

Brushless Servomotors

T C4 -xxxx Series

U_{dc} = 320 VDC / 560 VDC



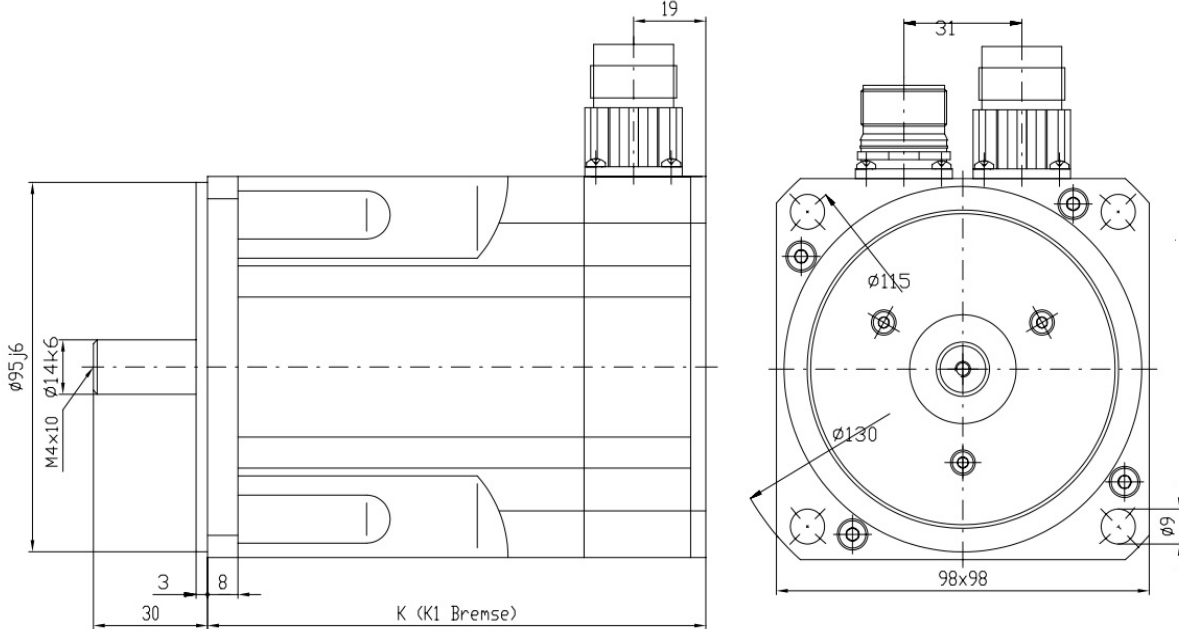
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Features:

- highest overload capacity
- highest diversity of variants
- distributed winding
- plug connection

Options:

- holding brake, feather key DIN 6885
- special shaft/flange, special mechanics
- various encoders
- cable, add. inertia, UL certificate



Parameters			TC4-0100		TC4-0160	
Standardwinding No.			132	133	136	137
Winding No.			132	133	136	137
DC Bus Voltage	U _{dc}	V	320	560	320	560
Rated Torque	M _N	Nm	0,9		1,35	
Rated AC Current	I _N	A	1,8	1,05	1,86	1
Stall Torque	M ₀	Nm	1		1,6	
Stall Current	I ₀	A	1,83	1,06	2,02	1,06
Peak Torque	M _{max}	Nm	4		6,4	
Peak AC Current	I _{max}	A	11	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	34	57	48	91
Resistance Ph-Ph	R _{ph}	Ω	13,45	36,3	7,68	25,9
Inductance Ph-Ph	L _{ph}	mH	25,7	79	22,7	82
EL. Time Constant	T _{el}	ms	1,91	2,18	2,96	3,17
Therm. Constant	T _{th}	min	45		50	
Number of poles	2p		6			
Inertia	J	kgcm ²	0,79		1,28	
Rated Brake torque	M ₂	Nm	4,5			
Weight without brake	m	kg	2,7		3	
Weight with brake	m _{Br}	kg	3,35		3,65	
Length without brake	K	mm	91		106	
Length with brake	K1	mm	128		143	

