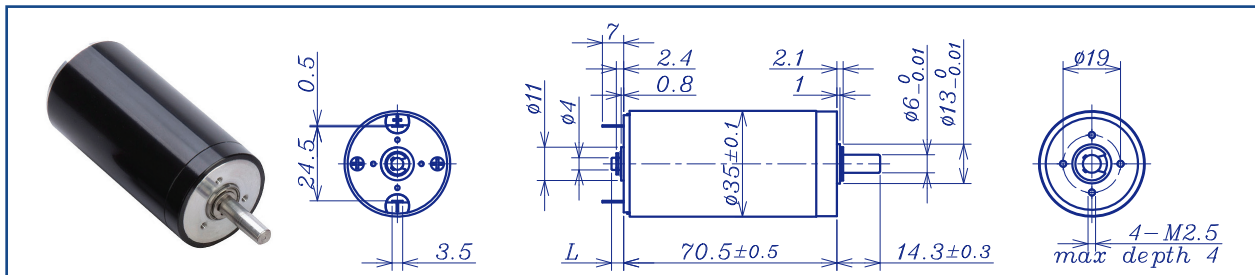


DC BRUSHED CORELESS MOTOR — GRAPHITE BRUSH

AM-CL3570GAN SERIES



		Graphite brush				Ball Bearings				
Motor Model		1206	1204	2408	2406	2404	4806	4804	4803	4802
Nominal voltage	V	12	12	24	24	24	48	48	48	48
No load speed $\pm 12\%$	rpm	6140	4150	7800	5930	4020	6060	4040	3240	1756
No load current $+150\%$	mA	190	130	155	100	70	55	33	26	12
Recommended Limit for Continuous Running	Max cont. torque	mN.m	63.3	73.3	59.9	69.3	81.1	67.4	86.6	100.3
	Rated Speed	rpm	5632	3695	7433	5506	3541	5686	3573	1223
	Rated Current	mA	3600	2800	2200	1900	1500	950	800	400
	Rated Power	W	37.4	28.4	46.6	40.0	30.1	40.2	32.4	12.9
Starting current	mA	41379	24490	43636	25263	12060	14545	6667	4068	1290
Stall torque	mN.m	765	669	1274	969	680	1092	749	568	331
Max power output	W	123.0	72.7	260.2	150.4	71.5	173.2	79.2	48.2	15.2
Maximum Efficiency	%	87	86	88	88	85	88	86	85	82
Terminal R $\pm 12\%$	Ω	0.29	0.49	0.55	0.95	1.99	3.3	7.2	11.8	37.2
Inductance (1KHz)	mH	0.036	0.11	0.11	0.21	0.45	0.83	1.71	2.75	9.6
Mech. time constant	ms	8.8	7.1	7.1	6.9	6.5	6.1	6.2	6.4	6.2
Moment of inertia	gcm ²	105.3	108.7	111	108.4	105.6	104.4	110.5	106.4	110.8
Torque constant	mN.m/A	18.6	27.5	29.3	38.5	56.7	75.4	112.9	140.6	258.6
Speed constant	rpm/V	514	348	326	248	168	127	85	68	37
Speed/torque gradient	rpm/mN.m	8.0	6.2	6.1	6.1	5.9	5.6	5.4	5.7	5.3
Weight	g	348.3	350.2	350.2	350.5	348.2	347.4	351.4	348.7	351.6

ADDITIONAL INFORMATION	
Motor thermal resistance:	9.1K/W
Motor thermal time constant:	1352S
Axial (dynamic):	5.5 N
Radial (5mm from mounting face):	28.0 N
Press-fit force (static):	100(1000) N
Max allowable screw depth into flange:	4.0 mm
Maximum radial play (5mm from mounting face):	≤ 0.02 mm
Axial play:	Preset
Maximum winding temperature:	85°C
Ambient temperature range:	-30 to 65°C
Standard rear shaft diameter:	4 mm
Standard rear shaft length "L":	3.7/5.5 mm

Total Length (Gearbox and Motor) $T=L_1+L_2+L_3$				
L136GP	L140GP	L145GP	L2:CL35	L3:EN225
39.6	46.8	62.8	70.5	10.7
48.6	58.3	74.8		L3:EN24T
57.6	69.8			12.0

Remarks: Client can choose gearbox and encoder to match with this motor. Some combinations are listed here for reference.

AM-CL3570GAN Combination Scheme

Recommended Gearbox:
Planetary Gearbox:
AM-36GP
AM-40GP
AM-45GP

Recommended Encoder:
Encoder S: AM-EN2211S***
2~3 Channels
Encoder T: AM-EN2412T***
2~3 Channels

For more combination specs, visit Assun Motor website.

Motor data tested at 25°C. Motor operation exceeding continuous limits will reduce life or result in damage.
At elevated ambient temperatures, load current must be reduced.

Download datasheet: <https://assunmotor.com/documents-download>

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