4. Linear motor axis LMX1A

4.1 Properties of the LMX1A linear motor axes

LMX1A 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 length is measured via the optical or magnetic distance measuring systems incrementally or absolutely. The LMX1A linear motor axis have a very compact design and are available in overall lengths up to 4,000 mm.

- Max. acceleration 50 m/s²
- Max. speed 5 m/s
- Up to 4,000 mm long

4.2 Order code for LMX1A linear motor axes

LM	X	1	A	SA21	1	0872	A	1	E	0	CL	XXX

Linear motor axis

Axis type:
X: Horizontal axis

Number of axes:
1: Single axis

Axis profile:
A: Iron-core motors (LMSA)

Motor type:
LMSAxx: Motor size

Number of carriages

Stroke length [mm]

Distance measuring system:
A: Optical, period 40 µm, analogous 1 V_{PP} sin/cos
E: Magnetic, digital TTL, resolution 1 µm
G: Optical, digital TTL, resolution 1 µm
K: Optical, digital TTL, resolution 0.1 µm
X: Magnetic, absolute with BiSS-C interface
Magnetic, absolute with HIPERFACE interface
Optical, absolute, encapsulated with EnDat interface
Optical, absolute, encapsulated with DRIVE-CLiQ interface
Optical, absolute, encapsulated with FANUC interface

Limit switches:
0: None
1: Inductive, PNP (standard)
2: Inductive, NPN

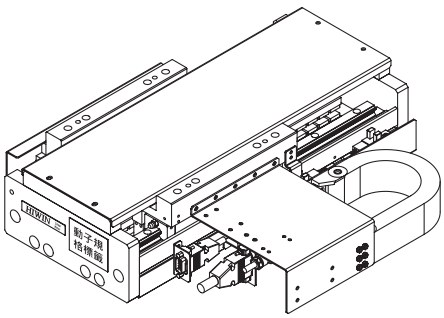
Limit switch connector:
E: Front side Sub-D connector
S: Side outlet, 300 mm Sub-D connector

Energy chain:
0: None
V1: Vertical, inside cross-section: 21 × 25 mm
V2: Vertical, inside cross-section: 21 × 38 mm
V3: Vertical, inside cross-section: 21 × 50 mm
V4: Vertical, inside cross-section: 21 × 68 mm
H1: Horizontal, inside cross-section: 21 × 25 mm
H2: Horizontal, inside cross-section: 21 × 38 mm

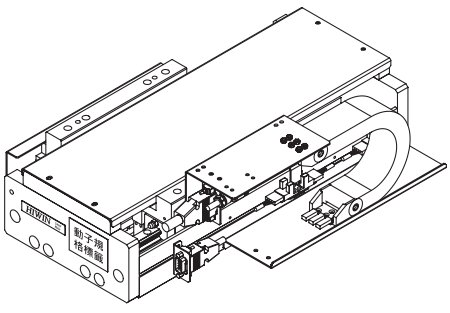
Central lubrication:
0: None
CL: With central lubrication

Job number of drawing, several forcers, hall sensor, weight compensation, brake, special mounting holes

4.3 Energy supply for linear motor axes LMX1A



Energy supply horizontal

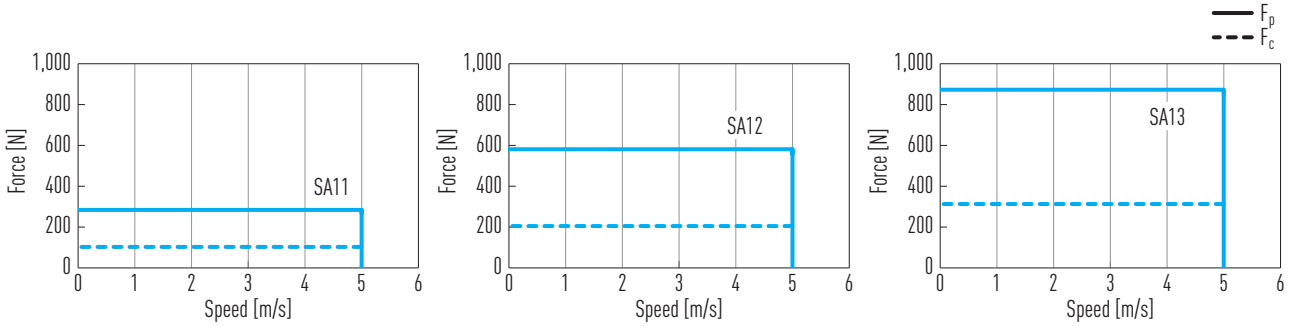


Energy supply vertical

4.4 Linear motor axis LMX1A specifications

4.4.1 Specifications LMX1A-SA11/SA12/SA13

Force as a function speed (DC bus voltage: 600 VDC)



Acceleration as a function of load capacity (DC bus voltage: 600 VDC)

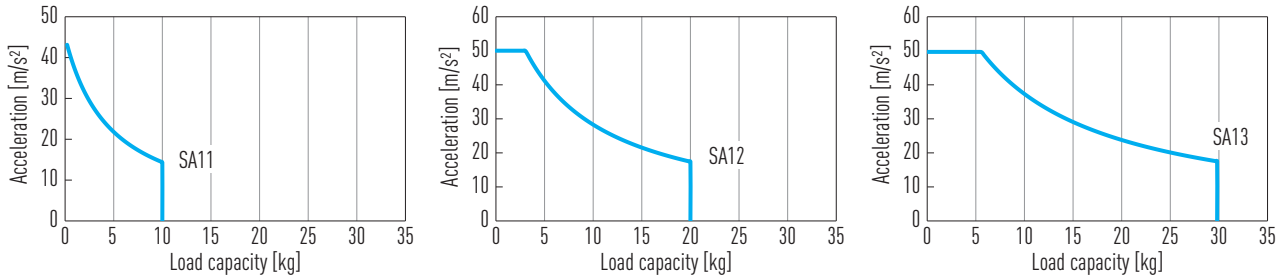


Table 4.1 **Technical data LMX1A-SA11/SA12/SA13**

	Symbol	Unit	LMX1A-SA11	LMX1A-SA12	LMX1A-SA13
Continuous force [1]	F_c	N	103	205	308
Peek force [1]	F_p	N	289	579	868
Stroke length		mm	100 – 4,000		
Resolution distance measuring system			Type E/G: 1 µm; Type K: 0.1 µm; Type A: 1 V_{SS}		
Repeatability		µm	Type E/G: ±1; Type K: ±0.5; Type A: ±1		
Accuracy		µm	Type E/G: ±2; Type K: ±1; Type A: ±2		
Horizontal straightness		µm	10/500 mm		
Vertical straightness		µm	20/500 mm		
Moved mass		kg	5	6	8
Typical load capacity		kg	10	20	30

[1] F_c: 100 % duty cycle, at 120 °C winding temperature; F_p: 1 s
Electrical parameters of linear motors: see catalogue "Linear Motors and Distance Measuring Systems"

4.4.2 LMX1A-SA11/SA12/SA13 dimensions

Table 4.2 **LMX1A-SA11 dimensions (dimensional drawings see Page 63)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	5	6	6	7	8	8	9
Total length LT [mm]	400	500	600	700	800	900	1,000	1,100	1,200	1,300
LA [mm]	25	25	65	75	25	75	50	25	75	50
LB [mm]	–	–	–	–	750	750	900	1,050	1,050	1,200
LC [mm]	100	100	100	150	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	150	250	270	250	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

Table 4.3 **LMX1A-SA12 dimensions (dimensional drawings see Page 64)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	6	6	7	8	8	9	10
Total length LT [mm]	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
LA [mm]	25	65	75	25	75	50	25	75	50	25
LB [mm]	–	–	–	750	750	900	1,050	1,050	1,200	1,350
LC [mm]	100	100	150	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	250	270	250	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

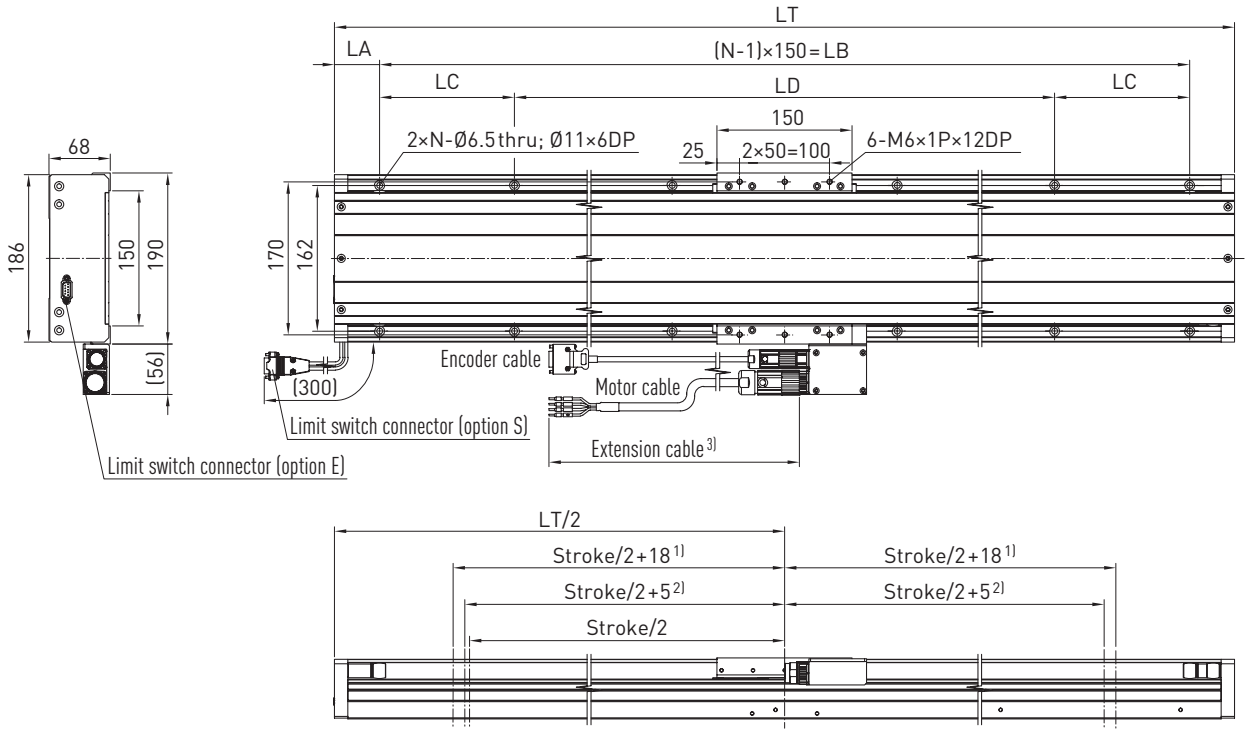
Table 4.4 **LMX1A-SA13 dimensions (dimensional drawings see Page 65)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	6	6	7	8	8	9	10	10
Total length LT [mm]	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
LA [mm]	65	75	25	75	50	25	75	50	25	75
LB [mm]	–	–	750	750	900	1,050	1,050	1,200	1,350	1,350
LC [mm]	100	150	–	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	270	250	–	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

