

# Outer Rotor BLDC



## 3013 Specifications:

### General Specifications

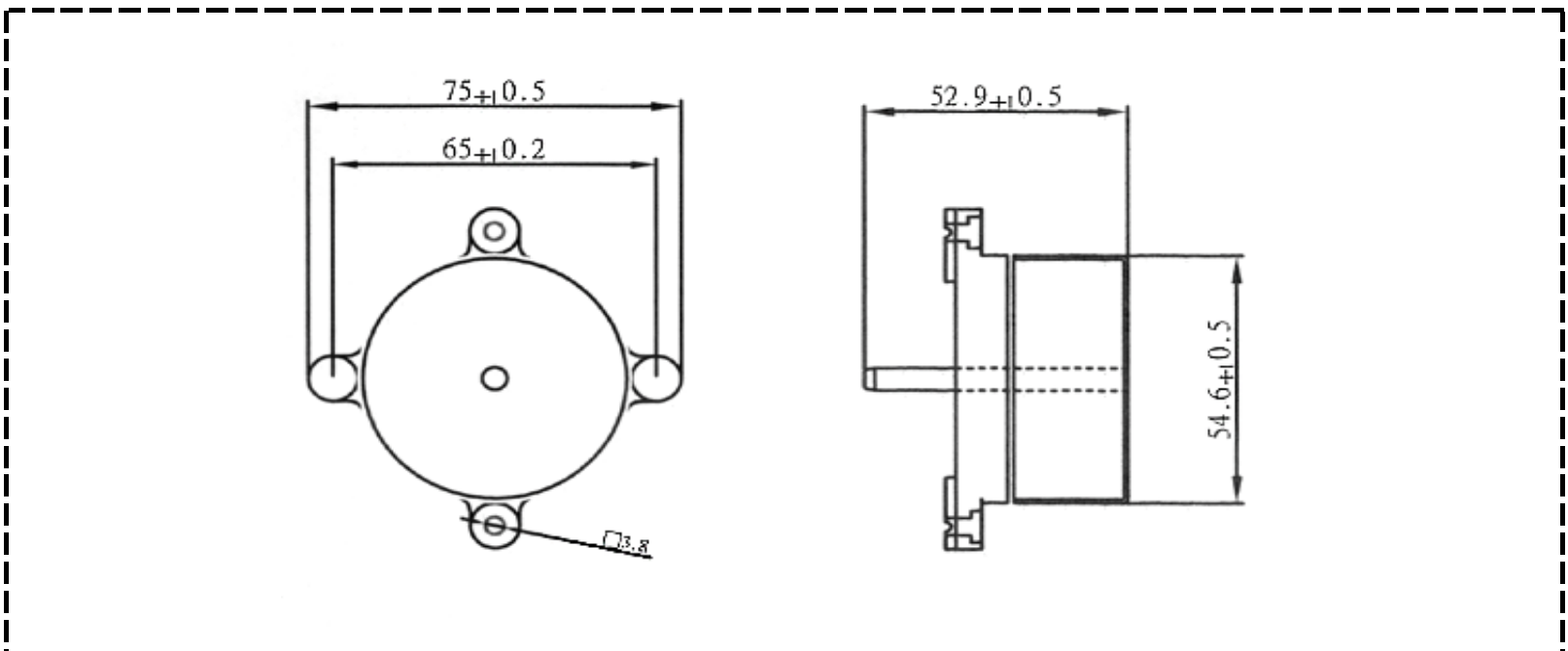
Motor	Shaded pole, impedance protected.
Frame (Housing)	Aluminum die-cast. AP: Painted black. AN: Natural.
Impeller	PBT+ 30% fiber glass. Black color.
Lead wire	1007# 22AWG. UL/CSA.
Insulation Resistance	Min.10 M Ohm at 500 VDC between terminal and the frame.
Dielectric Strength	1 min at 1,500 VAC, 50/60 HZ.
Net Weight	196 grams ( 0.57 pounds)
Bearing Type	B: 2 ball bearing. S: 1 sleeve bearing.
Operating Temp	Ball bearing.: Within - 20 ~ 80 degree C. Sleeve bearing.: Within - 10 ~ 56 degree C.
Life Expectancy	Ball bearing.: 50,000 hours at 60 degree C. Sleeve bearing.: 20,000 hours at 45 degree C.
Above Measurements Tem. at: Within 20 ~ 30 degree C.	
Above Measurements Humidity at: 65% + - 15%.	
Safety Approvals : CE.	



Model	DO3013-HBPL	DO3013-HSPL	DO3013-MBPL	DO3013-MSPL	DO3013-LBPL	DO3013-LSPL
Rated Voltage (VDC)	12	12	12	12	12	12
Rated Current (AMP)	0.21	0.21	0.19	0.19	0.18	0.18
Rated Speed (RPM)	3000	3000	2500	2500	2000	2000

### OUTLINE DRAWING

(DIMENSIONS: mm)



# Outer Rotor BLDC



## 3019 Specifications:

### General Specifications

Motor	Shaded pole, impedance protected.
Frame (Housing)	Aluminum die-cast. AP: Painted black. AN: Natural.
Impeller	PBT+ 30% fiber glass. Black color.
Lead wire	1007# 22AWG. UL/CSA.
Insulation Resistance	Min.10 M Ohm at 500 VDC between terminal and the frame.
Dielectric Strength	1 min at 1,500 VAC, 50/60 HZ.
Net Weight	196 grams ( 0.57 pounds)
Bearing Type	B: 2 ball bearing. S: 1 sleeve bearing.
Operating Temp	Ball bearing.: Within - 20 ~ 80 degree C. Sleeve bearing.: Within - 10 ~ 56 degree C.
Life Expectancy	Ball bearing.: 50,000 hours at 60 degree C. Sleeve bearing.: 20,000 hours at 45 degree C.
Above Measurements Tem. at: Within 20 ~ 30 degree C.	
Above Measurements Humidity at: 65% + - 15%.	
Safety Approvals : CE.	

