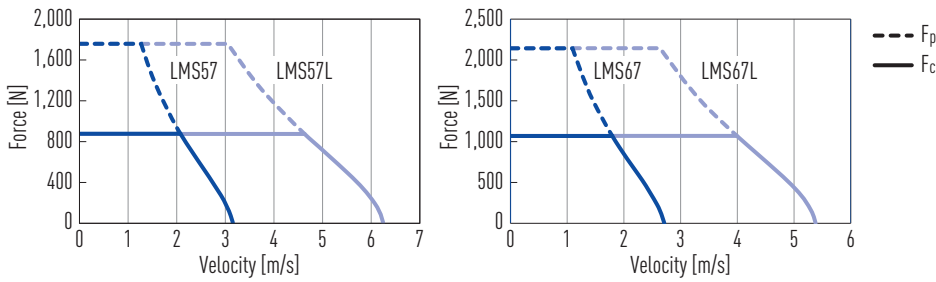


Specifications

Force-velocity curves (DC bus voltage: 600 VDC)



Technical data for LMS5, LMS6

	Symbol	Unit	LMS57	LMS57L	LMS67	LMS67L
Forces and electrical parameters						
Continuous force at T_{max}	F_c	N	879		1,069	
Continuous current at T_{max}	I_c	A_{eff}	3.9	7.9	3.9	7.9
Peak force (for 1 s)	F_p	N	1,758		1,466	
Peak current (for 1 s)	I_p	A_{eff}	11.8	23.7	11.8	23.7
Force constant	K_f	N/A_{eff}	223	112	271	136
Attraction force	F_a	N	4,885		5,700	
Electrical time constant	K_e	ms	12.4	12.0	12.4	12.6
Resistance ¹⁾	R_{25}	Ω	13.8	3.1	15.4	3.4
Inductance ¹⁾	L	mH	170.8	37.3	190.7	43.0
Back EMF constant	K_u	$V_{eff}/(m/s)$	121	61	141	71
Motor constant	K_m	N/\sqrt{W}	49.0	51.6	56.4	60.2
Thermal resistance	R_{th}	$^{\circ}C/W$	0.2	0.2	0.2	0.2
Thermal time constant	T_{th}	s	6,460		7,440	
Thermal switch			3 PTC SNM 120 in series			
Max. DC bus voltage		V	600			
Mechanical parameters						
Max. bending radius of motor cable	R_{bend}	mm	69			
Pole pair pitch	2τ	mm	32			
Max. winding temperature	T_{max}	$^{\circ}C$	120			
Weight of forcer	M_F	kg	9.4		10.8	
Unit mass of stator	M_S	kg/m	13.7		15.9	
Width of stator	W_S	mm	150		170	
Stator mounting distance	A_S	mm	135		155	
Length of stator/Dimension N	L_S	mm	128 mm/N = 2; 320 mm/N = 5			
Total height (forcer + stator)	H	mm	57.4			

All the specifications in the table (except dimensions) are in $\pm 10\%$ of tolerance at 25 $^{\circ}C$ ambient temperature; ¹⁾ Line to line

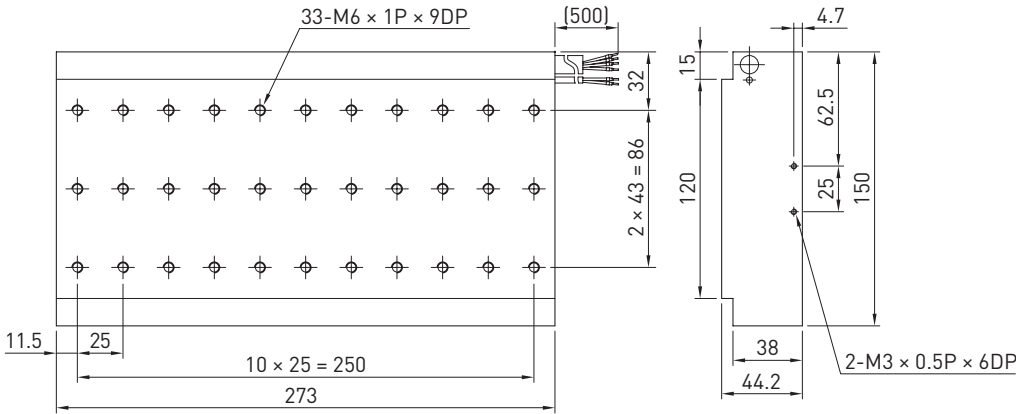
LMS5, LMS6 motor cable assignment

Motor cable	Signal	Diameter [mm]
1	V	9.0
2	U	
3	W	
4	—	
5	T+	
6	T-	
Green/Yellow	GND	

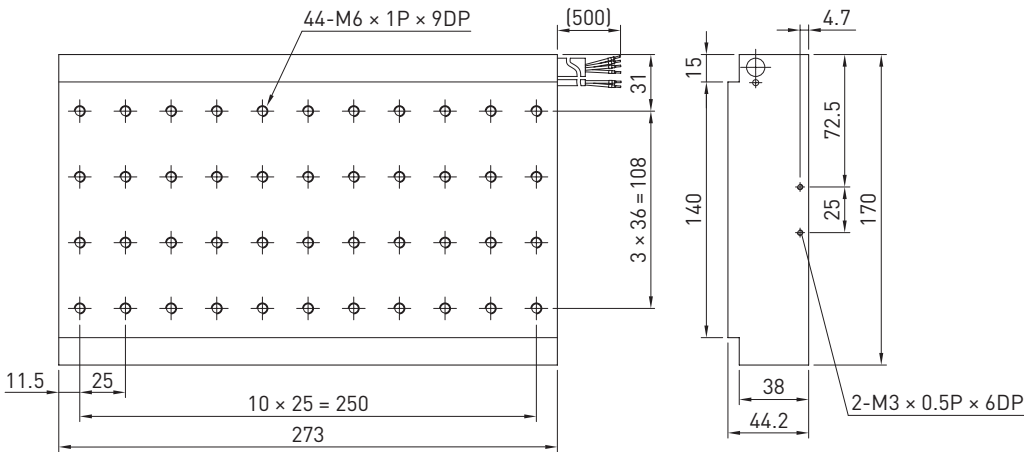
Data Sheet

HIWIN linear motors LMS5, LMS6

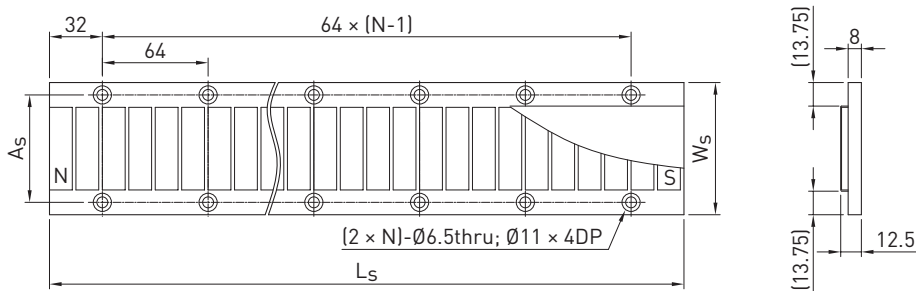
Dimensions of forcer LMS57(L)



Dimensions of forcer LMS67(L)



Dimensions of stator



Mounting tolerances