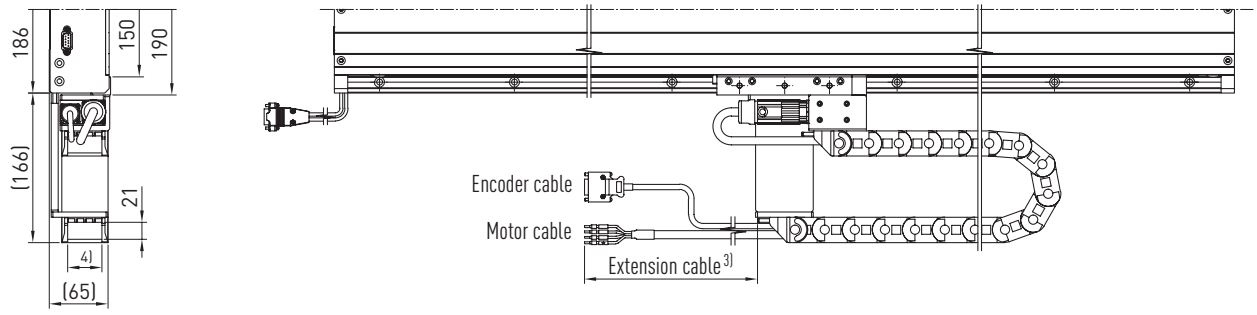
Dimensional drawings LMX1A-SA11

Without energy supply

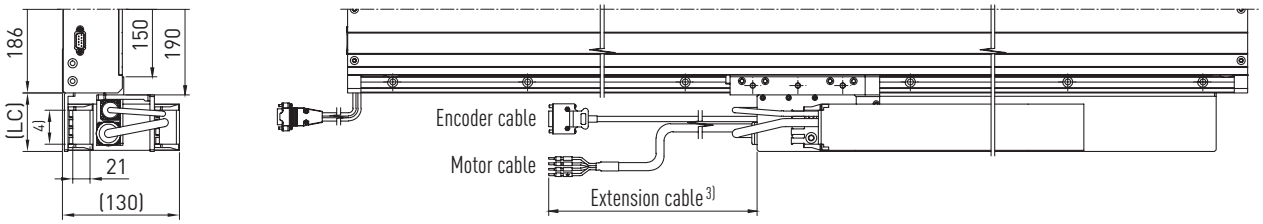


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

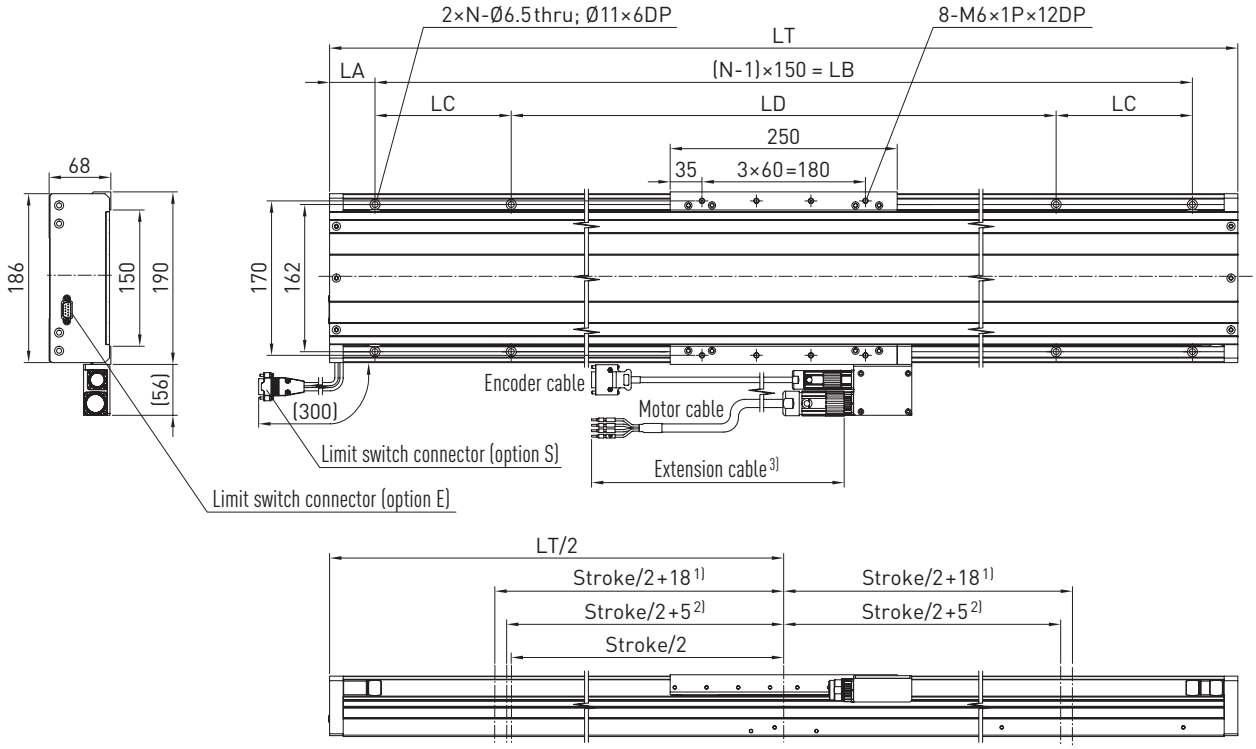


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

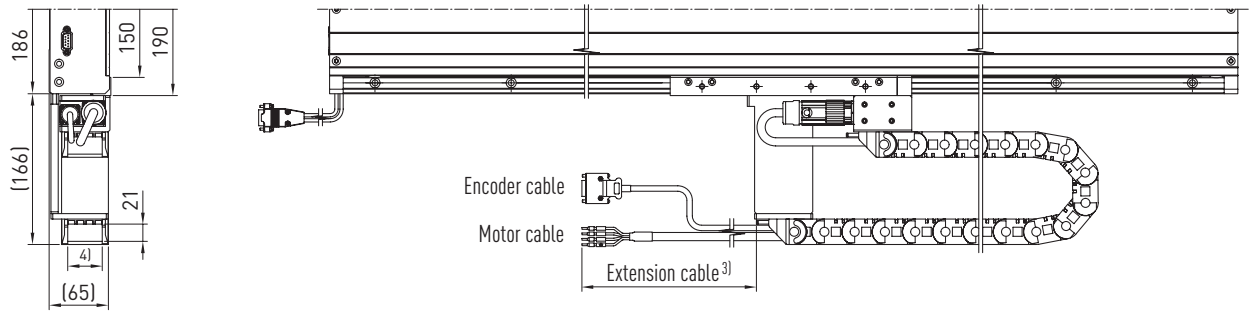
Dimensional drawings LMX1A-SA12

Without energy supply

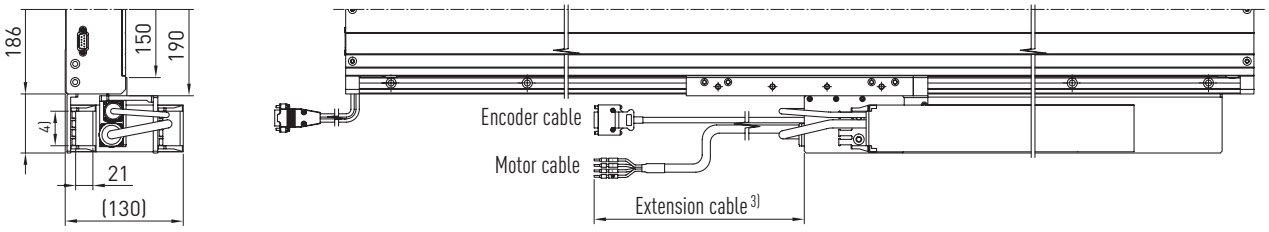


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

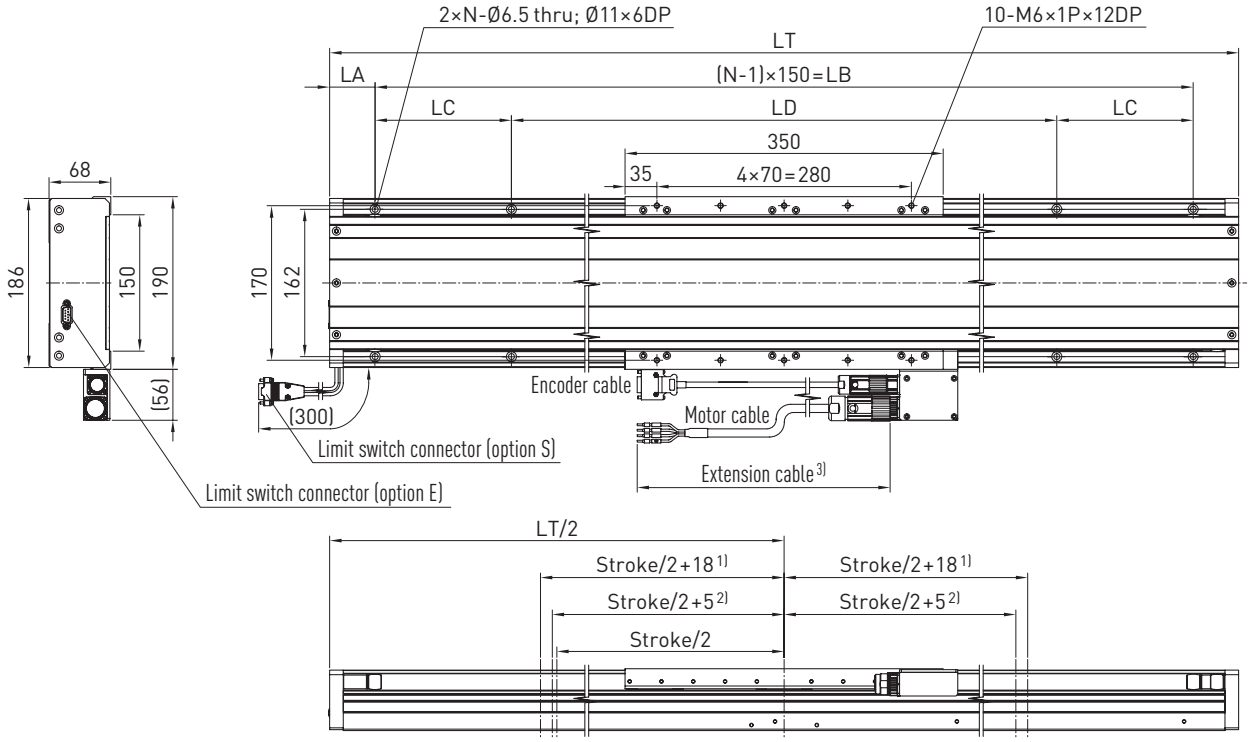


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

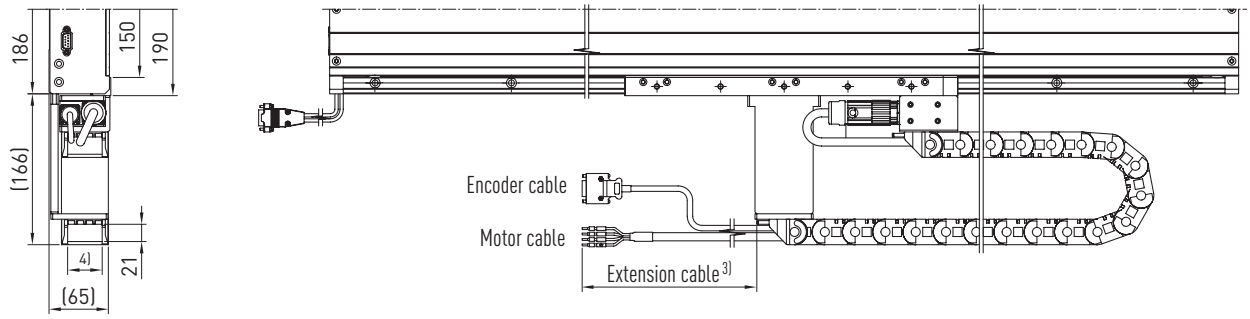
Dimensional drawings LMX1A-SA13

Without energy supply

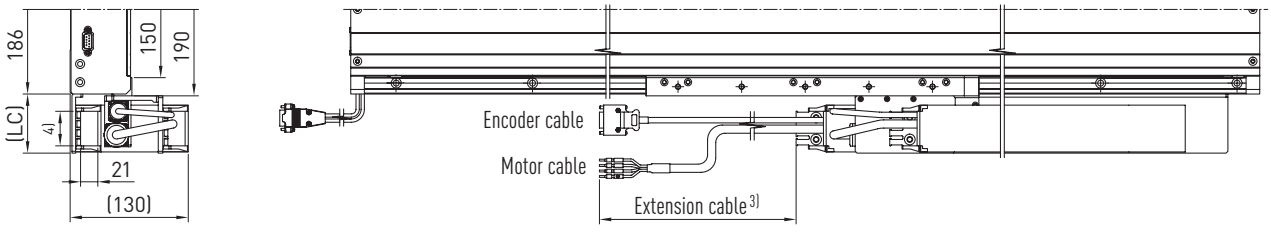


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

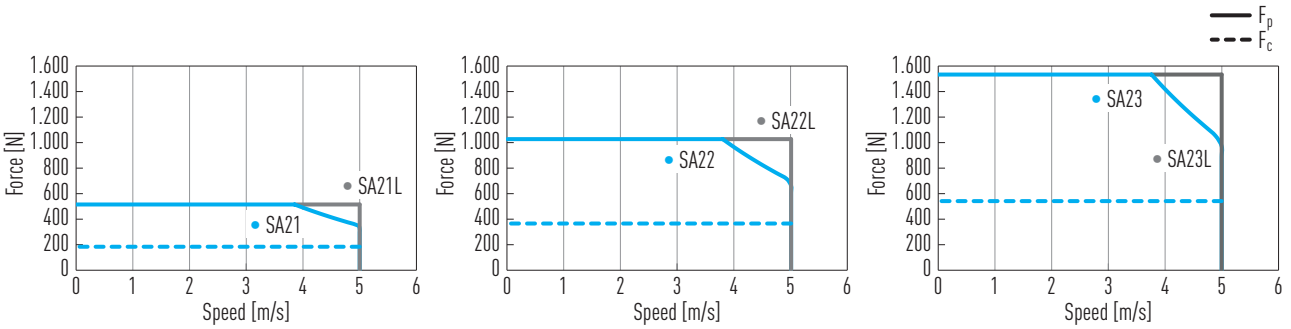


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

4.4.3 Specifications LMX1A-SA21/SA22/SA23

Force as a function speed (DC bus voltage: 600 VDC)



