

# Rail guide tables





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While SKF maintains its leadership as the hallmark of quality bearings throughout the world, new dimensions in technical advances, product support and services have evolved SKF into a truly solutions-oriented supplier, creating greater value for customers.

These solutions encompass ways to bring greater productivity to customers, not only with breakthrough application-specific products, but also through leading-edge design simulation tools and consultancy services, plant asset efficiency maintenance programmes, and the industry's most advanced supply management techniques.

The SKF brand still stands for the very best in rolling bearings, but it now stands for much more.

**SKF – the knowledge engineering company**

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# Design and characteristic features

## General

SKF rail guide tables are state-of-the-art tables with high accuracy and high load carrying capacity.

They are available in the following variations:

- five different sizes,
- three different covers
- two different drives
- four precision classes.

### Sizes

SKF rail guide tables are available in widths of 110, 170, 235, 320 and 400 mm.

### Drive

Two different drives can be fitted: ball screws and linear motors.

### Cover

The rail guide tables can be supplied in three versions: without cover, with bellows, with steel cover.

### Precision classes

Depending on their application, the slides are available in four precision classes: P10, P5, P2, P1.

### Customer benefits

- Modular and compact design.
- Variants having high load carrying capacity and stiffness.
- Large number of drives, providing the optimum solution for any application.
- Different covers to suit the environmental conditions.
- Precision class matched with application, thus more cost-efficient.

## Guide

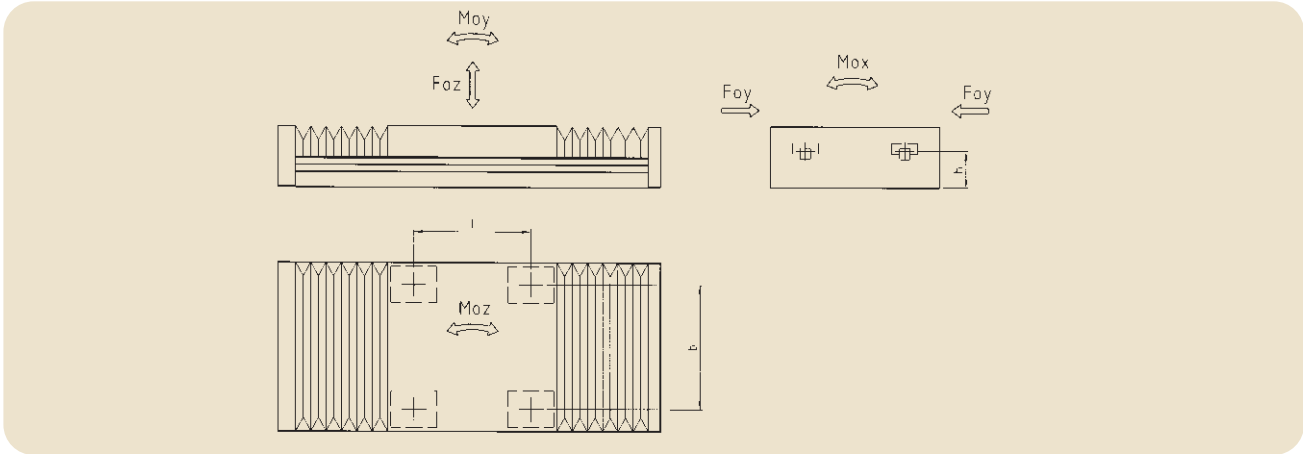
SKF rail guide tables are equipped with a pair of rails fitted with a total of four carriages (with the exception of size 110 with linear motor F 22706 having six carriages).

### Customer benefits

- Profile rail with high load carrying capacity and stiffness

See table 1 for further technical details.

Table 1: Load carrying capacity of the tables



Type Size	Precision class	Load rating per carriage		No. of carriages z	Distance			Maximum static load per table <sup>1)</sup>				
		C	C <sub>0</sub>		b	l	h <sup>3)</sup>	F <sub>oz</sub>	F <sub>oy</sub>	M <sub>ox</sub>	M <sub>oy</sub>	M <sub>oz</sub>
–		N		–	mm			N		Nm		
LTB110.L1.SH/TN	P10 - P1	2 295	4 270	4	81	69	23	17 080	8 540	690	580	290
LTB110.L1.F20906	P5 - P1	2 295	4 270	4	81	63	23	16 880	8 440	680	530	260
LTB110.L1.F21806	P5 - P1	2 295	4 270	4	81	130	23	16 680	8 340	670	1 080	540
LTB110.L1.F22706	P5 - P1	2 295	4 270	6	81	220	23	25 020	12 510	1 010	2 750	1 370
LTB170.L1.SH/TN	P10 - P1	7 800	13 500	4	116	92	35	54 000	27 000	3 130	2 480	1 240
LTB170.L1.F21806	P5 - P1	7 800	13 500	4	116	124	35	53 600	26 800	3 100	3 320	1 660
LTB170.L1.F22706	P5 - P1	7 800	13 500	4	116	195	35	53 400	26 700	3 090	5 200	2 600
LTB235.L1.SX/TN/TL	P10 - P1	18 800	24 400	4	156	140	46	97 600	48 800	7 610	6 830	3 410
LTB235.L1.A32008	P5 - P1	18 800	24 400	4	156	142	46	95 800	47 900	7 470	6 800	3 400
LTB235.L1.A33008	P5 - P1	18 800	24 400	4	156	177	46	94 900	47 450	7 400	8 390	4 190
LTB235.L1.A34008	P5 - P1	18 800	24 400	4	156	262	46	94 000	47 000	7 330	12 310	6 150
LTB320.L1.SX/TN/TL	P10 - P1	22 800	30 400	4	220	221	70	121 600	60 800	13 370	13 430	6 710
LTB320.L1.A32014	P5 - P1	22 800	30 400	4	220	160	70	118 000	59 000	12 980	9 440	4 720
LTB320.L1.A33014	P5 - P1	22 800	30 400	4	220	185	70	116 000	58 100	12 780	10 740	5 370
LTB320.L1.A34014	P5 - P1	22 800	30 400	4	220	275	70	114 000	57 200	12 580	15 730	7 860
LTB400.L1.SX/TN/TL	P10 - P1	41 900	54 000	4	270	270	77	216 000	108 000	29 160	29 160	14 580

<sup>1)</sup> Loads F<sub>oz</sub> and F<sub>oy</sub> for central load application, but not for slides with steel cover.  
 Moments M<sub>ox</sub> to M<sub>oz</sub> for pure moment load (without force), but not for slides with steel cover.  
<sup>2)</sup> Distance up to the middle of the rail

## Drive

### Tables with a ball screw:

These tables are equipped with precision rolled thread ballscrew drives.

Screws SH and SX have a nut with internal ball recirculation. They are not preloaded, the axial clearance

is 0,1 mm maximum. These screws are the standard for precision class P10 tables. On request also for P5.

Screws TN and TL are fitted with an internal preloaded nut. TL screws have long leads and are therefore suitable for high travel speeds. They can be fitted in tables of precision classes P5 to P1.

### Benefits:

- Robust drive.
- Suitable for high axial forces.
- Any drive can be fitted, e.g. manual drive, DC, AC or stepped motor.
- Attachment via motor flange or indirect toothed belt drive.

See table 2 for further technical information.

Table 2: Ball screw technical details

Table		Screw		Nominal			Load rating <sup>2)</sup>		Table drive torque	
Type size	Precision class	Type size	diameter d <sub>o</sub>	Lead p	Lead accuracy <sup>1)</sup> acc. to ISO	V <sub>300p</sub>	dynamic C <sub>a</sub>	static C <sub>oa</sub>	Max. idling M <sub>s</sub>	Max. permissible M <sub>a</sub>
			mm			µm/300 mm		N	Nm	
LTB110	P10-P5	SH1205	12	5	G9	87	3 100	5 100	0,17	2,6
	P5-P1	TN1205	12	5	G7	40	6 060	7 100	0,27	2,6
	P5-P1	TN1210	12	10	G7	40	3 730	3 550	0,30	2,6
LTB170	P10-P5	SH1605	16	5	G9	87	5 200	8 700	0,33	5,8
	P5-P1	TN1605	16	5	G7	40	10 710	12 720	0,48	8,4
	P5-P1	TN1610	16	10	G7	40	10 710	12 720	0,52	12,0
	P5-P1	TN1616	16	16	G7	40	6 590	6 360	0,55	12,0
LTB235	P10-P5	SX2505	25	5	G9	87	15 600	31 000	0,49	20,6
	P10-P5	SX2510	25	10	G9	87	18 800	31 000	0,49	32,9
	P5-P1	TN2505	25	5	G7	40	12 700	22 440	0,79	14,9
	P5-P1	TN2510	25	10	G7	40	12 700	22 440	0,89	29,8
	P5-P1	TL2520	25	20	G7	40	12 700	22 440	0,86	32,9
	P5-P1	TL2525	25	25	G7	40	7 820	11 220	0,87	32,9
LTB320	P10-P5	SX3205	32	5	G9	87	17 800	50 400	0,81	33,4
	P10-P5	SX3210	32	10	G9	87	27 500	55 000	0,82	72,9
	P5-P1	TN3205	32	5	G7	40	14 210	30 960	1,21	20,5
	P5-P1	TN3210	32	10	G7	40	23 390	40 960	1,42	54,3
	P5-P1	TL3220	32	20	G7	40	23 390	40 960	1,28	96,0
	P5-P1	TL3232	32	32	G7	40	14 400	20 480	1,35	86,9
	P5-P1	TL3240	32	40	G7	40	14 400	20 480	1,36	96,0
LTB400	P10-P5	SX4005	40	5	G9	87	19 500	63 100	1,01	41,8
	P10-P5	SX4010	40	10	G9	87	29 000	64 000	1,03	84,9
	P5-P1	TN4005	40	5	G7	40	20 350	59 580	1,61	39,3
	P5-P1	TN4010	40	10	G7	40	29 000	64 000	2,43	84,9
	P5-P1	TL4020	40	20	G7	40	29 000	64 000	1,61	169,7
	P5-P1	TL4040	40	40	G7	40	25 500	35 120	1,66	186,3

<sup>1)</sup> Lead accuracy G5 at V<sub>300p</sub> = 23 µm/300 mm available on request.

<sup>2)</sup> Value indicated = minimum load rating of either screw or locating bearing

### Tables with a linear motor drive:

These are equipped with brushless AC motors and work as follows:

- The secondary part in the lower part of the table takes the form of a magnetic rail.
- The primary part is located in the travelling upper part of the table and takes the form of a coil system.
- Two or three-phase AC synchronous motors with electronic commutation.
- Linear measuring system, integrated in the table as standard.

### Customer benefits:

- High dynamics and stiffness in a closed loop system.
- Good synchronous characteristics.
- High acceleration capacity.
- High travel speeds, even with large strokes.
- Friction and wear free drive.

See table 3 for further technical details.

Table 3: Linear motor technical details

For table: Motorsize	LTB	110 F20906	110+170 F21806	F22706	235 A32008	A33008	320 A34008	A32014	A33014	A34014
Number of motor phases		2P	2P		3P			3P		
Static maximum force	$F_p$ N	105	210	315	600	900	1 200	1 200	1 800	2 400
Nominal force	$F_n$ N	33	66	100	190	285	379	379	596	759
Power loss at $F_p$	$P_{vp}$ W	212	424	637	424	643	907	690	1 043	1 381
Power loss at $F_n$	$P_{vn}$ W	21	42	64	42		91	69	104	138
Motor constant	$k_m$ N/W <sup>-2</sup>	7,2	10,2	12,5	29,1	35,5	39,8	45,7	55,7	64,6
Attractive force between motor parts	$F_a$ N	200	400	600	1 800	2 700	3 600	3 600	5 400	7 200
Force constant	$k_f$ N/A <sub>eff</sub>	19,7	19,7	19,7	74	74	74	148	148	148
Dyn. force at $v_{lim}$	$F_{lim}$ N	70	160	250	430	750	1 100	900	1 550	2 200
Linear limiting speed at $F_{lim}$	$v_{lim}$ m/s	3,0 <sup>1)</sup>	3,0 <sup>1)</sup>	3,0 <sup>1)</sup>	2,5	2,4	2,3	1,3	1,2	1,1
Maximum current	$I_p$ A <sub>eff</sub>	5,3	10,6	16,0	8,1	12,2	16,2	8,1	12,2	16,2
Continuons current	$I_n$ A <sub>eff</sub>	1,7	3,4	5,0	2,6	3,8	5,1	2,6	3,8	5,1
DC-link Voltage	$U_{zk}$ V	80	80	80	300	300	300	300	300	300
<b>Linear measuring system:</b>										
Signal output		Standard: sinus signal, 1 V <sub>ss</sub> , grading rate 20 µm; Option: TTL-signal resolution 0,1 - 0,2 - 0,5 - 1 µm, after 4-fold interpolation								
Limit-/Ref. switch		2 switches integrated inside the measuring system, PNP/NC or NPN/NC possible								
Precision class		Standard: ±5 µm; option: ±3 µm or ±2 µm								

<sup>1)</sup> limited by linear guiding

## Cover

The slides with ball screw and linear motor drive are available as follows:

- **With bellows** made of oil and water resistant polyurethane fibre material on both sides. The carriages and ballscrew nut are additionally protected by wipers (with the exception of the SH screws). The screw thrust bearings are also sealed.
- **Without cover** for applications without exposure to dirt, e.g. in

laboratories. The carriages, ball-screw nut and bearings are sealed as they are in the bellows version. The effective stroke is, of course, longer than in the bellows version.

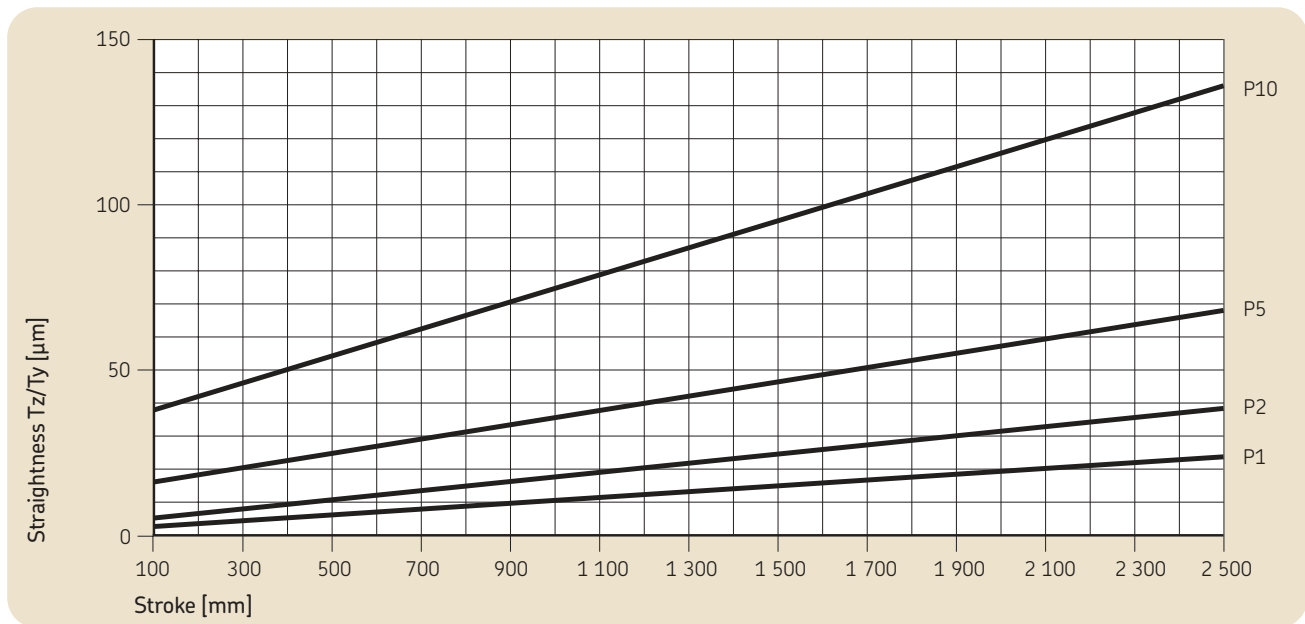
- **With steel cover**, made from corrosion resistant steel sheet, for applications with extreme exposure to dirt from above or for those applications where shock impacts on the cover cannot be excluded. The effective stroke is as long as in the version without cover.

## Precision classes

The characteristics of the different precision classes are listed in the table below. The precision given in diagram 1 applies to a single table in clamped condition on an ideal plane clamping surface.

Straightness defined as in VDI 2617 sheet 3.

Diagram 1: Precision



## Stroke

The strokes S1 (with bellows), S2 (without bellows) and S (with steel cover) are the maximum travel distances between the end stops. Depending on the speed and the moving mass the operating stroke is correspondingly less. The overrun on both sides must be larger than the length of the brake path of the drive. The value of  $2 \times p$  (spindle lead) can be considered to be a reliable guideline value. The adjustment of the electrical stroke is the mechanical stroke less 10 mm from each side. This value can be adjusted individually.

## Materials

As standard, the table components are made of aluminium and are black oxidised. The bottom part of the table is made of untreated aluminium. On request the bottom part and the top part are also available in steel.

## Permissible operating temperature

Tables with screw drives:  
-20 °C to +80 °C constant temperature.  
Linear motor slides:  
0 °C to + 55 °C constant temperature.

## Lubrication

The guides and screw are greased with an all-purpose SKF grease by the manufacturing unit. The carriages and the screw nut can be relubricated. For further information please refer to the operating instructions. On the carriages can be fitted with a central lubricating connection. Five lubricating holes are provided in

the side plate. (Not possible by using carriages with steel cover.) Relubrication intervals depending on operating conditions: 20 - 200 km or after 1 year at the latest.

## Load carrying capacity and life

For exact dimensioning and design of SKF rail guide tables and drives please contact SKF. In order to provide the required data correctly, please fill in the specification sheet on page 35.

## Accessories

### Limit and reference switches

Tables with ball screw drives are fitted with inductive limit switches PNP/NC as standard and can be equipped with inductive reference switches on request. These are integral with the slide. They are connected via a central plug connection on one of the end plates (see dimension specifications). Slides with linear motor drive are fitted with 2 limit/reference switches PNP/NC or NPN/NC, which are integrated in the linear measuring system.

### Cross table assembly

Individual tables can be mounted to form a cross table. The standard drill hole patterns of the table top and bottom parts are matched so that mounting of the same or next smaller size is possible. Please note the details in the corresponding column of the dimensional specifications.

