

NEW

Brushless DC-Servomotors
4 Pole Technology

97 mNm

For combination with
Gearheads:
32A
Encoders:
IE3 ...
Drive Electronics:
SC 2804

Series 3268 ... BX4

	3268 G		024 BX4	
1 Nominal voltage	U_N		24	Volt
2 Terminal resistance, phase-phase	R		1,45	Ω
3 Output power ¹⁾	$P_{2 \text{ max.}}$		35,8	W
4 Efficiency	$\eta_{\text{ max.}}$		79,5	%
5 No-load speed	n_0		5 500	rpm
6 No-load current	I_0		0,212	A
7 Stall torque	M_H		718	mNm
8 Friction torque, static	C_0		1,7	mNm
9 Friction torque, dynamic	C_v		$1,3 \cdot 10^{-3}$	mNm/rpm
10 Speed constant	k_n		220	rpm/V
11 Back-EMF constant	k_E		4,555	mV/rpm
12 Torque constant	k_M		43,5	mNm/A
13 Current constant	k_I		0,0230	A/mNm
14 Slope of n-M curve	$\Delta n / \Delta M$		7,3	rpm/mNm
15 Terminal inductance, phase-phase	L		110	μH
16 Mechanical time constant	τ_m		4,6	ms
17 Rotor inertia	J		60	gcm^2
18 Angular acceleration	$\alpha_{\text{ max.}}$		120	$\cdot 10^3 \text{ rad/s}^2$
19 Thermal resistance	$R_{\text{th} 1} / R_{\text{th} 2}$	1,9 / 8,6		K/W
20 Thermal time constant	τ_{w1} / τ_{w2}	17 / 950		s
21 Operating temperature range		- 40 ... + 100		$^{\circ}\text{C}$
22 Shaft bearings		ball bearings, preloaded		
23 Shaft load max.:				
- radial at 3 000 rpm (4,5 mm from mounting flange)		50		N
- axial at 3 000 rpm		5		N
- axial at standstill		50		N
24 Shaft play:				
- radial	\leq	0,015		mm
- axial	$=$	0		mm
25 Housing material		stainless steel		
26 Weight		290		g
27 Direction of rotation		electronically reversible		
28 Number of pole pairs		2		
Recommended values - mathematically independent of each other				
29 Speed up to	$n_{e \text{ max.}}$		5 500	rpm
30 Torque up to ^{1) 2)}	$M_{e \text{ max.}}$		54 / 97	mNm
31 Current up to ^{1) 2)}	$I_{e \text{ max.}}$		1,57 / 2,72	A

¹⁾ at 5 000 rpm

²⁾ thermal resistance $R_{\text{th} 2}$ not reduced / thermal resistance $R_{\text{th} 2}$ by 55% reduced

Note:

The diagram indicates the recommended speed in relation to the available torque at the output shaft for a given ambient temperature of 22°C.

The diagram shows the motor in a completely insulated as well as thermally coupled condition ($R_{\text{th} 2}$ 55% reduced).

The nominal voltage (U_N) curve shows the operating point at nominal voltage in the insulated and thermally coupled condition. Any points of operation above the curve at nominal voltage will require a higher operating voltage. Any points below the nominal voltage curve will require less voltage.



