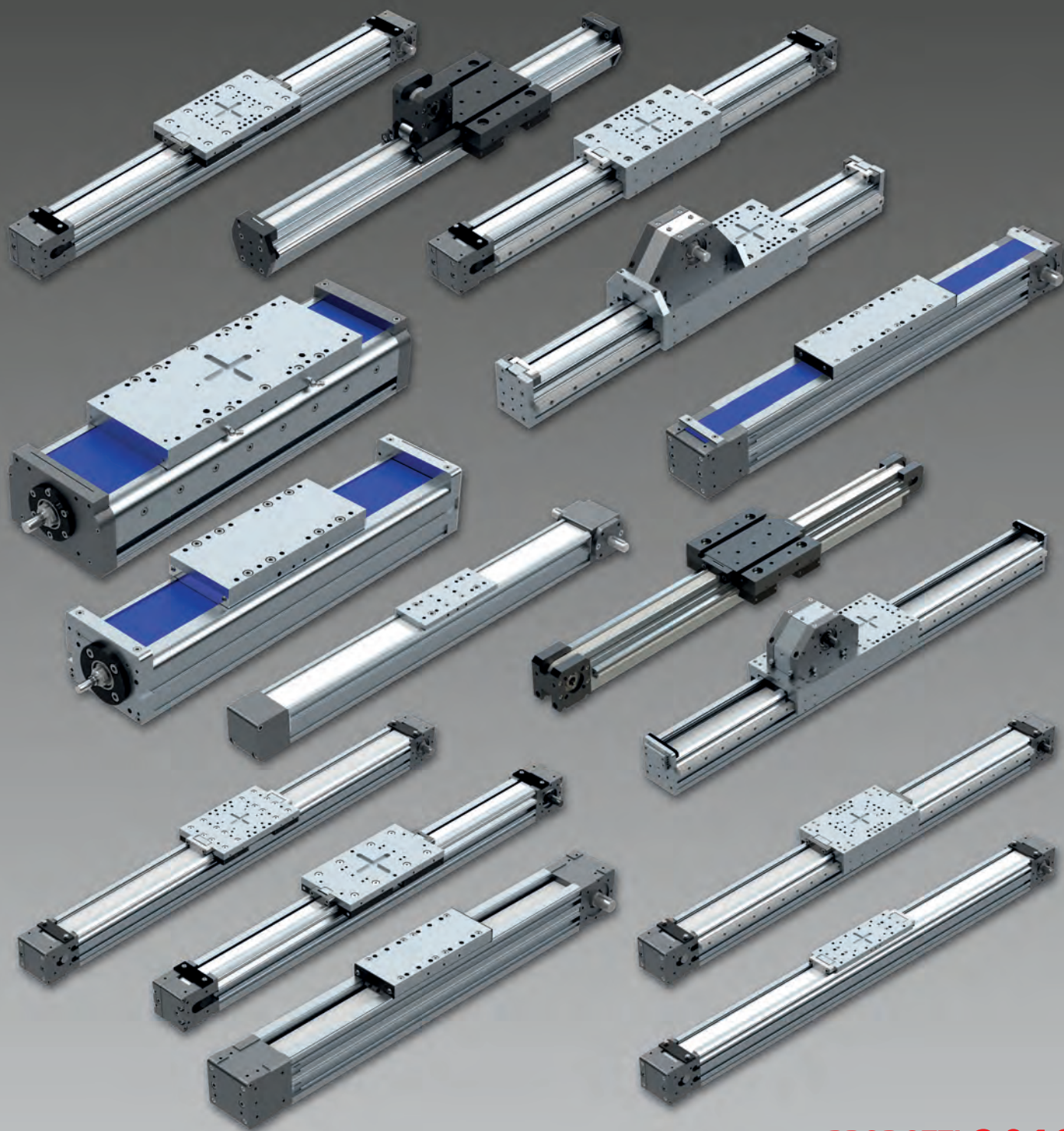




Assi di traslazione lineare
Motion linear axis



Progettazione e produzione di sistemi di traslazione.
Design and manufacture of translation systems.

PRODOTTI 2018
PRODUCTS



LITEK[®]
BY LINEARTECK srl

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LINEARTECK srl

Via Collodi 3/b I-40012 Calderara di Reno (BO) Italy



LITEK
unità lineari

TECHNICAL CHARACTERISTICS LITEK TOOTHED BELT LINEAR UNITS

Litek Linear Units were created with the express purpose of being affidable at a low cost while maintaining a high technological standard.

They are designed to be simple and functional for assembly, maintenance, and replacement of wear-and-tear parts due to the work cycle over time.

Linear units perform the task of alternatively moving (back and forth) organs, assemblies, and anything else required for industrial purposes.

Toothed Belt Units consist of the following assemblies:

- Bearing House
- Bearing House Referral
- Structural Profile
- Mobile Carriage
- Internal Transmission of Motion
- External Motorization

Toothed Belt Units are not among the high pre-precision systems for translation and repeatability, which are still around excellent values of 0.1-0.2 mm. This depends on the actual tolerances on the pitch of the belt teeth due to the limits imposed by rubber vulcanization. With the toothed belt drive as a counterpart, high travel and acceleration speeds are endured, with low inertia and low friction.

External motorization is variable and chosen according to duty cycle, required reliability, and cost. For each external motorization there are kits of components required for coupling to the unit (drive head shaft, direct motor or gearmotor coupling cam-pan).

Important: is the sound anchorage and concrete positioning of the units on the supporting structures to ensure perfect alignment of linearity in the plane and laterally and thus perfect movement of the carriage while avoiding damaging overloading of the rolling traversing parts (track rollers or recirculating ball carriages).

TERMS AND CONDITIONS OF USE

Terms of use

Linear units are guaranteed for use between -10°C and +80°C, dirty environments and hostile conditions require the adoption of the closed and pressurized version of the unit (available for different sizes), however on a case-by-case consultation with the Technical Department.

Tampering Control

Screws and nuts placed at adjustment or tightening points are marked with paint, so tampering is immediately evident.

Also considered as tampering are, runaway motor crashes, impacts from external bodies, introduction of various materials, unintended uses, lack of control and maintenance.

Warranty - Standards

Litek Modular Units are guaranteed against manufacturing defects and inspected before being shipped to the customer. In case the units need maintenance work, divided by normal working wear and tear, the customer is required to read Litek's Instructions before proceeding and in case contact Linearteck's technical department.

We disclaim responsibility for any errors, tampering or damage caused in use, and if our recommendations or procedures should not be applied.

Belt check

Visual and tactile inspection is very important for the proper functioning and durability of the units. The first check to be made

is to see if the drive belt is tensioned to the right point, and if it turns perfectly in the center of its seat. For centering proceed through one of the two adjusting screws (on the head opposite the motor for ML-MG-MPs or on the carriage for CM-CGs) by turning the screw a few degrees one way or the other and check the belt with the carriage in motion how it behaves, having obtained the desired direction of displacement insist step by step always with the unit in motion until the belt position in the center is reached.

Belt tensioning

Cyclically (at least every 2000 working hours) when the unit is stopped, check if the belt has maintained the correct tensioning, to accurately measure the belt tensioning use a "Belt Tension Meter" that is an instrument equipped with a microphone that by measuring the frequency through a formula returns a force value. Move the carriage so that there is a free portion of belt to vibrate of 500mm (Lf), at this distance the frequencies of correct tensioning must be: 76 Hz for pitch 5 belts and 88 Hz for pitch 8 belts. To act on the tensioning, by means of the two screws described above, act uniformly, achieving optimum tension for constant carriage movement, without overloading the pulley bearings, ensuring repetitiveness in positioning that would otherwise not be possible.

Belt replacement

Belt replacement on average is recommended before 12000 operating hours. In the case that the application has static +

dynamic Fx values with safety factor <5 from the value given in the catalog consider early replacement even after an analysis of the condition of the belt. However, do not exceed 5 years of operation due to aging causes of the belt itself.

To replace, loosen the belt completely using the procedure described in tensioning, completely remove the two belt clamps attached to the front of the carriage ends, slide out the belt with the caveat that a gap long enough to facilitate insertion of the new belt should be tied at one end, but first make sure the length is the same as the replaced

one, if necessary cut off the excess with sheet-metal scissors or a cutter, check that in inserting the belt does not twist and that it faces with the teeth toward the center of the module, insert it in the clamps as the old one was placed, clamp the clamps on the carriage then proceed to tensioning as described in the appropriate chapter, it is extremely important to control the centering with the unit in motion (refer to the appropriate chapter).

MAINTENANCE

Maintenance of units with sliding shafts and casters (ML-CM)

Checking the casters. If all casters rotate at the same speed we are in the correct condition, it means that they all have the same preload and only in this case the loads applied on the carriage are distributed equally on each caster. If, on the other hand, only some casters rotate those that creep will not bear any load but will wear both the contact track and the slide bar and those that rotate will bear all the load by themselves. Ultimately all this shortens the life of the track rollers, greater geometrical errors during movement and early decay of the life of the raceways and the rolling elements that make them up. The unit needs immediate maintenance so as not to permanently compromise the track bars (it is much easier and cheaper to replace the rollers than the track bars).

Adjusting or Replacing Casters

Castors can be divided into 2 types: Fixed and Adjustable (both with protective caps). Fixed Castors are the reference point of the carriage with respect to the profile, and are not affected by adjustment because they are mounted in calibrated holes. The Adjustable Castors are those that bring rigidity to the system, which is necessary to obtain the load capacity values loads and moments stated in the catalog. The Adjustable Castors because of their importance must be preloaded very carefully, this approach is achieved by means of grains acting on the shanks of the pins, this with the nuts loosened just enough for the pins to move. (The preload grains are protected by an additional grain).

To intervene on the rollers, remove the protective caps by unscrewing the 2 screws that fasten them; once the caps have been removed, the rollers are visible, so try using two fingers to turn them without the carriage moving; if this happens, it means that they are unloaded; preload them by doing the following: slightly loosen the nut that fastens the rollers without creating play, then turn clockwise the adjusting screws slowly on all the adjustable rollers, until you notice an increase in friction on the sliding bars when turning them with your fingers with the carriage locked, it is essential that the resistance is the same in all the rollers and that there is no play on the pins, at this point turn the two screws clockwise again by about 20° reinsert the locking and tighten the nuts of the pins as they were before.

In any replacement of the rollers, first arrange the fixed ones, then proceed with the adjustable ones as indicated above. Recall that the protective caps also serve to clean and lubricate the slide bars, keep a certain amount of grease in the seats of the two side felt pads through the removal of the two grains on the back of the cap. We also recall that the grains act as a spring register by pressure on the felt.

Maintenance of units with prismatic guides and recirculating ball carriages (MG-CG-MP-LV)

Lubrication: Profile rail systems receive initial in-greasing at the time of assembly, and then need periodic routine maintenance depending on conditions of use. Suitable grease types range from 000 to 3 (NLGI consistency class), lithium soap or lithium complex soap greases based on mineral oil are recommended.

The viscosity of the base oil should be from ISO-VG 68 up to ISO-VG100. At high loads, greases with EP additives are required. Based on current experience, linear units lubricated with mineral oil-based greases, can be kept stored for periods of up to three years under normal conditions (0°C-40°C; humidity <65%; "clean" environment). Lubrication interval **Tf**: In order to roughly calculate the lubrication interval in hours before, it is necessary to calculate the speed index GWK defined as follows: $GWK=60/v \times 2$ (v=average displacement speed,[m/min])

For values obtained:

$GWK=0,5 \rightarrow Tf=200-400h$; $GWK=0,5-1 \rightarrow Tf=400-1500h$;

$GWK=1-2 \rightarrow Tf=1500-4000h$; $GWK=2-3 \rightarrow Tf=4000-8000h$;

$GWK=3-4 \rightarrow Tf=8000-12000h$; $GWK=4-5 \rightarrow Tf=12000-16000h$;

$GWK=5-6 \rightarrow Tf=16000-20000h$; $GWK=6-7 \rightarrow Tf=20000-25000h$;

$GWK=7-8 \rightarrow Tf=25000-30000h$; $GWK=8-9 \rightarrow Tf=30000-35000h$;

$GWK=9-10 \rightarrow Tf=35000-40000h$; $GWK=10-20 \rightarrow Tf=40000-80000h$

If the stroke is very short (0-100mm), the lubricating grease life may be shorter than the determined guideline values.

For strokes longer than 1 meter, halve the Tf obtained.

In MG or CG models having external carriages, grease each carriage directly via the grease nipple on sight; in MP or LV models with internal rails and carriages, grease via the grease nipple hole on the carriage side; a centralized circuit will deliver grease to all carriages (and to the grease nipple for LVs)

Nominal service life of a recirculating ball carriage

Nominal life is reached or exceeded by 90 percent of a sufficiently large quantity of the same bearings before the first signs of material fatigue occur. One can indicatively calculate the service life with the following formulas:

$$L=(C/P)^3 \quad L_h=(833)(H*Nosc)*(C/P)^3 \quad L_h=(1666/v)*(C/P)^3$$

L=rated duration in 100Km

Lh=rated duration in operating hours

C=dynamic load capacity (data given in catalog)

P=equivalent dynamic load (applied load)

H=actual stroke MT

Nosc=number of cycles per minute

V=equivalent dynamic speed

In replacing the carriages, if any, proceed as follows: loosen then unhook the belt by means of the appropriate belt clips, slide the carriage out, taking care not to let the balls come out of their seats by using a "false guide."

When reinserting the carriages into the guides, take care that the sealing lip is not damaged and that it does not position itself in a incorrectly.

