



Brushless Servomotors N7-xxxx Series



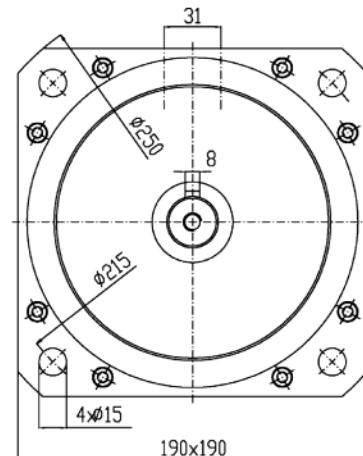
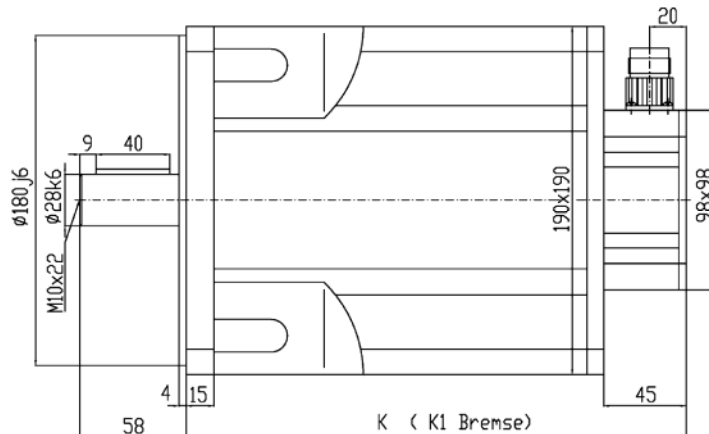
U_{dc} = 560 VDC

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			N7-3000		N7-4000		N7-5000		N7-6000	
DC Bus Voltage	U _{dc}	V	560		560		560		560	
Rated Torque	M _N	Nm	26,1	23,0	32,8	25,0	40,4	30,0	54,0	36,2
Rated AC Current	I _N	A	13,2	15,5	15,4	20,1	21,8	24,4	14,6	20,7
Stall Torque	M ₀	Nm	30,0		40,0		50,0		60,0	
Stall Current	I ₀	A	13,0	16,3	16,7	26,3	22,7	31,5	15,8	30,0
Peak Torque	M _{max}	Nm	85		120		150		180	
Peak AC Current	I _{max}	A	46	58	59	90	79	109	51	102
Rated Speed	n _N	min ⁻¹	2000*	3000	2000	3000*	2000	3000*	1000	2500*
Max. Mech. Speed	n _{max}	min ⁻¹	6000		6000		6000		6000	
Torque Constant	K _T	Nm/A	2,3	1,84	2,4	1,52	2,2	1,59	4,0	2,0
Voltage Constant	K _E	V/1000	139	111	145	92,0	133	96	241	121
Resistance _{Ph-Ph}	R _{Ph}	Ω	0,64	0,41	0,43	0,17	0,25	0,13	0,62	0,16
Inductance _{Ph-Ph}	L _{Ph}	mH	10,1	6,4	7,8	3,1	4,9	2,6	13,0	3,3
El. Time Constant	T _{el}	ms	15,8	15,6	18,1	18,2	19,6	20,0	21,0	21,0
Therm. Constant	T _{th}	min	80		90		100		108	
Inertia	J	kgcm ²	49,5		69,0		88,0		107,0	
Rated Brake Torque	M _{Br}	Nm	36/72**		36/72**		36/72**		36/72**	
Weight w/o brake	m	kg	16,5		21,5		26,5		31,5	
Weight with brake	m _{Br}	kg	20,1		25,1		30,1		35,1	
Length w/o brake	K	mm	181		211		241		271	
Length with brake	K1	mm	240		270		300		330	

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

Protection Class
Electrical Connections
Thermal Protection
Rated Parameters
Motor Controller
Flange/Shaft

IP64, optional IP65 or IP67
Intercontec-Connectors (2 pcs)
PTC, optional thermal switch (normally closed type) tripping out at 140°C, KTY or NTC
Acc. to EN 60034-1, T_{Ambient} = 40°C, T_{Rise} = 110 K, Flange Temperature ≤ 65°C
Standard winding designed for power supply U_{cc} = 320 or 560 VDC, different execution optional
Acc. To DIN 42955N, optional R