Acceleration as a function of load capacity (DC bus voltage: 600 VDC)

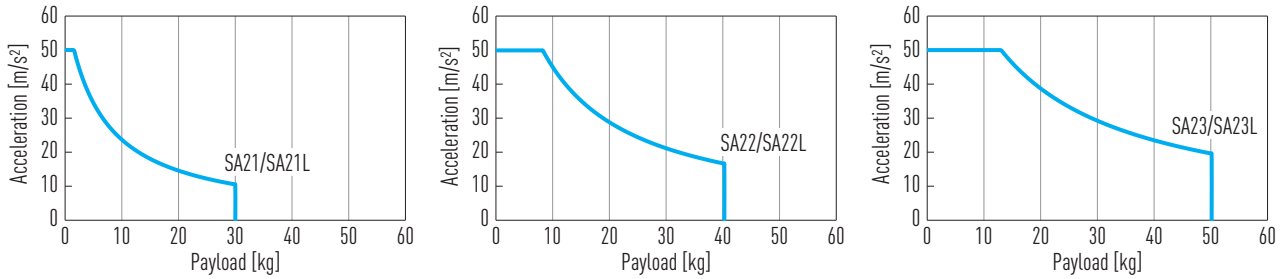


Table 4.5 **Technical data LMX1A-SA21/SA22/SA23**

	Symbol	Unit	LMX1A-SA21(L)	LMX1A-SA22(L)	LMX1A-SA23(L)
Continuous force [1]	F_c	N	181	362	544
Peek force [1]	F_p	N	512	1,023	1,535
Stroke length		mm	100 – 4,000		
Resolution distance measuring system			Type E/G: 1 µm; Type K: 0.1 µm; Type A: 1 V_{SS}		
Repeatability		µm	Type E/G: ±1; Type K: ±0.5; Type A: ±1		
Accuracy		µm	Type E/G: ±2; Type K: ±1; Type A: ±2		
Horizontal straightness		µm	10/500 mm		
Vertical straightness		µm	20/500 mm		
Moved mass		kg	6	8	11
Typical load capacity		kg	30	40	50

[1] F_c: 100 % duty cycle, at 120 °C winding temperature; F_p: 1 s
Electrical parameters of linear motors: see catalogue "Linear Motors and Distance Measuring Systems"

4.4.4 LMX1A-SA21/SA22/SA23 dimensions

Table 4.6 **LMX1A-SA21 dimensions (dimensional drawings see Page 68)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	5	6	6	7	8	8	9
Total length LT [mm]	400	500	600	700	800	900	1,000	1,100	1,200	1,300
LA [mm]	25	25	65	75	25	75	50	25	75	50
LB [mm]	–	–	–	–	750	750	900	1,050	1,050	1,200
LC [mm]	100	100	100	150	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	150	250	270	250	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

Table 4.7 **LMX1A-SA22 dimensions (dimensional drawings see Page 69)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	6	6	7	8	8	9	10
Total length LT [mm]	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
LA [mm]	25	65	75	25	75	50	25	75	50	25
LB [mm]	–	–	–	750	750	900	1,050	1,050	1,200	1,350
LC [mm]	100	100	150	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	250	270	250	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

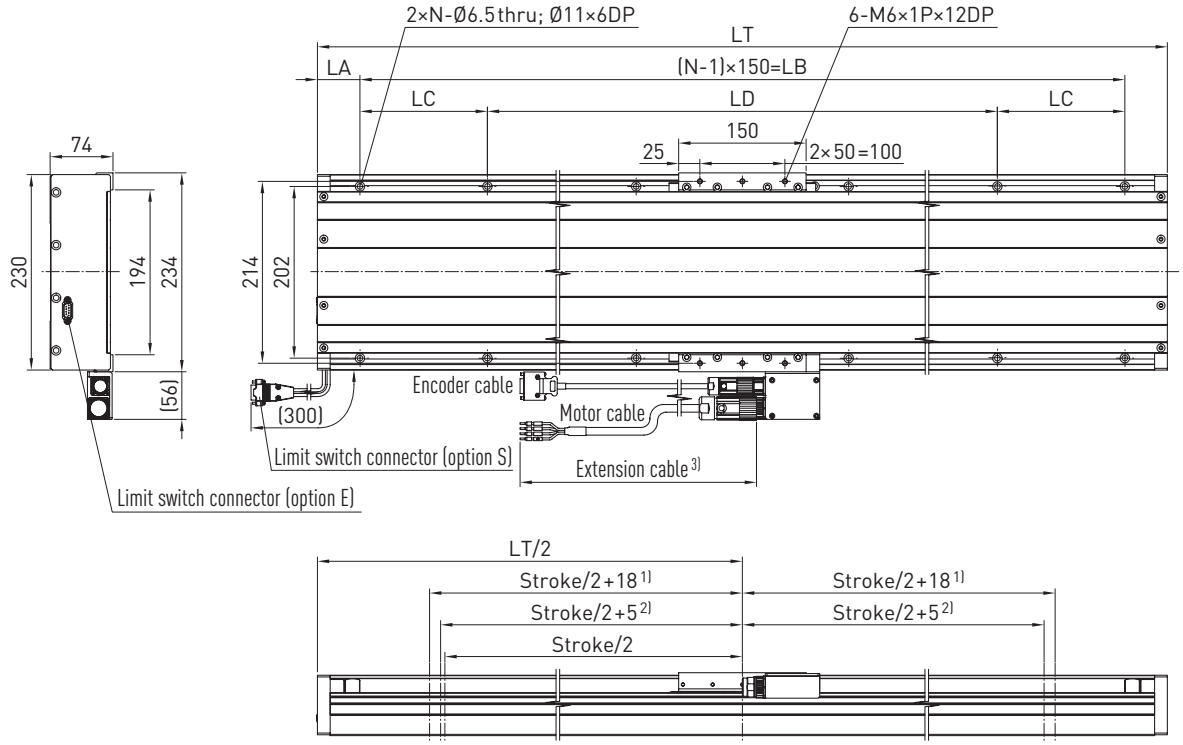
Table 4.8 **LMX1A-SA23 dimensions (dimensional drawings see Page 70)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	6	6	7	8	8	9	10	10
Total length LT [mm]	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
LA [mm]	65	75	25	75	50	25	75	50	25	75
LB [mm]	–	–	750	750	900	1,050	1,050	1,200	1,350	1,350
LC [mm]	100	150	–	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	270	250	–	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

