

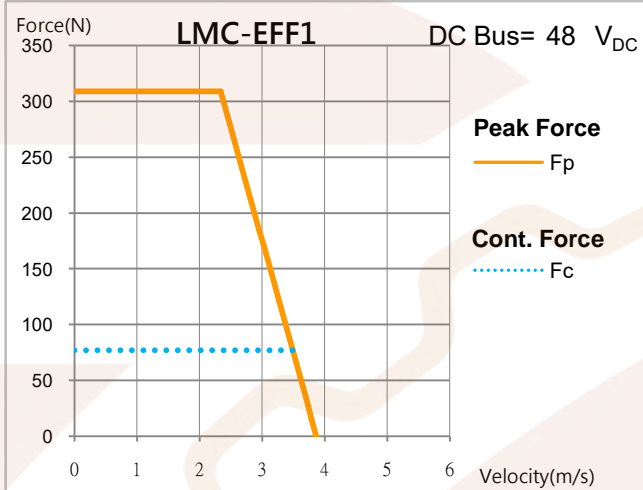
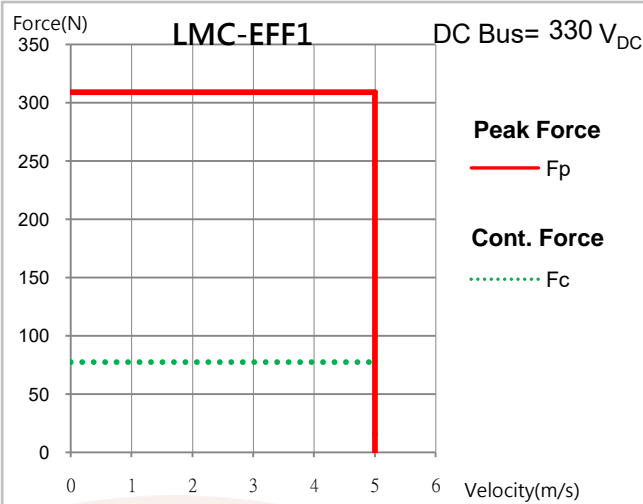
HIWIN MIKROSYSTEM CORP.

LMC-EFF1

Electrical specifications

	Symbol	Unit	Free air convection
Continuous force	F_c	N	77
Continuous current	I_c	Arms	5.7
Peak force (for 1sec.)	F_p	N	309
Peak current (for 1sec.)	I_p	Arms	22.6
Force constant	K_f	N/Arms	13.7
Electrical time constant	K_e	ms	1.5
Resistance (line to line at 25°C)	R_{25}	Ω	0.6
Inductance (line to line)	L	mH	0.9
Pole pair pitch	2 τ	mm	60
Back emf constant (line to line)	K_v	Vrms/m/s	7.9
Motor constant (at 25°C)	K_m	N/ \sqrt{W}	14.6
Thermal resistance	R_{th}	°C/W	2.59
Thermal sensor	-	-	3 PTC 120°C in series
Max. DC BUS	-	V	330

F-V curve

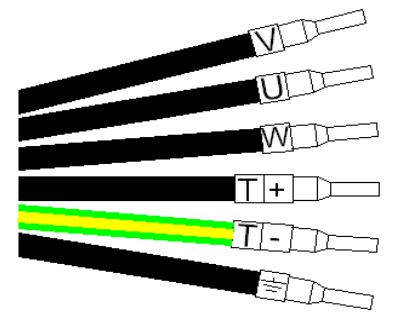


Connector /Wiring type

Wiring Type

Cabling : IGUS CF10.07.05
Diameter : 7.5mm
PTC Sensor: 3 PTC 120°C in series

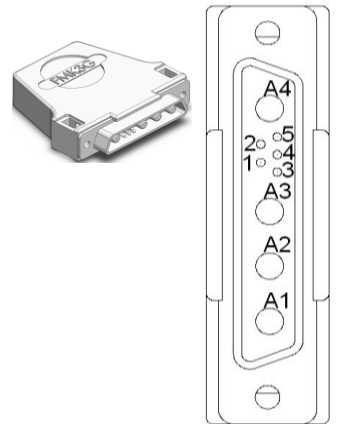
WIRING DIAGRAM	
Signal	Cable
V	1
U	2
W	3
GND	Shielding
Thermal+	4
Thermal-	YellowGreen



Connector Type

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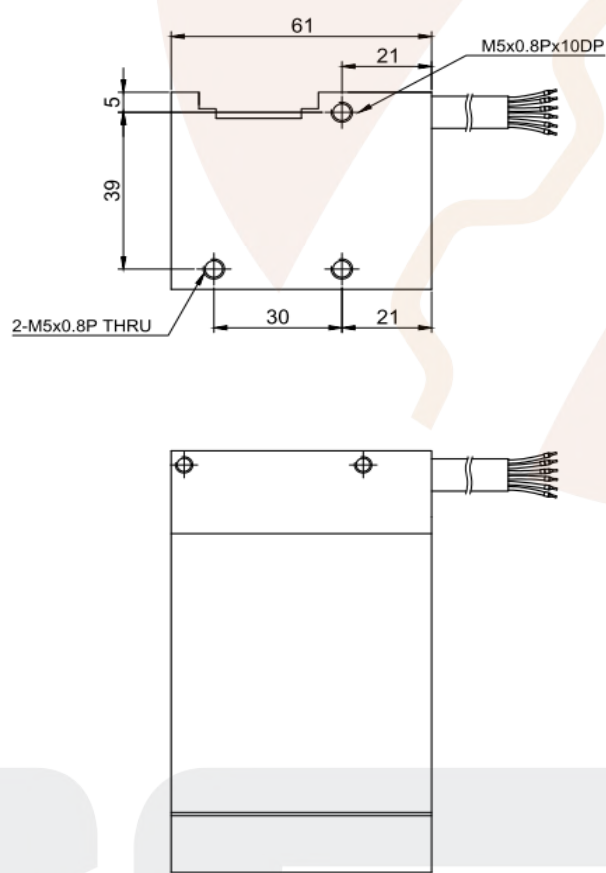
Wiring Diagram		
Connector	Signal	CABLE
A1	V	1
A2	U	2
A3	W	3
A4	GND	Shielding
1	Thermal+	4
3	Thermal-	YellowGreen
Case	GND	Shielding