* Other windings / nominal speeds possible; tolerance +/-10%; Inductance +/-25%

Protection Class IP6x

Electrical Connections M23 Industrial Connectors, Cable, Special

Thermal Protection PTC, PT1000, Thermoswitch, NTC

Rated Parameters Acc. to EN 60034-1, T_{Ambient} = 40°C, T_{Rise} = 110K, Flange Temperature ≤ 65°C

Motor Controller Standard winding designed for power supply U_{cc} = 320 or 560 VDC, other voltages optional

Flange/Shaft Acc. To DIN 42955N, optional R, Special

Brushless Servomotors

T C5 -xxxx Series

U_{dc} = 320 VDC / 560 VDC



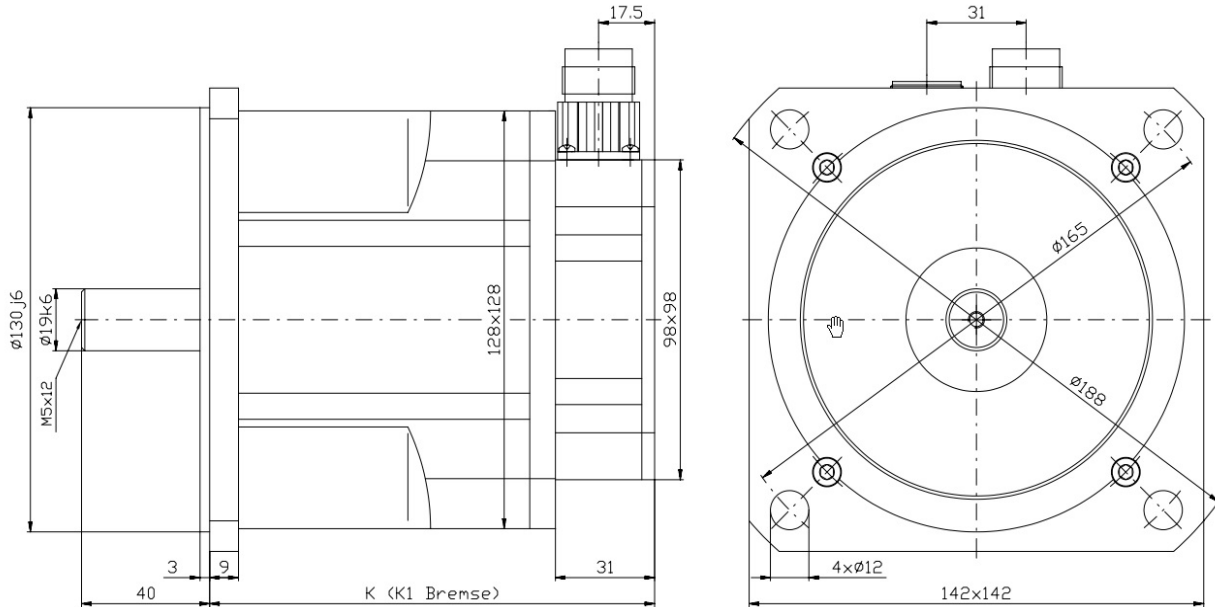
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Features:

- highest overload capacity
- highest diversity of variants
- distributed winding
- plug connection

Options:

- holding brake, feather key DIN 6885
- special shaft/flange, special mechanics
- various encoders
- cable, add. inertia, UL certificate