### Linear measuring system

The attachment of a direct linear measurement system is possible. The slides with linear motor drive are equipped with a linear measuring system as standard. It is integral with the table. Further information can be found in table 3 on page 7.

### Motor flange

The slides with ball screw drives can be equipped with a motor flange and coupling on request. When ordering please indicate the motor manufacturer, model and type.

### Indirect toothed belt drive

If space is restricted, an indirect drive using a toothed belt may be the best choice. The motor can be mounted on either the right or left hand side. Standard transmission ratio 1:1.

### Linear motor control units and control components

The following components are available for controlling the linear motors:

- Dividing electronics for measuring system, integrated in the table
- Servo module
- Point-to-point or continuous path control

Further information available on request or in the offer as submitted.

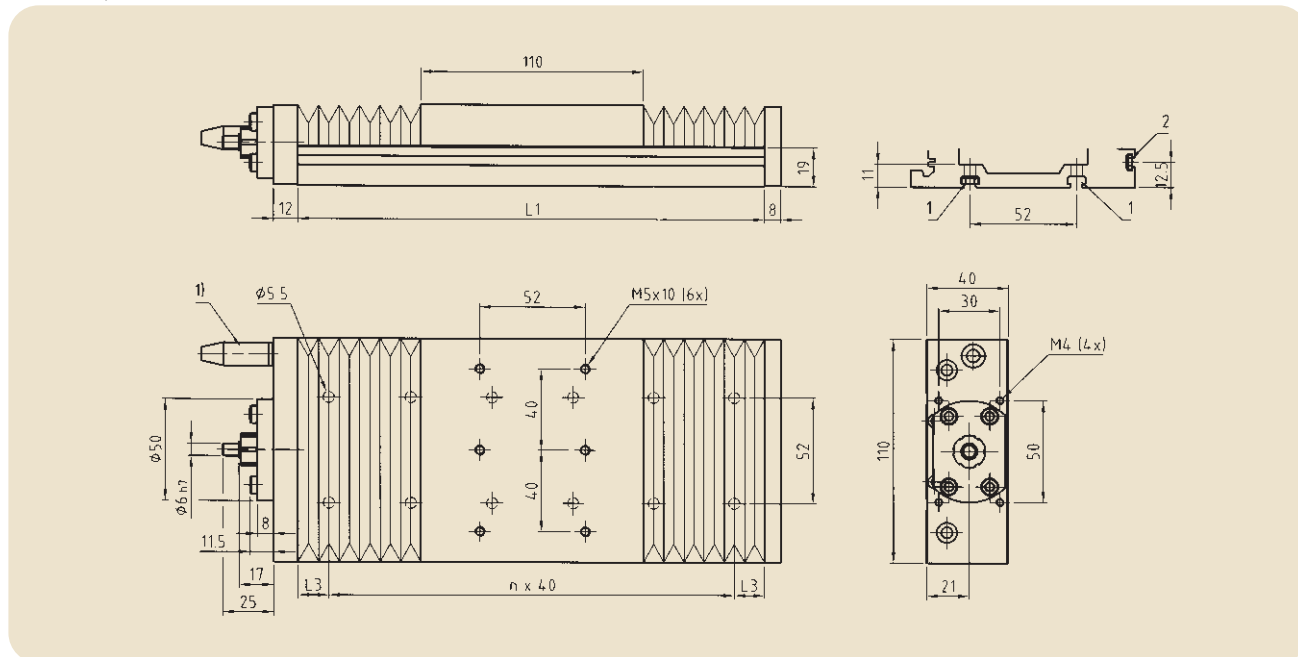


# Notes



## Rail guide tables with ball screw drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M5  
 Slot 2: for square nut DIN 562 M4



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel - <---> +

Length			2) KN	Stroke <sup>3)</sup>		Screw data		Weight <sup>4)</sup>	
L1	L3	n		S1	S2	SH1205 n <sub>max</sub>	TN1205+1210 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm				mm		1/min		kg	
150	15	3	-	10	30	4 160	7 500	1,7	0,8
190	15	4	✓	35	70	4 160	7 500	1,6	0,8
230	15	5	-	60	110	4 160	7 500	1,8	0,8
270	15	6	✓	80	150	4 160	7 500	2,0	0,8
310	15	7	-	105	190	4 160	7 500	2,2	0,8
350	15	8	✓	130	230	4 160	7 500	2,4	0,8
390	15	9	-	155	270	4 160	7 500	2,6	0,8
430	15	10	✓	180	310	4 160	7 500	2,7	0,8
470	15	11	-	205	350	4 160	7 500	2,9	0,8
510	15	12	✓	225	390	4 160	7 500	3,1	0,8
550	15	13	-	250	430	4 160	6 370	3,3	0,8
590	15	14	✓	275	470	4 160	5 420	3,5	0,8
630	15	15	-	300	510	4 160	4 670	3,6	0,8
670	15	16	✓	325	550	3 900	4 060	3,8	0,8
710	15	17	-	350	590	3 420	3 570	4,0	0,8
750	15	18	✓	375	630	3 030	3 160	4,2	0,8
790	15	19	-	395	670	2 700	2 810	4,4	0,8
830	15	20	✓	420	710	2 420	2 520	4,5	0,8
870	15	21	-	445	750	2 180	2 280	4,7	0,8
910	15	22	✓	470	790	1 980	2 060	4,9	0,8
950	15	23	-	495	830	1 800	1 880	5,1	0,8

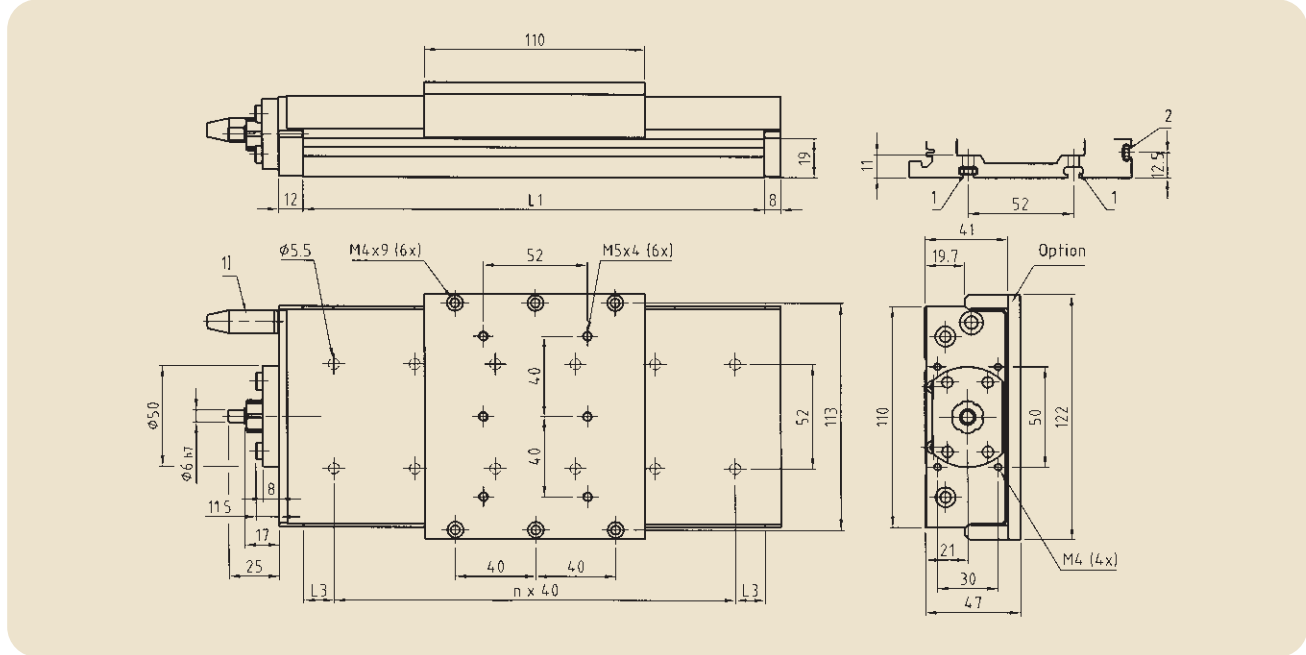
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>A</sub> = Total mass of table  
 G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with ball screw drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M5  
 Slot 2: for square nut DIN 562 M4



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel - <---> +

Lenght			2) KN	Stroke <sup>3)</sup> S	Screw data		Weight <sup>4)</sup>	
L1	L3	n			SH1205 n <sub>max</sub>	TN1205+1210 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm				mm	1/min		kg	
150	15	3	-	30	4 160	7 500	2,0	0,9
190	15	4	✓	70	4 160	7 500	2,2	0,9
230	15	5	-	110	4 160	7 500	2,4	0,9
270	15	6	✓	150	4 160	7 500	2,6	0,9
310	15	7	-	190	4 160	7 500	2,8	0,9
350	15	8	✓	230	4 160	7 500	3,0	0,9
390	15	9	-	270	4 160	7 500	3,2	0,9
430	15	10	✓	310	4 160	7 500	3,4	0,9
470	15	11	-	350	4 160	7 500	3,6	0,9
510	15	12	✓	390	4 160	7 500	3,8	0,9
550	15	13	-	430	4 160	6 370	4,0	0,9
590	15	14	✓	470	4 160	5 420	4,2	0,9
630	15	15	-	510	4 160	4 670	4,4	0,9
670	15	16	✓	550	3 900	4 060	4,6	0,9
710	15	17	-	590	3 420	3 570	4,8	0,9
750	15	18	✓	630	3 030	3 160	5,0	0,9
790	15	19	-	670	2 700	2 810	5,2	0,9
830	15	20	✓	710	2 420	2 520	5,4	0,9
870	15	21	-	750	2 180	2 280	5,6	0,9
910	15	22	✓	790	1 980	2 060	5,8	0,9
950	15	23	-	830	1 800	1 880	6,0	0,9

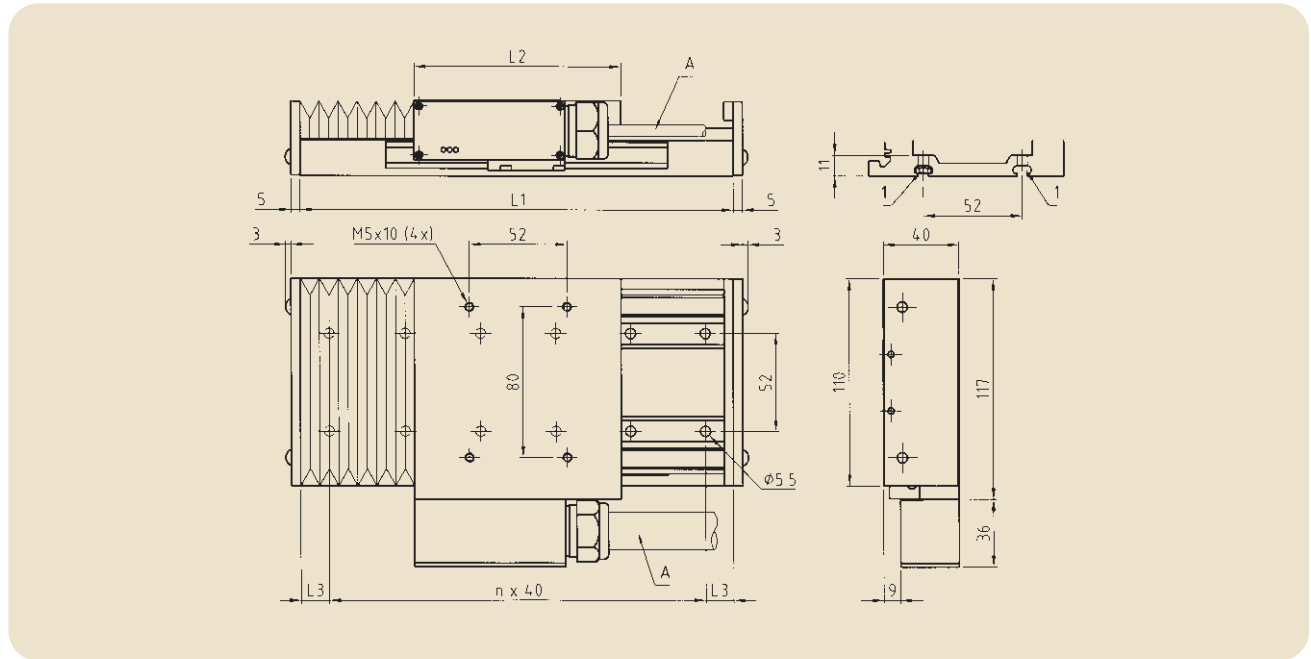
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>A</sub> = Total mass of table  
 G<sub>0</sub> = Mobile mass of table top

## Rail guide tables with linear motor drive with or without bellows

T slots in bottom part:  
Slot 1: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

Length			F20906				F21806				F22706					
L1	L3	n	2) KN	4) G <sub>0</sub>	L2	Stroke <sup>3)</sup>		5) G <sub>0</sub>	L2	Stroke <sup>3)</sup>		5) G <sub>0</sub>	L2	Stroke <sup>3)</sup>		5) G <sub>0</sub>
mm	mm	-	-	kg	mm	S1	S2	kg	mm	S1	S2	kg	mm	S1	S2	kg
150	15	3	-	1,3	110	10	30	0,9	190	-	-	1,5	280	-	-	2,1
190	15	4	✓	1,5	110	35	70	0,9	190	-	-	1,5	280	-	-	2,1
230	15	5	-	2,0	110	60	110	0,9	190	10	30	1,5	280	-	-	2,1
270	15	6	✓	2,2	110	85	150	0,9	190	35	70	1,5	280	-	-	2,1
310	15	7	-	2,5	110	105	190	0,9	190	60	110	1,5	280	-	-	2,1
350	15	8	✓	2,9	110	130	230	0,9	190	80	150	1,5	280	30	60	2,1
390	15	9	-	3,2	110	155	270	0,9	190	105	190	1,5	280	55	100	2,1
430	15	10	✓	3,5	110	180	310	0,9	190	130	230	1,5	280	75	140	2,1
470	15	11	-	3,9	110	205	350	0,9	190	155	270	1,5	280	100	180	2,1
510	15	12	✓	4,1	110	225	390	0,9	190	180	310	1,5	280	125	220	2,1
550	15	13	-	4,4	110	250	430	0,9	190	205	350	1,5	280	150	260	2,1
590	15	14	✓	4,8	110	275	470	0,9	190	225	390	1,5	280	175	300	2,1
630	15	15	-	5,1	110	300	510	0,9	190	250	430	1,5	280	200	340	2,1
670	15	16	✓	5,4	110	325	550	0,9	190	275	470	1,5	280	225	380	2,1
710	15	17	-	5,8	110	350	590	0,9	190	300	510	1,5	280	245	420	2,1
750	15	18	✓	6,0	110	375	630	0,9	190	325	550	1,5	280	270	460	2,1
790	15	19	-	6,3	110	395	670	0,9	190	350	590	1,5	280	295	500	2,1
830	15	20	✓	6,7	110	420	710	0,9	190	375	630	1,5	280	320	540	2,1
870	15	21	-	7,0	110	445	750	0,9	190	395	670	1,5	280	345	580	2,1
910	15	22	✓	7,3	110	470	790	0,9	190	420	710	1,5	280	370	620	2,1
950	15	23	-	7,7	110	495	830	0,9	190	445	750	1,5	280	390	660	2,1

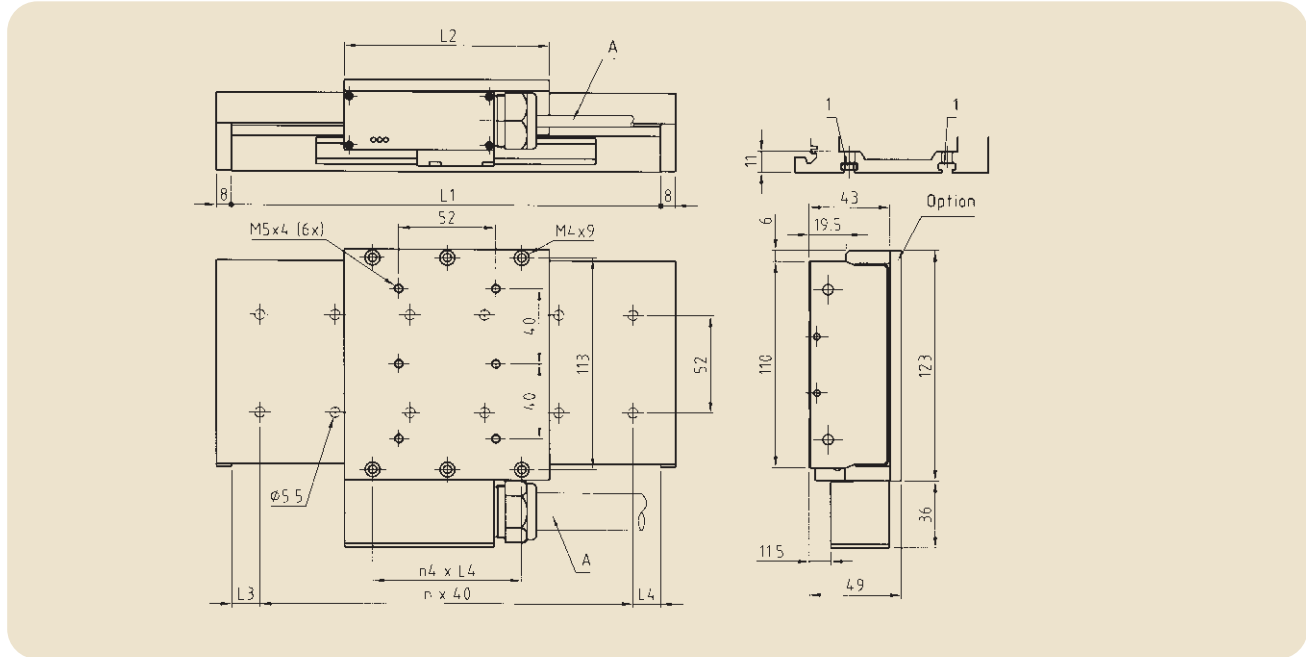
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
S1 with bellows (standard version)  
S2 without bellows (special version)

<sup>4)</sup> G<sub>0</sub> = Stationary mass of bottom part  
G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with linear motor drive with steel cover

T slots in bottom part:  
Slot 1: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <---> +

