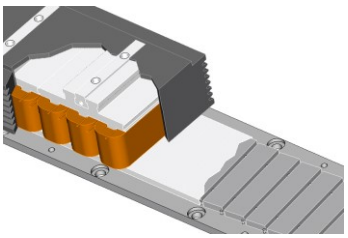
KPL Series (KLT, Platen core, Large size)



Motor Specifications

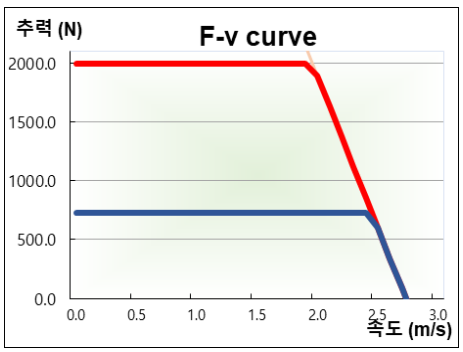
Items	Model	KPL-2P	KPL-3P	KPL-4P	KPL-5P
Force [N]	Continuous	750.6	1,125.9	1,501.2	1,876.5
	Peak	1,985.8	2,978.7	3,971.6	4,964.5
Current [A_{rms}]	Continuous	6.2	9.3	12.4	15.5
	Peak	19.2	28.8	38.4	48.0
Back EMF Const[V_{rms}/(m/s)]		40.35	40.35	40.35	40.35
Motor Constant[N/A_{rms}] note1)		121.06	121.06	121.06	121.06
Max. Velocity[m/s] note2)		2.4	2.4	2.4	2.4
Resistance [Ω] note1)		1.4	0.9	0.7	0.5
Inductance [mH] note1)		17.0	11.3	8.5	6.8
Attraction Force[N] note3)		3,034	4,551	6,068	7,585
Mover Weight [kg]		6.7	10.1	13.5	17.5

Note1) All Parameters indicate at phase level (3-phases, Y-connection, Phase-to-Neutral) at room temperature.
Note2) Motor Driver works for 3 phases with AC 220V ~ 380V and maximum velocity is subjected to modified by DC link voltage.
Note3) Magnetic attraction force is between the coils and the magnets through air-gap.

