



# Brushless Servomotors

## NN4 Series

U<sub>dc</sub> = 320 / 560 VDC

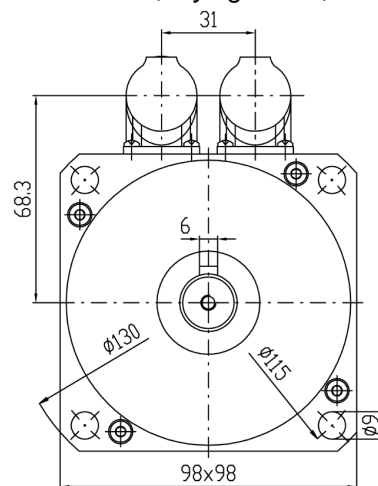
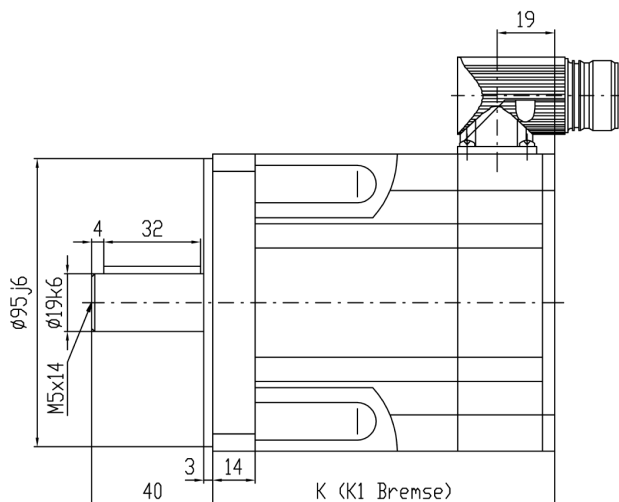
**NOVOTRON**  
für Dynamik und Bewegung

### 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			NN4-0510		NN4-0750		NN4-0960		NN4-1130	
DC Bus Voltage	U <sub>dc</sub>	V	320	560	320	320	320	320	320	560
Rated Torque	M <sub>N</sub>	Nm	4,2		6,1		7,7		8,8	
Rated AC Current	I <sub>N</sub>	A	7,0	3,9	8,8	5,1	10,8	6,0	11,4	6,9
Stall Torque	M <sub>0</sub>	Nm	5,1		7,5		9,6		11,3	
Stall Current	I <sub>0</sub>	A	6,8	3,8	8,9	5,2	10,7	6,0	11,6	7,1
Peak Torque	M <sub>max</sub>	Nm	15,3		22,5		28,8		34	
Peak AC Current	I <sub>max</sub>	A	31,0	17,4	40,7	23,8	49,2	27,4	43	27
Rated Speed*	n <sub>N</sub>	min <sup>-1</sup>	3000							
Max. Mech. Speed	n <sub>max</sub>	min <sup>-1</sup>	9000							
Torque Constant	K <sub>T</sub>	Nm/A	0,75	1,34	0,84	1,44	0,89	1,6	0,98	1,59
Voltage Constant	K <sub>E</sub>	V/1000	45,5	81	51	87	54	97	59	96
Resistance Ph-Ph	R <sub>Ph</sub>	Ω	1,24	4,0	0,79	2,29	0,62	2,0	0,59	1,49
Inductance Ph-Ph	L <sub>Ph</sub>	mH	6,8	21,7	4,8	13,5	3,6	11,9	3,7	9,1
El. Time Constant	T <sub>el</sub>	ms	5,5	5,5	6,1	5,9	5,8	6,0	6,3	6,1
Therm. Constant	T <sub>th</sub>	min	25		30		35		40	
Inertia	J	kgcm <sup>2</sup>	2,04		3,26		4,49		5,70	
Rated Brake Torque	M <sub>Br</sub>	Nm	9,0							
Weight w/o brake	m	kg	3,8		5,1		6,4		7,7	
Weight with brake	m <sub>Br</sub>	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  
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<sub>Ambient</sub> = 40°C, T<sub>Rise</sub> = 110 K, Flange Temperature ≤ 65°C  
Standard winding designed for power supply U<sub>cc</sub> = 320 or 560 VDC, different execution optional  
Acc. To DIN 42955N, optional R