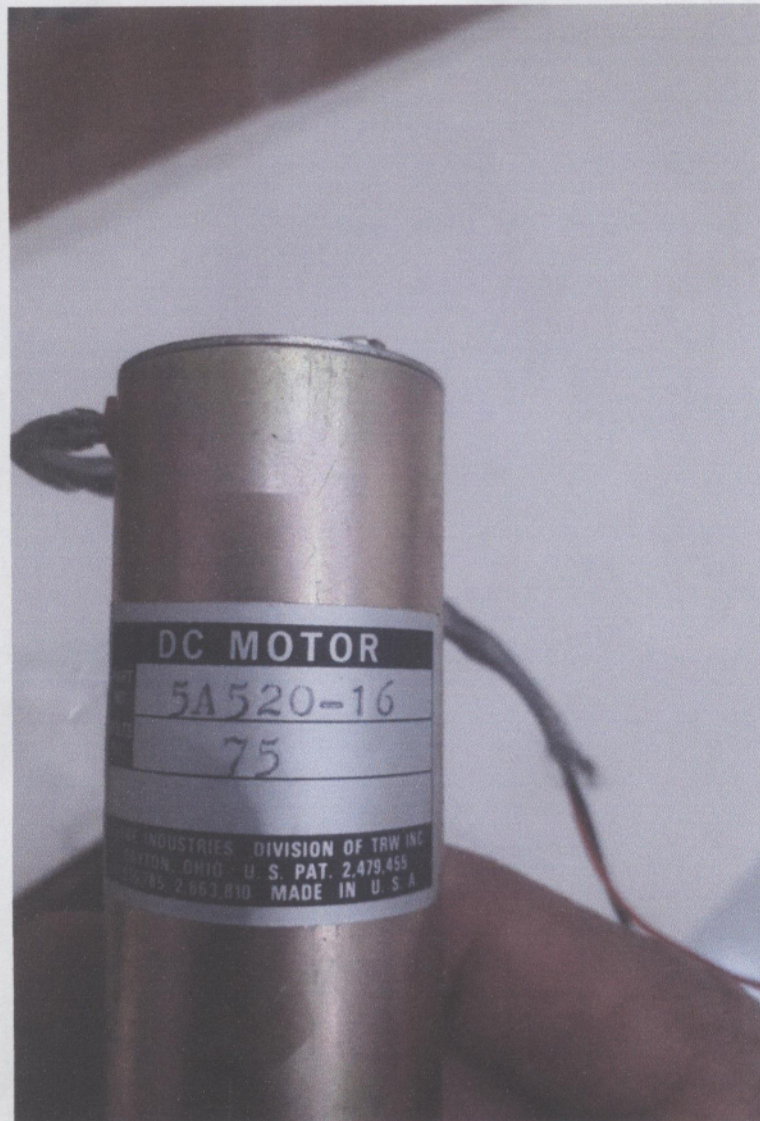


Allied



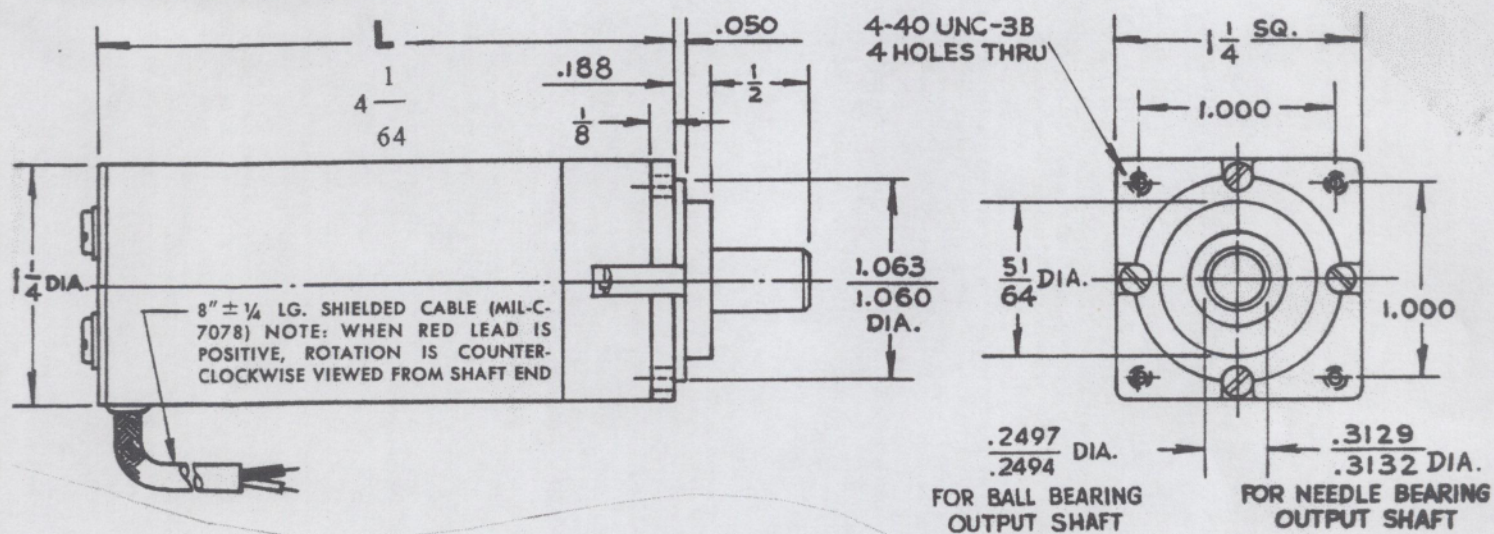
MOTOR TIPO MINIATURA COM REDUÇÃO PLANETÁRIA

CARACTERÍSTICAS MECÂNICAS / ELÉTRICAS:

- . Razão de redução de velocidade => 1528:1
- . Torque máximo contínuo => 3524 N x m
- . RPM de saída => 6 RPM
- . Tensão de Trabalho => 75VDC
- . Consumo => 32mA

DIMENSÕES:

ALTERNATE FLANGE

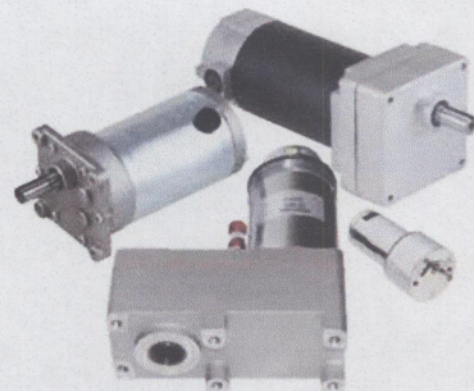


OBS: UNIDADES EM POLEGADAS

Industrial PMDC Gear Motors

Allied Motion offers **PMDC gear motors** in right-angle and parallel shaft versions.

These rugged gear motors are ideal for use in battery-fed commercial or industrial applications like medical mobility, material handling, linear actuators and similar applications.

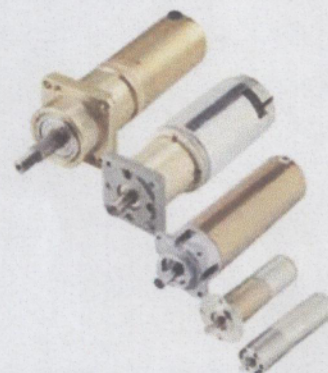


Performance		Right Angle Shaft				Parallel Shaft				
