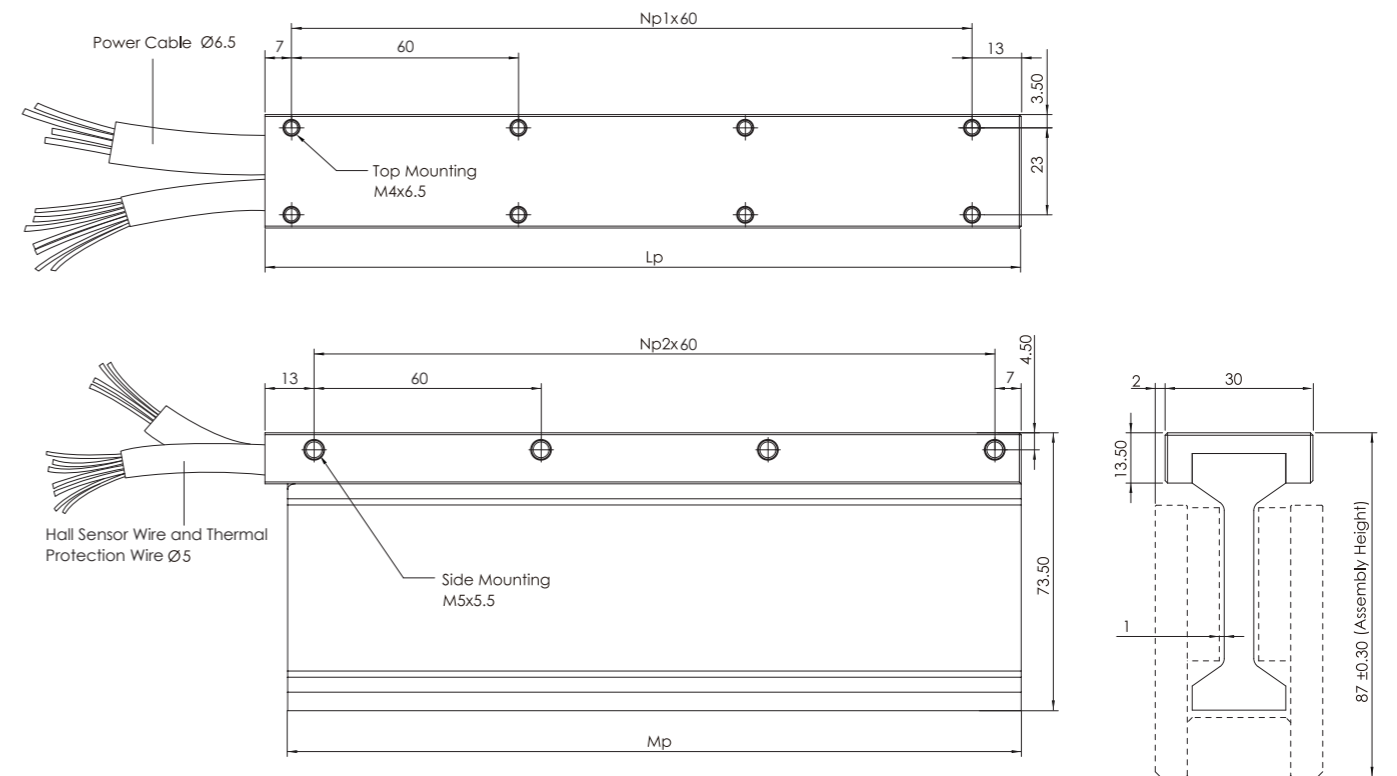




**LM-PB SERIES**  
Linear Motion Technology

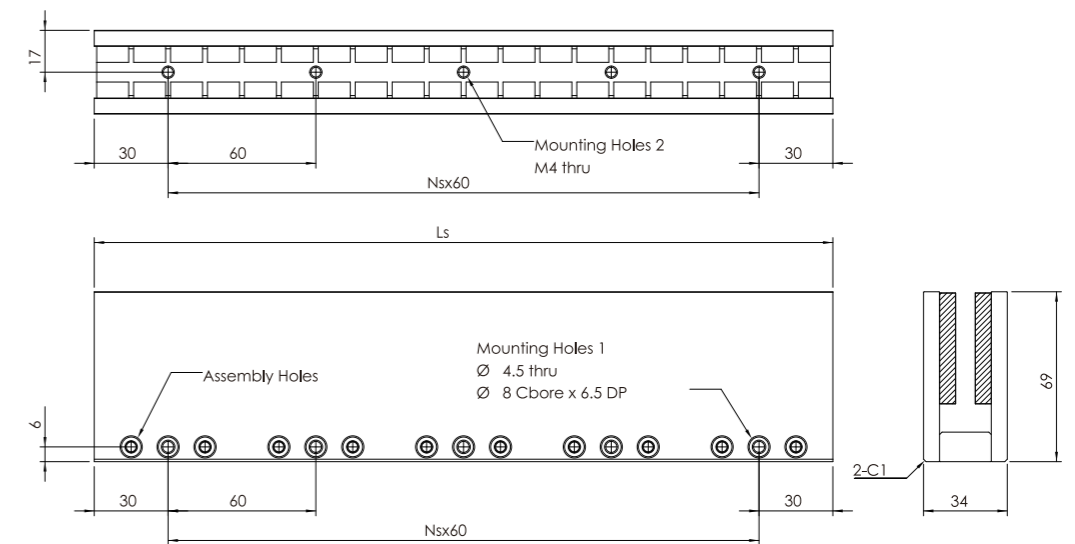
## LM-PB Coil Assembly



## LM-PB Coil Assembly Model

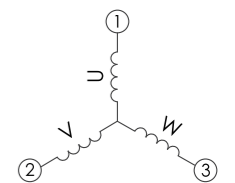
Coil Assembly Model	LM-PB2		LM-PB3		LM-PB4			LM-PB6			LM-PB8			
	W1	W2	W1	W2	W1	W2	W3	W1	W2	W3	W1	W2	W3	W4
<b>Performance</b>														
Peak force (N)	150	224	300	450	600									
Continuous force (N)	37.5	56.2	75	112.5	150									
Peak power (W)	684	1030	1517	2073	1548									
Continuous power (W)	42	64	94	129	189									
<b>Mechanical</b>														
Coil assembly length (mm)	80	110	140	200	260									
Coil assembly weight (kg)	0.17	0.26	0.31	0.46	0.58									
Magnet track weight (kg/m)	8.4	8.4	8.4	8.4	8.4									
Electrical cycle length (mm)	30	30	30	30	30									
<b>Electrical</b>														
Continuous current (Arms)	2.0	4.0	2.0	4.0	2.1	4.2	8.4	2.0	4.0	8.0	2.1	4.2	8.4	16.0
Peak current (Arms)	8	16	8	16	8.4	16.8	33.6	8	16	32	8	16	32	64
Force constant (N/A)	18.7	9.3	28.1	14	35.7	17.8	8.9	56.2	28.1	14	75	37.5	18	9.3
Back EMF constant (V/m/s)	20.6	10.3	30.9	7.7	41.2	20.58	10.3	61.8	30.9	15.4	82.3	41.2	20.58	10.3
