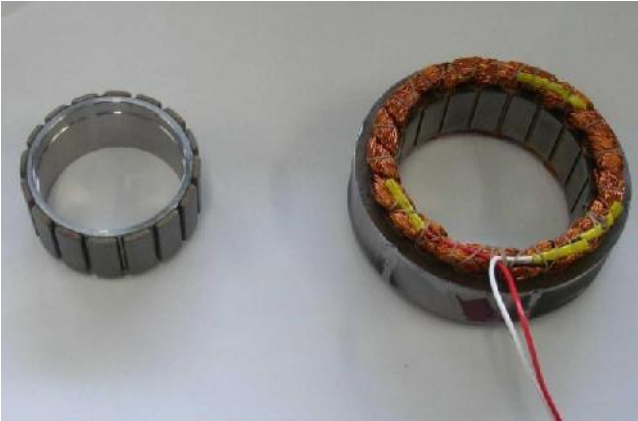


MSK brushless servomotors in kit-form (Sizes 5 - 8)

Datasheet



- No. of poles: 6
- Electrical connections: flying leads, 150 mm
- Thermal protection: PTC, optional: thermal switch 145°C, KTY or NTC
- Rotor with straight through hole, optional: with shaft (tbd)

Designation:

MSK5-0130-30-320-T1

Family: MSK = MACCON Servo kit

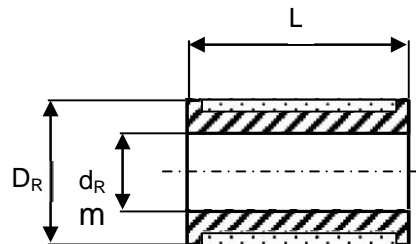
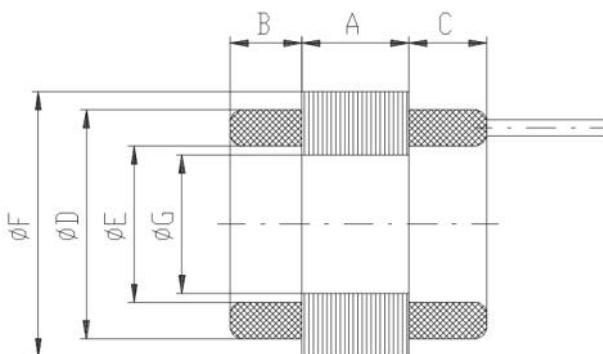
Frame size: 5, 6, 7, 8

Nominal torque in Ncm

Nominal speed ÷ 100 in UpM

Thermal protection Tx: 0=Switch, 1=PTC
2=NTC, 3=KTY83-110° C, 4=KTY84-130° C

Nominal bus voltage in Vdc



Dimensions (mm):

	Stator							Rotor		
	A	B max.	C max.	D max.	E min.	F	G	DR, max.	dR, max.	L max.
MSK5-0660	51	23	29	112	74	120,2	60	59,5	44	68
MSK5-1050	85	23	29	112	74	120,2	60	59,5	44	103
MSK5-1350	102	23	29	112	74	120,2	60	59,5	44	120
MSK5-1700	136	23	29	112	74	120,2	60	59,5	44	154
MSK5-2200	170	23	29	112	74	120,2	60	59,5	44	188
MSK6-1350	68	28	31	142	80	149,8	75	74,3	50	84
MSK6-1900	102	28	31	142	80	149,8	75	74,3	50	118
MSK6-2200	119	28	31	142	80	149,8	75	74,3	50	135
MSK6-2900	170	28	31	142	80	149,8	75	74,3	50	186
MSK6-3500	238	28	31	142	80	149,8	75	74,3	50	254
MSK7-2700	92	34	41	172	96	180,2	90	89,3	61	112
MSK7-3200	105	34	41	172	96	180,2	90	89,3	61	125
MSK7-4000	135	34	41	172	96	180,2	90	89,3	61	155
MSK8-4000	93	52	62	197	110	210	100	99,0	68	113
MSK8-6800	162	52	62	197	110	210	100	99,0	68	182
MSK8-9300	231	52	62	197	110	210	100	99,0	68	251
MSK8-11500	299	52	62	197	110	210	100	99,0	68	319

Winding data for operation at 90 – 320 Vdc bus voltage:

Motor model	Nominal torque	Nominal current	Nominal speed	Peak torque	Peak current	Voltage constant	Torque constant	Resistance Ph.-Ph.)	Inductance Ph.-Ph.)	Rotor inertia	Weight w/out brake
	M_n	I_n	n_n	M_{max}	I_{max}	K_E	K_T	R_{2ph}	L_{2ph}	J	m
	Nm	$A_{eff.}$	min^{-1}	Nm	$A_{eff.}$	$V_{dc}/1000$	$Nm/A_{eff.}$		mH	$kgcm^2$	kg
MSK5-0660-30-320	5.7	6.8	3000	19.8	38	73.5	0.86	1.44	9.6	4.0	7.5
MSK5-1050-30-320	8.8	10.5	3000	31.5	61	73.5	0.86	0.61	5.5	6.2	10.0
MSK5-1350-30-320	11.0	14.5	3000	40.5	87	66.5	0.78	0.38	3.6	7.3	11.2
MSK5-1700-30-320	14.5	18.5	3000	51.0	106	68.6	0.80	0.28	2.9	9.5	13.7
MSK5-2200-30-320	17	20.2	3000	66.0	127	73.5	0.86	0.24	2.6	11.7	16.2
MSK6-1350-30-320	13	14.6	3000	40.5	62	79.2	0.93	0.34	4.2	13.1	13.9
MSK6-1900-30-320	17	19.0	3000	57	87	79.2	0.93	0.19	2.8	18.7	18.2
MSK6-2200-30-320	19	20.5	3000	66	97	82.0	0.96	0.17	2.6	21.5	20.3
MSK6-2900-30-320	24	26.8	3000	87	132	79.2	0.93	0.09	1.7	32.8	26.7
MSK7-2700-30-320	21	23.7	3000	83	110	82.0	0.96	0.15	2.2	36	23.5
MSK7-3200-30-320	23	25.9	3000	96	128	83.4	0.98	0.12	1.3	39	26.0
MSK7-4000-30-320	26	31.8	3000	120	172	77.8	0.91	0.07	0.8	45	31.5

Winding data for operation at 320 – 680 Vdc bus voltage:

Motor model	Nominal torque	Nominal current	Nominal speed	Peak torque	Peak current	Voltage constant	Torque constant	Resistance Ph.-Ph.)	Inductance Ph.-Ph.)	Rotor inertia	Weight w/out brake
	M_n	I_n	n_n	M_{max}	I_{max}	K_E	K_T	R_{2ph}	L_{2ph}	J	m
	Nm	$A_{eff.}$	min^{-1}	Nm	$A_{eff.}$	$V_{dc}/1000$	Nm/ $A_{eff.}$		mH	$kgcm^2$	kg
MSK5-0660-30-560	5.7	4.0	3000	19.8	23	124.5	1.46	4.51	27.8	4.0	7.5
MSK5-1050-30-560	8.8	6.3	3000	31.5	36	123.0	1.44	1.70	15.2	6.2	10.0
MSK5-1350-30-560	11.0	9.5	3000	40.5	56	103.2	1.21	0.95	9.0	7.3	11.2
MSK5-1700-30-560	14.5	10.0	3000	51.0	57	127.3	1.49	0.95	10.0	9.5	13.7
MSK5-2200-30-560	17	13.0	3000	66.0	82	114.5	1.34	0.54	5.9	11.7	16.2
MSK6-1350-30-560	13	8.2	3000	40.5	35	141.4	1.65	1.10	13.5	13.1	13.9
MSK6-1900-30-560	17	10.6	3000	57	49	141.4	1.65	0.61	9.0	18.7	18.2
MSK6-2200-30-560	19	13.1	3000	66	62	128.7	1.51	0.41	6.4	21.5	20.3
MSK6-2900-30-560	24	14.7	3000	87	73	144.2	1.69	0.31	5.6	32.8	26.7
MSK6-3500-30-560	26	18.2	3000	105	99	127.3	1.49	0.16	3.2	46.0	35.2
MSK7-2700-30-560	21	13.5	3000	83	62	144.2	1.69	0.43	4.4	36	23.5
MSK7-3200-30-560	23	15.0	3000	96	74	144.2	1.69	0.35	3.8	39	26.0
MSK7-4000-30-560	26	17.9	3000	120	96	138.6	1.62	0.23	2.7	45	31.5
MSK8-4000-30-560	30	17.8	3000	120	85	157.0	1.84	0.25	5.7	76	41
MSK8-6800-30-560	50	31.1	3000	204	156	145.7	1.70	0.10	2.5	114	56
MSK8-9300-20-560	70	25.3	2000	279	129	240.4	2.81	0.15	4.8	153	73
MSK8-11500-20-560	85	32.4	2000	345	164	233.3	2.73	0.11	3.4	190	89

Other windings available on request.

Colour coding:

Motor Phase		Halls	Thermal protection	
U	white	U, /U	PTC	
V	blue	V, /V	KTY83-110° C	
W	red	W, /W	KTY84-130° C	
		+5V		
		GND		