		RAA	RAB	RAC	RAD	IM-13	IM-15	PLA	PLB	PLC
Frame Size	mm	76.2	76.2	82.6	91.4	30.2	40.1	63.5	73	82, 92
Length	mm	185.4	225.3	195.6	327.7	71 – 82.1	93.4 – 103.9	160	115	268, 277
Gear Ratio	n:1	35	58	47, 30	18 – 29	6.3 – 1803.6	5.9 – 4732.5	208	16.8, 29	20.4
Rated Torque	Nm	2.3	4.1, 8.7	1.0, 6.2	8.5 – 17.5	0.06 – 1.13	0.134 – 2.12	11.3	3.0, 5.9	6.2, 14.0
Power	W	22	33, 37	48, 78	96 – 254	2.72 – 4.18	8.17 – 15.7	27	82	144, 297
Voltage	VDC	12	12	12, 115	24	12, 24	12, 24	12	24	24, 120
Rated Speed	RPM	100	37, 77,	34, 119	108 – 170	2.88 – 825.4	1.1 – 881.36	23	130, 255	202, 221

Industrial & Mil-Aero Planetary Gear Motors

Allied Motion offers a full line-up of **Globe** small-frame fractional horsepower planetary gear motors. The **CLL**, **CMM**, **IM** and **NB** series are suitable for industrial applications.

