3W Torque Motor 3W(□ 60mm)

Motor Specification

Model 6TDG*-3G: Gear Type Shaft 6TDD*-3: D-Cut Type Shaft	Rating at Locked Rotor	Voltage V	Frequency Hz	Poles	Starting Torque kgfcm	 N.m	At max. Output Power Output W	 Speed r/min	 Current A	 Torque kgfcm	 N.m	Capacitor μF / VAC
6TDG1(A)-3G	5min.	1ø 110	60	4	0.66	0.066	3	900	0.30	0.32	0.032	3.5 / 250
	Cont.	1ø 60			0.26	0.026	1		0.22	0.11	0.011	
6TDG2(D)-3G	5min.	1ø 220	60	4	0.72	0.072	3		0.17	0.32	0.032	1.0 / 450
	Cont.	1ø 140			0.27	0.027	1		0.13	0.11	0.011	
6TDGE-3G	5min.	1ø 220~240	50	4	0.58	0.058	3	750	0.15	0.39	0.039	1.0 / 450
	Cont.	1ø 140			0.22	0.022	1		0.10	0.13	0.013	

1) Enter the phase & voltage code in the place * within the motor model name.
2) Gear Type Shaft is for attaching a gearbox and D-Cut Type Shaft is for using the motor only.
4) Impedance Protected Type

Max. Permissible Torque at Output Shaft of Gearbox

60Hz

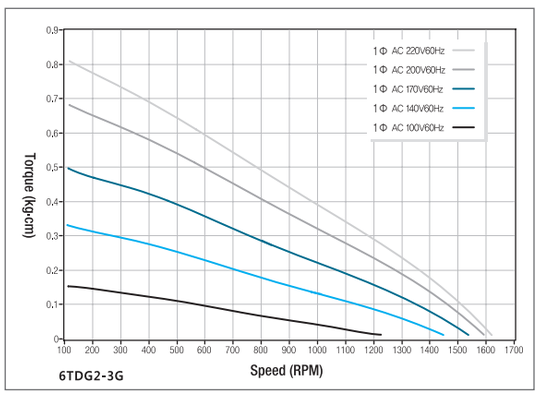
Motor Model	Gearbox Model	Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
6TDG □ -3G	6GBD □ MH	5min.	kgfcm	0.8	0.9	1.3	1.6	2.0	2.4	2.6	3.3	3.9	4.7	4.7	5.9	7.1	8.5	9.5	10.7	12.9	16.1	19.3	21.4	25.7	30.0	30.0	30.0	30.0
			N.m	0.08	0.09	0.13	0.15	0.19	0.23	0.26	0.32	0.39	0.46	0.46	0.58	0.70	0.84	0.93	1.05	1.26	1.57	1.89	2.10	2.52	2.94	2.94	2.94	2.94
		Cont.	kgfcm	0.3	0.3	0.4	0.5	0.7	0.8	0.9	1.1	1.3	1.6	1.6	2.0	2.4	2.8	3.2	3.6	4.3	5.4	6.4	7.1	8.6	10.7	12.9	14.3	17.9
			N.m	0.03	0.03	0.04	0.05	0.06	0.08	0.09	0.11	0.13	0.15	0.15	0.19	0.23	0.28	0.31	0.35	0.42	0.52	0.63	0.70	0.84	1.05	1.26	1.40	1.75

50Hz

Motor Model	Gearbox Model	Gear Ratio		3	3.6	5	6	7.5	9	10	12.5	15	18	20	25	30	36	40	50	60	75	90	100	120	150	180	200	250
6TDG*-3G	6GBD □ MH	5min.	kgfcm	0.9	1.1	1.6	1.9	2.4	2.8	3.2	3.9	4.7	5.7	5.7	7.1	8.5	10.2	11.4	12.9	15.4	19.3	23.1	25.7	30.0	30.0	30.0	30.0	30.0
			N.m	0.09	0.11	0.15	0.19	0.23	0.28	0.31	0.39	0.46	0.56	0.56	0.70	0.84	1.00	1.11	1.26	1.51	1.89	2.27	2.52	2.94	2.94	2.94	2.94	2.94
		Cont.	kgfcm	0.3	0.4	0.5	0.6	0.8	0.9	1.1	1.3	1.6	1.9	1.9	2.4	2.8	3.4	3.8	4.3	5.1	6.4	7.7	8.6	10.3	12.9	15.4	17.1	21.4
			N.m	0.03	0.04	0.05	0.06	0.08	0.09	0.10	0.13	0.15	0.19	0.19	0.23	0.28	0.33	0.37	0.42	0.50	0.63	0.76	0.84	1.01	1.26	1.51	1.68	2.10