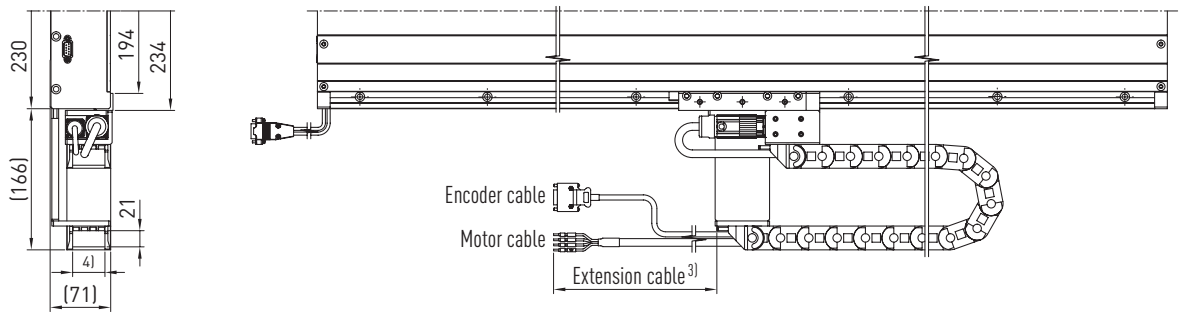
Dimensional drawings LMX1A-SA21

Without energy supply

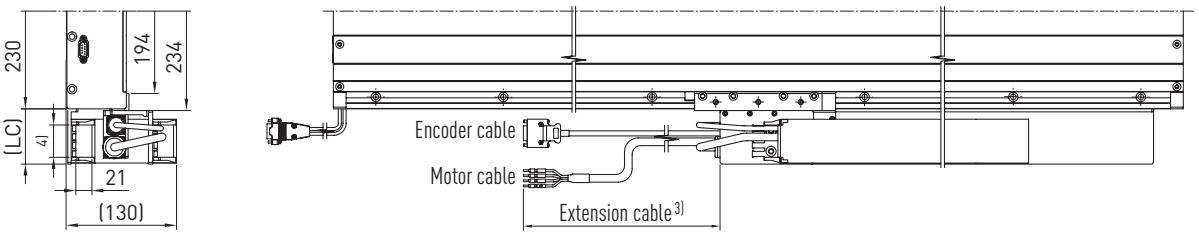


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

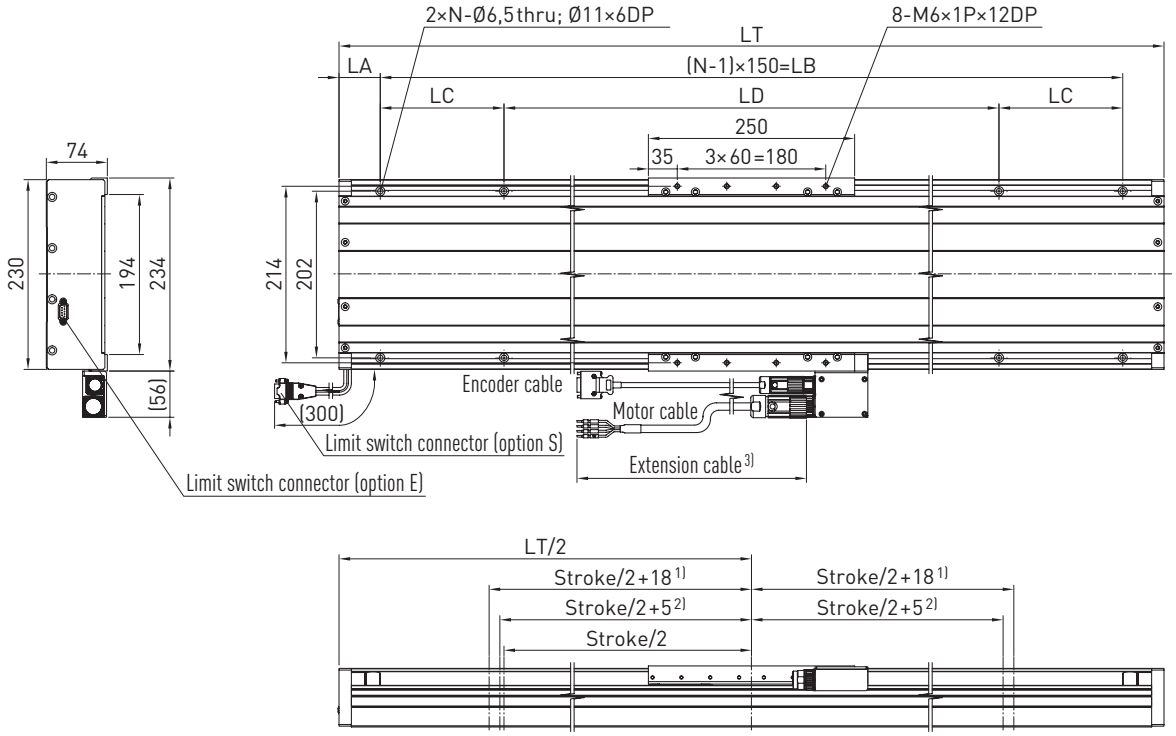


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

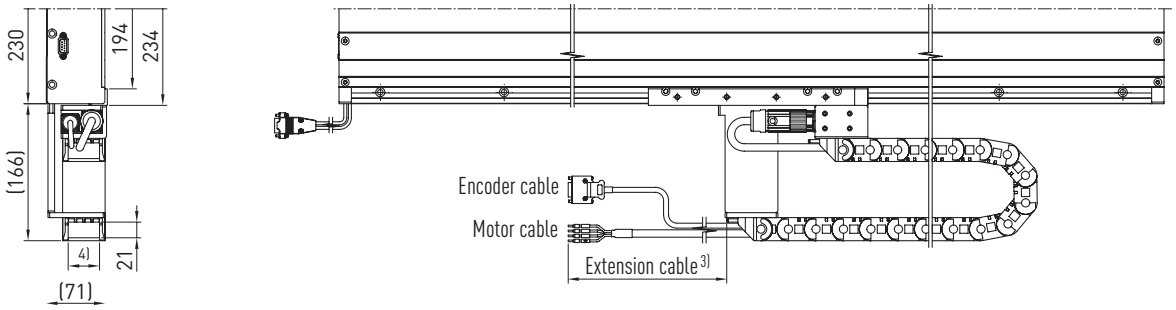
Dimensional drawings LMX1A-SA22

Without energy supply

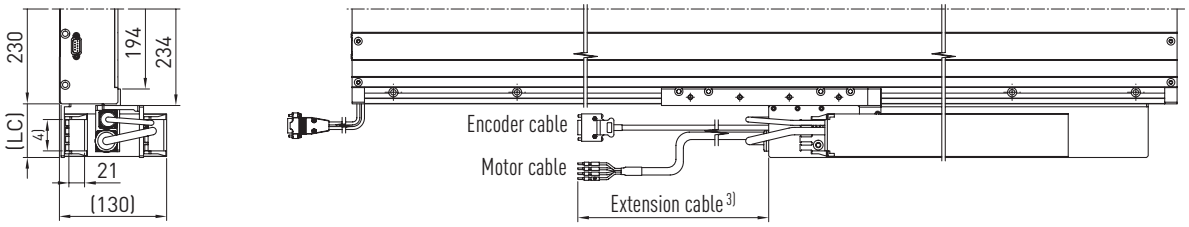


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

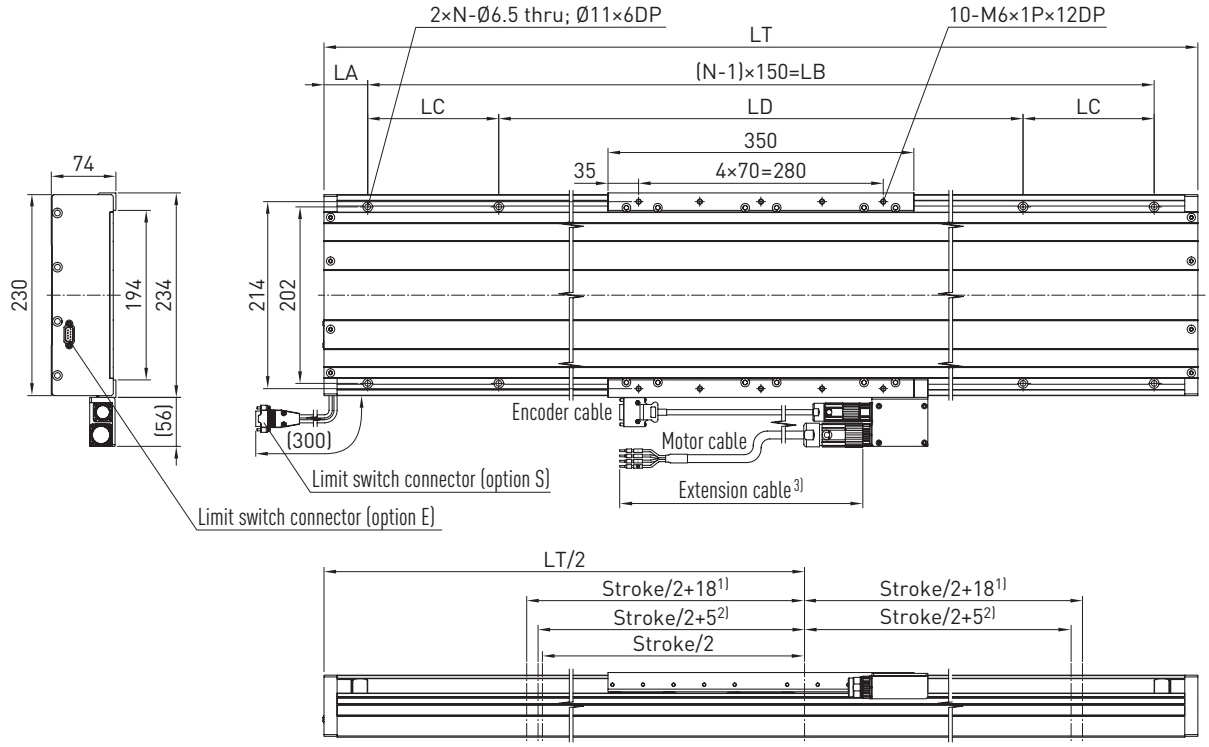


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

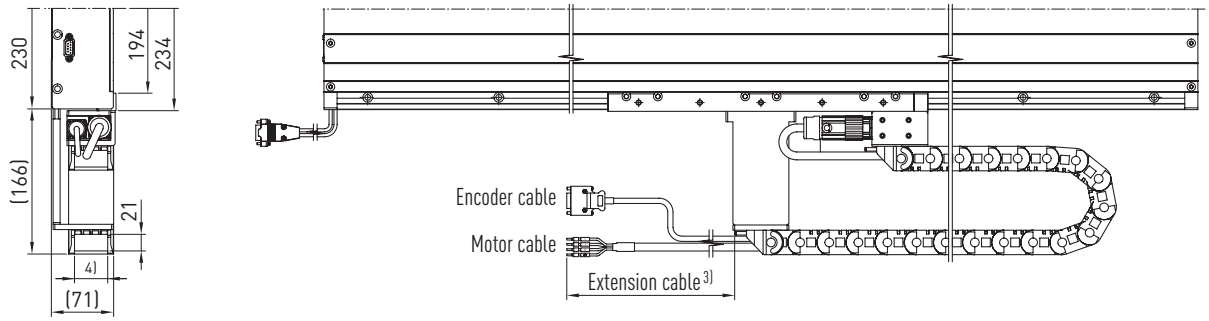
Dimensional drawings LMX1A-SA23

Without energy supply

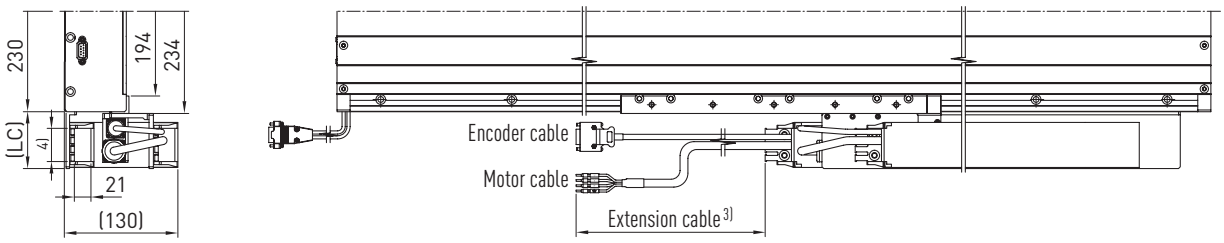


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

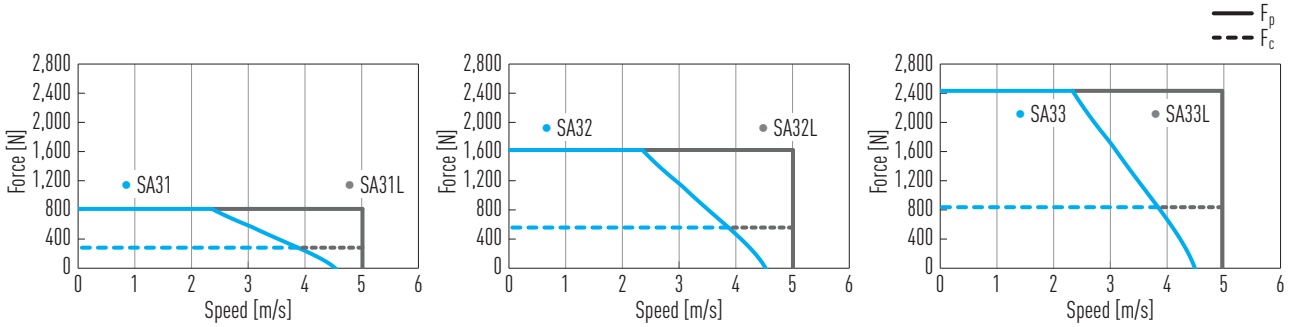


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

4.4.5 Specifications LMX1A-SA31/SA32/SA33

Force as a function speed (DC bus voltage: 600 VDC)



Acceleration as a function of load capacity (DC bus voltage: 600 VDC)

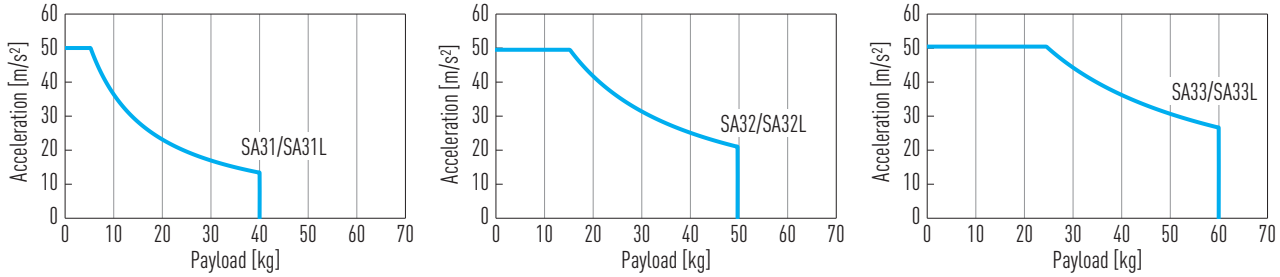


Table 4.9 **Technical data LMX1A-SA31/SA32/SA33**

	Symbol	Unit	LMX1A-SA31(L)	LMX1A-SA32(L)	LMX1A-SA33(L)
Continuous force [1]	F_c	N	292	583	875
Peek force [1]	F_p	N	823	1,646	2,469
Stroke length		mm	100 – 4,000		
Resolution distance measuring system			Type E/G: 1 µm; Type K: 0.1 µm; Type A: 1 V_{SS}		
Repeatability		µm	Type E/G: ±1; Type K: ±0.5; Type A: ±1		
Accuracy		µm	Type E/G: ±2; Type K: ±1; Type A: ±2		
Horizontal straightness		µm	10/500 mm		
Vertical straightness		µm	20/500 mm		
Moved mass		kg	7.5	10.5	14.5
Typical load capacity		kg	40	50	60

