

Stepper Motors

6,0 mNm

Two phase, 24 steps per revolution
PRECiStep® Technology

AM1524-ww-ee

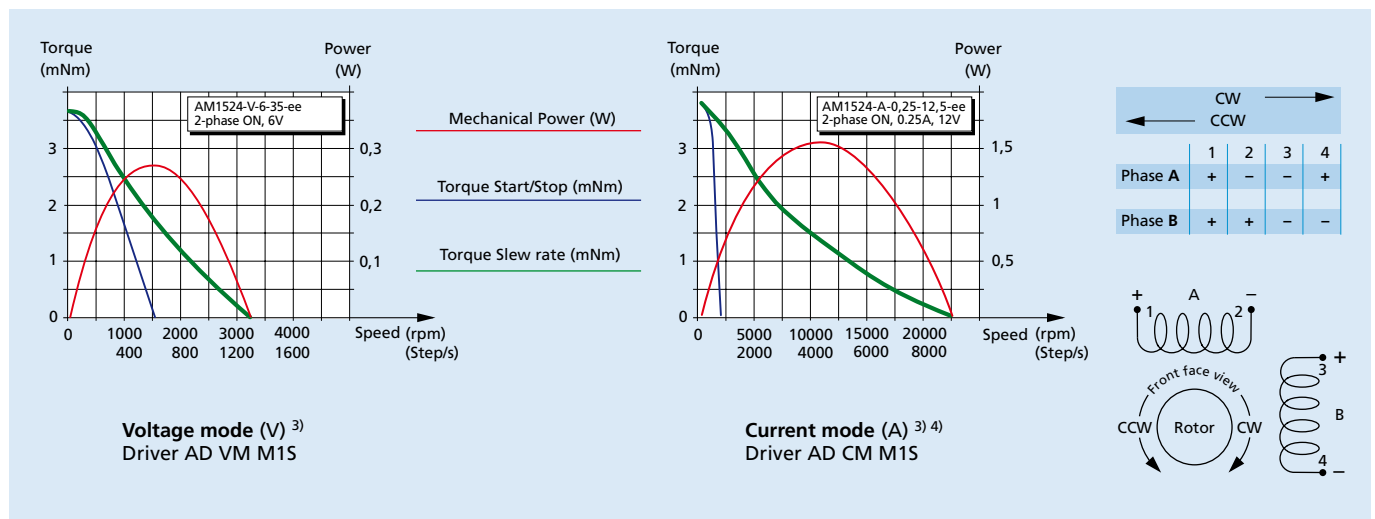
	V-6-35		V-12-150		A-0,25-12,5		A-0,45-3,6		Drive mode	
	Voltage	Current	Voltage	Current	Voltage	Current	Voltage	Current		
1 Nominal voltage	6	–	12	–	3,5	–	2	–	V DC	
2 Nominal current per phase (both phases ON)	–	0,15	–	0,075	–	0,25	–	0,45	A	
3 Phase resistance (at 20°C)	35		138		12,5		3,6		Ω	
4 Phase inductance (1kHz)	16,5		70,6		6,3		1,9		mH	
5 Back-EMF amplitude	7,2		14,7		4,4		2,4		V/k step/s	
6 Holding torque ¹⁾ (at nominal current in both phases)	6,0									mNm
7 Holding torque ¹⁾ (at twice the nominal current)	10									mNm
8 Step angle (full step)	15									degree
9 Angular accuracy ²⁾	± 10									% of full step
10 Residual torque	0,9									mNm
11 Rotor inertia	45									·10 ⁻⁹ kgm ²
12 Resonance frequency (at no load)	120									Hz
13 Electrical time constant	0,5									ms
14 Ambient temperature range	–35 ... +70									°C
15 Winding temperature tolerated, max.	130									°C
16 Thermal resistance winding-ambient air	37									°C/W
17 Thermal time constant	220									s
18 Shaft bearings	sintered bronze sleeves (standard)				ball bearings, preloaded (optional)					
19 Shaft load, max.:										
– radial (3 mm from bearing)	0,5				6,0					N
– axial	0,5				2,0					N
20 Shaft play, max.:										
– radial (0,2N)	15				12					µm
– axial (0,2N)	150				–0					µm
21 Isolation test voltage	200									V DC
22 Weight	12									g

