

Precision axes and precision systems

LMSSA linear motor axis

6. LMSSA linear motor axis

6.1 Properties of the LMSSA linear motor axis

HIWIN LMSSA linear motor axes guarantee repeatability in the μ range. The precision axes feature standardisation of available options including profile width, motor type and encoder system. This reduction to the essentials means we can quickly create an offer and ensure short delivery times. All available variants can be easily put together in the HIWIN configurator for precision axes.

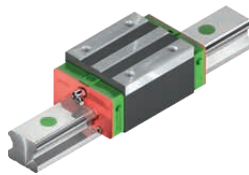
The modular system makes it possible to create offers quickly with short delivery times.

- Standard precision axis with linear motor drive
- Versions with iron core (high force density) and ironless versions (best synchronisation). Two motors per axis also possible.
- Profile widths from 80 mm to 206 mm
- Standard options for distance measuring systems and limit switches



Linear guideway

A high-quality HIWIN double guide safely transfers forces and torques from the carriage to the axis profile. Four blocks are used per carriage, which are guided on two parallel, high-precision profile rails. SynchMotion™ technology with ball chain also ensures good synchronisation and very smooth running in all sizes.



Electrical interface

To optimise costs, motor and encoder cables are led out directly at the travel carriage and delivered with open cable tails. The limit switch cables are also led out at the front of the axis with open cable tails.



Distance measuring systems

The distance measuring system, integrated into the inside of the axis to save space, determines the repeatability. Different measuring systems are available depending on the requirements for measuring method, interface and resolution.



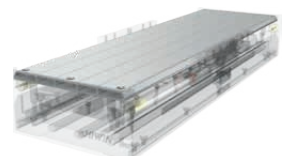
Colour

In addition to the black type, the LMSSA linear motor axis is also available in sizes 18 and 20 in a grey, anodised aluminium version.



Cover

The aluminium cover prevents dirt and dust from penetrating through the top.



Linear motor

The integrated HIWIN linear motors ensure dynamic and precise positioning. LMSA motors with iron core are the first choice when high feed forces are required. Ironless motors are the first choice for applications with the highest requirements for synchronisation.



Precision axes and precision systems

LMSSA linear motor axis

6.3 General dimensions and specifications for LMSSA precision axes

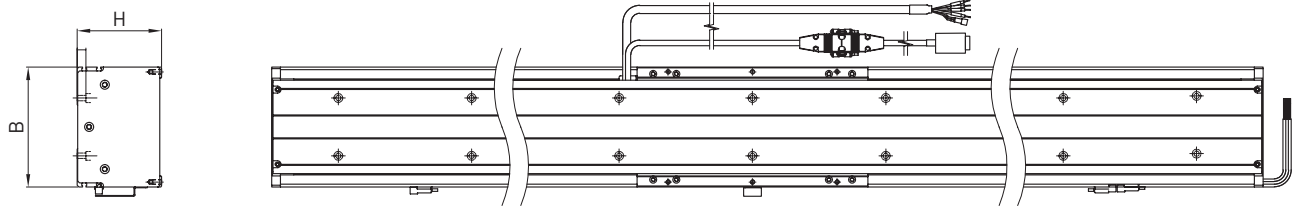


Table 6.2 General dimensions and specifications for LMSSA precision axes

	Motor type	Max stroke length ST*	Profile width W	Profile height H
LMSSA-08S	With iron core (LMSA)	1400	80	75
LMSSA-10S	With iron core (LMSA)	1400	100	76
LMSSA-13S	With iron core (LMSA)	2700	135	95
LMSSA-18S	With iron core (LMSA)	2700	185	108.7
LMSSA-18C	Ironless (LMC)	2700	185	88.7
LMSSA-20S	With iron core (LMSA)	2700	206	117.7
LMSSA-20C	Ironless (LMC)	2700	206	91.7

* Depending on the exact specification

6.4 Dimensions and specifications for LMSSA precision axes

6.2.1 Technical data for LMSSA-S (with iron core)

Table 6.1 Technical data for LMSSA-S (with iron core) – sizes 08/10/13

	Symbol	Unit	08S050	08S100	10S100	10S200	13S100	13S200	13S300
Linear motor			LMSA01	LMSA02	LMSA11	LMSA12	LMSA11	LMSA12	LMSA13
Continuous force at T_{max}	F_c	N	52	104	103	205	103	205	308
Continuous current at T_{max}	I_c	A _{eff}	2.1	4.2	2.1	4.2	2.1	4.2	6.3
Peak force (for 1 sec.)	F_p	N	112	224	289	579	289	579	868
Peak current (for 1 sec.)	I_p	A _{eff}	6.3	12.6	6.3	12.7	6.3	12.7	19.0
Maximum force (for 0.5 sec.)	F_u	N	192	384	379	759	379	759	1,138
Maximum current (for 0.5 s)	I_u	A _{eff}	10.6	21.1	10.6	21.1	10.6	21.1	31.7
Force constant	K_f	N/A _{eff}	24.5		48.6				
Electrical time constant	K_e	ms	3.0	3.7	4.4	4.5	4.4	4.5	4.4
Resistance¹⁾	R_{25}	Ω	6.2	3.1	8.4	4.1	8.4	4.1	2.8
Inductance¹⁾	L	mH	19.0	11.6	37.1	18.5	37.1	18.5	12.4
Voltage constant	K_u	V _{eff} /(m/s)	14.2		28.1				
Motor constant	K_m	N/ $\sqrt{W}$	8.1	11.5	13.7	19.6	13.7	19.6	23.7
Thermal resistance	R_{th}	°C/W	1.69	0.83	1.23	0.63	1.23	0.63	0.41
Thermal time constant	T_{th}	s	431	431	610	890	610	890	2,290
Thermal switch			1 × [3 PTC SNM 120 in series]						
Max. intermediate circuit voltage		V	600						
Pole pair pitch	2τ	mm	30						
Max. coil temperature	T_{max}	°C	120						
Repeatability		μm	Type A/K/P: ± 1 ; type G: ± 2 ; type D/E: ± 3						
Absolute precision		μm	Type A/K/P: ± 2 ; type G: ± 4 ; type D/E: ± 6						
Horizontal straightness		μm	$\pm 8/300$ mm						
Vertical straightness		μm	$\pm 8/300$ mm						

Max. speed		m/s	5						
Max. acceleration		m/s ²	50						
Moved mass		kg	1.8	3.0	2.1	3.4	3.4	5.2	7.5
Stroke length		mm	100 – 1300 (in 50-mm steps), 1400 – 2700 (in 100-mm steps)						

¹⁾ Measured between phase-phase

All values ±10 % at 25 °C ambient temperature

Table 6.3 Technical data for LMSSA-S (with iron core) – sizes 18/20

	Symbol	Unit	18S100	18S200	18S300	20S300	20S500	20S700
Linear motor			LMSA11	LMSA12	LMSA13	LMSA22	LMSA23	LMSA24
Continuous force at T_{max}	F _c	N	103	205	308	362	544	725
Continuous current at T_{max}	I _c	A _{eff}	2.1	4.2	6.3	3.9	5.9	7.8
Peak force (for 1 sec.)	F _p	N	289	579	868	1,023	1,535	2,048
Peak current (for 1 sec.)	I _p	A _{eff}	6.3	12.7	19.0	11.8	17.6	23.5
Maximum force (for 0.5 sec.)	F _u	N	379	759	1,138	1,341	2,011	2,682
Maximum current (for 0.5 s)	I _u	A _{eff}	10.6	21.1	31.7	19.6	29.4	39.2
Force constant	K _f	N/A _{eff}	48.6			92.5		
Electrical time constant	K _e	ms	4.4	4.5	4.4	4.9	4.9	4.6
Resistance¹⁾	R ₂₅	Ω	8.4	4.1	2.8	6.8	4.6	3.5
Inductance¹⁾	L	mH	37.1	18.5	12.4	33.0	22.4	16.0
Voltage constant	K _u	V _{eff} /(m/s)	28.1			53.4		
Motor constant	K _m	N/√W	13.7	19.6	23.7	28.9	35.2	40.6
Thermal resistance	R _{th}	°C/W	1.23	0.63	0.41	0.44	0.29	0.22
Thermal time constant	T _{th}	s	610	890	2,290	2,540	2,670	3,270
Thermal switch			1 × (3 PTC SNM 120 in series)					
Max. intermediate circuit voltage		V	600					
Pole pair pitch	2τ	mm	30					
Max. coil temperature	T _{max}	°C	120					
Repeatability		μm	Type A/K: ±1; type D/E/G/P: ±3					
Absolute precision		μm	Type A/K: ±2; type D/E/G/P: ±6					
Horizontal straightness		μm	±8/300 mm					
Vertical straightness		μm	±8/300 mm					
Max. speed		m/s	5.0					
Max. acceleration		m/s ²	50					
Moved mass		kg	3.1	4.4	6.2	6.4	8.3	11.0
Stroke length		mm	200 – 1300 (in 50-mm steps), 1400 – 2700 (in 100-mm steps)					

¹⁾ Measured between phase-phase

All values ±10 % at 25 °C ambient temperature

Precision axes and precision systems

LMSSA linear motor axis

6.4.1 Technical data for LMSSA-C (ironless)

Table 6.4 Technical data for LMSSA-C (ironless)							
	Symbol	Unit	18C100	18C200	20C100	20C200	
Linear motor			LMC-EFC2	LMC-EFC4	LMC-B5	LMC-B8	
Continuous force at T _{max}	F _c	N	75	150	91	145	
Continuous current at T _{max}	I _c	A _{eff}	3.4	3.4	2.0	2.0	
Peak force (for 1 sec.)	F _p	N	300	600	364	580	
Peak current (for 1 sec.)	I _p	A _{eff}	13.6	13.6	8.0	8.0	
Force constant	K _f	N/A _{eff}	22.6	44.6	45.4	72.5	
Electrical time constant	K _e	ms	0.7	0.7	0.4	0.3	
Resistance ¹⁾	R ₂₅	Ω	3.3	6.3	9.0	14.6	
Inductance ¹⁾	L	mH	2.3	4.5	3.17	4.95	
Voltage constant	K _u	V _{eff} /(m/s)	12.9	25.8	24.8	40.0	
Motor constant	K _m	N/√W	9.9	14.4	12.4	15.5	
Thermal resistance	R _{th}	°C/W	1.26	0.66	1.11	0.68	
Thermal switch			3 PTC 120 °C			3 PTC 100 °C	
Max. intermediate circuit voltage		VDC	330				
Pole pair pitch	2τ	mm	60			32	
Max. coil temperature	T _{max}	°C	120			100	
Repeatability		μm	Type A/K: ±1; type D/E/G/P: ±3				
Absolute precision		μm	Type A/K: ±2; type D/E/G/P: ±6				
Horizontal straightness		μm	±8/300 mm				
Vertical straightness		μm	±8/300 mm				
Max. speed		m/s	5.0				
Max. acceleration		m/s ²	50				
Moved mass		kg	3.0	5.0	4.2	6.0	
Stroke length		mm	200 – 1300 (50-mm steps), 1400 – 2700 (100-mm steps)				

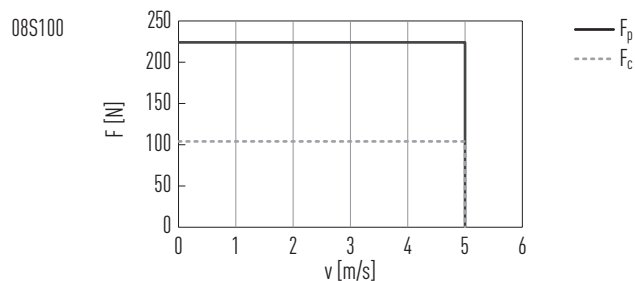
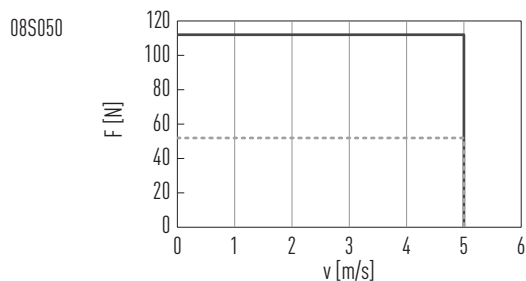
¹⁾ Measured between phase-phase

All values $\pm 10\%$ at 25 $^{\circ}C$ ambient temperature

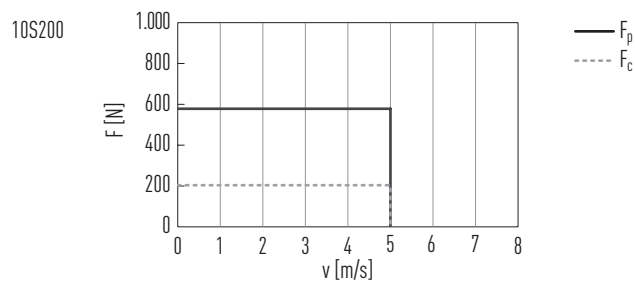
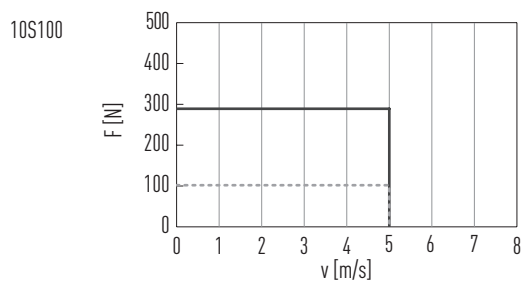
6.4.2 Characteristic curves for LMSSA-S (with iron core)

Force depending on speed (intermediate circuit voltage 600 VDC)

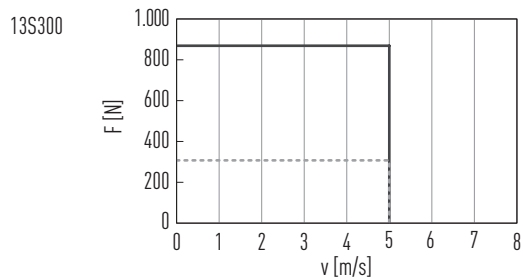
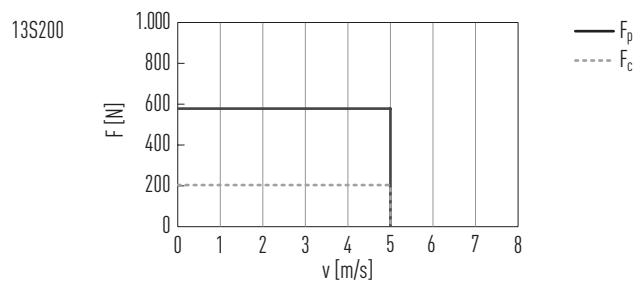
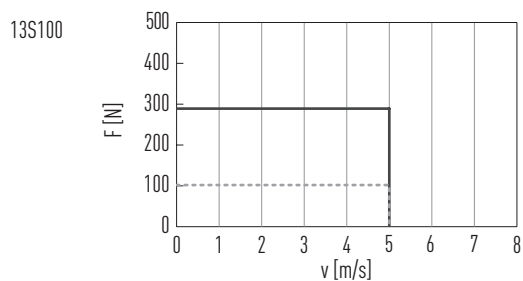
LMSSA-08



LMSSA-10



LMSSA-13

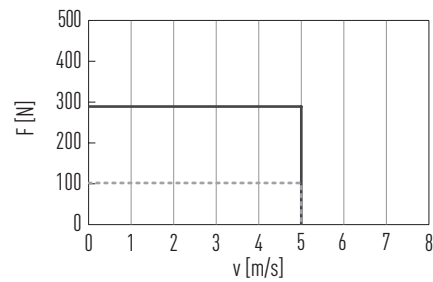


Precision axes and precision systems

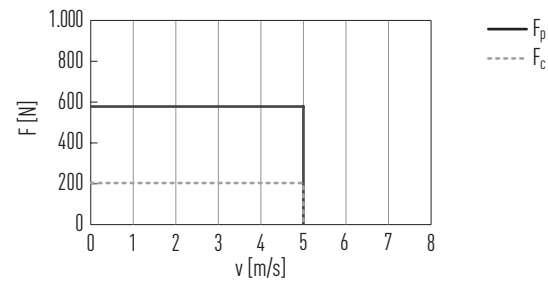
LMSSA linear motor axis

LMSSA-18

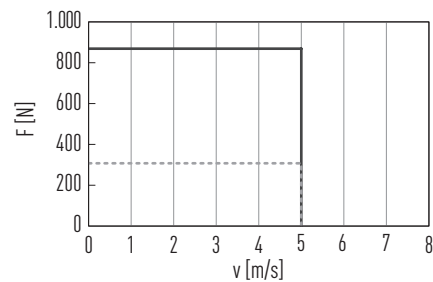
18S100



18S200

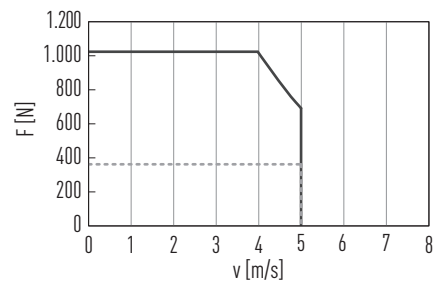


18S300

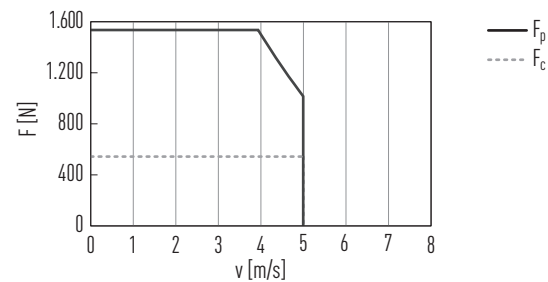


LMSSA-20

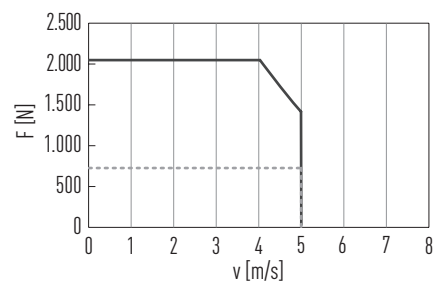
20S300



20S500



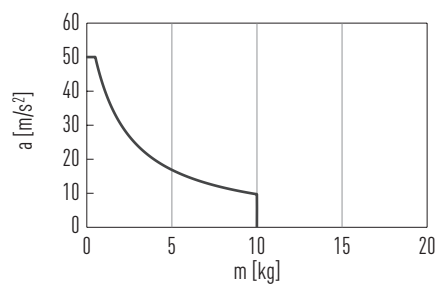
20S700



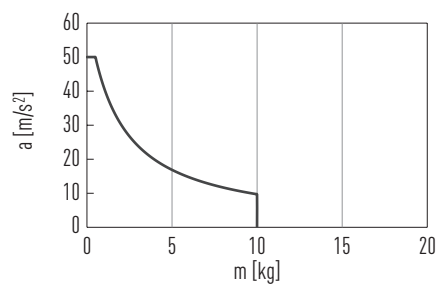
Acceleration depending on load capacity (intermediate circuit voltage 600 VDC)