Parameters			TC5-0210		TC5-0430	
Standardwinding No.			167	168	171	172
Winding No.			167	168	171	172
DC Bus Voltage	U _{dc}	V	320	560	320	560
Rated Torque	M _N	Nm	1,9		3,9	
Rated AC Current	I _N	A	3,8	2,14	6,5	3,91
Stall Torque	M ₀	Nm	2,1		4,3	
Stall Current	I ₀	A	3,85	2,19	6,8	4,06
Peak Torque	M _{max}	Nm	6,3	6,3	12,9	12,9
Peak AC Current	I _{max}	A	19,2	10,9	33,6	20,2
Rated Speed*	n _N	min ⁻¹	3000			
Max. Mech. Speed	n _{max}	min ⁻¹	9000			
Torque Constant	K _T	Nm/A	0,55	0,96	0,64	1,06
Voltage Constant	K _E	V/1000	33	58	38,5	64
Resistance Ph-Ph	R _{ph}	Ω	3,9	11,3	1,47	4,17
Inductance Ph-Ph	L _{ph}	mH	15,9	48,9	8,71	24,6
EL. Time Constant	T _{el}	ms	4,08	4,33	5,93	5,90
Therm. Constant	T _{th}	min	33,00		34,00	
Number of poles	2p		6			
Inertia	J	kgcm ²	2		2,9	
Rated Brake torque	M ₂	Nm	9			
Weight without brake	m	kg	3,9		6,8	
Weight with brake	m _{Br}	kg	5,25		8,15	
Length without brake	K	mm	124		141	
Length with brake	K1	mm	160		177	

* Other windings / nominal speeds possible; tolerance +/-10%; Inductance +/-25%

Protection Class	IP6x
Electrical Connections	M23 Industrial Connectors, Cable, Special
Thermal Protection	PTC, PT1000, Thermoswitch, NTC
Rated Parameters	Acc. to EN 60034-1, T _{Ambient} = 40°C, T _{Rise} = 110K, Flange Temperature ≤ 65°C
Motor Controller	Standard winding designed for power supply U _{cc} = 320 or 560 VDC, other voltages optional
Flange/Shaft	Acc. To DIN 42955N, optional R, Special

Brushless Servomotors

T C6 -xxxx Series

U_{dc} = 320 VDC / 560 VDC



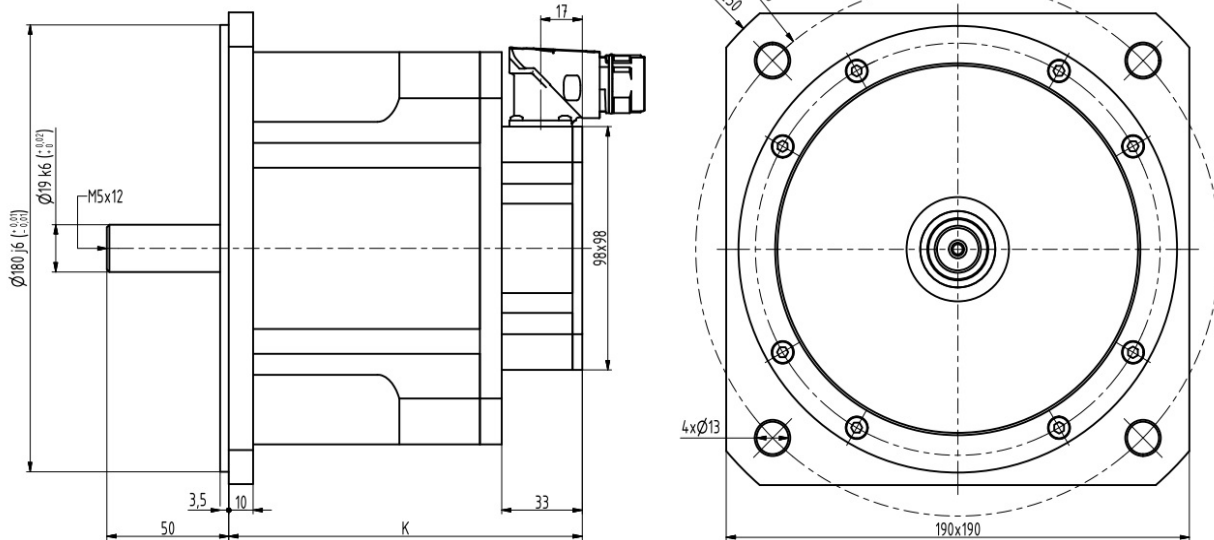
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Features:

