

Stepper Motors

116 mNm

Two phase, 100 steps per revolution, microstepping

Series DM52100S

	Winding	3300	1300	
1 Phase resistance (at 20°C)	± 14%	0,7	4,4	Ω
2 Phase inductance	± 20%	1,3	8	mH
3 Nominal current (1 phase ON)	typ.	3,3	1,3	A
4 Boosted current (1 phase ON)	typ.	5	1,9	A
5 Induced voltage at 600 min ⁻¹	± 10%	2,2	5,82	V DC
6 Torque constant	± 10%	35	92,6	mNm/A
7 Static torque	± 10%	116		mNm
8 Boosted static torque	typ.	174		mNm
9 Reluctant torque	typ.	7		mNm
10 Friction torque	max.	4		mNm
11 Thermal resistance (coil-air)	typ.	10		°C/W
12 Thermal time constant	typ.	14		min
13 Recommended ambient temperature range	typ.	-20 ... 50		°C
14 Max temperature for coils	max.	100		°C
15 Number of pole pairs		25		
16 Phase shift	± 5%	90		°
17 Phase fluctuation	max.	3		°
18 Maximum speed	max.	5 000		min ⁻¹
19 Rotor inertia	typ.	8		kgm ² · e ⁻⁷
20 Mass	typ.	185		g
21 Electrical time constant	typ.	1,8		ms
22 Max angular acceleration (boosted)	typ.	217 000		rad/s ²
23 Insulation voltage	typ.	500		V DC

