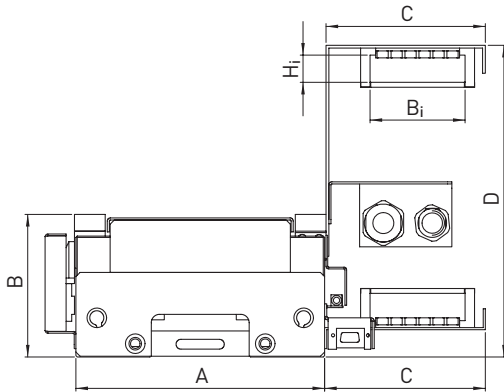


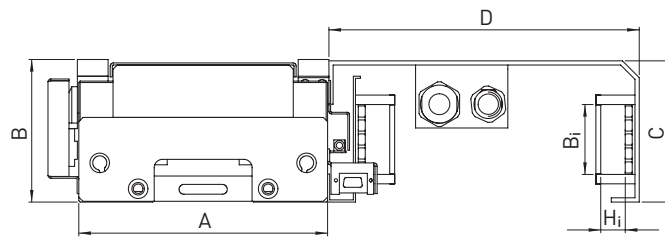
### 3.3 LMX1L-S linear motor axis

LMX1L linear motor axis are equipped with an iron-core motor, which provides substantial continuous force. They can also be used in cross tables. The stroke is measured via the optical or magnetic positioning measurement systems incrementally or absolutely. The LMX1L-S linear motor axis have a very compact design and are available in overall lengths up to 4,000 mm.

- Max. acceleration 50 m/s<sup>2</sup>
- Max. speed 4 m/s
- Up to 4,000 mm long



Energy supply vertical



Energy supply horizontal

Table 3.11 Dimensions of Energy supply

Energy supply alignment	C [mm]	D [mm]	Internal dimensions B <sub>i</sub> × H <sub>i</sub> [mm]
Vertical	115	223	68 × 21
Horizontal	89	222	68 × 21

Table 3.12 Technical data of LMX1L-S linear motor axis

Description (order code) xxxx = stroke [mm]	Motor type	F <sub>c</sub> [N]	F <sub>p</sub> [N]	Weight of carriage [kg]	Length of carriage [kg]	v <sub>max</sub> [m/s]	a <sub>max</sub> [m/s <sup>2</sup> ]	Dimension A [mm]	Dimension B [mm]
LMX1L-S23-1-xxxx-D100	LMS23	240	480	7.5	200	4.0	50	178	90
LMX1L-S27-1-xxxx-D100	LMS27	382	764	9.5	280	4.0	50	178	90
LMX1L-S37-1-xxxx-D100	LMS37	535	1,070	12.0	280	3.5 <sup>1)</sup>	50	202	95
LMX1L-S37L-1-xxxx-D100	LMS37L	535	1,070	12.0	280	4.0	50	202	95
LMX1L-S47-1-xxxx-D100	LMS47	733	1,466	18.0	280	2.5 <sup>1)</sup>	50	232	95
LMX1L-S47L-1-xxxx-D100	LMS47L	733	1,466	18.0	280	4.0	50	232	95
LMX1L-S57-1-xxxx-D100	LMS57	879	1,758	22.0	280	2.0 <sup>1)</sup>	50	252	100
LMX1L-S57L-1-xxxx-D100	LMS57L	879	1,758	22.0	280	4.0	50	252	100
LMX1L-S67-1-xxxx-D100	LMS67	1,069	2,138	26.0	280	2.0 <sup>1)</sup>	50	272	100
LMX1L-S67L-1-xxxx-D100	LMS67L	1,069	2,138	26.0	280	4.0	50	272	100
LMX1L-S23-1-xxxx-D1A0	LMS23	240	480	7.8	200	4.0	50	178	102/111 <sup>2)</sup>
LMX1L-S27-1-xxxx-D1A0	LMS27	382	764	9.9	280	4.0	50	178	102/111 <sup>2)</sup>
LMX1L-S37-1-xxxx-D1A0	LMS37	535	1,070	12.5	280	3.5 <sup>1)</sup>	50	202	107/116 <sup>2)</sup>
LMX1L-S37L-1-xxxx-D1A0	LMS37L	535	1,070	12.5	280	4.0	50	202	107/116 <sup>2)</sup>
LMX1L-S47-1-xxxx-D1A0	LMS47	733	1,466	18.8	280	2.5 <sup>1)</sup>	50	232	107/116 <sup>2)</sup>
LMX1L-S47L-1-xxxx-D1A0	LMS47L	733	1,466	18.8	280	4.0	50	232	107/116 <sup>2)</sup>
LMX1L-S57-1-xxxx-D1A0	LMS57	879	1,758	23.0	280	2.0 <sup>1)</sup>	50	252	112/121 <sup>2)</sup>
LMX1L-S57L-1-xxxx-D1A0	LMS57L	879	1,758	23.0	280	4.0	50	252	112/121 <sup>2)</sup>
LMX1L-S67-1-xxxx-D1A0	LMS67	1,069	2,138	27.0	280	2.0 <sup>1)</sup>	50	272	112/121 <sup>2)</sup>
LMX1L-S67L-1-xxxx-D1A0	LMS67L	1,069	2,138	27.0	280	4.0	50	272	112/121 <sup>2)</sup>