Length			F20906					F21806				F22706				
L1	L3	n	2) KN	4) G <sub>U</sub>	Stroke <sup>3)</sup> L2	S	n <sub>4xL4</sub>	5) G <sub>0</sub>	L2	S	n <sub>4xL4</sub>	G <sub>0</sub>	L2	S	n <sub>4xL4</sub>	G <sub>0</sub>
mm	-	-	-	kg	mm	-	-	kg	mm	-	-	kg	mm	-	-	kg
150	15	3	-	1,3	110	30	2x40	1,2	190	-	4x40	2,0	280	-	6x40	2,8
190	15	4	✓	1,6	110	70	2x40	1,2	190	-	4x40	2,0	280	-	6x40	2,8
230	15	5	-	2,1	110	110	2x40	1,2	190	30	4x40	2,0	280	-	6x40	2,8
270	15	6	✓	2,3	110	150	2x40	1,2	190	70	4x40	2,0	280	-	6x40	2,8
310	15	7	-	2,6	110	190	2x40	1,2	190	110	4x40	2,0	280	-	6x40	2,8
350	15	8	✓	3,1	110	230	2x40	1,2	190	150	4x40	2,0	280	60	6x40	2,8
390	15	9	-	3,4	110	270	2x40	1,2	190	190	4x40	2,0	280	100	6x40	2,8
430	15	10	✓	3,7	110	310	2x40	1,2	190	230	4x40	2,0	280	140	6x40	2,8
470	15	11	-	4,1	110	350	2x40	1,2	190	270	4x40	2,0	280	180	6x40	2,8
510	15	12	✓	4,4	110	390	2x40	1,2	190	310	4x40	2,0	280	220	6x40	2,8
550	15	13	-	4,7	110	430	2x40	1,2	190	350	4x40	2,0	280	260	6x40	2,8
590	15	14	✓	5,1	110	470	2x40	1,2	190	390	4x40	2,0	280	300	6x40	2,8
630	15	15	-	5,4	110	510	2x40	1,2	190	430	4x40	2,0	280	340	6x40	2,8
670	15	16	✓	5,7	110	550	2x40	1,2	190	470	4x40	2,0	280	380	6x40	2,8
710	15	17	-	6,1	110	590	2x40	1,2	190	510	4x40	2,0	280	420	6x40	2,8
750	15	18	✓	6,4	110	630	2x40	1,2	190	550	4x40	2,0	280	460	6x40	2,8
790	15	19	-	6,7	110	670	2x40	1,2	190	590	4x40	2,0	280	500	6x40	2,8
830	15	20	✓	7,1	110	710	2x40	1,2	190	630	4x40	2,0	280	540	6x40	2,8
870	15	21	-	7,4	110	750	2x40	1,2	190	670	4x40	2,0	280	580	6x40	2,8
910	15	22	✓	7,7	110	790	2x40	1,2	190	710	4x40	2,0	280	620	6x40	2,8
950	15	23	-	8,2	110	830	2x40	1,2	190	750	4x40	2,0	280	660	6x40	2,8

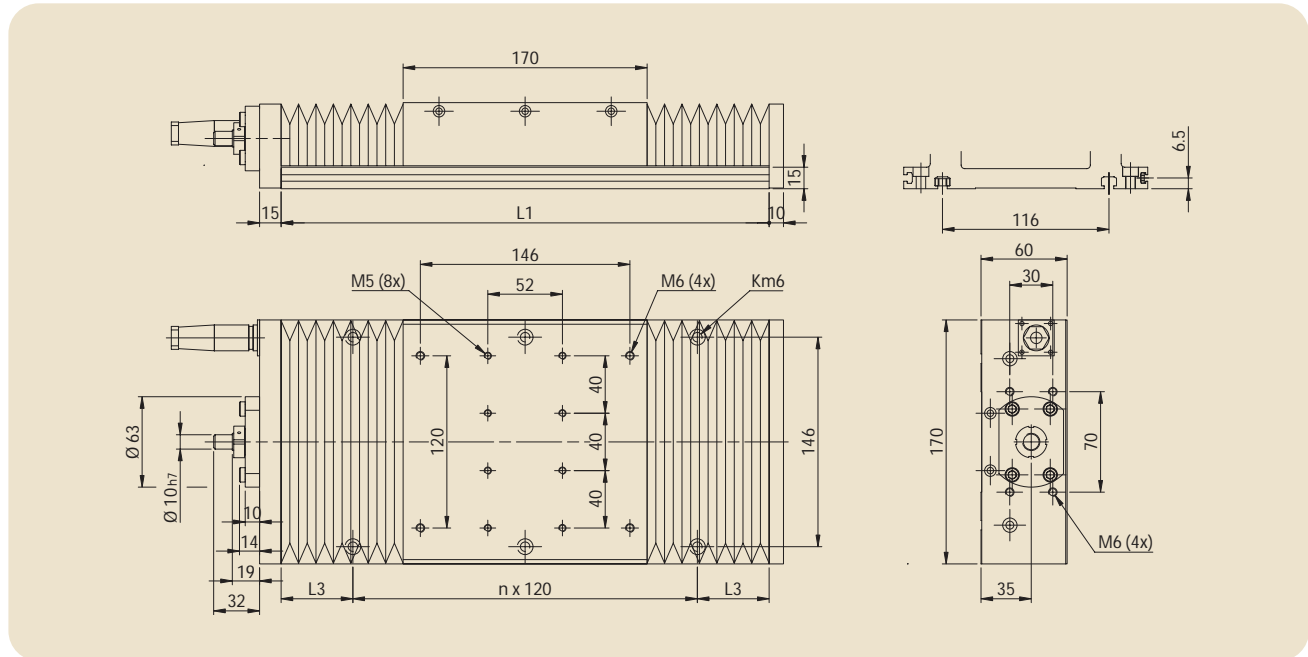
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with ball screw drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M6  
 Slot 2: for square nut DIN 562 M4



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <---> +

Length			2) KN	Stroke <sup>3)</sup>		Screw data				Weight <sup>4)</sup>	
L1	L3	n		S1	S2	SH1605 n <sub>max</sub>	TN1605 n <sub>max</sub>	TN1610 n <sub>max</sub>	TN1616 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm			-	mm		1/min				kg	
220	50	1	✓	25	40	3 120	5 620	5 620	5 620	5,7	2,3
280	20	2	-	70	100	3 120	5 620	5 620	5 620	6,4	2,3
340	50	2	-	115	160	3 120	5 620	5 620	5 620	7,1	2,3
400	20	3	✓	160	220	3 120	5 620	5 620	5 620	7,8	2,3
460	50	3	✓	205	280	3 120	5 620	5 620	5 620	8,5	2,3
520	20	4	-	250	340	3 120	5 620	5 620	5 620	9,2	2,3
580	50	4	-	295	400	3 120	5 620	5 620	5 620	9,9	2,3
640	20	5	✓	345	460	3 120	5 620	5 620	5 620	10,6	2,3
700	50	5	✓	390	520	3 120	5 620	5 620	5 620	11,3	2,3
760	20	6	-	435	580	3 120	4 670	4 670	4 670	12,0	2,3
820	50	6	-	485	640	3 120	3 900	3 900	3 900	12,7	2,3
880	20	7	✓	525	700	3 120	3 300	3 300	3 300	13,4	2,3
940	50	7	✓	570	760	2 830	2 830	2 830	2 830	14,1	2,3
1 000	20	8	-	615	820	2 460	2 460	2 460	2 460	14,8	2,3
1 060	50	8	-	665	880	2 150	2 150	2 150	2 150	15,6	2,3
1 120	20	9	✓	710	940	1 900	1 900	1 900	1 900	16,3	2,3
1 180	50	9	✓	755	1 000	1 690	1 690	1 690	1 690	17,0	2,3
1 240	20	10	-	805	1 060	1 510	1 510	1 510	1 510	17,7	2,3
1 300	50	10	-	845	1 120	1 360	1 360	1 360	1 360	18,4	2,3
1 360	20	11	✓	890	1 180	1 230	1 230	1 230	1 230	19,1	2,3
1 420	50	11	✓	935	1 240	1 120	1 120	1 120	1 120	19,8	2,3
1 480	20	12	-	985	1 300	1 020	1 020	1 020	1 020	20,5	2,3
1 540	50	12	-	1 030	1 360	930	930	930	930	21,2	2,3
1 600	20	13	✓	1 075	1 420	860	860	860	860	21,9	2,3

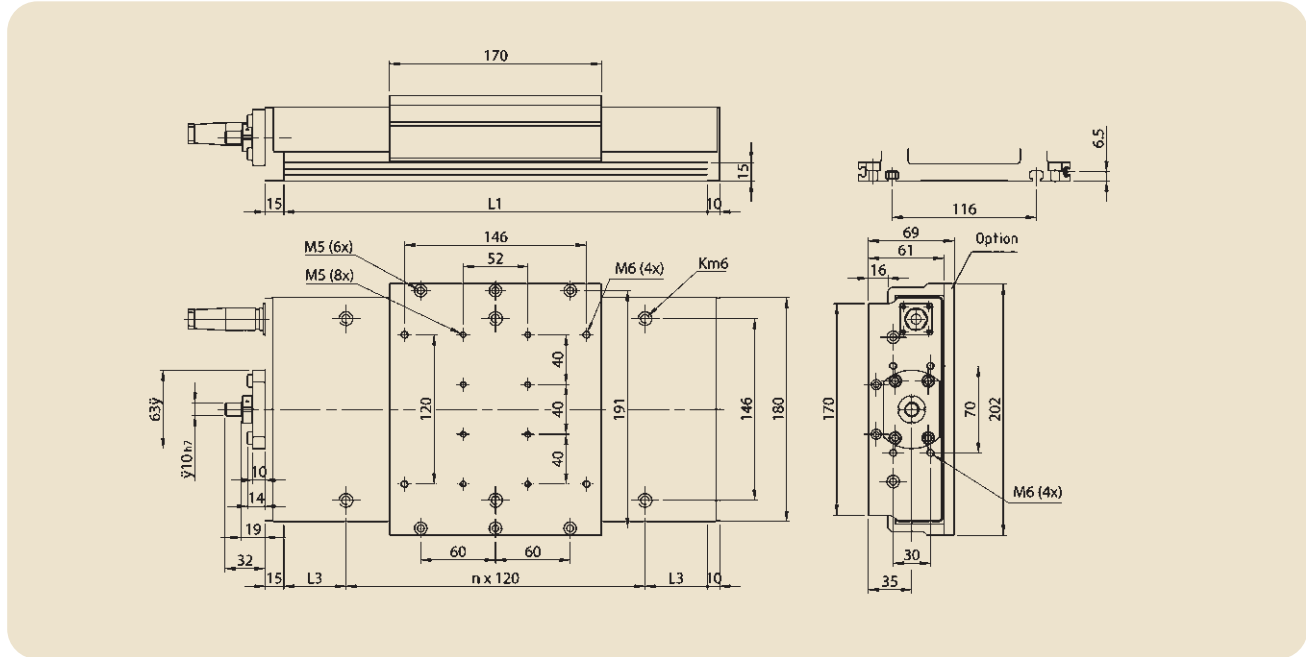
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>A</sub> = Total weight of table  
 G<sub>0</sub> = Weight of mobile mass of table top

# Rail guide tables with ball screw drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M6  
 Slot 2: for square nut DIN 562 M4



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <---> +

Length		n	<sup>2)</sup> KN	Stroke <sup>3)</sup> S	Screw data				Weight <sup>4)</sup>	
L1	L3				SH1605	TN1605	TN1610	TN1616	G <sub>A</sub>	G <sub>0</sub>
mm	mm			mm	n <sub>max</sub>	n <sub>max</sub>	n <sub>max</sub>	n <sub>max</sub>	kg	kg
220	50	1	✓	40	3 120	5 620	5 620	5 620	6,9	3,3
280	20	2	-	100	3 120	5 620	5 620	5 620	7,7	3,3
340	50	2	-	160	3 120	5 620	5 620	5 620	8,4	3,3
400	20	3	✓	220	3 120	5 620	5 620	5 620	9,2	3,3
460	50	3	✓	280	3 120	5 620	5 620	5 620	9,9	3,3
520	20	4	-	340	3 120	5 620	5 620	5 620	10,7	3,3
580	50	4	-	400	3 120	5 620	5 620	5 620	11,5	3,3
640	20	5	✓	460	3 120	5 620	5 620	5 620	12,2	3,3
700	50	5	✓	520	3 120	5 620	5 620	5 620	13,0	3,3
760	20	6	-	580	3 120	4 670	4 670	4 670	13,8	3,3
820	50	6	-	640	3 120	3 900	3 900	3 900	14,5	3,3
880	20	7	✓	700	3 120	3 300	3 300	3 300	15,3	3,3
940	50	7	✓	760	2 830	2 830	2 830	2 830	16,0	3,3
1 000	20	8	-	820	2 460	2 460	2 460	2 460	16,8	3,3
1 060	50	8	-	880	2 150	2 150	2 150	2 150	17,6	3,3
1 120	20	9	✓	940	1 900	1 900	1 900	1 900	18,3	3,3
1 180	50	9	✓	1 000	1 690	1 690	1 690	1 690	19,1	3,3
1 240	20	10	-	1 060	1 510	1 510	1 510	1 510	19,9	3,3
1 300	50	10	-	1 120	1 360	1 360	1 360	1 360	20,6	3,3
1 360	20	11	✓	1 180	1 230	1 230	1 230	1 230	21,4	3,3
1 420	50	11	✓	1 240	1 120	1 120	1 120	1 120	22,1	3,3
1 480	20	12	-	1 300	1 020	1 020	1 020	1 020	22,9	3,3
1 540	50	12	-	1 360	930	930	930	930	23,7	3,3
1 600	20	13	✓	1 420	860	860	860	860	24,4	3,3

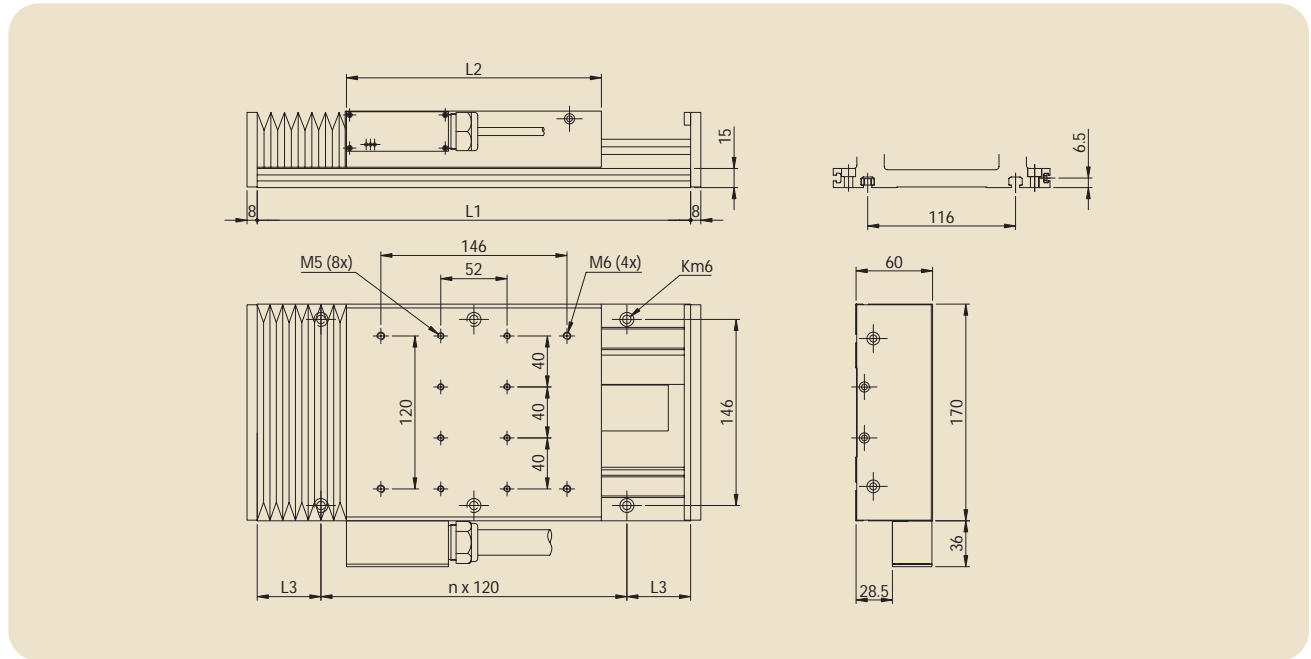
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>A</sub> = Stationary mass of bottom part  
 G<sub>0</sub> = Mobile mass of table top

## Rail guide tables with linear motor drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M6  
 Slot 2: for square nut DIN 562 M4



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

Length			F21806					F22706				
L1	L3	n	2) KN	4) G <sub>U</sub>	L2	Stroke <sup>3)</sup>		5) G <sub>0</sub>	L2	Stroke <sup>3)</sup>		5) G <sub>0</sub>
mm		-		kg	mm	S1	S2	kg	mm	S1	S2	kg
280	20	2	-	4,5	200	45	70	3,0	280	-	-	3,9
340	50	2	-	5,3	200	95	130	3,0	280	30	50	3,9
400	20	3	✓	6,2	200	140	190	3,0	280	80	110	3,9
460	50	3	✓	7,1	200	180	250	3,0	280	125	170	3,9
520	20	4	-	8,0	200	230	310	3,0	280	165	230	3,9
580	50	4	-	8,9	200	275	370	3,0	280	210	290	3,9
640	20	5	✓	9,8	200	320	430	3,0	280	260	350	3,9
700	50	5	✓	10,7	200	365	490	3,0	280	305	410	3,9
760	20	6	-	11,5	200	415	550	3,0	280	350	470	3,9
820	50	6	-	12,4	200	460	610	3,0	280	400	530	3,9
880	20	7	✓	13,3	200	500	670	3,0	280	445	590	3,9
940	50	7	✓	14,2	200	550	730	3,0	280	485	650	3,9
1 000	20	8	-	15,1	200	595	790	3,0	280	530	710	3,9
1 060	50	8	-	16,0	200	640	850	3,0	280	580	770	3,9
1 120	20	9	✓	16,9	200	685	910	3,0	280	625	830	3,9
1 180	50	9	✓	17,7	200	735	970	3,0	280	670	890	3,9
1 240	20	10	-	18,6	200	780	1 030	3,0	280	720	950	3,9
1 300	50	10	-	19,5	200	820	1 090	3,0	280	765	1 010	3,9
1 360	20	11	✓	20,4	200	870	1 150	3,0	280	810	1 070	3,9
1 420	50	11	✓	21,3	200	915	1 210	3,0	280	850	1 130	3,9
1 480	20	12	-	22,2	200	960	1 270	3,0	280	900	1 190	3,9
1 540	50	12	-	23,1	200	1 005	1 330	3,0	280	945	1 250	3,9
1 600	20	13	✓	23,9	200	1 055	1 390	3,0	280	990	1 310	3,9