LMSSA-08

08S050

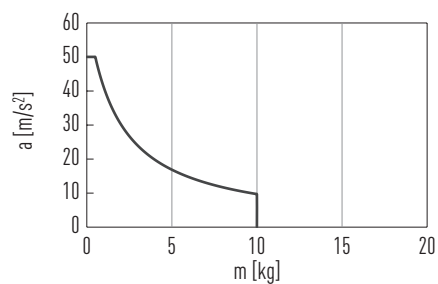


08S100

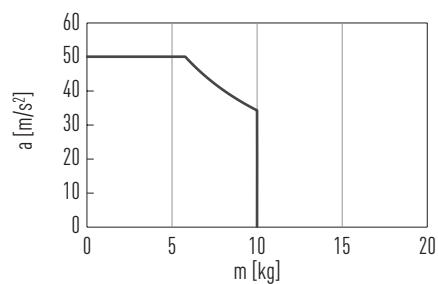


LMSSA-10

10S100

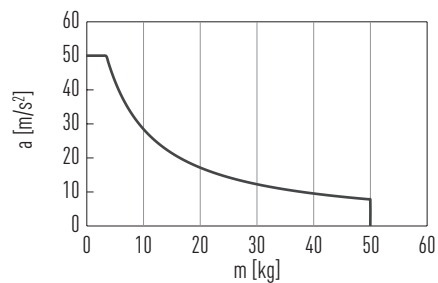


10S200

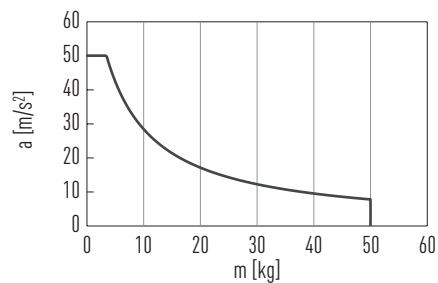


LMSSA-13

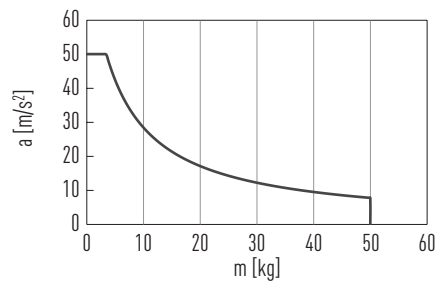
13S100



13S200



13S300

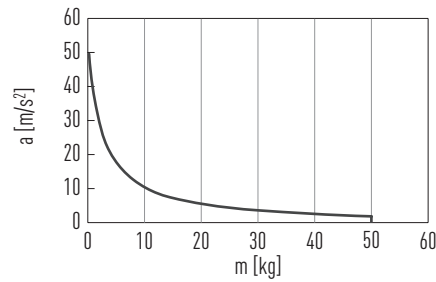


Precision axes and precision systems

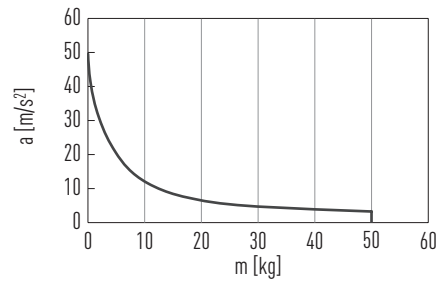
LMSSA linear motor axis

LMSSA-18

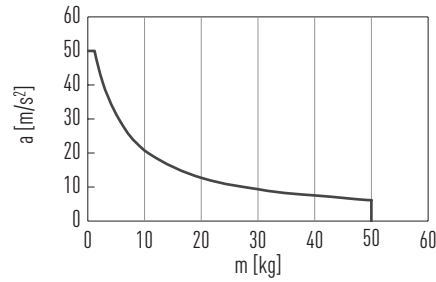
18S100



18S200

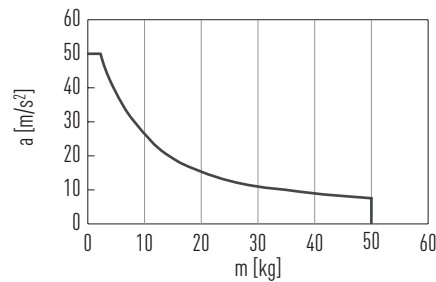


18S300

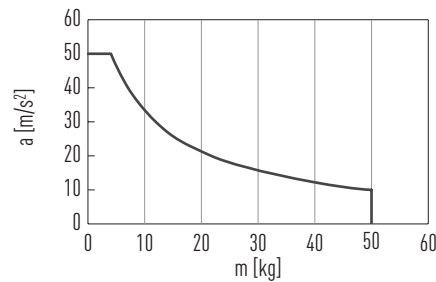


LMSSA-20

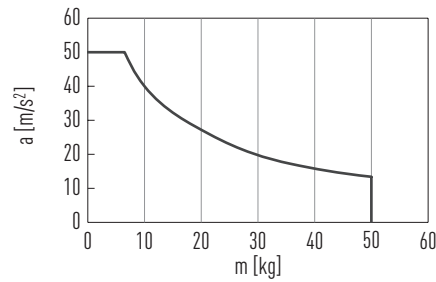
20S300



20S500

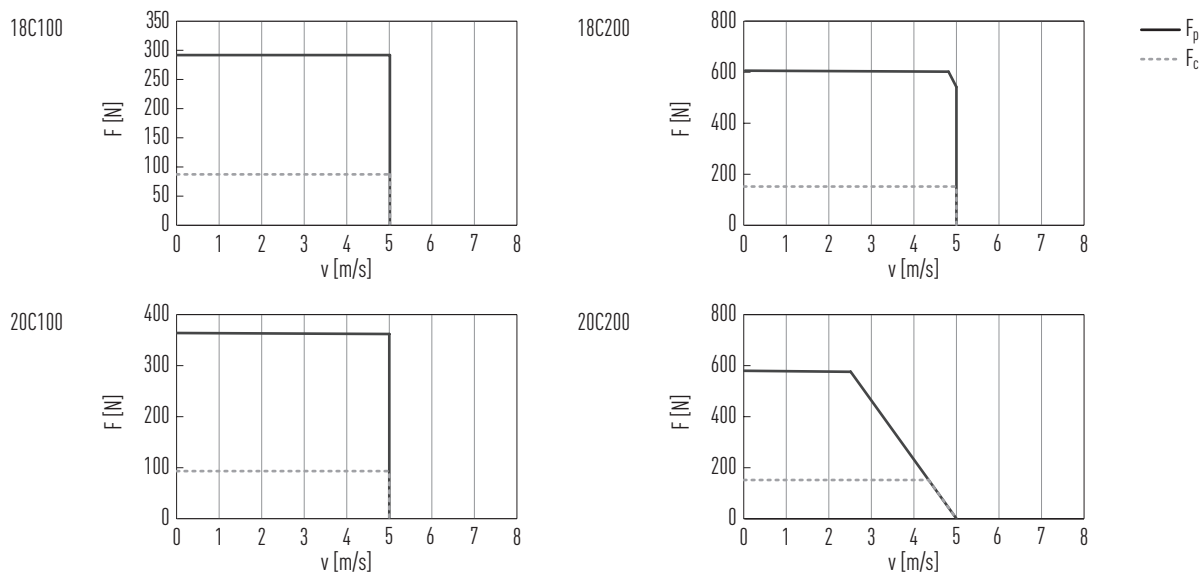


20S700

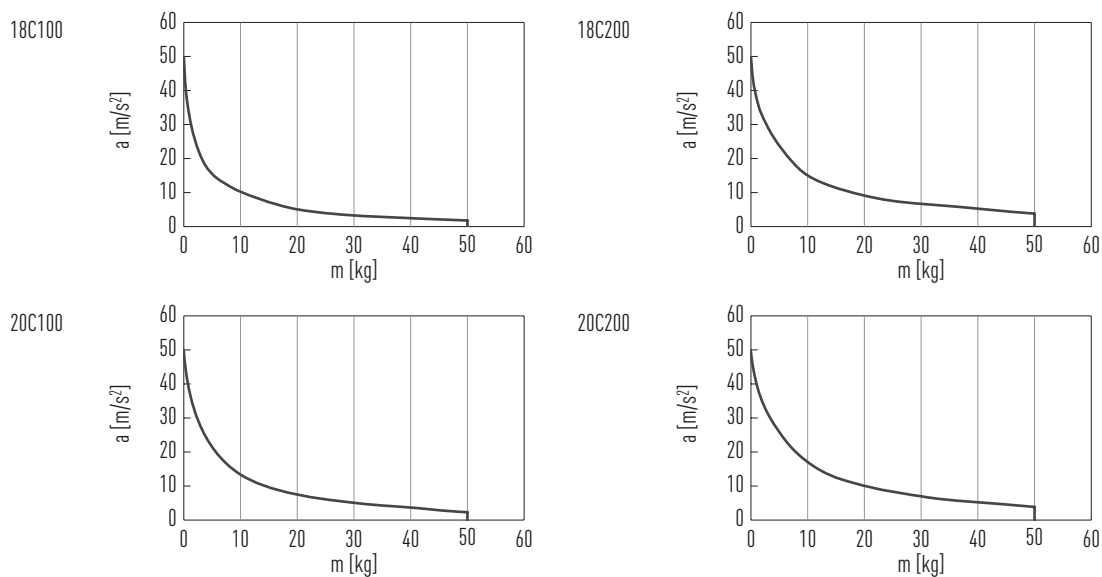


6.4.3 Characteristic curves for LMSSA-C (ironless)

Force depending on speed (intermediate circuit voltage: 325 VDC)

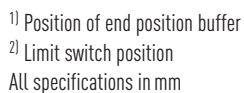


Acceleration depending on load capacity (intermediate circuit voltage: 325 VDC)



LMSSA linear motor axis

LMSSA-08S050, stroke length 100 – 1400 mm



Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	350	400	450	500	550	600	650	700	750	800	850	900	950
N	2	2	2	3	3	3	4	4	4	5	5	5	6
LA	25	50	75	25	50	75	25	50	75	25	50	75	25
LB	300	300	300	450	450	450	600	600	600	750	750	750	900
Weight [kg]	6.3	6.8	7.2	7.6	8.0	8.5	8.8	9.2	9.6	10.0	10.5	10.9	11.2

Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400
Total length LT	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,650
N	6	6	7	7	7	8	8	8	9	9	9	10	10
LA	50	75	25	50	75	25	50	75	25	50	75	25	75
LB	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500
Weight [kg]	11.6	12.1	12.5	12.9	13.3	13.6	14.1	14.5	14.9	15.3	15.8	16.1	16.9

6.4.5 Dimensions of LMSSA-08, 2 travel carriages

LMSSA-08S050, stroke length 100 – 1200 mm

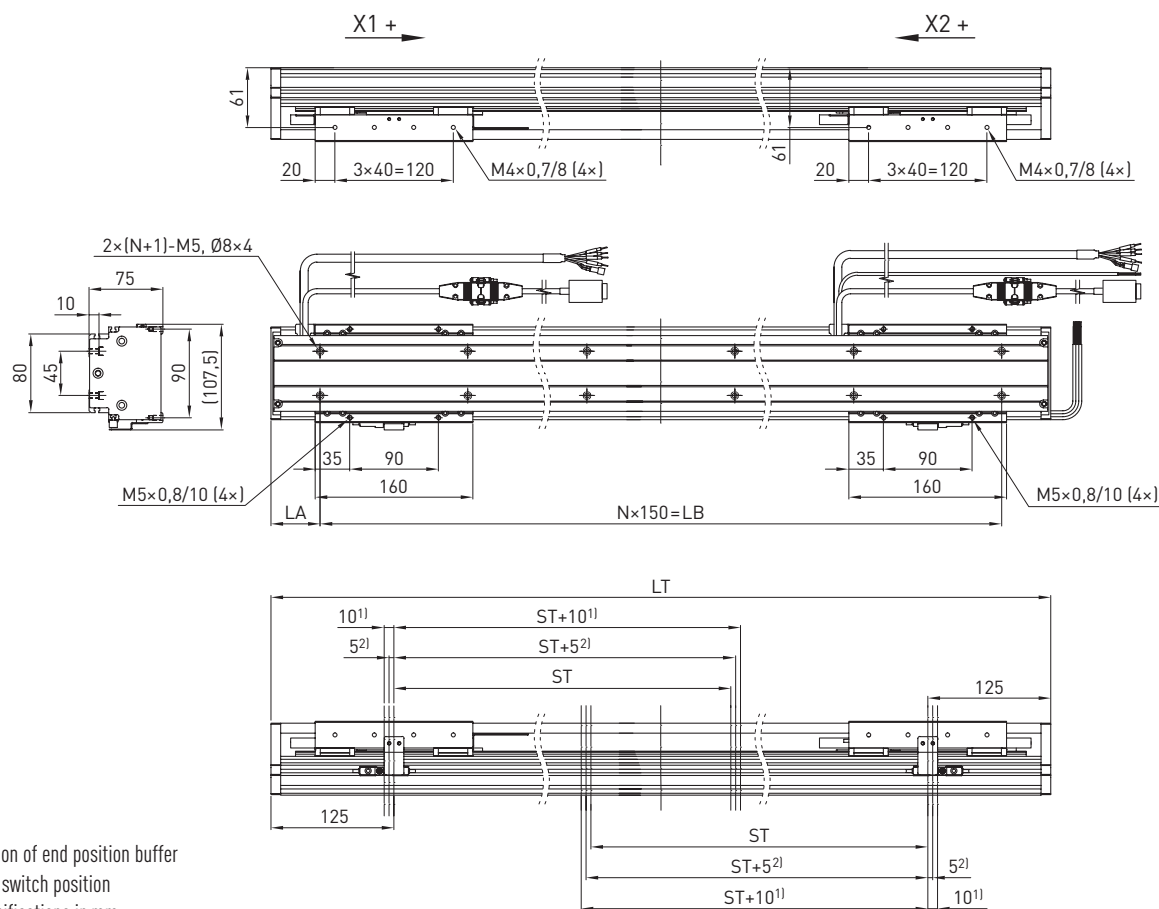


Table 6.7 Dimensions of LMSSA-08S050, 2 travel carriages, stroke length 100 – 700 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150
N	3	3	4	4	4	5	5	5	6	6	6	7	7
LA	50	75	25	50	75	25	50	75	25	50	75	25	50
LB	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050
Weight [kg]	9.2	9.6	10.0	10.5	10.9	11.3	11.6	12.1	12.5	12.9	13.3	13.8	14.1

Table 6.8 Dimensions of LMSSA-08S050, 2 travel carriages, stroke length 750 – 1200 mm

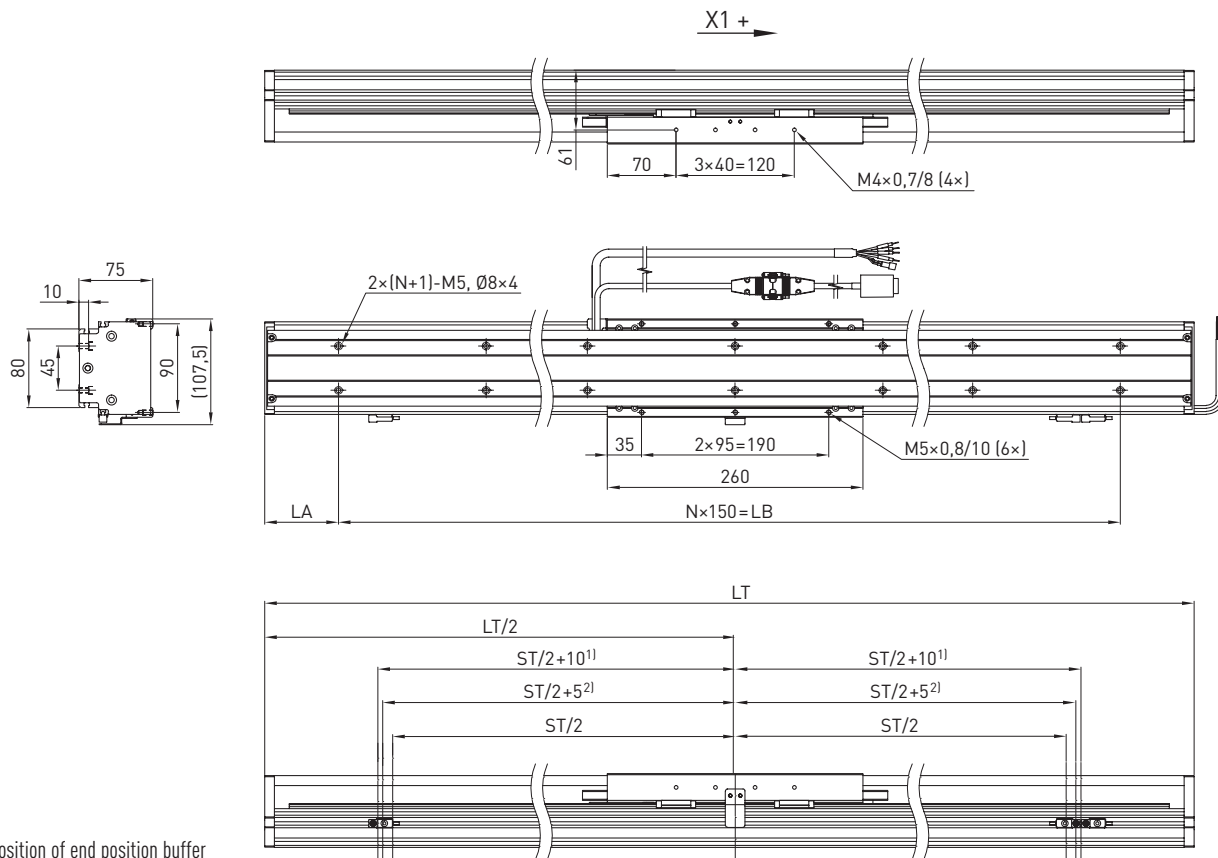
Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200
Total length LT	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	7	8	8	8	9	9	9	10	10	10
LA	75	25	50	75	25	50	75	25	50	75
LB	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	14.5	14.9	15.3	15.8	16.2	16.5	16.9	17.4	17.8	18.2

Precision axes and precision systems

LMSSA linear motor axis

6.4.6 Dimensions of LMSSA-08, 1 travel carriage

LMSSA-08S100, stroke length 100 – 1300 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.9 Dimensions of LMSSA-08S100, 1 travel carriage, stroke length 100 – 700 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050
N	2	3	3	3	4	4	4	5	5	5	6	6	6
LA	75	25	50	75	25	50	75	25	50	75	25	50	75
LB	300	450	450	450	600	600	600	750	750	750	900	900	900
Weight [kg]	8.1	8.5	8.9	9.4	9.8	10.1	10.5	10.9	11.4	11.8	12.2	12.5	13.0

Table 6.10 Dimensions of LMSSA-08S100, 1 travel carriage, stroke length 750 – 1300 mm

Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300
Total length LT	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	7	7	7	8	8	8	9	9	9	10	10	10
LA	25	50	75	25	50	75	25	50	75	25	50	75
LB	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	13.4	13.8	14.2	14.7	15.0	15.4	15.8	16.2	16.7	17.1	17.4	17.8

6.4.7 Dimensions of LMSSA-08, 2 travel carriages

LMSSA-08S100, stroke length 100 – 1000 mm

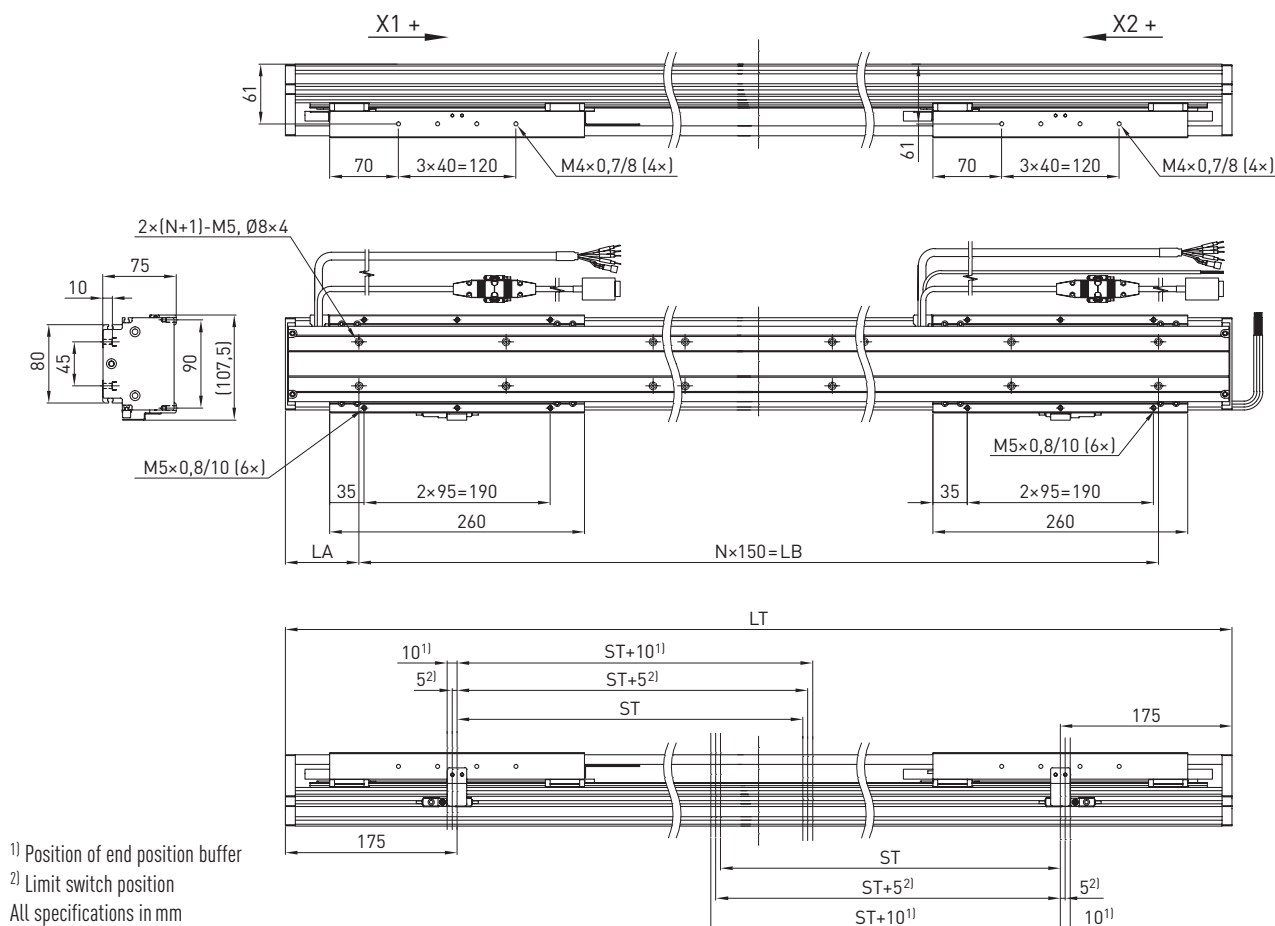


Table 6.11 Dimensions of LMSSA-08S100, 2 travel carriages, stroke length 100 – 550 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550
Total length LT	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200
N	4	5	5	5	6	6	6	7	7	7
LA	75	25	50	75	25	50	75	25	50	75
LB	600	750	750	750	900	900	900	1,050	1,050	1,050
Weight [kg]	12.5	12.9	13.3	13.7	14.0	14.5	14.9	15.3	15.8	16.2

Table 6.12 Dimensions of LMSSA-08S100, 2 travel carriages, stroke length 600 – 1000 mm