[1] F_c: 100 % duty cycle, at 120 °C winding temperature; F_p: 1 s
Electrical parameters of linear motors: see catalogue "Linear Motors and Distance Measuring Systems"

4.4.6 LMX1A-SA31/SA32/SA33 dimensions

Table 4.10 **LMX1A-SA31 dimensions (dimensional drawings see Page 73)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	5	6	6	7	8	8	9
Total length LT [mm]	400	500	600	700	800	900	1,000	1,100	1,200	1,300
LA [mm]	25	25	65	75	25	75	50	25	75	50
LB [mm]	–	–	–	–	750	750	900	1,050	1,050	1,200
LC [mm]	100	100	100	150	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	150	250	270	250	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

Table 4.11 **LMX1A-SA32 dimensions (dimensional drawings see Page 74)**

Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	4	6	6	7	8	8	9	10
Total length LT [mm]	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400
LA [mm]	25	65	75	25	75	50	25	75	50	25
LB [mm]	–	–	–	750	750	900	1,050	1,050	1,200	1,350
LC [mm]	100	100	150	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	250	270	250	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

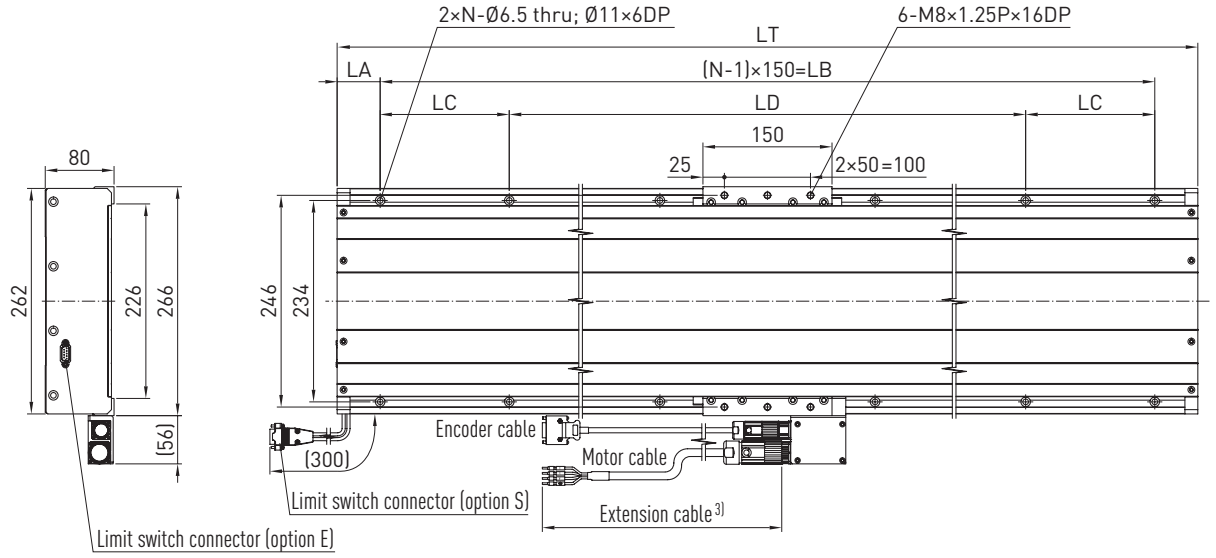
Table 4.12 **LMX1A-SA33 dimensions (dimensional drawings see Page 75)**

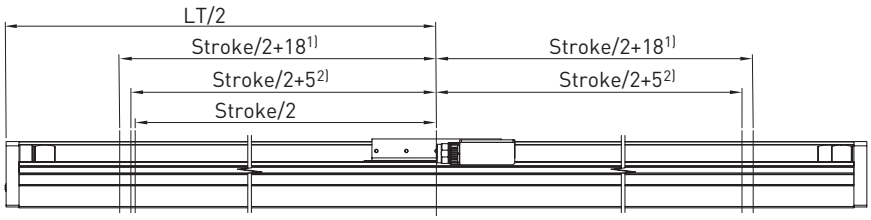
Stroke length	100	200	300	400	500	600	700	800	900	1,000
N	4	4	6	6	7	8	8	9	10	10
Total length LT [mm]	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
LA [mm]	65	75	25	75	50	25	75	50	25	75
LB [mm]	–	–	750	750	900	1,050	1,050	1,200	1,350	1,350
LC [mm]	100	150	–	–	–	–	–	–	–	–
LC with energy chain V1/V2 [mm] [1)]	65									
LC with energy chain V3/V4 [mm] [1)]	95									
LD [mm]	270	250	–	–	–	–	–	–	–	–

[1)] Dimension LC is determined by energy chain inside cross-section (see order code on Page 60)