<sup>2)</sup> Suitable as top axis for central cross table mounting

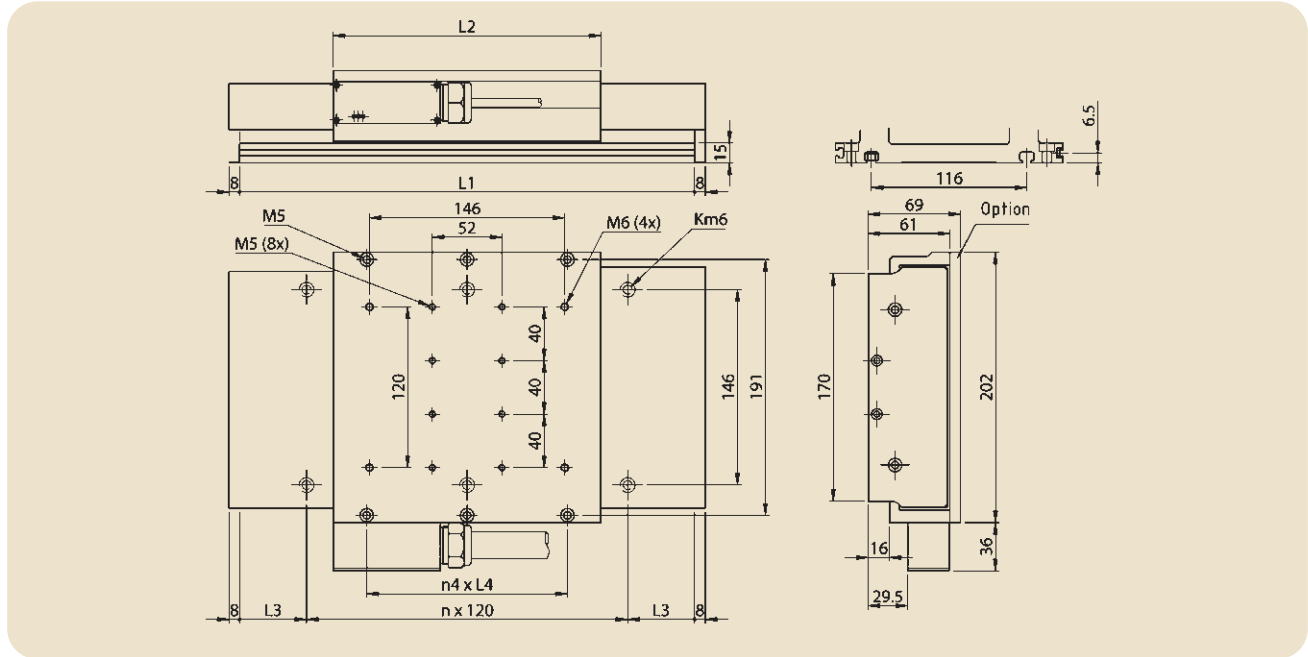
<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top



# Rail guide tables with linear motor drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M6  
 Slot 2: for square nut DIN 562 M4



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

Length			F21806					F22706				
L1	L3	n	2) KN	4) G <sub>U</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>
mm		-		kg	mm			kg	mm			kg
280	20	2	-	4,5	200	70	2x75	4,2	280	-	3x75	5,6
340	50	2	-	5,4	200	130	2x75	4,2	280	50	3x75	5,6
400	20	3	✓	6,3	200	190	2x75	4,2	280	110	3x75	5,6
460	50	3	✓	7,2	200	250	2x75	4,2	280	170	3x75	5,6
520	20	4	-	8,1	200	310	2x75	4,2	280	230	3x75	5,6
580	50	4	-	9,0	200	370	2x75	4,2	280	290	3x75	5,6
640	20	5	✓	9,8	200	430	2x75	4,2	280	350	3x75	5,6
700	50	5	✓	10,7	200	490	2x75	4,2	280	410	3x75	5,6
760	20	6	-	11,6	200	550	2x75	4,2	280	470	3x75	5,6
820	50	6	-	12,5	200	610	2x75	4,2	280	530	3x75	5,6
880	20	7	✓	13,4	200	670	2x75	4,2	280	590	3x75	5,6
940	50	7	✓	14,3	200	730	2x75	4,2	280	650	3x75	5,6
1 000	20	8	-	15,2	200	790	2x75	4,2	280	710	3x75	5,6
1 060	50	8	-	16,1	200	850	2x75	4,2	280	770	3x75	5,6
1 120	20	9	✓	17,0	200	910	2x75	4,2	280	830	3x75	5,6
1 180	50	9	✓	17,9	200	970	2x75	4,2	280	890	3x75	5,6
1 240	20	10	-	18,8	200	1 030	2x75	4,2	280	950	3x75	5,6
1 300	50	10	-	19,7	200	1 090	2x75	4,2	280	1 010	3x75	5,6
1 360	20	11	✓	20,5	200	1 150	2x75	4,2	280	1 070	3x75	5,6
1 420	50	11	✓	21,4	200	1 210	2x75	4,2	280	1 130	3x75	5,6
1 480	20	12	-	22,3	200	1 270	2x75	4,2	280	1 190	3x75	5,6
1 540	50	12	-	23,2	200	1 330	2x75	4,2	280	1 250	3x75	5,6
1 600	20	13	✓	24,1	200	1 390	2x75	4,2	280	1 310	3x75	5,6

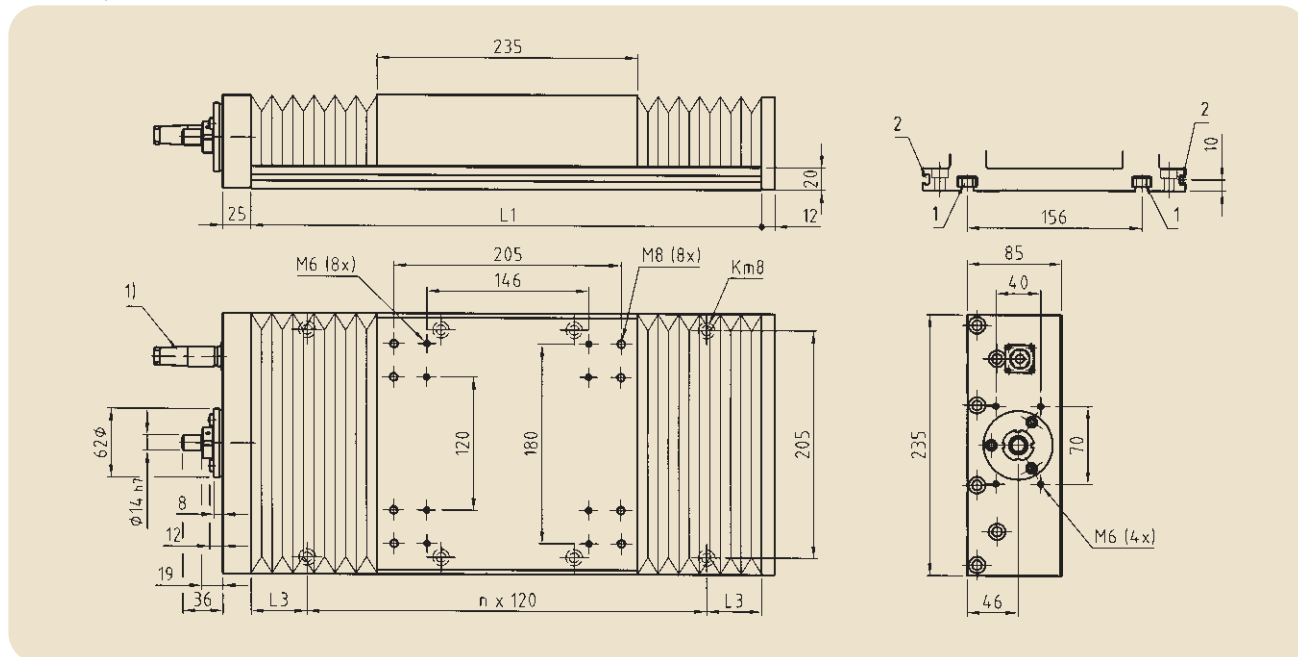
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top

## Rail guide tables with ball screw drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <----> +

Length					Stroke <sup>3)</sup>		Screw data				Weight <sup>4)</sup>	
L1	L3	n	<sup>2)</sup> KN	S1	S2	$n_{max}$	$n_{max}$	$n_{max}$	$n_{max}$	$G_A$	$G_O$	
mm		-		mm		1/min				kg		
280	20	2	-	25	35	2 000	3 600	2 000	3 600	14,5	5,9	
340	50	2	-	75	95	2 000	3 600	2 000	3 600	15,9	5,9	
400	20	3	✓	125	155	2 000	3 600	2 000	3 600	17,2	5,9	
460	50	3	✓	175	215	2 000	3 600	2 000	3 600	18,6	5,9	
520	20	4	-	225	275	2 000	3 600	2 000	3 600	20,0	5,9	
580	50	4	-	270	335	2 000	3 600	2 000	3 600	21,3	5,9	
640	20	5	✓	325	395	2 000	3 600	2 000	3 600	22,7	5,9	
700	50	5	✓	375	455	2 000	3 600	2 000	3 600	24,1	5,9	
760	20	6	-	425	515	2 000	3 600	2 000	3 600	25,4	5,9	
820	50	6	-	475	575	2 000	3 600	2 000	3 600	26,8	5,9	
880	20	7	✓	525	635	2 000	3 600	2 000	3 600	28,1	5,9	
940	50	7	✓	575	695	2 000	3 600	2 000	3 600	29,5	5,9	
1 000	20	8	-	625	755	2 000	3 600	2 000	3 600	30,9	5,9	
1 060	50	8	-	680	815	2 000	3 600	2 000	3 600	32,2	5,9	
1 120	20	9	✓	730	875	2 000	3 390	2 000	3 390	33,6	5,9	
1 180	50	9	✓	780	935	2 000	3 010	2 000	3 010	34,9	5,9	
1 240	20	10	-	825	995	2 000	2 690	2 000	2 690	36,3	5,9	
1 300	50	10	-	875	1 055	2 000	2 410	2 000	2 410	37,7	5,9	
1 360	20	11	✓	925	1 115	2 000	2 180	2 000	2 180	39,0	5,9	
1 420	50	11	✓	980	1 175	1 990	1 980	1 880	1 980	40,4	5,9	
1 480	20	12	v	1 030	1 235	1 810	1 800	1 710	1 800	41,8	5,9	
1 540	50	12	-	1 090	1 295	1 660	1 650	1 570	1 650	43,1	5,9	

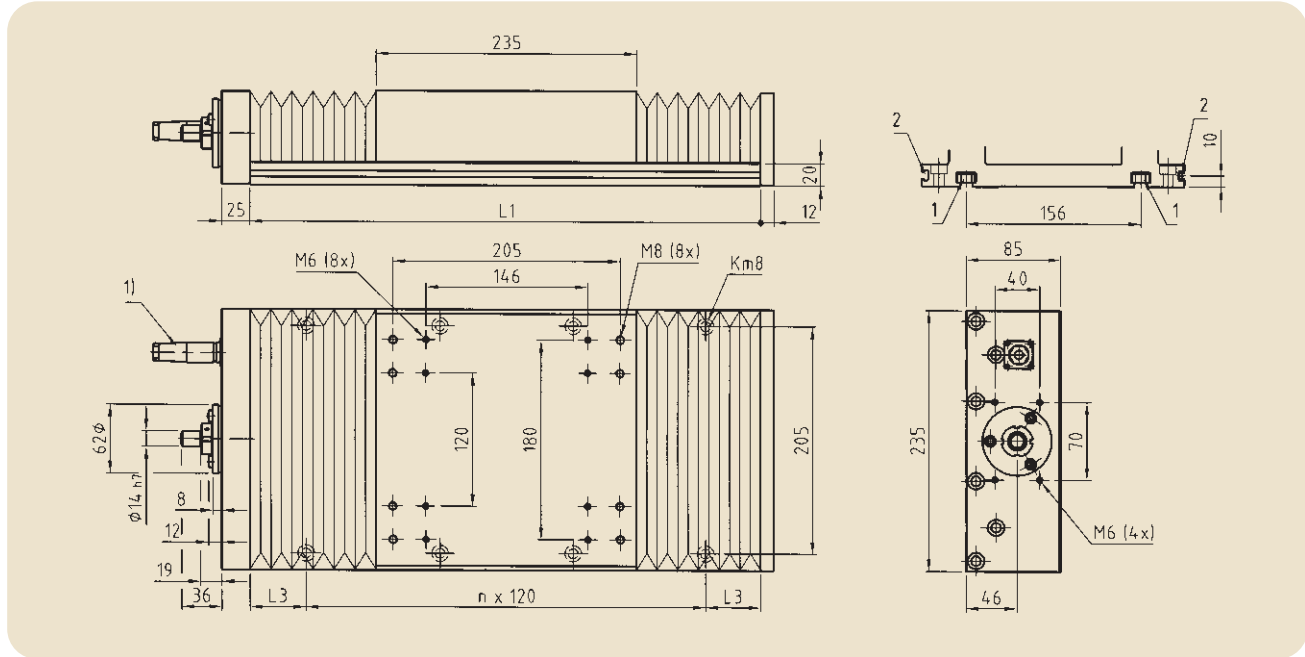
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup>  $G_A$  = Total weight of table  
 $G_O$  = Weight of mobile mass of table top

## Rail guide tables with ball screw drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <----> +

Length			2) KN	Stroke <sup>3)</sup>		Screw data				Weight <sup>4)</sup>	
L1	L3	n		S1	S2	SX2505 n <sub>max</sub>	TN2505 n <sub>max</sub>	SX2510 n <sub>max</sub>	TN2510+2520+2525 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm			-	mm		1/min				kg	
1 600	20	13	✓	1 130	1 355	1 530	1 520	1 440	1 520	44,5	5,9
1 660	50	13	✓	1 180	1 415	1 410	1 400	1 330	1 400	45,8	5,9
1 720	20	14	-	1 230	1 475	1 300	1 290	1 230	1 290	47,2	5,9
1 780	50	14	-	1 280	1 535	1 210	1 200	1 140	1 200	48,6	5,9
1 840	20	15	✓	1 335	1 595	1 120	1 120	1 060	1 120	49,9	5,9
1 900	50	15	✓	1 380	1 655	1 050	1 040	990	1 040	51,3	5,9
1 960	20	16	-	1 430	1 715	980	970	920	970	52,7	5,9
2 020	50	16	-	1 480	1 775	920	920	870	910	54,0	5,9
2 080	20	17	✓	1 530	1 835	860	860	810	860	55,4	5,9
2 140	50	17	✓	1 580	1 895	810	800	760	800	56,7	5,9
2 200	20	18	-	1 635	1 955	760	760	720	760	58,1	5,9
2 260	50	18	-	1 685	2 015	720	720	680	720	59,5	5,9
2 320	20	19	✓	1 735	2 075	680	608	640	680	60,8	5,9
2 380	50	19	✓	1 785	2 135	640	640	610	640	62,2	5,9
2 440	20	20	-	1 835	2 195	610	610	580	610	63,6	5,9
2 500	50	20	-	1 880	2 255	580	580	550	580	64,9	5,9
2 560	20	21	✓	1 930	2 315	550	550	520	550	66,3	5,9
2 620	50	21	✓	1 985	2 375	520	520	490	520	67,6	5,9
2 680	20	22	-	2 035	2 435	500	500	470	500	69,0	5,9
2 740	50	22	-	2 085	2 495	480	470	450	470	70,4	5,9
2 800	20	23	✓	2 135	2 555	450	450	430	450	71,7	5,9
2 860	50	23	✓	2 185	2 615	430	430	410	430	73,1	5,9

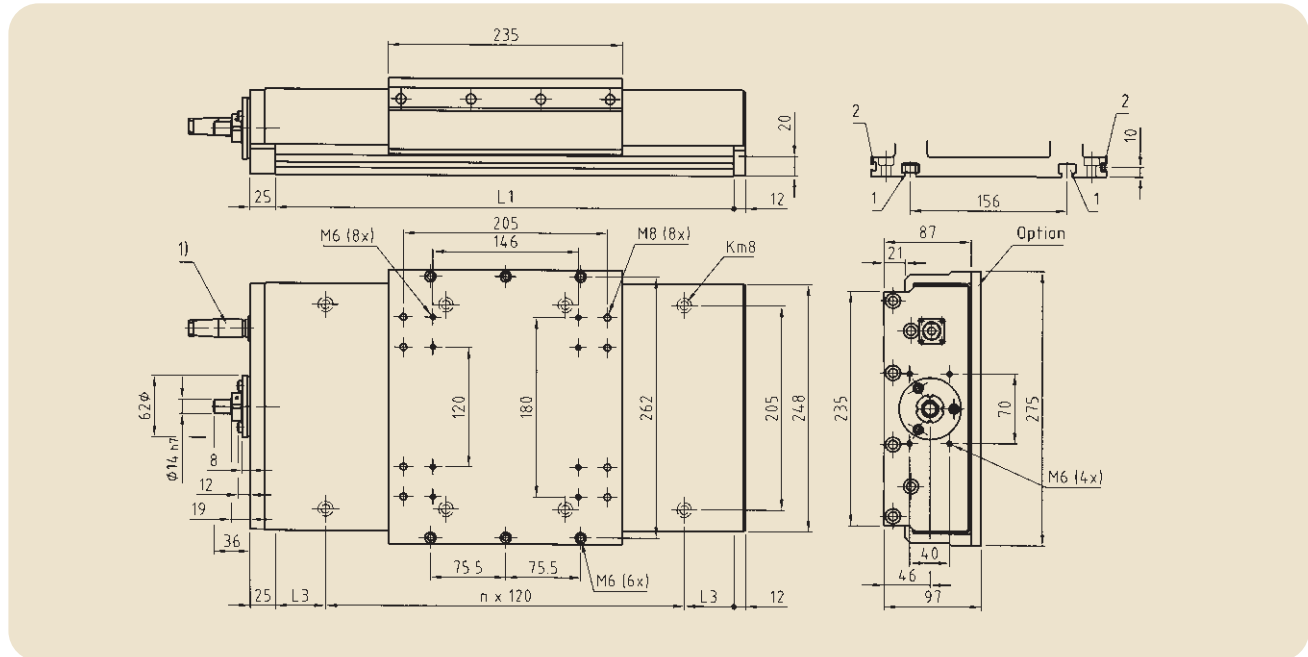
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>A</sub> = Total weight of table  
 G<sub>0</sub> = Weight of mobile mass of table top

