

Brushless DC-Gearmotors

4 Pole Technology

100 mNm

Series 2622 ... B

Values at 22°C and nominal voltage		2622 S	006 B	012 B	
1	Nominal voltage	U_N	6	12	V
2	Terminal resistance, phase-phase	R	6,97	28,2	Ω
3	Efficiency, max.	$\eta_{max.}$	79	79	%
4	No-load speed	n_o	6 400	6 400	min ⁻¹
5	No-load current, typ.	I_o	0,01	0,005	A
6	Stall torque	M_H	7,543	7,453	mNm
7	Friction torque, static	C_o	0,035	0,035	mNm
8	Friction torque, dynamic	C_v	$8,85 \cdot 10^{-6}$	$8,85 \cdot 10^{-6}$	mNm/min ⁻¹
9	Speed constant	k_n	1 085	543	min ⁻¹ /V
10	Back-EMF constant	k_E	0,922	1,842	mV/min ⁻¹
11	Torque constant	k_M	8,8	17,6	mNm/A
12	Current constant	k_I	0,114	0,057	A/mNm
13	Slope of n-M curve	$\Delta n / \Delta M$	859	870	min ⁻¹ /mNm
14	Terminal inductance, phase-phase	L	486	1 945	μH
15	Mechanical time constant	τ_m	71	72	ms
16	Rotor inertia	J	7,9	7,9	gcm ²
17	Angular acceleration	$\alpha_{max.}$	9	9	$\cdot 10^3$ rad/s ²
18	Thermal resistance	R_{th1} / R_{th2}	33 / 27		K/W
19	Thermal time constant	τ_{w1} / τ_{w2}	23,6 / 222		s

Integrated Gearhead

Housing material		plastic	
Geartrain material		metal	
Backlash, at no-load	≤	4	°
Bearings on output shaft		ball bearing	
Shaft load max.:			
– radial (5 mm from mounting face)	≤	15	N
– axial	≤	5	N
Shaft press fit force, max.	≤	10	N
Shaft play:			
– radial (5 mm from mounting face)	≤	0,03	mm
– axial	≤	0,25	mm
Operating temperature range		– 25 ... + 80 °C	

Specifications

reduction ratio (rounded)	output speed up to n_{max} min ⁻¹	weight with motor g	output torque		direction of rotation (reversible)	efficiency %
			continuous operation M_{max} mNm	intermittent operation M_{max} mNm		
8 : 1	635	25	9	30	=	81
22 : 1	223	26	23	75	≠	73
33 : 1	151	26	30	100	=	60
112 : 1	44	27	93	180	≠	59
207 : 1	24	27	100	180	=	53
361 : 1	14	27	100	180	=	53
814 : 1	6	28	100	180	=	43
1 257 : 1	4	29	100	180	=	43

Note: output speed at 5000 min⁻¹ input speed. Based on motor 2610 ... B.