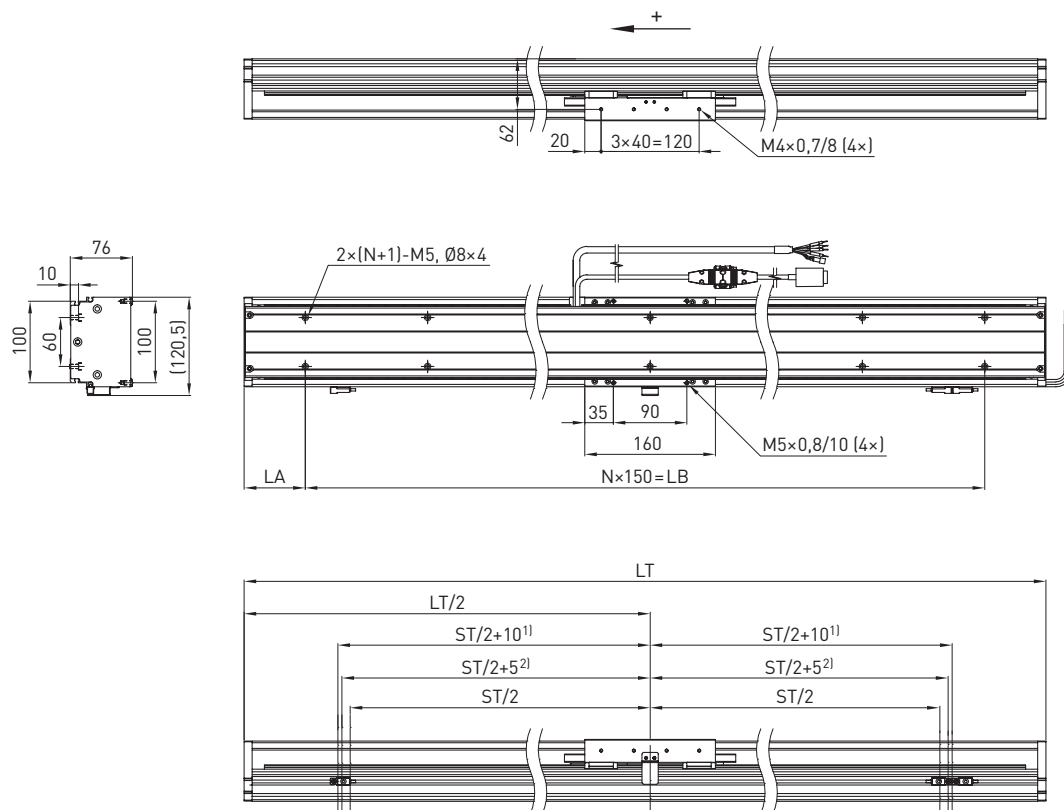
Stroke length ST	600	650	700	750	800	850	900	950	1,000
Total length LT	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	8	8	8	9	9	9	10	10	10
LA	25	50	75	25	50	75	25	50	75
LB	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	16.5	16.9	17.3	17.8	18.2	18.6	18.9	19.3	19.8

Precision axes and precision systems

LMSSA linear motor axis

6.4.8 Dimensions of LMSSA-10, 1 travel carriage

LMSSA-10S100, stroke length 100 – 1400 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.13 Dimensions of LMSSA-10S100, 1 travel carriage, stroke length 100 – 700 mm

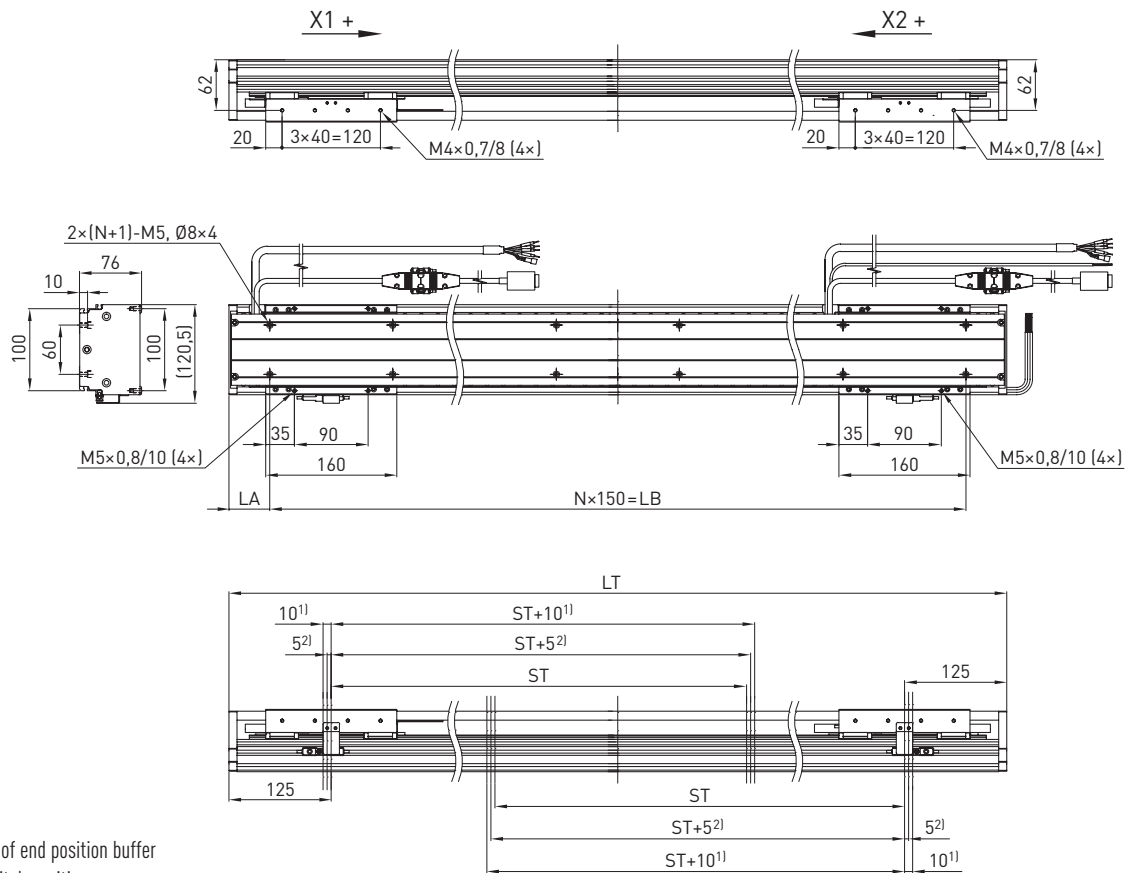
Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	350	400	450	500	550	600	650	700	750	800	850	900	950
N	2	2	2	3	3	3	4	4	4	5	5	5	6
LA	25	50	75	25	50	75	25	50	75	25	50	75	25
LB	300	300	300	450	450	450	600	600	600	750	750	750	900
Weight [kg]	7.4	7.9	8.5	8.8	9.3	9.9	10.4	10.9	11.5	11.8	12.3	12.9	13.4

Table 6.14 Dimensions of LMSSA-10S100, 1 travel carriage, stroke length 750 – 1400 mm

Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400
Total length LT	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,650
N	6	6	7	7	7	8	8	8	9	9	9	10	10
LA	50	75	25	50	75	25	50	75	25	50	75	25	75
LB	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500
Weight [kg]	13.9	14.5	14.8	15.3	15.9	16.4	16.9	17.5	17.8	18.3	18.9	19.4	20.5

6.4.9 Dimensions of LMSSA-10, 2 travel carriages

LMSSA-10S100, stroke length 100 – 1200 mm



¹⁾ Position of end position buffer
²⁾ Limit switch position
 All specifications in mm

Table 6.15 Dimensions of LMSSA-10S100, 2 travel carriages, stroke length 100 – 700 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150
N	3	3	4	4	4	5	5	5	6	6	6	7	7
LA	50	75	25	50	75	25	50	75	25	50	75	25	50
LB	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050
Weight [kg]	10.8	11.3	11.8	12.2	12.7	13.3	13.8	14.3	14.8	15.2	15.7	16.3	16.8

Table 6.16 Dimensions of LMSSA-10S100, 2 travel carriages, stroke length 750 – 1200 mm

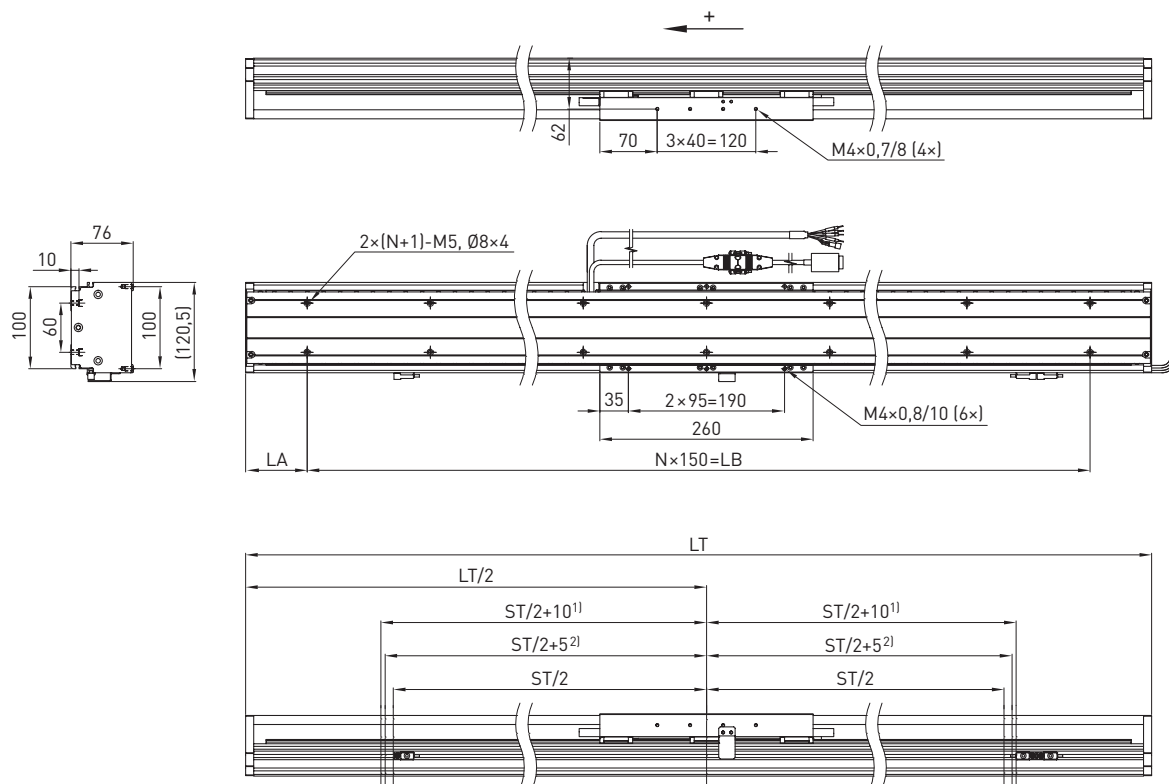
Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200
Total length LT	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	7	8	8	8	9	9	9	10	10	10
LA	75	25	50	75	25	50	75	25	50	75
LB	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	17.3	17.8	18.2	18.7	19.3	19.8	20.3	20.8	21.2	21.7

Precision axes and precision systems

LMSSA linear motor axis

6.4.10 Dimensions of LMSSA-10, 1 travel carriage

LMSSA-10S200, stroke length 100 – 1300 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.17 Dimensions of LMSSA-10S200, 1 travel carriage, stroke length 100 – 700 mm

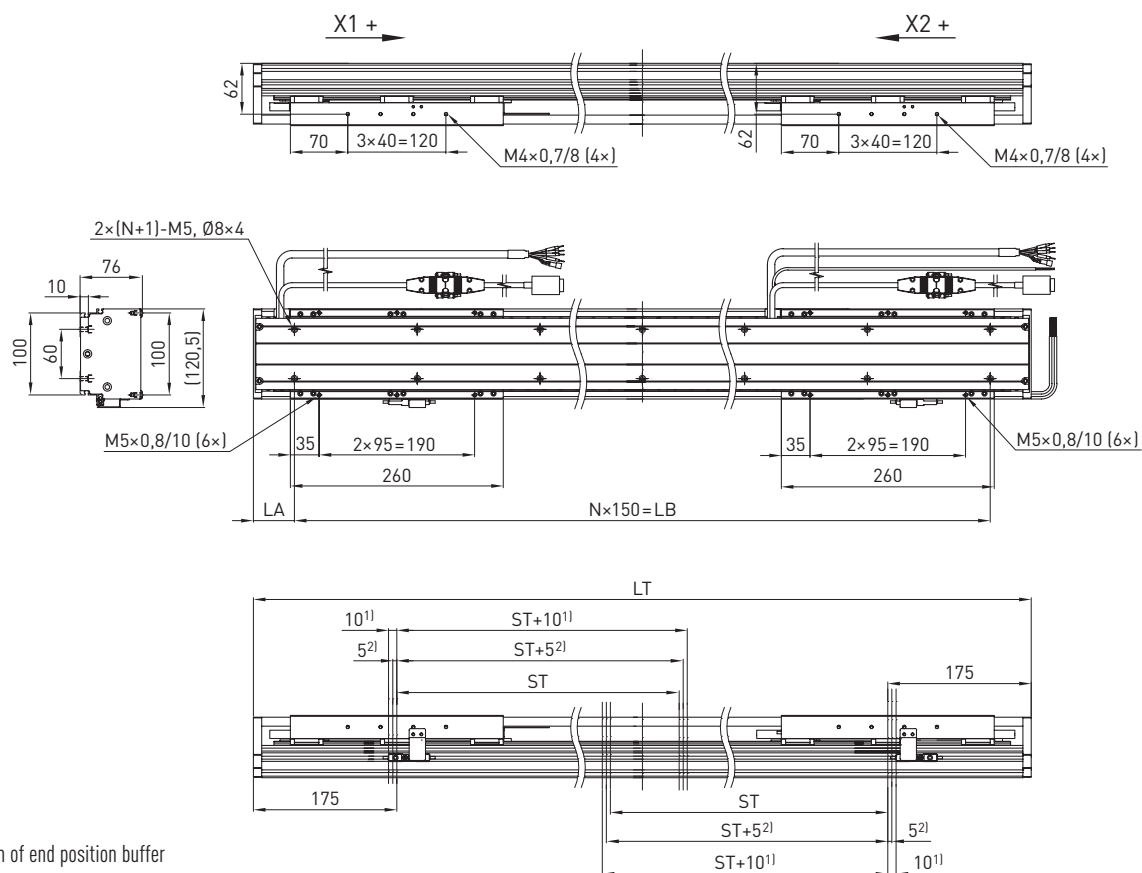
Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700
Total length LT	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050
N	2	3	3	3	4	4	4	5	5	5	6	6	6
LA	75	25	50	75	25	50	75	25	50	75	25	50	75
LB	300	450	450	450	600	600	600	750	750	750	900	900	900
Weight [kg]	9.6	10.1	10.5	11.0	11.5	12.0	12.6	13.1	13.4	14.0	14.5	15.0	15.6

Table 6.18 Dimensions of LMSSA-10S200, 1 travel carriage, stroke length 750 – 1300 mm

Stroke length ST	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300
Total length LT	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	7	7	7	8	8	8	9	9	9	10	10	10
LA	25	50	75	25	50	75	25	50	75	25	50	75
LB	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	16.1	16.4	17.0	17.5	18.0	18.6	19.1	19.4	20.0	20.5	21.0	21.6

6.4.11 Dimensions of LMSSA-10, 2 travel carriages

LMSSA-10S200, stroke length 100 – 1000 mm



¹) Position of end position buffer

²) Limit switch position

All specifications in mm

Table 6.19 Dimensions of LMSSA-10S200, 2 travel carriages, stroke length 100 – 550 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550
Total length LT	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200
N	4	5	5	5	6	6	6	7	7	7
LA	75	25	50	75	25	50	75	25	50	75
LB	600	750	750	750	900	900	900	1,050	1,050	1,050
Weight [kg]	14.9	15.5	16.0	16.5	17.0	17.4	17.9	18.5	19.0	19.5

Table 6.20 Dimensions of LMSSA-10S200, 2 travel carriages, stroke length 600 – 1000 mm

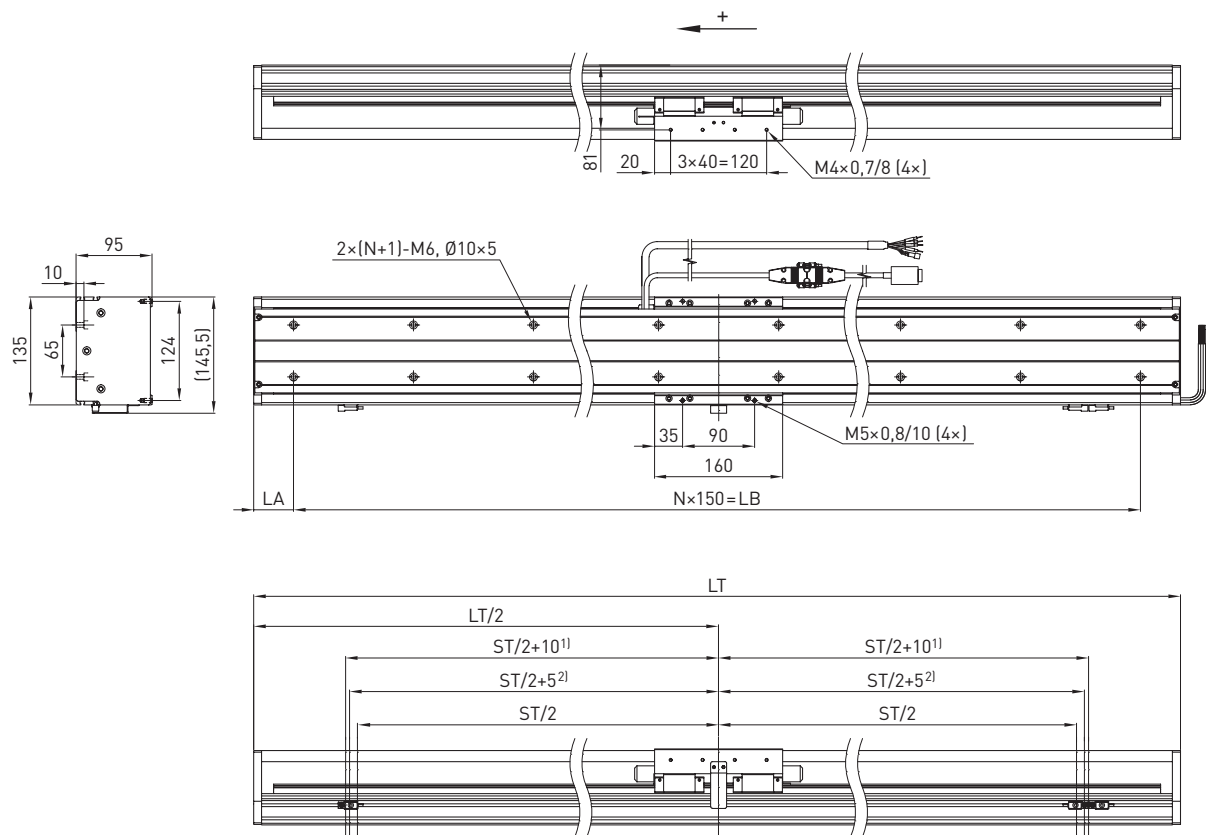
Stroke length ST	600	650	700	750	800	850	900	950	1,000
Total length LT	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650
N	8	8	8	9	9	9	10	10	10
LA	25	50	75	25	50	75	25	50	75
LB	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500
Weight [kg]	20.0	20.4	20.9	21.5	22.0	22.5	23.0	23.4	23.9

Precision axes and precision systems

LMSSA linear motor axis

6.4.12 Dimensions of LMSSA-13, 1 travel carriage

LMSSA-13S100, stroke length 100 – 2700 mm



¹) Position of end position buffer

²) Limit switch position

All specifications in mm

Table 6.21 Dimensions of LMSSA-13S100, 1 travel carriage, stroke length 100 – 1100 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100
Total length LT	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350
N	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8
LA	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75
LB	300	300	300	450	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200
Weight [kg]	10.6	11.4	12.2	12.9	13.7	14.5	15.3	16.1	16.9	17.6	18.4	19.2	20.0	20.9	21.7	22.3	23.1	24.0	24.8	25.6	26.4

Table 6.22 Dimensions of LMSSA-13S100, 1 travel carriage, stroke length 1150 – 2700 mm

Stroke length ST	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700
Total length LT	1,400	1,450	1,500	1,550	1,650	1,750	1,850	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	9	9	9	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19
LA	25	50	75	25	50	75	25	50	75	25	75	25	75	25	50	75	25	50
LB	1,350	1,350	1,350	1,500	1,500	1,650	1,800	1,800	1,950	2,100	2,100	2,250	2,400	2,400	2,550	2,700	2,700	2,850
Weight [kg]	27.1	27.9	28.7	29.5	31.3	32.6	34.2	35.9	37.3	39.0	40.6	42.1	43.7	45.3	46.8	48.4	50.1	51.5