## Rail guide tables with ball screw drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <----> +

Length		n	<sup>2)</sup> KN	Stroke <sup>3)</sup> S	Screw data				Weight <sup>4)</sup>	
L1	L3				SX2505	TN2505	SX2510	TN2510+2520+2525	G <sub>A</sub>	G <sub>0</sub>
mm		-		mm	n <sub>max</sub>	n <sub>max</sub>	n <sub>max</sub>	n <sub>max</sub>	kg	
280	20	2	-	35	2 000	3 600	2 000	3 600	18,1	8,5
340	50	2	-	95	2 000	3 600	2 000	3 600	19,6	8,5
400	20	3	✓	155	2 000	3 600	2 000	3 600	21,1	8,5
460	50	3	✓	215	2 000	3 600	2 000	3 600	22,7	8,5
520	20	4	-	275	2 000	3 600	2 000	3 600	24,2	8,5
580	50	4	-	335	2 000	3 600	2 000	3 600	25,7	8,5
640	20	5	✓	395	2 000	3 600	2 000	3 600	27,3	8,5
700	50	5	✓	455	2 000	3 600	2 000	3 600	28,8	8,5
760	20	6	-	515	2 000	3 600	2 000	3 600	30,3	8,5
820	50	6	-	575	2 000	3 600	2 000	3 600	31,8	8,5
880	20	7	✓	635	2 000	3 600	2 000	3 600	33,4	8,5
940	50	7	✓	695	2 000	3 600	2 000	3 600	34,9	8,5
1 000	20	8	-	755	2 000	3 600	2 000	3 600	36,4	8,5
1 060	50	8	-	815	2 000	3 600	2 000	3 600	37,9	8,5
1 120	20	9	✓	875	2 000	3 390	2 000	3 380	39,5	8,5
1 180	50	9	✓	935	2 000	3 010	2 000	2 990	41,0	8,5
1 240	20	10	-	995	2 000	2 690	2 000	2 670	42,5	8,5
1 300	50	10	-	1 055	2 000	2 410	2 000	2 400	44,1	8,5
1 360	20	11	✓	1 115	2 000	2 180	2 000	2 170	45,6	8,5
1 420	50	11	✓	1 175	1 990	1 980	1 880	1 970	47,1	8,5
1 480	20	12	-	1 235	1 810	1 800	1 710	1 800	48,6	8,5
1 540	50	12	-	1 295	1 660	1 650	1 570	1 640	50,2	8,5
1 600	20	13	✓	1 355	1 530	1 520	1 440	1 510	51,7	8,5
1 660	50	13	✓	1 415	1 410	1 400	1 330	1 390	53,2	8,5

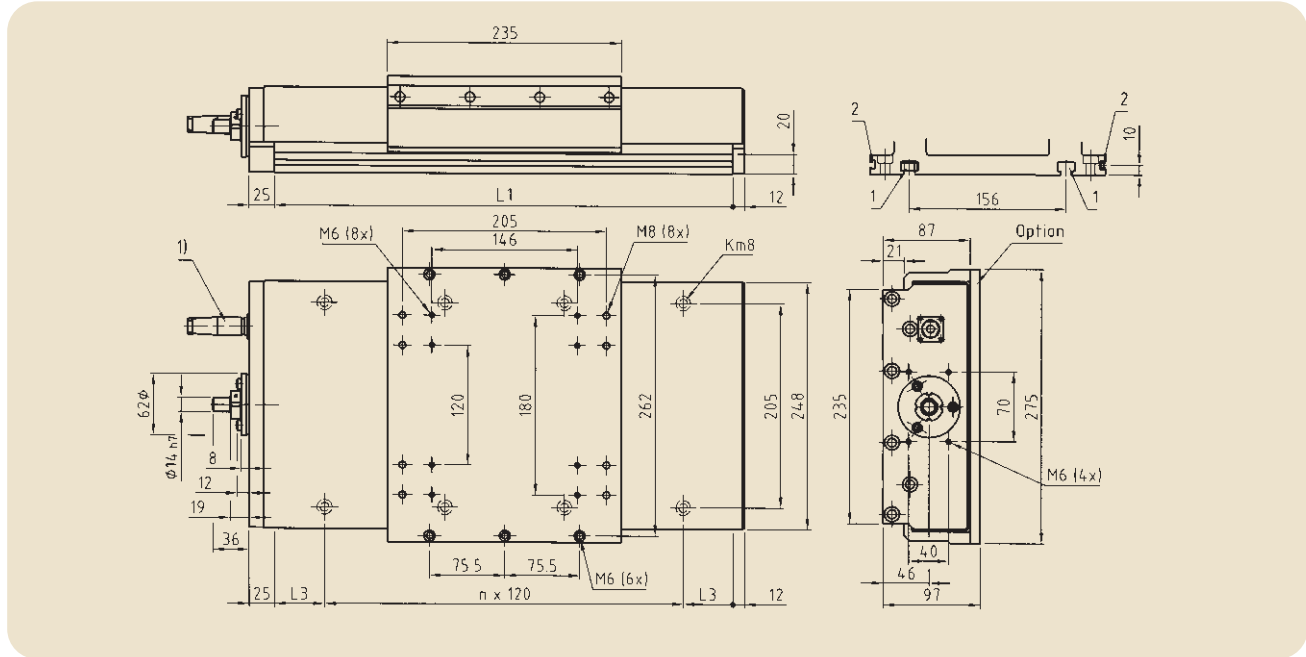
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>A</sub> = Total weight of table  
 G<sub>0</sub> = Weight of mobile mass of table top

# Rail guide tables with ball screw drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <----> +

Length			2) KN	Stroke <sup>3)</sup> S	Screw data				Weight <sup>4)</sup>	
L1	L3	n			SX2505 n <sub>max</sub>	TN2505 n <sub>max</sub>	SX2510 n <sub>max</sub>	TN2510+2520+2525 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm			-	mm	1/min				kg	
1 720	20	14	-	1 475	1 300	1 290	1 230	1 290	54,7	8,5
1 780	50	14	-	1 535	1 210	1 200	1 140	1 200	56,3	8,5
1 840	20	15	✓	1 595	1 120	1 120	1 060	1 110	57,8	8,5
1 900	50	15	✓	1 655	1 050	1 040	990	1 040	59,3	8,5
1 960	20	16	-	1 715	980	970	920	970	60,9	8,5
2 020	50	16	-	1 775	920	910	870	910	62,4	8,5
2 080	20	17	✓	1 835	860	860	810	860	63,9	8,5
2 140	50	17	✓	1 895	810	800	760	800	65,4	8,5
2 200	20	18	-	1 955	760	760	720	760	67,0	8,5
2 260	50	18	-	2 015	720	720	680	720	68,5	8,5
2 320	20	19	✓	2 075	680	680	640	680	70,0	8,5
2 380	50	19	✓	2 135	640	640	610	640	71,5	8,5
2 440	20	20	-	2 195	610	610	580	610	73,1	8,5
2 500	50	20	-	2 255	580	580	550	580	74,6	8,5
2 560	20	21	✓	2 315	550	550	520	550	76,1	8,5
2 620	50	21	✓	2 375	520	520	490	520	77,7	8,5
2 680	20	22	-	2 435	500	500	470	500	79,2	8,5
2 740	50	22	-	2 495	480	470	450	470	80,7	8,5
2 800	20	23	✓	2 555	450	450	430	450	82,2	8,5
2 860	50	23	✓	2 615	430	430	410	430	83,8	8,5

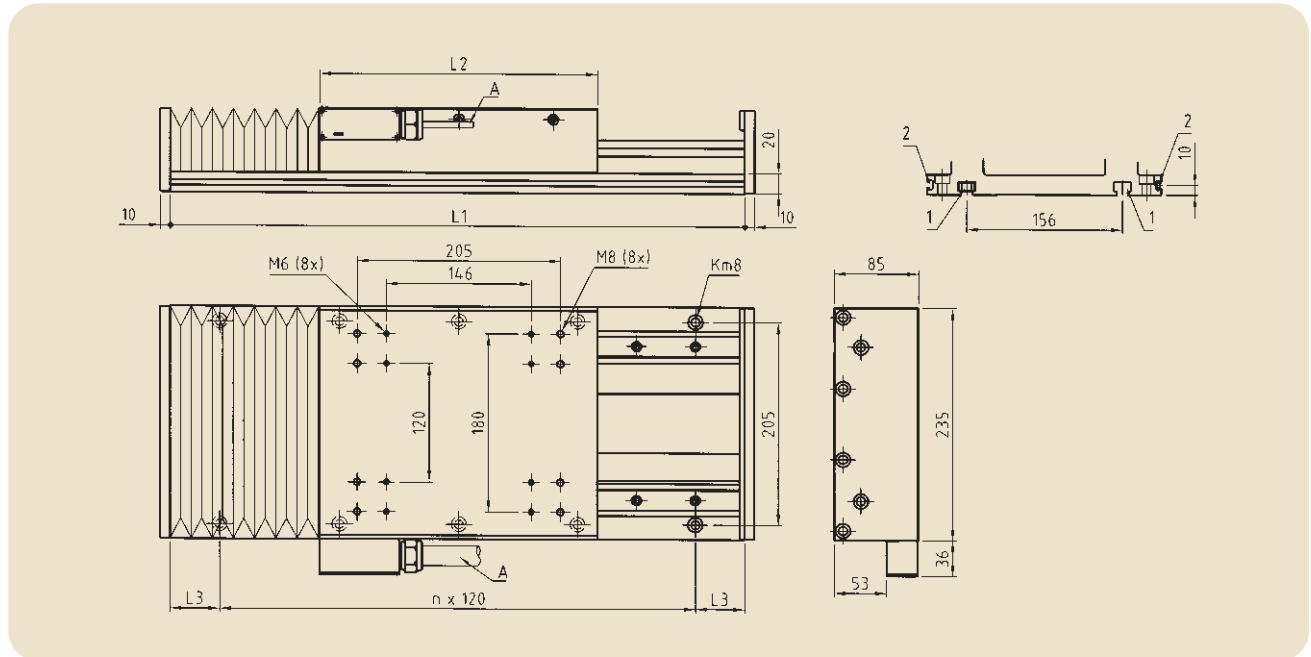
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>A</sub> = Total weight of table  
 G<sub>0</sub> = Weight of mobile mass of table top

## Rail guide tables with linear motor drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

Length			A32008					A33008				AC34008				
L1	L3	n	2) KN	4) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S1 S2		5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S1 S2		5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S1 S2		5) G <sub>0</sub>
mm		-		kg	mm			kg	mm			kg	mm			kg
340	50	2	-	8,8	235	75	95	8,0	320	-	-	10,6	410	-	-	13,1
400	20	3	✓	10,2	235	125	155	8,0	320	55	70	10,6	410	-	-	13,1
460	50	3	✓	11,6	235	175	215	8,0	320	105	130	10,6	410	-	-	13,1
520	20	4	-	12,9	235	225	275	8,0	320	155	190	10,6	410	80	100	13,1
580	50	4	-	14,3	235	270	335	8,0	320	205	250	10,6	410	130	160	13,1
640	20	5	✓	15,7	235	325	395	8,0	320	250	310	10,6	410	180	220	13,1
700	50	5	✓	17,1	235	375	455	8,0	320	300	370	10,6	410	230	280	13,1
760	20	6	-	18,4	235	425	515	8,0	320	350	430	10,6	410	275	340	13,1
820	50	6	-	19,8	235	475	575	8,0	320	405	490	10,6	410	325	400	13,1
880	20	7	✓	21,2	235	525	635	8,0	320	455	550	10,6	410	380	460	13,1
940	50	7	✓	22,6	235	575	695	8,0	320	505	610	10,6	410	430	520	13,1
1 000	20	8	-	23,9	235	625	755	8,0	320	555	670	10,6	410	480	580	13,1
1 060	50	8	-	25,3	235	680	815	8,0	320	605	730	10,6	410	530	640	13,1
1 120	20	9	✓	26,7	235	730	875	8,0	320	655	790	10,6	410	580	700	13,1
1 180	50	9	✓	28,1	235	780	935	8,0	320	710	850	10,6	410	630	760	13,1
1 240	20	10	-	29,4	235	825	995	8,0	320	760	910	10,6	410	680	820	13,1
1 300	50	10	-	30,8	235	875	1 055	8,0	320	805	970	10,6	410	735	880	13,1
1 360	20	11	✓	32,2	235	925	1 115	8,0	320	855	1 030	10,6	410	785	940	13,1
1 420	50	11	✓	33,6	235	980	1 175	8,0	320	905	1 090	10,6	410	830	1 000	13,1
1 480	20	12	-	34,9	235	1 030	1 235	8,0	320	955	1 150	10,6	410	880	1 060	13,1
1 540	50	12	-	36,3	235	1 080	1 295	8,0	320	1 005	1 210	10,6	410	930	1 120	13,1
1 600	20	13	✓	37,7	235	1 130	1 355	8,0	320	1 060	1 270	10,6	410	980	1 180	13,1
1 660	50	13	✓	39,1	235	1 180	1 415	8,0	320	1 110	1 330	10,6	410	1 035	1 240	13,1

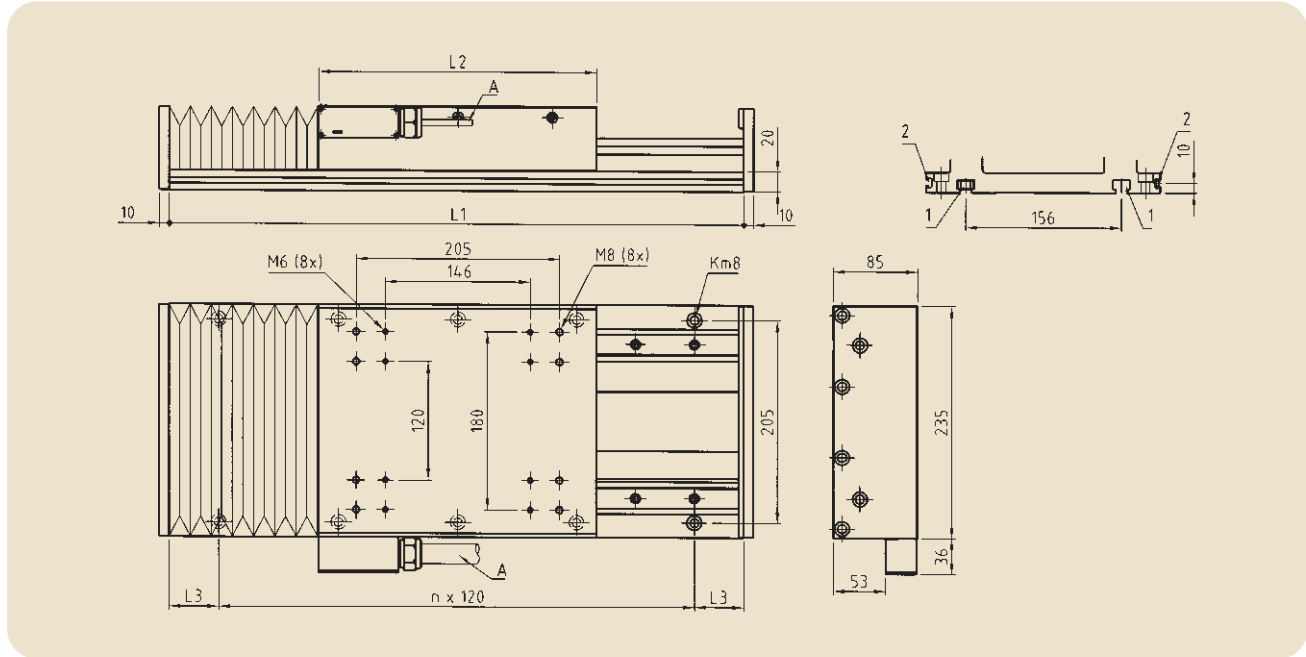
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>0</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top

## Rail guide tables with linear motor drive with or without bellows

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

Length			2) 4)		A32008				A33008				AC34008			
L1	L3	n	KN	G <sub>U</sub>	L2	Stroke <sup>3)</sup>		G <sub>0</sub>	L2	Stroke <sup>3)</sup>		G <sub>0</sub>	L2	Stroke <sup>3)</sup>		G <sub>0</sub>
mm	mm	-	kg	kg	mm	S1	S2	kg	mm	S1	S2	kg	mm	S1	S2	kg
1 720	20	14	-	40,4	235	1 230	1 475	8,0	320	1 160	1 390	10,6	410	1 085	1 300	13,1
1 780	50	14	-	41,8	235	1 280	1 535	8,0	320	1 210	1 450	10,6	410	1 135	1 360	13,1
1 840	20	15	✓	43,2	235	1 335	1 595	8,0	320	1 260	1 510	10,6	410	1 185	1 420	13,1
1 900	50	15	✓	44,6	235	1 385	1 655	8,0	320	1 310	1 570	10,6	410	1 235	1 480	13,1
1 960	20	16	-	45,9	235	1 430	1 715	8,0	320	1 360	1 630	10,6	410	1 285	1 540	13,1
2 020	50	16	-	47,3	235	1 480	1 775	8,0	320	1 410	1 690	10,6	410	1 330	1 600	13,1
2 080	20	17	✓	48,7	235	1 530	1 835	8,0	320	1 460	1 750	10,6	410	1 385	1 660	13,1
2 140	50	17	✓	50,1	235	1 580	1 895	8,0	320	1 510	1 810	10,6	410	1 435	1 720	13,1
2 200	20	18	-	51,4	235	1 635	1 955	8,0	320	1 560	1 870	10,6	410	1 485	1 780	13,1
2 260	50	18	-	52,8	235	1 685	2 015	8,0	320	1 610	1 930	10,6	410	1 535	1 840	13,1
2 320	20	19	✓	54,2	235	1 735	2 075	8,0	320	1 660	1 990	10,6	410	1 585	1 900	13,1
2 380	50	19	✓	55,6	235	1 785	2 135	8,0	320	1 715	2 050	10,6	410	1 635	1 960	13,1
2 440	20	20	-	56,9	235	1 835	2 195	8,0	320	1 765	2 110	10,6	410	1 690	2 020	13,1
2 500	50	20	-	58,3	235	1 880	2 255	8,0	320	1 815	2 170	10,6	410	1 740	2 080	13,1
2 560	20	21	✓	59,7	235	1 930	2 315	8,0	320	1 865	2 230	10,6	410	1 790	2 140	13,1
2 620	50	21	✓	61,1	235	1 985	2 375	8,0	320	1 910	2 290	10,6	410	1 840	2 200	13,1
2 680	20	22	-	62,4	235	2 035	2 435	8,0	320	1 960	2 350	10,6	410	1 885	2 260	13,1
2 740	50	22	-	63,8	235	2 085	2 495	8,0	320	2 015	2 410	10,6	410	1 935	2 320	13,1
2 800	20	23	✓	65,2	235	2 135	2 555	8,0	320	2 065	2 470	10,6	410	1 985	2 380	13,1
2 860	50	23	✓	66,6	235	2 185	2 615	8,0	320	2 115	2 530	10,6	410	2 040	2 440	13,1

