



Brushless Servomotors

TC4-xxxx series



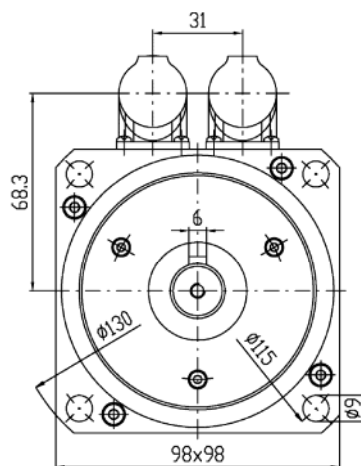
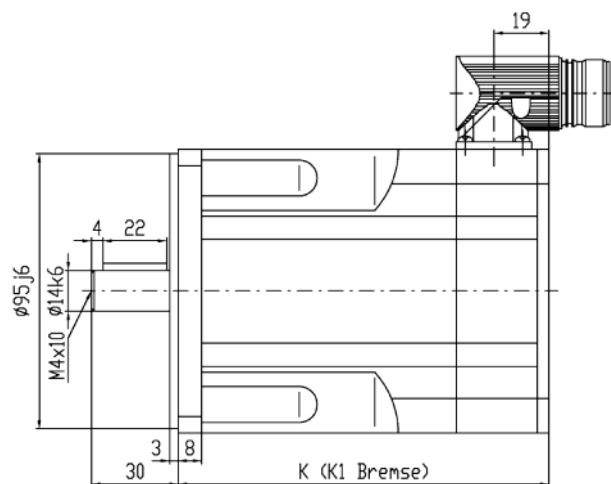
U_{dc} = 320 / 560 VDC

General Description:

Compact Design
Rare Earth Magnets
Resolver Feedback
Intercontec-Connectors

Options:

Holding Brake
Shaft Keyway DIN 6885
Encoder Feedback
Flying Leads



Parameters			TC4-0100		TC4-0160	
DC Bus Voltage	U _{dc}	V	320	560	320	560
Rated Torque	M _N	Nm	0,90		1,35	
Rated AC Current	I _N	A	1,80	1,05	1,86	1,00
Stall Torque	M ₀	Nm	1,00		1,60	
Stall Current	I ₀	A	1,83	1,06	2,0	1,06
Peak Torque	M _{max}	Nm	4,0		6,4	
Peak AC Current	I _{max}	A	11,0	6,4	12,1	6,4
Rated Speed*	n _N	min ⁻¹	3000			
Max. Mech. Speed	n _{max}	min ⁻¹	12000			
Torque Constant	K _T	Nm/A	0,55	0,94	0,79	1,51
Voltage Constant	K _E	V/1000	33	57	48	91
Resistance _{Ph-Ph}	R _{Ph}	Ω	13,5	36,3	7,7	25,9
Inductance _{Ph-Ph}	L _{Ph}	mH	25,7	75,0	22,7	82
El. Time Constant	T _{el}	ms	1,9	2,1	3,0	3,2
Therm. Constant	T _{th}	min	45		50	
Inertia	J	kgcm ²	0,79		1,3	
Rated Brake Torque	M _{Br}	Nm	4,5			
Weight w/o Brake	m	kg	2,70		3,00	
Weight with Brake	m _{Br}	kg	3,35		3,65	
Length w/o Brake	K	mm	91		106	
Length with Brake	K1	mm	128		143	

* 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, ambient temperature T_A = 40°C, cooling flange 65°C, temperature rise T_R = 110 K
Standard winding designed for power supply U_{cc} = 320 or 560 VDC, different execution optional
Acc. to DIN 42955 N, optional R