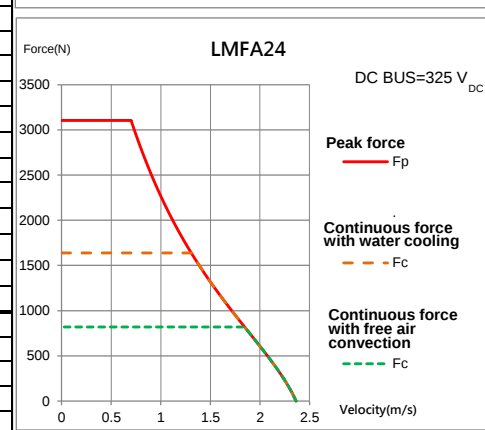
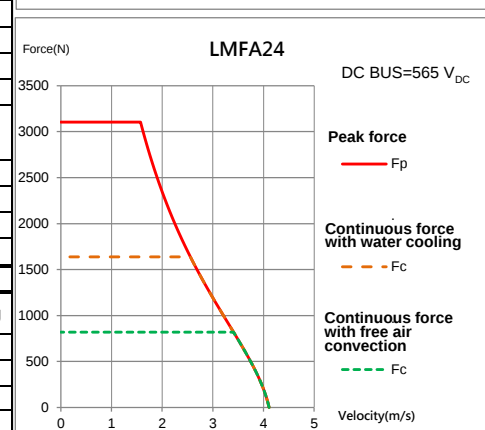
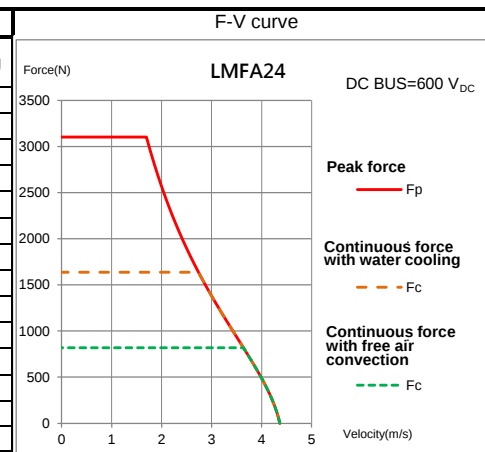


Linear Motor

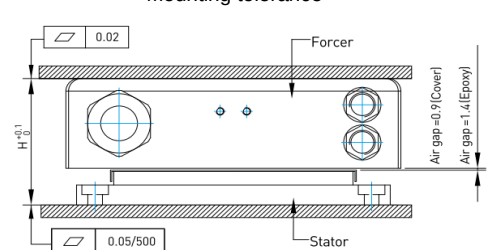
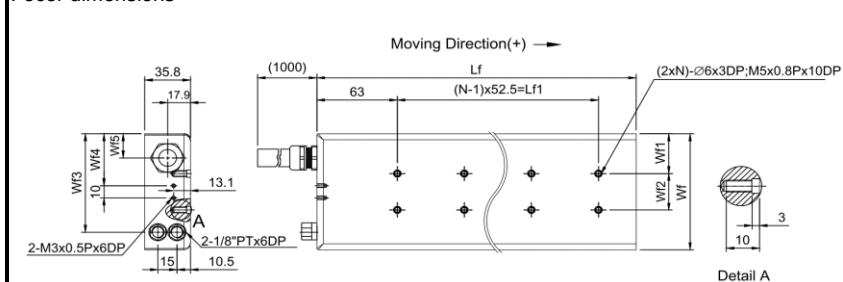
Electrical specifications				
	Symbol	Unit	Free air convection	Water cooling
Continuous force	F_c	N	819	1638
Continuous current	I_c	A_{rms}	5.4	10.8
Stall force	F_0	N	-	1146
Stall current	I_0	A_{rms}	-	7.6
Peak force (1s)	F_p	N	3104	
Peak current (1s)	I_p	A_{rms}	33.5	
Force constant	K_f	N/A_{rms}	151.6	
Attraction force	F_a	N	5036	
Max. winding temperature	T_{max}	°C	120	
Electrical time constant	K_e	ms	7.2	
Resistance (line to line · 25°C)	R_{25}	Ω	6.2	
Resistance (line to line · 120°C)	R_{120}	Ω	8.2	
Inductance (line to line)	L	mH	44.6	
Pole pair pitch	2τ	mm	30	
Back emf constant(line to line)	K_v	$V_{rms}/(m/s)$	87.5	
Motor constant (25 °C)	K_m	$N/\sqrt{W}$	49.7	
Thermal resistance	R_{th}	°C/W	0.27	0.07
Thermal time constant	t_{th}	s	-	150
Thermal switch			1 x Pt1000 + 1 x (3 PTC SNM 120 In Series)	
Maximum velocity at maximum force	$V_{MAX,FP}$	m/s	2.21	
Maximum electric power input	$P_{EL,MAX}$	W	-	20607
Maximum dissipated heat output	$Q_{P,H,MAX}$	W	-	1431
Max. DC bus voltage		V_{DC}	750	

Mechanical specifications				
	Symbol	Unit	Free air convection	Water cooling
Mass of forcer	M_f	kg	10.4	
Unit mass of stator	M_s	kg	9.8	
Total installation height	H	mm	50.5	
Minimum flow rate		L/min	-	4
Temperature of cooling water		°C	-	20
Pressure drop	ΔP	bar	-	3.18
Water temperature difference	$\Delta \theta_{p-H}$	K	-	5.1

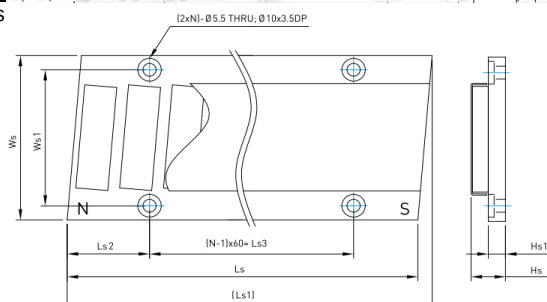
Lf	mm	460	Wf3	mm	111.5
Lf1	mm	367.5	Wf4	mm	58
Wf	mm	126	Wf5	mm	20
Wf1	mm	40.5	N	mm	8
Wf2	mm	45	n	mm	-



Mounting tolerance



(2xN)- Ø5.5 THRU; Ø 10x3.5DP



Type	Ls	Ls1	Ls2	Ls3	Hs	Hs1	Ws	Ws1	N
LMF2S1	120	123.09	30.4	60	13.8	7.9	118	104	2
LMF2S1E	120	123.09	30.4	60	13.3	7.7	118	104	2
LMF2S2	180	183.09	30.4	120	13.8	7.9	118	104	3
LMF2S2E	180	183.09	30.4	120	13.3	7.7	118	104	3
LMF2S3	300	303.09	30.4	240	13.8	7.9	118	104	5
LMF2S3E	300	303.09	30.4	240	13.3	7.7	118	104	5

Version: 2.00

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