Ph-Ph resistance @25°C(Ω)	10.7	2.7	16.1	4	21.5	5	1.25	32.4	8.1	2.1	43.0	10	2.5	0.7
Ph-Ph inductance @25°C(mH)	6.52	1.63	9.78	2.44	13.04	3.26	0.82	39.12	9.78	2.44	26.08	6.52	1.63	0.4
Motor constant (N/A/W)	5.78	5.78	7.02	7.02	7.73	7.73	7.73	9.9	9.9	9.9	10.91	10.91	10.91	10.91

## LM-SB Magnetic Way



### OUTPUT CABLE (All cable standard length 400 mm)

Motor Wire Table			Hall Sensor Wire Table and Thermal Protection Wire Table					
Pin Number	Function	Cross section	Color	Function	Cable Dia.	Color	Function	Cable Dia.
1	U phase	1.0 mm <sup>2</sup>	Pink	Hall A U phase	0.14 mm <sup>2</sup>	Brown/Blue	Thermal sensor	0.14 mm <sup>2</sup>
2	V phase	1.0 mm <sup>2</sup>	Yellow	Hall B V phase	0.14 mm <sup>2</sup>			
3	W phase	1.0 mm <sup>2</sup>	Green	Hall C W phase	0.14 mm <sup>2</sup>			
yellow/green	PE	1.0 mm <sup>2</sup>	Grey	Hall IC + 5V	0.14 mm <sup>2</sup>			
			White	GND	0.14 mm <sup>2</sup>			



## LM-PB Coil Assembly

	Np1	Np2	Lp	Mp
LM-PB2	1	1	80	74
LM-PB3	2	2	110	104
LM-PB4	2	2	140	134
LM-PB6	3	3	200	194
LM-PB8	4	4	260	254

## LM-SB Magnetic Way

	Ns	Ls
LM-SB0	1	120
LM-SB1	4	300
LM-SB2	7	480