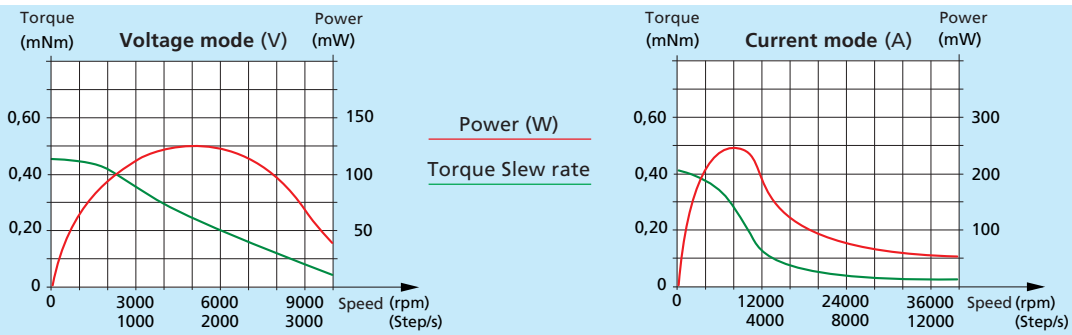
Two phases, 20 steps per revolution

For combination with:
Gearheads: 08/1, 10/1
Drive Electronics: AD VL M, AD VM M, AD CM M

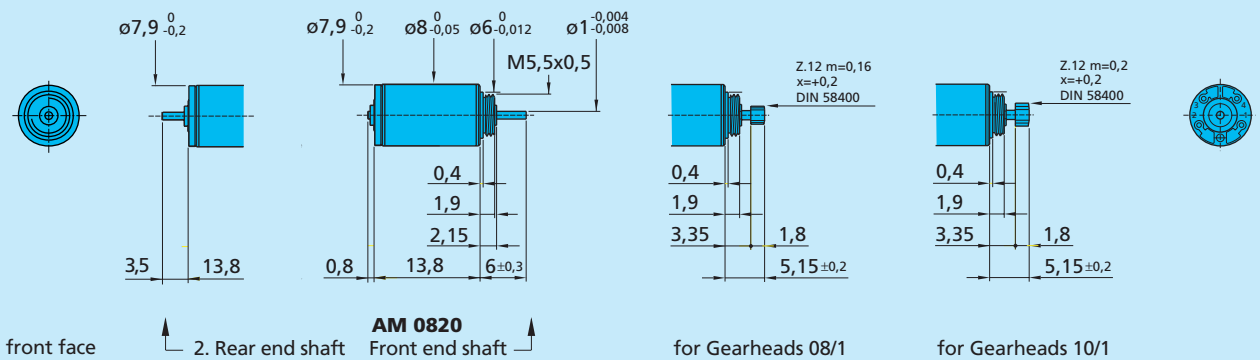
Series AM 0820

		V 3	V 5	A 0,225	
		Voltage mode		Current mode	
1	Nominal voltage U_N	3	5		V DC
2	Phase resistance (at 20°C)	16	56	7,3	Ω
3	Phase inductance (1kHz)	5,2	16	2,1	mH
4	Nominal current per phase (both phases ON)	0,14	0,08	0,225	A
5	Back-EMF amplitude	0,8	1,4	0,5	V/k step/s
6	Holding torque [1] (at nominal current in both phases)	0,65			mNm
7	Holding torque [1] (at twice the nominal current)	1			mNm
8	Detent torque	0,06			mNm
9	Thermal resistance winding-ambient air	76			K/W
10	Winding temperature tolerated, max.	130			°C
11	Ambient temperature range	–40 ... +70			°C
12	Thermal time constant	180			s
13	Step angle (full step)	18			degree
14	Angular accuracy [2]	± 5			% of full step
15	Rotor inertia	2,75			$\cdot 10^{-9}$ kgm^2
16	Shaft bearings	sintered bronze sleeves	ball bearings, preloaded		
17	Shaft load, max.:	(standard)	(optional)		
	– radial (2,5 mm from bearing)	0,3	3,0		N
	– axial	0,2	1,5		N
18	Shaft play, max.:				
	– radial (0,2N)	15	10		µm
	– axial (0,2N)	140	~0		µm
19	Weight	3,3			g
20	Test voltage (1 min.)	500			Vrms
21	Resonance frequency	170			Hz
22	Electrical time constant	0,29			ms

[1] with bipolar driver
[2] 2 phases ON, balanced phase current



Torque/Speed curves measured with a load inertia of 10 $\cdot 10^{-9}$ kgm^2



For notes on technical data refer to „Technical Information"

Specifications subject to change without notice