The **BD**, **BL**, **CM**, **LL**, **MM**, **NB**, **SD** and **SS** are specifically tailored for mil-aero (mil-spec) applications. All units are equipped with PMDC motors or brushless DC motors. Custom versions of the standard models are available.

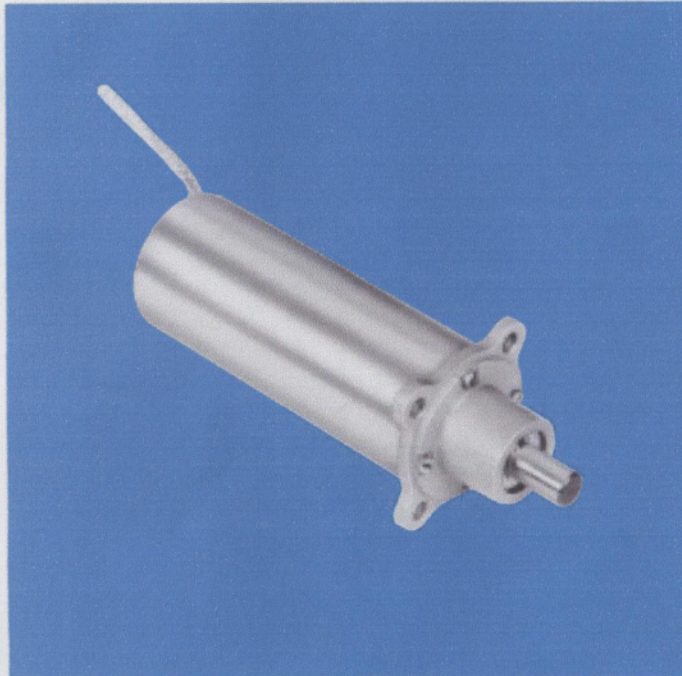


Performance		Industrial				Mil-Aero							
		CLL	CMM	IM	INB	BD	BL	CM	LL	MM	NB	SD	SS
Frame Size	mm	32	32	30.2 – 40.1	20.3 – 38.1 sq.	38.1	38.1	19.2 sq.	31.8	31.8	38.1 sq.	19.1	22.23
Length	mm	81 – 111.5	72.7 – 102.4	79.9 – 131.2	76.4 – 115.3	84.8 – 141.0	94.5 – 150.4	34.87 – 41.63	70.9 – 105.2	62 – 96.5	67.87 – 133.6	62.2 – 84.6	57.7 – 87.63
Gear Ratio	n:1	4 – 46656	4 – 46656	4 – 46656	3.82 – 46656	3.81 – 5211	3.81 – 5211	18.78 – 780.6	18.78 – 21808	18.78 – 21808	3.81 – 21808	3.82 – 36873	3.82 – 36873
Rated Torque	Nm	0.036 – 8.83	0.036 – 8.83	0.03 – 8.83	0.007 – 8.83	0.12 – 62.2	0.12 – 62.2	0.07 – 2.17	0.14 – 8.8	0.08 – 8.8	0.12 – 62.2	0.005 – 2.12	0.007 – 2.12
Power	W	0.9 – 14.6	0.9 – 14.6	2.7 – 15.7	7.2 – 66	2.1 – 21.9	3.9 – 34.2	0.77 – 1.0	0.2 – 12.4	0.186 – 8.8	9.8 – 64.2	0.036 – 1.5	0.03 – 3.5
Winding Voltage	VDC	6 – 75	6 – 50	12, 24	24, 27	6 – 115	6 – 115	6, 12, 24	6 – 75	6 – 50	27	6 – 50	6 – 50
Rated Speed	RPM	0.1 – 3860	0.1 – 4120	0.1 – 1300	0.2 – 6283	0.864 – 3412	0.576 – 2625	3.08 – 129	0.22 – 830	0.2 – 984	0.41 – 3281	0.16 – 3627	0.13 – 4495