Num. item	Num. part	Description	Quantity
1			
2			
3			
4			

IN ORDER: if the module is "standard" i.e., with double shaft transmission, example:
MP50-100-1-1000

where:

MP50-100 = model

1= number of carriages

1000= total length

Whether the module is customized or with accessories:

Accessories:

refer to the relevant page for codes and indicate the quantity required will be delivered separately

Customized or complete with mounted accessories:

In the case of models complete with accessories or customized send a drawing or

In either condition once the product is defined it will be uniquely coded

Cod.	Description	Lenght	Quantity
	profile		
	shaft/guide		
	belt		

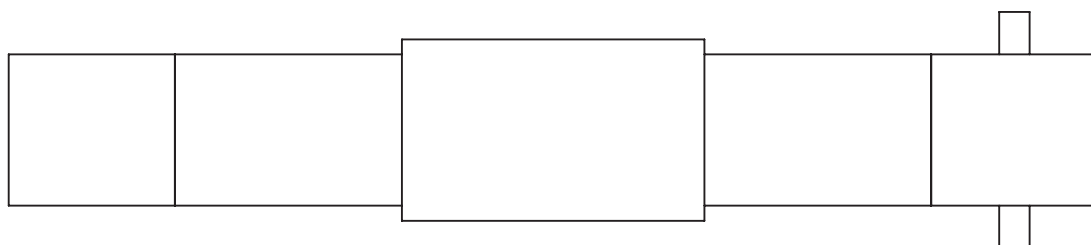
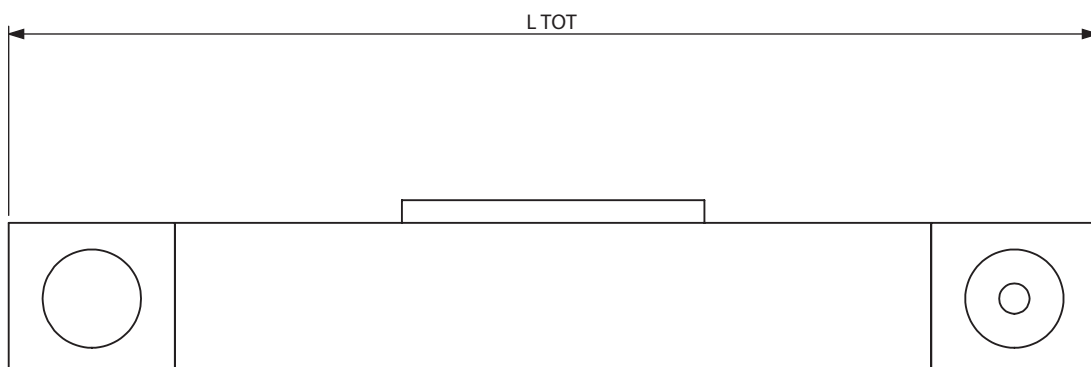
Estimated delivery date:	Quantity:
Serial number:	
No. Order Confirmation Ref.	
No. Order Production Ref:	
Production/Technician Testing (date and signature):	


TEST SHEET BY ORDER CODE

L tot.= xxxx

without accessories or customization, it can be described as follows.

Request it from our technical department with the required specifications



Disegnato da CR	Approvato da MC	Codice cliente
	Cliente	Data 18/11/2016
	Descrizione modello	
	40012 Calderara di Reno (BO)	Codice (cod. incrementale univoco)

VERIFICATION OF SUITABILITY OF SAFETY BRAKE FOR VERTICAL AXES

Please fill out the following form, to evaluate the specific brake for your application

Motor:

Rated motor torque [Nm]:

Maximum motor rotation speed [rpm]:

Motor inertia [kgm²]:

Motor centering [mm]:

Diameter of the crankshaft [mm]:

Gearbox:

Gearbox reduction ratio [/]:

Gearbox inertia [kgm²]:

Gearbox centering [mm]:

Diameter of the reducer shaft [mm]:

Kinematics by rack and pinion:

Pinion primitive diameter [mm]:

Rack pitch [mm]:

Rack inertia [kgm²]:

Kinematics by ball screw:

Diameter of the ball screw [mm]:

Ball screw pitch [mm]:

Ball screw inertia [kgm²]:

Weight of the load to be braked [Kg]:

Maximum linear axis speed [m/s]:

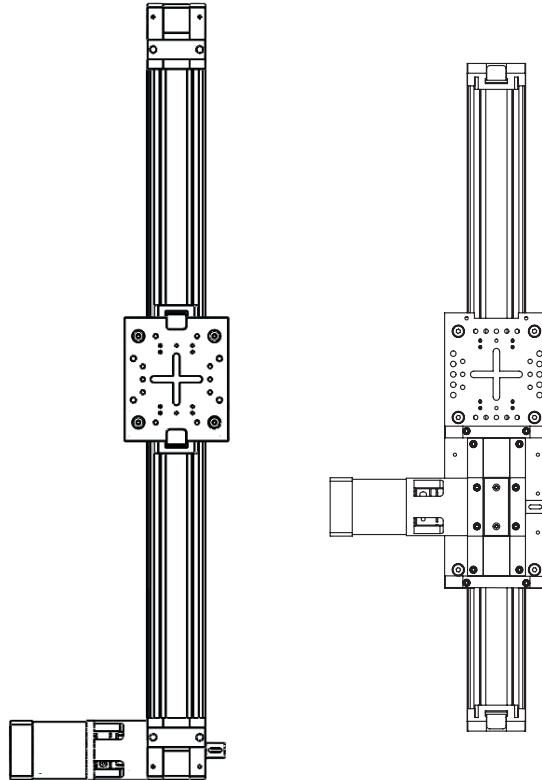
Work cycle of your application [s]:

Required braking distance [mm]:

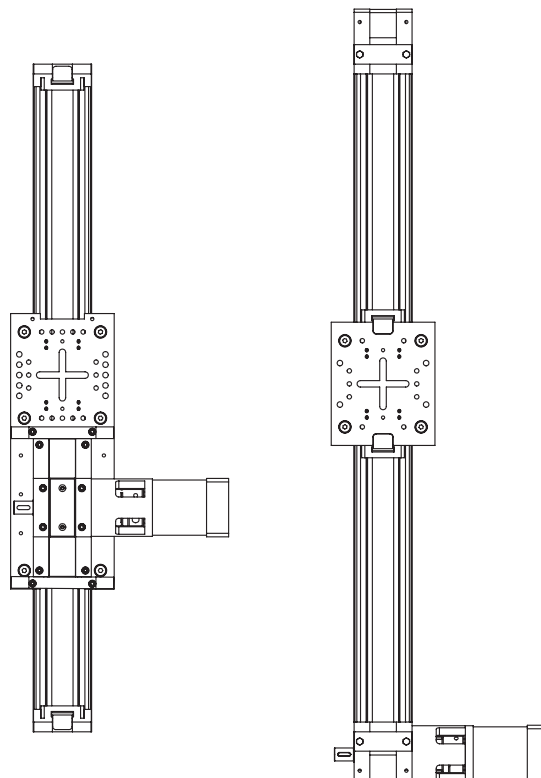
Available voltages in the machine for brake power supply (380VAC, 220VAC, 24VAC):

Gearbox side / Limit switch side

LEFT



RIGHT



IP PROTECTION RATING TABLE

The following is the table with the list of IP rating of protection according to the standard **UNI EN60529**

The first digit represents the index of protection against the penetration of solid objects and dust, while the second digit indicates the index of protection against the penetration of liquids; these are valid at standard environmental conditions.

1 ^a Num.	Description	2 ^a Num.	Description
1	Protection from solid objects greater than 50 mm	1	Protection from water drops
2	Protection from solid objects greater than 12 mm	2	Protection from diverted water droplets up to 15°
3	Protection from solid objects greater than 2.5 mm	3	Protection from water vapor
4	Protection from solid objects greater than di 1 mm	4	Protection from splashing water
5	Protection from dust	5	Protection from water jets
6	Strong protection from dust	6	Protection from strong jets of water or storm surges
		7	Protection against immersion
		8	Protection against continuous immersion

CALCULATION FOR HORIZONTAL TORQUE

CALCULATION OF THE TORQUE REQUIRED FOR MECHANICAL LINEAR UNITS:

$$M_A = \text{Required drive torque (Nm)} \quad M_A = M_{Last} + M_{Leer} \quad M_A \quad 0$$

M_{Last} = Load torque (Nm) $M_{Last} = \frac{F_x * p}{2 * \pi * 1000}$

M_{Leer} = See data sheets (Nm)

F_x = Feed force in horizontal application (N) $F_x = m * g * \mu + m * a$

g = gravitational acceleration

a = acceleration

m = transport weight (Kg)

p = spindle pitch [mm] (screw drive) or stroke per revolution [mm] (toothed belt drive)

μ = friction coefficient for linear guide = 0,02
 μ = friction coefficient for roller guide = 0,05
 μ = friction coefficient for sliding guide = 0,1

= campo da fornire

CALCOLO PER COPPIA VERTICALE

CALCOLO DELLA COPPIA NECESSARIA PER LE UNITÀ LINEARI MECCANICHE:

$$M_A = \text{Required drive torque (Nm)} \quad M_A = M_{Last} + M_{Leer} \quad M_A \quad 0$$

M_{Last} = Load torque (Nm) $M_{Last} = \frac{F_x * p}{2 * \pi * 1000}$

M_{Leer} = See data sheets (Nm)

F_x = Feed force in vertical application (N) $F_x = m * (g + a)$

g = gravitational acceleration

a = acceleration

m = transport weight (Kg)

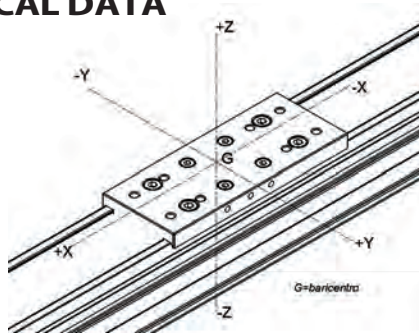
p = spindle pitch [mm] (screw drive) or stroke per revolution [mm] (toothed belt drive)

= campo da fornire

GENERAL DATA

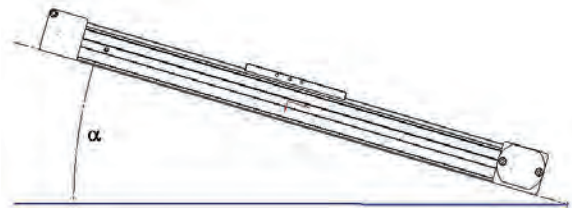
Date:	Request code:
Company:	Contact person :
Address:	ZIP Code/City:
Phone:	Fax:

TECHNICAL DATA



WORKING POSITION

Horizontal Vertical
Tilt (°) α : _____



LOAD AND APPLIED FORCES

Mass to be translatedz (kg): _____
Barycenter position(+/-mm): x _____ y _____ z _____

ADDITIONAL FORCES

Force in direc. X (+/-N): _____
applicata in (+/-mm): x _____ y _____ z _____

Force in direc. Y (+/-N): _____
applicata in (+/-mm): x _____ y _____ z _____

Force in direc. Z (+/-N): _____
applicata in (+/-mm): x _____ y _____ z _____

WORK CYCLE

Helpful stroke (mm): _____
Max acceleration(m/s²): _____
Max speed (m/s): _____
N° di cicly/hour: _____
Required repeatability index (+/-mm): _____
Minimum required duration(hours): _____

POSITION OF THE CARRIAGE



WORK SPACE

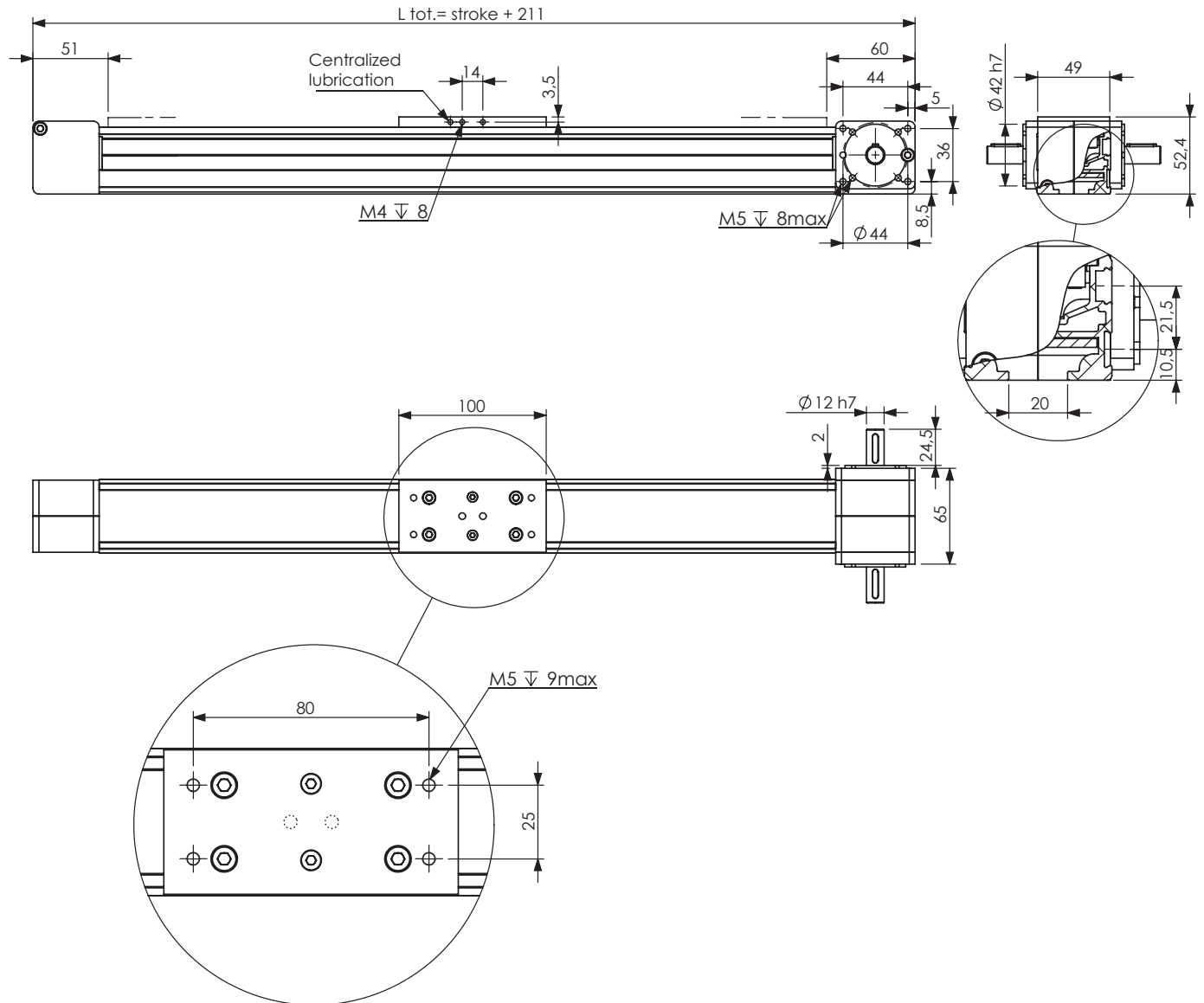
Dust: _____
Scrap chip: _____
Wet: _____
Corrosive acid: _____
IP rating required: _____

