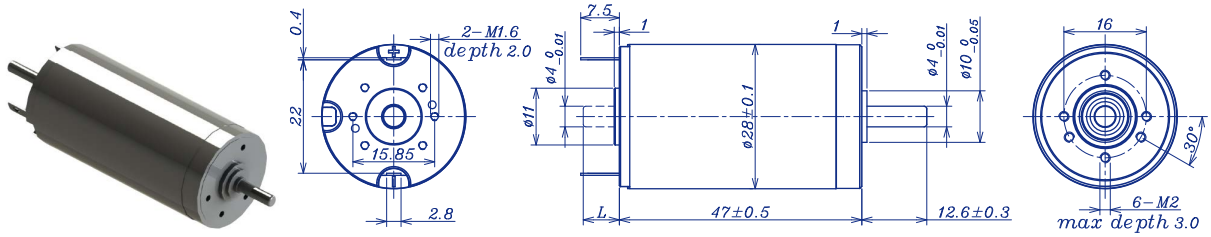
AM-CL2847MAE Series



Motor Model			Precious brush 0605	Precious brush 0905	Ball bearings 1205	Ball bearings 1805	Ball bearings 2405	Ball bearings 4805
Nominal voltage		V	6	9	12	18	24	48
No load speed	±12%	rpm	5110	5200	5100	5220	5100	5200
No load current	Max 150%	mA	81	56	40.5	28	20	10.5
Recommend limit for continuous operating	Max cont. torque	mN.m	23.7	35.3	38.3	36.8	39.4	38.6
	Rated speed	rpm	4621	4479	4334	4469	4340	4483
	Rated current	mA	2200	2200	1750	1150	900	450
	Rated power	W	11.5	16.6	17.4	17.2	17.9	18.1
Starting current		mA	22222	15517	11429	7826	5926	3200
Stall torque		mN.m	247.4	254.6	255	255.9	264.5	280.2
Maximum power output		W	33.1	34.7	34	35	35.3	38.1
Maximum efficiency		%	88	88	88	88	89	89
Terminal resistance	±12%	Ω	0.27	0.58	1.05	2.3	4.05	15
Inductance	(1KHZ)	mH	Null	0.087	0.18	Null	Null	2.66
Mechanical time constant		ms	4.9	4.8	4.7	4.8	4.5	4.4
Moment of inertia		gcm²	22.5	22.5	22.5	22.5	22.5	22.5
Torque constant		mN.m/A	11.2	16.5	22.4	32.8	44.8	87.9
Speed constant		rpm/V	855	580	427	291	213	109
Speed/torque gradient		rpm/mN.m	20.7	20.4	20	20.4	19.3	18.6
Weight		g	158	158	158	158	158	158

ADDITIONAL INFORMATION

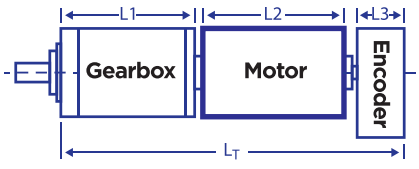
Motor thermal resistance:	15.6 K/W	Motor thermal time constant:	1086 S
Axial (dynamic):	7.3 N	Radial (5mm from mounting face):	28.0 N
Press-fit force (static):	60(120)N	Max allowable screw depth into flange:	3.0 mm
Maximum radial play (5mm from mounting face):	≤0.02 mm	Axial play:	Preset
Maximum winding temperature:	125°C	Ambient temperature range:	-40 to 85 °C

Total Length (Gearbox and Motor): L_T=L1+L2+L3

L1:26GP	L1: 28GP	L1:32GP	L2:CL28	L3: EN22S
25.7	26.1	27.4	47.0	10.7
36	33.3	35.9		L3: EN24T
44.5	40.5	44.4		12
53	47.7	52.9		

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

AM-CL2847GAE Combination Scheme



Recommended Gearbox:
Planetary Gearbox:
AM-26GP
AM-28GP
AM-32GP

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

For more combination specs, visit Assun Motor werbsite.

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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