- highest overload capacity
- highest diversity of variants
- distributed winding
- plug connection

Options:

- holding brake, feather key DIN 6885
- special shaft/flange, special mechanics
- various encoders
- cable, add. inertia, UL certificate



Parameters			T6-1350		T6-1900	
Standardwinding No.			329	330	331	332
Winding No.			329	330	331	332
DC Bus Voltage	U _{dc}	V	320	560	320	560
Rated Torque	M _N	Nm	3		6	
Rated AC Current	I _N	A	5,25	3,09	9,28	5,12
Stall Torque	M ₀	Nm	3,5		7	
Stall Current	I ₀	A	5,3	3,11	9,8	5,4
Peak Torque	M _{max}	Nm	10,5	10,5	21	21
Peak AC Current	I _{max}	A	22,4	13,2	41,6	22,9
Rated Speed*	n _N	min ⁻¹	3000			
Max. Mech. Speed	n _{max}	min ⁻¹	6000			
Torque Constant	K _T	Nm/A	0,66	1,12	0,71	1,29
Voltage Constant	K _E	V/1000	40	68	43	78
Resistance Ph-Ph	R _{ph}	Ω	1,93	5,59	0,71	2,34
Inductance Ph-Ph	L _{ph}	mH	13,9	40	6,3	21
EL. Time Constant	T _{el}	ms	7,20	7,16	8,87	8,97
Therm. Constant	T _{th}	min	36		40	
Number of poles	2p		6			
Inertia	J	kgcm ²	4,7		7,79	
Rated Brake torque	M ₂	Nm	9			
Weight without brake	m	kg	7,5		9,7	
Weight with brake	m _{Br}	kg	9,2		11,4	
Length without brake	K	mm	127		144	
Length with brake	K1	mm	170		187	

* Other windings / nominal speeds possible; tolerance +/-10%; Inductance +/-25%

Protection Class	IP6x
Electrical Connections	M23 Industrial Connectors, Cable, Special
Thermal Protection	PTC, PT1000, Thermoswitch, NTC
Rated Parameters	Acc. to EN 60034-1, T _{Ambient} = 40°C, T _{Rise} = 110K, Flange Temperature ≤ 65°C
Motor Controller	Standard winding designed for power supply U _{cc} = 320 or 560 VDC, other voltages optional
Flange/Shaft	Acc. To DIN 42955N, optional R, Special

