Brushless DC-Gearmotors 100 mNm

For combination with
Drive Electronics:
Speed Controller

Series 2622 ... B

		2622 S		006 B	012 B	
1	Nominal voltage	U_N		6	12	Volt
2	Terminal resistance, phase-phase	R		7,0	28,2	Ω
3	Output power	$P_{2\ max.}$		1,92	1,91	W
4	Efficiency	$\eta_{max.}$		78	78	%
5	No-load speed	n_o		6 200	6 200	rpm
6	No-load current	I_o		0,012	0,006	A
7	Stall torque	M_H		7,73	7,68	mNm
8	Friction torque, static	C_o		0,025	0,025	mNm
9	Friction torque, dynamic	C_v		$1{,}35 \cdot 10^{-5}$	$1{,}35 \cdot 10^{-5}$	mNm/rpm
10	Speed constant	k_n		1 055	528	rpm/V
11	Back-EMF constant	k_E		0,948	1,895	mV/rpm
12	Torque constant	k_M		9,05	18,1	mNm/A
13	Current constant	k_I		0,111	0,055	A/mNm
14	Slope of n-M curve	$\Delta n/\Delta M$		816	822	rpm/mNm
15	Terminal inductance, phase-phase	L		480	1 940	µH
16	Mechanical time constant	τ_m		69	70	ms
17	Rotor inertia	J		8,1	8,1	gcm^2
18	Angular acceleration	$\alpha_{max.}$		9,5	9,5	$\cdot 10^3 rad/s^2$
19	Thermal resistance	$R_{th\,1}$ / $R_{th\,2}$	33 / 27			K/W
20	Thermal time constant	τ_{w1} / τ_{w2}	20 / 230			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

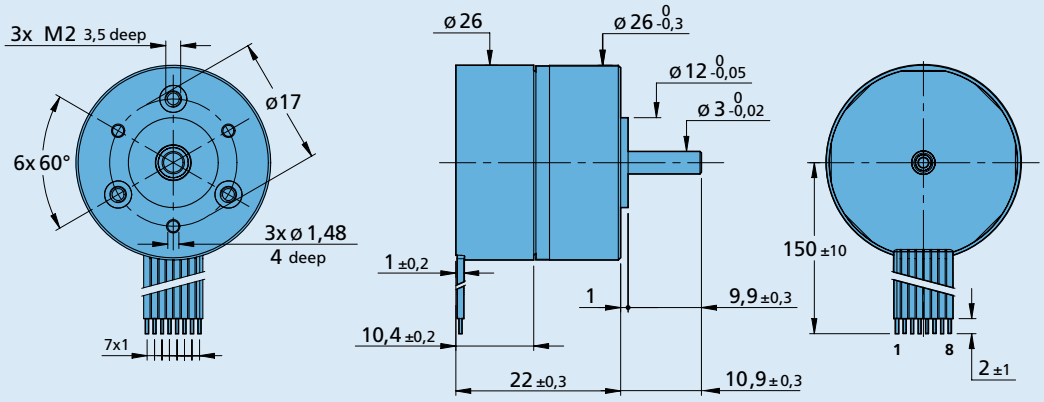
Specifications

reduction ratio (rounded)	output speed up to n_{max} rpm	weight with motor g	output torque continuous operation M_{max} mNm	output torque intermittent operation M_{max} mNm	direction of rotation (reversible)	efficiency %
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 rpm input speed. Based on motor 2610 ... B.

2622 S ... B

M1:1



2622 S

Connection

No.	Function
1	Phase C
2	Phase B
3	Phase A
4	GND
5	+ 5V
6	Hall sensor C
7	Hall sensor B
8	Hall sensor A