大銀微系統股份有限公司 HIWIN MIKROSYSTEM CORP.

LMC-EFF4

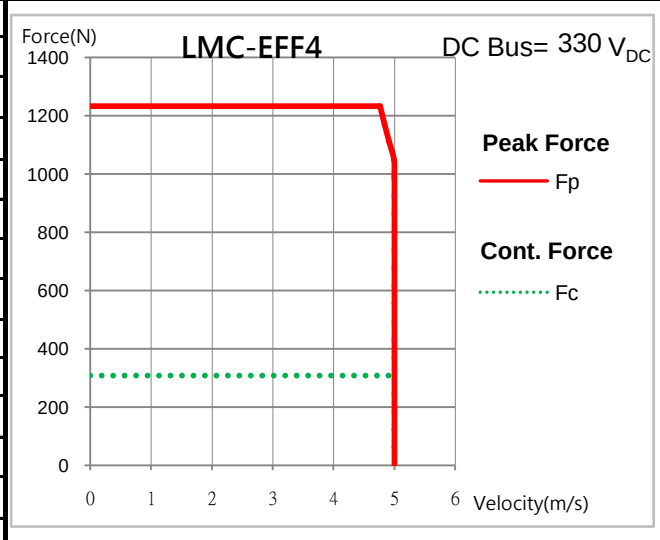
Electrical specifications

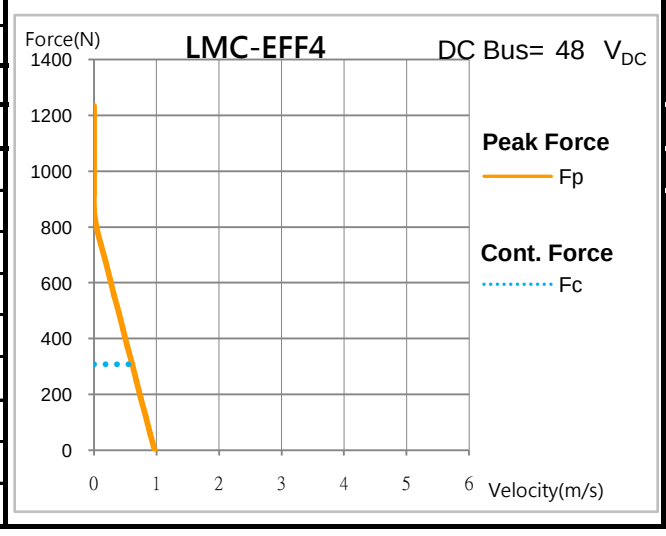
	Symbol	Unit	Free air convection
Continuous force	F_c	N	309
Continuous current	I_c	Arms	5.7
Peak force (for 1sec.)	F_p	N	1234
Peak current (for 1sec.)	I_p	Arms	22.6
Force constant	K_f	N/Arms	54.6
Electrical time constant	K_e	ms	1.5
Resistance (line to line at 25℃)	R_{25}	Ω	2.3
Inductance (line to line)	L	mH	3.5
Pole pair pitch	2τ	mm	60
Back emf constant (line to line)	K_v	Vrms/m/s	31.5
Motor constant (at 25℃)	K_m	N/√W	29.3
Thermal resistance	R_{th}	℃/W	0.65
Thermal sensor	-	-	3 PTC 120℃ in series
Max. DC BUS	-	V	330

Mechanical specifications

	Symbol	Unit	Free air convection
Mass of forcer	M_f	kg	2.7
Unit mass of stator	M_s	kg/m	24.7
Length of forcer / Dimension n	L_f	mm	241/7
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