# Linear Motor Systems

## Single linear motor axes

### 3.3.1 LMX1L-S linear motor axis without cover

#### Dimensions and weights of the LMX1L-S23 linear motor axis without cover

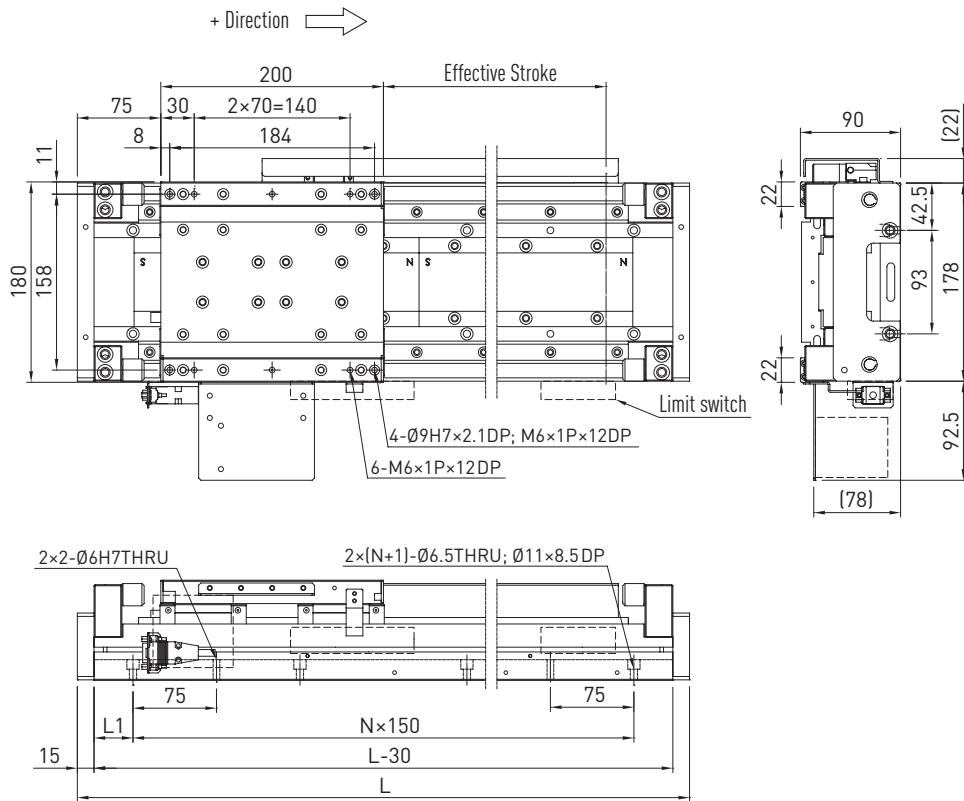
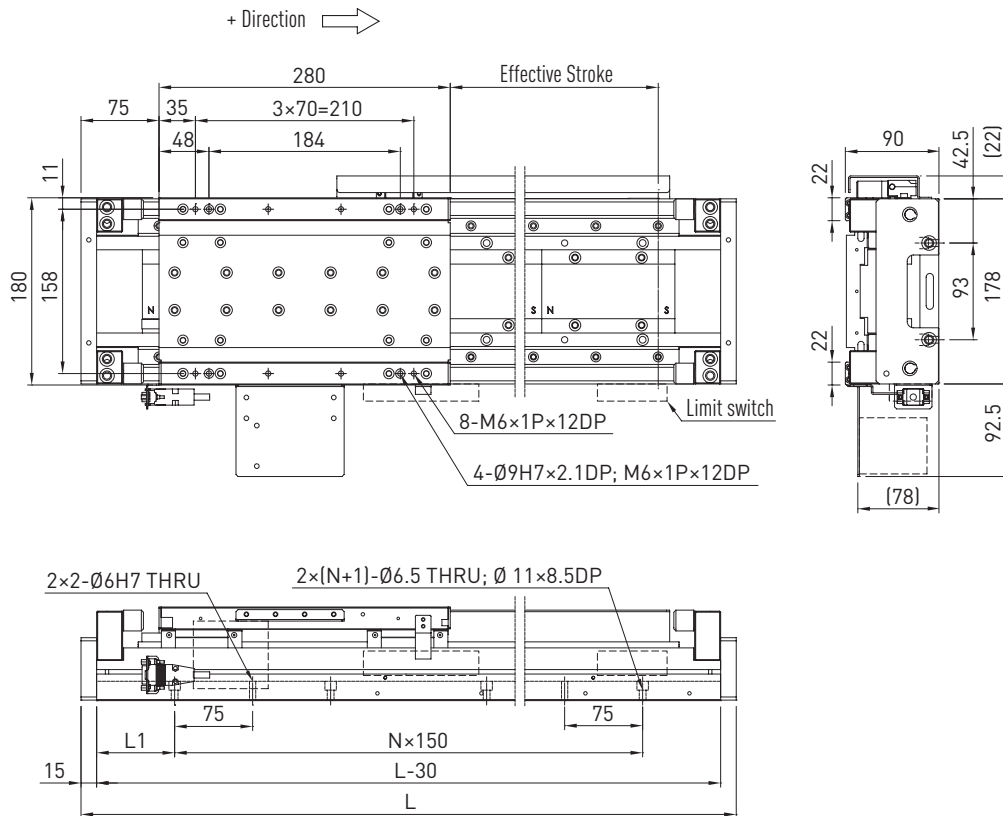