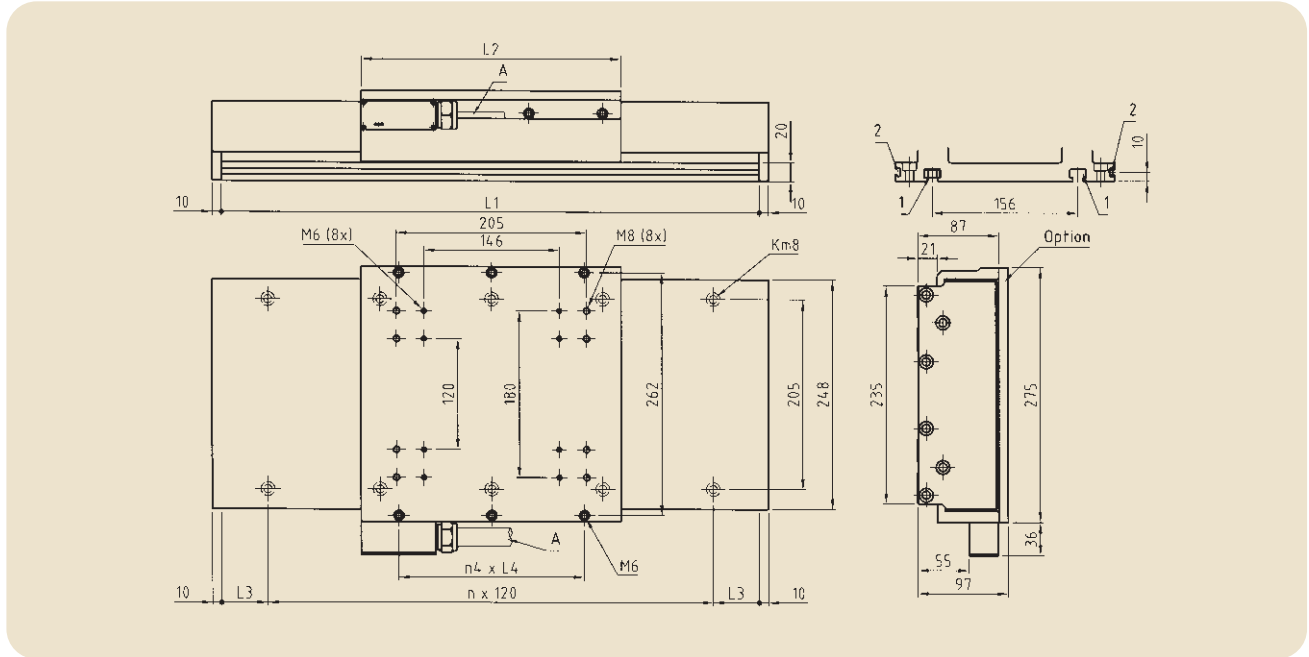
<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops:  
 S1 with bellows (standard version)  
 S2 without bellows (special version)

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with linear motor drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <---> +

Length				A32008					A33008					A34008				
L1	L3	n	2) 4) KN G <sub>U</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>			
mm		-	kg	mm			kg	mm			kg	mm			kg			
340	50	2	- 9,9	235	95	2x98	10,5	320	-	3x78	14,1	410	-	4x81,5	17,6			
400	20	3	✓ 11,5	235	155	2x98	10,5	320	70	3x78	14,1	410	-	4x81,5	17,6			
460	50	3	✓ 13,0	235	215	2x98	10,5	320	130	3x78	14,1	410	-	4x81,5	17,6			
520	20	4	- 14,5	235	275	2x98	10,5	320	190	3x78	14,1	410	100	4x81,5	17,6			
580	50	4	- 16,1	235	335	2x98	10,5	320	250	3x78	14,1	410	160	4x81,5	17,6			
640	20	5	✓ 17,6	235	395	2x98	10,5	320	310	3x78	14,1	410	220	4x81,5	17,6			
700	50	5	✓ 19,2	235	455	2x98	10,5	320	370	3x78	14,1	410	280	4x81,5	17,6			
760	20	6	- 20,7	235	515	2x98	10,5	320	430	3x78	14,1	410	340	4x81,5	17,6			
820	50	6	- 22,2	235	575	2x98	10,5	320	490	3x78	14,1	410	400	4x81,5	17,6			
880	20	7	✓ 23,8	235	635	2x98	10,5	320	550	3x78	14,1	410	460	4x81,5	17,6			
940	50	7	✓ 25,3	235	695	2x98	10,5	320	610	3x78	14,1	410	520	4x81,5	17,6			
1 000	20	8	- 26,9	235	755	2x98	10,5	320	670	3x78	14,1	410	580	4x81,5	17,6			
1 060	50	8	- 28,4	235	815	2x98	10,5	320	730	3x78	14,1	410	640	4x81,5	17,6			
1 120	20	9	✓ 29,9	235	875	2x98	10,5	320	790	3x78	14,1	410	700	4x81,5	17,6			
1 180	50	9	✓ 31,5	235	935	2x98	10,5	320	850	3x78	14,1	410	760	4x81,5	17,6			
1 240	20	10	- 33,0	235	995	2x98	10,5	320	910	3x78	14,1	410	820	4x81,5	17,6			
1 300	50	10	- 34,6	235	1 055	2x98	10,5	320	970	3x78	14,1	410	880	4x81,5	17,6			
1 360	20	11	✓ 36,1	235	1 115	2x98	10,5	320	1 030	3x78	14,1	410	940	4x81,5	17,6			
1 420	50	11	✓ 37,6	235	1 175	2x98	10,5	320	1 090	3x78	14,1	410	1 000	4x81,5	17,6			
1 480	20	12	- 39,2	235	1 235	2x98	10,5	320	1 150	3x78	14,1	410	1 060	4x81,5	17,6			
1 540	50	12	- 40,7	235	1 295	2x98	10,5	320	1 210	3x78	14,1	410	1 120	4x81,5	17,6			
1 600	20	13	✓ 42,3	235	1 355	2x98	10,5	320	1 270	3x78	14,1	410	1 180	4x81,5	17,6			
1 660	50	13	✓ 43,8	235	1 415	2x98	10,5	320	1 330	3x78	14,1	410	1 240	4x81,5	17,6			

<sup>2)</sup> Suitable as top axis for central cross table mounting

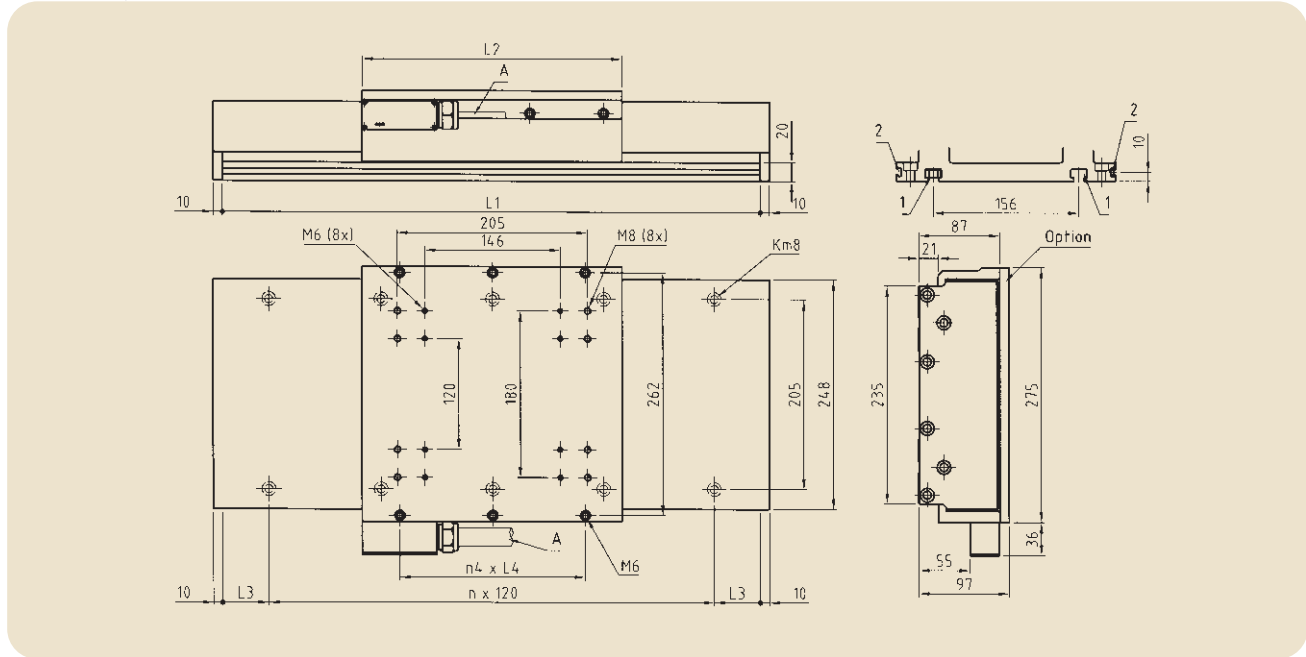
<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top



# Rail guide tables with linear motor drive with steel cover

T slots in bottom part:  
 Slot 1: for square nut DIN 562 M10  
 Slot 2: for square nut DIN 562 M5



A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <----> +

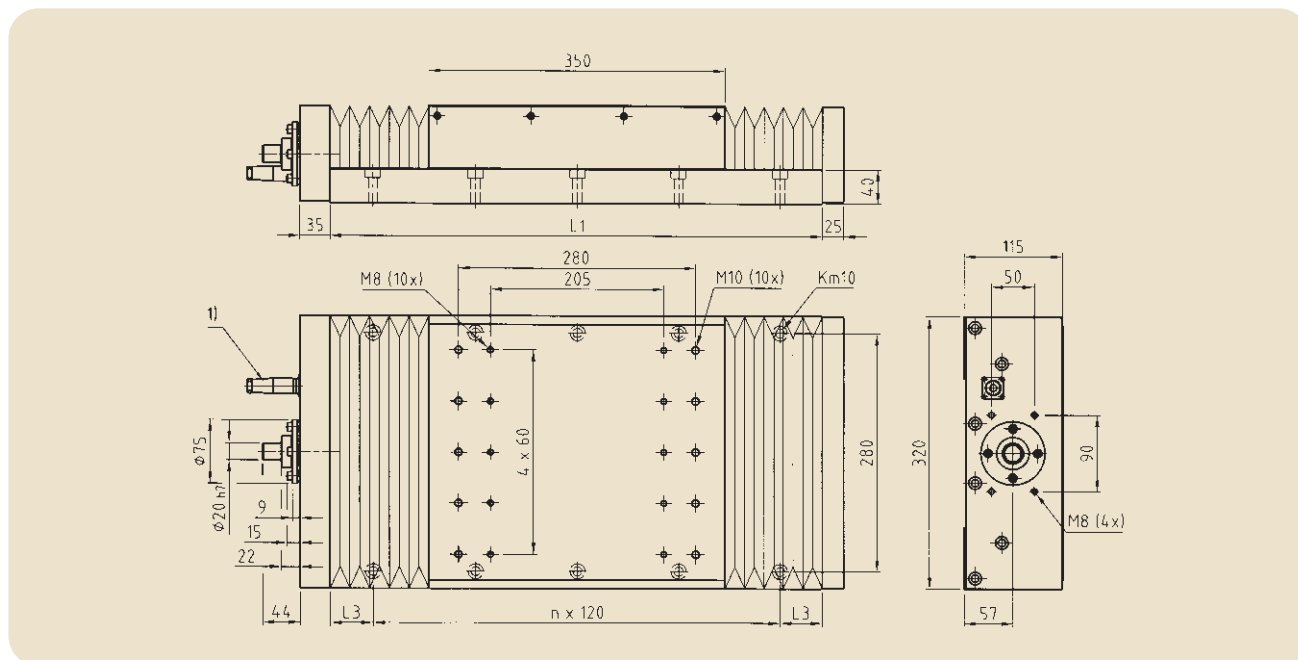
Length			A32008						A33008				A34008			
L1	L3	n	2) KN	4) G <sub>U</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	5) G <sub>0</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	G <sub>0</sub>	L2	Stroke <sup>3)</sup> S	n <sub>4xL4</sub>	G <sub>0</sub>
mm	-	-	kg	kg	mm	mm		kg	mm	mm		kg	mm	mm		kg
1 720	20	14	-	45,3	235	1 475	2x98	10,5	320	1 390	3x78	14,1	410	1 300	4x81,5	17,6
1 780	50	14	-	46,9	235	1 535	2x98	10,5	320	1 450	3x78	14,1	410	1 360	4x81,5	17,6
1 840	20	15	✓	48,4	235	1 595	2x98	10,5	320	1 510	3x78	14,1	410	1 420	4x81,5	17,6
1 900	50	15	✓	50,0	235	1 655	2x98	10,5	320	1 570	3x78	14,1	410	1 480	4x81,5	17,6
1 960	20	16	-	51,5	235	1 715	2x98	10,5	320	1 630	3x78	14,1	410	1 540	4x81,5	17,6
2 020	50	16	-	53,0	235	1 775	2x98	10,5	320	1 690	3x78	14,1	410	1 600	4x81,5	17,6
2 080	20	17	✓	54,6	235	1 835	2x98	10,5	320	1 750	3x78	14,1	410	1 660	4x81,5	17,6
2 140	50	17	✓	56,1	235	1 895	2x98	10,5	320	1 810	3x78	14,1	410	1 720	4x81,5	17,6
2 200	20	18	-	57,7	235	1 955	2x98	10,5	320	1 870	3x78	14,1	410	1 780	4x81,5	17,6
2 260	50	18	-	59,2	235	2 015	2x98	10,5	320	1 930	3x78	14,1	410	1 840	4x81,5	17,6
2 320	20	19	✓	60,7	235	2 075	2x98	10,5	320	1 990	3x78	14,1	410	1 900	4x81,5	17,6
2 380	50	19	✓	62,3	235	2 135	2x98	10,5	320	2 050	3x78	14,1	410	1 960	4x81,5	17,6
2 440	20	20	-	63,8	235	2 195	2x98	10,5	320	2 110	3x78	14,1	410	2 020	4x81,5	17,6
2 500	50	20	-	65,4	235	2 255	2x98	10,5	320	2 170	3x78	14,1	410	2 080	4x81,5	17,6
2 560	20	21	✓	66,9	235	2 315	2x98	10,5	320	2 230	3x78	14,1	410	2 140	4x81,5	17,6
2 620	50	21	✓	68,4	235	2 375	2x98	10,5	320	2 290	3x78	14,1	410	2 200	4x81,5	17,6
2 680	20	22	-	70,0	235	2 435	2x98	10,5	320	2 350	3x78	14,1	410	2 260	4x81,5	17,6
2 740	50	22	-	71,5	235	2 495	2x98	10,5	320	2 410	3x78	14,1	410	2 320	4x81,5	17,6
2 800	20	23	✓	73,1	235	2 555	2x98	10,5	320	2 470	3x78	14,1	410	2 380	4x81,5	17,6
2 860	50	23	✓	74,6	235	2 615	2x98	10,5	320	2 530	3x78	14,1	410	2 440	4x81,5	17,6

<sup>2)</sup> Suitable as top axis for central cross table mounting

<sup>3)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>5)</sup> G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with ball screw drive with or without bellows



1) Plug connection for limit and reference switches (optional)