Brushless Servomotors T C7 -xxxx Series

U_{dc} = 320 VDC / 560 VDC



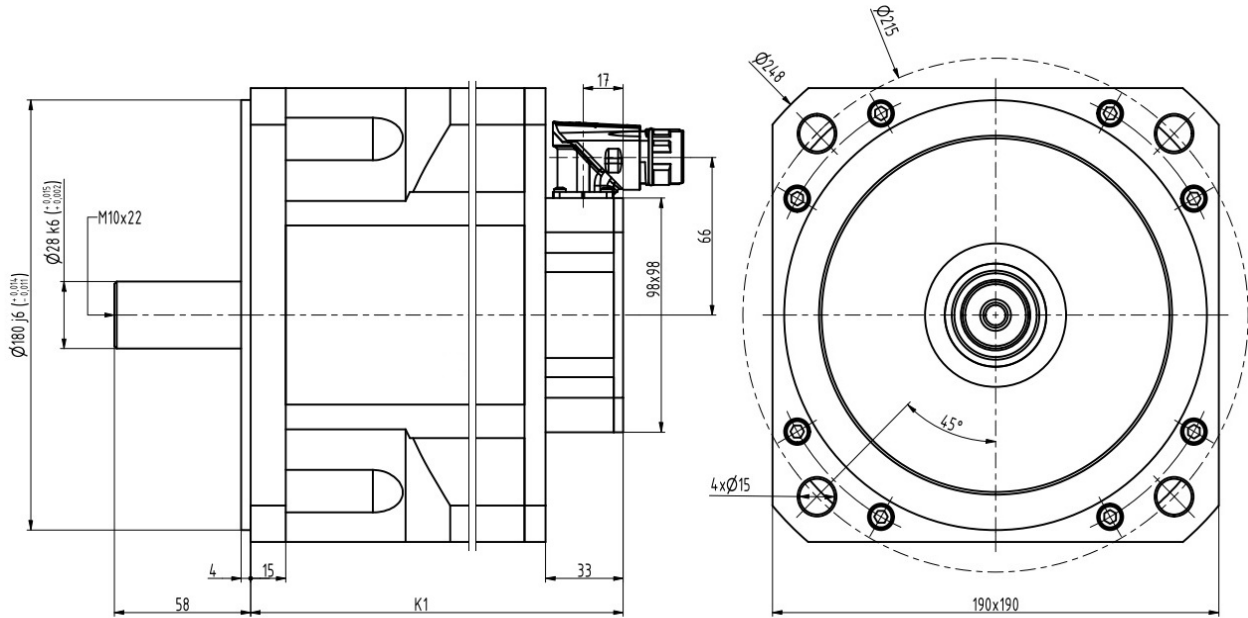
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Features:

- highest overload capacity
- highest diversity of variants
- distributed winding
- plug connection

Options:

- holding brake, feather key DIN 6885
- special shaft/flange, special mechanics
- various encoders
- cable, add. inertia, UL certificate



Parameters			TC7-0850		TC7-1250		TC7-1850	
Standardwinding No.			392	393	394	395	396	397
Winding No.			392	393	394	395	396	397
DC Bus Voltage	U _{dc}	V	320	560	320	560	320	560
Rated Torque	M _N	Nm	6,5		11		14	
Rated AC Current	I _N	A	9,5	5,02	12,45	7,29	17,44	9,06
Stall Torque	M ₀	Nm	8,5		12,5		18,5	
Stall Current	I ₀	A	11,2	5,9	13	8	21,1	11
Peak Torque	M _{max}	Nm	25,5		37,5		55,5	
Peak AC Current	I _{max}	A	43,6	23	50,8	31	82,3	42,8
Rated Speed*	n _N	min ⁻¹	3000					
Max. Mech. Speed	n _{max}	min ⁻¹	6000					
Torque Constant	K _T	Nm/A	0,76	1,44	0,96	1,57	0,88	1,69
Voltage Constant	K _E	V/1000	46	87	58	95	53	102
Resistance Ph-Ph	R _{ph}	Ω	0,53	2,1	0,43	1,14	0,23	0,82
Inductance Ph-Ph	L _{ph}	mH	5,7	20,5	5,32	14,1	3,4	12,1
EL. Time Constant	T _{el}	ms	10,75	9,76	12,37	12,37	14,78	14,76
Therm. Constant	T _{th}	min	35		42		52	
Number of poles	2p		6					
Inertia	J	kgcm ²	23,5		26,7		29,8	
Rated Brake torque	M ₂	Nm	18					
Weight without brake	m	kg	12,4		15,1		17,9	
Weight with brake	m _{Br}	kg	14,9		17,6		20,4	
Length without brake	K	mm	168		183		198	
Length with brake	K1	mm	206		221		236	

* Other windings / nominal speeds possible; tolerance +/-10%; Inductance +/-25%

Protection Class IP6x

Electrical Connections M23 Industrial Connectors, Cable, Special

Thermal Protection PTC, PT1000, Thermoswitch, NTC

Rated Parameters Acc. to EN 60034-1, T_{Ambient} = 40°C, T_{Rise} = 110K, Flange Temperature ≤ 65°C

Motor Controller Standard winding designed for power supply U_{cc} = 320 or 560 VDC, other voltages optional

Flange/Shaft Acc. To DIN 42955N, optional R, Special