Table 3.13 Dimensions and weights of LMX1L-S23 without cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	450	550	650	750	850	950	1,050	1,150	1,250	1,350	1,450	1,550
L1 [mm]	60	35	85	60	35	85	60	35	85	60	35	85
N	1 <sup>1)</sup>	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	19	21	23	25	27	29	31	33	35	36	39	40

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1L-S27 linear motor axis without cover



All values in mm

Table 3.14 Dimensions and weights of LMX1L-S27 without cover

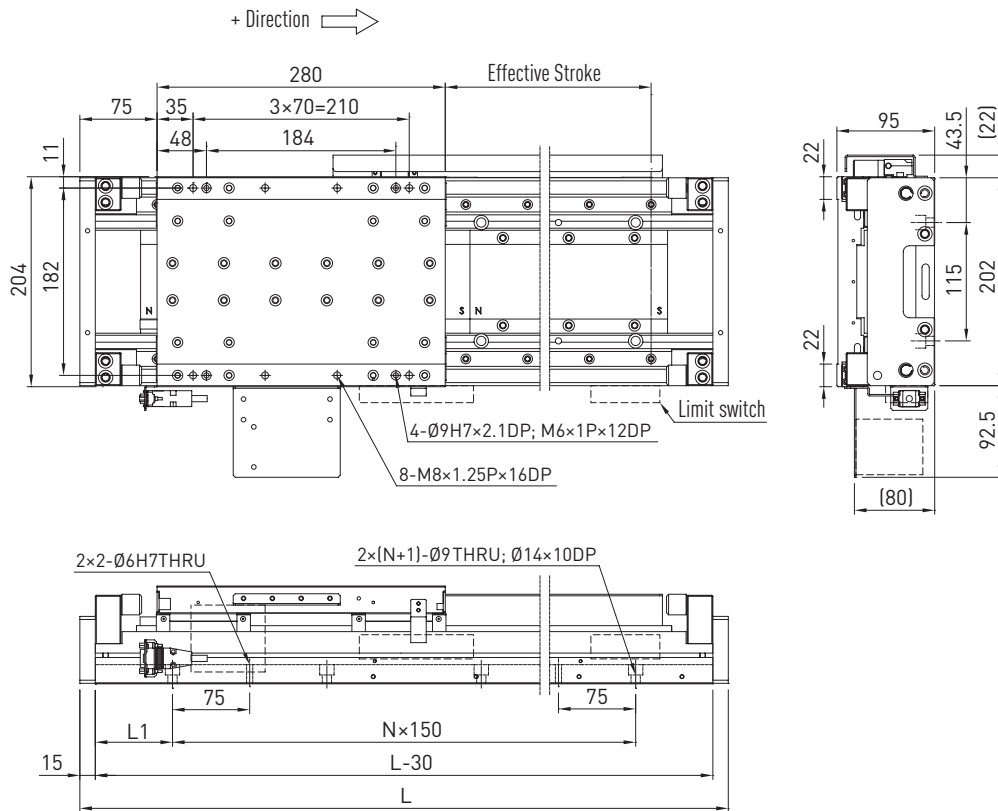
Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	23	26	28	29	32	34	36	38	39	42	43	45