F-V curve





Connector /Wiring type

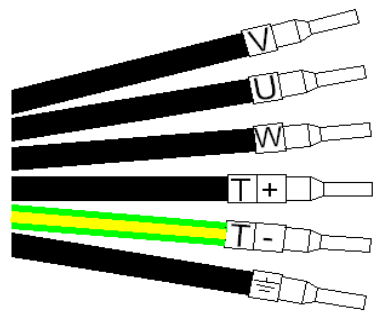
Wiring Type

Cabling：IGUS CF10.07.05

Diameter：7.5mm

PTC Sensor: 3 PTC 120℃ in series

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



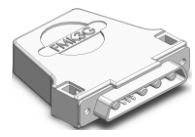
Connector Type

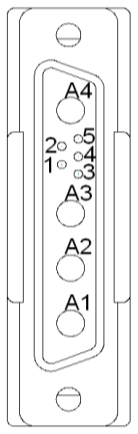
Cabling：IGUS CF10.07.05

Diameter：7.5mm

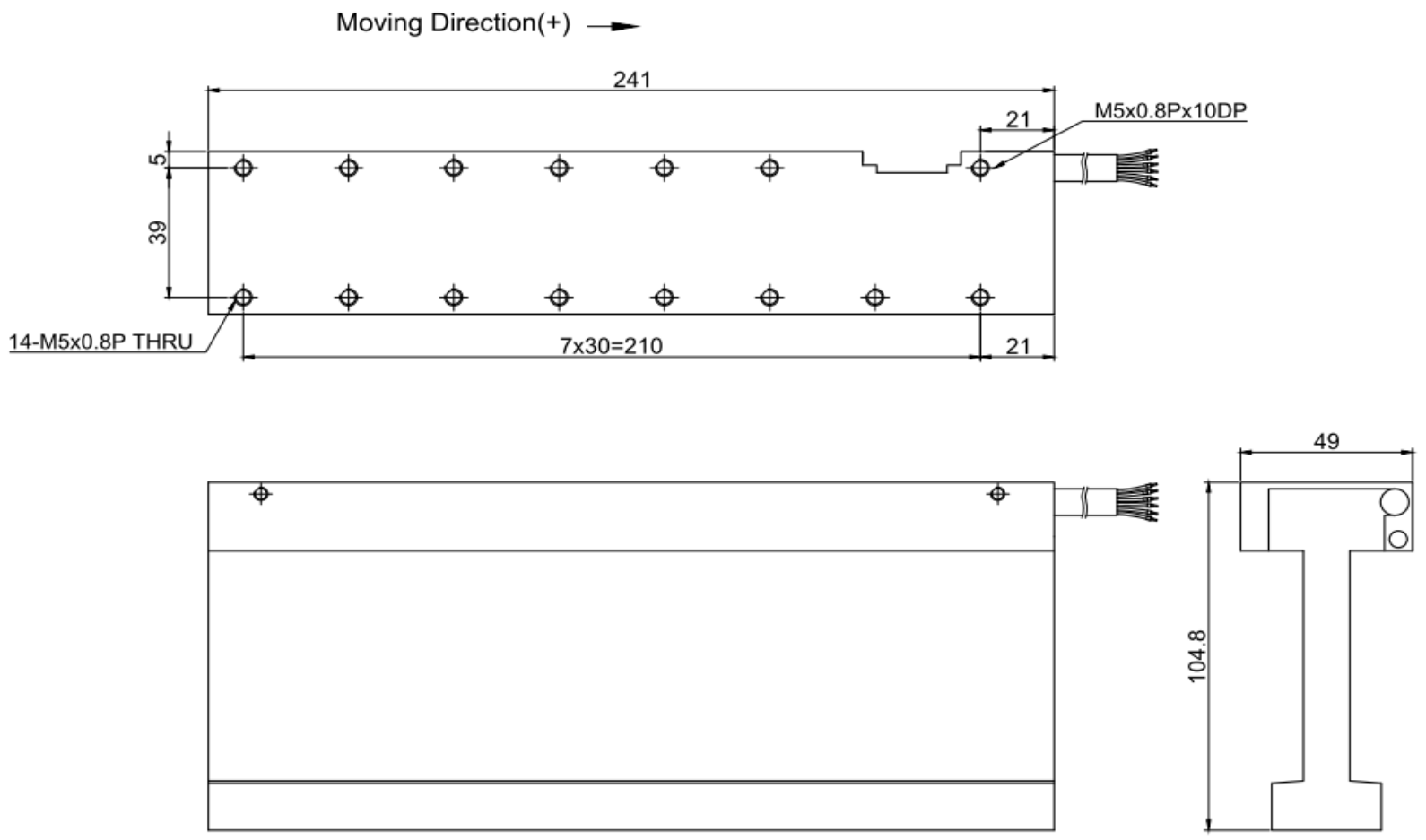