6.4.13 Dimensions of LMSSA-13, 2 travel carriages

LMSSA-13S100, stroke length 100 – 2500 mm

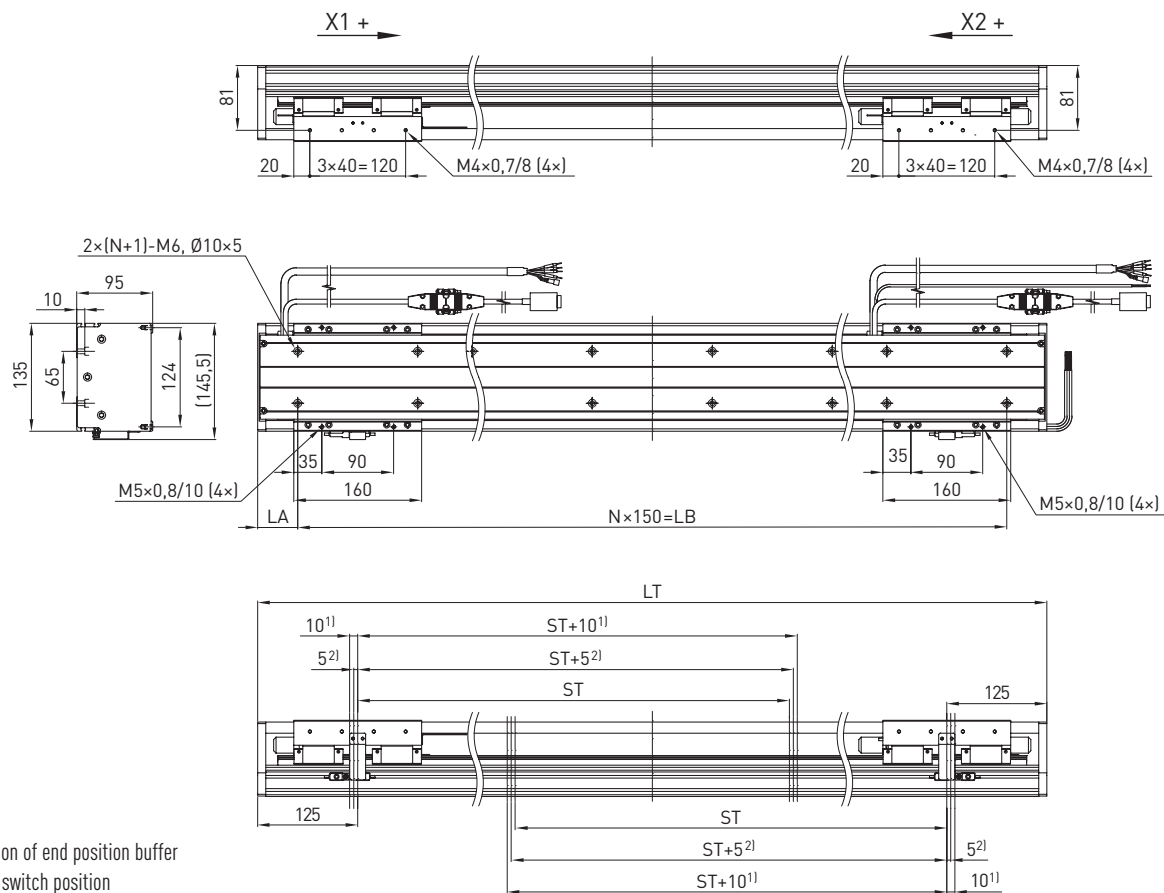


Table 6.23 Dimensions of LMSSA-13S100, 2 travel carriages, stroke length 100 – 1050 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050
Total length LT	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500
N	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9
LA	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75
LB	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350
Weight [kg]	16.1	16.9	17.8	18.4	19.2	20.0	20.9	21.7	22.5	23.1	24.0	24.8	25.6	26.4	27.2	27.9	28.7	29.5	30.3	31.1

Table 6.24 Dimensions of LMSSA-13S100, 2 travel carriages, stroke length 1100 – 2500 mm

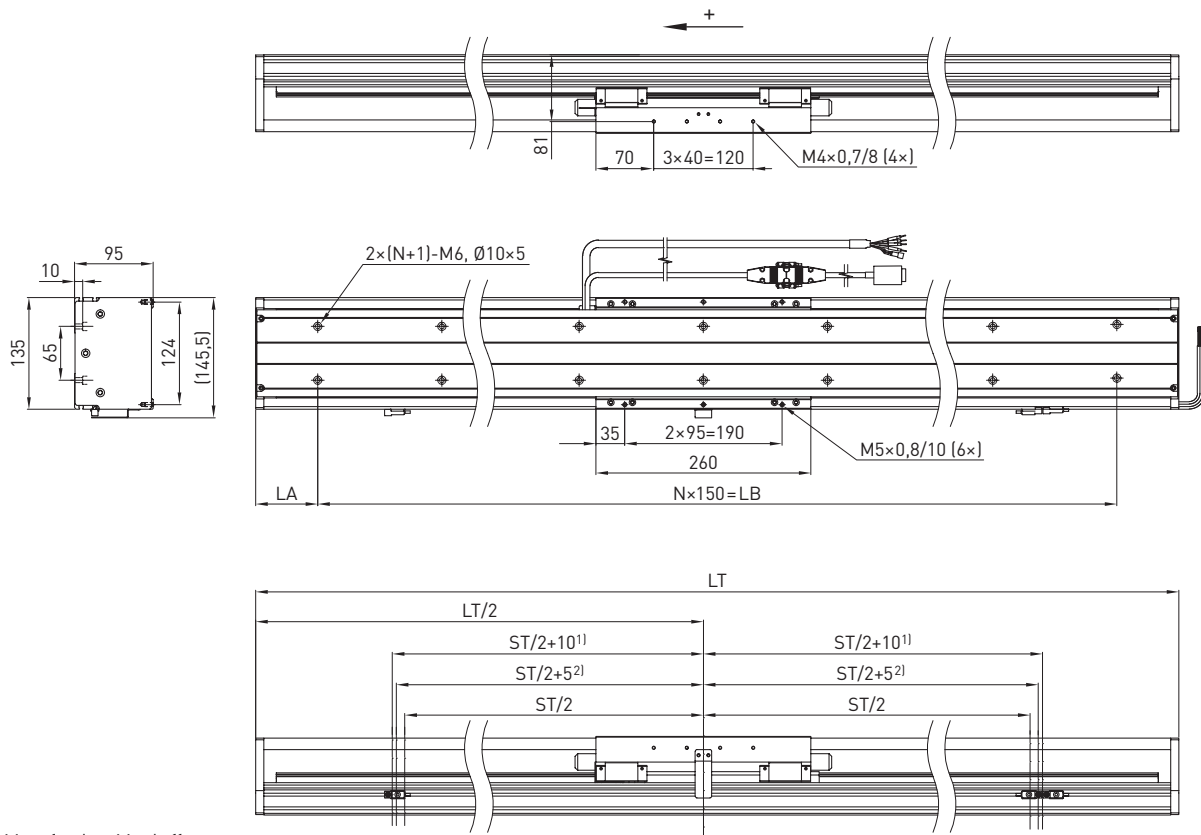
Stroke length ST	1,100	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
Total length LT	1,550	1,600	1,650	1,700	1,750	1,850	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	10	10	10	11	11	12	12	13	14	14	15	16	16	17	18	18	19
LA	25	50	75	25	50	75	25	50	75	25	75	25	75	25	50	75	50
LB	1,500	1,500	1,500	1,650	1,650	1,800	1,800	1,950	2,100	2,100	2,250	2,400	2,400	2,550	2,700	2,700	2,850
Weight [kg]	32.0	32.6	33.4	34.2	35.1	36.7	38.2	39.8	41.4	42.9	44.5	46.2	47.6	49.3	50.9	52.4	54.0

Precision axes and precision systems

LMSSA linear motor axis

6.4.14 Dimensions of LMSSA-13, 1 travel carriage

LMSSA-13S200, stroke length 100 – 2600 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.25 Dimensions of LMSSA-13S200, 1 travel carriage, stroke length 100 – 1050 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050
Total length LT	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400
N	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9
LA	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25
LB	300	450	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350
Weight [kg]	13.5	14.3	15.0	15.8	16.6	17.4	18.3	19.1	19.7	20.5	21.4	22.2	23.0	23.8	24.5	25.3	26.1	26.9	27.7	28.5

Table 6.26 Dimensions of LMSSA-13S200, 1 travel carriage, stroke length 1100 – 2600 mm

Stroke length ST	1,100	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
Total length LT	1,450	1,500	1,550	1,600	1,650	1,750	1,850	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	9	9	10	10	10	11	12	12	13	14	14	15	16	16	17	18	18	19
LA	50	75	25	50	75	50	25	75	50	25	75	50	25	75	50	25	75	50
LB	1,350	1,350	1,500	1,500	1,500	1,650	1,800	1,800	1,950	2,100	2,100	2,250	2,400	2,400	2,550	2,700	2,700	2,850
Weight [kg]	29.2	30.0	30.8	31.6	32.4	33.9	35.5	37.2	38.6	40.3	41.9	43.4	45.0	46.6	48.1	49.7	51.4	52.8

6.4.15 Dimensions of LMSSA-13, 2 travel carriages

LMSSA-13S200, stroke length 100 – 2300 mm

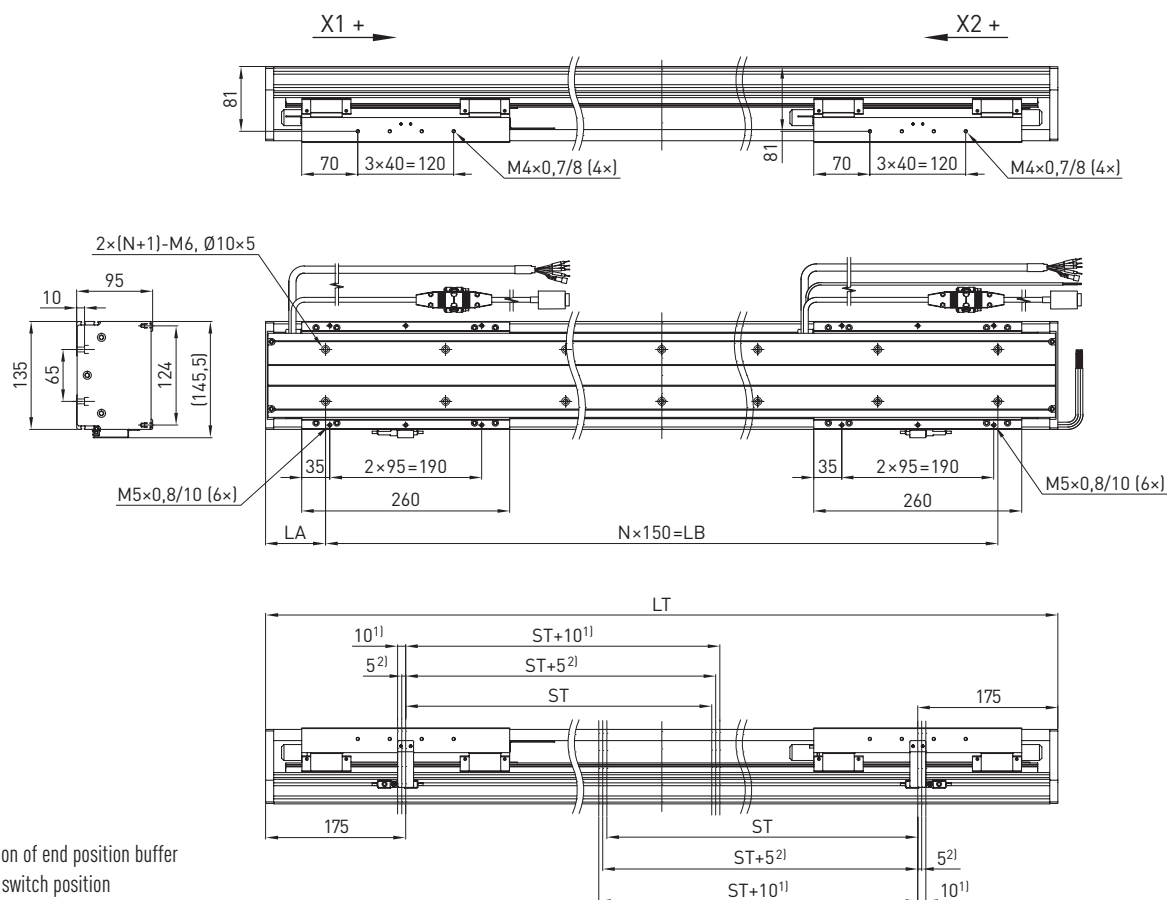


Table 6.27 Dimensions of LMSSA-13S200, 2 travel carriages, stroke length 100 – 950 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950
Total length LT	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600
N	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10
LA	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50
LB	600	750	750	750	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500
Weight [kg]	21.8	22.6	23.5	24.3	25.1	25.7	26.6	27.4	28.2	29.0	29.8	30.5	31.3	32.1	32.9	33.7	34.6	35.2

Table 6.28 Dimensions of LMSSA-13S200, 2 travel carriages, stroke length 1000 – 2300 mm

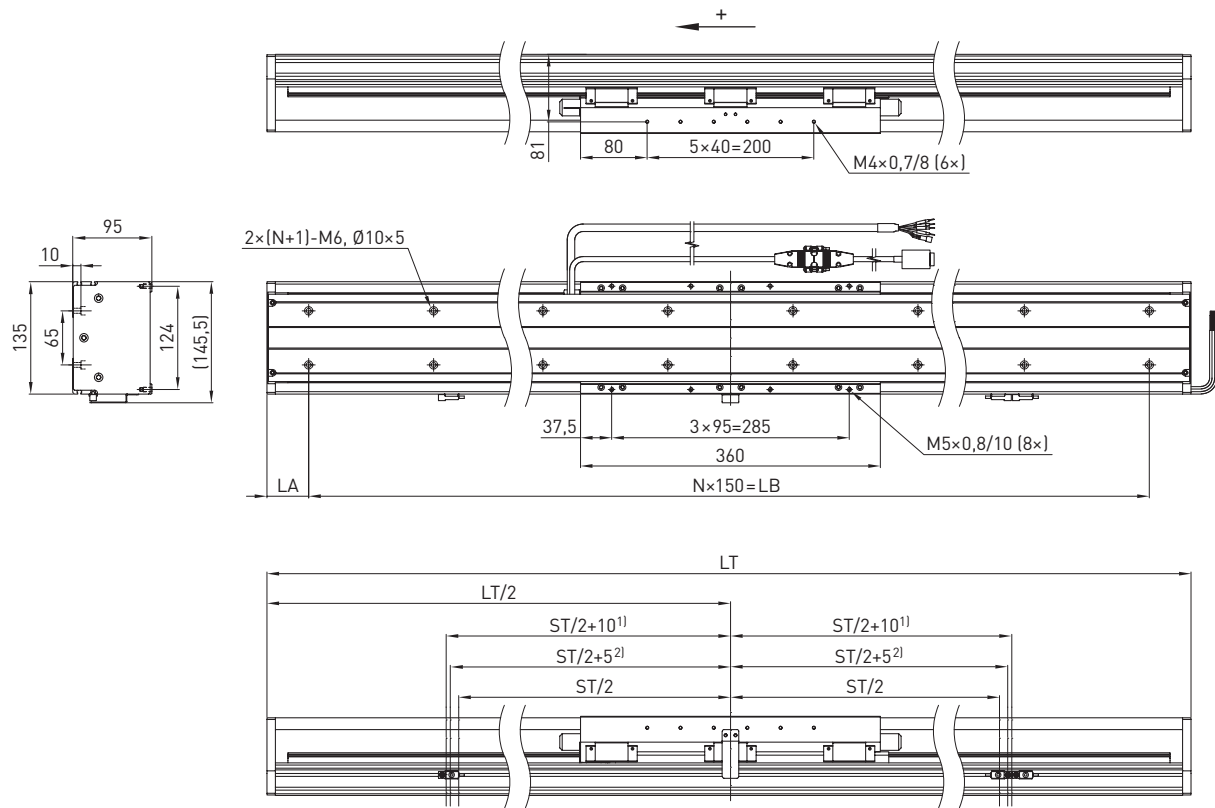
Stroke length ST	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300
Total length LT	1,650	1,700	1,750	1,800	1,850	1,900	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	10	11	11	11	12	12	12	13	14	14	15	16	16	17	18	18	19
LA	75	25	50	75	25	50	75	50	25	75	50	25	75	50	25	75	50
LB	1,500	1,650	1,650	1,650	1,800	1,800	1,800	1,950	2,100	2,100	2,250	2,400	2,400	2,550	2,700	2,700	2,850
Weight [kg]	36.0	36.8	37.7	38.5	39.3	40.1	41.1	42.7	44.2	45.8	47.4	48.9	50.6	52.2	53.7	55.3	56.9

Precision axes and precision systems

LMSSA linear motor axis

6.4.16 Dimensions of LMSSA-13, 1 travel carriage

LMSSA-13S300, stroke length 100 – 2500 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.29 Dimensions of LMSSA-13S300, 1 travel carriage, stroke length 100 – 1000 mm

Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000
Total length LT	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450
N	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9
LA	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50
LB	450	450	600	600	600	750	750	750	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350
Weight [kg]	16.7	17.5	18.3	19.1	20.0	20.8	21.4	22.2	23.1	23.9	24.7	25.5	26.2	27.0	27.8	28.6	29.4	30.2	30.9

Table 6.30 Dimensions of LMSSA-13S300, 1 travel carriage, stroke length 1050 – 2500 mm

Stroke length ST	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500
Total length LT	1,500	1,550	1,600	1,650	1,700	1,750	1,850	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	9	10	10	10	11	11	12	12	13	14	14	15	16	16	17	18	18	19
LA	75	25	50	75	25	50	25	75	50	25	75	50	25	75	50	25	75	50
LB	1,350	1,500	1,500	1,500	1,650	1,650	1,800	1,800	1,950	2,100	2,100	2,250	2,400	2,400	2,550	2,700	2,700	2,850
Weight [kg]	31.7	32.5	33.3	34.1	35.0	35.6	37.2	38.9	40.3	42.0	43.6	45.1	46.7	48.3	49.8	51.4	53.1	54.5

6.4.17 Dimensions of LMSSA-13, 2 travel carriages

LMSSA-13S300, stroke length 100 – 2100 mm

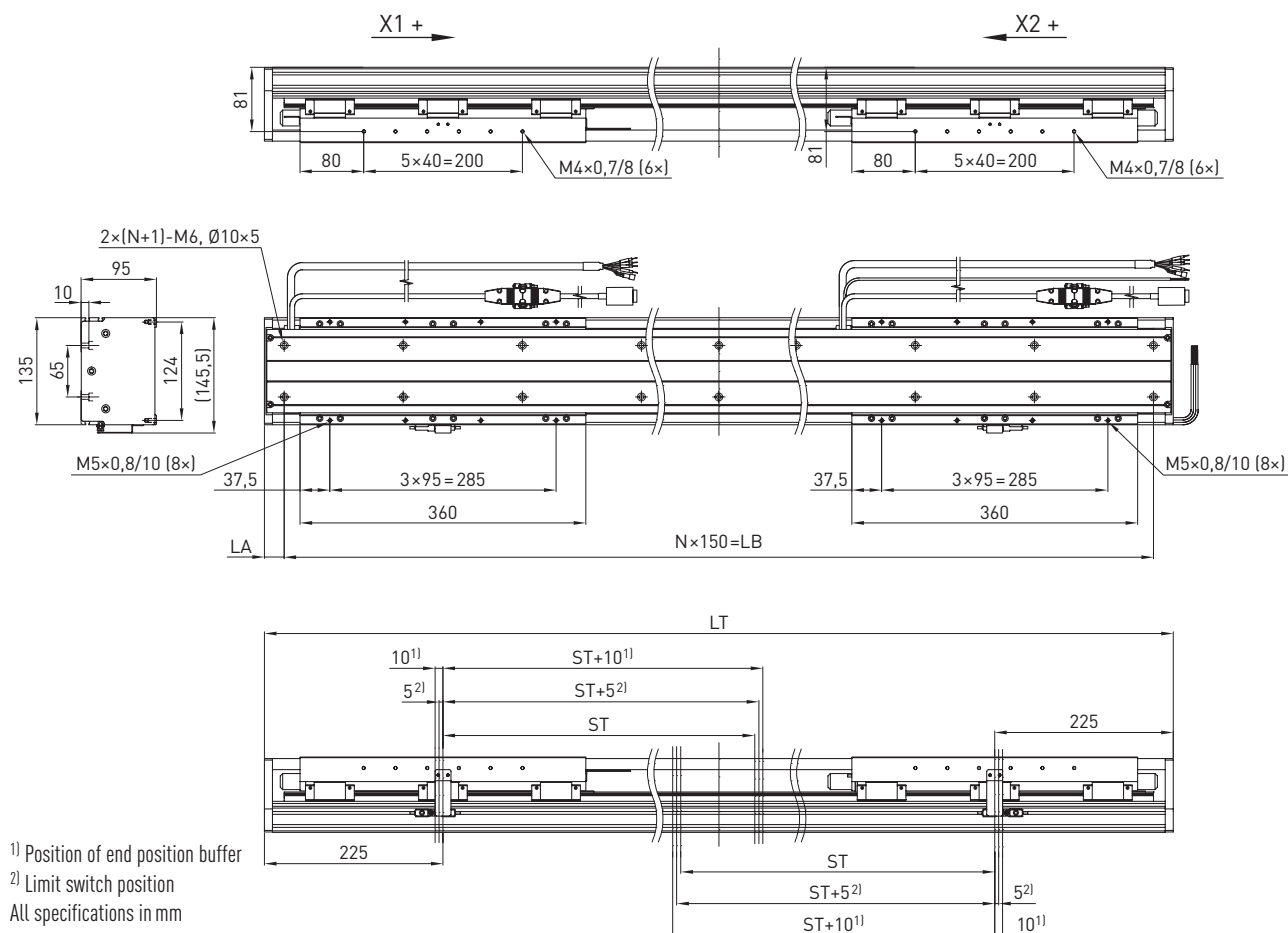


Table 6.31 Dimensions of LMSSA-13S300, 2 travel carriages, stroke length 100 – 900 mm

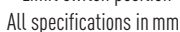
Stroke length ST	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900
Total length LT	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650	1,700	1,750
N	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11	11
LA	25	50	75	25	50	75	25	50	75	25	50	75	25	50	75	25	50
LB	900	900	900	1,050	1,050	1,050	1,200	1,200	1,200	1,350	1,350	1,350	1,500	1,500	1,500	1,650	1,650
Weight [kg]	31.7	32.5	33.3	34.2	35.0	35.9	36.5	37.4	38.2	39.1	39.9	40.7	41.4	42.2	43.1	43.9	44.8

