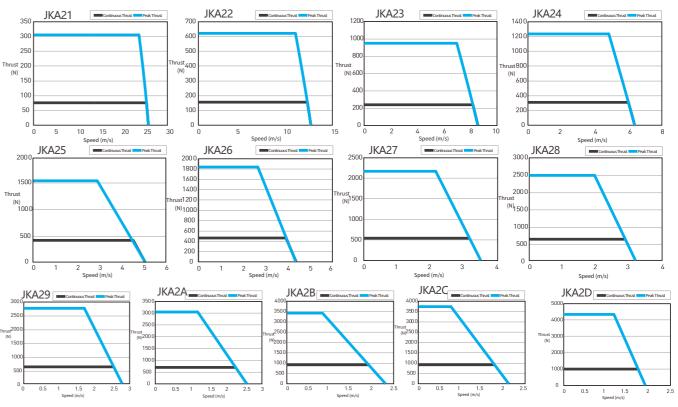
Model Number Designation System

Stator Model Mover Model JKA2 1 3.0 JKA2 - 120 Model Cable Length Model Stator Length Hall Sensor Wiring Type 120mm 180mm S = Loose Leads 300mm 1 2 3 456789ABCD D = DB9 Male Connector

JKA2 Series: Thrust Graph

Linear Motor Specifications Overview



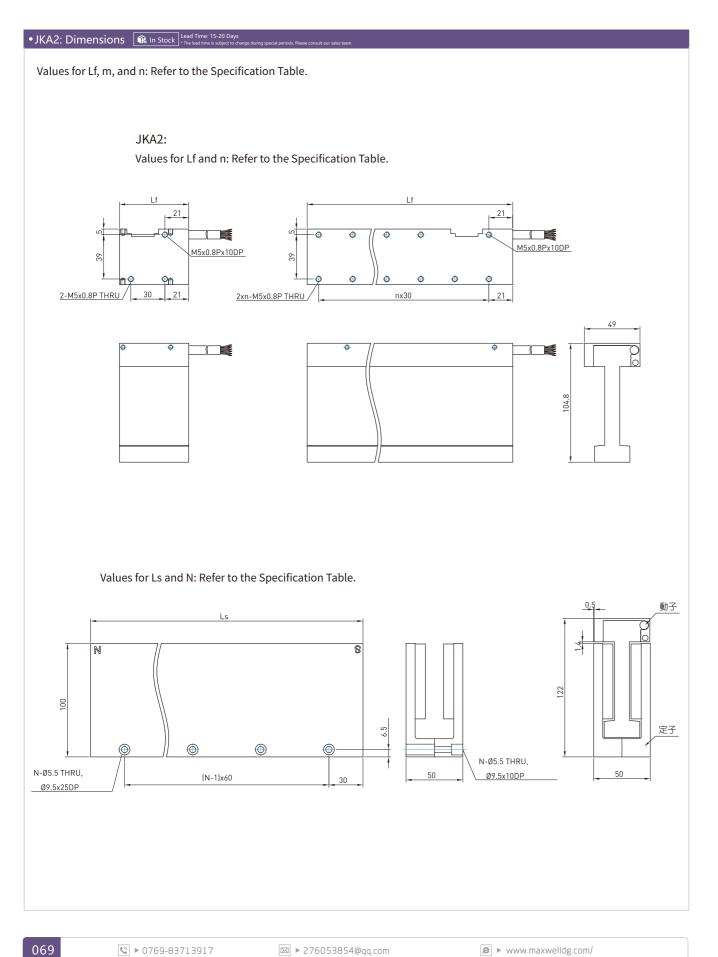
Specification Parameters

				11/400	11/400		11/405						11/400		
	Symbol	Unit	JKA21	JKA22	JKA23	JKA24	JKA25	JKA26	JKA27	JKA28	JKA29	JKA2A	JKA2B	JKA2C	JKA2D
Continuous Thrust	Fc	N	77	154	231	309	386	463	540	617	694	771	849	926	1003
Continuous Current	I _c	A_{rms}							5.7						
Peak Thrust [1s]	F_p	N	309	617	926	1234	1543	1852	2160	2469	2777	3086	3394	3703	4012
Peak Current [1s]	I _p	A_{rms}							22.6						
Thrust Constant	K_f	N/A _{rms}	13.7	27.3	41.0	54.6	68.3	81.9	95.6	109.2	122.9	136.5	150.2	163.9	177.5
Max. Coil Temperature	T_{max}	°C							120						
Electrical Time Constant	K _e	ms 1.5													
Resistance [Line-to-Line, 25°C]	R ₂₅	Ω	0.6	1.2	1.7	2.3	2.9	3.5	4.1	4.6	5.2	5.8	6.4	7	7.5
Inductance [Line-to-Line]	L	mH	0.9	1.7	2.6	3.5	4.3	5.2	6.1	6.9	7.8	8.7	9.6	10.4	11.3
Pole Pitch	2τ	mm	60												
Motor Cable Bend Radius	R_{bend}	mm							37.5						
Back EMF Constant [Line-to-Line]	K_v	$V_{rms}/(m/s)$	7.9	15.8	23.7	31.5	39.4	47.3	55.2	63.1	71.0	78.8	86.7	94.6	102.5
Motor Constant [25°C]	K_{m}	N/√W	14.6	20.7	25.4	29.3	32.7	35.9	38.7	41.4	43.9	46.3	48.6	50.7	52.8
Thermal Resistance	R_{TH}	°C/W	2.59	1.30	0.86	0.65	0.52	0.43	0.37	0.32	0.29	0.26	0.24	0.22	0.20
Thermal Sensor Switch			PTC												
Max. Operating Voltage		V_{DC}							330						
Mover Mass	M_f	kg	0.7	1.3	2.0	2.7	3.3	4.0	4.7	5.3	6.0	6.7	7.3	8.0	8.7
Stator Unit Mass	M_s	kg/m							24.7						
Mover Length / Value n	L_f	mm	61	121/3	181/5	241/7	301/9	361/11	421/13	481/15	541/17	601/19	661/21	721/23	781/25
Stator Length / Value N	Ls	mm	120mm/N=2, 180mm/N=3, 300mm/N=5												
Heat Sink Dimensions		mm						2	210x210	x10					
Notes: 1. All data in this table are measured at	an amhient	temperature of 25°C w	ithout forced o	poling.											

Linu data in this table are measured at an ambient temperature of 25°C without forced cool 2. Thermal resistance data is measured with the mover mounted on the heat sink. 3. Except for dimensional specifications, all other specifications have a tolerance of ±10%. 4. We reserve the right to make changes. Please refer to the customer-approved drawing for

▶ 0769-83713917

JKA2



MEMO	

Linear Motor Specifications Overview