LL GEARMOTORS

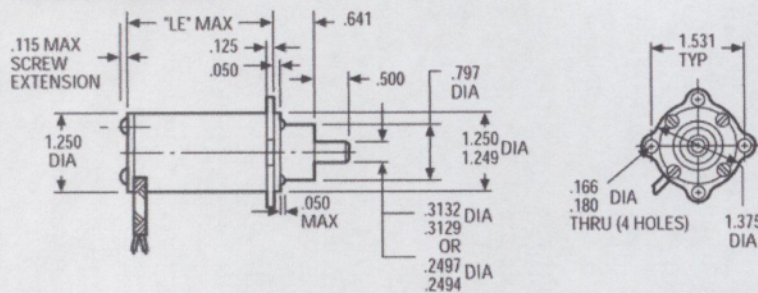
DC Permanent Magnet Planetary Gearmotors

A-2030

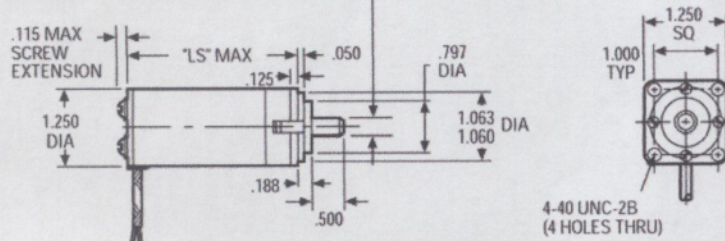


Dimensions

EARED FLANGE



SQUARE FLANGE



general design specification

torque rating: Up to 1,250 oz. in. maximum continuous torque

weight: 6 to 15 ounces depending on ratio

gears: Planetary gearing system. All gears are heat treated for consistently reliable performance and long life

shaft: Precision-ground, No. 416 nitrided stainless steel.

Options: length, smaller diameter, flats, pinions, gears, holes (through or tapped), threaded ends and tapers. Type of steel used may change depending upon variation selected

backlash: Varies with reduction but average unit will have less than 3°

gear inertia: 4.2×10^{-6} oz. in. sec.² @ input max

bearings: .250" dia. shaft uses double-shielded, life-lubricated ball bearings for -55°C to +85°C operation. A .313" dia. shaft uses needle bearings. Special lubricants available for temperature extremes

cables/leads: 8" shielded cable per MIL-C-7078 #22 AWG conductors per MIL-W-16878/4

cover: Brass

mounting flange: Die-cast aluminum

marking: Per MIL-STD-130

life: 1,000 hours continuous duty for 27 VDC units

options available:

- Internal slip clutch
- RFI filters to meet MIL-I-6181, MIL-I-26600 or MIL-STD-46
- Integral tachometer generators (See A-2016 for details)
- Electromechanical brakes