EXPLICIT REQUESTS

Module with roller guides
Closed module
Pressurized closed module

MPS50-100

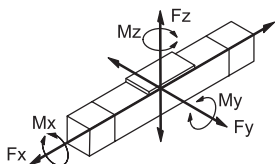
Belt translation unit on sliding block



WEIGHTS

Basic length without stroke	1,17 Kg
100 MM stroke	0,17 Kg
Entire carriage	0,14 Kg

Forces [N]	max dynamics***	break
Fx	1245	2800
Fy	-	-
Fz	-	-
Moments [Nm]	max dynamics***	break
Mx	-	-
My	-	-
Mz	-	-



TECHNICAL DATA

Max speed***	5m/s
Max acceleration***	80m/s ² *
Repeat	+/-0,03mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	4000mm**
Max total length	100mm
Stroke per revolution	belt RPP5M40

*maximum no-load value

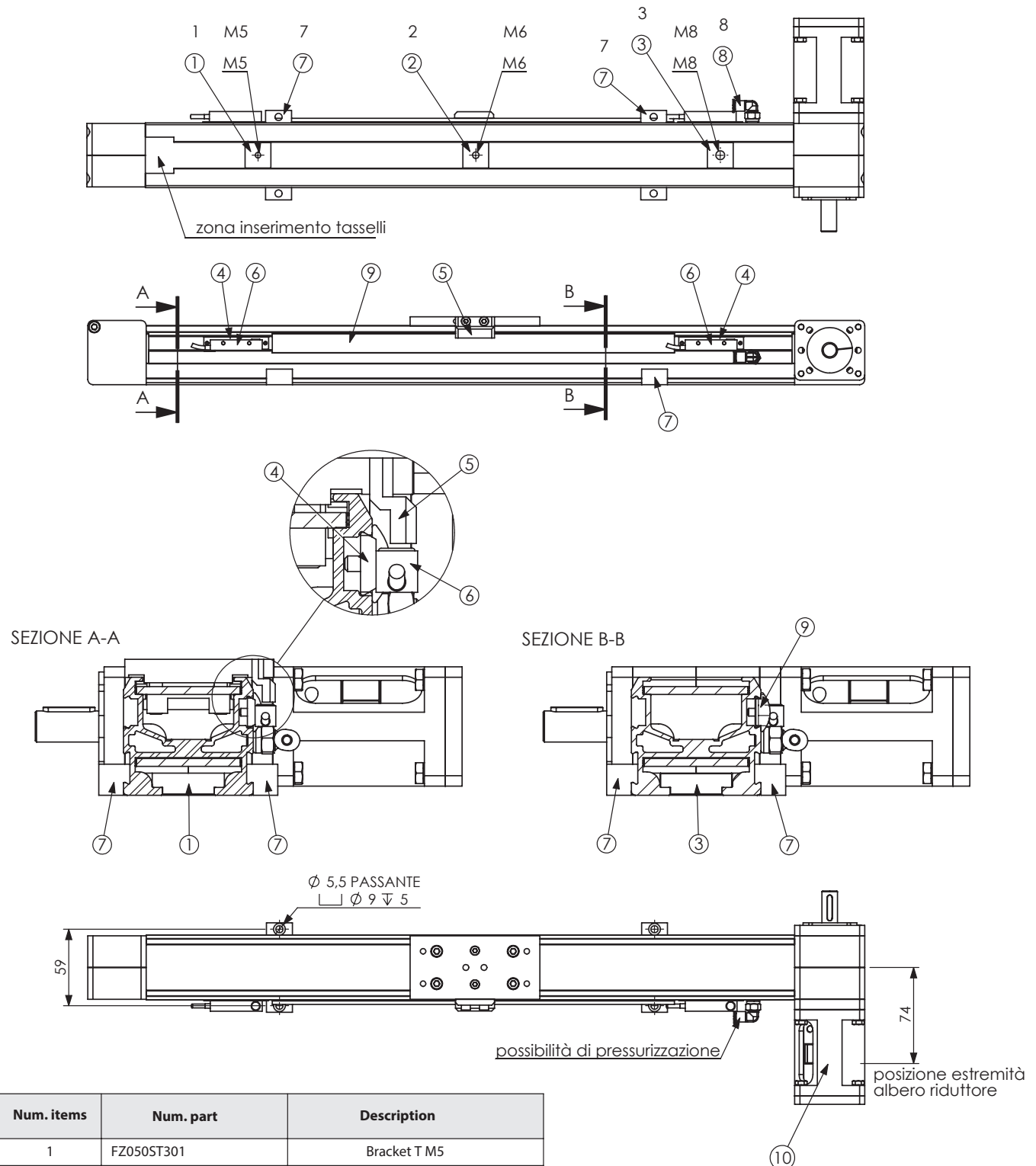
** higher strokes on request

*** for special applications contact technical department

- loads and moments depend on the external guide

MPS50-100 ACCESSORIES

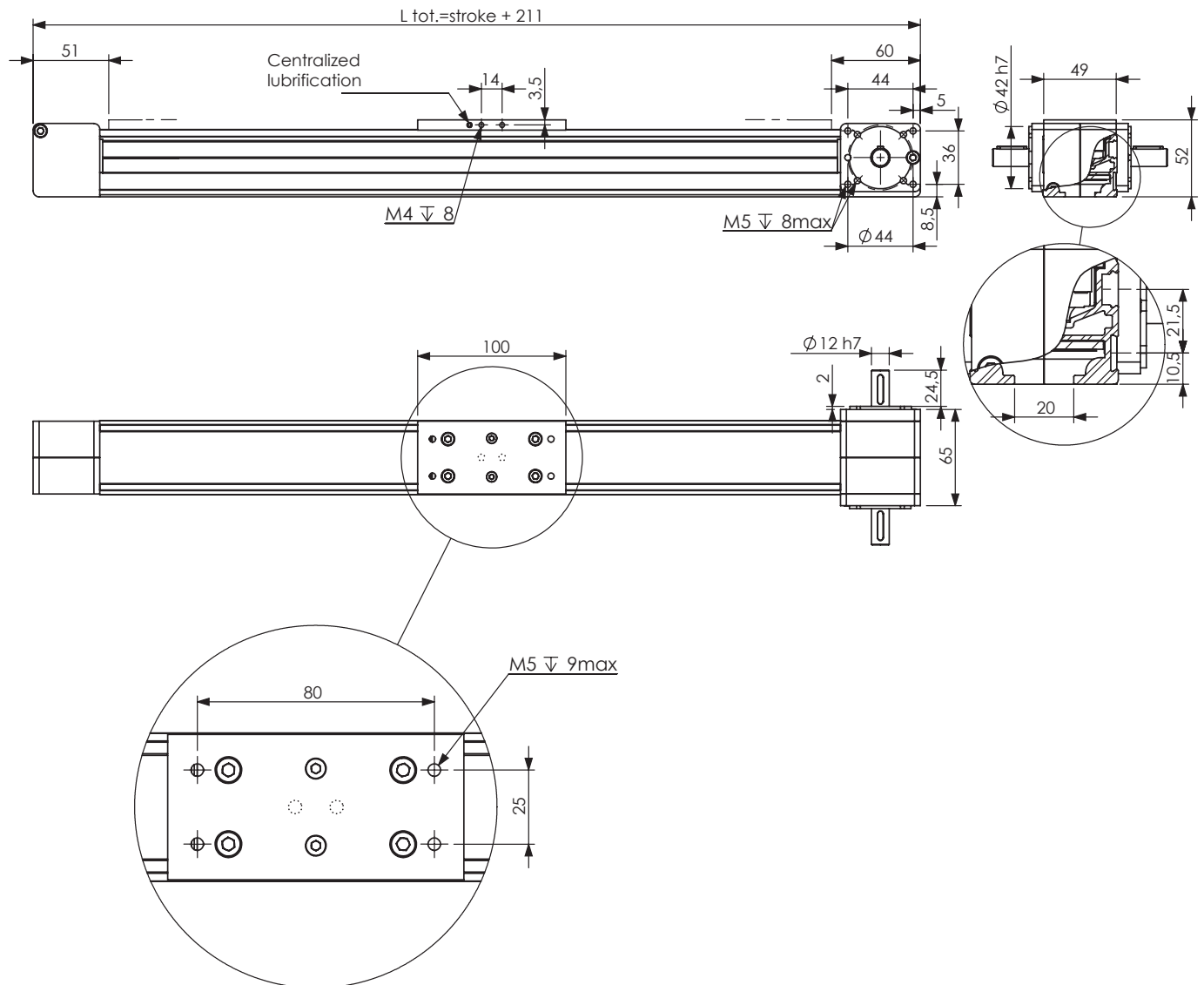
LITEK®



Num. items	Num. part	Description
1	FZ050ST301	Bracket T M5
2	FZ050ST302	Bracket T M6
3	FZ050ST303	Bracket T M8
4	FZ000SS231	Limit switch bracket
5	FZ050RS242	Reference limit switch
6	Sensore	see p. 110-111 of the catag.
7	FZ000SF225	Bracket
8	PL4M6C	Air pressure adapter
9	METMG565P	Cablecover
10	Motor adapter	

MP50-100

Belt translation unit on recirculating ball bearing guide



WEIGHTS

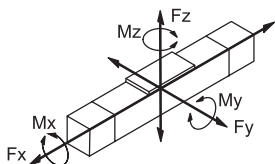
Basic length without stroke	1,35 Kg
100 MM stroke	0,33 Kg
Entire carriage	0,29 Kg

Forces [N]

	max dynamics***	break
Fx	1245	2800
Fy	1225	1500
Fz	790	1161

Moments [Nm]

	max dynamics***	break
Mx	21	23
My	9	35
Mz	9	35



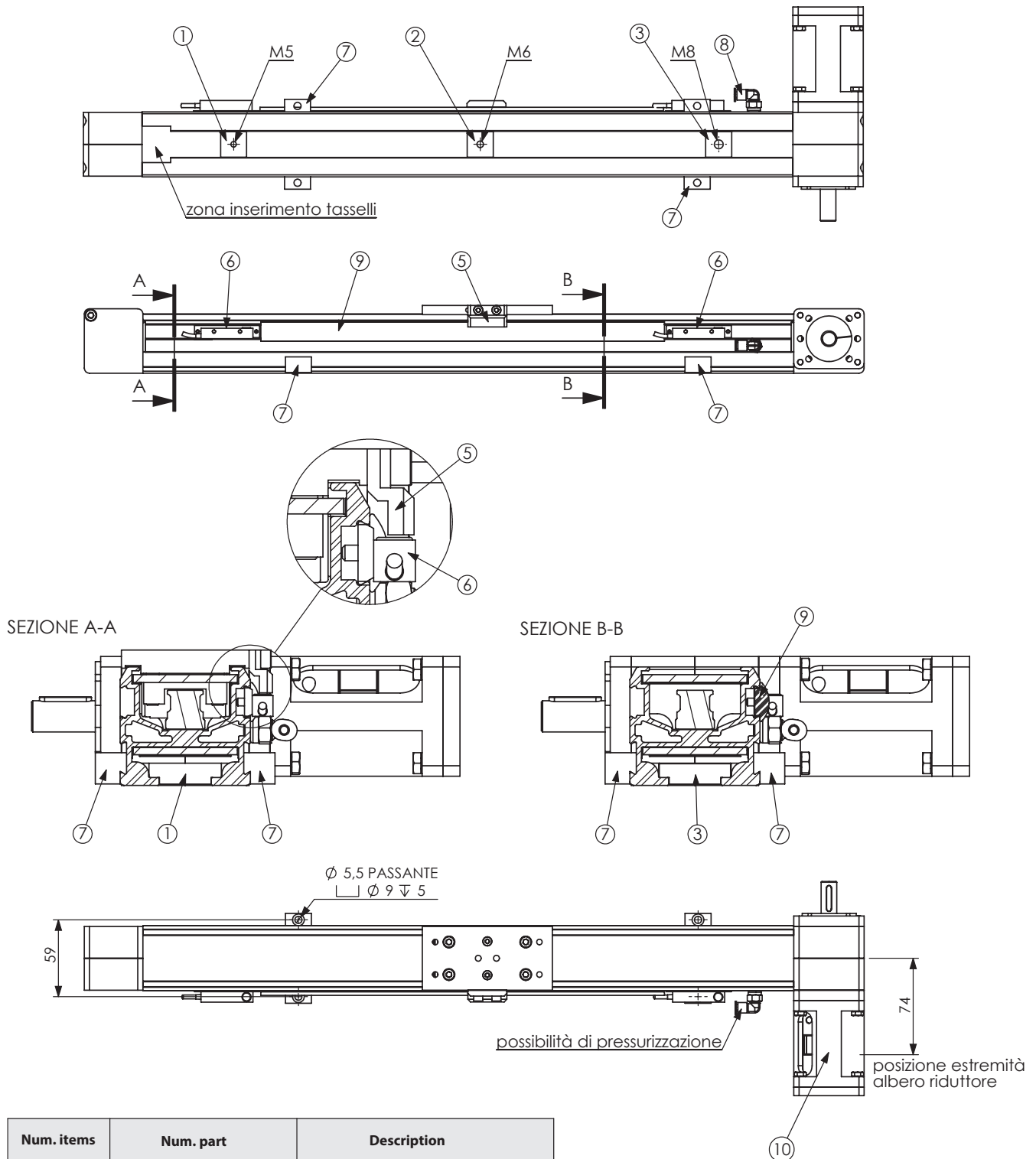
TECHNICAL DATA

Max speed***	5m/s
Max acceleration***	80m/s ² *
Repeat	+/-0,03mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	4000mm**
Max total length	100mm
Stroke per revolution	belt RPP5M40

