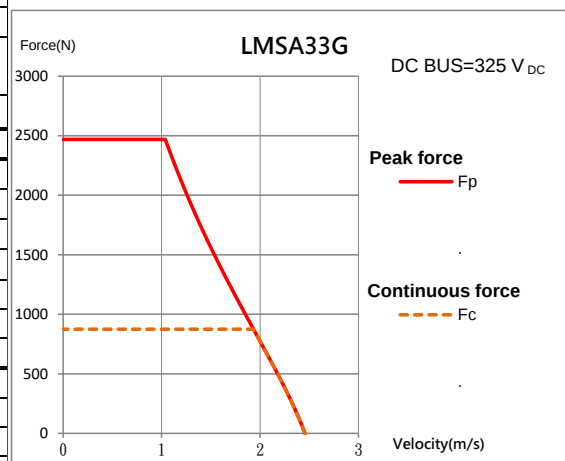
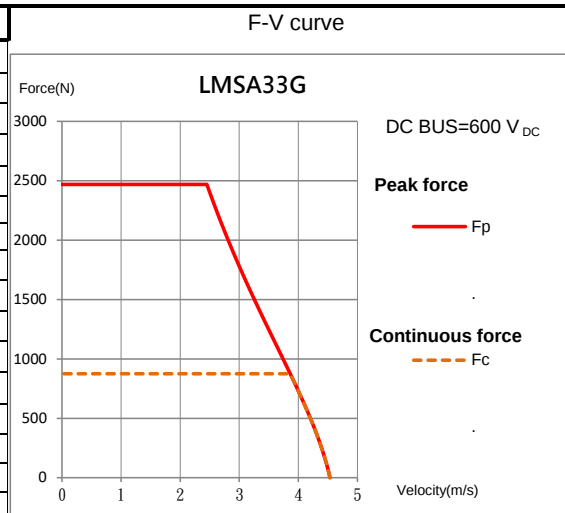


LMSA33G

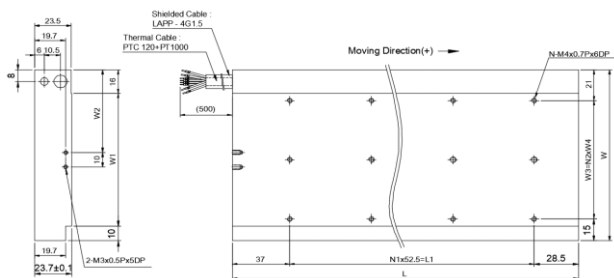
Linear Motor

Electrical specifications			
	Symbol	Unit	
Continuous force	F_c	N	875
Continuous current	I_c	A_{rms}	6
Peak force (1s)	F_p	N	2469
Peak current (1s)	I_p	A_{rms}	18
Ultimate force (0.5s)	F_u	N	3236
Ultimate current (0.5s)	I_u	A_{rms}	30
Force constant	K_f	N/A_{rms}	145.8
Attraction force	F_a	N	4333
Max. winding temperature	T_{max}	$^{\circ}C$	120
Electrical time constant	K_e	ms	4.9
Resistance (line to line · 25°C)	R_{25}	Ω	6.4
Resistance (line to line · 120°C)	R_{120}	Ω	8.8
Inductance (line to line)	L	mH	31.3
Pole pair pitch	2τ	mm	30
Minimum bending radius of cable	R_{bend}	mm	69
Back emf constant(line to line)	K_v	$V_{rms}/(m/s)$	84.2
Motor constant (25°C)	K_m	$N/\sqrt{W}$	47
Thermal resistance	R_{th}	$^{\circ}C/W$	0.2
Thermal time constant	t_{th}	s	3480
Thermal switch			1 x Pt1000 + 1 x (3 PTC SNM 120 In Series)
Max. DC bus voltage		V_{DC}	750

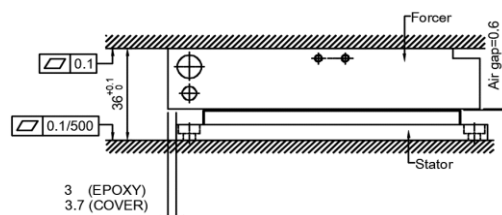


Mechanical specifications					
		Symbol	Unit		
Mass of forcer		M_f	kg	5.7	
Unit mass of stator		M_s	kg	8.5	
L	mm	328	W3	mm	80
L1	mm	262.5	W4	mm	40
W	mm	116	N	mm	18
W1	mm	90	N1	mm	5
W2	mm	56	N2	mm	2

Focer dimensions

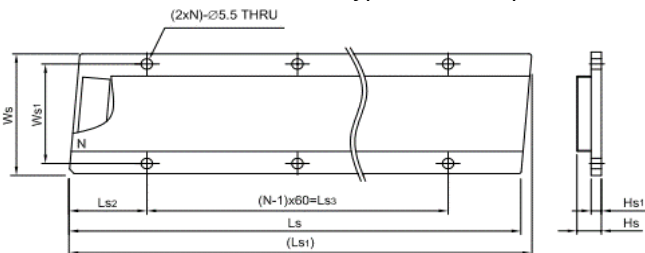


Mounting tolerance



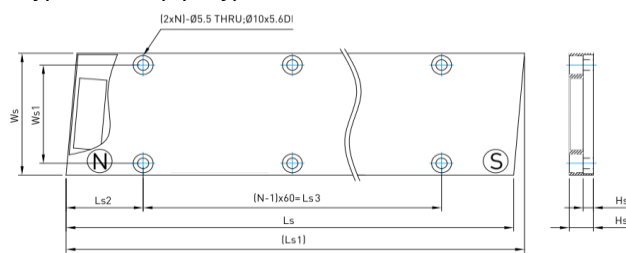
Stator dimensions

Type 1 : Cover plate



	LS	LS1	LS2	LS3	WS	WS1	HS	HS1	N
LMSA3S1(EA)	120	123.04	30.37	60	114.6(116)	104	11.7	6	2
LMSA3S2(EA)	180	183.04	30.37	120	114.6(116)	104	11.7	6	3
LMSA3S3(EA)	300	303.04	30.37	240	114.6(116)	104	11.7	6	5

Type 2 : EA (Epoxy)



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

Version: 1.00

This drawing is only for reference, detail dimensions please refer to approval drawing.

Date: 2023/3/29