PTC Sensor: 3 PTC 120℃ in series

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

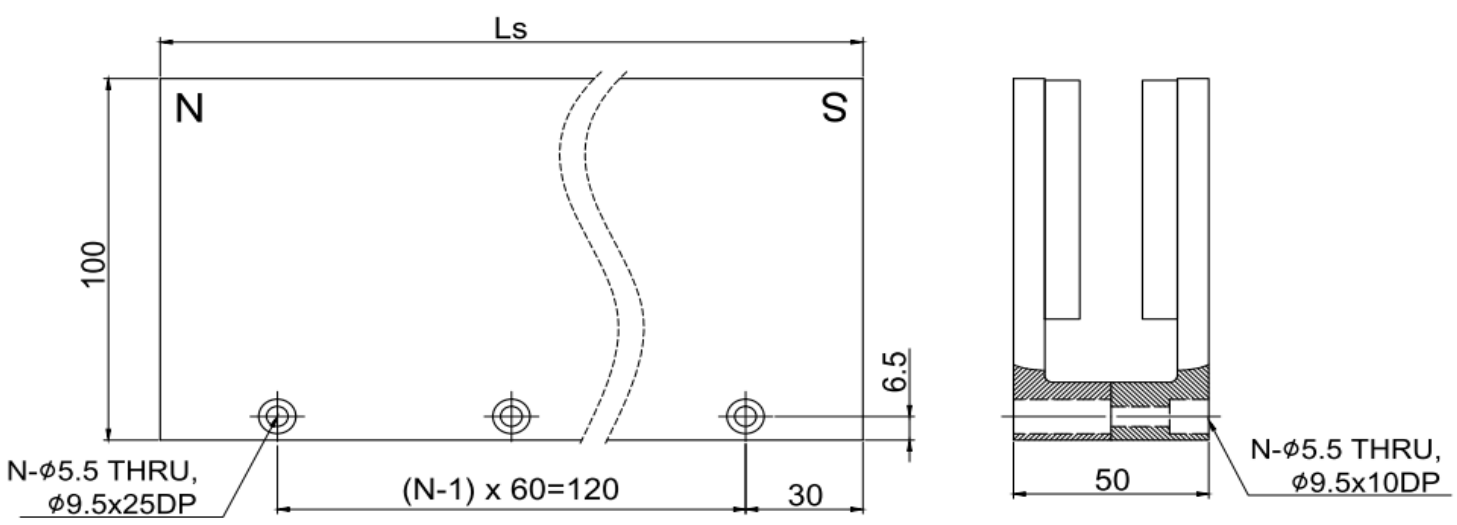




Dimensions for linear motor LMC-EFF4 forcer

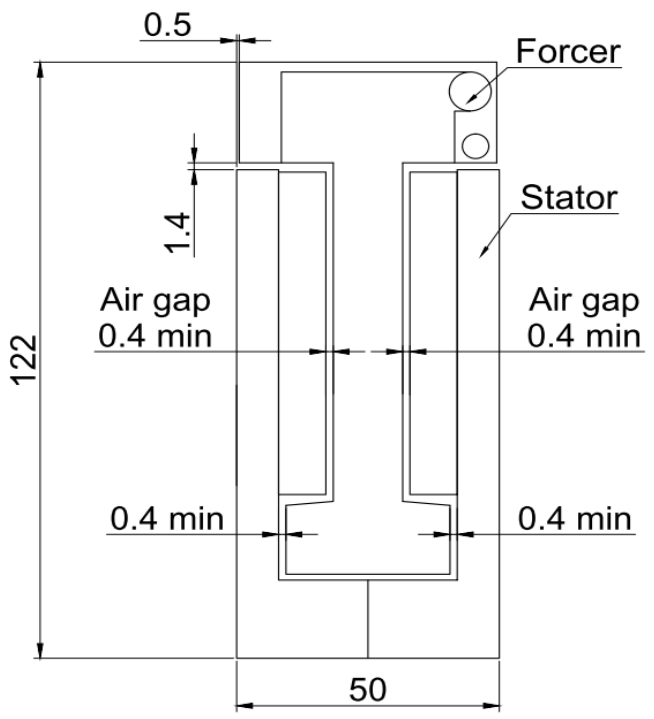


Dimensions for linear motor LMC-EFF stator



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 ±10% of tolerance.

Version: 1.01

Date: 2015/06/12