

Stepper Motors

0,2 mNm

Two phases, 20 steps per revolution

ADM0620-2R-ww-ee

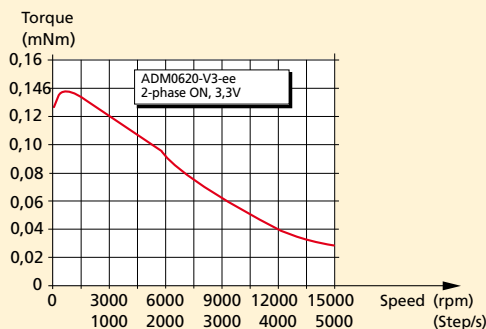
	ww =	V-3		V-6		Drive mode
		Voltage	Current	Voltage	Current	
1 Nominal voltage		3	6 – 30	6	6 – 30	V DC
2 Nominal current per phase (both phases ON)		–	0,075	–	0,04	A
3 Phase resistance (at 20°C)			30		120	Ω
4 Phase inductance (1kHz)			3,5		9,9	mH
5 Back-EMF amplitude			0,5		0,9	V/k step/s
6 Holding torque ¹⁾ (at nominal current in both phases)	0,2					mNm
7 Holding torque ¹⁾ (at twice the nominal current)	0,28					mNm
8 Step angle (full step)	18					degree
9 Angular accuracy ²⁾	± 5					% of full step
10 Residual torque	0,04					mNm
11 Rotor inertia	0,7					· 10 ⁻⁹ kgm ²
12 Resonance frequency (at no load)	170					Hz
13 Electrical time constant	0,10					ms
14 Ambient temperature range	-35 ... +70					°C
15 Winding temperature tolerated, max.	130					°C
16 Thermal resistance winding-ambient air	165					°C/W
17 Thermal time constant	120					s
18 Shaft bearings	ball bearings					
19 Shaft load, max.:						
– radial (3 mm from bearing)	0,3					N
– axial	0,5					N
20 Shaft play, max.:						
– radial (0,2N)	20					µm
– axial (0,2N)	50					µm
21 Isolation test voltage	200					V DC
22 Motor dimensions:						
– diameter	6					mm
– length	9,5					mm
– shaft diameter	0,8					mm
23 Weight	1,4					g

1) with bipolar driver

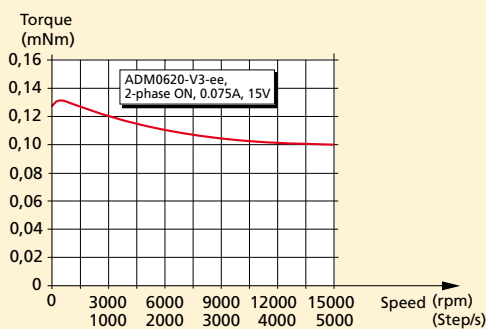
2) 2 phases ON, balanced phase currents

3) Curves measured with a load inertia of $8 \cdot 10^{-9}$ kgm²

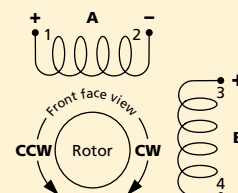
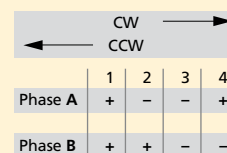
4) Testing the motor at lower supply voltages in current mode will result in a decrease in torque at higher speed, even with the same current setting.



Voltage mode (V) ³⁾
Driver AD VL M1S

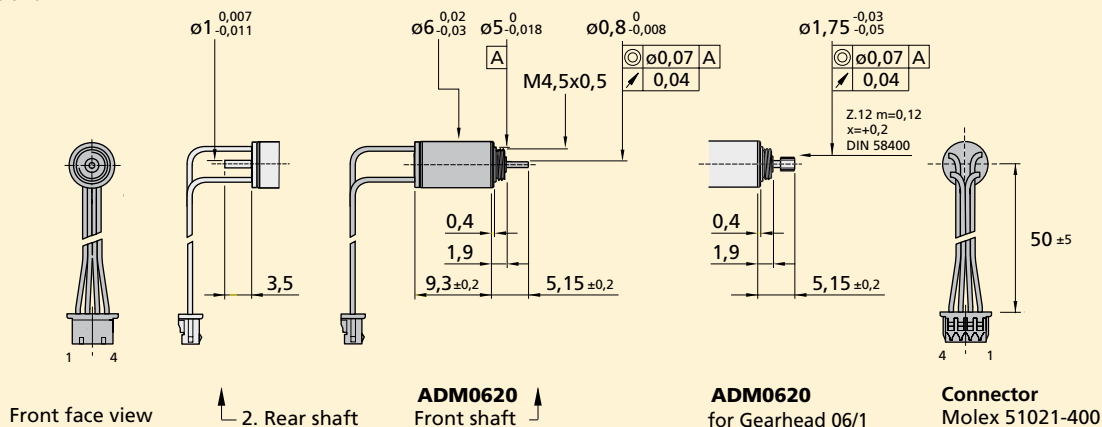


Current mode (A) ^{3) 4)}
Driver AD CM M1S

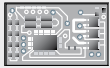
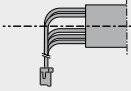

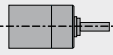


Dimensional drawing

- standard
- optional



Combinations

Drive Electronics	Encoders	Stepper Motors	Precision Gearheads
			
AD VL M_S AD CM M_S		ADM0620	06/1

Ordering information

Example: **ADM0620-2R-V3-05**

Motor type	Bearings (rr)	Winding (ww)	Motor execution (ee)		
			Only front output shaft	With double output shaft	Front output shaft
ADM = ARSAPE Disk Motor 06 = Motor diameter (mm) 20 = Steps per revolution	Standard: ball bearings				
ADM0620	-2R (standard)	-V2 ¹⁾ -V3 -V6	-01 -05	-00 -06	Plain shaft Plain shaft Pinion 06/1

¹⁾ Non-standard windings, for data please inquire with your point of sales.