Frame Size: □90mm (□3.54 in.) Spur Gearhead with PMDC Motor

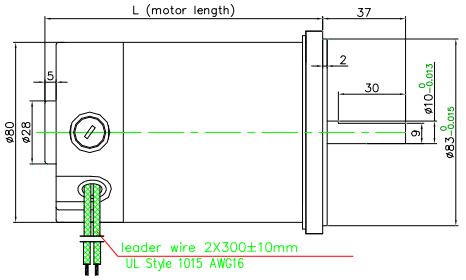
- General Specifications：

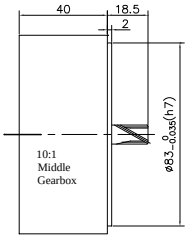
Item	Specifications
Insulation Resistance	100 MΩ Min. @ 500VDC
Dielectric Strength	1.5 kVAC for one minute
Temperature Rise	<= 80℃
Insulation Class	Class B (130C)
Ambient Temperature	14°F-104°F (-10℃～+40℃)(Nonfreezing)
Ambient Humidity	85% or less (Noncondensing)
Speed tolerance	±15%
Torque tolerance	±20%

- Motor specifications：

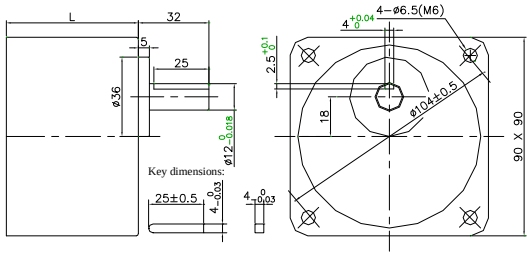
Motor				Model #	Volt.	No load		Rated				Weight
Frame		Length (L)				Speed	Current	Speed	Current	Torque		Power	
mm	Inch	mm	Inch		Vdc	RPM	Amp	RPM	Amp	mN.m	oz-in	W	Kg
80	2.76	124	4.9	80ZYT124-40W1232	12	3200	2	2800	5.2	136	19.26	40	1.9
				80ZYT121-40W2432	24	3200	0.8	2800	2.1	136	19.26		
				80ZYT121-40W9032	90	3200	0.3	2800	2.1	136	19.26		
		145	5.7	80ZYT145-60W1232	12	3200	2	2800	9.0	205	29.03	60	2.2
				80ZYT145-60W2432	24	3200	1	2800	3.5	205	29.03		
				80ZYT145-60W9032	90	3200	0.3	2800	1.0	205	29.03		

- Dimensions: Motor





Gearhead



- Gear Motor-Torque Table (Listed speeds are rated speeds)

Model		Ratio	X:1	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180	200
		Eff.	%	81	81	81	81	81	81	81	81	81	73	73	73	66	66	66	66	66	66	66	66	66
80ZYT124-40Wxxxx	5GN□K	Speed	RPM	933	778	560	467	373	311	224	187	156	112	93	78	56	47	37	31	28	23	19	16	14
		Torque	Nm	0.33	0.40	0.55	0.66	0.83	0.99	1.38	1.65	1.98	2.48	2.98	3.57	4.49	5.39	6.73	8.08	8.98	10	10	10	10
			Kg.cm	3.37	4.04	5.62	6.74	8.42	10.1	14.0	16.8	20.2	25.3	30.4	36.4	45.8	54.9	68.6	82.4	91.5	100	100	100	100
80ZYT145-60Wxxxx		Speed	RPM	933	778	560	467	373	311	224	187	156	112	93	78	56	47	37	31	28	23	19	16	14
		Torque	Nm	0.50	0.60	0.83	1.00	1.25	1.49	2.08	2.49	2.99	3.74	4.49	5.39	6.77	8.12	10	10	10	10	10	10	10
			Kg.cm	5.08	6.10	8.47	10.2	12.7	15.2	21.2	25.4	30.5	38.1	45.8	54.9	69.0	82.8	100	100	100	100	100	100	100
Gearhead Length / Weight			mm/Kg	42 / 0.73									60 / 1.03			60 / 1.13								

- Enter the gear ratio in the box □. Colored background indicates the output shaft rotate in the same direction as the motor shaft.
- Higher gear ratio (>200) can be achieved by adding a middle gearbox (10:1). Using Middle Gearbox limits Max.torque to3Nm (30kg.cm)

- Permissible load for gearheads

Frame Size	Gear Ratio	Maximum Permissible torque		Permissible overhung load (from end of shaft)				Permissible thrust load	
				10 mm		20 mm			
		lb-in	N.m	lb	N	lb	N	lb	N
5GNxxK	3 - 18	89	10	56.2	250	78.7	350	22	100
	25 - 200			67.4	300	101.1	450		

- Wiring: Rotation direction: Motor shaft rotates CW when RED(+) & BLK(-) and CCW when RED(-) & BLK(+)

- Product Code:

5	GN	50	K	/	80	ZYT	124 -	40W	12	32
Size	Type	Ratio	Bearing		Size	Type	Length	Power	Voltage	Speed (NL)
90mm	GN type	50:1	Ball		80mm	PMDC	121mm	40Watts	12VDC	3200RPM