

Stepper Motors

Two phases, 24 steps per revolution



For combination with:

Gearheads: 20/1, 22E, 22/2, 22/5, 23/1

Encoders: AE 23B8, IE2

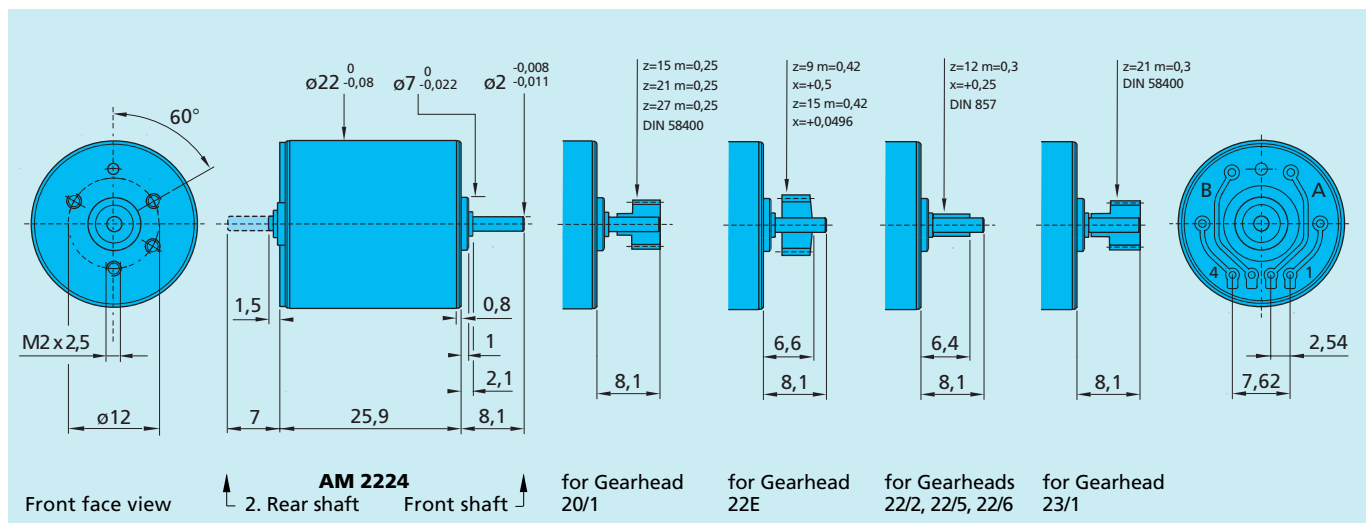
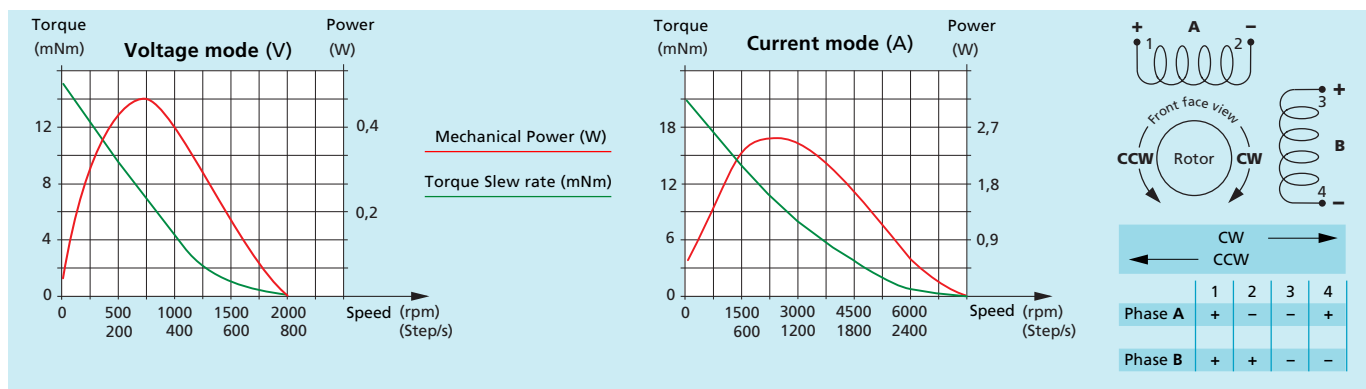
Drive Electronics: AD VL M, AD VM M, AD CM M

Series AM 2224

	AV - 4,8		AV - 18		V - 12		V - 24	
	Current mode	Voltage mode	Current mode	Voltage mode	Voltage mode			
1 Nominal voltage U_N	6 ... 30	3	6 ... 30	6	12	24	V DC	
2 Phase resistance (at 20°C)	4,8	4,8	18	18	75	290	Ω	
3 Phase inductance (1kHz)	8,5	8,5	35	35	135	620	mH	
4 Nominal current per phase (both phases ON)	0,50	0,60	0,25	0,33	0,16	0,09	A	
5 Back-EMF amplitude	8,3	8,3	16,7	16,7	33,0	67	V/k step/s	
6 Holding torque ¹⁾ (at nominal current in both phases)	26						mNm	
7 Holding torque ¹⁾ (at twice the nominal current)	45						mNm	
8 Residual and friction torque	2						mNm	
9 Thermal resistance winding-ambient air	28						°C/W	
10 Winding temperature tolerated, max.	130						°C	
11 Ambient temperature range	-40 ... +70						°C	
12 Thermal time constant	600						s	
13 Step angle (full step)	15						degree	
14 Angular accuracy ²⁾	± 5						% of full step	
15 Rotor inertia	228						$\cdot 10^{-9}$ kgm ²	
16 Shaft bearings	sintered bronze sleeves		ball bearings, preloaded					
17 Shaft load, max.:	(standard)		(optional)					
- radial (3 mm from bearing)	1,5		8,0				N	
- axial	0,5		3,0				N	
18 Shaft play, max.:								
- radial (1N)	30		15				μ m	
- axial (1N)	200		-0				μ m	
19 Weight	43						g	
20 Isolation test voltage	200						V	
21 Resonance frequency	100						Hz	
22 Electrical time constant	1,7						ms	

¹⁾ with bipolar driver

²⁾ 2 phases ON, balanced phase current



For notes on technical data refer to „Technical Information“

Specifications subject to change without notice

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