FL28BL series

◆ INDICATIONS OF THE MODELS

FL 28 BL 26

- FL — Fulling
- 28 — Motor Frame Size (mm)
- BL — Brushless DC Motor
- 26 — Body Length (mm)

◆ GENERAL SPECIFICATIONS

Winding Type	Star
Hall Effect Angle	120° electrical angle
Shaft Runout	0.025mm
Radial Play	0.02mm @450g
End Play	0.08mm @450g
Max. Radial Force	15N @10mm from the flange
Max. Axial Force	10N
Insulation Class	Class B
Insulation Resistance	100MΩ Min., 500VDC
Dielectric Strength	500VAC for one minute

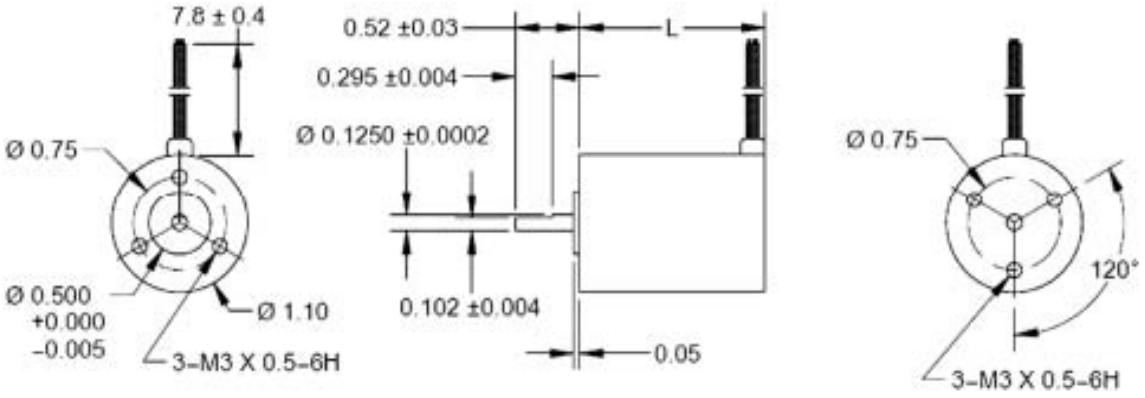
◆ ELECTRIC CONNECTION

Lead No.	Lead Color	Lead Gauge	Function	Description
1	Yellow	UL1007 26AWG	Vcc	Supply Voltage for Hall Sensors
2	Blue		Hall A	
3	Orange		Hall B	
4	Brown		Hall C	
5	White		GND	Ground for Hall Sensors
6	Green		Phase U	
7	Red		Phase V	
8	Black		Phase W	

◆ ELECTRICAL SPECIFICATIONS

Model		FL28BL26	FL28BL38	FL28BL77
Number of Poles		4	4	4
Number of Phase		3	3	3
Rated Voltage	VDC	15	24	24
Rated Speed	RPM	8000	10000	3700
Continuous Stall Torque	mNm	8.4	17	60
Rated Torque	mNm	7	14.12	50
Rated Power	W	6	14.78	16
Peak Torque	mNm	21	42.4	150
Peak Current	A	2.5	2.8	3
Line to Line Resistance	Ω	8	4.63	4.67
Line to Line Inductance	mH	2	3	3.5
Torque Constant	mNm/A	13.7	16	50
Rotor Inertia	$g.cm^2$	1.23	2.12	5.98
Body Length	mm	26	38	77
Mass	Kg	0.06	0.082	0.28

◆ DIMENSIONS (inch)



FL28BL-PG series

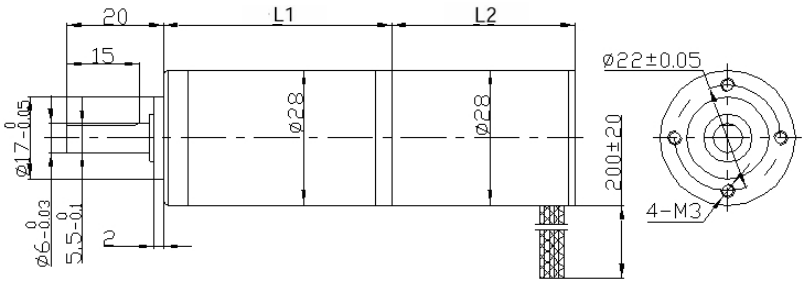
◆ ELECTRICAL SPECIFICATIONS (AFTER GEAR TRAINS)

- Rated Speed of the Output Shaft = Rated Motor Speed / Gear Reduction Ratio
- Rated Output Torque = (Rated Motor Torque x Gear Reduction Ratio) x Gear Efficiency

◆ GEARHEAD SPECIFICATIONS 1

Gearing Type		Planetary									
Gearhead Frame Size	mm	Φ28									
Gearhead Length (L1)	mm	35.5	35.5	35.5	35.5	35.5	41.2	41.2	41.2	41.2	47.5
Reduction Ratio		3.7	5.2	14	19	27	51	71	100	139	264
Number of Gear Trains		1	1	2	2	2	3	3	3	3	4
Max. Allowed Torque	Nm	0.5	0.5	1	1	1	3	3	3	3	3

◆ DIMENSIONS (mm)



◆ GEARHEAD SPECIFICATIONS 2

Gearing Type		Planetary									
Gearhead Frame Size	mm	Φ36									
Gearhead Length (L1)	mm	38	38	38	38	38	47.5	47.5	47.5	47.5	55
Reduction Ratio		3.7	5.2	14	19	27	51	71	100	139	264
Number of Gear Trains		1	1	2	2	2	3	3	3	3	4
Max. Allowed Torque	Nm	1	1	3	3	3	6	6	6	6	6

◆ DIMENSIONS (mm)