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

# Linear Motor Systems

## Single linear motor axes

### Dimensions and weights of the LMX1L-S37 and LMX1L-S37L linear motor axes without cover



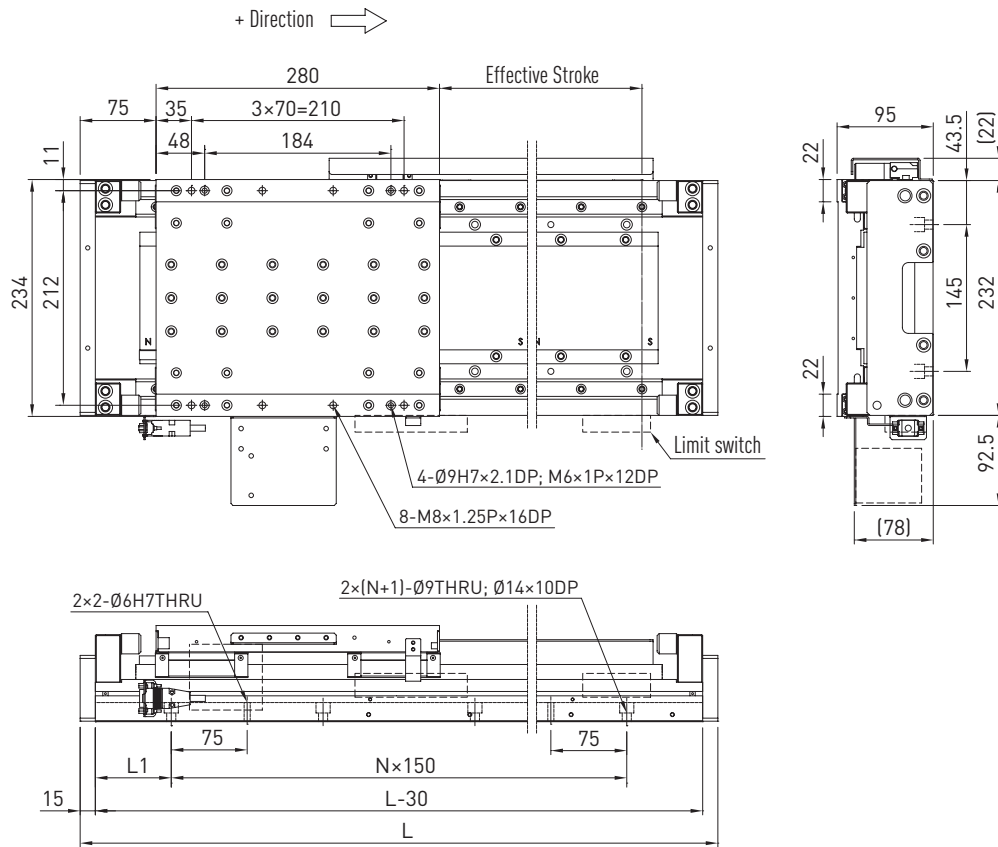
All values in mm

Table 3.15 Dimensions and weights of LMX1L-S37 and LMX1L-S37L without cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	27	29	32	34	37	39	41	44	46	49	51	54

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1L-S47 and LMX1L-S47L linear motor axes without cover



All values in mm

Table 3.16 Dimensions and weights of LMX1L-S47 and LMX1L-S47L without cover

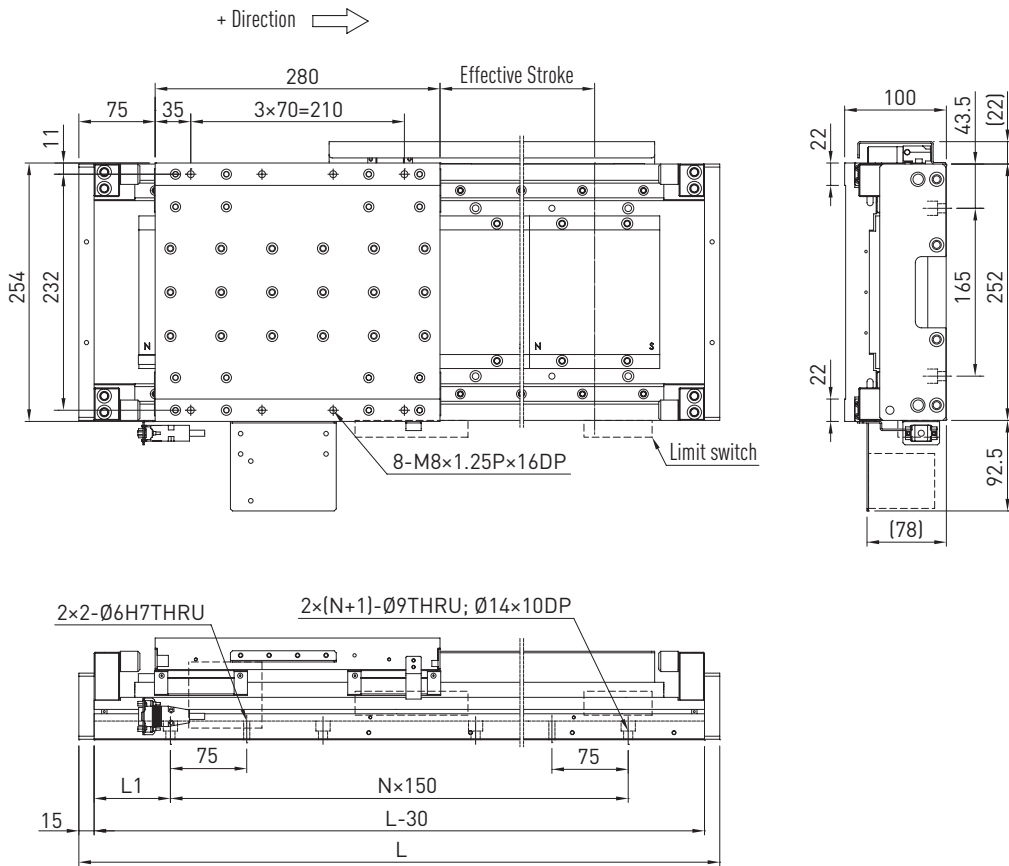
Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	37	39	42	45	48	51	54	57	60	63	65	69

