

# DC Gear Motor Series

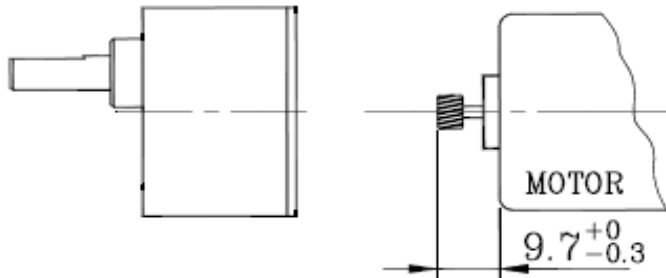


Gearbox with Sleeve Bearings

## ES37B

Operating Relative Humidity: 20%~85%RH  
 Operating Temperature Range: -10°C~+60°C

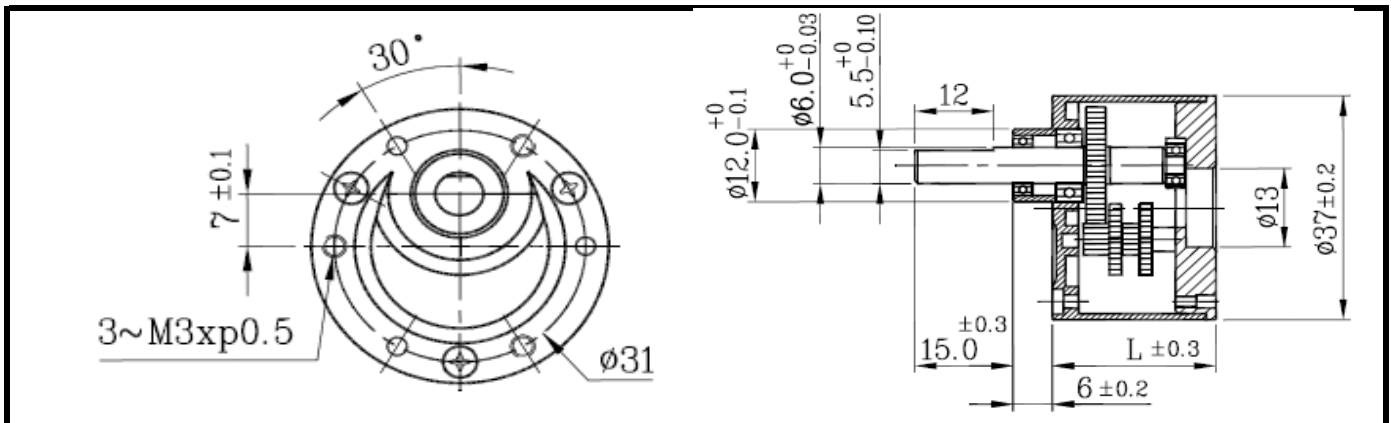
### MOTOR INSTALLATION



### SPECIFICATIONS

Reduction Ratio	Related Tolerance Torque	Max Momentary Tolerance Torque	Efficiency	Radial Play of Shaft	Thrust Play of Shaft	L	Helix Angle	Module	No. of Teeth	Pressure Angle	Hole Diameter
1/18	1.0kgf-cm Max	3.0 kgf-cm	73%	<0.04mm	<0.35mm	22	22°	0.5	10	20°	
1/30	2.0kgf-cm Max	6.0 kgf-cm	73%	<0.04mm	<0.35mm	22		0.5	10	20°	
1/50, 1/60, 1/70	3.0kgf-cm Max	9.0 kgf-cm	66%	<0.04mm	<0.35mm	24.5		0.5	10	20°	
1/75, 1/90	4.0kgf-cm Max	12.0 kgf-cm	66%	<0.04mm	<0.35mm	24.5		0.5	10	20°	
1/100	6.0kgf-cm Max	18.0 kgf-cm	66%	<0.04mm	<0.35mm	24.5		0.5	10	20°	
1/120, 1/150, 1/180, 1/200, 1/250, 1/300	6.0kgf-cm Max	18.0 kgf-cm	59%	<0.04mm	<0.35mm	27		0.5	10	20°	
1/350, 1/400, 1/450, 1/500, 1/600, 1/700	6.0kgf-cm Max	18.0 kgf-cm	53%	<0.04mm	<0.35mm	29.5		0.5	10	20°	
1/750, 1/900, 1/1000	6.0kgf-cm Max	18.0 kgf-cm	53%	<0.04mm	<0.35mm	29.5		0.5	10	20°	
1/1500, 1/3000	6.0kgf-cm Max	18.0 kgf-cm	48%	<0.04mm	<0.35mm	32		0.5	10	20°	