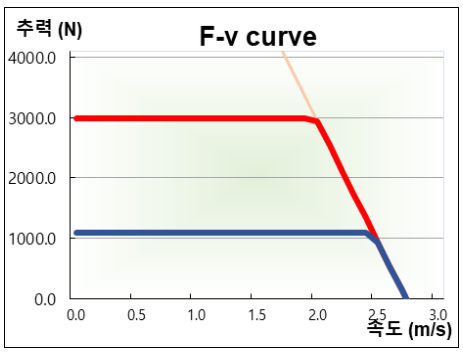
Force-Velocity Characteristics

Rated Area Peak Area

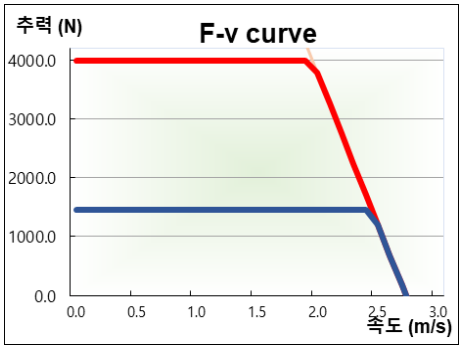
KPL-2P



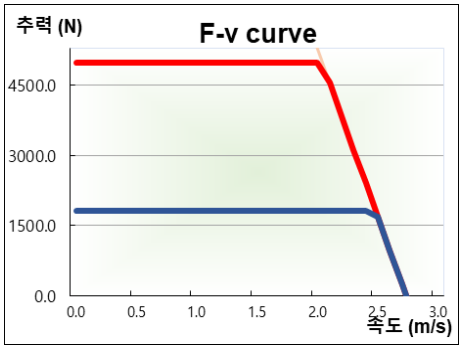
KPL-3P



KPL-4P



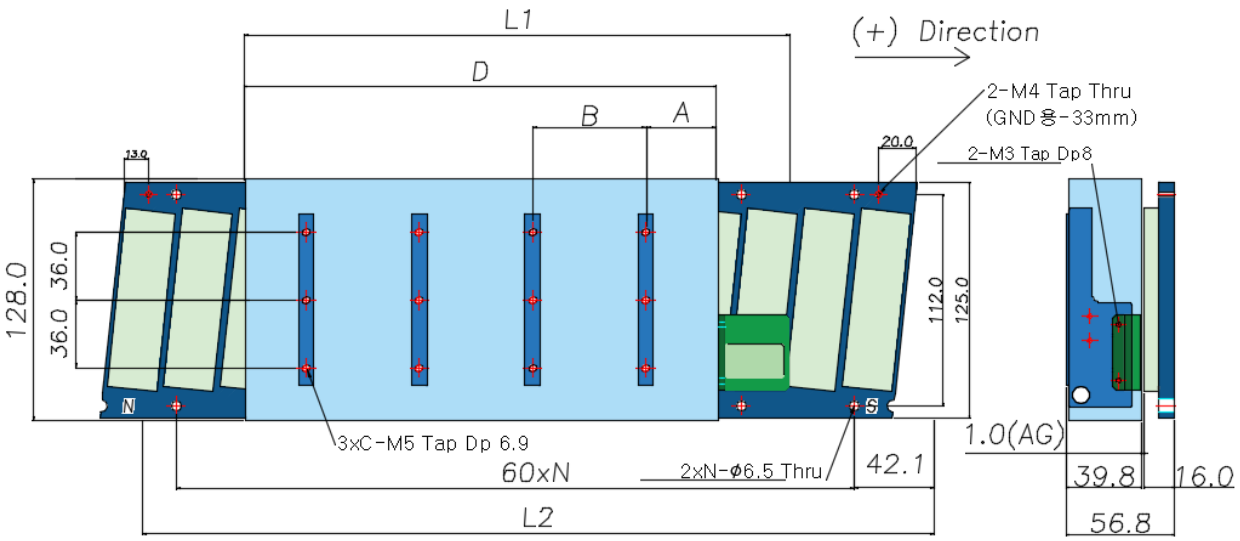
KPL-5P



Outline Dimension

Model	A [mm]	B [mm]	C(Q'ty)	D [mm]	L1 [mm]
KPL-2P	39.0	60.0	4	251.0	288.0
KPL-3P	39.0	60.0	6	371.0	408.0
KPL-4P	39.0	60.0	8	491.0	528.0
KPL-5P	39.0	60.0	10	611.0	648.0

KPL-1P and KPL-2S2P Models are available for special purpose.



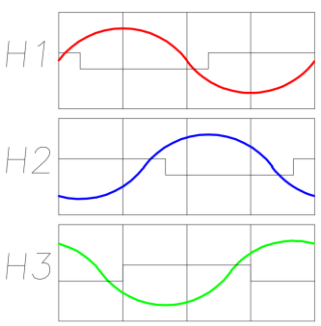
Model	L2 [mm]	N(Q'ty)	Weight [kg]	Pole Pitch [mm]
KPL-120	120.0	2	1.6	30.0
KPL-240	240.0	4	2.6	
KPL-420	420.0	7	5.1	
KPL-540	540.0	9	7.2	

• Pole Pitch is (N-S or S-N) magnet distance with 180 degrees.

Motor and Hall sensor Cables

Cables	Signals	Colors	Length
Motor Cable (AWG16)	U V W FG	Brown Black Gray(Blue) Green	STD: 0.6M OPTION: 1.0M, 1.5M, 2.0M, ETC
Hall Sensor Cable (AWG22)	+5V GND H1 (U) H2 (V) H3 (W)	Red Black Blue Green White	STD: 0.6M OPTION: 1.0M, 1.5M

• The Hall offset angle in each phase is 30 degree at falling edge.



* Hall Sensor phase at Back EMF.