*maximumno-load value

** higher strokes on request

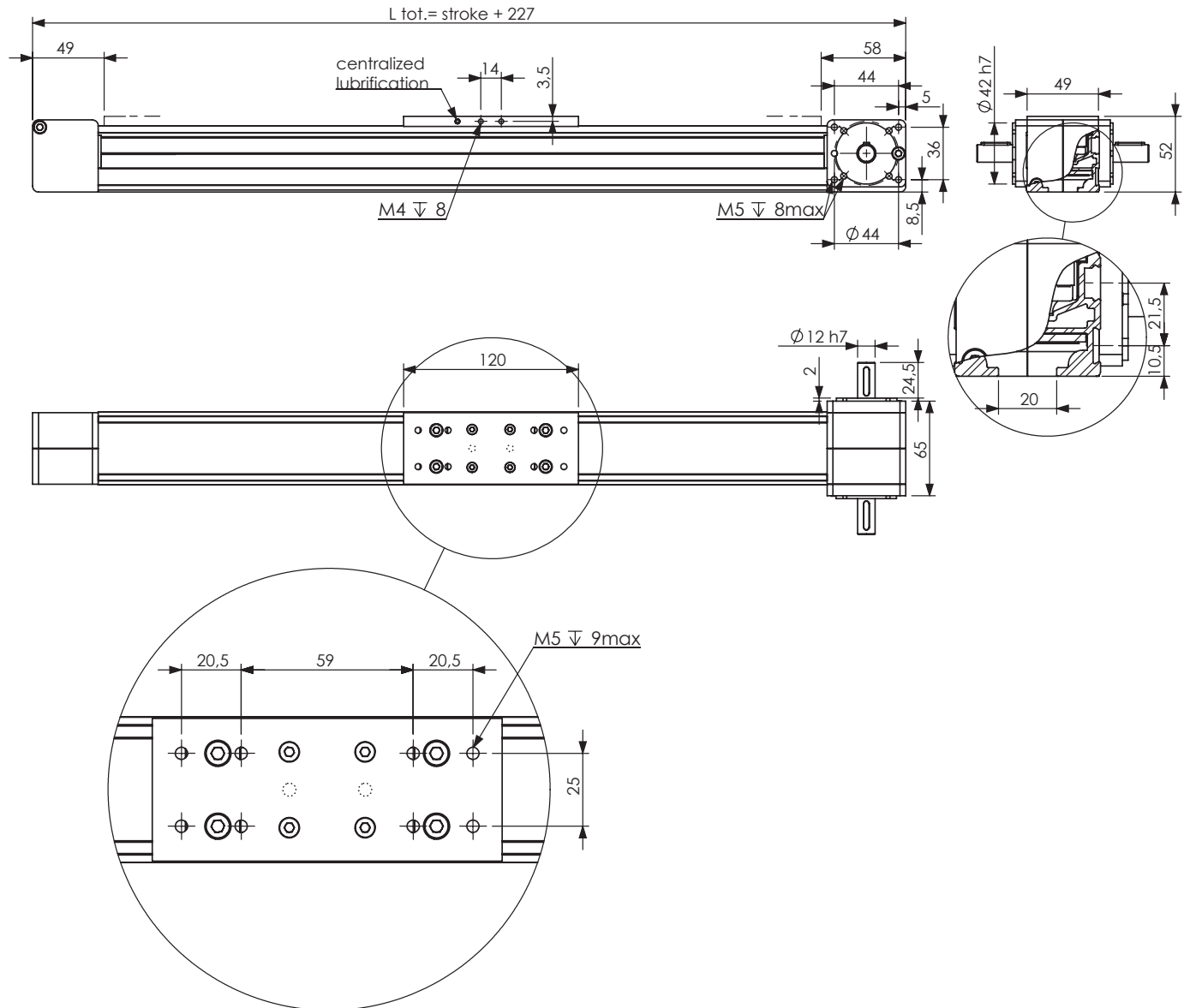
*** for special applications contact technical department



Num. items	Num. part	Description
1	FZ050ST301	Bracket T M5
2	FZ050ST302	Bracket T M6
3	FZ050ST303	Bracket T M8
4	FZ000SS231	Limit switch bracket
5	FZ050RS242	Reference limit switch
6	Sensore	see p. 110-111 of the catag.
7	FZ000SF225	Bracket
8	PL4M6C	Air pressure adapter
9	METMG565P	Cablecover
10	Motor adapter	

MP50-120

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	1,441 Kg
100 MM stroke	0,33 Kg
Entire carriage	0,3 Kg

Forces [N]

	max dynamics***	break
Fx	1245	2800
Fy	1225	1600
Fz	960	1440
Moments [Nm]		
	max dynamics***	break
Mx	21	28
My	25	56
Mz	25	100

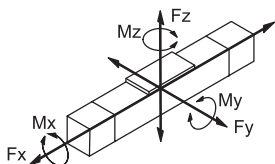
TECHNICAL DATA

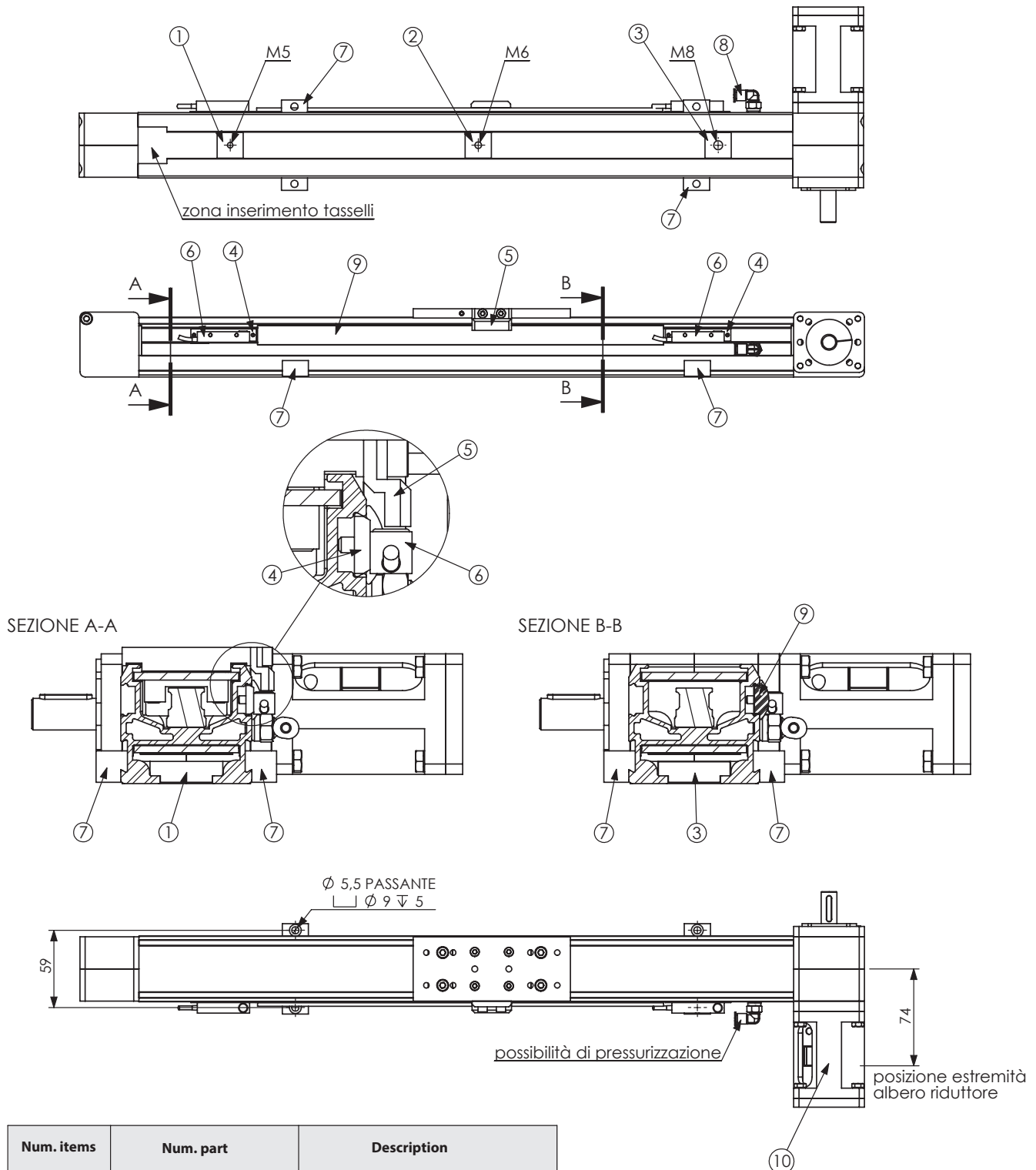
Max speed***	5m/s
Max acceleration***	80m/s ² *
Repeat	+/-0,03mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	4000mm**
Max total length	100mm
Stroke per revolution	belt RPP5M40

*maximum no-load value

** higher strokes on request

*** for special applications contact technical department

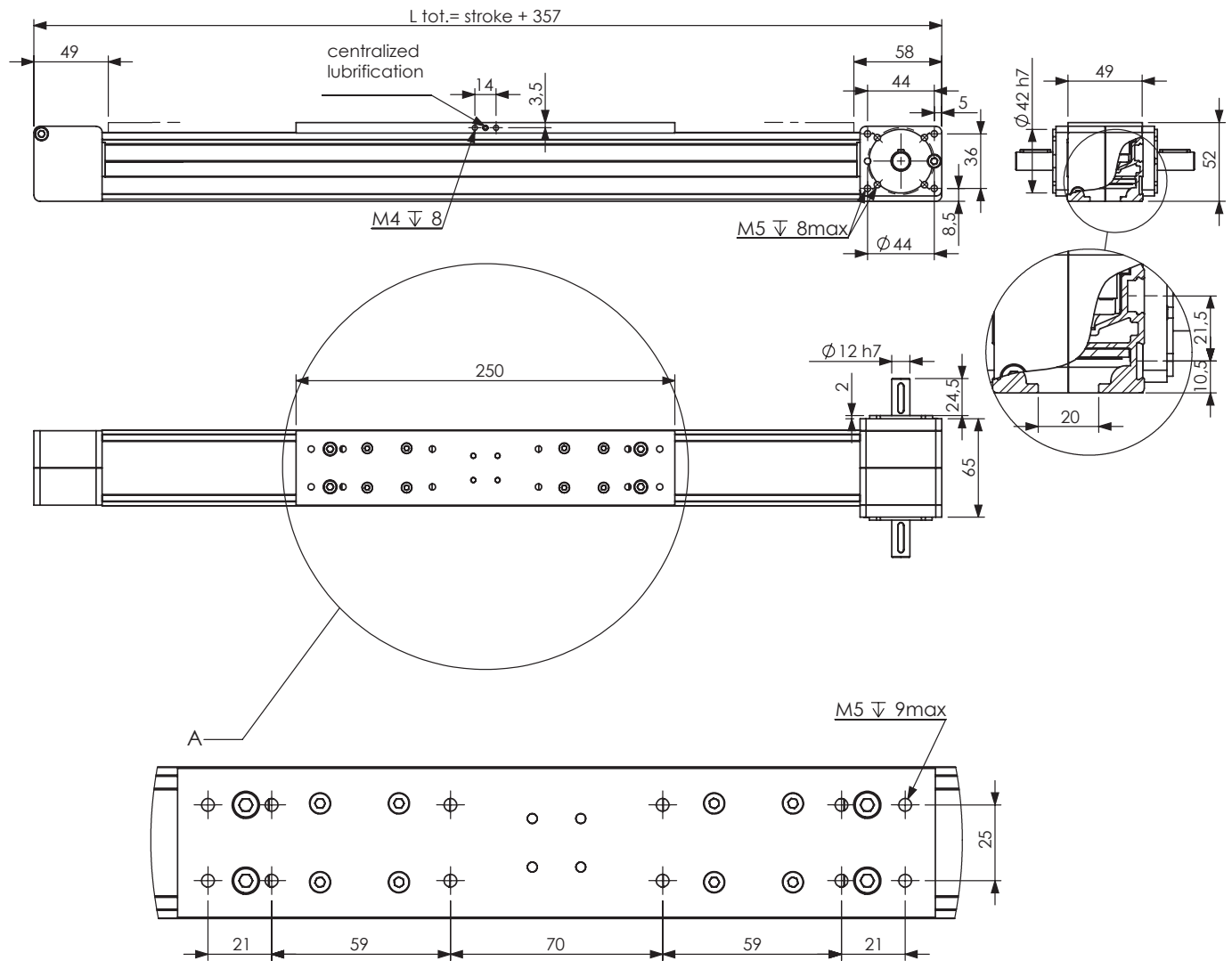




Num. items	Num. part	Description
1	FZ050ST301	Bracket T M5
2	FZ050ST302	Bracket T M6
3	FZ050ST303	Bracket T M8
4	FZ000SS231	Limit switch bracket
5	FZ050RS242	Reference limit switch
6	Sensore	see p. 110-111 of the catag.
7	FZ000SF225	Bracket
8	PL4M6C	Air pressure adapter
9	METMG565P	Cablecover
10	Motor adapter	

MP50-250

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	2,14 Kg
100 MM stroke	0,33 Kg
Entire carriage	0,583 Kg

Forces [N]

	max dynamics***	break
Fx	1245	2800
Fy	2333	3500
Fz	2304	3456

Moments [Nm]

	max dynamics***	break
Mx	40	58
My	142	212
Mz	234	500

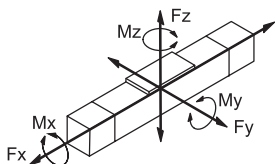
TECHNICAL DATA

Max speed***	5m/s
Max acceleration***	80m/s ² *
Repeat	+/-0,03mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	4000mm**
Max total length	100mm
Stroke per revolution	belt RPP5M40