### DRAWING



# DC Gear Motor Series

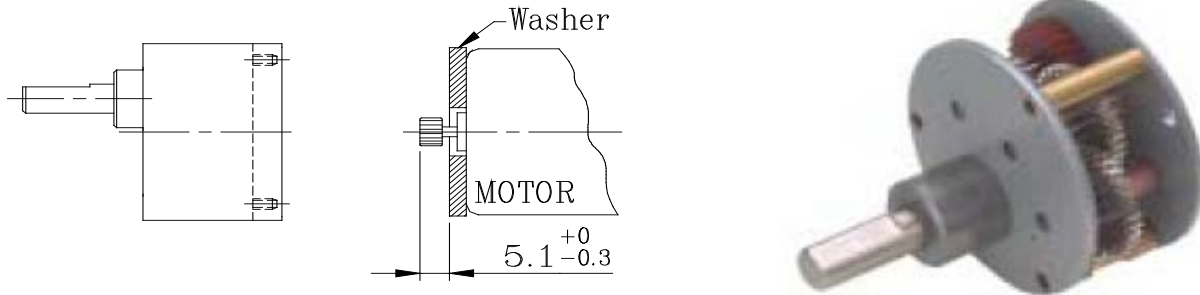


Gearbox with Sleeve Bearings

## ES37C

Operating Relative Humidity: 20%~85%RH  
 Operating Temperature Range: -10°C~+60°C