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

# Linear Motor Systems

## Single linear motor axes

### Dimensions and weights of the LMX1L-S57 and LMX1L-S57L linear motor axes without cover



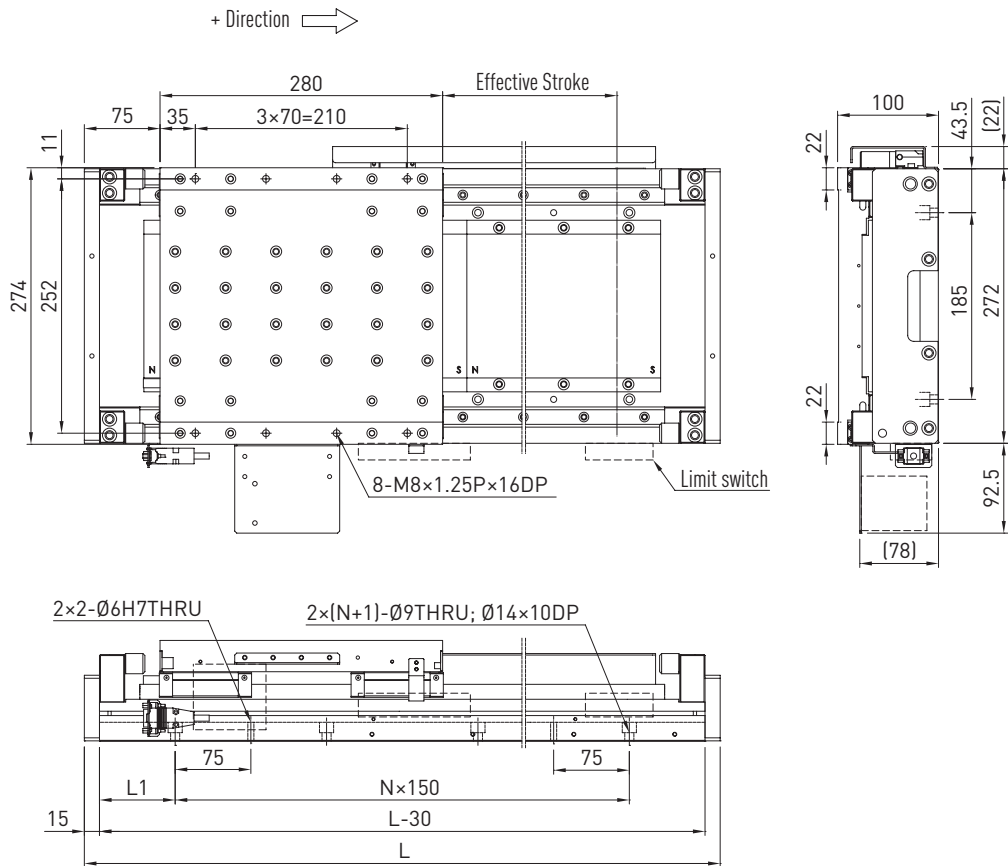
All values in mm

Table 3.17 Dimensions and weights of LMX1L-S57 and LMX1L-S57L without cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	41	43	47	50	53	57	60	63	66	70	72	76

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1L-S67 and LMX1L-S67L linear motor axes without cover



All values in mm

Table 3.18 Dimensions and weights of LMX1L-S67 and LMX1L-S67L without cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	44	47	51	54	58	62	65	69	72	76	79	83

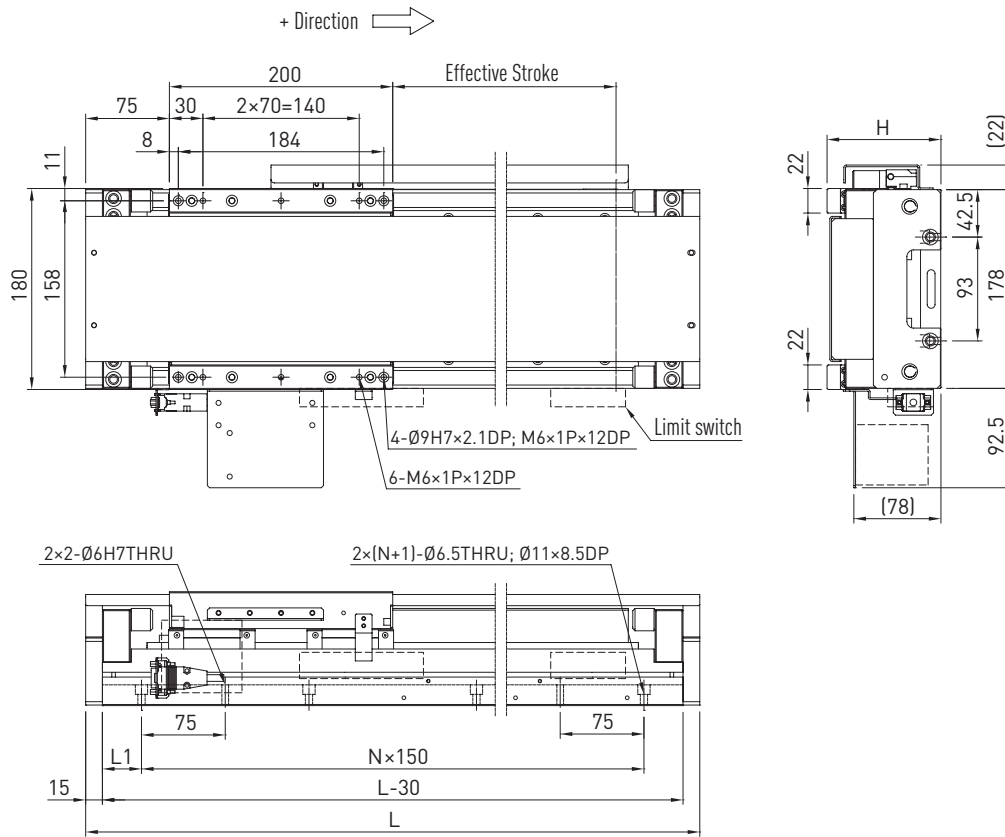
<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

