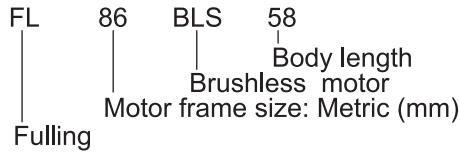


# Brushless DC Motor

## FL86BLS SERIES

### ● Indications of The Models



### ● General Specifications

Winding type	Star
Hall effect angle	120 degree electrical angle
Shaft run out	0.038mm
Radial play	0.025mm@5N
End play	0.075mm@10N
Max. radial force	200N @ 20mm from the flange
Max. axial force	65N
Insulation class	Class B
Dielectric strength	500VAC for one minute
Insulation resistance	100MΩ Min., 500VDC

### ● Electric Connection

Lead No.	Lead Color	Lead Gauge	FUNCTION	DESCRIPTION
1	Red	UL1332 AWG22#	Vcc	SUPPLY VOLTAGE FOR HALL SENEORS
2	Blue		HALL A	
3	Green		HALL B	
4	White		HALL C	
5	Black	AWN3135 AWG16#	GND	GROUND FOR HALL SENEORS
6	Yel & Yel / Wht		PHASE U	
7	Red & Red / Wht		PHASE V	
8	Blk & Blk / Wht		PHASE W	

### ● Electrical Specifications

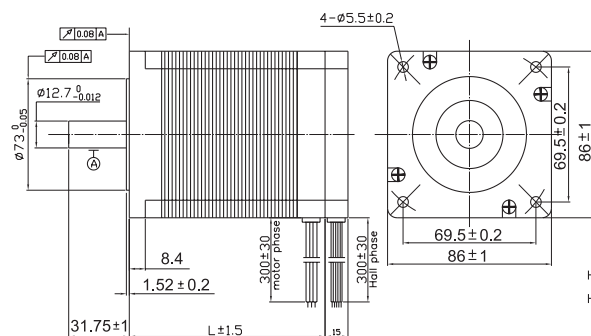
Model	FL86BLS58	FL86BLS71	FL86BLS98	FL86BLS125
Number of poles	8			
Number of phase	3			
Rated voltage	VDC			
Rated speed	RPM			
Rated torque	N.m			
Rotor power	W			
Peak torque	N.m			
Peak current	A(ref)			
Line to line resistance	ohms			
Line to line inductance	mH			
Torque constant	Nm/A			
Back E.M.F	V/KRPM			
Rotor inertia	g.cm <sup>2</sup>			
Body length	mm			
Mass	Kg			

### ● Commutation

ROTATION: CCW VIEWED FROM THE OUTPUT SHAFT

SENSOR OUTPUT			DRIVER OUTPUT		
H1	H2	H3	PHU	PHV	PHW
1	1	0	X	HIGH	LOW
1	0	0	HIGH	X	LOW
1	0	1	HIGH	LOW	X
0	0	1	X	LOW	HIGH
0	1	1	LOW	X	HIGH
0	1	0	LOW	HIGH	X

### ● Dimension



### ● Wiring Diagram