Dimensional drawings LMX1A-SA31

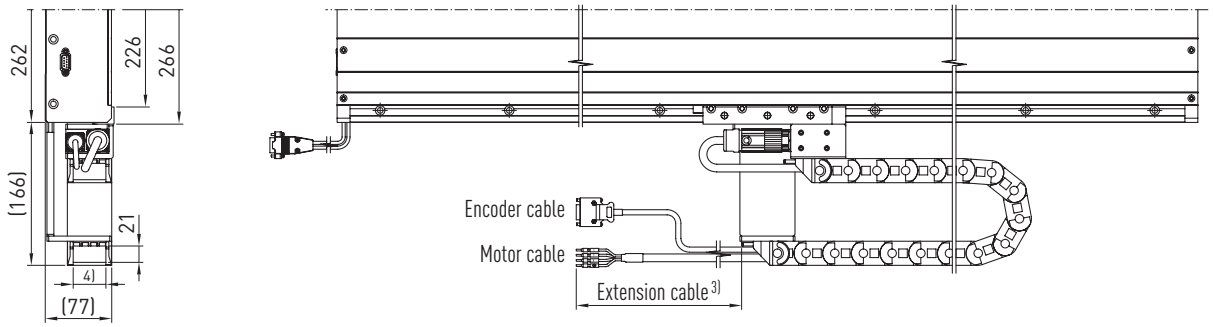
Without energy supply



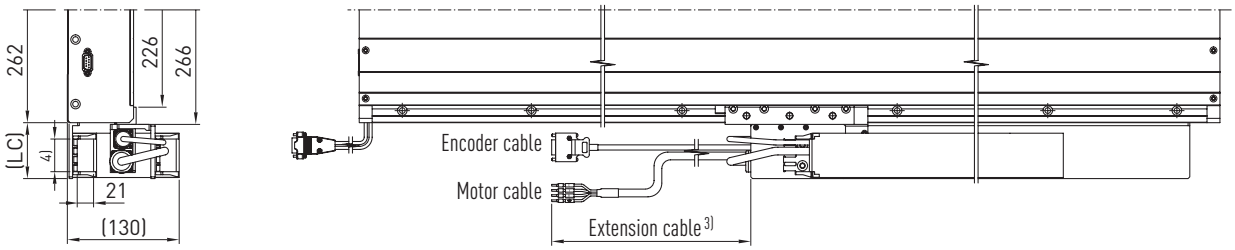


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

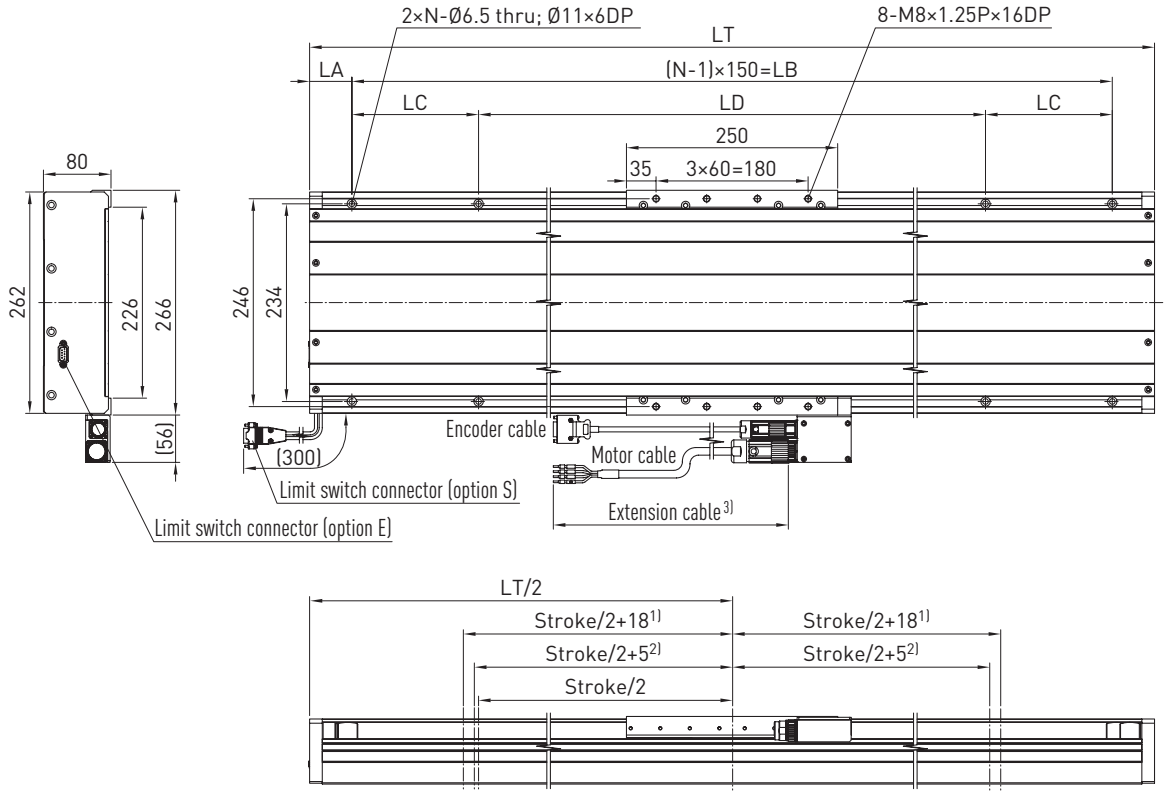


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

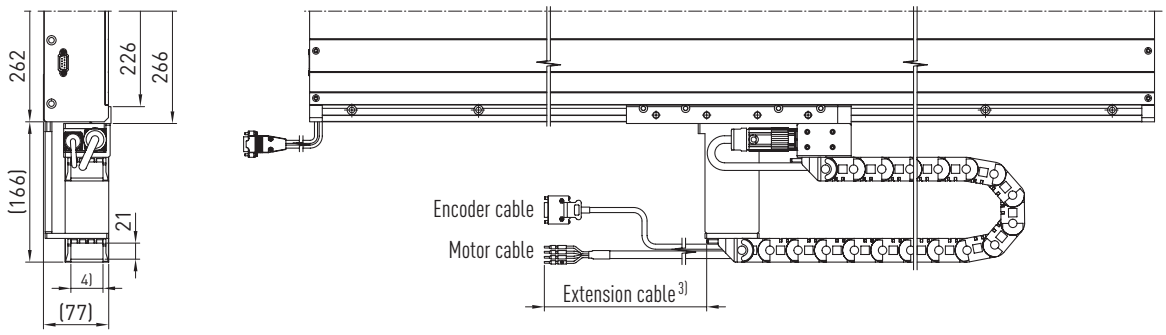
Dimensional drawings LMX1A-SA32

Without energy supply

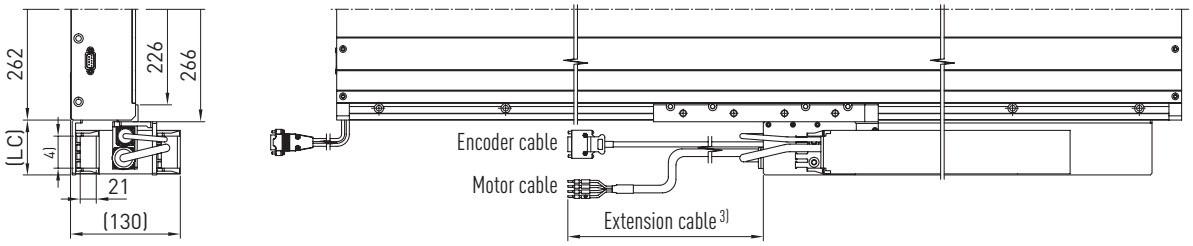


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical

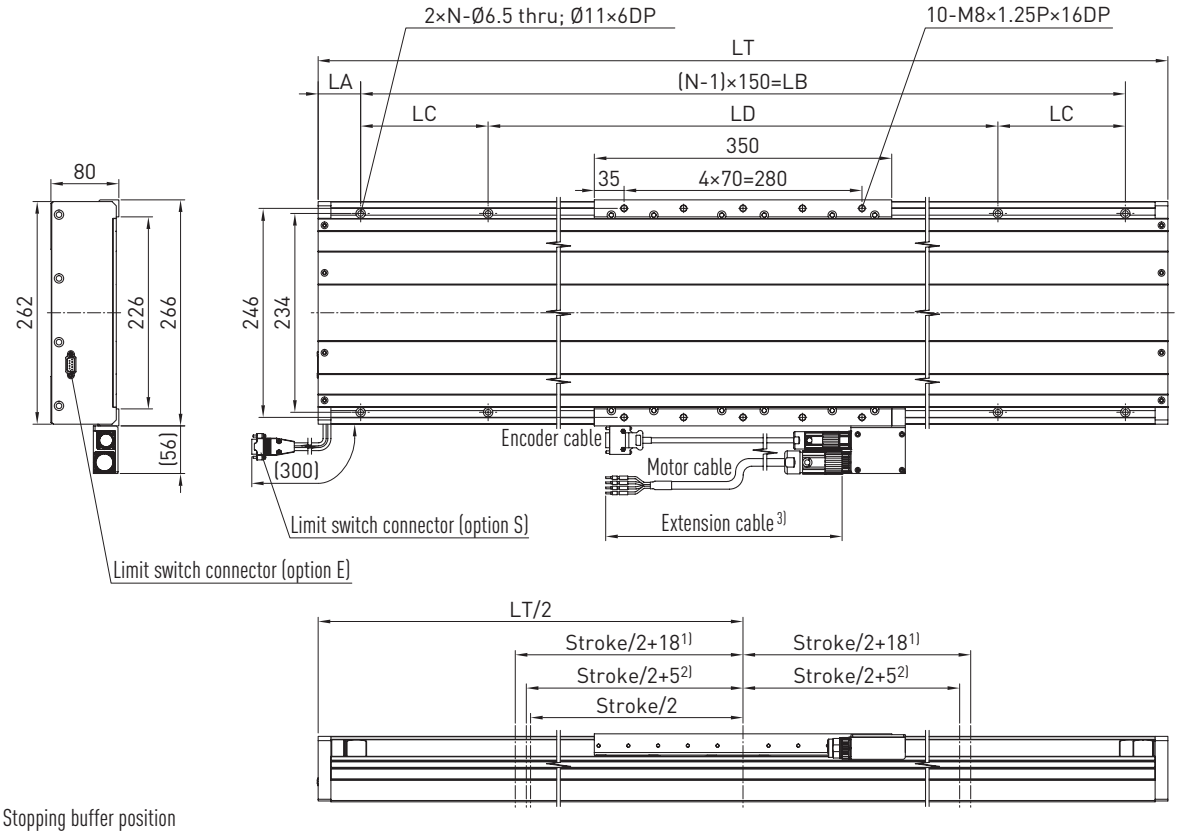


3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

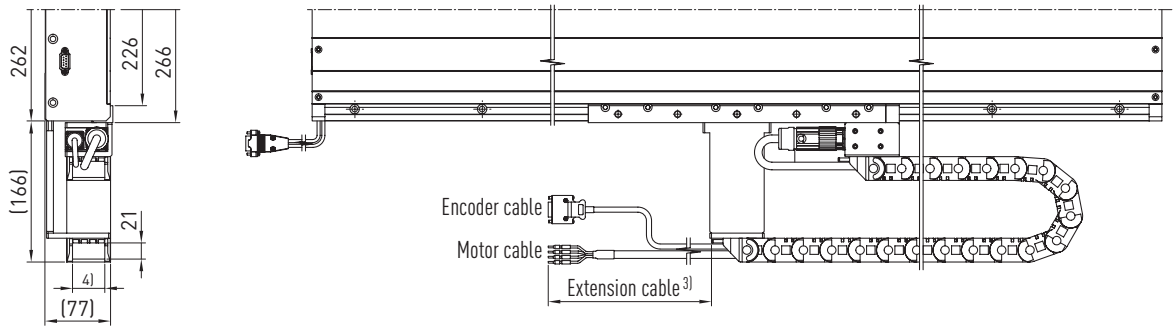
Dimensional drawings LMX1A-SA33

Without energy supply

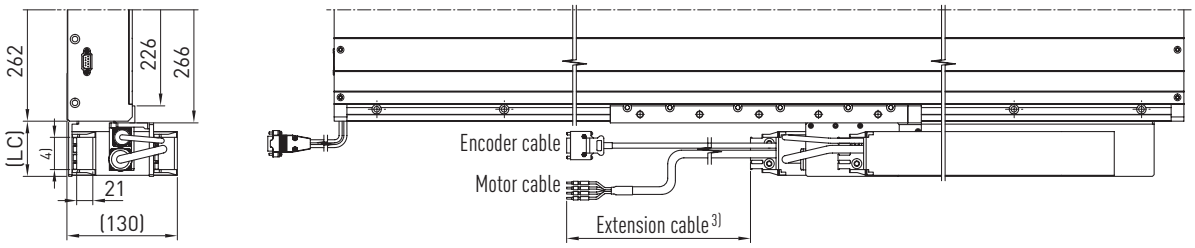


1) Stopping buffer position
2) Limit switch position

Energy supply horizontal



Energy supply vertical



3) Optional
4) Inside width of energy chain: see order code on Page 60

All values in mm

5. Linear motor axis LMX1E

5.1 Properties of the LMX1E linear motor axes

LMX1E linear motor axes are equipped with a coreless motor and are well suited for applications with a high degree of synchronous operational requirements. They can also be used in cross tables. They are distinguished by their very flat design. The stroke length is measured incrementally or absolutely via optical encoders. The LMX1E linear motor axes have very high dynamics and are available in overall lengths up to 4,000 mm.

- Max. acceleration 100 m/s^2
- Max. speed 5 m/s
- Up to 4,000 mm long

5.2 Order code for LMX1E linear motor axes

LM	X	1	E	CB5	1	0872	A	1	0	0	0	XXX

Linear motor axis

Axis type:
X: Horizontal axis

Number of axes:
1: Single axis

Axis profile:
E: Ironless motors (LMC)

Motor type:
LMCxx: Motor size

Number of carriages

Stroke length [mm]

Distance measuring system:
A: Optical, period 40 µm, analogous 1 V_{PP} sin/cos
C: HIWIN MAGIC: magnetic, period 1 mm, 1 V_{PP} sin/cos
D: HIWIN MAGIC-PG: magnetic, period 1 mm, 1 V_{PP} sin/cos
Magnetic scale integrated in guiding rail
E: Magnetic, digital TTL, resolution 1 µm
G: Optical, digital TTL, resolution 1 µm
K: Optical, digital TTL, resolution 0.1 µm
X: Magnetic, absolute with BiSS C interface
Magnetic, absolute with HIPERFACE interface
Optical, absolute, encapsulated with EnDat interface
Optical, absolute, encapsulated with DRIVE-CLiQ interface
Optical, absolute, encapsulated with FANUC interface

Limit switches:
0: None
1: Inductive, PNP (standard)
2: Optical, NPN

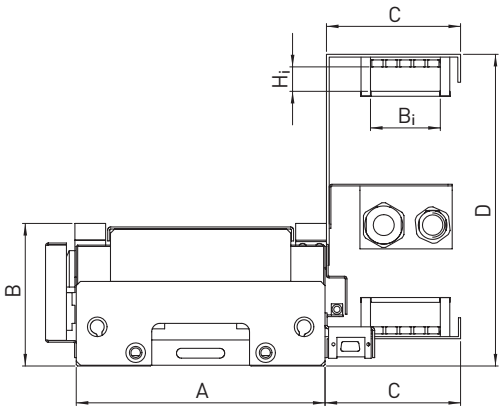
Cover:
0: None (standard)
A: Metal cover
B: Bellow cover

Energy supply alignment:
0: None (standard)
1: Horizontal alignment
2: Vertical alignment
C: Customer specific

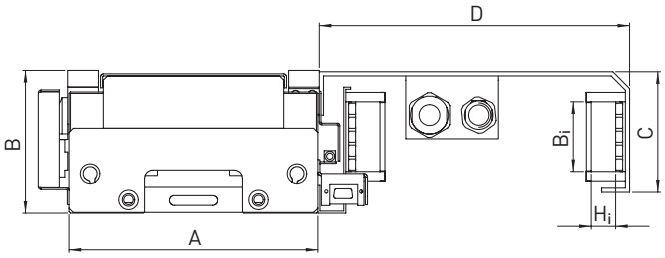
Energy supply size:
0: Standard for LMC axes
C: Customer specific

Job number of drawing, several forcers, hall sensor, weight compensation, brake, special mounting holes

5.3 Energy supply for linear motor axes LMX1A



Energy supply vertical



Energy supply horizontal

Table 5.1 **Dimensions of energy supply**

Energy supply alignment	C [mm]	D [mm]	Internal dimensions B_i × H_i [mm]
Vertical	97	170	50 × 21
Horizontal	79	170	50 × 21

5.4 Linear motor axis LMX1E specifications

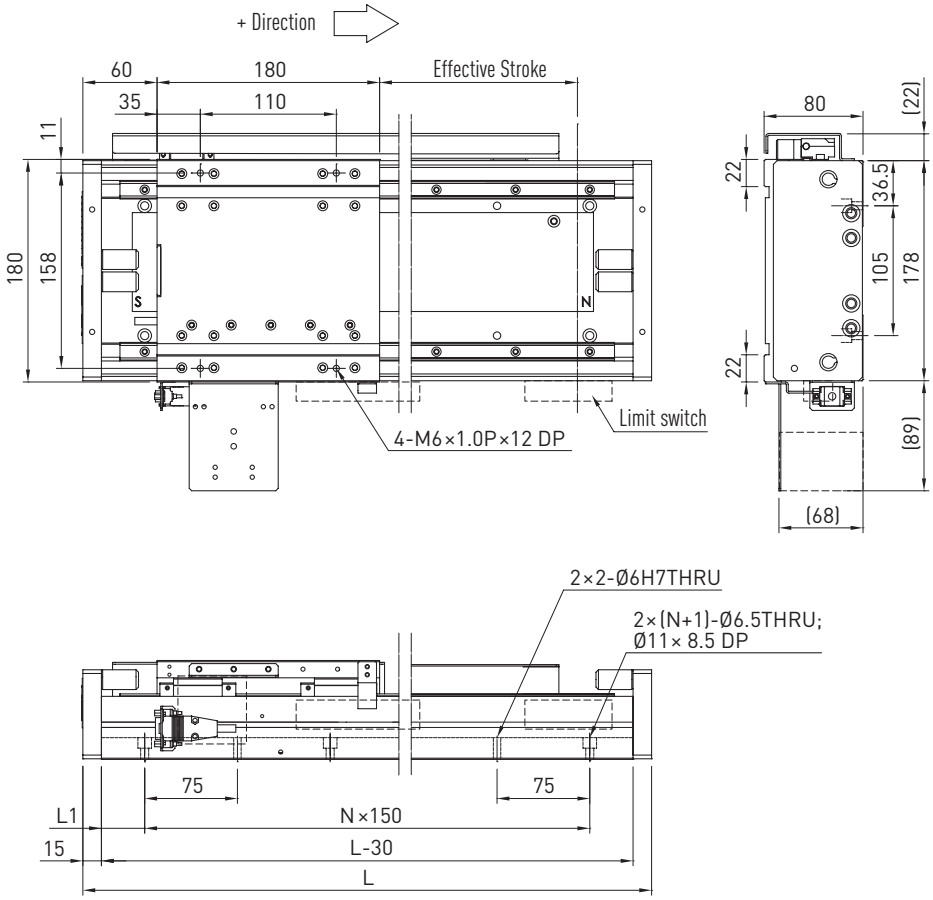
Table 5.2 **Technical data of LMX1E linear motor axes**