*maximum no-load value

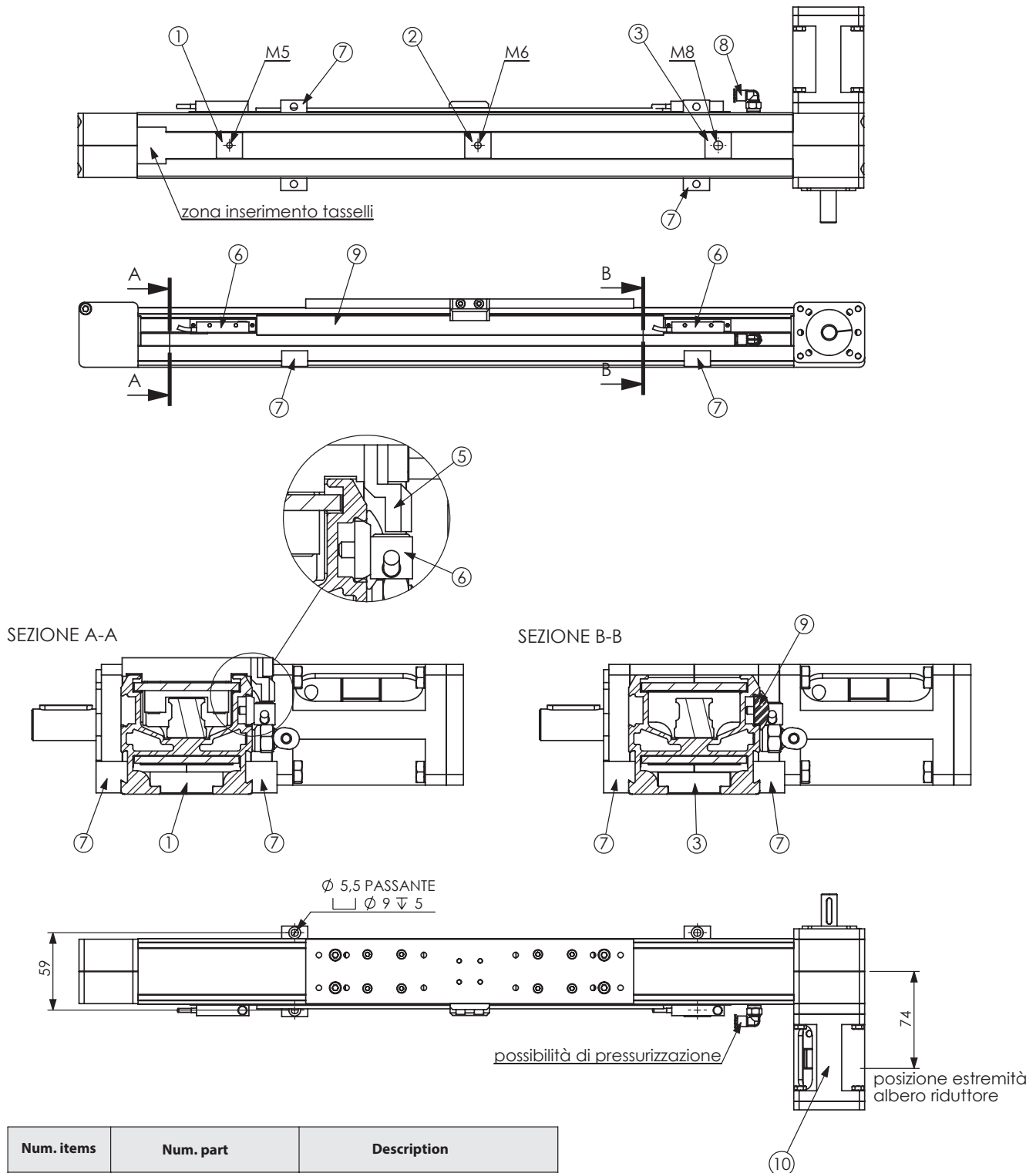
** higher strokes on request

*** for special applications contact technical department



MP50-250 ACCESSORIES

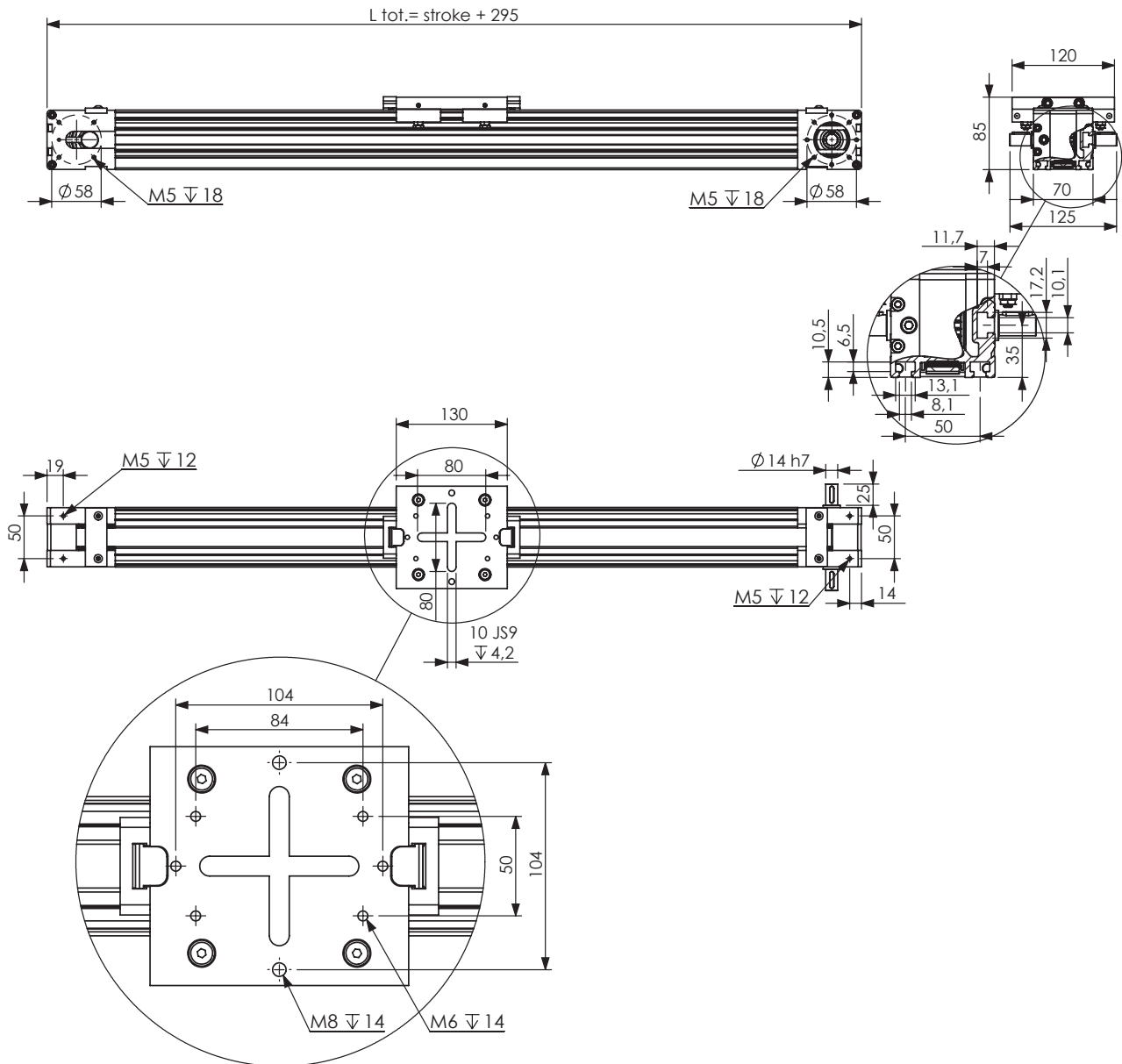
LITEK®



Num. items	Num. part	Description
1	FZ050ST301	Bracket T M5
2	FZ050ST302	Bracket T M6
3	FZ050ST303	Bracket T M8
4	FZ000SS231	Limit switch bracket
5	FZ050RS242	Reference limit switch
6	Sensore	see p. 110-111 of the catag.
7	FZ000SF225	Bracket
8	PL4M6C	Air pressure ada
9	METMG565P	Cablecover
10	Motor adapter	

ML70-130

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	4,35 Kg
100 MM stroke	0,54 Kg
Entire carriage	0,90 Kg

Forces [N]

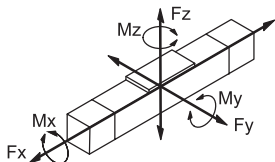
	max dynamics***	break
Fx	671	1510
Fy	1050	4200
Fz	600	2400

Moments [Nm]

	max dynamics***	break
Mx	12	47
My	23	90
Mz	43	169

TECHNICAL DATA

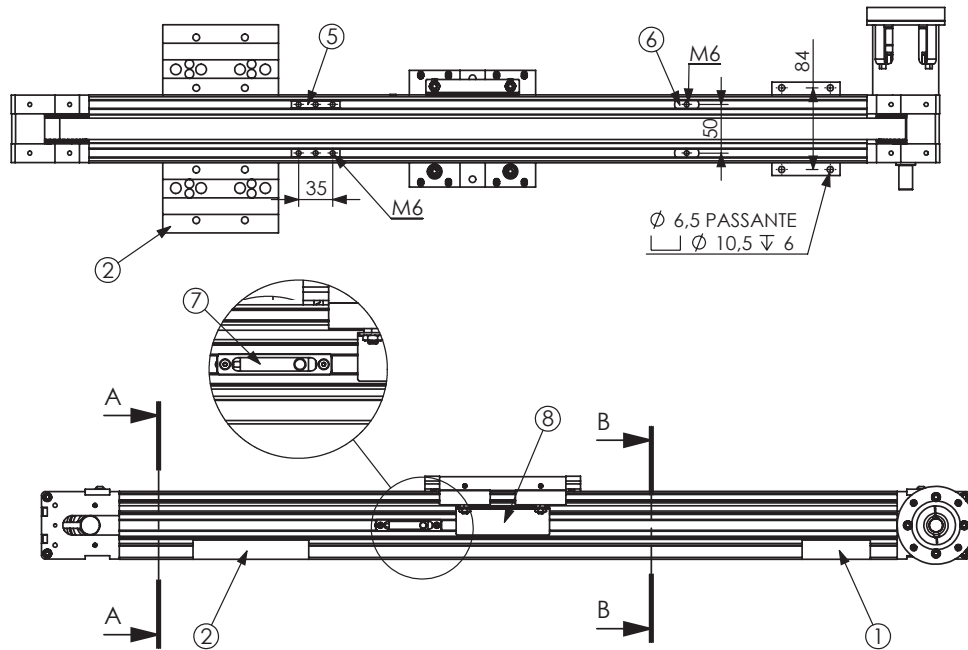
Max speed***	8m/s
Max acceleration***	50m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	6300mm**
Max total length	180mm
Stroke per revolution	belt RPP5M22



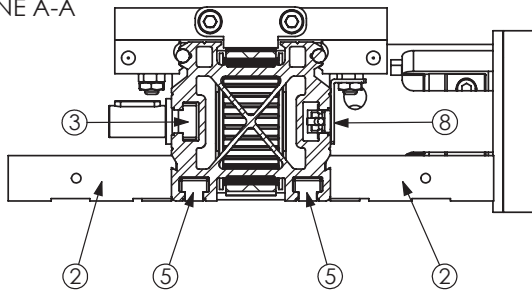
*maximum no-load value

** higher strokes on request

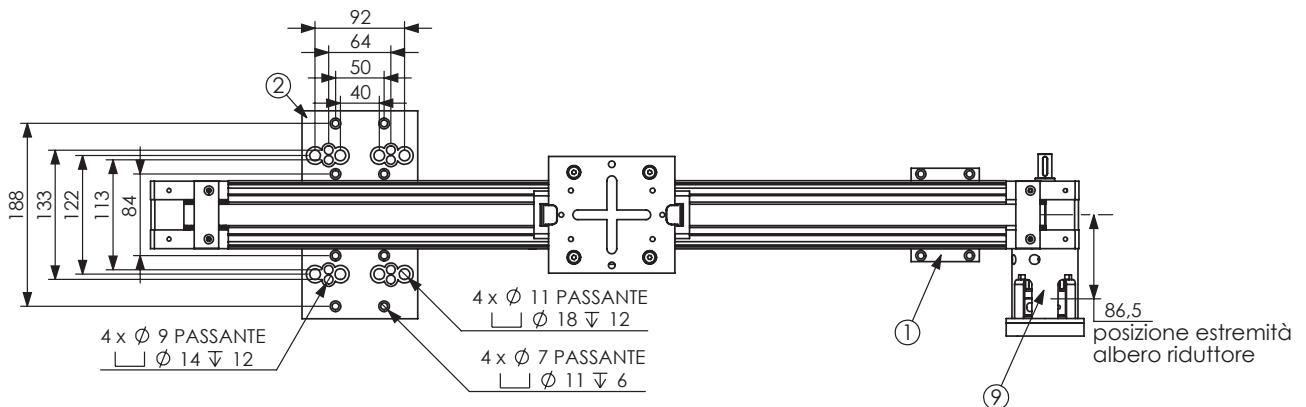
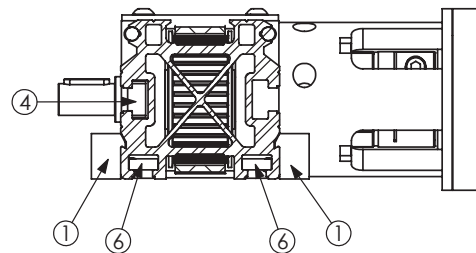
*** for special applications contact technical department