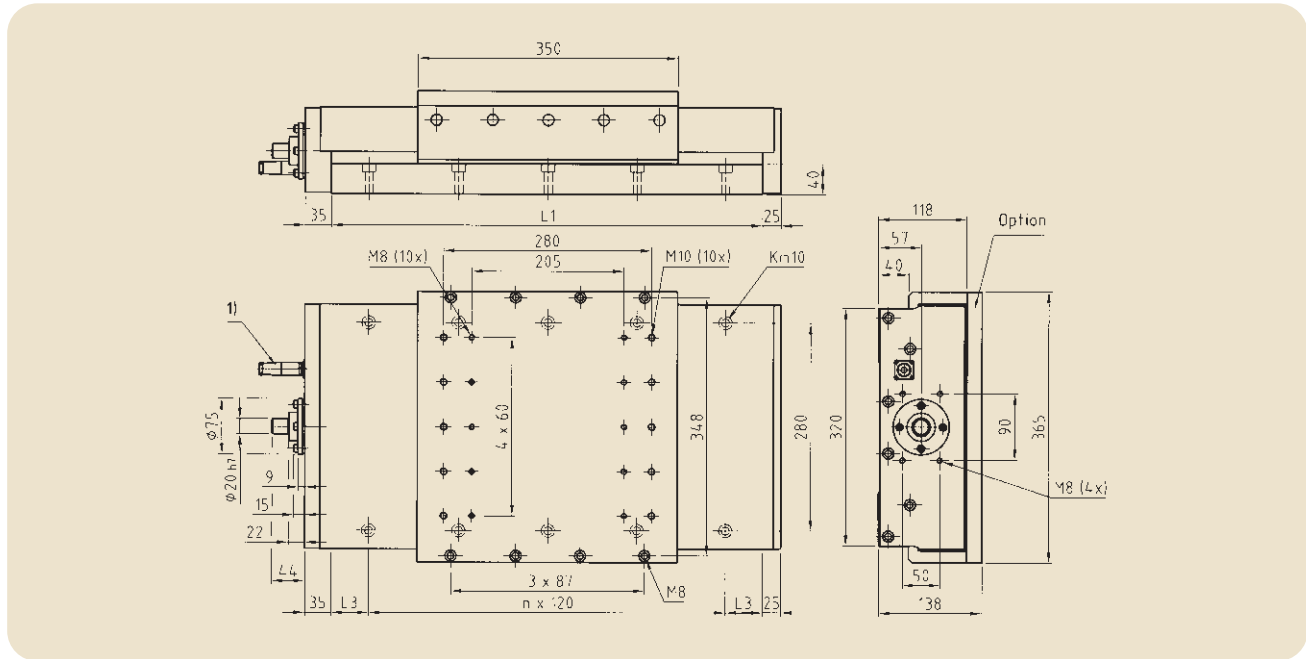
Direction of travel: - <---> +

Length			Stroke <sup>2)</sup>		Screw data					Weight <sup>3)</sup>	
L1	L3	n	S1	S2	SX3205 n <sub>max</sub>	TN3205 n <sub>max</sub>	SX3210 n <sub>max</sub>	TN3210 n <sub>max</sub>	TN3220+3232+3240 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm	mm	-	mm	mm	1/min					kg	
580	50	4	185	220	1 560	2 810	1 560	2 810	2 810	43,5	13,3
700	50	5	290	340	1 560	2 810	1 560	2 810	2 810	48,5	13,3
820	50	6	390	460	1 560	2 810	1 560	2 810	2 810	53,4	13,3
940	50	7	500	580	1 560	2 810	1 560	2 810	2 810	58,4	13,3
1 060	50	8	600	700	1 560	2 810	1 560	2 810	2 810	63,3	13,3
1 180	50	9	710	820	1 560	2 810	1 560	2 810	2 810	68,2	13,3
1 300	50	10	810	940	1 560	2 810	1 560	2 810	2 810	73,2	13,3
1 420	50	11	915	1 060	1 560	2 810	1 560	2 810	2 810	78,1	13,3
1 540	50	12	1 015	1 180	1 560	2 610	1 560	2 520	2 520	83,1	13,3
1 660	50	13	1 125	1 300	1 560	2 180	1 560	2 100	2 100	88,0	13,3
1 780	50	14	1 225	1 420	1 560	1 850	1 560	1 780	1 780	92,9	13,3
1 900	50	15	1 335	1 540	1 560	1 590	1 440	1 530	1 530	97,9	13,3
2 020	50	16	1 435	1 660	1 380	1 380	1 250	1 330	1 330	102,8	13,3
2 140	50	17	1 540	1 780	1 210	1 200	1 090	1 160	1 160	107,8	13,3
2 260	50	18	1 645	1 900	1 070	1 060	970	1 030	1 030	112,7	13,3
2 380	50	19	1 750	2 020	950	950	860	910	910	117,7	13,3
2 500	50	20	1 850	2 140	850	850	770	820	820	122,6	13,3
2 620	50	21	1 960	2 260	760	760	690	740	740	127,5	13,3
2 740	50	22	2 060	2 380	690	690	630	670	670	132,5	13,3
2 860	50	23	2 165	2 500	630	630	570	600	600	137,4	13,3

<sup>2)</sup> Maximum mechanical stroke between end stops:  
S1 with bellows (standard version)  
S2 without bellows (special version)

<sup>3)</sup> G<sub>A</sub> = Total weight of table  
G<sub>0</sub> = Weight of mobile mass of table top

# Rail guide tables with ball screw drive with steel cover



<sup>1)</sup> Plug connection for limit and reference switches (optional)

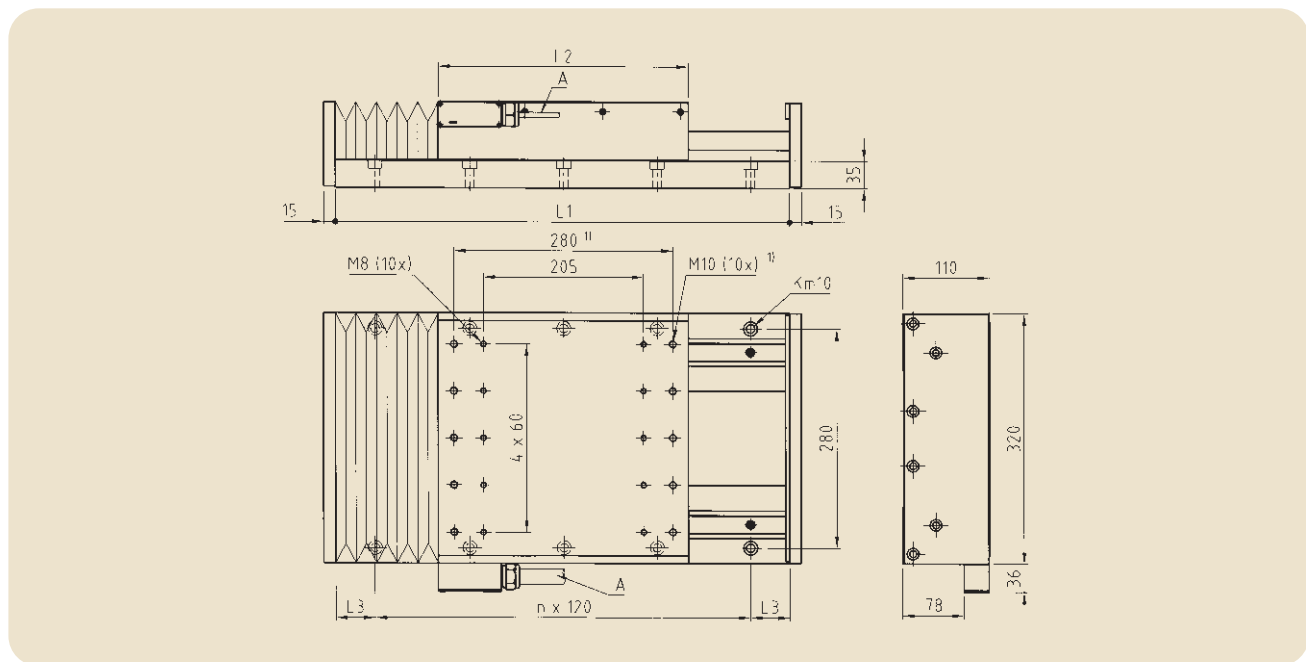
Direction of travel: - <----> +

Length			Stroke <sup>2)</sup> S	Screw data				TN3220+3232+3240 n <sub>max</sub>	Weight <sup>4)</sup>	
L1	L3	n		SX3205 n <sub>max</sub>	TN3205 n <sub>max</sub>	SX3210 n <sub>max</sub>	TN3210 n <sub>max</sub>		G <sub>A</sub>	G <sub>0</sub>
mm			mm	1/min				kg		
580	50	4	220	1 560	2 810	1 560	2 810	2 810	62,9	30,4
700	50	5	340	1 560	2 810	1 560	2 810	2 810	68,3	30,4
820	50	6	460	1 560	2 810	1 560	2 810	2 810	73,8	30,4
940	50	7	580	1 560	2 810	1 560	2 810	2 810	79,2	30,4
1 060	50	8	700	1 560	2 810	1 560	2 810	2 810	84,6	30,4
1 180	50	9	820	1 560	2 810	1 560	2 810	2 810	90,0	30,4
1 300	50	10	940	1 560	2 810	1 560	2 810	2 810	95,5	30,4
1 420	50	11	1 060	1 560	2 810	1 560	2 810	2 810	100,9	30,4
1 540	50	12	1 180	1 560	2 610	1 560	2 520	2 520	106,3	30,4
1 660	50	13	1 300	1 560	2 180	1 560	2 100	2 100	111,7	30,4
1 780	50	14	1 420	1 560	1 850	1 560	1 780	1 780	117,2	30,4
1 900	50	15	1 540	1 560	1 590	1 440	1 530	1 530	122,6	30,4
2 020	50	16	1 660	1 380	1 380	1 250	1 330	1 330	128,0	30,4
2 140	50	17	1 780	1 210	1 200	1 090	1 160	1 160	133,5	30,4
2 260	50	18	1 900	1 070	1 060	970	1 030	1 030	138,9	30,4
2 380	50	19	2 020	950	950	860	910	910	144,3	30,4
2 500	50	20	2 140	850	850	770	820	820	149,7	30,4
2 620	50	21	2 260	760	760	690	740	740	155,2	30,4
2 740	50	22	2 380	690	690	630	670	670	160,6	30,4
2 860	50	23	2 500	630	630	570	600	600	166,0	30,4

<sup>2)</sup> Maximum mechanical stroke between end stops

<sup>3)</sup> G<sub>A</sub> = Total weight of table  
G<sub>0</sub> = Weight of mobile mass of table top

# Rail guide tables with linear motor drive with or without bellows



<sup>1)</sup> only at size A33014 + A34014

A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

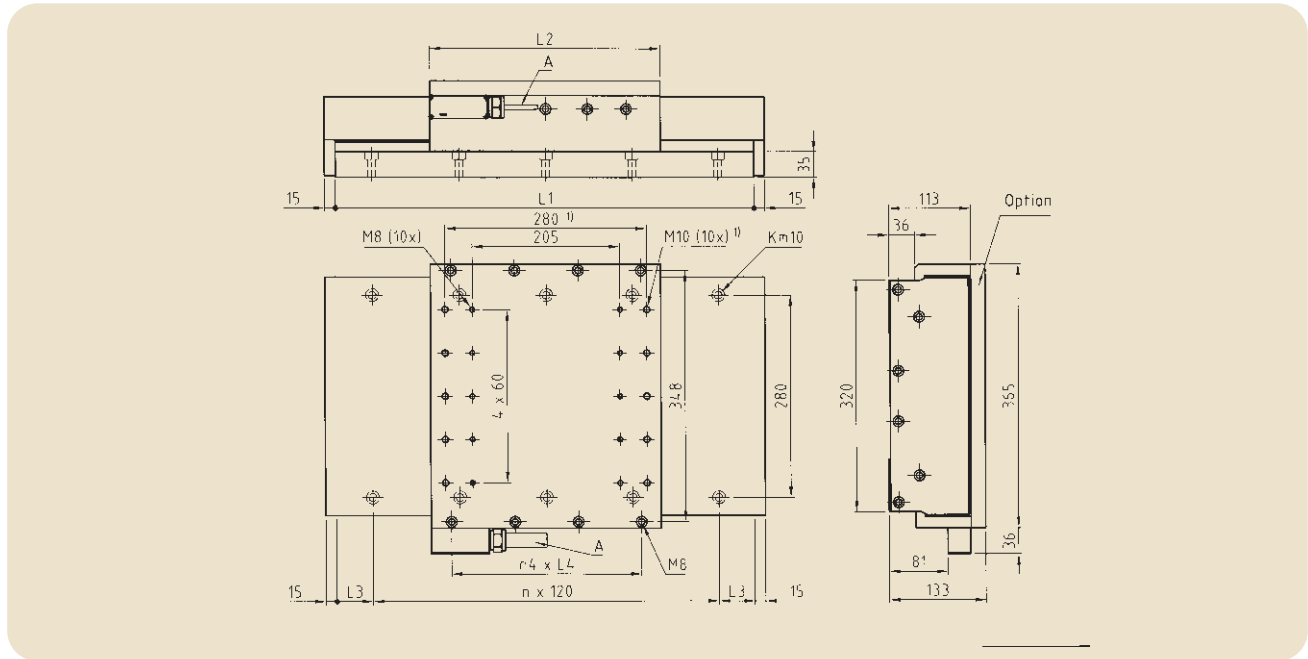
Direction of travel: - <---> +

Length			A32014					A33014					A34014				
L1	L3	n	<sup>3)</sup> G <sub>U</sub>	Stroke <sup>2)</sup>				<sup>4)</sup> G <sub>0</sub>	Stroke <sup>2)</sup>				<sup>4)</sup> G <sub>0</sub>	Stroke <sup>2)</sup>			
mm		-	kg	mm			kg	mm			kg	mm			kg		
580	50	4	30,4	280	245	290	15,3	320	215	250	18,7	410	130	160	23,8		
700	50	5	36,1	280	350	410	15,3	320	315	370	18,7	410	235	280	23,8		
820	50	6	41,9	280	455	530	15,3	320	420	490	18,7	410	340	400	23,8		
940	50	7	47,6	280	555	650	15,3	320	525	610	18,7	410	445	520	23,8		
1 060	50	8	53,3	280	665	770	15,3	320	630	730	18,7	410	545	640	23,8		
1 180	50	9	59,1	280	765	890	15,3	320	730	850	18,7	410	655	760	23,8		
1 300	50	10	64,8	280	875	1 010	15,3	320	840	970	18,7	410	755	880	23,8		
1 420	50	11	70,5	280	975	1 130	15,3	320	940	1 090	18,7	410	865	1 000	23,8		
1 540	50	12	76,3	280	1 080	1 250	15,3	320	1 045	1 210	18,7	410	965	1 120	23,8		
1 660	50	13	82,0	280	1 180	1 370	15,3	320	1 150	1 330	18,7	410	1 070	1 240	23,8		
1 780	50	14	87,7	280	1 290	1 490	15,3	320	1 255	1 450	18,7	410	1 170	1 360	23,8		
1 900	50	15	93,5	280	1 390	1 610	15,3	320	1 355	1 570	18,7	410	1 280	1 480	23,8		
2 020	50	16	99,2	280	1 500	1 730	15,3	320	1 465	1 690	18,7	410	1 380	1 600	23,8		
2 140	50	17	104,9	280	1 600	1 850	15,3	320	1 565	1 810	18,7	410	1 490	1 720	23,8		
2 260	50	18	110,7	280	1 705	1 970	15,3	320	1 675	1 930	18,7	410	1 590	1 840	23,8		
2 380	50	19	116,4	280	1 810	2 090	15,3	320	1 775	2 050	18,7	410	1 695	1 960	23,8		
2 500	50	20	122,1	280	1 915	2 210	15,3	320	1 880	2 170	18,7	410	1 800	2 080	23,8		
2 620	50	21	127,9	280	2 015	2 330	15,3	320	1 985	2 290	18,7	410	1 905	2 200	23,8		
2 740	50	22	133,6	280	2 125	2 450	15,3	320	2 090	2 410	18,7	410	2 005	2 320	23,8		
2 860	50	23	139,3	280	2 225	2 570	15,3	320	2 190	2 530	18,7	410	2 115	2 440	23,8		

<sup>2)</sup> Maximum mechanical stroke between end stops:  
S1 with bellows (standard version)  
S2 without bellows (special version)

<sup>3)</sup> G<sub>U</sub> = Stationary mass of bottom part  
<sup>4)</sup> G<sub>0</sub> = Mobile mass of table top

# Rail guide tables with linear motor drive with steel cover



<sup>1)</sup> only at size A33014 + A34014

A cable output for motor and measuring system. Flat ribbon cable 20 x 6.3 mm

Direction of travel: - <---> +

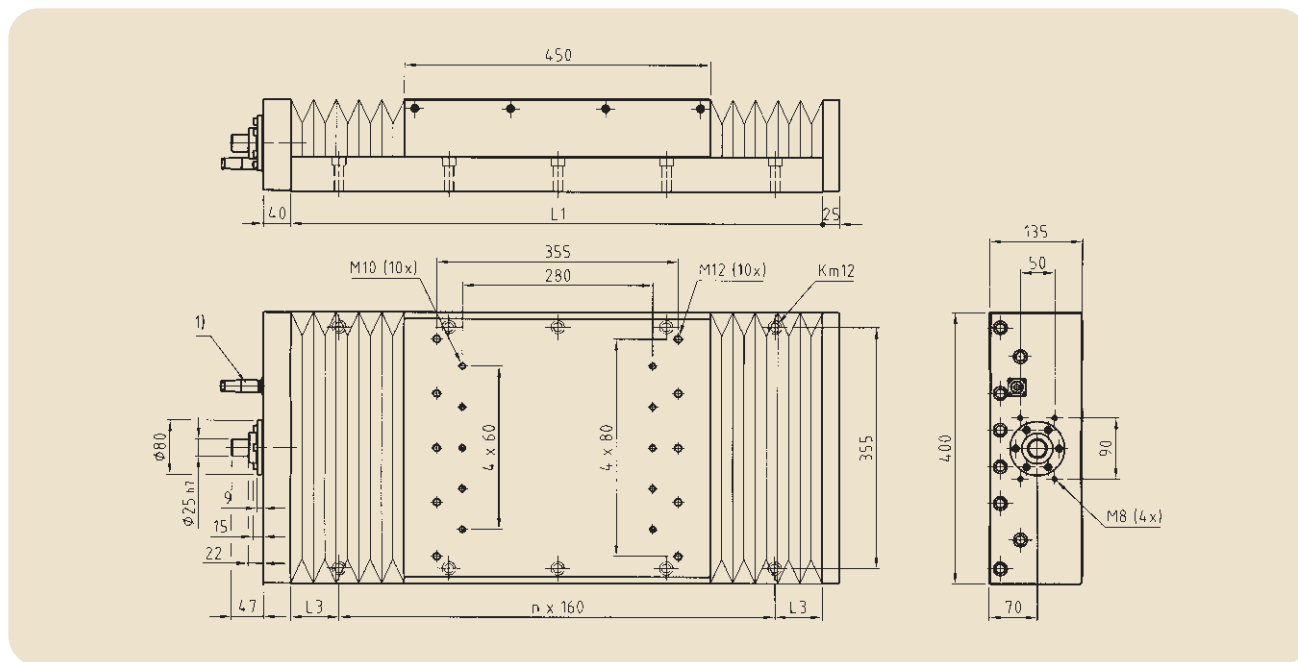
Length			A32014				A33014				A34014				
L1	L3	n	<sup>3)</sup> G <sub>U</sub>	L2	Stroke <sup>2)</sup> S	n <sub>4xL4</sub>	<sup>4)</sup> G <sub>O</sub>	L2	Stroke <sup>2)</sup> S	n <sub>4xL4</sub>	<sup>4)</sup> G <sub>O</sub>	L2	Stroke <sup>2)</sup> S	n <sub>4xL4</sub>	<sup>4)</sup> G <sub>O</sub>
mm		-	kg	mm			kg	mm			kg	mm			kg
580	50	4	32,6	280	290	3x75	22,3	320	250	3x87	26,8	410	160	4x88	34,1
700	50	5	38,7	280	410	3x75	22,3	320	370	3x87	26,8	410	280	4x88	34,1
820	50	6	44,9	280	530	3x75	22,3	320	490	3x87	26,8	410	400	4x88	34,1
940	50	7	51,0	280	650	3x75	22,3	320	610	3x87	26,8	410	520	4x88	34,1
1 060	50	8	57,2	280	770	3x75	22,3	320	730	3x87	26,8	410	640	4x88	34,1
1 180	50	9	63,3	280	890	3x75	22,3	320	850	3x87	26,8	410	760	4x88	34,1
1 300	50	10	69,5	280	1 010	3x75	22,3	320	970	3x87	26,8	410	880	4x88	34,1
1 420	50	11	75,6	280	1 130	3x75	22,3	320	1 090	3x87	26,8	410	1 000	4x88	34,1
1 540	50	12	81,8	280	1 250	3x75	22,3	320	1 210	3x87	26,8	410	1 120	4x88	34,1
1 660	50	13	87,9	280	1 370	3x75	22,3	320	1 330	3x87	26,8	410	1 240	4x88	34,1
1 780	50	14	94,1	280	1 490	3x75	22,3	320	1 450	3x87	26,8	410	1 360	4x88	34,1
1 900	50	15	100,2	280	1 610	3x75	22,3	320	1 570	3x87	26,8	410	1 480	4x88	34,1
2 020	50	16	106,4	280	1 730	3x75	22,3	320	1 690	3x87	26,8	410	1 600	4x88	34,1
2 140	50	17	112,5	280	1 850	3x75	22,3	320	1 810	3x87	26,8	410	1 720	4x88	34,1
2 260	50	18	118,7	280	1 970	3x75	22,3	320	1 930	3x87	26,8	410	1 840	4x88	34,1
2 380	50	19	124,8	280	2 090	3x75	22,3	320	2 050	3x87	26,8	410	1 960	4x88	34,1
2 500	50	20	130,9	280	2 210	3x75	22,3	320	2 170	3x87	26,8	410	2 080	4x88	34,1
2 620	50	21	137,1	280	2 330	3x75	22,3	320	2 290	3x87	26,8	410	2 200	4x88	34,1
2 740	50	22	143,2	280	2 450	3x75	22,3	320	2 410	3x87	26,8	410	2 320	4x88	34,1
2 860	50	23	149,4	280	2 570	3x75	22,3	320	2 530	3x87	26,8	410	2 440	4x88	34,1

