



Brushless Servomotors N6-xxxx Series



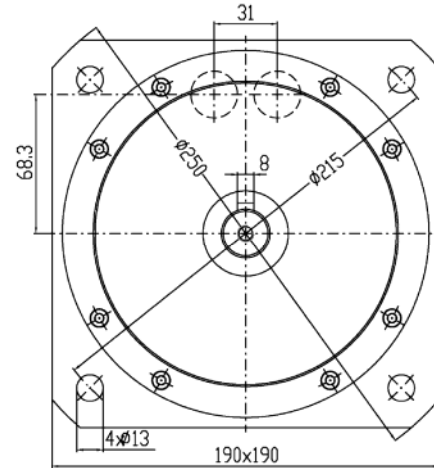
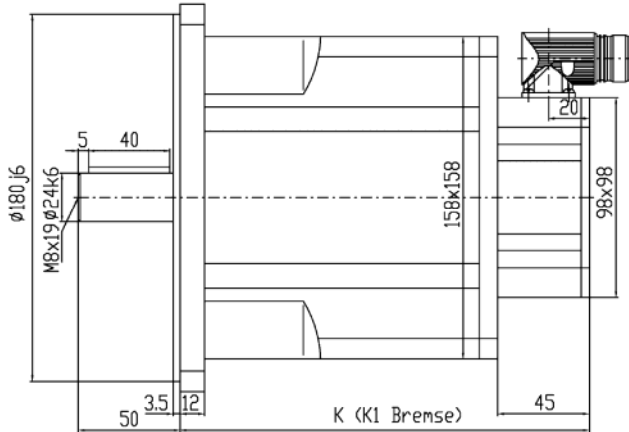
U_{dc} = 560 VDC

General Description:

Compact Design
Rare Earth Magnets
Resolver Feedback
Intercontec-Connectors

Options:

Holding Brake, different Encoders,
Shaft Keyway DIN 6885, UL, ATEX,
spec. Shaft / Flange / Housing,
Gearbox, Flying Leads, etc...



Parameters			N6-1800		N6-2400		N6-3000		N6-3800		N6-4400	
DC Bus Voltage	U _{dc}	V	560		560		560		560		560	
Rated Torque	M _N	Nm	14,8	13,0	20,0	17,0	25,3	21,0	29,0	25,0	36,5	30,0
Rated AC Current	I _N	A	8,6	11,0	10,7	13,8	12,9	16,2	15,0	19,7	17,3	24,4
Stall Torque	M ₀	Nm	18,0		24,0		30,0		38,0		44,0	
Stall Current	I ₀	A	8,9	12,2	10,8	15,3	12,8	17,8	16,7	23,9	17,7	28,3
Peak Torque	M _{max}	Nm	51		72		90		114		132	
Peak AC Current	I _{max}	A	33	45	42	60	46	64	64	93	64	102
Rated Speed	n _N	min ⁻¹	2000*	3000	2000*	3000	2000*	3000	2000	3000*	2000	3000*
Max. Mech. Speed	n _{max}	min ⁻¹	6000		6000		6000		6000		6000	
Torque Constant	K _T	Nm/A	2,0	1,47	2,2	1,57	2,4	1,69	2,3	1,59	2,5	1,55
Voltage Constant	K _E	V/1000	123	89	134	95	142	102	138	96	150	94
Resistance _{Ph-Ph}	R _{Ph}	Ω	1,19	0,62	0,81	0,41	0,63	0,33	0,52	0,25	0,49	0,19
Inductance _{Ph-Ph}	L _{Ph}	mH	13,7	7,2	10,8	5,5	9,2	4,7	7,2	3,5	7,0	2,8
El. Time Constant	T _{el}	ms	11,5	11,6	13,3	13,4	14,5	14,2	13,8	14,0	14,4	14,5
Therm. Constant	T _{th}	min	42		47		52		57		62	
Inertia	J	kgcm ²	18,5		25,6		32,7		39,9		47,0	
Rated Brake Torque	M _{Br}	Nm	36/72**		36/72**		36/72**		36/72**		36/72**	
Weight w/o brake	m	kg	10,1		12,8		15,5		18,3		21,0	
Weight with brake	m _{Br}	kg	13,2		15,9		18,6		21,4		24,1	
Length w/o brake	K	mm	158		183		208		233		258	
Length with brake	K1	mm	222		247		272		297		322	

*Special Windings; other Windings for different rated Speeds are available; Parameter Tolerance +/-10%; **Reinforced Brake on request

Protection Class	IP64, optional IP65 or IP67
Electrical Connections	Intercontec-Connectors (2 pcs)
Thermal Protection	PTC, optional thermal switch (normally closed type) tripping out at 140°C, KTY or NTC
Rated Parameters	Acc. to EN 60034-1, T _{Ambient} = 40°C, T _{Rise} = 110 K, Flange Temperature ≤ 65°C
Motor Controller	Standard winding designed for power supply U _{cc} = 320 or 560 VDC, different execution optional
Flange/Shaft	Acc. To DIN 42955N, optional R