



Brushless Servomotors

H3-xxxx series

U_{dc} = 320 / 560 VDC

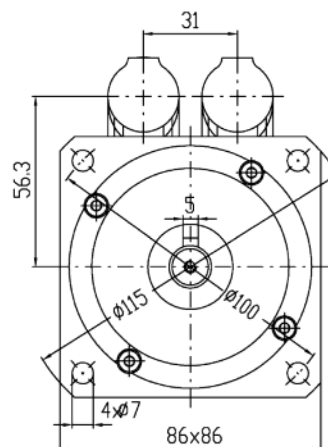
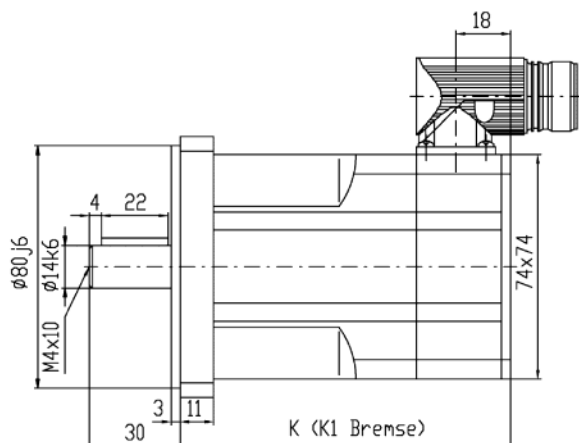


General Description:

Rare Earth Magnets
Resolver Feedback
Intercontec-Connectors
Concentrated Winding /High Torque Density

Options:

Holding Brake
Shaft Keyway DIN 6885
Encoder Feedback
Flying Leads



Parameters			H3-0095		H3-0190		H3-0330		H3-0420	
DC Bus Voltage	U _{dc}	V	320	560	320	560	320	560	320	560
Rated Torque	M _N	Nm	0,86		1,60		2,9		3,1	
Rated AC Current	I _N	A	1,43	1,28	2,43	1,46	3,95	2,25	3,70	2,28
Stall Torque	M ₀	Nm	0,95		1,90		3,25		4,2	
Stall Current	I ₀	A	1,47	1,32	2,75	1,66	4,25	2,45	4,80	2,95
Peak Torque	M _{max}	Nm	2,4		5,2		9,45		12,3	
Peak AC Current	I _{max}	A	5,4	4,9	11,1	6,7	18,6	10,6	21,0	12,9
Rated Speed*	n _N	min ⁻¹	3000							
Max. Mech. Speed	n _{max}	min ⁻¹	12000							
Torque Constant	K _T	Nm/A	0,65	0,72	0,69	1,14	0,76	1,34	0,88	1,42
Voltage Constant	K _E	V/1000	39	43,5	41,5	69	46	81	53	86
Resistance Ph-Ph	R _{Ph}	Ω	9,90	12,6	3,95	11,6	2,20	6,50	1,77	4,60
Inductance Ph-Ph	L _{Ph}	mH	30,6	38,0	15,4	42,3	9,8	30,6	10,0	26,1
El. Time Constant	T _{el}	ms	3,10	3,00	3,90	3,65	4,45	4,70	5,60	5,70
Therm. Constant	T _{th}	min	25		30		33		36	
Inertia	J	kgcm ²	0,5		0,7		1,1		1,5	
Rated Brake Torque	M _{Br}	Nm	4,5							
Weight w/o Brake	m	kg	1,52		2,09		3,22		4,35	
Weight with Brake	m _{Br}	kg	2,11		2,68		3,81		4,94	
Length w/o Brake	K	mm	96		114		150		186	
Length with Brake	K1	mm	138		156		192		228	

* 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, ambient temperature T _A = 40°C, cooling flange 65°C, temperature rise T _R = 110 K
Motor Controller	Standard winding designed for power supply U _{cc} = 320 or 560 VDC, different execution optional
Flange/Shaft	Acc. to DIN 42955 N, optional R