Description (order code) xxxx = travel distance [mm]	Motor type	F_c [N]	F_p [N]	Weight of carriage [kg]	Length of carriage [mm]	v_{max} [m/s]	a_{max} [m/s²]	Dimension A [mm]	Dimension B [mm]
LMX1E-CB5-1-xxxx-C100	LMCB5	91	364	2.3	180	5	100	178	80
LMX1E-CB6-1-xxxx-C100	LMCB6	109	436	3.3	210	5	100	178	80
LMX1E-CB7-1-xxxx-C100	LMCB7	128	512	3.8	240	5	100	178	80
LMX1E-CB8-1-xxxx-C100	LMCB8	145	580	4.5	280	5	100	178	80
LMX1E-CB5-1-xxxx-C1A0	LMCB5	91	364	2.5	180	5	100	178	95/105 [1)]
LMX1E-CB6-1-xxxx-C1A0	LMCB6	109	436	3.5	210	5	100	178	95/105 [1)]
LMX1E-CB7-1-xxxx-C1A0	LMCB7	128	512	4.0	240	5	100	178	95/105 [1)]
LMX1E-CB8-1-xxxx-C1A0	LMCB8	145	580	4.7	280	5	100	178	95/105 [1)]

F_c = Continuous power, 100 % duty cycle, at 100 °C winding temperature
F_p = Peak force (1 s)
Electrical parameters for linear motors see catalogue "Linear Motors and Distance Measuring Systems"
[1)] See dimensional tables Page 82 till Page 85

5.4.1 LMX1E linear motor axes without cover

Dimensions and weights of the LMX1E-CB5 linear motor axis without cover



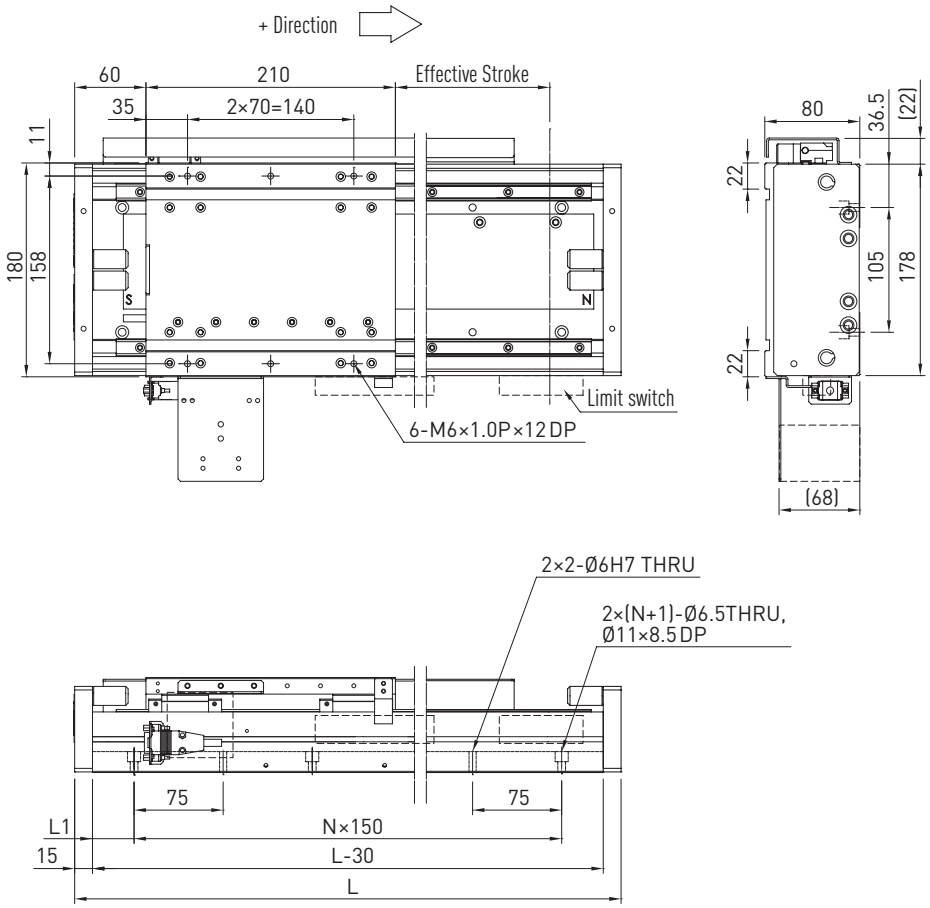
All values in mm

Table 5.3 **Dimensions and weights of LMX1E-CB5 without cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
L1 [mm]	35	85	60	35	85	60	35	85	60	35	85	60
N	1 [1)]	2	3	4	4	5	6	6	7	8	8	9
Weight [kg]	18	22	26	30	34	38	42	46	50	54	58	62

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB6 linear motor axis without cover



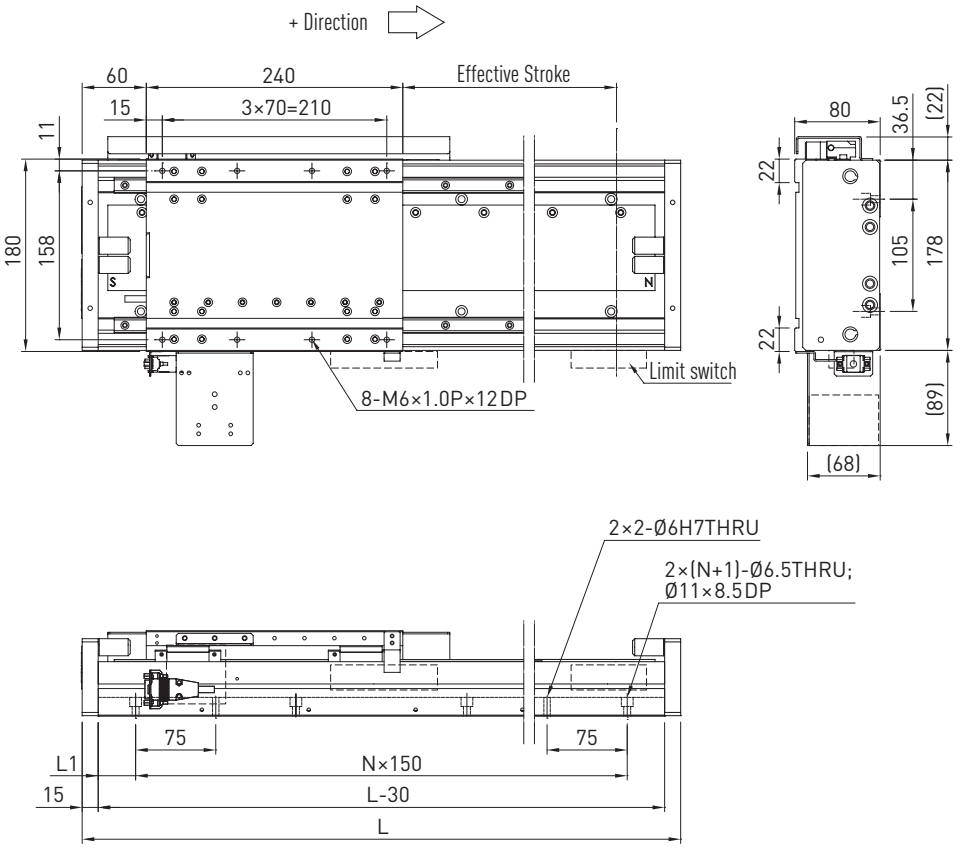
All values in mm

Table 5.4 **Dimensions and weights of LMX1E-CB6 without cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	430	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530
L1 [mm]	50	25	75	50	25	75	50	25	75	50	25	75
N	1[1)]	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	19	23	27	31	35	39	43	47	51	55	59	63

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB7 linear motor axis without cover



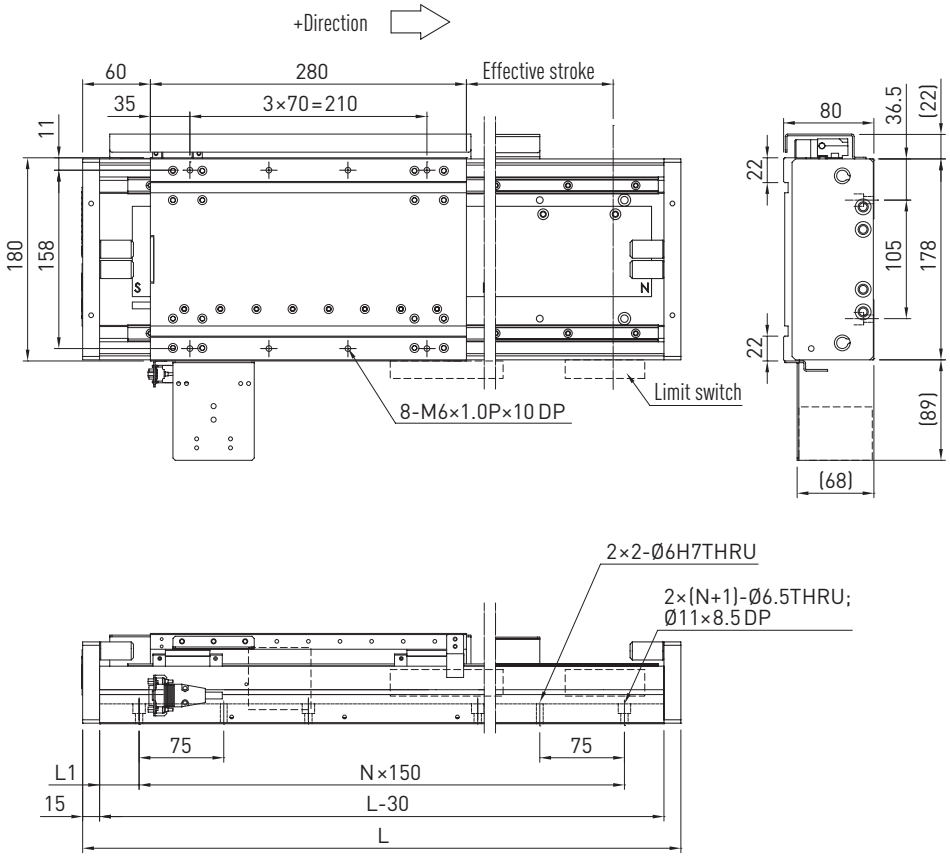
All values in mm

Table 5.5 **Dimensions and weights of LMX1E-CB7 without cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	460	560	660	760	860	960	1,060	1,160	1,260	1,360	1,460	1,560
L1 [mm]	65	40	90	65	40	90	65	40	90	65	40	90
N	1 [1)]	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	20	24	28	32	36	40	44	48	52	56	60	64

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB8 linear motor axis without cover