Table 6.32 Dimensions of LMSSA-13S300, 2 travel carriages, stroke length 950 – 2100 mm

Stroke length ST	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100
Total length LT	1,800	1,850	1,900	1,950	2,000	2,050	2,100	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N	11	12	12	12	13	13	13	14	14	15	16	16	17	18	18	19
LA	75	25	50	75	25	50	75	25	75	50	25	75	50	25	75	50
LB	1,650	1,800	1,800	1,800	1,950	1,950	1,950	2,100	2,100	2,250	2,400	2,550	2,700	2,700	2,700	2,850
Weight [kg]	45.6	46.3	47.1	48.0	48.8	49.6	50.5	51.2	52.8	54.5	56.0	57.7	59.4	60.9	62.6	64.3

LMSSA linear motor axis

LMSSA-18S100, LMSSA-18C100, stroke length 200 – 1500 mm

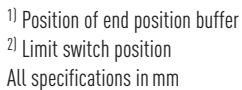


Stroke length ST		200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT		490	540	590	640	690	740	790	840	890	940	990	1,040	1,090
N		5	5	7	7	7	7	7	9	9	9	9	9	11
LA		424	474	524	574	624	674	724	774	824	874	924	974	1,024
LB		125	150	55	80	105	130	155	60	85	110	135	160	65
LC		240	240	480	480	480	480	480	720	720	720	720	720	960
A		423	473	523	573	623	673	723	773	823	873	923	973	1,023
B		—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	18S100	12.0	12.9	13.8	14.7	15.6	16.5	17.4	18.3	19.2	20.1	21.0	21.9	22.8
	18C100	15.9	17.0	18.1	19.2	20.3	21.4	22.5	23.7	24.8	25.9	27.0	28.1	29.2

Stroke length ST [mm]		850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]		1,140	1,190	1,240	1,290	1,340	1,390	1,440	1,490	1,540	1,590	1,690	1,790
N [mm]		11	11	13	13	13	13	13	13	15	15	15	17
LA [mm]		1,074	1,124	1,174	1,224	1,274	1,324	1,374	1,424	1,474	1,524	1,624	1,723
LB [mm]		90	115	20	45	70	95	120	145	50	75	125	55
LC [mm]		960	960	1,200	1,200	1,200	1,200	1,200	1,200	1,440	1,440	1,440	1,680
A [mm]		1,073	1,123	1,173	1,223	1,273	1,323	1,373	1,423	1,473	1,523	1,623	1,723
B [mm]		—	—	—	—	—	—	—	—	360	360	360	600
Weight [kg]	18S100	23.7	24.6	25.5	26.4	27.3	28.2	29.1	30.0	30.9	31.8	33.6	35.4
	18C100	30.3	31.4	32.6	33.7	34.8	35.9	37.0	38.1	39.2	40.3	42.6	44.8

LMSSA linear motor axis

LMSSA-18S100, LMSSA-18C100, stroke length 230 – 1280 mm

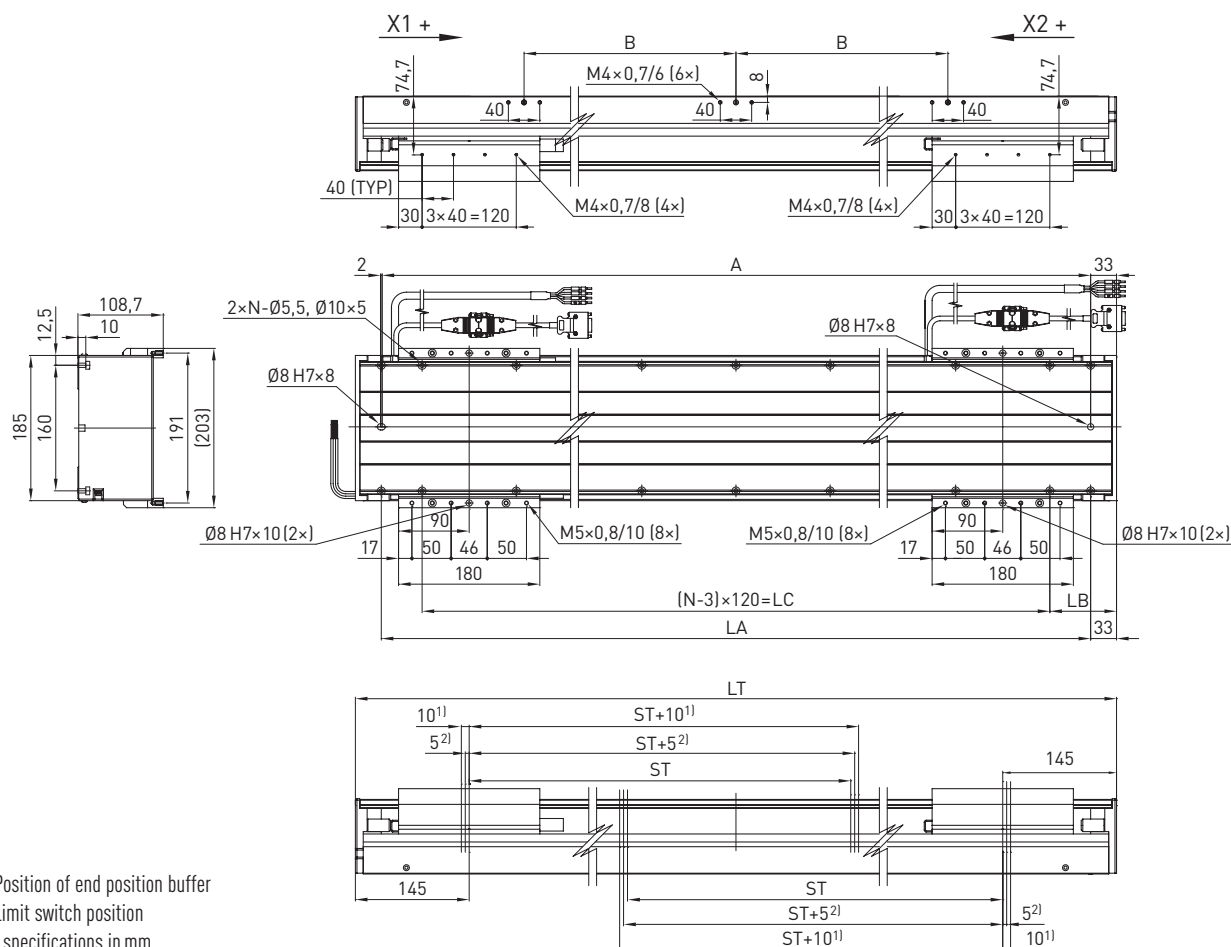


Stroke length ST [mm]		230	280	330	380	430	480	530	580	630	680	730
Total length LT [mm]		740	790	840	890	940	990	1,040	1,090	1,140	1,190	1,240
N [mm]		7	7	9	9	9	9	9	11	11	11	13
LA [mm]		674	724	774	824	874	924	974	1,024	1,074	1,124	1,174
LB [mm]		130	155	60	85	110	135	160	65	90	115	20
LC [mm]		480	480	720	720	720	720	720	960	960	960	1,200
A [mm]		673	723	773	823	873	923	973	1,023	1,073	1,123	1,173
B [mm]		—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	18S100	19.4	20.3	21.2	22.1	23.0	23.9	24.8	25.7	26.6	27.5	28.4
	18C100	24.1	25.2	26.3	27.5	28.6	29.7	30.8	31.9	33.0	34.1	35.2

Stroke length ST [mm]		780	830	880	930	980	1,030	1,080	1,130	1,180	1,230	1,280
Total length LT [mm]		1,290	1,340	1,390	1,440	1,490	1,540	1,590	1,640	1,690	1,740	1,790
N [mm]		13	13	13	13	13	15	15	15	15	15	17
LA [mm]		1,224	1,274	1,324	1,374	1,424	1,474	1,524	1,574	1,624	1,674	1,724
LB [mm]		45	70	95	120	145	50	75	100	125	150	55
LC [mm]		1,200	1,200	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,680
A [mm]		1,223	1,273	1,323	1,373	1,423	1,473	1,523	1,573	1,623	1,673	1,723
B [mm]		—	—	—	—	—	—	360	360	360	600	600
Weight [kg]	18S100	29.3	30.2	31.1	32.0	32.9	33.8	34.7	35.6	36.5	37.4	38.3
	18C100	36.3	37.5	38.6	39.7	40.8	41.9	43.0	44.1	45.2	46.3	47.5

6.4.21 Dimensions of LMSSA-18, 2 travel carriages

LMSSA-18S100, LMSSA-18C100, stroke length 1330 – 2430 mm



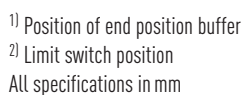
1) Position of end position buffer
2) Limit switch position
All specifications in mm

Table 6.38 Dimensions of LMSSA-18S100, -18C100, 2 travel carriages, stroke length 1330 – 2430 mm

Stroke length ST [mm]	1,330	1,430	1,530	1,630	1,730	1,830	1,930	2,030	2,130	2,230	2,330	2,430
Total length LT [mm]	1,840	1,940	2,040	2,140	2,240	2,340	2,440	2,540	2,640	2,740	2,840	2,940
N [mm]	17	17	19	19	19	21	23	23	23	25	25	25
LA [mm]	1,774	1,874	1,974	2,074	2,174	2,274	2,374	2,474	2,574	2,674	2,774	2,874
LB [mm]	80	130	60	110	160	90	20	70	120	50	100	150
LC [mm]	1,680	1,680	1,920	1,920	1,920	2,160	2,400	2,400	2,400	2,640	2,640	2,640
A [mm]	1,773	1,873	1,973	2,073	2,173	2,273	2,373	2,473	2,573	2,673	2,773	2,873
B [mm]	600	600	600	600	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	18S100	41.6	43.4	45.2	47.0	48.8	50.6	52.4	54.2	55.9	57.7	59.5
	18C100	51.0	53.2	55.4	57.6	59.9	62.1	64.3	66.5	68.8	71.0	73.2

LMSSA linear motor axis

LMSSA-18S200, stroke length 200 – 1500 mm

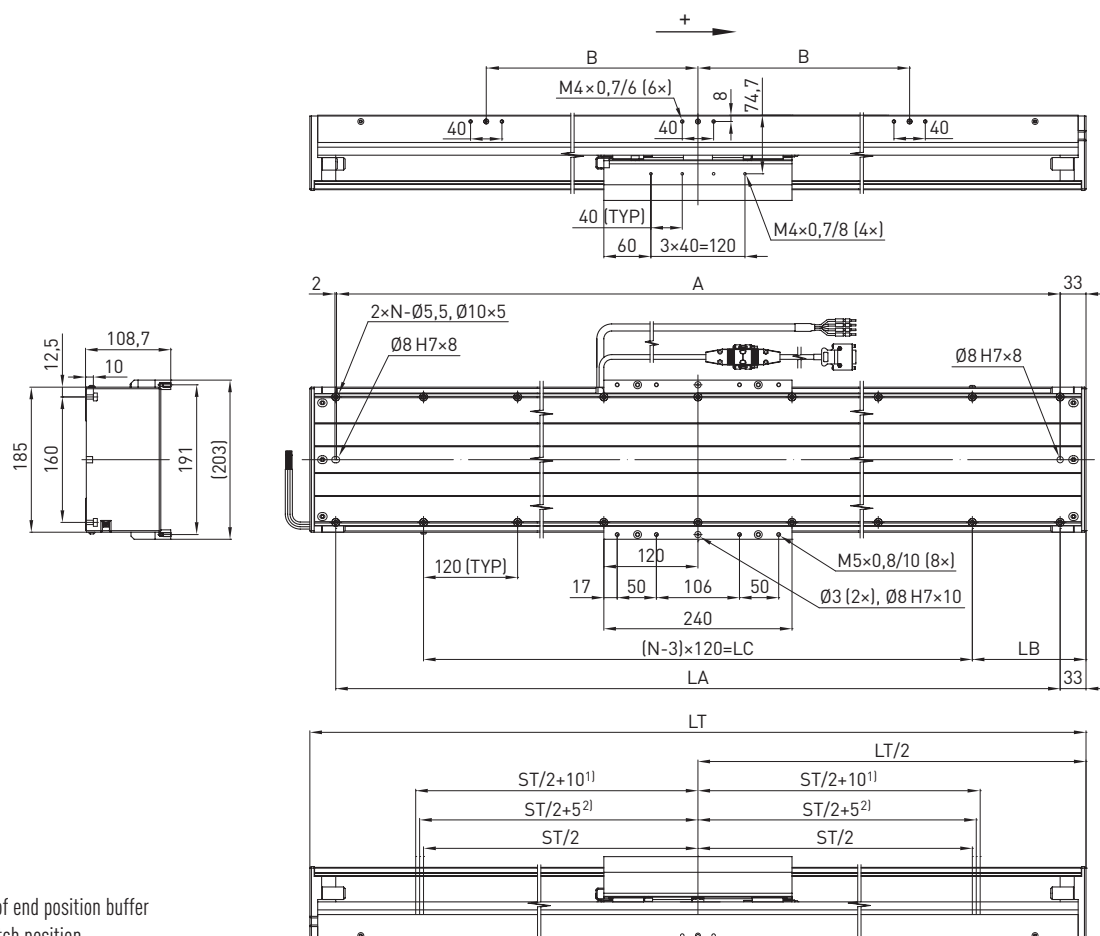


Stroke length ST [mm]	200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT [mm]	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150
N [mm]	5	7	7	7	7	7	9	9	9	11	11	11	11
LA [mm]	484	534	584	634	684	734	784	834	884	934	984	1,034	1,084
LB [mm]	155	60	85	110	135	160	65	90	115	20	45	70	95
LC [mm]	240	480	480	480	480	480	720	720	720	960	960	960	960
A [mm]	483	533	583	633	683	733	783	833	883	933	983	1,033	1,083
B [mm]	—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	14.2	15.1	16.0	17.0	17.9	18.8	19.7	20.6	21.5	22.4	23.3	24.3	25.2

Stroke length ST [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650	1,750	1,850
N [mm]	11	11	13	13	13	13	13	15	15	15	15	17
LA [mm]	1,134	1,184	1,234	1,284	1,334	1,384	1,434	1,484	1,534	1,584	1,684	1,784
LB [mm]	120	145	50	75	100	125	150	55	80	105	155	85
LC [mm]	960	960	1,200	1,200	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,680
A [mm]	1,133	1,183	1,233	1,283	1,333	1,383	1,433	1,483	1,533	1,583	1,683	1,783
B [mm]	—	—	—	—	—	—	—	—	360	360	600	600
Weight [kg]	26.1	27.0	27.9	28.8	29.7	30.6	31.6	32.5	33.4	34.3	36.1	37.9

6.4.23 Dimensions of LMSSA-18, 1 travel carriage

LMSSA-18S200, stroke length 1600 – 2600 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.41 Dimensions of LMSSA-18S200, 1 travel carriage, stroke length 1600 – 2600 mm

Stroke length ST [mm]	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
Total length LT [mm]	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N [mm]	17	19	19	21	21	21	23	23	25	25	25
LA [mm]	1,884	1,984	2,084	2,184	2,284	2,384	2,484	2,584	2,684	2,784	2,884
LB [mm]	135	65	115	45	95	145	75	125	55	105	155
LC [mm]	1,680	1,920	1,920	2,160	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]	1,883	1,983	2,083	2,183	2,283	2,383	2,483	2,583	2,683	2,783	2,883
B [mm]	600	600	600	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	41.8	43.6	45.4	47.2	49.1	50.9	52.7	54.5	56.4	58.2	60.0

Precision axes and precision systems

LMSSA linear motor axis

6.4.24 Dimensions of LMSSA-18, 2 travel carriages

LMSSA-18S200, stroke length 220 – 1220 mm

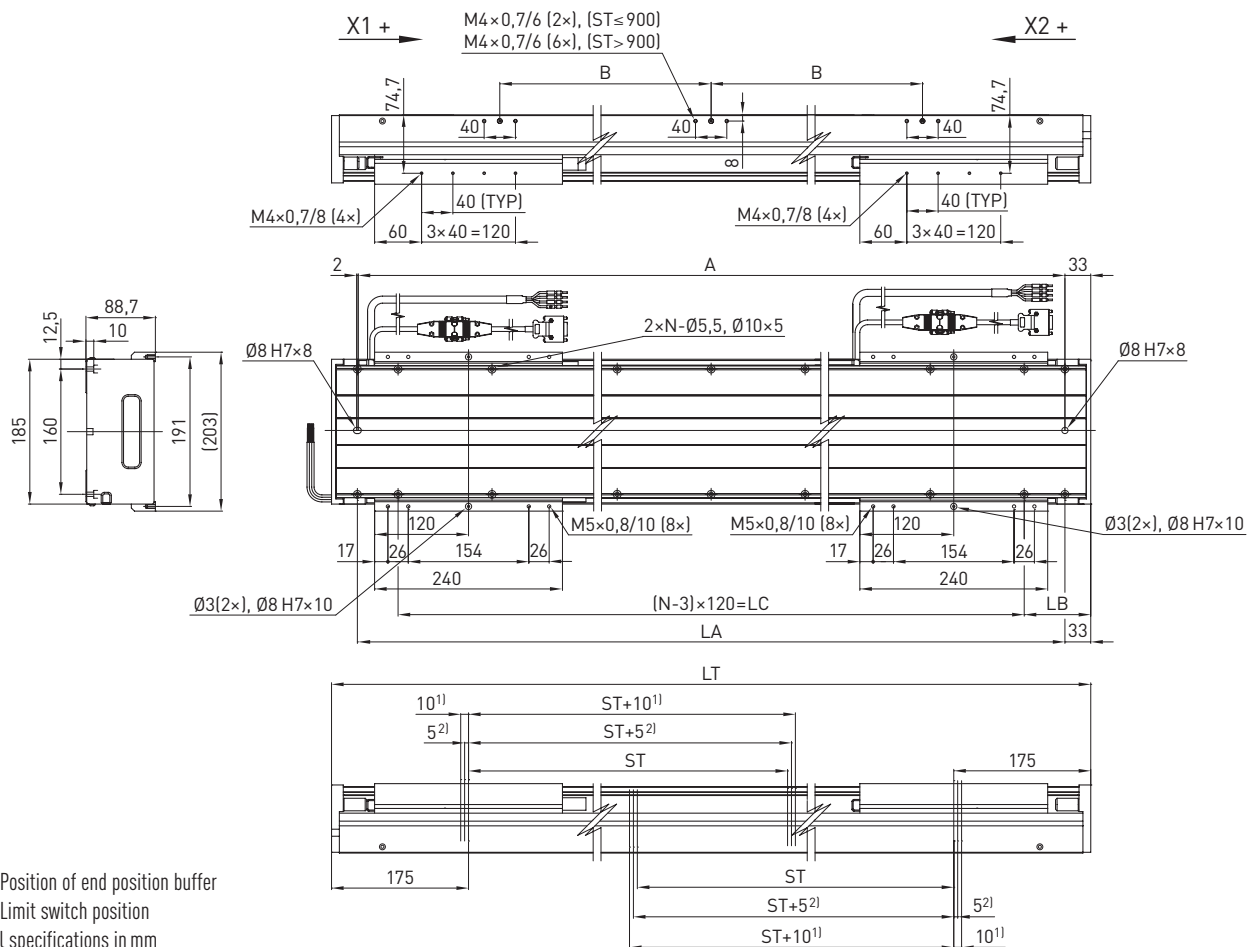


Table 6.42 Dimensions of LMSSA-18S200, 2 travel carriages, stroke length 200 – 720 mm

