:270, 1:762
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 35~100mA,
 : 3.0~15rpm
 Output Torque : 1~2Kgf.cm
 Weight : 41.2g



BO-29 (OUTPUT BY ONE SIDE)

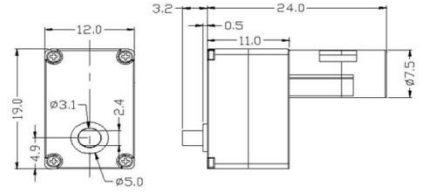
Gear Ratio : 1:570, 1:1620
 Operating Voltage : 3.0~4.5V DC
 Without Loading : 20~100mA,
 : 2~7rpm
 Output Torque : 2~6Kgf.cm
 Weight : 47.6g





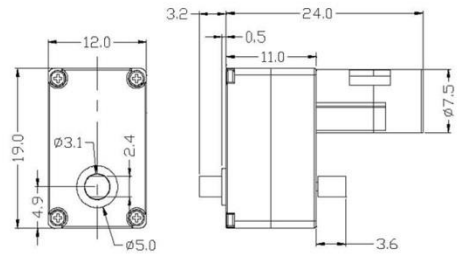
BO-30 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:192,1:96
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~0.48Kgf.cm
 Weight : 3.7 g



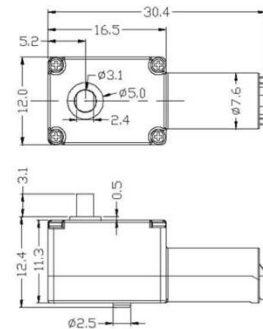
BO-30 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:192,1:96
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~0.48Kgf.cm
 Weight : 3.8 g



BO-31 (OUTPUT BY ONE SIDE)

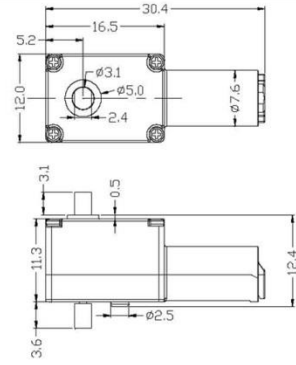
Gear Ratio : 1:96,1:192
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~0.48Kgf.cm
 Weight : 3.6 g





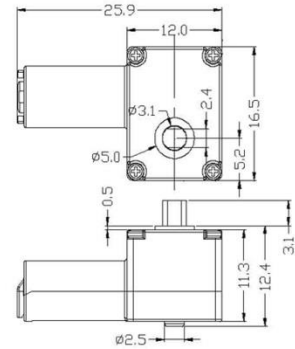
BO-31 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:96,1:192
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~0.48Kgf.cm
 Weight : 3.6 g



BO-32 (OUTPUT BY ONE SIDE)

Gear Ratio : 1:96,1:192
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~0.48Kgf.cm
 Weight : 3.5 g



BO-32 (OUTPUT BY BOTH SIDE)

Gear Ratio : 1:96,1:192
 Operating Voltage : 3.0V
 Without Loading : 30~80mA,
 100~410 rpm
 Output Torque : 0.06~6.48Kgf.cm
 Weight : 3.6 g