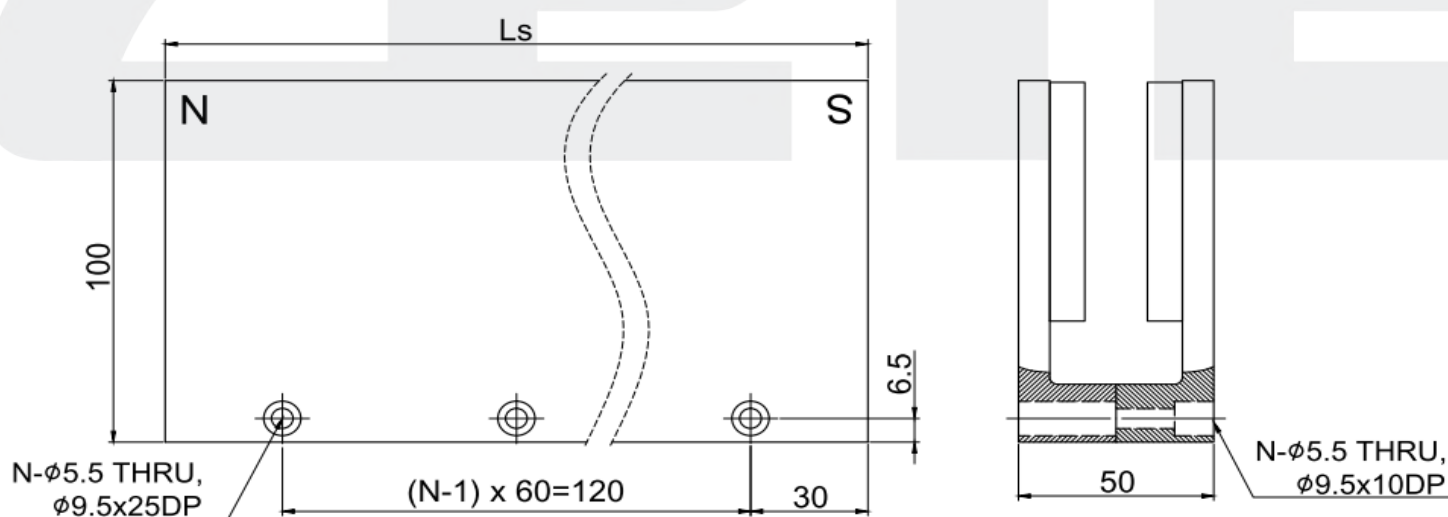
Mechanical specifications

	Symbol	Unit	Free air convection
Mass of forcer	M_f	kg	0.7
Unit mass of stator	M_s	kg/m	24.7
Length of forcer / Dimension n	L_f	mm	61/1
Height of forcer	h	mm	104.8
Height of stator	H_s	mm	100
Width of stator	W_s	mm	50
Length of stator / Dimension N	L_s	mm	120/2, 180/3, 300/5
Total height	H	mm	122

Dimensions for linear motor LMC-EFF1 forcer
Moving Direction(+) →

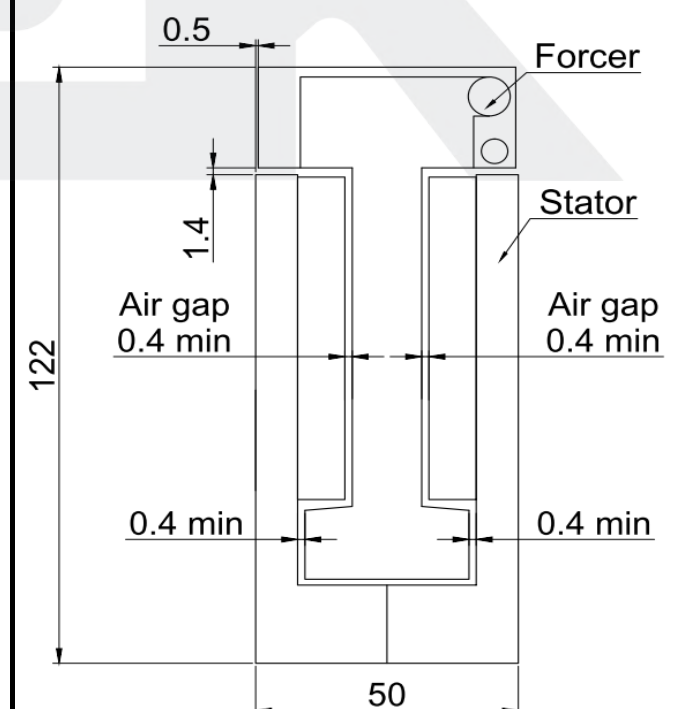


Dimensions for linear motor LMC-EFF stator



TYPE	LMC-EFFS1	LMC-EFFSB	LMC-EFFS2
Ls/N	120/2	180/3	300/5

Installing linear motors LMC-EFF series



Except dimensions, all the specifications in the table are in $\pm 10\%$ of tolerance.

Version: 1.01

Date: 2015/06/12