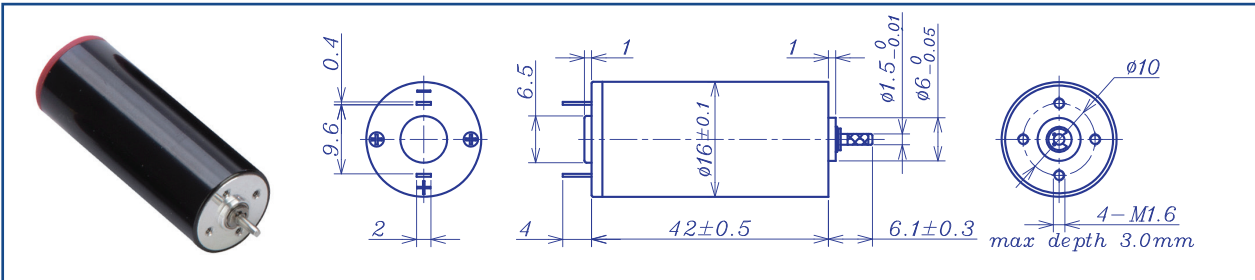


AM-CL1642MAN SERIES

DC BRUSHED MOTOR

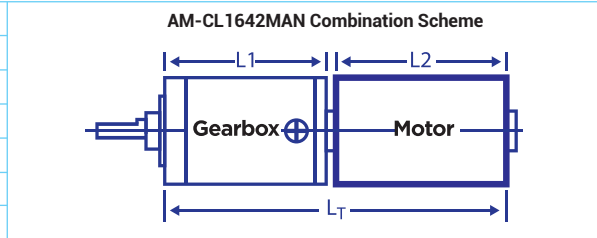


Motor Model	Precious metal brush					Ball bearings				
		0609	1210	2409	2411	3609	3611	4809	4811	
Nominal voltage	V	6	12	24	24	36	36	48	48	
No load speed	±12% rpm	9222	9952	9450	11120	9207	11682	9339	11253	
No load current	Max 150% mA	19	10.5	6.0	7.0	4.5	5.0	3.5	4.2	
Recommend limit for continuous operating	Max cont. torque	mN.m	5.3	5.0	5.2	4.2	5.4	4.3	5.2	4.3
	Rated speed	rpm	8094	8874	8393	10215	8090	10700	8122	10242
	Rated current	mA	850	450	220	210	150	150	110	110
	Rated power	W	4.5	4.7	4.5	4.5	4.6	4.8	4.4	4.6
Starting current	mA	7059	4068	1920	2500	1204	1731	821	1182	
Stall torque	mN.m	44	47	46	51	45	51	40	48	
Maximum power output	W	10.5	12.1	11.4	14.9	10.8	15.5	9.8	14.1	
Maximum efficiency	%	90	90	89	90	88	90	87	88	
Terminal resistance	±12% Ω	0.85	2.95	12.5	9.6	29.9	20.8	58.5	40.6	
Inductance (1KHZ)	mH	0.054	0.2	0.95	0.66	2.22	2.22	3.8	3.8	
Mechanical time constant	ms	7.0	6.7	6.4	6.8	6.1	7.3	7.1	9.6	
Moment of inertia	gcm ²	3.14	3.01	3.01	3.01	2.8	3.01	2.9	3.9	
Torque constant	mN.m/A	6.2	11.5	24.2	20.6	37.2	29.3	48.9	40.6	
Speed constant	rpm/V	1541	831	395	465	257	325	195	235	
Speed/ torque gradient	rpm/mN.m	211	214	204	217	206	231	234	235	
Weight	g	39.0	38.5	38.5	38.5	38.5	38.6	37.9	38.1	

ADDITIONAL INFORMATION

Motor thermal resistance:	K/W	Motor thermal time constant:	S
Axial (dynamic):	3.4 N	Radial (5mm from mounting face):	6.0 N
Press-fit force (static):	36N	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:	85°C	Ambient temperature range:	-30 to 65°C
Standard rear shaft diameter:	N/A	Standard rear shaft length "L":	N/A

Total Length (Gearbox and Motor): L _T =L1+L2+L3			
L1:16GP	L1: 20GP	L2:CL16	L3
15.9	18.8	42.0	
23.3	23.6		
27.0	28.4		



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

Recommended Gearbox:
Planetary Gearbox:
AM-16GP
AM-20GP
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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