



Brushless Servomotors

N4-xxxx Series

U_{dc} = 320 / 560 VDC

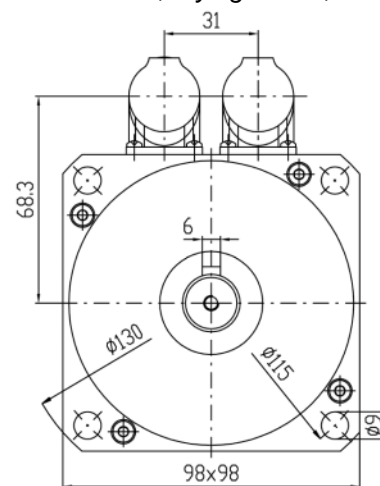
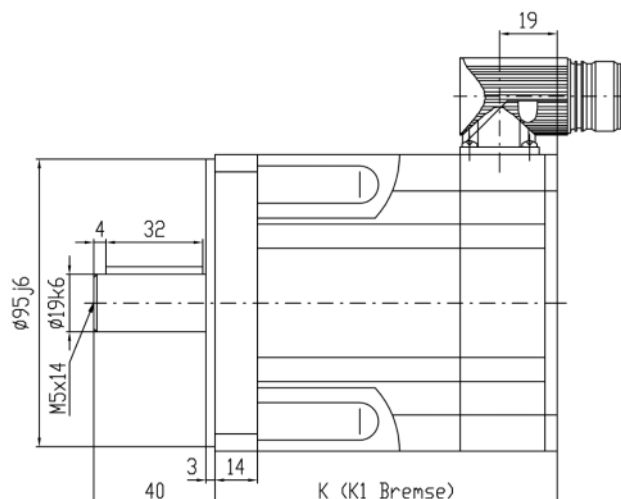


General Description:

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			N4-0510		N4-0750		N4-0960		N4-1130	
DC Bus Voltage	U _{dc}	V	320	560	320	560	320	560	320	560
Rated Torque	M _N	Nm	4,2		6,1		7,7		8,8	
Rated AC Current	I _N	A	7,0	3,9	8,8	5,1	10,8	6,0	10,7	6,9
Stall Torque	M ₀	Nm	5,1		7,5		9,6		11,3	
Stall Current	I ₀	A	6,8	3,8	8,9	5,2	10,7	6,0	11,0	7,1
Peak Torque	M _{max}	Nm	15,3		22,5		28,8		34	
Peak AC Current	I _{max}	A	31,0	17,4	40,7	23,8	49,2	27,4	41	27
Rated Speed*	n _N	min ⁻¹	3000							
Max. Mech. Speed	n _{max}	min ⁻¹	9000							
Torque Constant	K _T	Nm/A	0,75	1,34	0,84	1,44	0,89	1,6	1,03	1,59
Voltage Constant	K _E	V/1000	45,5	81	51	87	54	97	62	96
Resistance Ph-Ph	R _{Ph}	Ω	1,24	4,0	0,79	2,29	0,62	2,0	0,61	1,49
Inductance Ph-Ph	L _{Ph}	mH	6,8	21,7	4,8	13,5	3,6	11,9	3,8	9,1
El. Time Constant	T _{el}	ms	5,5	5,5	6,1	5,9	5,8	6,0	6,2	6,1
Therm. Constant	T _{th}	min	25		30		35		40	
Inertia	J	kgcm ²	2,04		3,26		4,49		5,70	
Rated Brake Torque	M _{Br}	Nm	9,0							
Weight w/o brake	m	kg	3,8		5,1		6,4		7,7	
Weight with brake	m _{Br}	kg	4,6		5,9		7,2		8,5	
Length w/o brake	K	mm	113		143		173		203	
Length with brake	K1	mm	154		184		214		244	

*Windings for different rated speeds are available; parameter tolerance +/-10%

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