# Linear Motor Systems

## Single linear motor axes

### 3.3.2 LMX1L-S linear motor axis with cover

#### Dimensions and weights of the LMX1L-S23 linear motor axis with cover



All values in mm

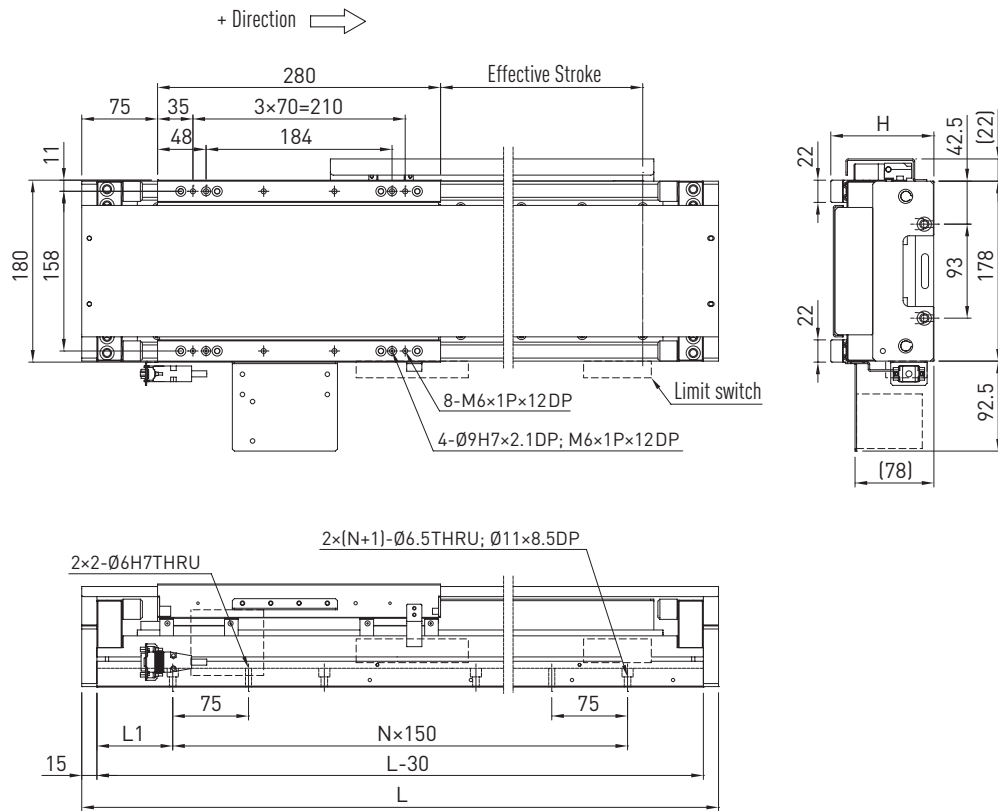
Table 3.19 Dimensions and weights of LMX1L-S23 with cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	450	550	650	750	850	950	1,050	1,150	1,250	1,350	1,450	1,550
L1 [mm]	60	35	85	60	35	85	60	35	85	60	35	85
N	1 <sup>1)</sup>	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	21	23	24	27	29	30	33	34	37	38	40	42
H [mm]	102	102	102	102	102	102	102	102	102	102	111	111

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm



Dimensions and weights of the LMX1L-S27 linear motor axis with cover



All values in mm

Table 3.20 Dimensions and weights of LMX1L-S27 with cover

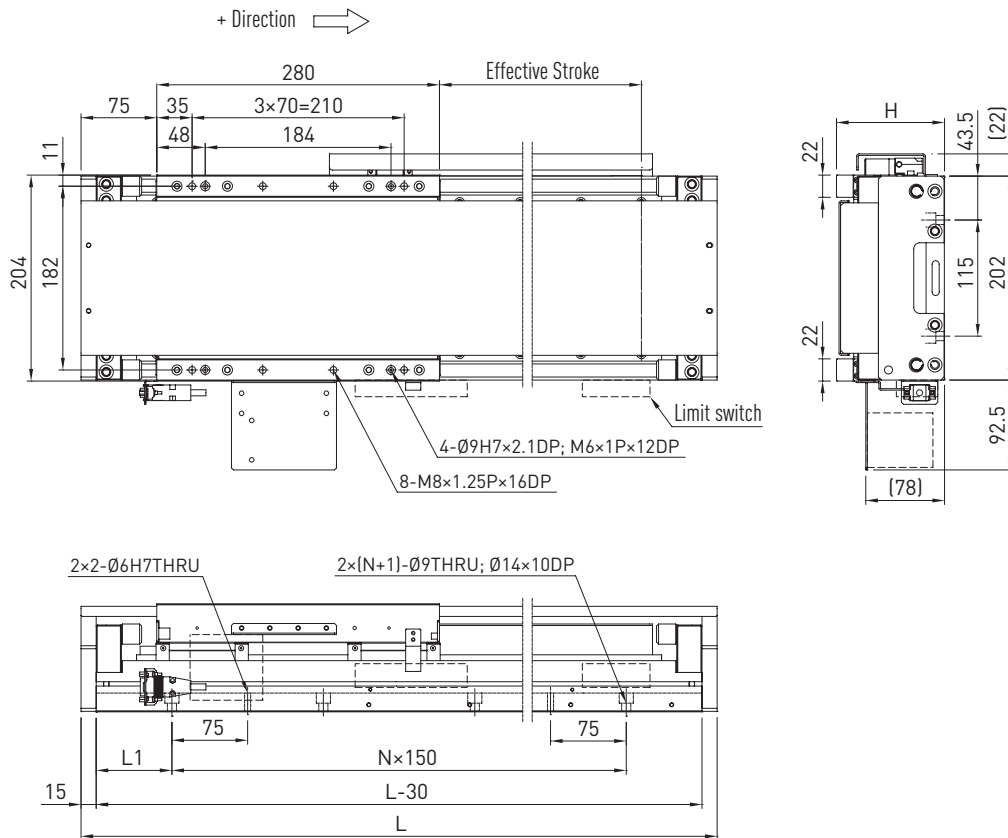
Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	24	26	28	29	32	34	36	38	39	42	43	45
H [mm]	102	102	102	102	102	102	102	102	102	102	111	111