GROUP SIX Call: 800-433-3434 x110 www.grp6.com info@grp6.com

A-2030

Standard Part Numbers and Data

Type LL

SPEED REDUCTION RATIO	MAXIMUM CONTINUOUS TORQUE (oz. in.)	TORQUE MULTIPLIER RATIO	TYPE LL STANDARD PART NUMBER PREFIX*				dim. LE (in.)	dim. LS (in.)
			EARED FLANGE		SQUARE FLANGE			
			.313" shaft	.260" shaft	.313" shaft	.260" shaft		
18.78:1 27.94:1	20 29	12.0 17.0	5A501 5A503	5A2332 5A2333	5A502 5A504	5A2352 5A2353	2.79	3.23
81.37:1 121.10:1 147.70:1	70 105 128	41.0 62.0 75.0	5A505 5A507 5A509	5A2334 5A2335 5A2336	5A506 5A508 5A510	5A2354 5A2355 5A2356	2.92	3.38
352.60:1 524.60:1 639.90:1 780.60:1	247 366 445 544	145.0 215.0 262.0 320.0	5A511 5A513 5A515 5A517	5A2337 5A2338 5A2339 5A2340	5A512 5A514 5A516 5A518	5A2357 5A2358 5A2359 5A2360	3.19	3.64
➤ 1,528.00:1 2,273.00:1 3,382.00:1 4,126.00:1	850 ** 1,250 ** 1,250 ** 1,250 **	500.0 740.0 1,100 1,350	5A519 5A521 5A523 5A525	5A2341 5A2342 5A2343 5A2344	5A520 5A522 5A524 5A526	5A2361 5A2362 5A2363 5A2364	3.56	4.02
6,621.00:1 9,851.00:1 12,016.00:1 17,879.00:1 21,808.00:1	1,250 ** 1,250 ** 1,250 ** 1,250 ** 1,250 **	1,730 2,580 3,150 4,700 5,700	5A527 5A529 5A531 5A533 5A535	5A2345 5A2346 5A2347 5A2348 5A2349	5A528 5A530 5A532 5A534 5A536	5A2365 5A2366 5A2367 5A2368 5A2369	3.69	4.14

*.250" dia. shaft units limited to 600 oz. in. maximum continuous duty torque. Use .313" dia. shaft if torque requirements exceed this value

Max Cont. Torque: The values in this column are based upon gear train strength and capability for 1,000 hrs. minimum life

Max rated torque of motor selected x torque multiplier ratio must not exceed maximum continuous torque of gearbox

Max Intermittent Torque = 2 x Max Cont. Torque

Momentary Stall Torque = 5 x Max Cont. Torque (2,000 oz. in. max)

Minimum Gearbox Efficiency = Torque Multiplier Ratio divided by Speed Reduction Ratio x 100

*When You Order

Each of the basic motor armature windings (next page) can be used with any of the gear ratios listed above. To order, state the gear train standard part number prefix, plus a motor armature winding dash number. EXAMPLE: 5A501-1 is an 18.78:1 LL gearmotor with a "-1" armature winding, 24 volts, 11,000 rpm, 1.1 oz. in. torque, etc.

Basic Motor Data

Type LL

VOLTAGE (VDC)	SPEED no load (rpm)	TORQUE		CURRENT			CONSTANTS		WINDING DASH NUMBER*
		max rated (oz. in.)	theoretical stall (oz. in.)	max no load (amps)	max rated load (amps)	nominal stall (amps)	K _t (oz. in./ amp)	ARMATURE R (ohms)	
6	7,600-9,400	1.60	5.5	.78	2.00	7.00	.90	.80	-5
12	11,500-14,000	1.10	8.7	.63	1.70	5.30	1.20	1.35	-24
12	9,000-11,000	1.70	6.9	.47	1.50	5.30	1.51	2.13	-3
24	16,000-19,000	.75	11.0	.45	1.00	7.30	1.74	3.12	-21
24	14,400-17,000	.85	11.0	.37	.85	6.50	1.96	3.50	-4
24	12,000-14,500	1.00	8.7	.33	.80	4.50	2.26	5.08	-7
24	10,400-12,300	1.10	6.9	.28	.75	3.00	2.71	7.68	-1
24	7,400-8,900	1.60	5.5	.20	.70	1.70	3.77	13.43	-2
24	6,900-8,200	1.80	4.3	.19	.65	1.20	4.05	18.28	-8
24	6,200-7,400	1.80	3.4	.17	.60	.89	4.52	25.59	-22
24	5,200-6,200	1.20	3.4	.15	.45	.74	5.42	30.70	-10
50	7,600-9,400	1.50	5.7	.10	.25	.92	7.25	51.55	-11
75	14,000-17,000	1.00	8.6	.12	.29	1.60	6.33	45.10	-25
75	9,000-11,000	1.70	6.8	.08	.29	.85	9.36	84.10	-16
75	8,000-10,000	1.80	5.4	.07	.26	.60	10.56	119.40	-12
75	6,500-8,000	1.20	4.3	.06	.20	.37	13.58	194.00	-15
75	4,500-5,300	1.00	3.4	.05	.10	.23	16.89	303.00	-13

**Because of brush drop and field distortion, current and torque indicated will not always be attainable

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