¹⁾ with bipolar driver

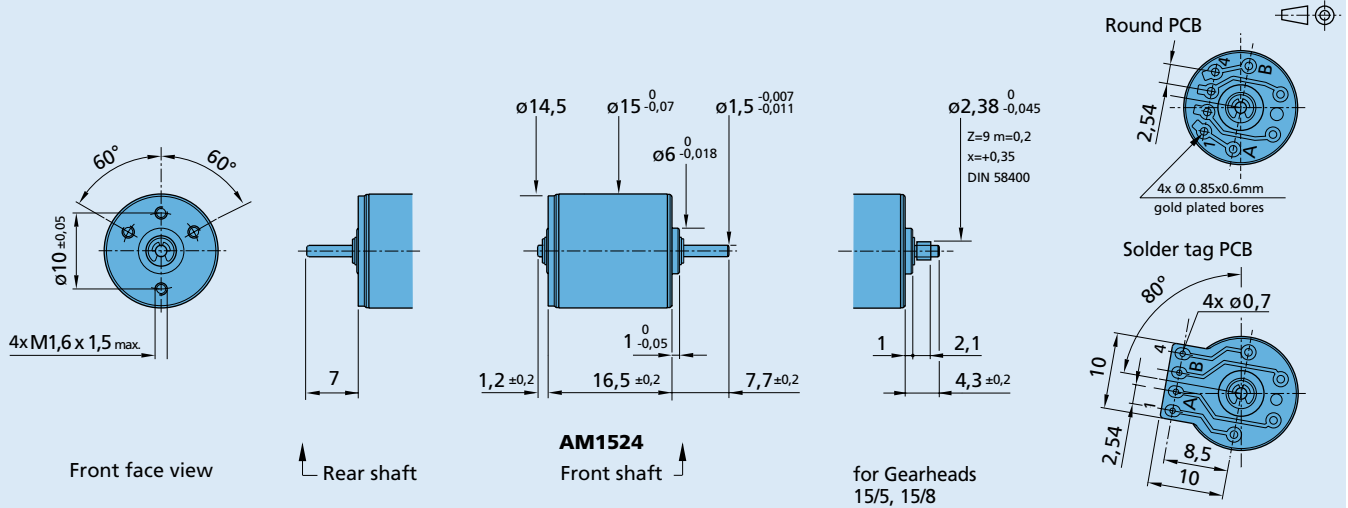
²⁾ 2 phases ON, balanced phase currents

³⁾ Curves measured with a load inertia of 10 · 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



Dimensional drawing



Combinations

Drive Electronics	Encoders	Stepper Motors	Gearheads / Lead screws
AD VL M_S AD VM M_S AD CM M_S	AE 23B8	AM1524	15A 15/5 15/8* 16/7 Lead screws M2 - M2,5 - M3

* Zero Backlash Gearheads

Ordering information

Example: **AM1524-2R-V-6-35-57**

Motor type	Bearings (rr)	Winding (wvw)	Motor execution (ee)		
AM = Motor design 15 = Motor diameter (mm) 24 = Steps per revolution	Special lubricant options available		Only front output shaft	With double output shaft	Front output shaft
AM1524	- (sleeve bearings) -2R (2 ball bearings)	-V-3-10* -V-6-35 -V-12-150 -V-24-590* -A-0,25-12,5 -A-0,45-3,6	-55 (Round PCB) -57 (Round PCB) -70 (Round PCB) -83 (Round PCB) -05 (Solder tag PCB) -07 (Solder tag PCB) -72 (Solder tag PCB) -23 (Solder tag PCB)	-54 (Round PCB) -56 (Round PCB) -71 (Round PCB) -82 (Round PCB) -04 (Solder tag PCB) -06 (Solder tag PCB) -73 (Solder tag PCB) -22 (Solder tag PCB)	Plain shaft, L=7,7 mm for gearhead 16/7 Pinion 15/5, 15/8 Plain shaft, L=4,3 mm for gearhead 15A Plain shaft for lead screw M2 - M2,5 - M3 Plain shaft, L=7,7 mm for gearhead 16/7 Pinion 15/5, 15/8 Plain shaft, L=4,3 mm for gearhead 15A Plain shaft for lead screw M2 - M2,5 - M3 -04-0904 -06-0904 -73-0904
			* Non-standard windings, for data please inquire with your point of sales		