SEZIONE A-A



SEZIONE B-B

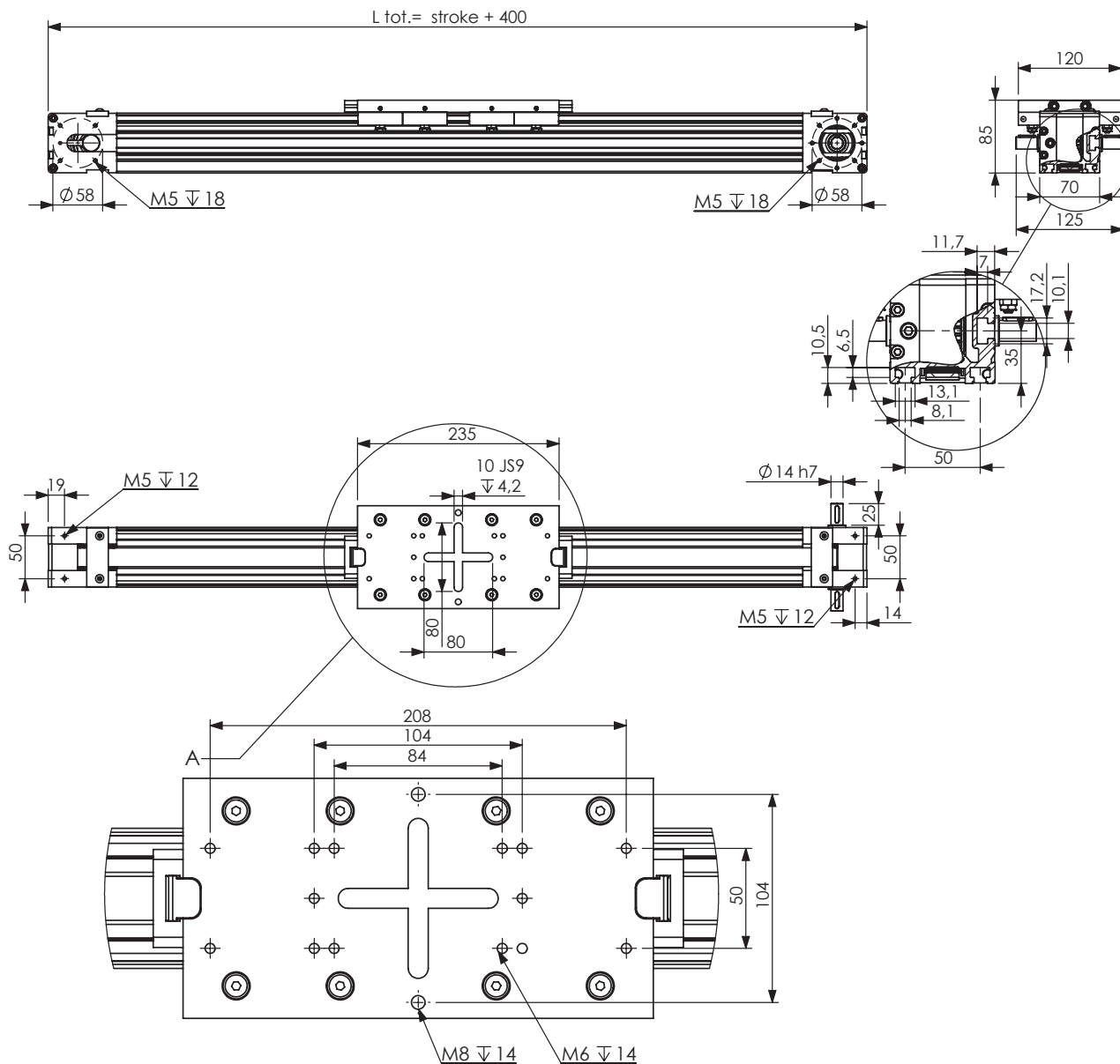


Num. item	Num. part	Description
1	FZ000SS406	Bracket
2	FZ000SS416	Bracket
3	FZ000SM801	T-slot M5
4	FZ000SM802	T-slot M8-M6
5	FZ000SM813	T-slot M6
6	FZ000SM815	T-slot M6
7	Sensore	See pg. 110-111 of the catag.
8	FZ070LS366	Reference limit switch
9	Motor adapter	

ML70-235

Belt translation unit on track rollers

LITEK®



WEIGHTS

Basic length without stroke	5,00 Kg
100 MM stroke	0,54 Kg
Entire carriage	1,55 Kg

Forces [N]

	max dynamics***	break
Fx	671	1510
Fy	2100	8400
Fz	1200	4800

Moments [Nm]

	max dynamics***	break
Mx	24	95
My	75	300
Mz	141	563

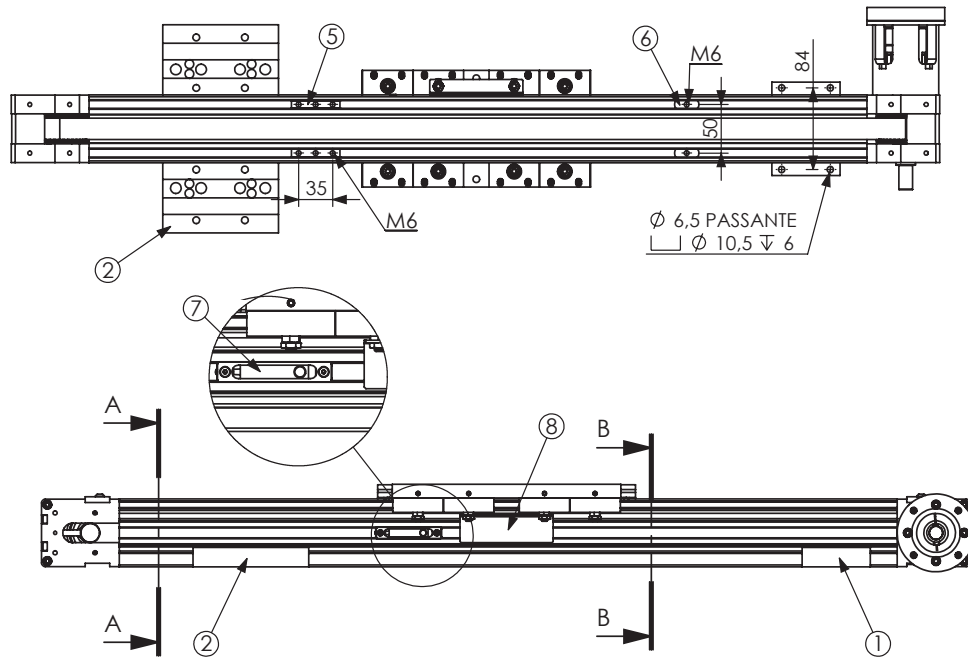
TECHNICAL DATA

Max speed***	6m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	6200mm**
Max total length	180mm
Stroke per revolution	belt RPP5M22

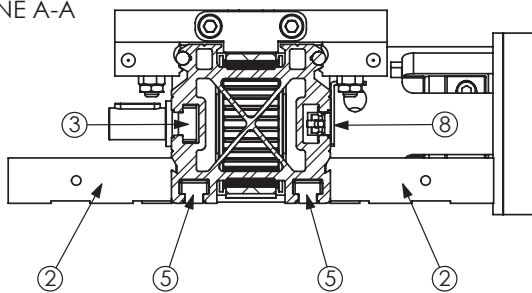
*maximumno-load value

** higher strokes on request

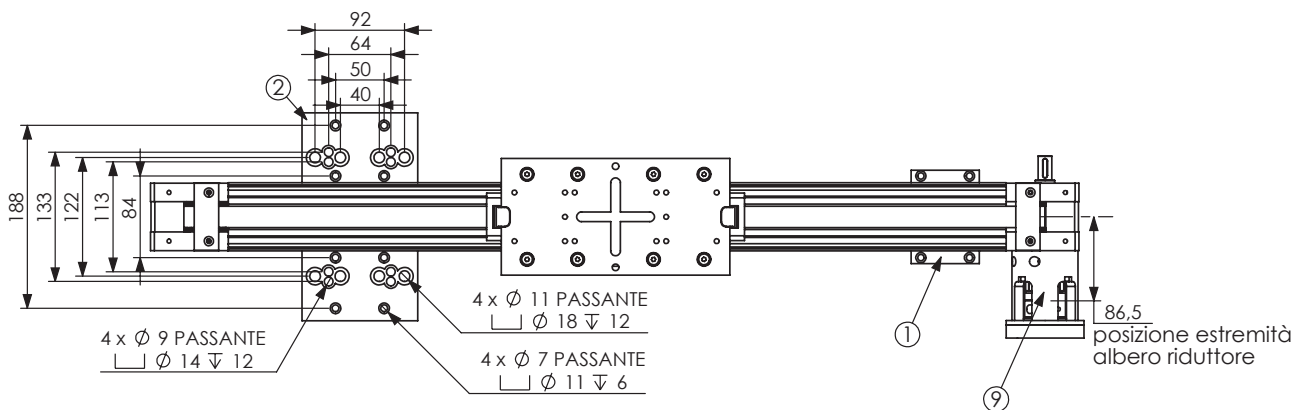
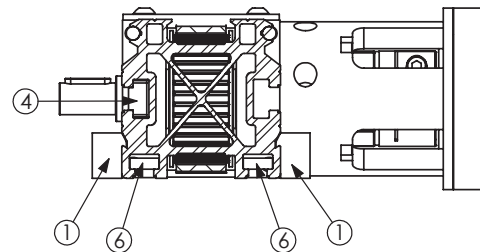
*** for special applications contact technical department



SEZIONE A-A



SEZIONE B-B

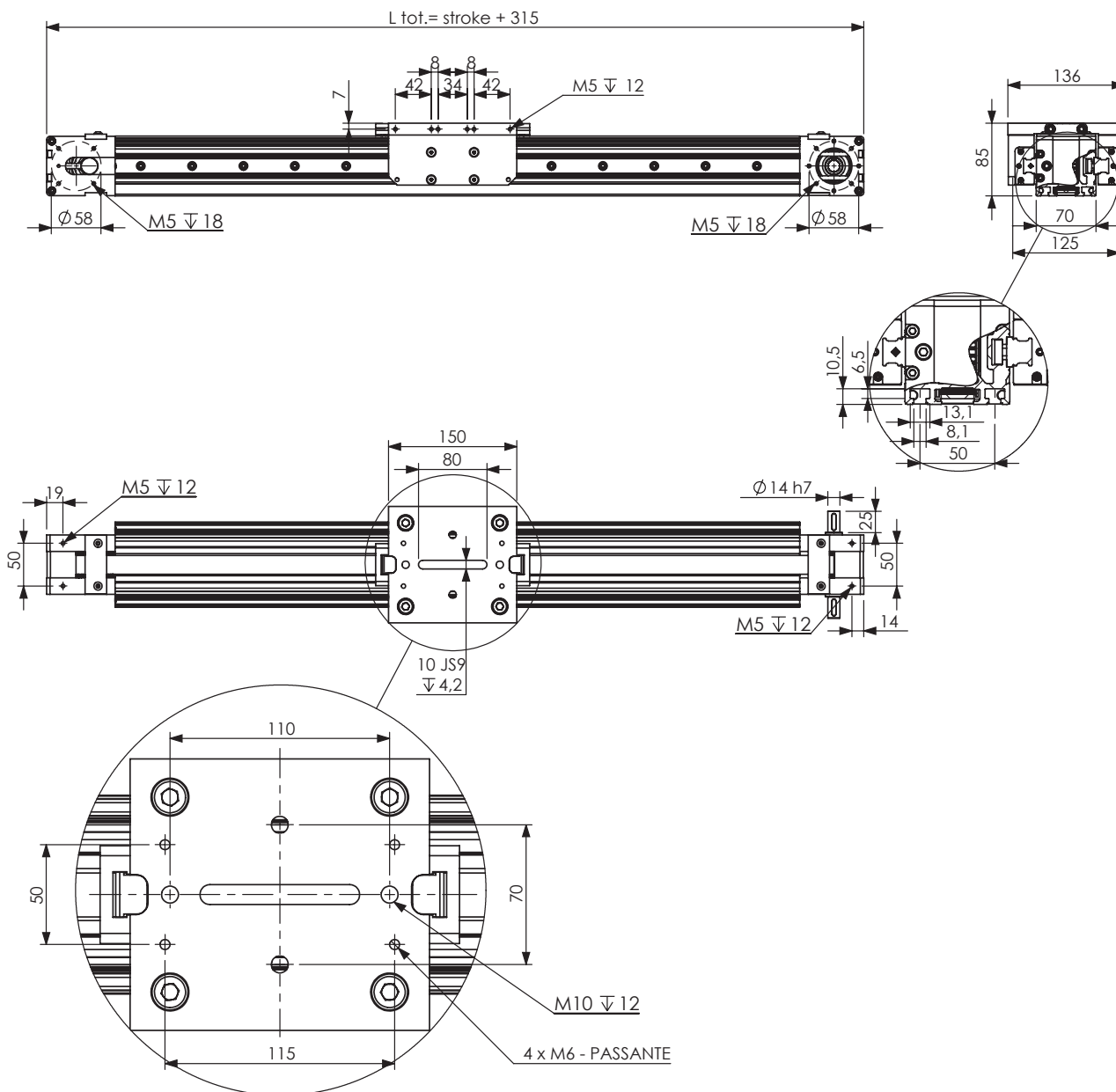


Num. item	Num. part	Description
1	FZ000S5406	Bracket
2	FZ000S5416	Bracket
3	FZ000SM801	T-slot M5
4	FZ000SM802	T-slot M8-M6
5	FZ000SM813	T-slot M6
6	FZ000SM815	T-slot M6
7	Sensore	See pg 110-111 of the catag.
8	FZ070LS366	Reference limit switch
9	Motor adapter	

MG70-150

Belt translation unit on recirculating ball bearing guide

LITEK®



WEIGHTS

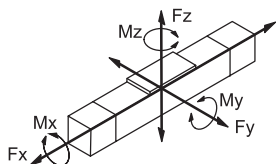
Basic length without stroke	6 Kg
100 MM stroke	1 Kg
Entire carriage	2,25 Kg

Forces [N]

	max dynamics***	break
Fx	671	1510
Fy	5800	8680
Fz	6500	9700

Moments [Nm]

	max dynamics***	break
Mx	220	330
My	215	360
Mz	215	650



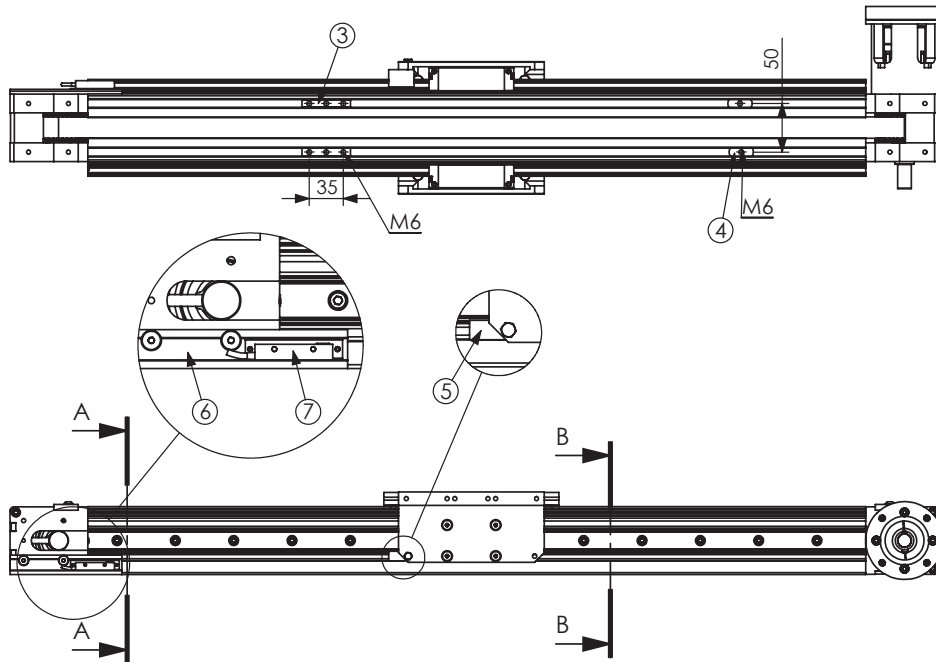
TECHNICAL DATA

Max speed***	3m/s
Max acceleration***	40m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2 Nm
Max stroke	6300mm**
Max total length	180mm
Stroke per revolution	belt RPP5M22

