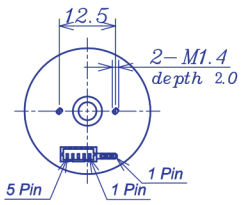
BRUSHLESS DC MOTOR

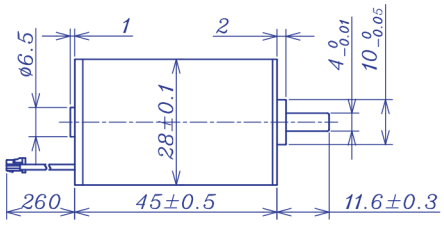
HIGH-TEMPERATURE SERIES

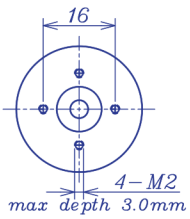
Cifu Technology

CF-BL2845









			Brushless Motor		Ball Bearings			
Model			**1215**	**1210**	**1813**	**1810**	**2412**	**2409**
Rated Voltage		V	12	12	18	18	24	24
No-load Speed	±12%	rpm	14800	10000	12520	9680	11680	9080
No-load Current	Max 150%	mA	300	190	170	120	120	85
Recommended Continuous Limits	**Max. Cont. Torque**	mN.m	33.8	38.7	37.2	40.1	36.6	40.4
	Rated Speed	rpm	13105	8250	10913	7985	10055	7383
	Max. Cont. Current	mA	4700	3600	2900	2400	2000	1700
	Rated Power	W	46.4	33.4	42.6	33.5	38.5	31.2
Starting Current		mA	38710	19672	21687	13139	13636	8727
Stall Torque		mN.m	295	221	293	229	263	216
Max. Output Pwr.		W	114.3	57.9	96.1	58.0	80.4	51.3
Peak Efficiency		%	83	81	83	82	82	81
Terminal Res.	±12%	Ω	0.31	0.61	0.83	1.37	1.76	2.75
Inductance	($1KH_Z$)	mH	0.034	0.086	0.126	0.22	0.27	0.46
Mech. Time Const.		ms	3.3	2.9	2.8	2.7	2.9	2.7
Rotor Inertia		gcm^2	6.19	6.19	6.19	6.19	6.19	6.19
Torque Constant		mN.m/A	7.7	11.3	13.6	17.6	19.4	25.0
Speed Constant		rpm/V	1243	1324	701	543	491	382
Speed-Torque Slope		rpm/mN.m	50.2	45.2	42.7	42.3	44.4	42.0
Motor Weight		g	138.8	138.7	139.1	140.1	138.4	139.2

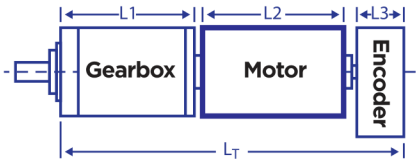
Specifications

Motor Thermal Resistance	10.2K/W	**Thermal Time Constant**	822S
Axial Dynamic Load	4.0 N	**Radial Dynamic Load (5 mm from face)**	16.0 N
Max. Static Mounting Force	50 N	**Max. Screw Insertion Depth**	3.0 mm
Radial Clearance (5 mm from face)	≤0.02 mm	**Axial Clearance**	0 (<4.0N)
Max. Coil Temperature	125°C	**Ambient Temperature**	-30 to 65°C
Standard Rear Shaft Dia.	4 mm	**Standard Rear Shaft Length "L"**	0/3.7/5.5 mm

Lead Wire Pinout (AWG 22#)	**Total Length L_T=L1+L2+L3**				
Lead 1: Yellow — Phase A	**L1:28GP**	**L1:32GP**	**L2:BL28**	**L3:EN16S**	**L3:EN24T**
Lead 2: Red — Phase B	26.1	27.4	45.0	10.7	12.0
Lead 3: Blue — Phase C	33.3	35.9			
Hall Sensor Pinout (AWG 28#) Molex: 51021-0500	40.5	44.4			
Pin 1: Brown, Vcc 3-16V					
Pin 2: Black, GND					
Pin 3: Yellow, Hall A					
Pin 4: Red, Hall B					
Pin 5: Blue, Hall C					

Gearboxes and encoders can be selected to match the motor; contact sales for additional combinations.

CF-BL2850 **Recommended Options**



Gearbox Options:
AM-28GP
AM-32GP

Encoder Options:
Mag. Enc.: AM-EN1611S***
Opt. Enc.: AM-EN2412T***

Tested at 25°C. Exceeding recommended continuous limits may shorten service life or damage the motor.
At high temperatures, reduce load current to protect the motor.