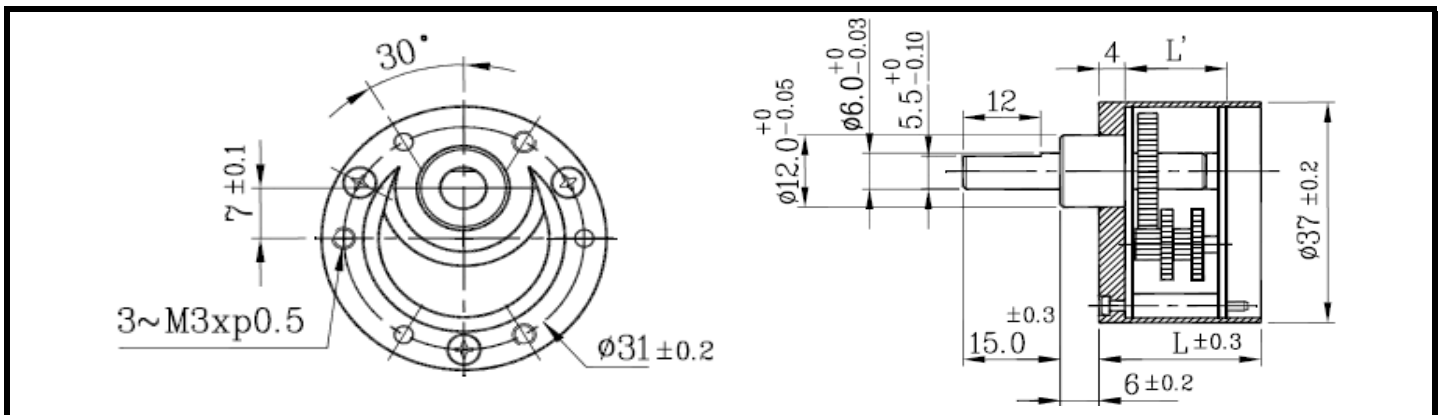
### MOTOR INSTALLATION



### SPECIFICATIONS

Reduction Ratio	Related Tolerance Torque	Max Momentary Tolerance Torque	Efficiency	Radial Play of Shaft	Thrust Play of Shaft	L	L'	Helix Angle	Module	No. of Teeth	Pressure Angle	Hole Diameter
1/6, 1/10	1.0kgf-cm Max	3.0 kgf-cm	81%	<0.05mm	<0.35mm	12.5	19.5	18° (Left)	0.5	10	20°	1.98,2.28 2.48,2.98, 3.16
1/18	1.0kgf-cm Max	3.0 kgf-cm	73%	<0.05mm	<0.35mm	15	22		0.5	10	20°	
1/30	2.0kgf-cm Max	6.0 kgf-cm	73%	<0.05mm	<0.35mm	15	22		0.5	10	20°	
1/50, 1/60, 1/70	3.0kgf-cm Max	9.0 kgf-cm	66%	<0.05mm	<0.35mm	17.5	24.5		0.5	10	20°	
1/75, 1/90	4.0kgf-cm Max	12.0 kgf-cm	66%	<0.05mm	<0.35mm	17.5	24.5		0.5	10	20°	
1/100	6.0kgf-cm Max	18.0 kgf-cm	66%	<0.05mm	<0.35mm	17.5	24.5		0.5	10	20°	
1/120, 1/150, 1/180, 1/200, 1/250, 1/300	6.0kgf-cm Max	18.0 kgf-cm	59%	<0.05mm	<0.35mm	20	27		0.5	10	20°	
1/350, 1/400, 1/450, 1/500, 1/600, 1/700	6.0kgf-cm Max	18.0 kgf-cm	53%	<0.05mm	<0.35mm	22.5	29.5		0.5	10	20°	
1/750, 1/900, 1/1000	6.0kgf-cm Max	18.0 kgf-cm	53%	<0.05mm	<0.35mm	22.5	29.5		0.5	10	20°	
1/1500, 1/3000	6.0kgf-cm Max	18.0 kgf-cm	48%	<0.05mm	<0.35mm	25	32		0.5	10	20°	