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

# Linear Motor Systems

## Single linear motor axes

### Dimensions and weights of the LMX1L-S37 and LMX1L-S37L linear motor axes with cover



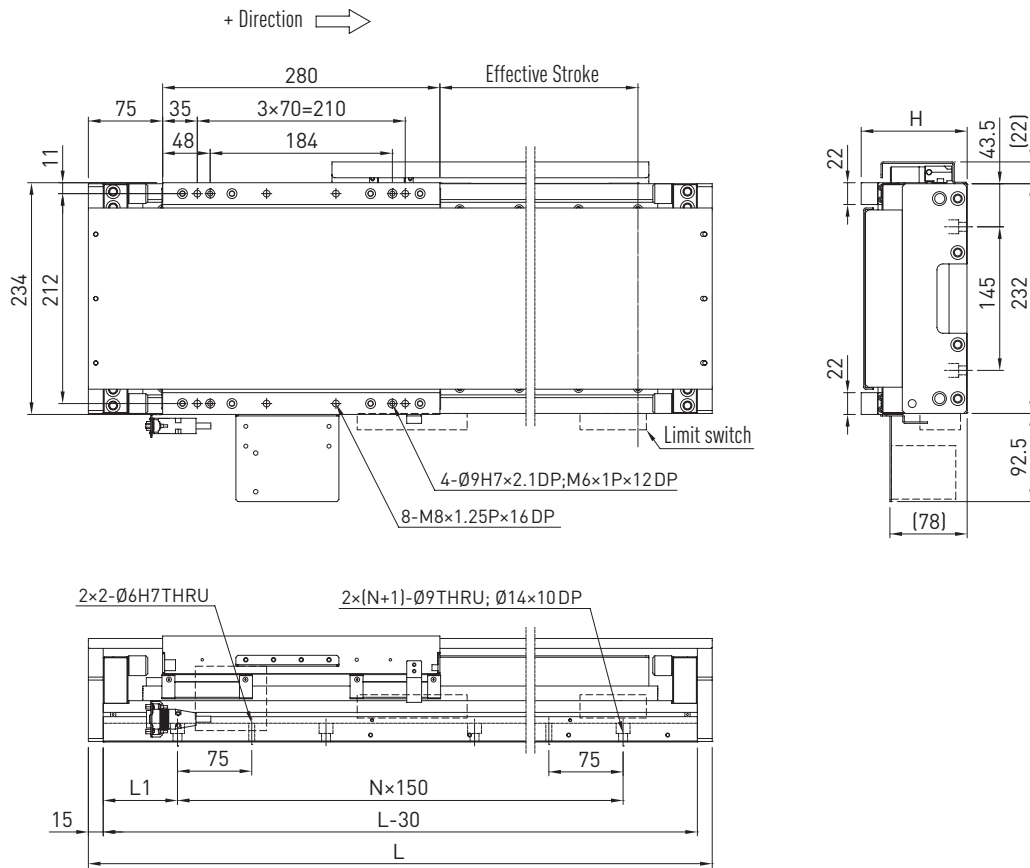
All values in mm

Table 3.21 Dimensions and weights of LMX1L-S37 and LMX1L-S37L with cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	28	31	33	36	38	41	43	46	48	51	53	56
H [mm]	107	107	107	107	107	107	107	107	107	107	116	116

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1L-S47 and LMX1L-S47L linear motor axes with cover



All values in mm

Table 3.22 Dimensions and weights of LMX1L-S47 and LMX1L-S47L with cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	38	41	44	47	50	53	56	59	62	65	68	71
H [mm]	107	107	107	107	107	107	107	107	107	107	116	116