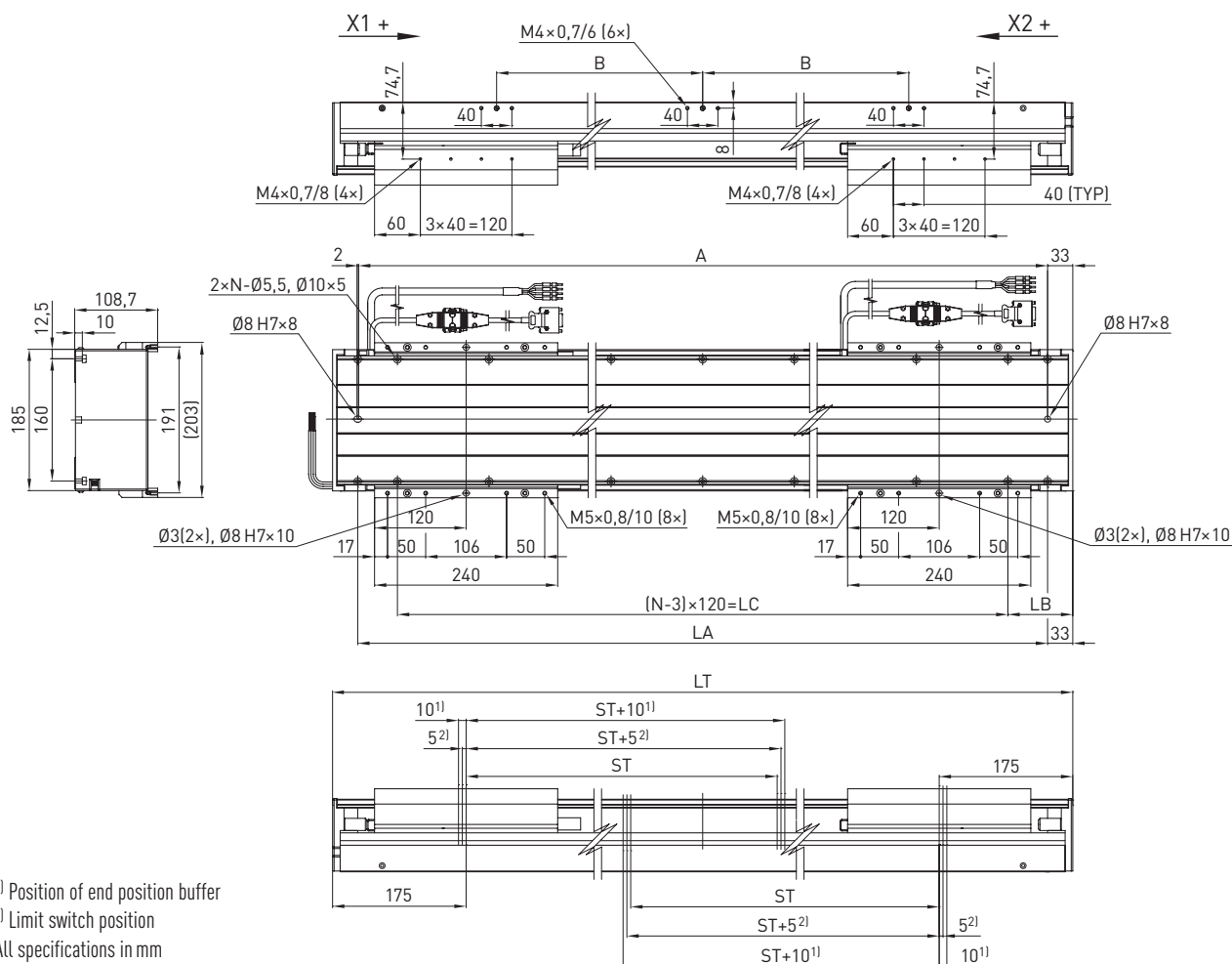
Stroke length ST [mm]	220	270	320	370	420	470	520	570	620	670	720
Total length LT [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350
N [mm]	9	9	9	11	11	11	11	11	11	13	13
LA [mm]	784	834	884	934	984	1,034	1,084	1,134	1,184	1,234	1,284
LB [mm]	65	90	115	20	45	70	95	120	145	50	75
LC [mm]	720	720	720	960	960	960	960	960	960	1,200	1,200
A [mm]	783	833	883	933	983	1,033	1,083	1,133	1,183	1,233	1,283
B [mm]	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	23.8	24.7	25.6	26.5	27.4	28.3	29.2	30.1	31.1	32.0	32.9

Table 6.43 Dimensions of LMSSA-18S200, 2 travel carriages, stroke length 770 – 1220 mm

Stroke length ST [mm]	770	820	870	920	970	1,020	1,070	1,120	1,170	1,220
Total length LT [mm]	1,400	1,450	1,500	1,550	1,600	1,650	1,700	1,750	1,800	1,850
N [mm]	13	13	13	15	15	15	15	15	15	17
LA [mm]	1,334	1,384	1,434	1,484	1,534	1,584	1,634	1,684	1,734	1,784
LB [mm]	100	125	150	55	80	105	130	155	60	85
LC [mm]	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,680	1,680
A [mm]	1,333	1,383	1,433	1,483	1,533	1,583	1,633	1,683	1,733	1,783
B [mm]	—	—	—	—	360	360	600	600	600	600
Weight [kg]	33.8	34.7	35.6	36.5	37.4	38.3	39.3	40.2	41.1	42.0

6.4.25 Dimensions of LMSSA-18, 2 travel carriages

LMSSA-18S200, stroke length 1270 – 2320 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

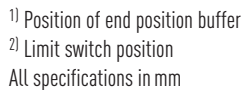
All specifications in mm

Table 6.44 Dimensions of LMSSA-18S200, 2 travel carriages, stroke length 1250 – 2300 mm

Stroke length ST [mm]	1,270	1,320	1,420	1,520	1,620	1,720	1,820	1,920	2,020	2,120	2,220	2,320
Total length LT [mm]	1,900	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N [mm]	17	17	19	19	21	21	21	23	23	25	25	25
LA [mm]	1,834	1,884	1,984	2,084	2,184	2,284	2,384	2,484	2,584	2,684	2,784	2,884
LB [mm]	110	135	65	115	45	95	145	75	125	55	105	155
LC [mm]	1,680	1,680	1,920	1,920	2,160	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]	1,833	1,883	1,983	2,083	2,183	2,283	2,383	2,483	2,583	2,683	2,783	2,883
B [mm]	600	600	600	600	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	47.0	47.9	49.7	51.5	53.3	55.2	57.0	58.8	60.6	62.5	64.3	66.1

LMSSA linear motor axis

LMSSA-18S300, LMSSA-18C200, stroke length 200 – 1500 mm



Stroke length ST [mm]		200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT [mm]		680	730	780	830	880	930	980	1,030	1,080	1,130	1,180	1,230	1,280
N [mm]		7	7	7	9	9	9	9	9	11	11	11	11	11
LA [mm]		614	664	714	764	814	864	914	964	1,014	1,064	1,114	1,164	1,214
LB [mm]		100	125	150	55	80	105	130	155	60	85	110	135	160
LC [mm]		480	480	480	720	720	720	720	720	960	960	960	960	960
A [mm]		613	663	713	763	813	863	913	963	1,013	1,063	1,113	1,163	1,213
B [mm]		—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	18S300	18.4	19.5	20.7	21.8	23.0	24.2	25.3	26.5	27.6	28.8	30.0	31.1	32.3
	18C200	21.7	22.9	24.1	25.2	26.4	27.5	28.7	29.9	31.0	32.2	33.3	34.5	35.7

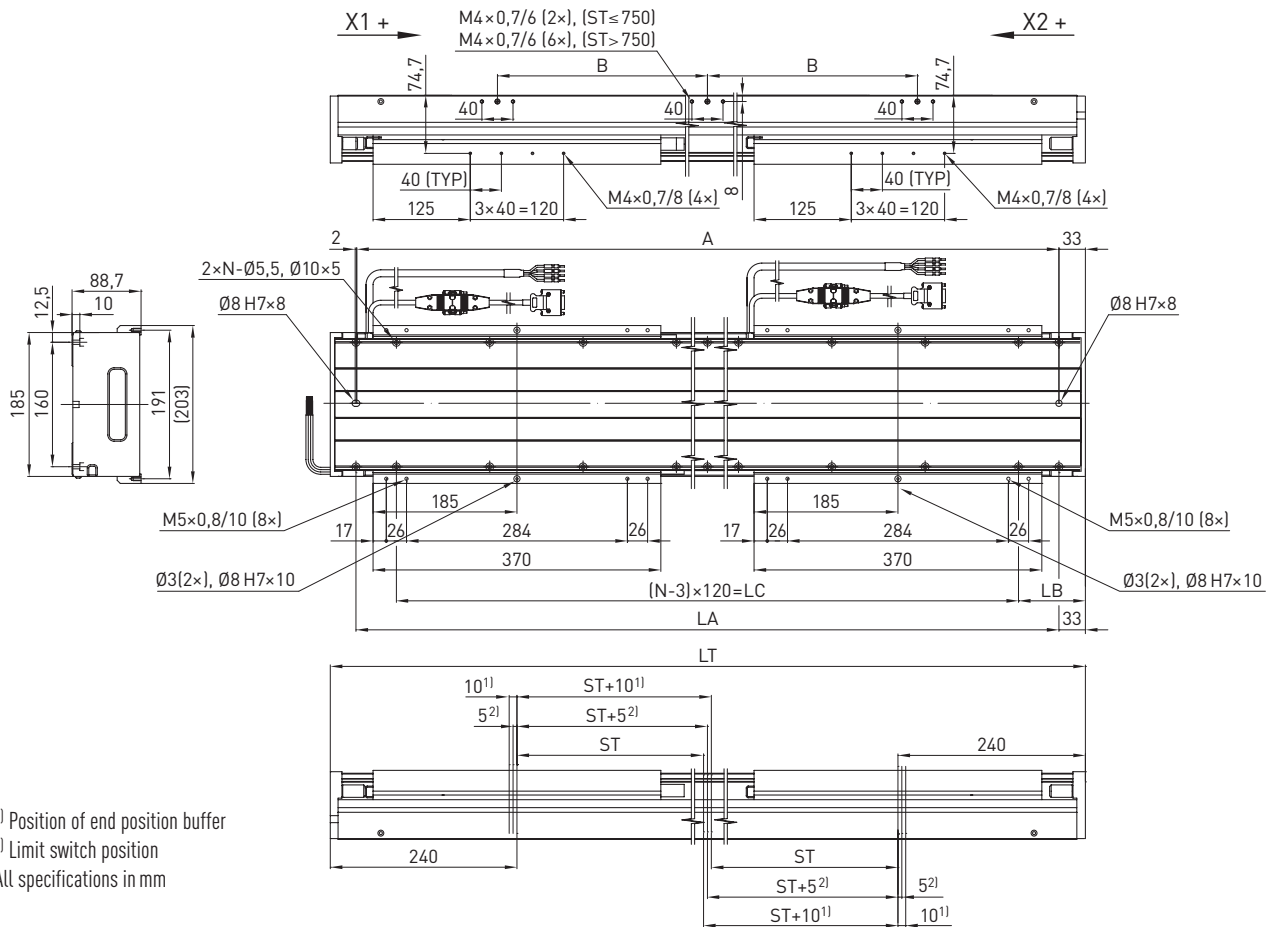
Stroke length ST [mm]		850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]		1,330	1,380	1,430	1,480	1,530	1,580	1,630	1,680	1,730	1,780	1,880	1,980
N [mm]		13	13	13	15	15	15	15	15	15	17	17	17
LA [mm]		1,264	1,314	1,364	1,414	1,464	1,514	1,564	1,614	1,664	1,714	1,814	1,914
LB [mm]		65	90	115	20	45	70	95	120	145	50	100	150
LC [mm]		1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,440	1,680	1,680	1,680
A [mm]		1,263	1,313	1,363	1,413	1,463	1,513	1,563	1,613	1,663	1,713	1,813	1,913
B [mm]		—	—	—	—	—	—	—	—	600	600	600	600
Weight [kg]	18S300	33.4	34.6	35.8	36.9	38.1	39.2	40.4	41.6	42.7	43.9	46.2	48.5
	18C200	36.8	38.0	39.1	40.3	41.5	42.6	43.8	44.9	46.1	47.3	49.6	51.9

Precision axes and precision systems

LMSSA linear motor axis

6.4.28 Dimensions of LMSSA-18, 2 travel carriages

LMSSA-18S300, LMSSA-18C200, stroke length 240 – 1090 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.49 Dimensions of LMSSA-18S300, -18C200, 2 travel carriages, stroke length 240 – 640 mm

Stroke length ST [mm]	240	290	340	390	440	490	540	590	640
Total length LT [mm]	1,130	1,180	1,230	1,280	1,330	1,380	1,430	1,480	1,530
N [mm]	11	11	11	11	13	13	13	15	15
LA [mm]	1,064	1,114	1,164	1,214	1,264	1,314	1,364	1,414	1,464
LB [mm]	85	110	135	160	65	90	115	20	45
LC [mm]	960	960	960	960	1,200	1,200	1,200	1,440	1,440
A [mm]	1,063	1,113	1,163	1,213	1,263	1,313	1,363	1,413	1,463
B [mm]	—	—	—	—	—	—	—	—	—
Weight [kg]	18S300	34.5	35.6	36.8	38.0	39.1	40.3	41.4	42.6
	18C200	36.7	37.9	39.0	40.2	41.4	42.5	43.7	44.8

Table 6.48 Dimensions of LMSSA-18S300, -18C200, 2 travel carriages, stroke length 690 – 1090 mm

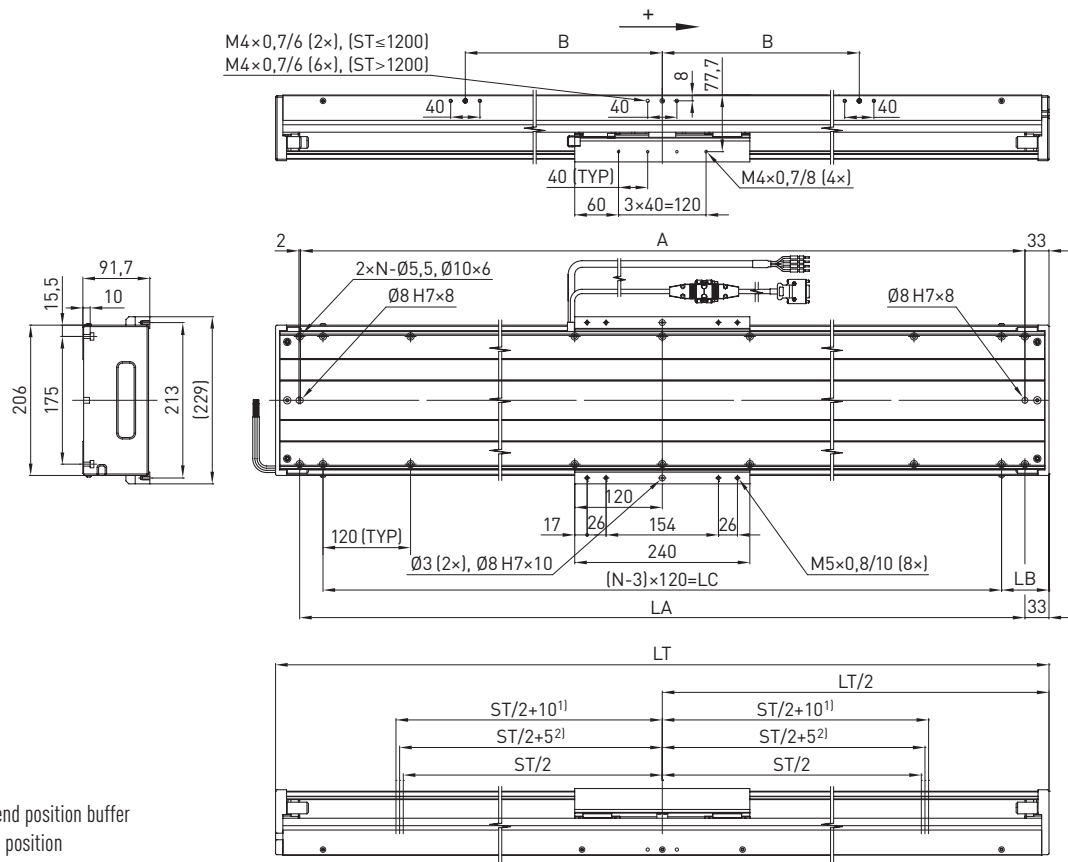
Stroke length ST [mm]	690	740	790	840	890	940	990	1,040	1,090
Total length LT [mm]	1,580	1,630	1,680	1,730	1,780	1,830	1,880	1,930	1,980
N [mm]	15	15	15	15	17	17	17	17	17
LA [mm]	1,514	1,564	1,614	1,664	1,714	1,764	1,814	1,864	1,914
LB [mm]	70	95	120	145	50	75	100	125	150
LC [mm]	1,440	1,440	1,440	1,440	1,680	1,680	1,680	1,680	1,680
A [mm]	1,513	1,563	1,613	1,663	1,713	1,763	1,813	1,863	1,913
B [mm]	—	—	—	600	600	600	600	600	600
Weight [kg]	18S300	44.9	46.1	47.2	48.4	49.6	50.7	51.9	53.0
	18C200	47.2	48.3	49.5	50.6	51.8	53.0	54.1	55.3

Precision axes and precision systems

LMSSA linear motor axis

6.4.30 Dimensions of LMSSA-20, 1 travel carriage

LMSSA-20S300, LMSSA-20C100, stroke length 200 – 1500 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.51 Dimensions of LMSSA-20S300, -20C100, 1 travel carriage, stroke length 200 – 800 mm

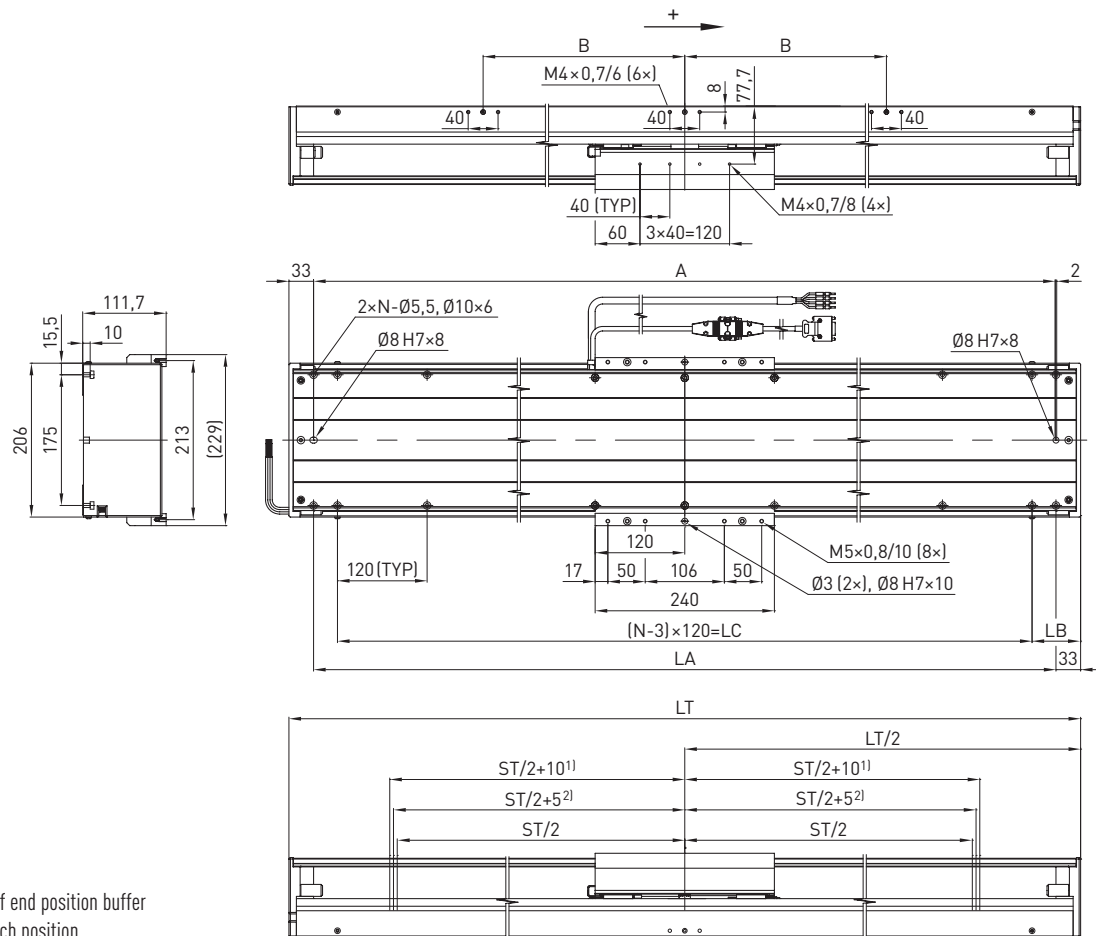
Stroke length ST [mm]	200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT [mm]	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	1,150
N [mm]	5	7	7	7	7	7	9	9	9	11	11	11	11
LA [mm]	484	534	584	634	684	734	784	834	884	934	984	1,034	1,084
LB [mm]	155	60	85	110	135	160	65	90	115	20	45	70	95
LC [mm]	240	480	480	480	480	480	720	720	720	960	960	960	960
A [mm]	483	533	583	633	683	733	783	833	883	933	983	1,033	1,083
B [mm]	—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	20S300	18.0	19.1	20.2	21.3	22.4	23.5	24.6	25.7	26.8	27.9	29.0	30.1
	20C100	19.4	20.9	22.4	23.9	25.4	26.9	28.4	29.9	31.4	32.9	34.4	36.0

Table 6.52 Dimensions of LMSSA-18S300, -18C200, 1 travel carriage, stroke length 850 – 1500 mm

Stroke length ST [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]	1,200	1,250	1,300	1,350	1,400	1,450	1,500	1,550	1,600	1,650	1,750	1,850
N [mm]	11	11	13	13	13	13	13	15	15	15	15	17
LA [mm]	1,134	1,184	1,234	1,284	1,334	1,384	1,434	1,484	1,534	1,584	1,684	1,784
LB [mm]	120	145	50	75	100	125	150	55	80	105	155	85
LC [mm]	960	960	1,200	1,200	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,680
A [mm]	1,133	1,183	1,233	1,283	1,333	1,383	1,433	1,483	1,533	1,583	1,683	1,783
B [mm]	—	—	—	—	—	—	—	—	360	360	600	600
Weight [kg]	20S300	32.3	33.4	34.5	35.6	36.7	37.8	38.9	40.0	41.1	44.4	46.6
	20C100	39.0	40.5	42.0	43.5	45.0	46.5	48.0	49.5	51.0	55.6	58.6

6.4.31 Dimensions of LMSSA-20, 1 travel carriage

LMSSA-20S300, LMSSA-20C100, stroke length 1600 – 2600 mm



¹¹ Position of end position buffer

²¹ Limit switch position

All specifications in mm

Table 6.53 Dimensions of LMSSA-20S100, -20C100, 1 travel carriage, stroke length 1600 – 2600 mm

Stroke length ST [mm]	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400	2,500	2,600
Total length LT [mm]	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N [mm]	17	19	19	21	21	21	23	23	25	25	25
LA [mm]	1,884	1,984	2,084	2,184	2,284	2,384	2,484	2,584	2,684	2,784	2,884
LB [mm]	135	65	115	45	95	145	75	125	55	105	155
LC [mm]	1,680	1,920	1,920	2,160	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]	1,883	1,983	2,083	2,183	2,283	2,383	2,483	2,583	2,683	2,783	2,883
B [mm]	600	600	600	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	20S300	50.8	53.0	55.2	57.4	59.6	61.8	64.0	66.2	68.4	70.6
	20C100	63.6	66.6	69.6	72.7	75.7	78.7	81.7	84.7	87.8	90.8