### DRAWING



# DC Gear Motor Series

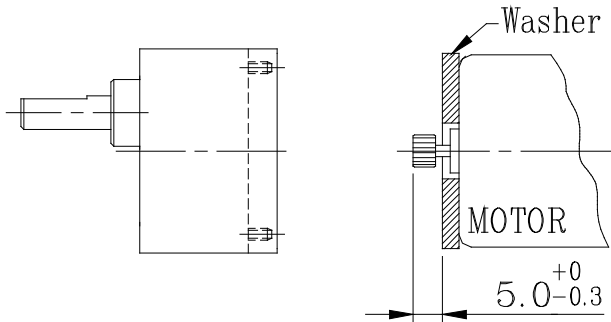


Gearbox with Sleeve Bearings

## ES37P

Operating Rative Humidity: 20%~85%RH  
 Operating Temperature Range: -10°C~+60°C

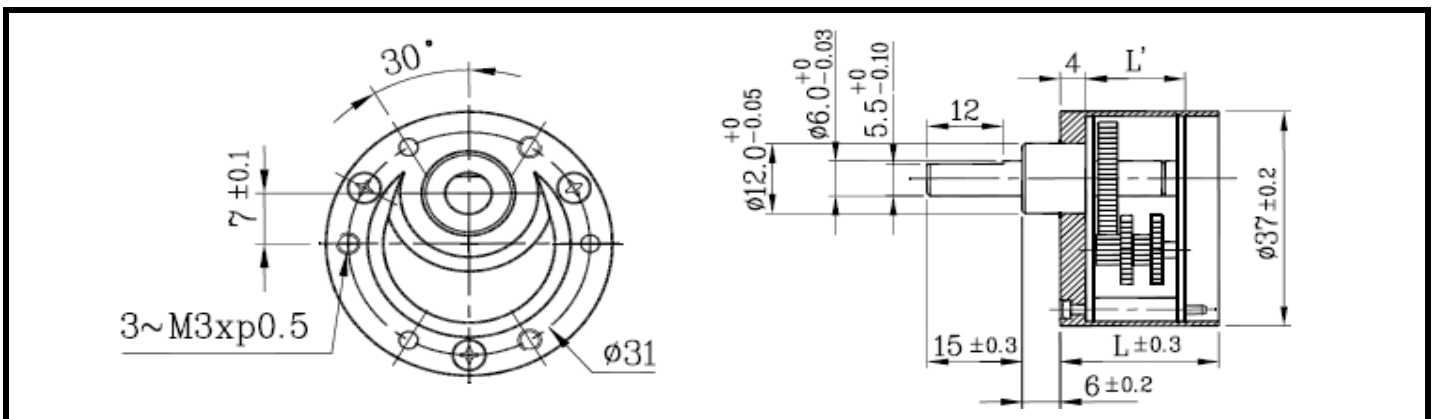
### MOTOR INSTALLATION



### SPECIFICATIONS

Reduction Ratio	Related Tolerance Torque	Max Momentary Tolerance Torque	Efficiency	Radial Play of Shaft	Thrust Play of Shaft	L	L'	Helix Angle	Module	No. of Teeth	Pressure Angle	Hole Diameter
1/18	1.0kgf-cm Max	3.0 kgf-cm	73%	<0.05mm	<0.35mm	15.0	22.0	18° (Left)	0.5	10	20°	1.98,2.28, 2.48,3.16
1/30	1.2kgf-cm Max	3.6 kgf-cm	73%	<0.05mm	<0.35mm	15.0	22.0		0.5	10	20°	
1/50,1/60,1/75	2.0kgf-cm Max	6.0 kgf-cm	66%	<0.05mm	<0.35mm	17.5	24.5		0.5	10	20°	
1/90,1/100	3.0kgf-cm Max	9.0 kgf-cm	66%	<0.05mm	<0.35mm	17.5	24.5		0.5	10	20°	
1/120,1/150,1/180, 1/200,1/300	4.0kgf-cm Max	12.0 kgf-cm	59%	<0.05mm	<0.35mm	20.0	27.0		0.5	10	20°	
1/400,1/450, 1/500,1/600.	4.0kgf-cm Max	12.0 kgf-cm	53%	<0.05mm	<0.35mm	22.5	29.5		0.5	10	20°	
1/900,1/1000	4.0kgf-cm Max	12.0 kgf-cm	53%	<0.05mm	<0.35mm	22.5	29.5		0.5	10	20°	
1/1500,1/3000	4.0kgf-cm Max	12.0 kgf-cm	48%	<0.05mm	<0.35mm	25.0	32.0		0.5	10	20°	

### DRAWING



# DC Gear Motor Series

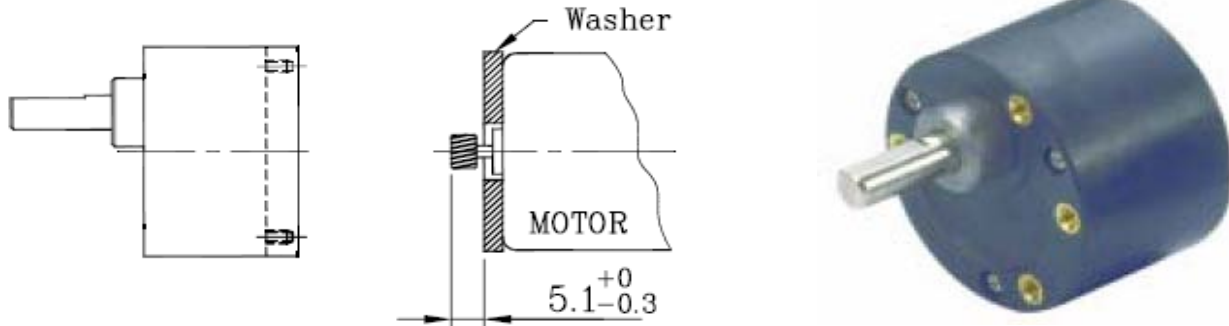


Gearbox with Sleeve Bearings

## ES37S

Operating Rative Humidity: 20%~85%RH  
 Operating Temperature Range: -10°C~+60°C

### MOTOR INSTALLATION



### SPECIFICATIONS

Reduction Ratio	Related Tolerance Torque	Max Momentary Tolerance Torque	Efficiency	Radial Play of Shaft	Thrust Play of Shaft	L	Helix Angle	Module	No. of Teeth	Pressure Angle	Hole Diameter
1/18	1.0kgf-cm Max	3.0 kgf-cm	73%	<0.05mm	<0.35mm	22	18° (Left)	0.5	10	20°	1.98, 2.28, 2.48, 2.98, 3.16
1/30	1.2kgf-cm Max	3.6 kgf-cm	73%	<0.05mm	<0.35mm	22		0.5	10	20°	
1/50, 1/60, 1/75	2.0kgf-cm Max	6.0 kgf-cm	66%	<0.05mm	<0.35mm	24.5		0.5	10	20°	
1/90, 1/100	3.0kgf-cm Max	9.0 kgf-cm	66%	<0.05mm	<0.35mm	24.5		0.5	10	20°	
1/120, 1/150, 1/180, 1/200, 1/300	4.0kgf-cm Max	12.0 kgf-cm	59%	<0.05mm	<0.35mm	27		0.5	10	20°	
1/400, 1/450, 1/500, 1/600	4.0kgf-cm Max	12.0 kgf-cm	53%	<0.05mm	<0.35mm	29.5		0.5	10	20°	
1/900, 1/1000	4.0kgf-cm Max	12.0 kgf-cm	53%	<0.05mm	<0.35mm	29.5		0.5	10	20°	
1/1500, 1/3000	4.0kgf-cm Max	12.0 kgf-cm	48%	<0.05mm	<0.35mm	32		0.5	10	20°	

### DRAWING