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

# Linear Motor Systems

## Single linear motor axes

### Dimensions and weights of the LMX1L-S57 and LMX1L-S57L linear motor axes with cover

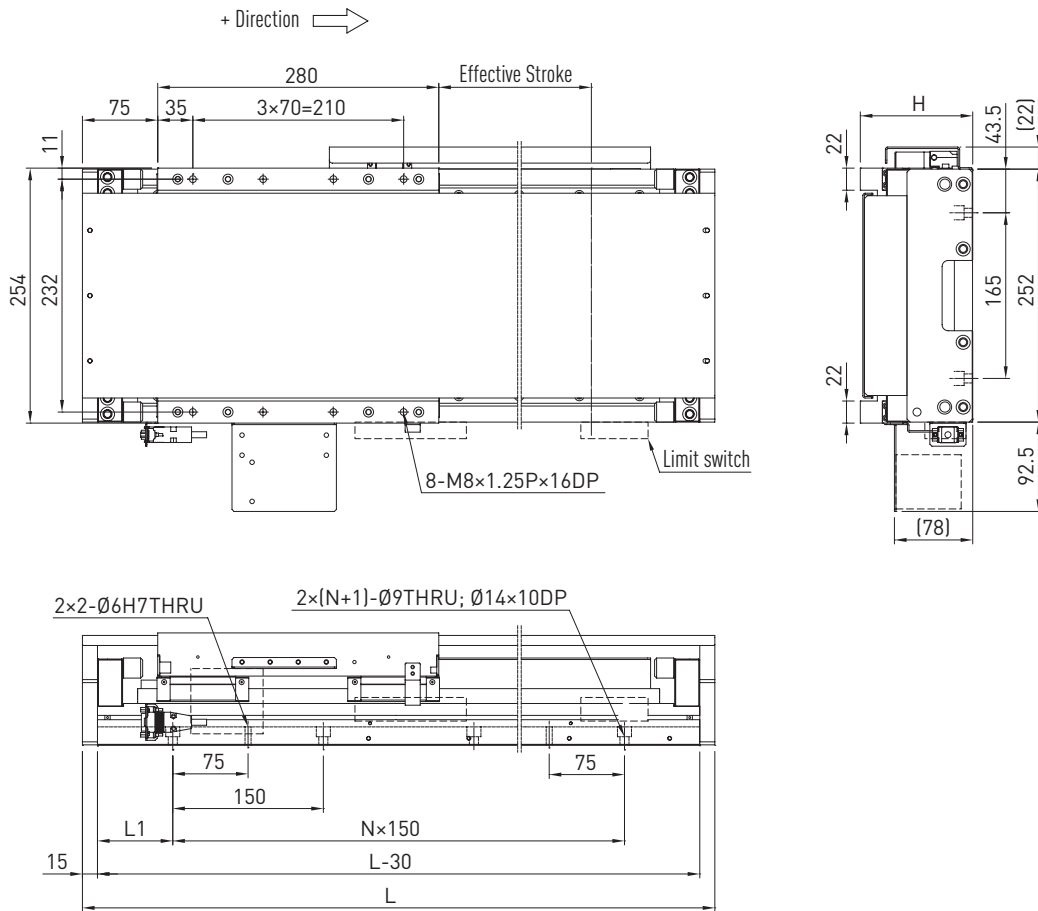
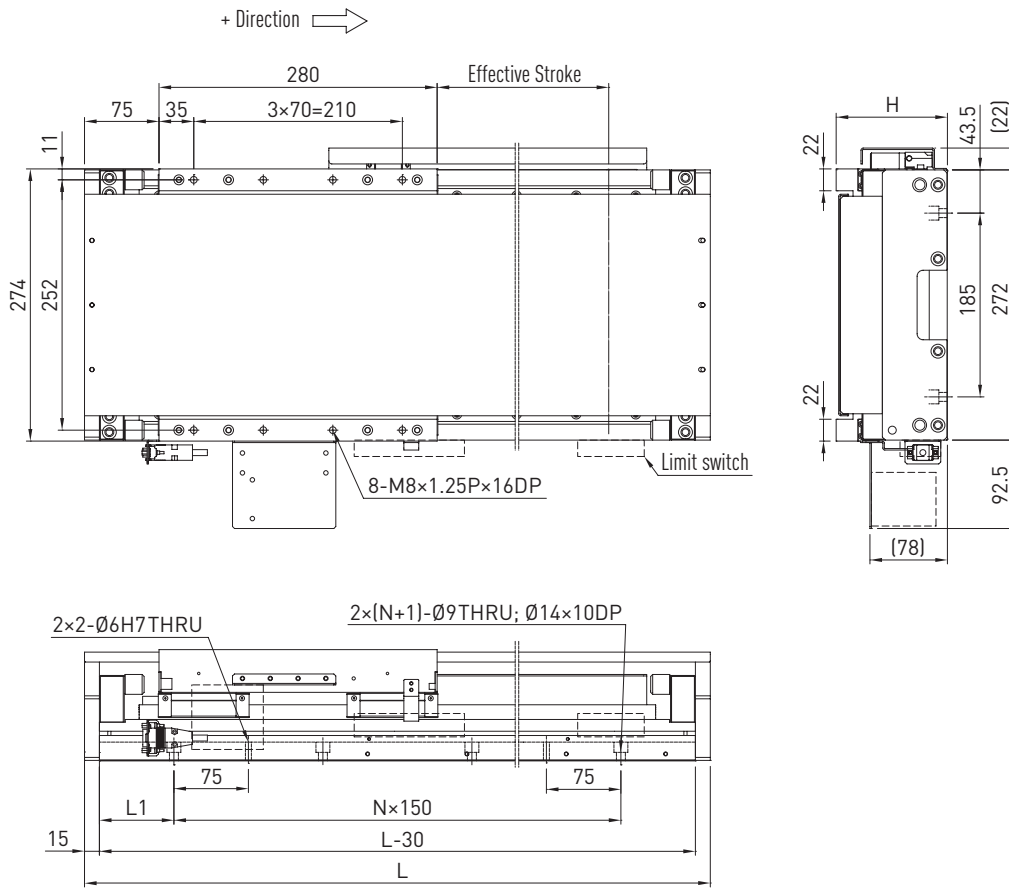


Table 3.23 Dimensions and weights of LMX1L-S57 and LMX1L-S57L with cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	42	45	49	51	55	59	62	65	68	72	75	79
H [mm]	112	112	112	112	112	112	112	112	112	112	121	121

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1L-S67 and LMX1L-S67L linear motor axes with cover



All values in mm

Table 3.24 Dimensions and weights of LMX1L-S67 and LMX1L-S67L with cover

Stroke [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530	1,630
L1 [mm]	100	75	50	25	75	50	25	75	50	25	75	50
N	1 <sup>1)</sup>	3	4	5	5	6	7	7	8	9	9	10
Weight [kg]	46	49	53	56	60	64	67	71	74	79	82	86
H [mm]	112	112	112	112	112	112	112	112	112	112	121	121

<sup>1)</sup> When stroke = 100 mm the mounting hole distance increases from 150 to 300 mm