All values in mm

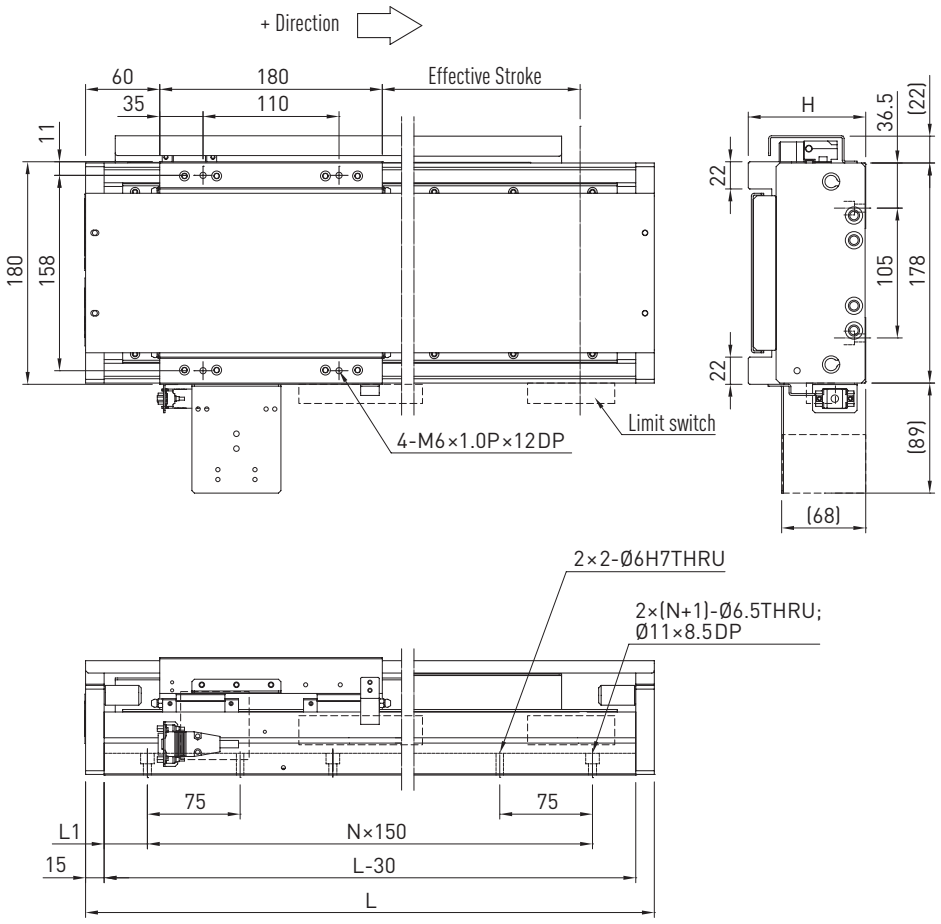
Table 5.6 **Dimensions and weights of LMX1E-CB8 without cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600
L1 [mm]	85	60	35	85	60	35	85	60	35	85	60	35
N	1[1)]	3	4	4	5	6	6	7	8	8	9	10
Weight [kg]	21	25	29	33	37	41	45	49	53	57	61	65

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

5.4.2 LMX1E linear motor axes with cover

Dimensions and weights of the LMX1E-CB5 linear motor axis with cover



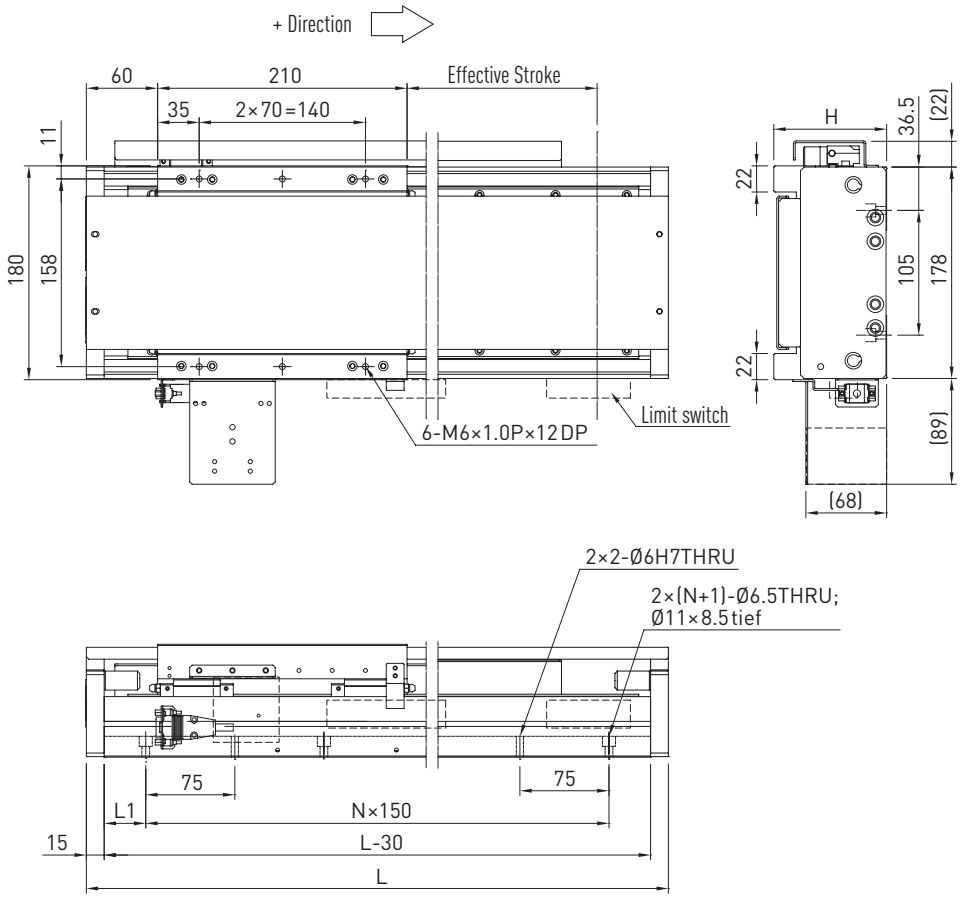
All values in mm

Table 5.7 **Dimensions and weights of LMX1E-CB5 with cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
L1 [mm]	35	85	60	35	85	60	35	85	60	35	85	60
N	1 [1)]	2	3	4	4	5	6	6	7	8	8	9
Weight [kg]	19	23	27	31	35	39	43	47	51	55	59	63
H [mm]	95	95	95	95	95	95	95	95	95	95	105	105

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB6 linear motor axis with cover



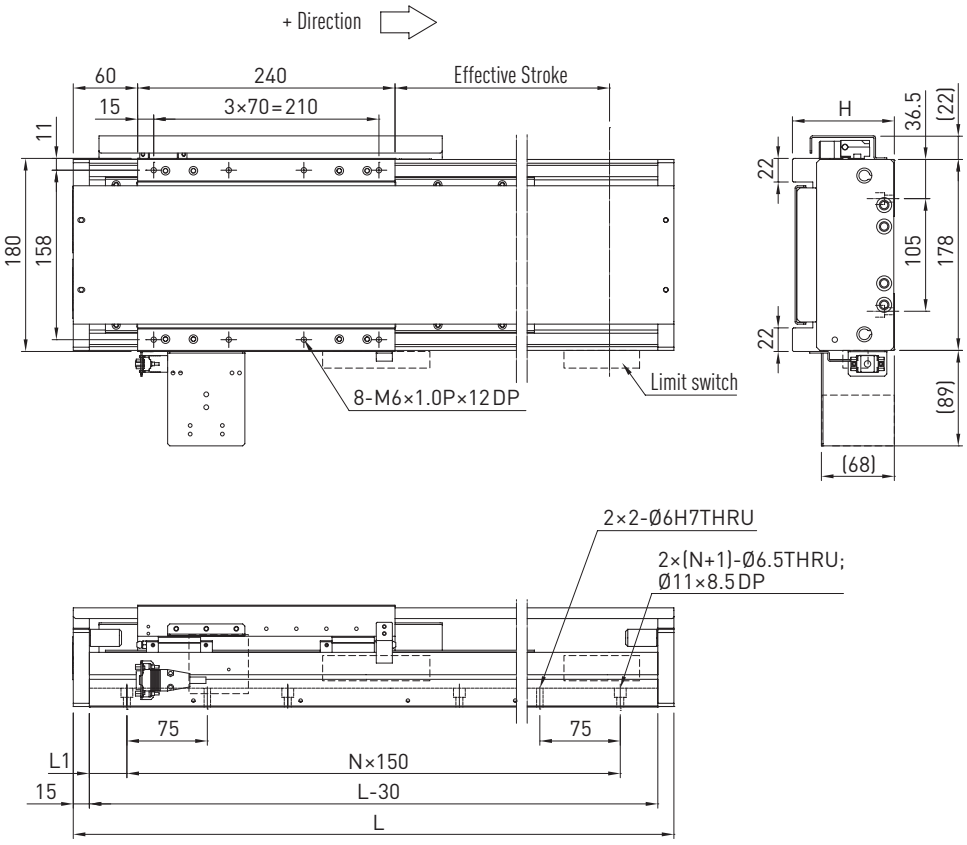
All values in mm

Table 5.8 **Dimensions and weights of LMX1E-CB6 with cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	430	530	630	730	830	930	1,030	1,130	1,230	1,330	1,430	1,530
L1 [mm]	50	25	75	50	25	75	50	25	75	50	25	75
N	1 [1)]	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	20	24	28	32	36	40	44	48	52	56	60	64
H [mm]	95	95	95	95	95	95	95	95	95	95	105	105

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB7 linear motor axis with cover



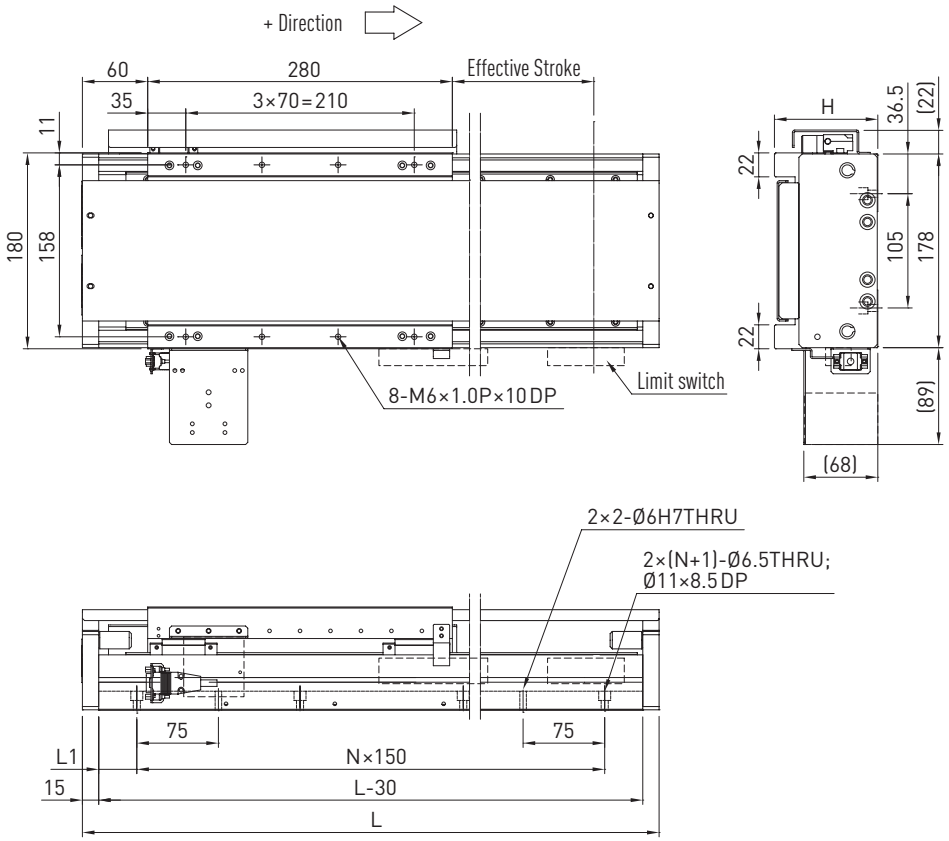
All values in mm

Table 5.9 **Dimensions and weights of LMX1E-CB7 with cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	460	560	660	760	860	960	1,060	1,160	1,260	1,360	1,460	1,560
L1 [mm]	65	40	90	65	40	90	65	40	90	65	40	90
N	1 [1)]	3	3	4	5	5	6	7	7	8	9	9
Weight [kg]	21	25	29	33	37	41	45	49	53	57	61	65
H [mm]	95	95	95	95	95	95	95	95	95	95	105	105

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm

Dimensions and weights of the LMX1E-CB8 linear motor axis with cover



All values in mm

Table 5.10 **Dimensions and weights of LMX1E-CB8 with cover**

Stroke length [mm]	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200
Total length L [mm]	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600
L1 [mm]	85	60	35	85	60	35	85	60	35	85	60	35
N	1 [1)]	3	4	4	5	6	6	7	8	8	9	10
Weight [kg]	22	26	30	34	38	42	46	50	54	58	62	66
H [mm]	95	95	95	95	95	95	95	95	95	95	105	105

[1)] When stroke length = 100 mm the mounting hole distance increases from 150 to 300 mm