Precision axes and precision systems

LMSSA linear motor axis

6.4.32 Dimensions of LMSSA-20, 2 travel carriages

LMSSA-20S300, LMSSA-20C100, stroke length 220 – 1220 mm

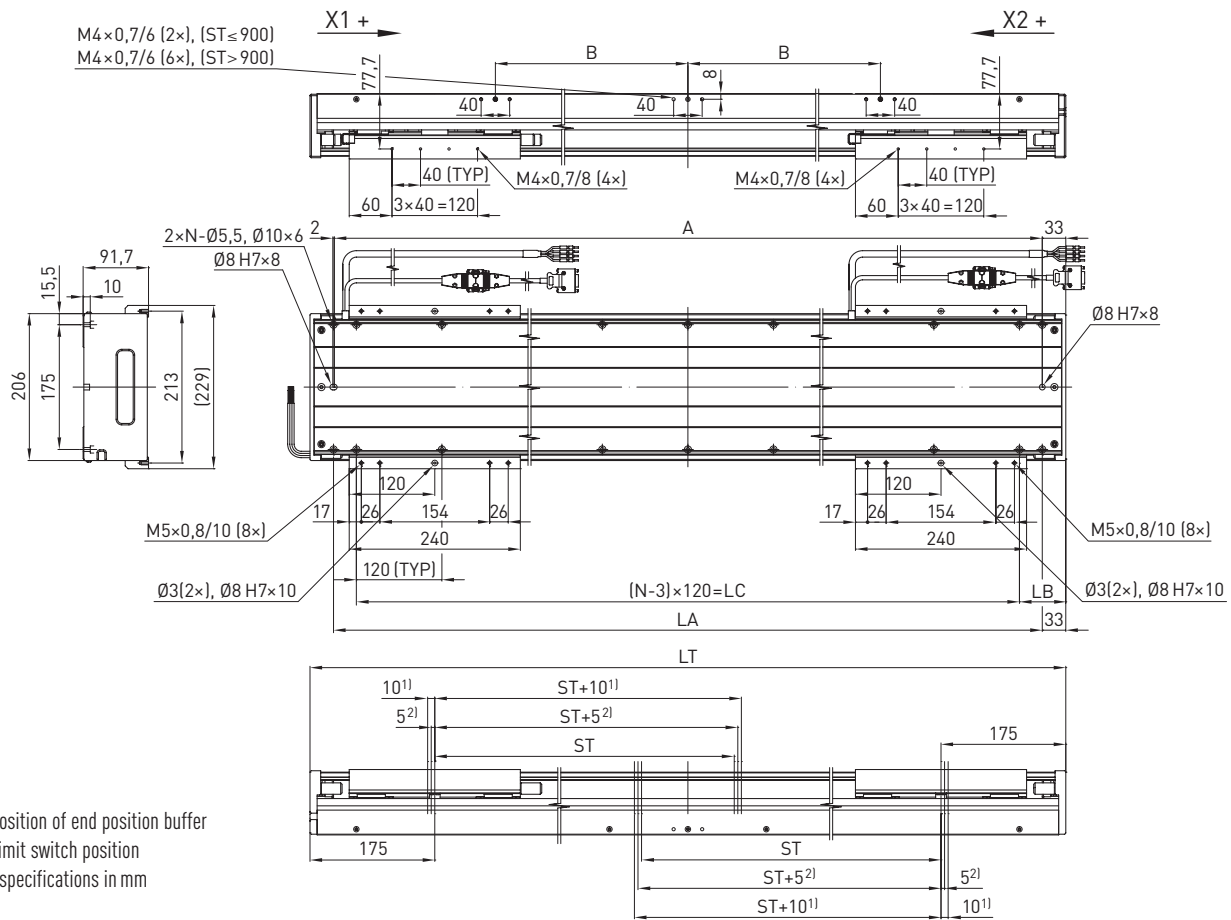


Table 6.54 Dimensions of LMSSA-20S300, -20C100, 2 travel carriages, stroke length 220 – 720 mm

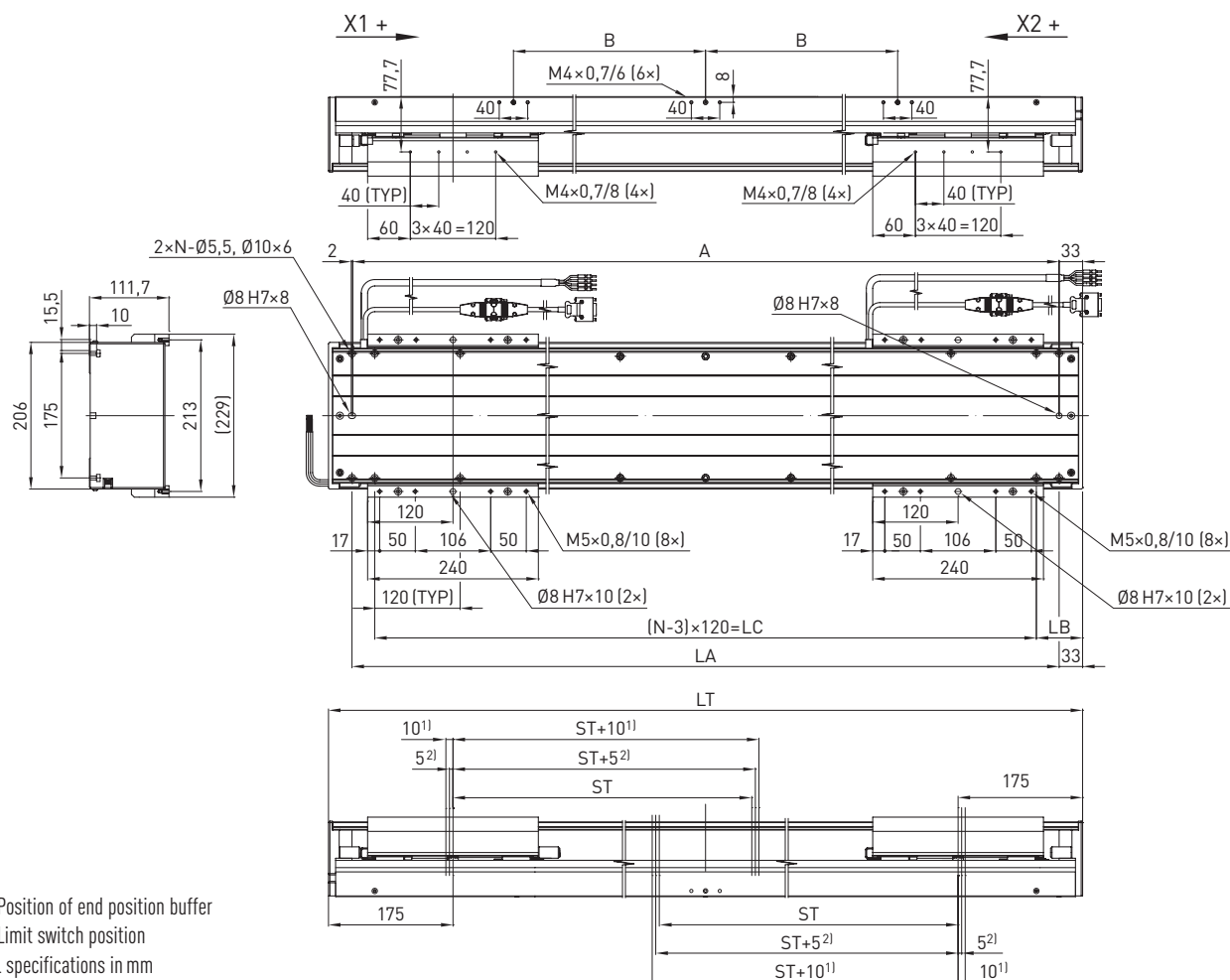
Stroke length ST [mm]	220	270	320	370	420	470	520	570	620	670	720
Total length LT [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350
N [mm]	9	9	9	11	11	11	11	11	11	13	13
LA [mm]	784	834	884	934	984	1,034	1,084	1,134	1,184	1,234	1,284
LB [mm]	65	90	115	20	45	70	95	120	145	50	75
LC [mm]	720	720	720	960	960	960	960	960	960	1,200	1,200
A [mm]	783	833	883	933	983	1,033	1,083	1,133	1,183	1,233	1,283
B [mm]	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	20S300	30.2	31.3	32.4	33.5	34.6	35.7	36.8	37.9	39.0	40.1
	20C100	32.3	33.8	35.3	36.8	38.3	39.9	41.4	42.9	44.4	45.9

Table 6.55 Dimensions of LMSSA-20S300, -20C100, 2 travel carriages, stroke length 770 – 1220 mm

Stroke length ST [mm]	770	820	870	920	970	1,020	1,070	1,120	1,170	1,220
Total length LT [mm]	1,400	1,450	1,500	1,550	1,600	1,650	1,700	1,750	1,800	1,850
N [mm]	13	13	13	15	15	15	15	15	15	17
LA [mm]	1,334	1,384	1,434	1,484	1,534	1,584	1,634	1,684	1,734	1,784
LB [mm]	100	125	150	55	80	105	130	155	60	85
LC [mm]	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,680	1,680
A [mm]	1,333	1,383	1,433	1,483	1,533	1,583	1,633	1,683	1,733	1,783
B [mm]	—	—	—	—	360	360	600	600	600	600
Weight [kg]	20S300	42.3	43.4	44.5	45.6	46.7	47.8	48.9	50.0	51.1
	20C100	48.9	50.4	51.9	53.4	54.9	56.5	58.0	59.5	61.0

6.4.33 Dimensions of LMSSA-20, 2 travel carriages

LMSSA-20S300, LMSSA-20C100, stroke length 1270 – 2320 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.56 Dimensions of LMSSA-20S300, -20C100, 2 travel carriages, stroke length 1270 – 2320 mm

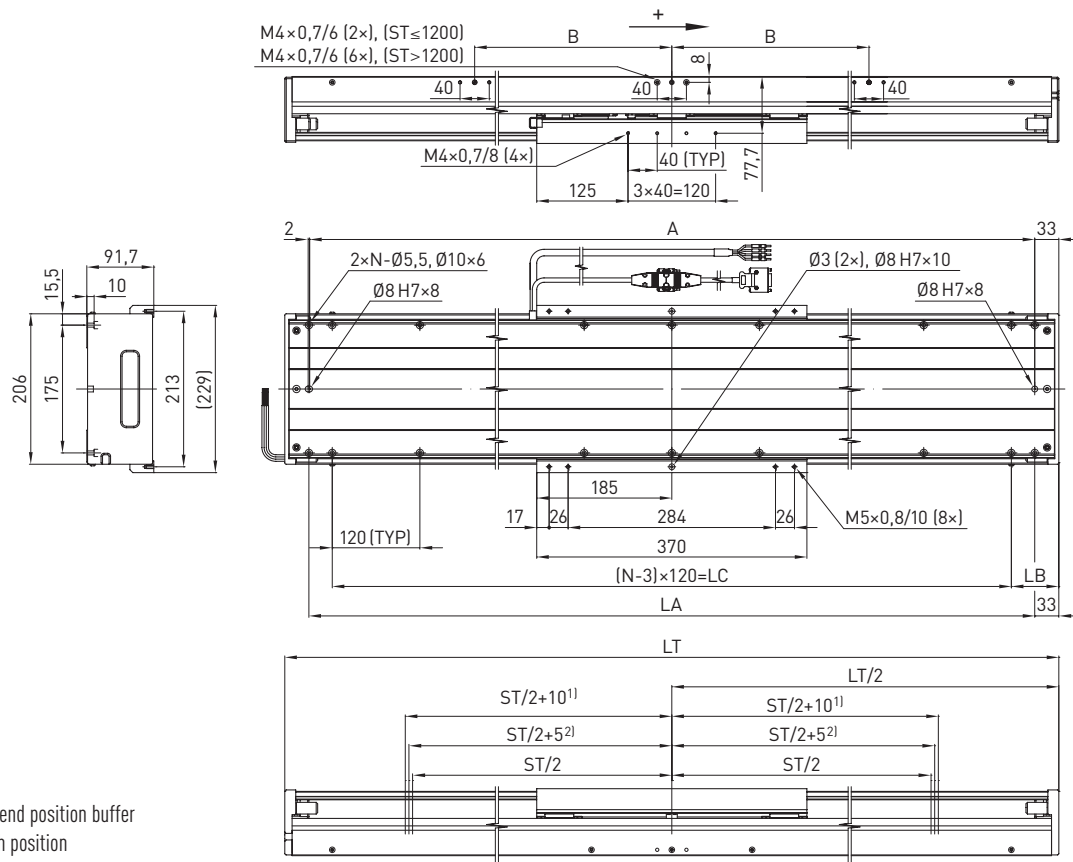
Stroke length ST [mm]	1,270	1,320	1,420	1,520	1,620	1,720	1,820	1,920	2,020	2,120	2,220	2,320
Total length LT [mm]	1,900	1,950	2,050	2,150	2,250	2,350	2,450	2,550	2,650	2,750	2,850	2,950
N [mm]	17	17	19	19	21	21	21	23	23	25	25	25
LA [mm]	1,834	1,884	1,984	2,084	2,184	2,284	2,384	2,484	2,584	2,684	2,784	2,884
LB [mm]	110	135	65	115	45	95	145	75	125	55	105	155
LC [mm]	1,680	1,680	1,920	1,920	2,160	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]	1,833	1,883	1,983	2,083	2,183	2,283	2,383	2,483	2,583	2,683	2,783	2,883
B [mm]	600	600	600	600	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	20S300	55.3	56.4	58.6	60.8	66.0	67.2	69.4	71.6	73.8	76.0	80.4
	20C100	68.0	69.5	72.5	75.5	78.6	81.6	84.6	87.6	90.6	93.7	99.7

Precision axes and precision systems

LMSSA linear motor axis

6.4.34 Dimensions of LMSSA-20, 1 travel carriage

LMSSA-20S500, LMSSA-20C200, stroke length 200 – 1500 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.57 Dimensions of LMSSA-20S500, -20C200, 1 travel carriage, stroke length 200 – 800 mm

Stroke length ST [mm]	200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT [mm]	680	730	780	830	880	930	980	1,030	1,080	1,130	1,180	1,230	1,280
N [mm]	7	7	7	9	9	9	9	9	11	11	11	11	11
LA [mm]	614	664	714	764	814	864	914	964	1,014	1,064	1,114	1,164	1,214
LB [mm]	100	125	150	55	80	105	130	155	60	85	110	135	160
LC [mm]	480	480	480	720	720	720	720	720	960	960	960	960	960
A [mm]	613	663	713	763	813	863	913	963	1,013	1,063	1,113	1,163	1,213
B [mm]	—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	20S500	23.1	24.2	25.4	26.5	27.7	28.8	30.0	31.1	32.3	33.4	34.6	35.7
	20C200	23.8	25.4	26.9	28.5	30.0	31.6	33.2	34.7	36.3	37.9	39.4	41.0

Table 6.58 Dimensions of LMSSA-20S500, -20C200, 1 travel carriage, stroke length 850 – 1500 mm

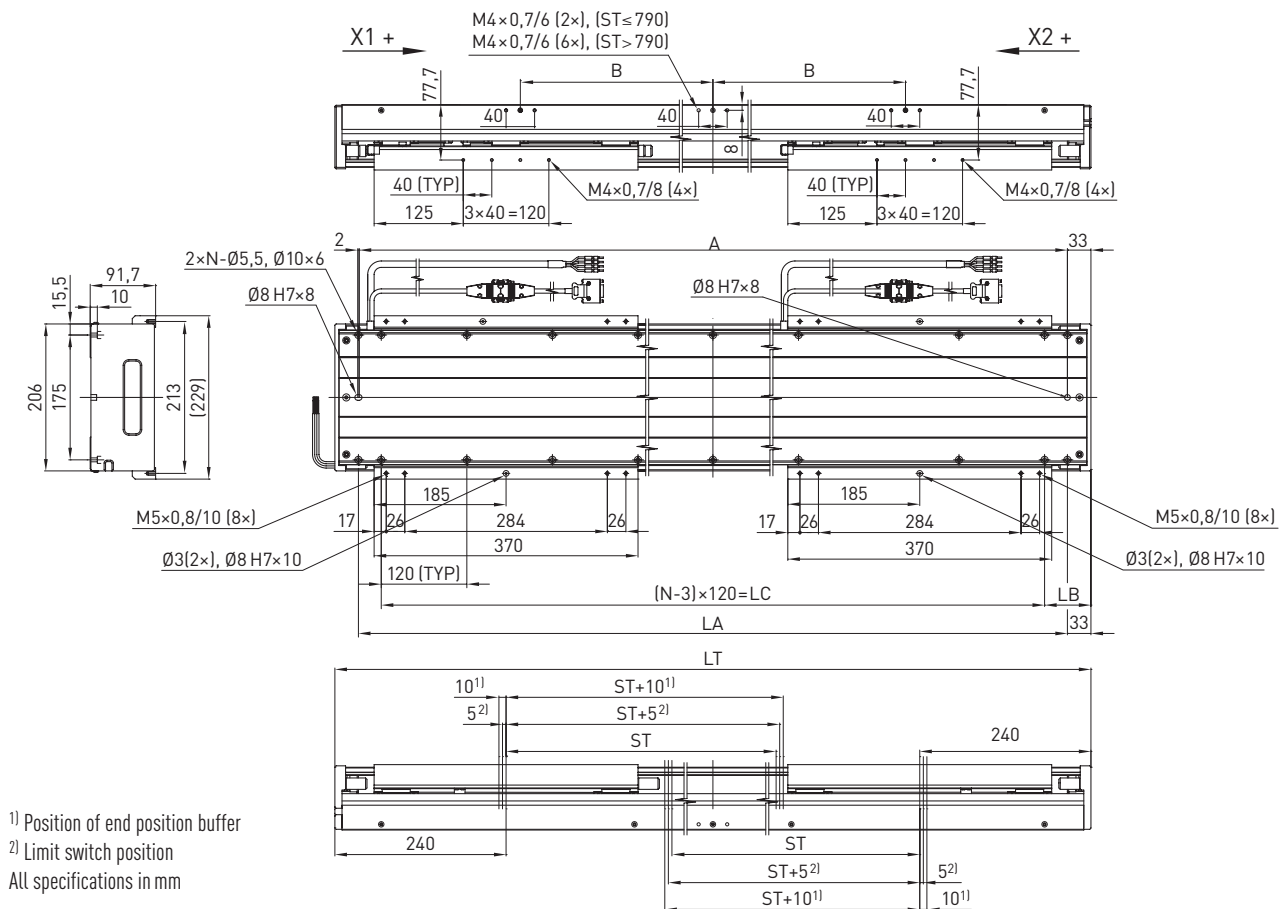
Stroke length ST [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]	1,330	1,380	1,430	1,480	1,530	1,580	1,630	1,680	1,730	1,780	1,880	1,980
N [mm]	13	13	13	15	15	15	15	15	15	17	17	17
LA [mm]	1,264	1,314	1,364	1,414	1,464	1,514	1,564	1,614	1,664	1,714	1,814	1,914
LB [mm]	65	90	115	20	45	70	95	120	145	50	100	150
LC [mm]	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,440	1,680	1,680	1,680
A [mm]	1,263	1,313	1,363	1,413	1,463	1,513	1,563	1,613	1,663	1,713	1,813	1,913
B [mm]	—	—	—	—	—	—	—	—	600	600	600	600
Weight [kg]	20S500	38.0	39.2	40.3	41.5	42.6	43.8	44.9	46.1	47.2	48.4	50.7
	20C200	44.1	45.7	47.2	48.8	50.4	51.9	53.5	55.1	56.6	58.2	61.3

Precision axes and precision systems

LMSSA linear motor axis

6.4.36 Dimensions of LMSSA-20, 2 travel carriages

LMSSA-20S500, LMSSA-20C200, stroke length 240 – 1090 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.60 Dimensions of LMSSA-20S500, -20C200, 2 travel carriages, stroke length 200 – 640 mm

