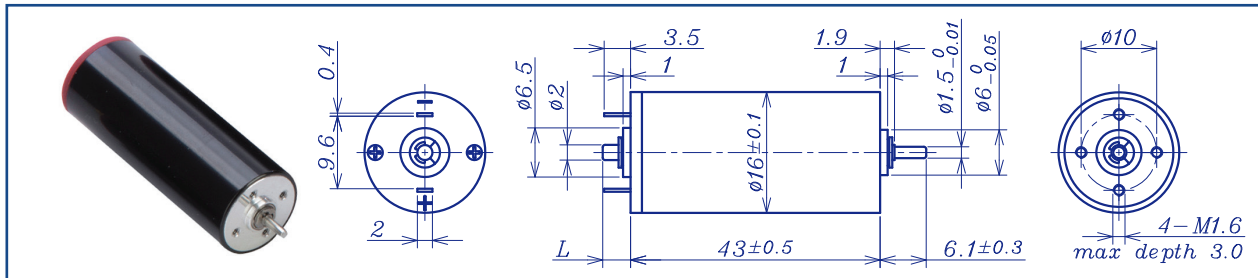


AM-CL1643MAN SERIES



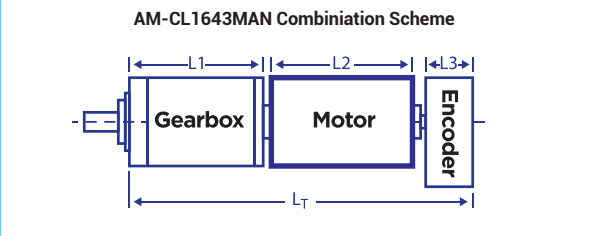
Precious metal brush                      Ball bearings

Motor Model		0307	0305	0607	0605	0907	1206	1204	2607	
Nominal voltage	V	3	3	6	6	9	12	12	26	
No load speed	±12% rpm	6730	5242	6620	4987	6878	6360	4400	7080	
No load current	Max 150% mA	65	50	32	23	24	16	10	10	
Recommend limit for continuous operating	Max cont. torque	mN.m	3.3	4.0	5.3	5.4	5.3	5.4	6.2	5.2
	Rated speed	rpm	5768	4058	5207	3607	5462	5008	2728	5580
	Rated current	mA	850	800	650	500	450	320	250	160
	Rated power	W	2.0	1.7	2.9	2.0	3.0	2.8	1.8	3.0
Starting current	mA	5556	3371	2927	1754	2093	1446	642	718	
Stall torque	mN.m	23	18	25	20	26	25	16	24	
Maximum power output	W	4.1	2.5	4.3	2.6	4.6	4.2	1.9	4.5	
Maximum efficiency	%	80	77	80	78	80	80	77	78	
Terminal resistance	±12% Ω	0.54	0.89	2.05	3.42	4.3	8.3	18.7	36.7	
Inductance	(1KHZ) mH	0.018	0.037	0.11	0.21	0.24	0.52	1.1	2.01	
Mechanical time constant	ms	9.3	9.0	8.2	8.2	8.7	7.7	8.3	8.7	
Moment of inertia	gcm <sup>2</sup>	3.04	2.94	2.94	3.11	3.07	2.94	2.91	2.87	
Torque constant	mN.m/A	4.2	5.4	8.6	11.4	12.4	17.8	25.6	34.6	
Speed constant	rpm/V	2270	1774	1116	841	773	536	372	276	
Speed/ torque gradient	rpm/mN.m	291	293	267	253	269	250	272	289	
Weight	g	38.9	38.6	38.7	40.1	40.1	38.7	38.5	38.4	

ADDITIONAL INFORMATION

Motor thermal resistance:	24.9K/W	Motor thermal time constant:	412 S
Axial (dynamic):	1.0 N	Radial (5mm from mounting face):	1.8 N
Press-fit force (static):	16(70)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:	85°C	Ambient temperature range:	-30 to 65°C
Standard rear shaft diameter:	2 mm	Standard rear shaft length "L":	0/3.7 mm

Total Length (Gearbox and Motor): L <sub>T</sub> =L1+L2+L3			
L1:16GP	L1: 19GP	L2:CL16	L3: EN16S
15.9	18.8	43.0	10.7
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-19GP

**Recommended Encoder:**  
Encoder S: AM-EN1611S\*\*\*  
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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