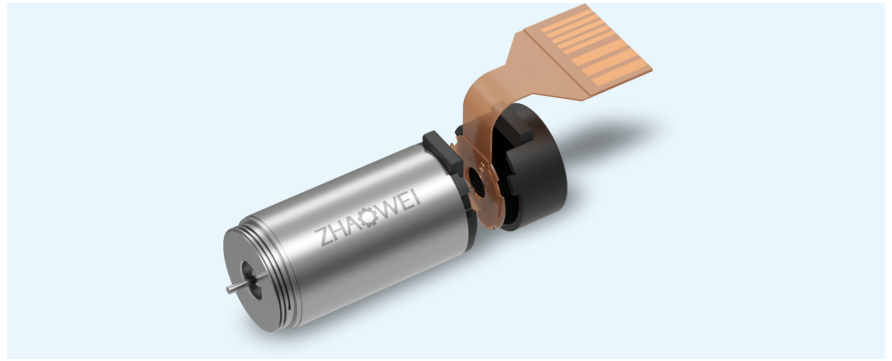


MC1226-01

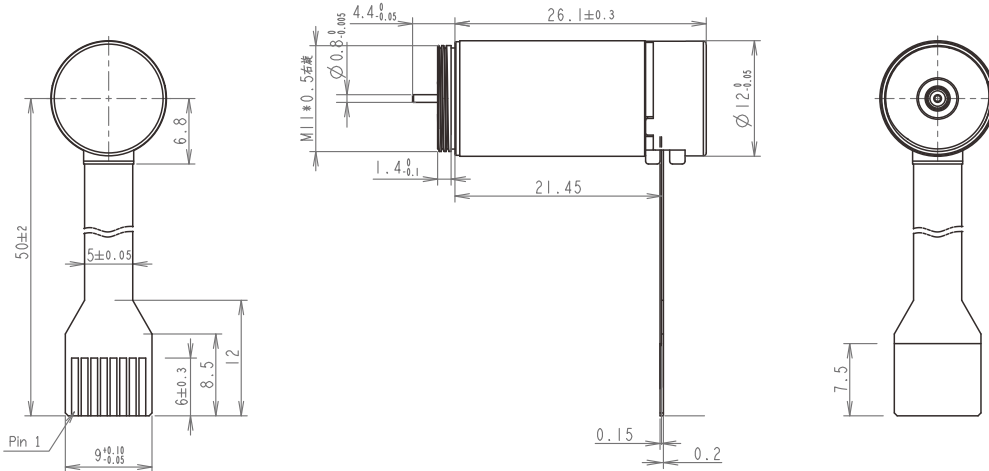
Φ12mm Brushless coreless motor

Main parameters

- Two-magnetic pole
- 9.9W
- 20970rpm
- 2.38mNm



Technical illustration



Motor data (Rated value)

Rated voltage	V	12
Air -load speed	rpm	28600±10%
No-load current	A	78±50%
Rated speed	rpm	20970±10%
The rated torque	mNm	2.38
Rated current	A	0.69±50%
Blocking torque	mNm	8.9±7%
Blocking current	A	2.38±20%
Maximum efficiency	%	67±7%

Motor constants (Rated value)

Phase terminal resistance	Ω	5.3±10%
Phase terminal inductance	mH	0.042±10%
Torque constant	mNm/A	3.87±20%
Speed constant	rpm/V	2383±20%
Speed/torque gradient	rpm/mNm	3213±20%
Mechanical time constant	ms	4.5±20%
Rotor inertia	gcm ²	0.138±20%

Thermal parameter

Case-Environmental thermal resistance	K/W	38.6
Wind-Case thermal resistance	K/W	7.5
Winding time constant	s	3.2
Motor heat time constant	s	210
Environmental temperature	°C	-20~+100
Maximum winding temperature	°C	125

Mechanical parameter (Pearl bearing)

Maximum speed (rpm)	40 000
Axial gap under axial load (mm)	< 0.15 N 0 > 0.15 N 0.06 (max)
Radial gap	preloaded
Maximum axial dynamic load (N)	2
Maximum allowable installation power (N)	10
Maximum radial load (2mm from Flange) (N)	5

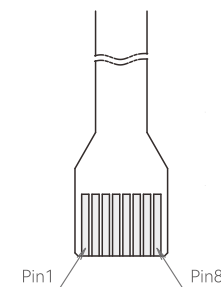
Note: Can be customized according to customer requirements

Pin model

Molex 52207-0885

Note: Can be customized according to customer requirements

Pin definition



pin1	motor winding 1
pin2	motor winding 2
pin3	motor winding 3
pin4	Grounded
pin5	VHall (3.3-24 VDC)
pin6	Hall sensor 1
pin7	Hall sensor 2
pin8	Hall sensor 3