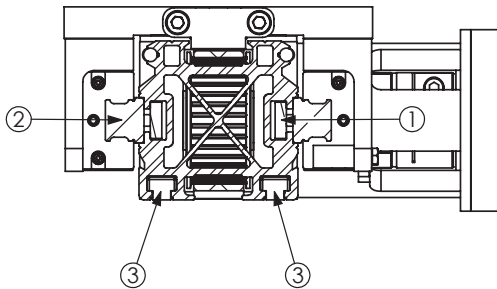
*maximum no-load value

** higher strokes on request

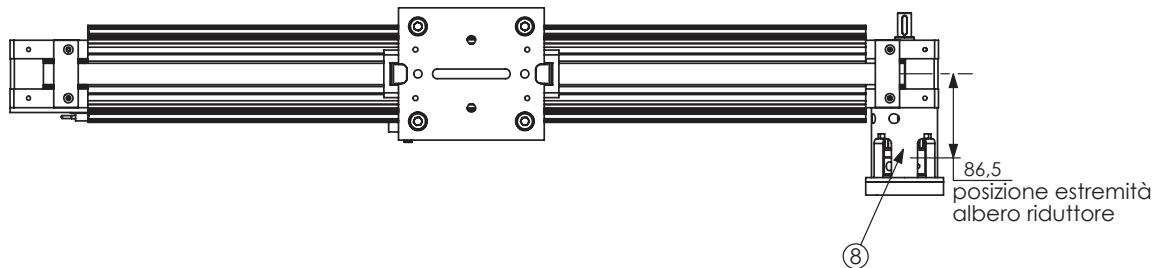
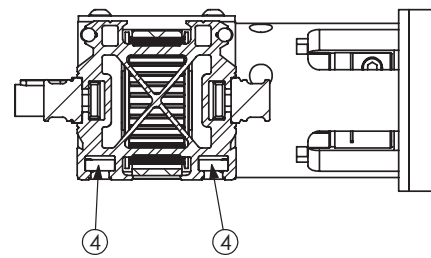
*** for special applications contact technical department



SEZIONE A-A



SEZIONE B-B

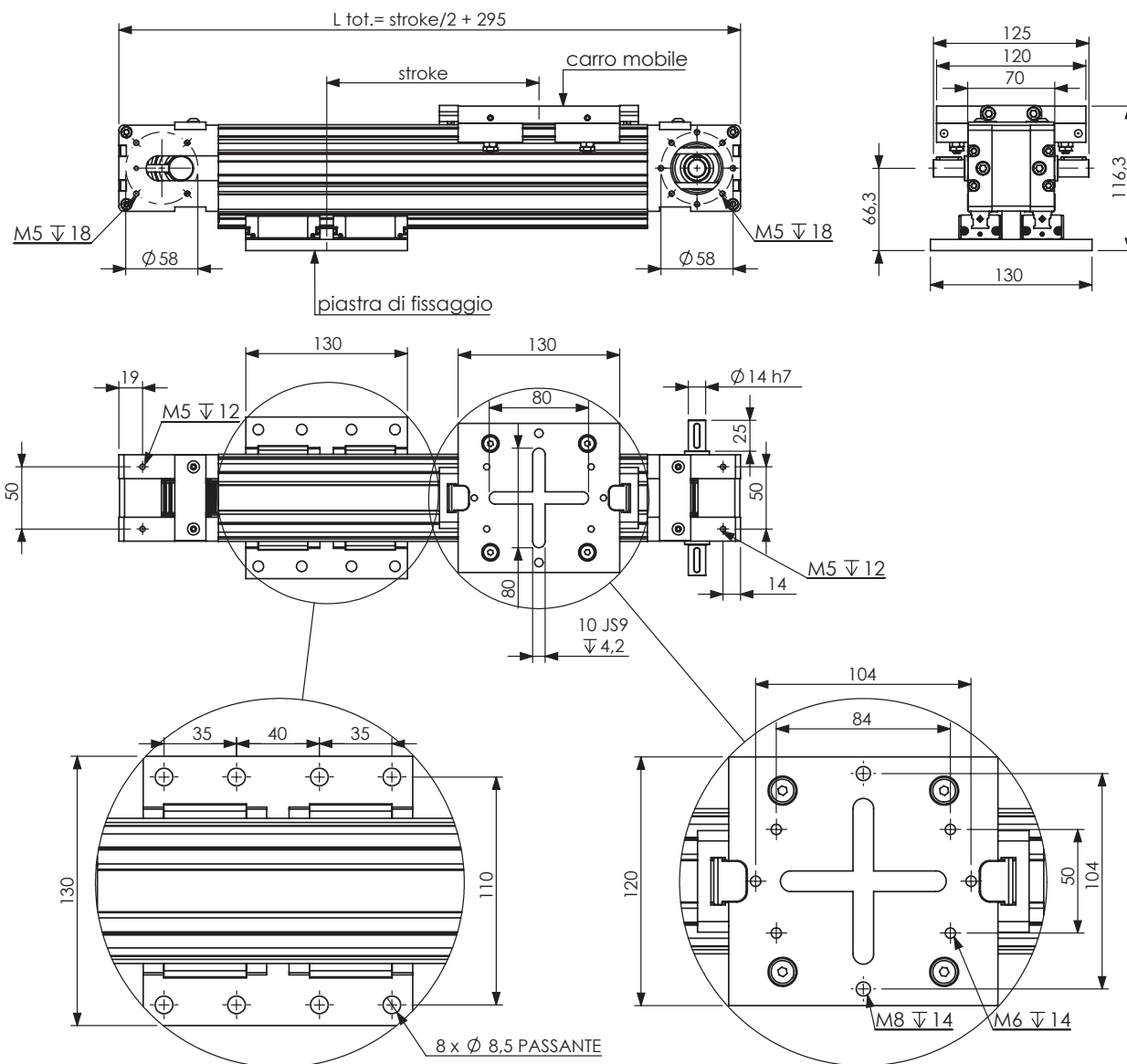


Num. item	Num. part	Description
1	FZ090ST500	T-slot
2	TKVD-20	Rail
3	FZ000SM813	T-slot M6
4	FZ000SM815	T-slot M6
5	CR070RS354	Reference limit switch MG
6	FZ000CS303	Limit switch support
7	Sensore	see pg. 110-111 of the catag.
8	Motor adapter	

MD70-130

Double belt translation unit on rollers and recirculating ball guides

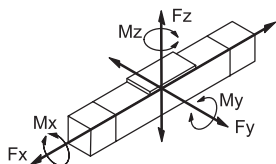
LITEK®



WEIGHTS

Basic length without stroke	5,73 Kg
100mmstroke	0,8 Kg
Moving carriage	0,9 Kg
Holding carriage	1,1 Kg

Force [N]	max dynamics***	break
Fx	671	1510
Fy	****	****
Fz	****	****
Moment [Nm]	max dynamics***	break
Mx	12	47
My	23	90
Mz	43	169



TECHNICAL DATA

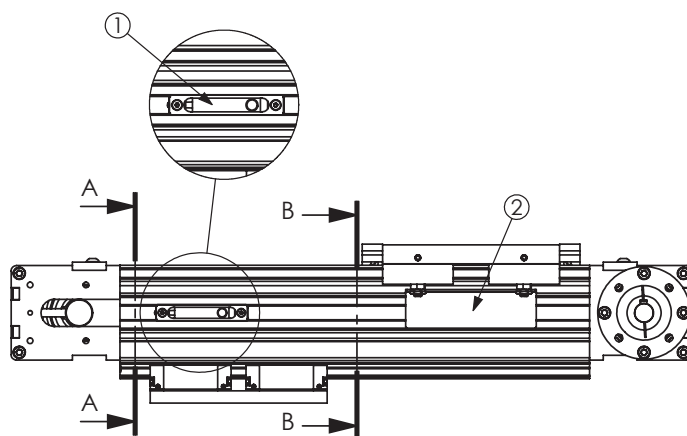
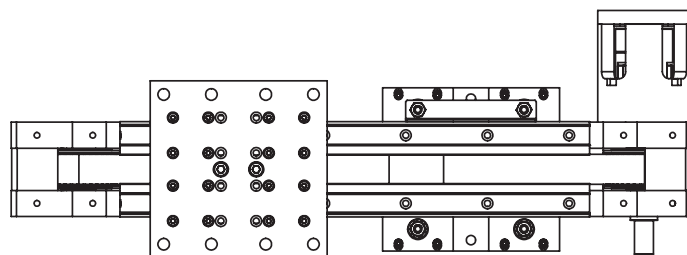
Max speed***	3m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3 Nm
Max stroke	10000**
Max total length	360mm
Stroke per revolution	belt RPP5M22

*maximumno-load value

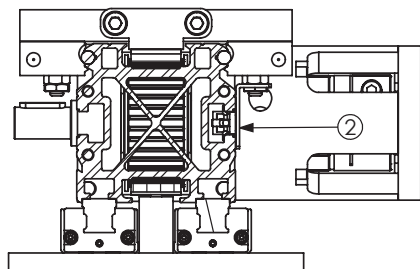
** higher strokes on request

*** for special applications contact technical department

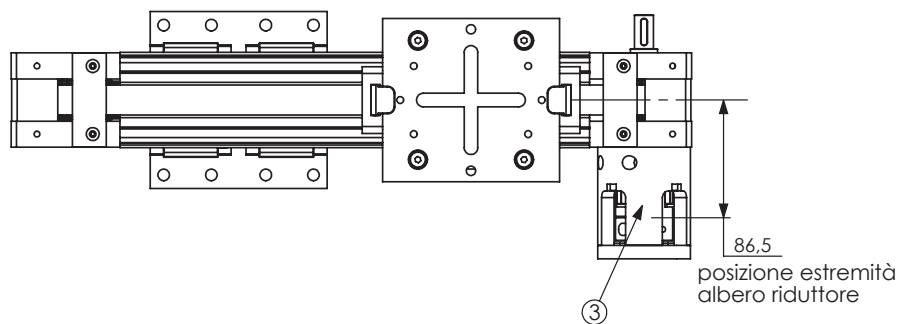
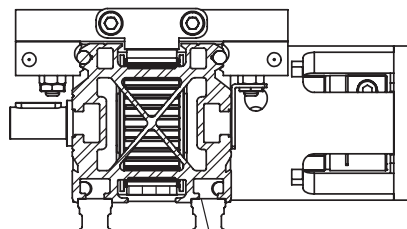
**** Fy and Fz seals depend on the position of the movable carriage relative to the fixed carriage. The deformation of the profile in the two directions is: **dY**=0.05mm (10N at 1mt) / **dZ**=0.06mm (10N at 1mt)



SEZIONE A-A



SEZIONE B-B

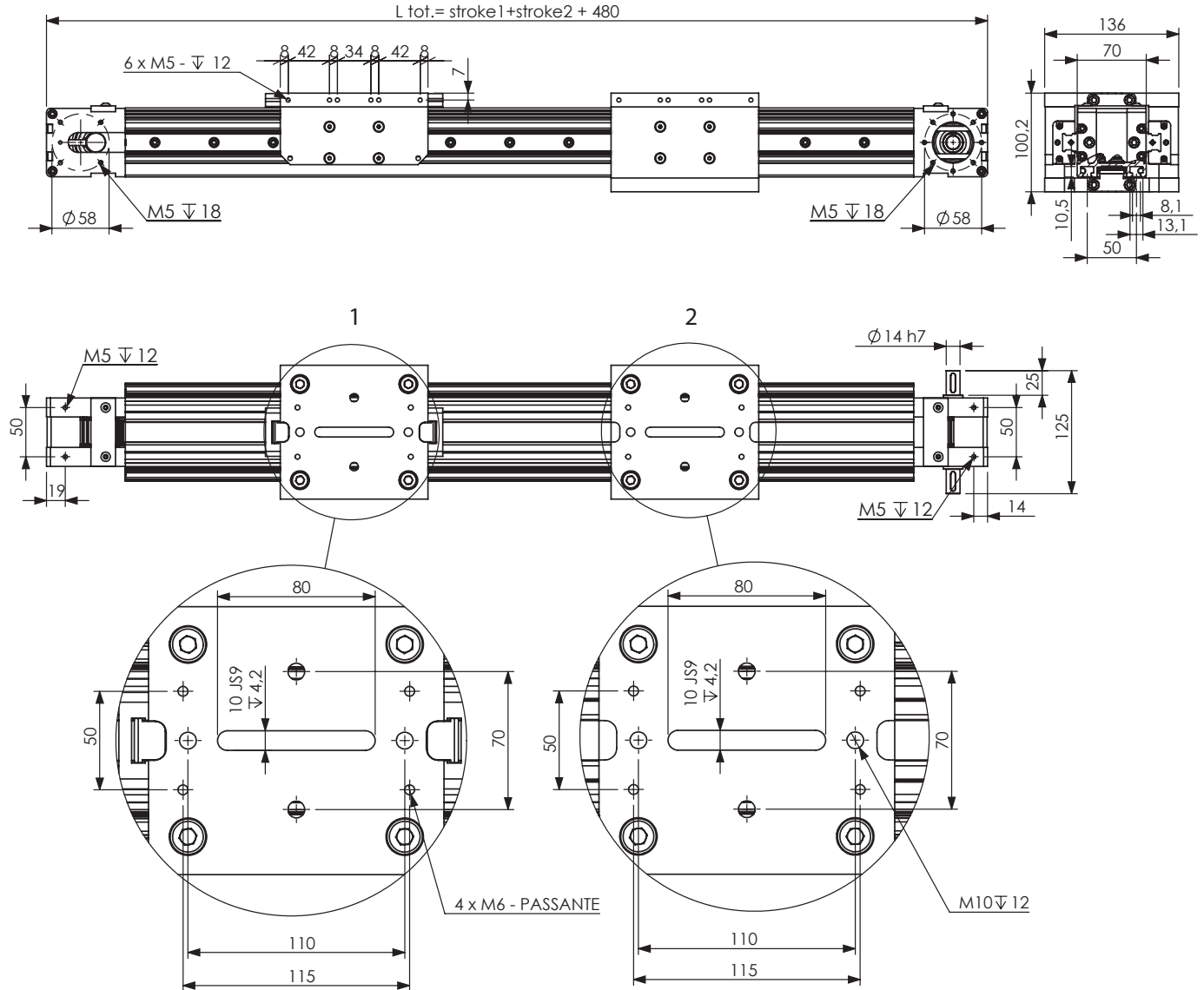


Num. item	Num. part	Description
1	Sensore	see pg. 110-111 of the catag.
2	FZ070LS366	Reference limit switch
3	Motor adapter	

