

Stepper Motors

62 mNm

Two phase, 100 steps per revolution, microstepping

Series DM40100R

	Winding	2630		1550		0940		Connection
		Parallel	Serial	Parallel	Serial	Parallel	Serial	
1 Phase resistance (at 20°C)	± 14%	0,9	3,8	2,9	11,8	7,5	30	Ω
2 Phase inductance	± 20%	1,15	4,6	3,3	13,2	9	36	mH
3 Nominal current (1 phase ON)	typ.	2,63	1,32	1,55	0,78	0,94	0,47	A
4 Boosted current (1 phase ON)	typ.	5,09	2,55	4,6	2,3	1,81	0,91	A
5 Induced voltage at 600 min ⁻¹	± 10%	1,47	2,95	2,5	5	4,14	8,27	V DC
6 Torque constant	± 10%	23,4	46,9	39,8	79,6	65,8	131,6	mNm/A
7 Static torque	± 10%	62						mNm
8 Boosted static torque	typ.	120						mNm
9 Reluctant torque	typ.	3						mNm
10 Friction torque	max.	1						mNm
11 Thermal resistance (coil-air)	typ.	14						°C/W
12 Thermal time constant	typ.	12						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.	5						°
18 Maximum speed	max.	10 000						min ⁻¹
19 Rotor inertia	typ.	2,7						kgm ² · e ⁻⁷
20 Mass	typ.	125						g
21 Electrical time constant	typ.	1,2						ms
22 Max angular acceleration (boosted)	typ.	444 000						rad/s ²
23 Insulation voltage	typ.	500						V DC