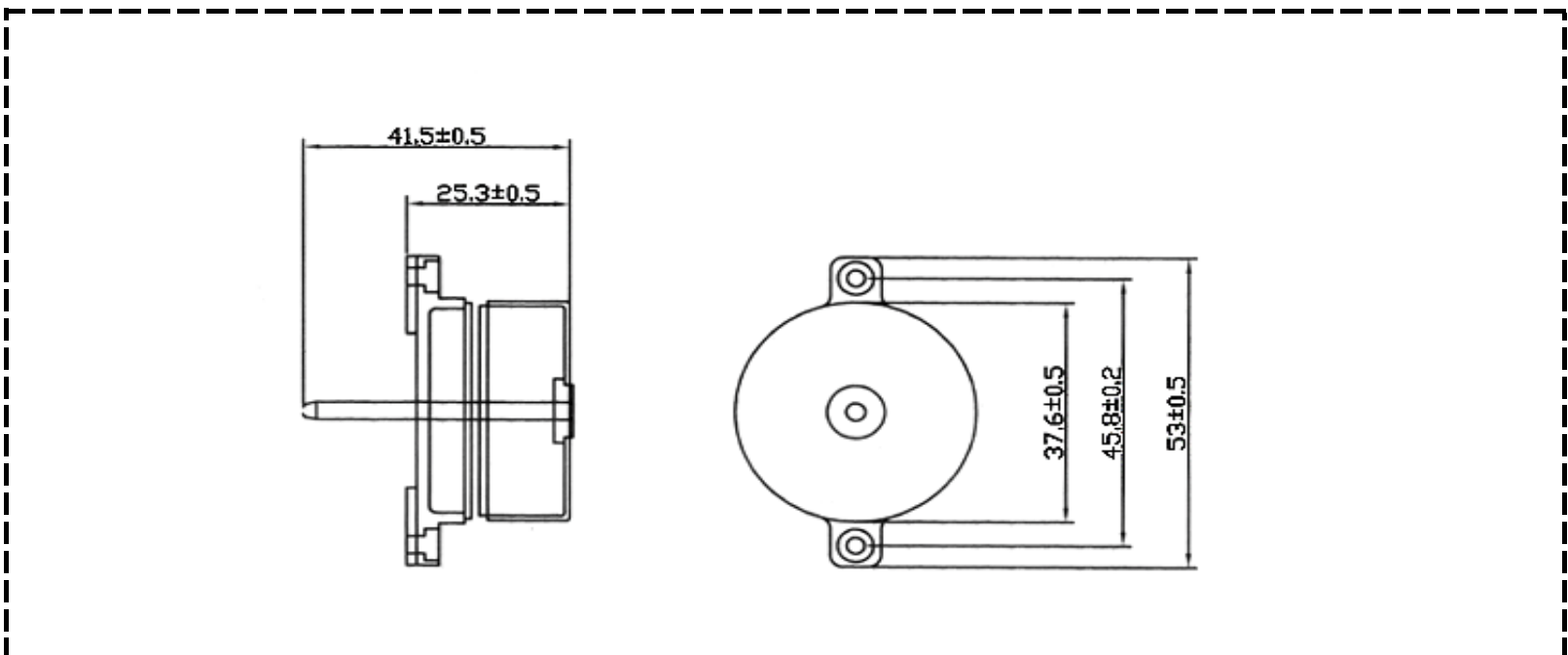


Model	DO3019-HBPL	DO3019-HSPL	DO3019-MBPL	DO3019-MSPL	DO3019-LBPL	DO3019-LSPL
Rated Voltage (VDC)	12	12	12	12	12	12
Rated Current (AMP)	0.2	0.2	0.18	0.18	0.15	0.15
Rated Speed (RPM)	3000	3000	2500	2500	2000	2000

Other Available Voltages: 24, 48

## OUTLINE DRAWING

(DIMENSIONS: mm)



# Outer Rotor BLDC



## 4220 Specifications:

### General Specifications

Motor	Shaded pole, impedance protected.
Frame (Houseing)	Aluminum die-cast. AP: Painted black. AN: Natural.
Impeller	PBT+ 30% fiber glass. Black color.
Lead wire	1007# 22AWG. UL/CSA.
Insulation Resistance	Min.10 M Ohm at 500 VDC between terminal and the frame.
Dielectric Strength	1 min at 1,500 VAC, 50/60 HZ.
Net Weight	196 grams ( 0.57 pounds)
Bearing Type	B: 2 ball bearing. S: 1 sleeve bearing.
Operating Temp	Ball bearing.: Within - 20 ~ 80 degree C. Sleeve bearing.: Within - 10 ~ 56 degree C.
Life Expectancy	Ball bearing.: 50,000 hours at 60 degree C. Sleeve bearing.: 20,000 hours at 45 degree C.
Above Measurements Tem. at: Within 20 ~ 30 degree C.	
Above Measurements Humidity at: 65% + - 15%.	
Safety Approvals : CE.	



Model	DO4220-HBPL	DO4220-HSPL	DO4220-MBPL	DO4220-MSPL	DO4220-LBPL	DO4220-LSPL
Rated Voltage (VDC)	12	12	12	12	12	12
Rated Current (AMP)	0.18	0.18	0.16	0.16	0.14	0.15
Rated Speed (RPM)	3000	3000	2500	2500	2000	2000

### OUTLINE DRAWING

(DIMENSIONS: mm)