<sup>2)</sup> Maximum mechanical stroke between end stops

<sup>4)</sup> G<sub>U</sub> = Stationary mass of bottom part

<sup>5)</sup> G<sub>O</sub> = Mobile mass of table top

# Rail guide tables with ball screw drive with or without bellows



<sup>1)</sup> Plug connection for limit and reference switches (optional)

Direction of travel: - <---> +

Length			Stroke <sup>2)</sup>		Screw data					Weight <sup>3)</sup>	
L1	L3	n	S1	S2	SX4005 n <sub>max</sub>	TN4005 n <sub>max</sub>	SX4010 n <sub>max</sub>	TN4010 n <sub>max</sub>	TN4020+4040 n <sub>max</sub>	G <sub>A</sub>	G <sub>0</sub>
mm		-	mm		1/min					kg	
620	70	3	135	160	1 250	2 250	1 250	2 250	2 250	77,0	25,2
780	70	4	275	320	1 250	2 250	1 250	2 250	2 250	87,7	25,2
940	70	5	420	480	1 250	2 250	1 250	2 250	2 250	98,4	25,2
1 100	70	6	560	640	1 250	2 250	1 250	2 250	2 250	109,1	25,2
1 260	70	7	700	800	1 250	2 250	1 250	2 250	2 250	119,8	25,2
1 420	70	8	850	960	1 250	2 250	1 250	2 250	2 250	130,5	25,2
1 580	70	9	990	1 120	1 250	2 250	1 250	2 250	2 250	141,2	25,2
1 740	70	10	1 130	1 280	1 250	2 250	1 250	2 250	2 250	151,9	25,2
1 900	70	11	1 270	1 440	1 250	2 150	1 250	1 980	1 980	162,6	25,2
2 060	70	12	1 410	1 600	1 250	1 780	1 250	1 630	1 630	173,3	25,2
2 220	70	13	1 555	1 760	1 250	1 490	1 250	1 370	1 370	184,0	25,2
2 380	70	14	1 695	1 920	1 250	1 270	1 180	1 160	1 160	194,7	25,2
2 540	70	15	1 835	2 080	1 090	1 090	1 010	1 000	1 000	205,4	25,2
2 700	70	16	1 975	2 240	950	950	880	870	870	216,1	25,2
2 860	70	17	2 125	2 400	840	830	770	760	760	226,8	25,2

<sup>2)</sup> Maximum mechanical stroke between end stops:  
S1 with bellows (standard version)  
S2 without bellows (special version)

<sup>3)</sup> G<sub>A</sub> = Total weight of table  
G<sub>0</sub> = Weight of mobile mass of table top

# Ordering details

For linear motor slides, the following additional details are required:

- Moving mass
- Possibly applied additional forces
- Maximum and minimum speeds; maximum acceleration
- Percentage duty cycle (description of operating cycle)
- Requirements of measuring system such as signal period and accuracy
- Required positioning resolution
- Information on triggering

Please fill in the specification sheet on page 35 and return it to us.

Type designation

LTB 320 · 1900 · A33014 - BL - P5

Width of table: See dimension specifications  
110 to 400 width of bottom part

Length of table: See dimension specifications  
150 to 2860 L1 Length of bottom part

## Drive:

Ball screw: See page 6 for further information

SH	no preload
SX	no preload
TN	preloaded
TL	preloaded
12 to 40	screw diameter
04 to 40	screw lead

Linear motor drive: See page 7 for further information

F	motor type
A	motor type
2 - 3	number of motor phases
09 - 40	primary part length [cm]
06 - 14	primary part width [cm]

Covers: See page 8 for further information

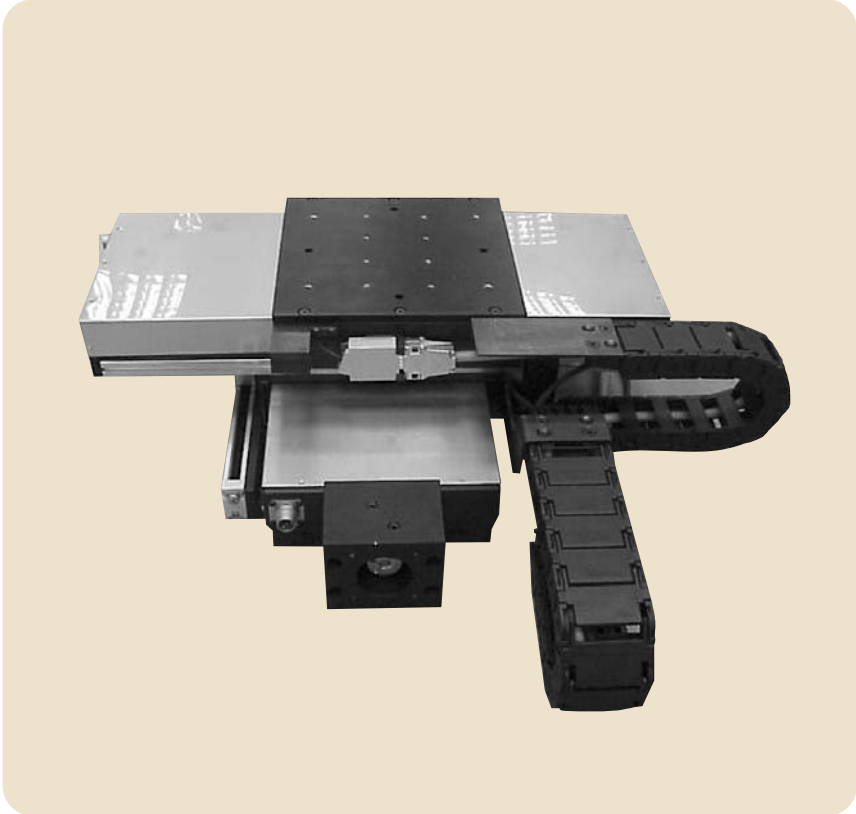
WBL	without bellows
BL	with bellows
-	without cover
SC	with steel cover
SCAP	with steel cover and adapter plate

## table precision:

See page 8 for further information  
P10, P5, P2, P1

# Application samples

Solder paste printer

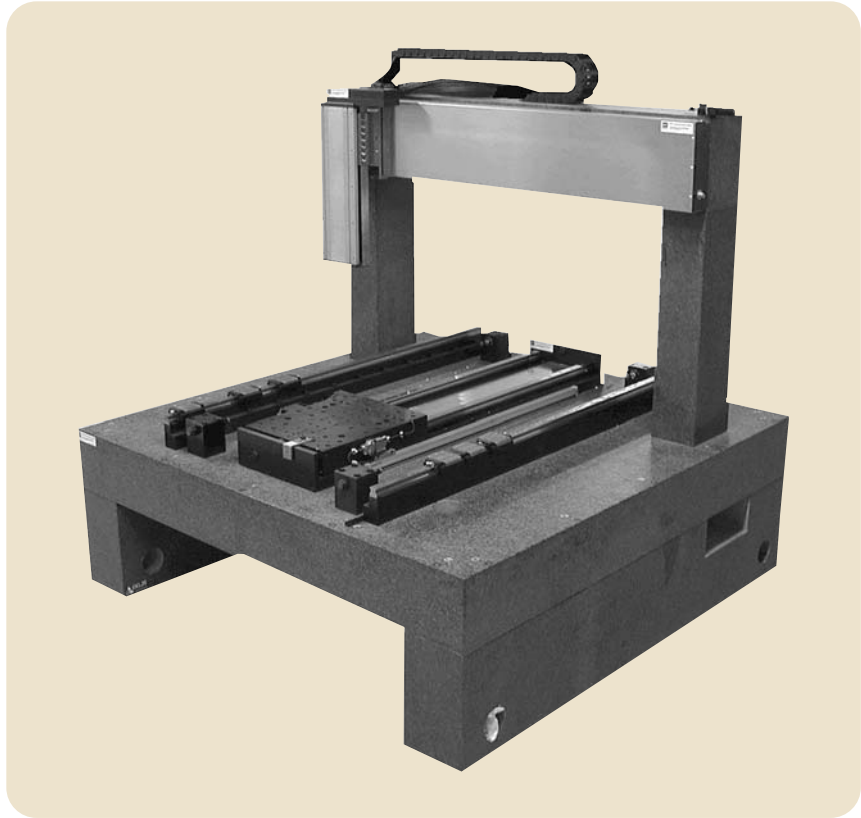


Drive for a milling / drilling unit

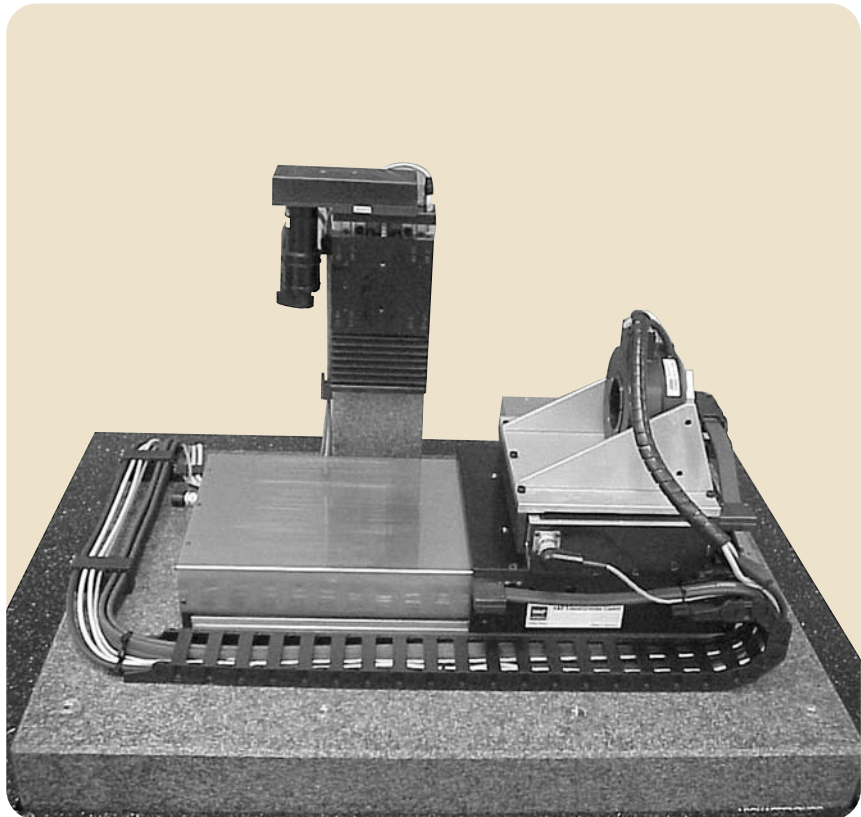




Laser cutting



Laser welding



# Possible application schemes

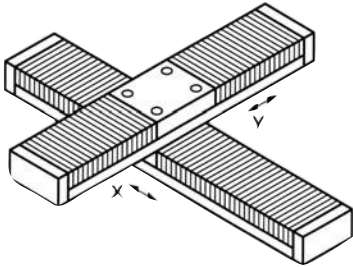


Fig. 1: Cross table X + Y

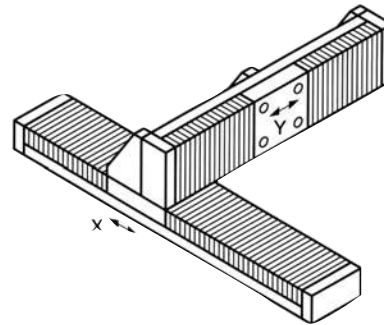


Fig. 2: Gantry X + Y

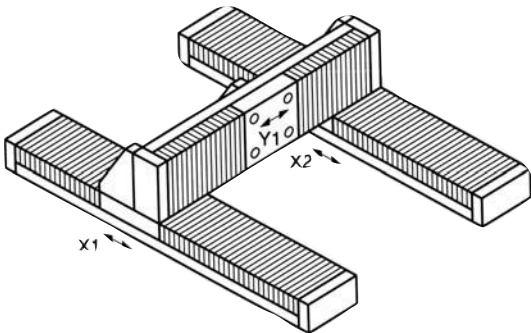


Fig. 3: Gantry X1/X2 + Y

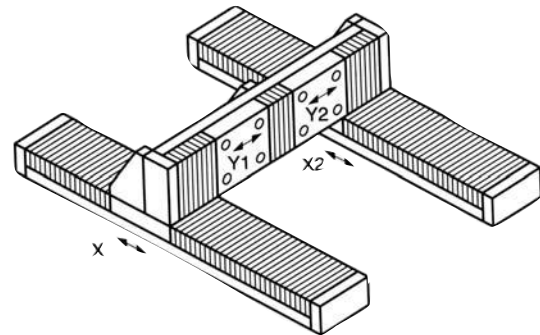


Fig. 4: Gantry X1/X2 + Y1 + Y2

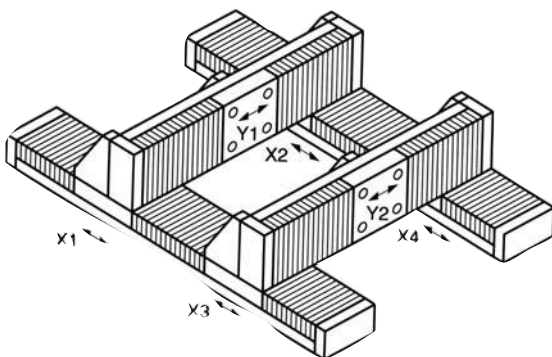


Fig. 5: Gantry X1/X2 + X3/X4 + Y1 + Y2

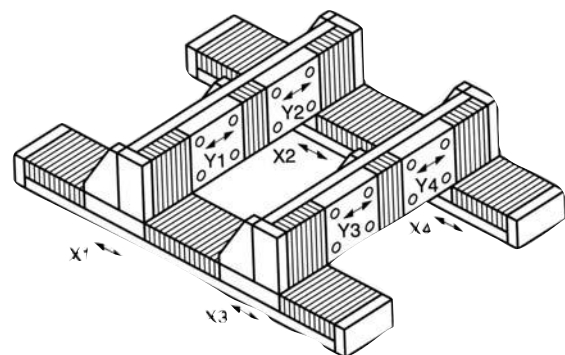


Fig. 6: Gantry X1/X2 + X3/X4 + Y1 + Y2 + Y3 + Y4

# Specification sheet for the selection of rail guide tables

1. Customer / customer address: .....

2. Application: .....

3. Number of axes in system: .....

4. Effective stroke / operating stroke [mm]: .....

5. Loads: additional moving mass [kg]: .....  
 additional force [N]: .....  
 direction of force [ $\pm X$ ,  $\pm Y$ ,  $\pm Z$ ]: .....

6. Speed: maximum [m/s]: .....  
 minimum [m/s]: .....

7. Acceleration: maximum [ $m/s^2$ ]: .....

8. Mode of operation: duty cycle (ED) [%]: .....  
 length of one operating cycle [s]: .....  
 interval between two operating cycles [s]: .....

operating hours per year [h]: .....

operating hours [h]: .....

9. Specification life: .....

10. Precision: straightness T [ $\mu m/S$ ]: .....  
 positioning tolerance (absolute positioning accuracy) [ $\mu m$ ]: .....  
 positioning variance Ps (repeating accuracy) [ $\mu m$ ]: .....  
 positioning resolution [ $\mu m$ ]: .....

X	Y	Z
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
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.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

11. Control: Components: only servo control  .....  
 complete control unit  .....  
 Positioning: linear path control  .....  
 continuous path control  .....

Interfaces: .....

Options: .....

12. Environmental conditions: (contamination, interference fields, place of operation).....

13. Accessories: (such as energy chain, cabling etc.).....

14. For multi-axial systems: arrangement of axes in accordance with drawings (see page 34).....

15. Remarks: .....

Filled in by / on:

# Notes





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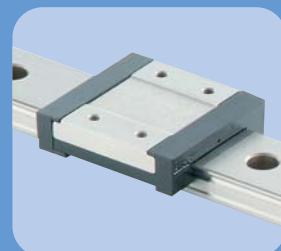
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