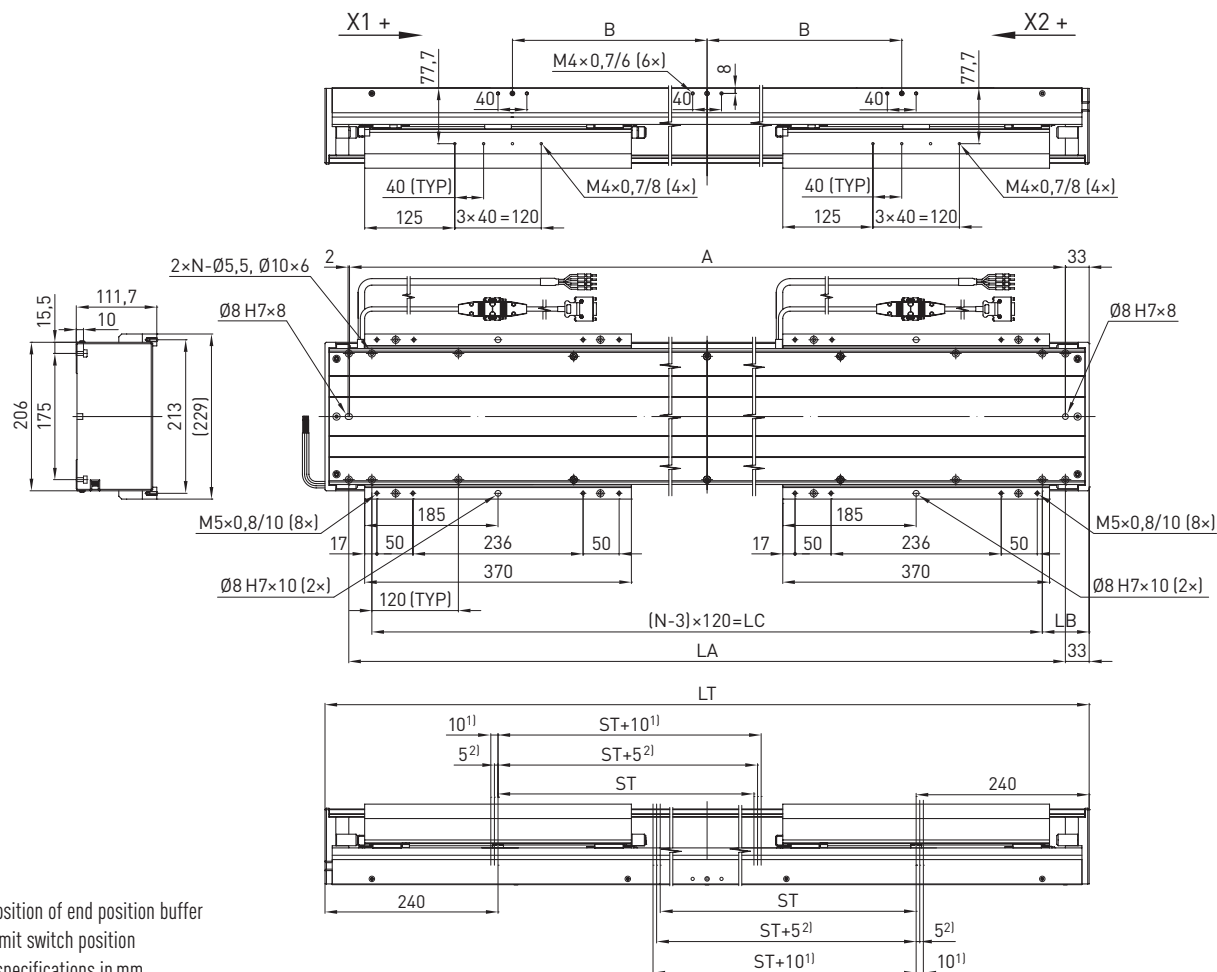
Stroke length ST [mm]	240	290	340	390	440	490	540	590	640
Total length LT [mm]	1,130	1,180	1,230	1,280	1,330	1,380	1,430	1,480	1,530
N [mm]	11	11	11	11	13	13	13	15	15
LA [mm]	1,064	1,114	1,164	1,214	1,264	1,314	1,364	1,414	1,464
LB [mm]	85	110	135	160	65	90	115	20	45
LC [mm]	960	960	960	960	1,200	1,200	1,200	1,440	1,440
A [mm]	1,063	1,113	1,163	1,213	1,263	1,313	1,363	1,413	1,463
B [mm]	—	—	—	—	—	—	—	—	—
Weight [kg]	20S500	41.6	42.7	43.9	45.0	46.2	47.3	48.5	49.6
	20C200	43.4	45.0	46.5	48.1	49.7	51.2	52.8	54.4

Table 6.61 Dimensions of LMSSA-20S500, -20C200, 2 travel carriages, stroke length 690 – 1090 mm

Stroke length ST [mm]	690	740	790	840	890	940	990	1,040	1,090
Total length LT [mm]	1,580	1,630	1,680	1,730	1,780	1,830	1,880	1,930	1,980
N [mm]	15	15	15	15	17	17	17	17	17
LA [mm]	1,514	1,564	1,614	1,664	1,714	1,764	1,814	1,864	1,914
LB [mm]	70	95	120	145	50	75	100	125	150
LC [mm]	1,440	1,440	1,440	1,440	1,680	1,680	1,680	1,680	1,680
A [mm]	1,513	1,563	1,613	1,663	1,713	1,763	1,813	1,863	1,913
B [mm]	—	—	—	600	600	600	600	600	600
Weight [kg]	20S500	51.9	53.1	54.2	55.4	56.5	57.7	58.8	60.0
	20C200	57.5	59.0	60.6	62.2	63.7	65.3	66.9	68.4

6.4.37 Dimensions of LMSSA-20, 2 travel carriages

LMSSA-20S500, LMSSA-20C200, stroke length 1140 – 2040 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.62 Dimensions of LMSSA-20S500, -20C200, 2 travel carriages, stroke length 1140 – 2040 mm

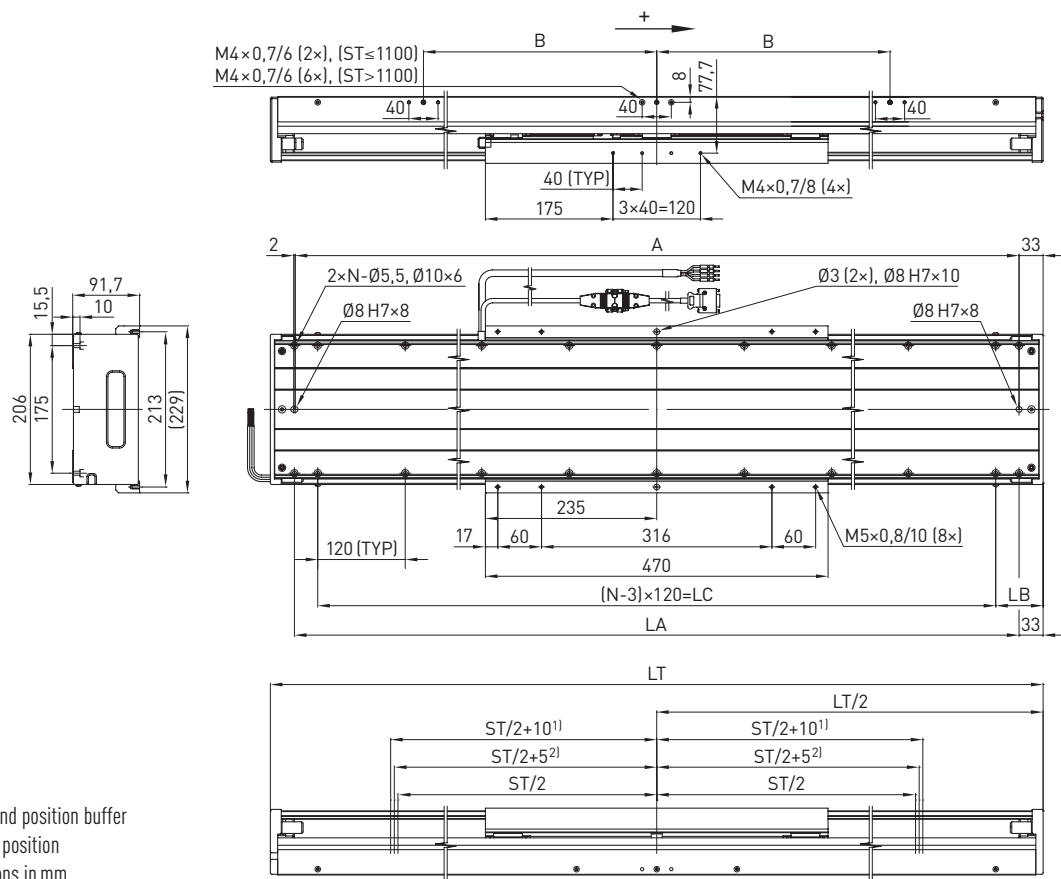
Stroke length ST [mm]		1,140	1,190	1,240	1,290	1,340	1,440	1,540	1,640	1,740	1,840	1,940	2,040
Total length LT [mm]		2,030	2,080	2,130	2,180	2,230	2,330	2,430	2,530	2,630	2,730	2,830	2,930
N [mm]		19	19	19	19	19	21	21	23	23	25	25	25
LA [mm]		1,964	2,014	2,064	2,114	2,164	2,264	2,364	2,464	2,564	2,664	2,764	2,864
LB [mm]		55	80	105	130	155	85	135	65	115	45	95	145
LC [mm]		1,920	1,920	1,920	1,920	1,920	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]		1,963	2,013	2,063	2,113	2,163	2,263	2,363	2,463	2,563	2,663	2,763	2,863
B [mm]		600	600	600	840	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	20S500	68.3	69.4	70.6	71.7	72.8	75.1	77.4	79.7	82.0	84.3	86.6	88.9
	20C200	77.5	79.1	80.7	82.2	83.8	86.9	90.1	93.2	96.3	99.4	102.6	105.7

Precision axes and precision systems

LMSSA linear motor axis

6.4.38 Dimensions of LMSSA-20, 1 travel carriage

LMSSA-20S700, stroke length 200 – 1500 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.63 Dimensions of LMSSA-20S700, 1 travel carriage, stroke length 200 – 800 mm

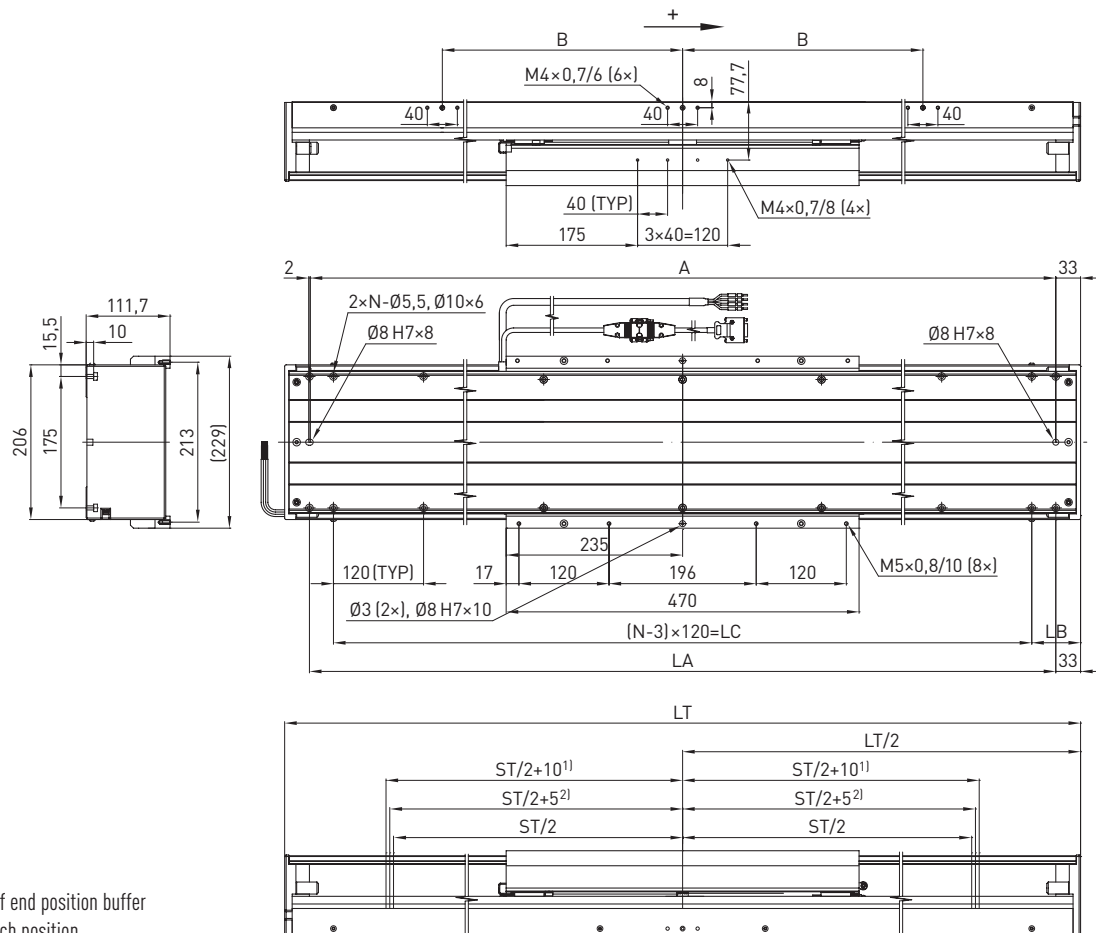
Stroke length ST [mm]	200	250	300	350	400	450	500	550	600	650	700	750	800
Total length LT [mm]	780	830	880	930	980	1,030	1,080	1,130	1,180	1,230	1,280	1,330	1,380
N [mm]	7	9	9	9	9	9	11	11	11	11	11	13	13
LA [mm]	714	764	814	864	914	964	1,014	1,064	1,114	1,164	1,214	1,264	1,314
LB [mm]	150	55	80	105	130	155	60	85	110	135	160	65	90
LC [mm]	480	720	720	720	720	720	960	960	960	960	960	1,200	1,200
A [mm]	713	763	813	863	913	963	1,013	1,063	1,113	1,163	1,213	1,263	1,313
B [mm]	—	—	—	—	—	—	—	—	—	—	—	—	—
Weight [kg]	27.4	28.5	29.7	30.8	32.0	33.1	34.3	35.4	36.6	37.7	38.9	40.0	41.2

Table 6.64 Dimensions of LMSSA-20S700, 1 travel carriage, stroke length 850 – 1500 mm

Stroke length ST [mm]	850	900	950	1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,400	1,500
Total length LT [mm]	1,430	1,480	1,530	1,580	1,630	1,680	1,730	1,780	1,830	1,880	1,980	2,080
N [mm]	13	15	15	15	15	15	15	17	17	17	17	19
LA [mm]	1,364	1,414	1,464	1,514	1,564	1,614	1,664	1,714	1,764	1,814	1,914	2,014
LB [mm]	115	20	45	70	95	120	145	50	75	100	150	80
LC [mm]	1,200	1,440	1,440	1,440	1,440	1,440	1,440	1,680	1,680	1,680	1,680	1,920
A [mm]	1,363	1,413	1,463	1,513	1,563	1,613	1,663	1,713	1,763	1,813	1,913	2,013
B [mm]	—	—	—	—	—	—	600	600	600	600	600	600
Weight [kg]	42.3	43.5	44.6	45.8	46.9	48.1	49.2	50.4	51.5	52.7	55.0	60.3

6.4.39 Dimensions of LMSSA-20, 1 travel carriage

LMSSA-20S700, stroke length 1600 – 2400 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.65 Dimensions of LMSSA-20S700, 1 travel carriage, stroke length 1600 – 2400 mm

Stroke length ST [mm]	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
Total length LT [mm]	2,180	2,280	2,380	2,480	2,580	2,680	2,780	2,880	2,980
N [mm]	19	21	21	21	23	25	25	25	27
LA [mm]	2,114	2,214	2,314	2,414	2,514	2,614	2,714	2,814	2,914
LB [mm]	130	60	110	160	90	20	70	120	50
LC [mm]	1,920	2,160	2,160	2,160	2,400	2,640	2,640	2,640	2,880
A [mm]	2,113	2,213	2,313	2,413	2,513	2,613	2,713	2,813	2,913
B [mm]	840	840	840	840	840	1,080	1,080	1,080	1,080
Weight [kg]	62.6	64.9	67.2	69.5	71.8	74.1	76.4	78.7	81.0

LMSSA linear motor axis

LMSSA-20S700, stroke length 240 – 890 mm

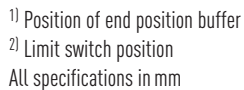
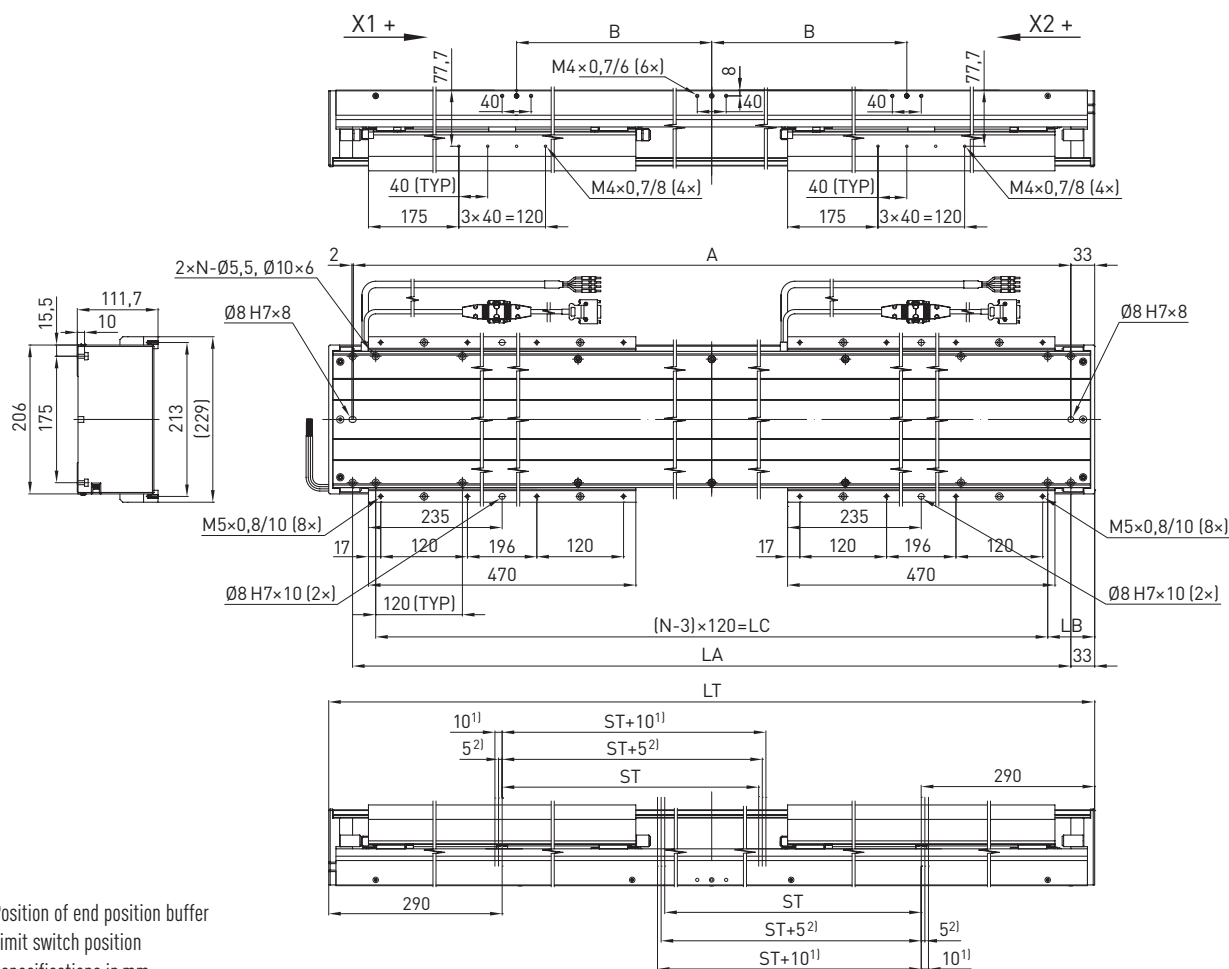


Table 6.66 Dimensions of LMSSA-20S700, 2 travel carriages, stroke length 240 – 890 mm

Stroke length ST [mm]	240	290	340	390	440	490	540	590	640	690	740	790	840	890
Total length LT [mm]	1,330	1,380	1,430	1,480	1,530	1,580	1,630	1,680	1,730	1,780	1,830	1,880	1,930	1,980
N [mm]	13	13	13	15	15	15	15	15	15	17	17	17	17	17
LA [mm]	1,264	1,314	1,364	1,414	1,464	1,514	1,564	1,614	1,664	1,714	1,764	1,814	1,864	1,914
LB [mm]	65	90	115	20	45	70	95	120	145	50	75	100	125	150
LC [mm]	1,200	1,200	1,200	1,440	1,440	1,440	1,440	1,440	1,440	1,680	1,680	1,680	1,680	1,680
A [mm]	1,263	1,313	1,363	1,413	1,463	1,513	1,563	1,613	1,663	1,713	1,763	1,813	1,863	1,913
B [mm]	—	—	—	—	—	—	—	—	600	600	600	600	600	600
Weight [kg]	50.5	51.7	52.8	54.0	55.1	56.3	57.4	58.6	59.7	60.9	62.0	63.2	64.3	65.5

6.4.41 Dimensions of LMSSA-20, 2 travel carriages

LMSSA-20S700, stroke length 940 – 1840 mm



¹⁾ Position of end position buffer

²⁾ Limit switch position

All specifications in mm

Table 6.67 Dimensions of LMSSA-20S700, 2 travel carriages, stroke length 940 – 1840 mm

Stroke length ST [mm]	940	990	1,040	1,090	1,140	1,190	1,240	1,290	1,340	1,440	1,540	1,640	1,740	1,840
Total length LT [mm]	2,030	2,080	2,130	2,180	2,230	2,280	2,330	2,380	2,430	2,530	2,630	2,730	2,830	2,930
N [mm]	19	19	19	19	19	21	21	21	21	23	23	25	25	25
LA [mm]	1,964	2,014	2,064	2,114	2,164	2,214	2,264	2,314	2,364	2,464	2,564	2,664	2,764	2,864
LB [mm]	55	80	105	130	155	60	85	110	135	65	115	45	95	145
LC [mm]	1,920	1,920	1,920	1,920	1,920	2,160	2,160	2,160	2,160	2,400	2,400	2,640	2,640	2,640
A [mm]	1,963	2,013	2,063	2,113	2,163	2,213	2,263	2,313	2,363	2,463	2,563	2,663	2,763	2,863
B [mm]	600	600	600	840	840	840	840	840	840	840	840	1,080	1,080	1,080
Weight [kg]	69.6	71.8	72.9	74.1	75.2	76.4	77.5	78.6	79.8	82.1	84.4	86.7	89.0	91.3