1) Enter the phase & voltage code in the place * within the motor model name. 2) Enter the gear ratio in the box (□) within the gearbox model name.
3) A colored background indicates the gear shaft rotation in the same direction as the motor shaft; a white background indicates the rotation in the opposite direction.
4) The rotating speed is calculated by dividing the motor's synchronous speed (50Hz: 1,500r/min, 60Hz: 1,800r/min) by the gear ratio.
The actual speed is 2~20% less than the displayed value, depending on the size of the load.

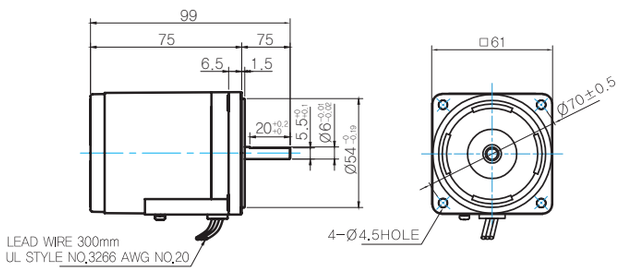
Speed-Torque Characteristics



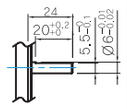
Dimensions

MOTOR ONLY

● MOTOR MODEL: 6TDD□-3 (NO FAN)



● MOTOR OUTPUT SHAFT

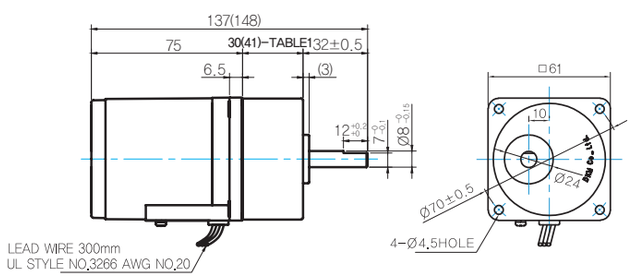
MODEL	SPEC
D-CUT TYPE	

GEARED MOTOR

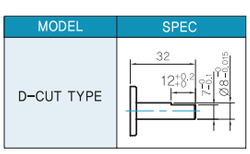
G TYPE GEARBOX

● MOTOR MODEL:
6TDG□-3G (NO FAN)

● GEARBOX MODEL:
6GBD□MH



● GEARBOX OUTPUT SHAFT

MODEL	SPEC
D-CUT TYPE	

WEIGHT

PART		WEIGHT(Kg)
MOTOR		0.7
GEAR BOX	6GBD3MH ~ 6GBD18MH	0.3
	6GBD20MH ~ 6GBD40MH	0.32
	6GBD50MH ~ 6GBD250MH	0.34

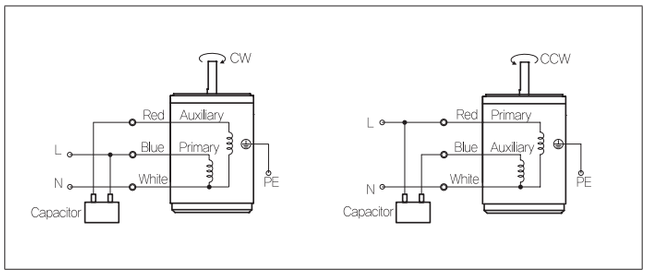
● 30(41)-Table1

SIZE(mm)	GEAR RATIO
30	6GBD3MH ~ 6GBD18MH
41	6GBD20MH ~ 6GBD250MH

Motor Images

6TDD□-3	6TDG□-3G+6GBD□MH
	

Connection Diagrams



1) The direction of motor rotation is as viewed from the shaft end of the motor.
2) CW represents the clockwise direction, while CCW represents the counterclockwise direction.
3) Change the direction of single phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore the reversing command or change its direction after some delay.