MDS70-150

Double belt translation unit on rollers and recirculating ball guides

LITEK®



WEIGHT

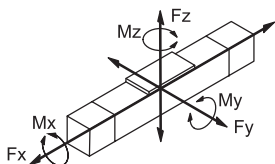
Basic length without stroke	10,3 Kg
100mm stroke	1,0 Kg
Carriage 1	2,2 Kg
Carriage 2	2,9 Kg

Forces [N]

	max dynamic***	break
Fx	671	1510
Fy	****	****
Fz	****	****

Moments [Nm]

	max dynamic***	break
Mx	220****	330
My	215****	360
Mz	215****	650



TECHNICAL DATA

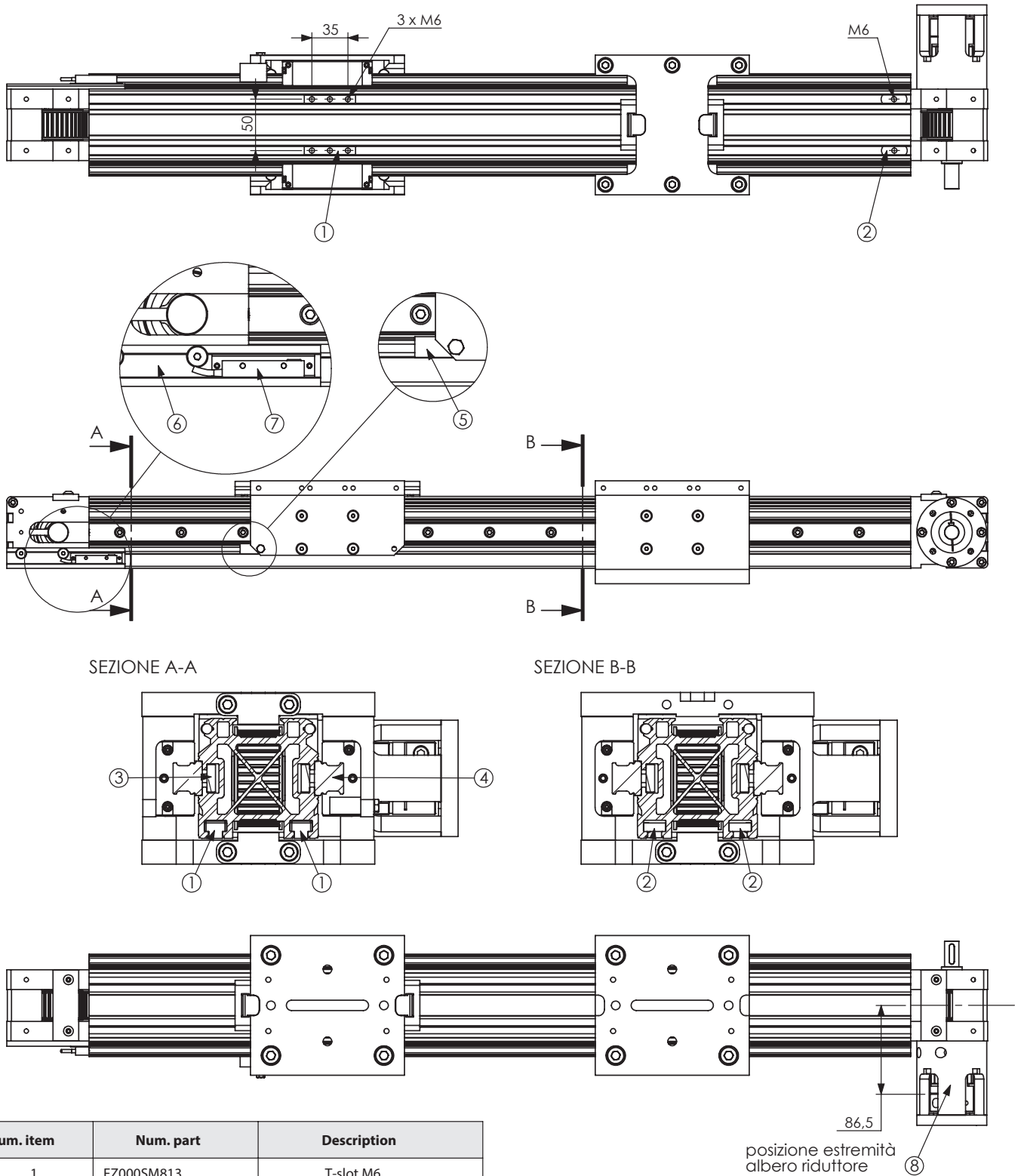
Max speed***	3m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3 Nm
Max stroke	3000+3000**
Max total length	180+180mm
Stroke per revolution	belt RPP5M22

* maximum no-load value

** higher strokes on request

*** for special applications contact technical department

**** Fy and Fz seals depend on the position of the movable carriage relative to the fixed carriage. The deformation of the profile in the two directions is: $dY=0.05\text{mm}$ (10N at 1mt) / $dZ=0.06\text{mm}$ (10N at 1mt)



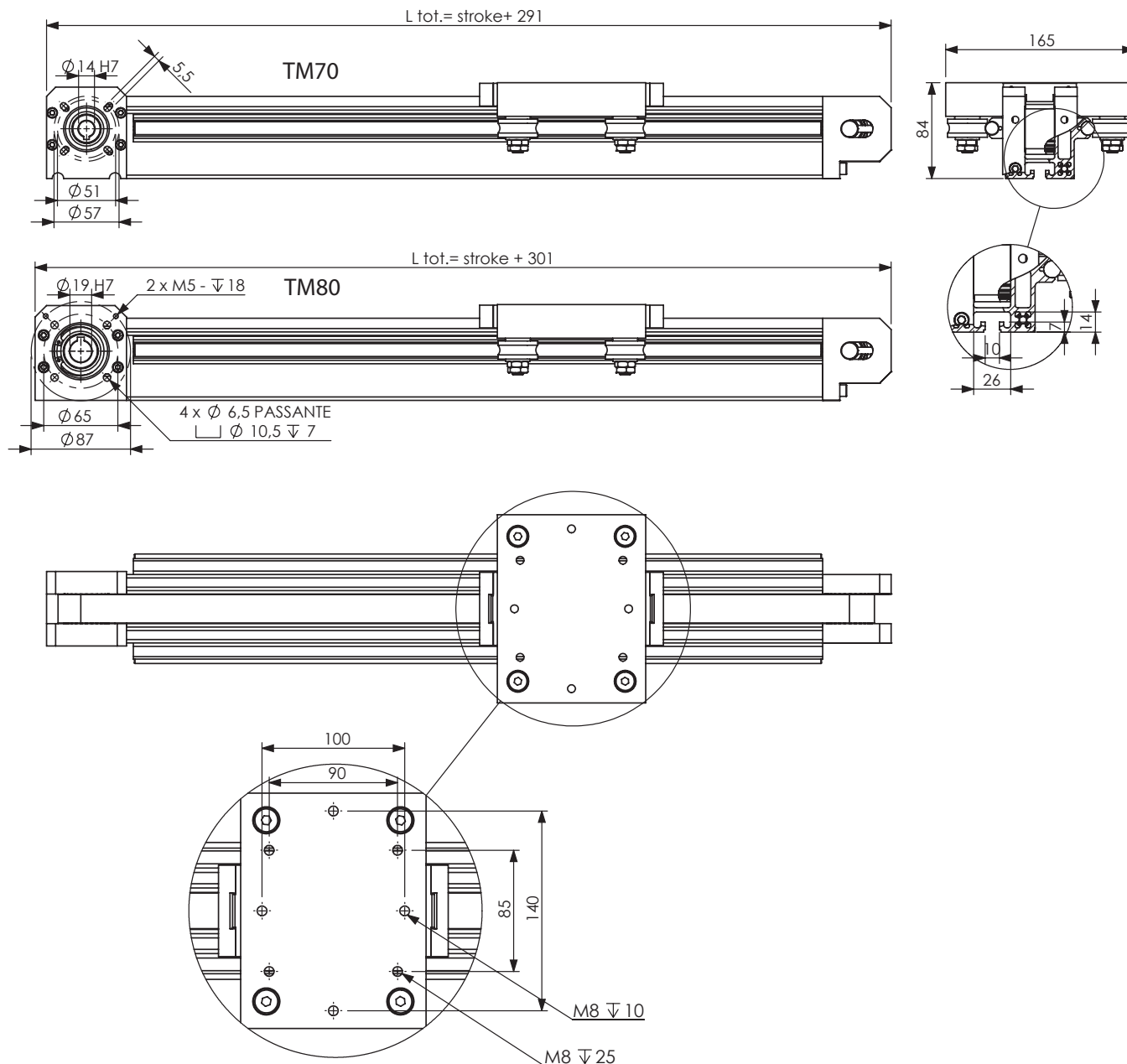
Num. item	Num. part	Description
1	FZ000SM813	T-slot M6
2	FZ000SM815	T-slot M6
3	FZ090ST500	T-slot
4	TKVD-20	Rail
5	CR070RS354	Reference limit switch MG
6	FZ000CS303	Cablecover
7	Sensore	see pg. 110-111 of the catag.
8	Motor adapter	

Linear system

LITEK® 72

ML72-130

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	4,07 Kg
100 MM stroke	0,71Kg
Entire carriage	2,00 Kg

Forces [N]	max dynamics***	break
Fx	762	1715
Fy	2500	3000
Fz	1300	1860
Moments [Nm]	max dynamics***	break
Mx	42	118
My	59	87
Mz	114	141

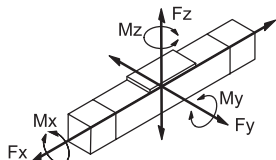
TECHNICAL DATA

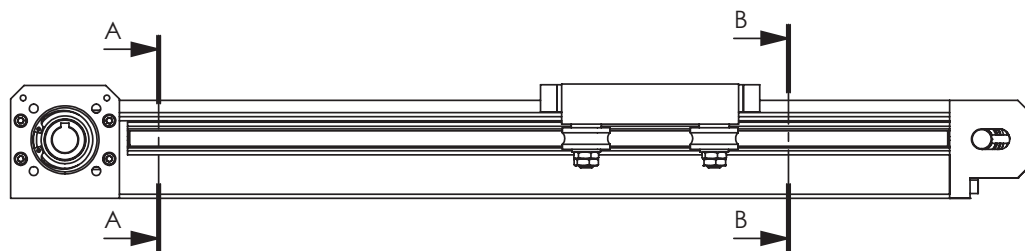
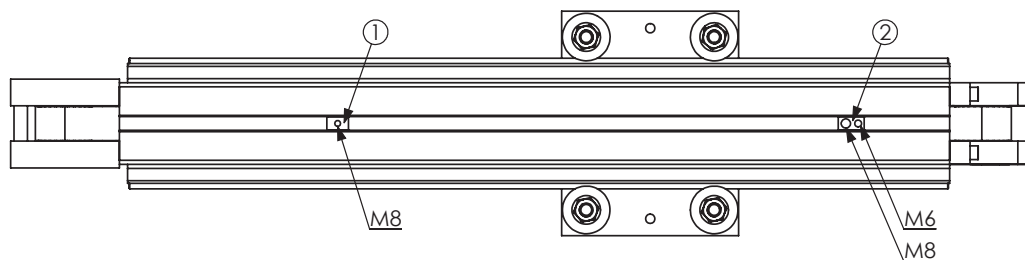
Max speed***	10m/s
Max acceleration***	50m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	0,4 Nm
Max stroke	6350mm**
Max total length	130mm
Stroke per revolution	belt RPP5M25

*maximumno-load value

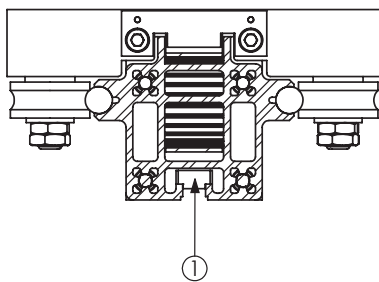
** higher strokes on request

*** for special applications contact technical department

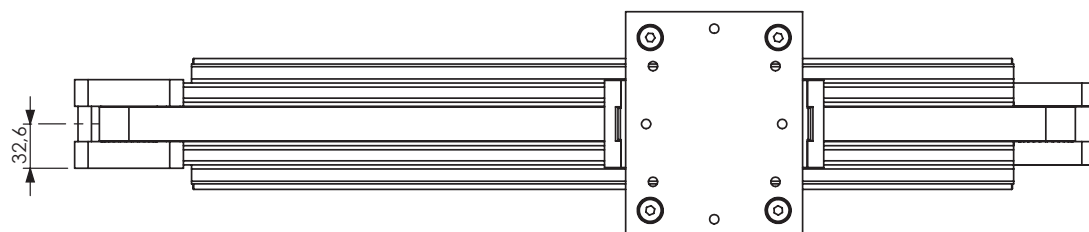
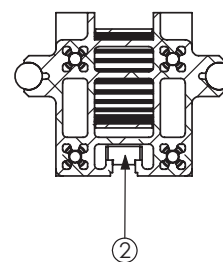




SEZIONE A-A



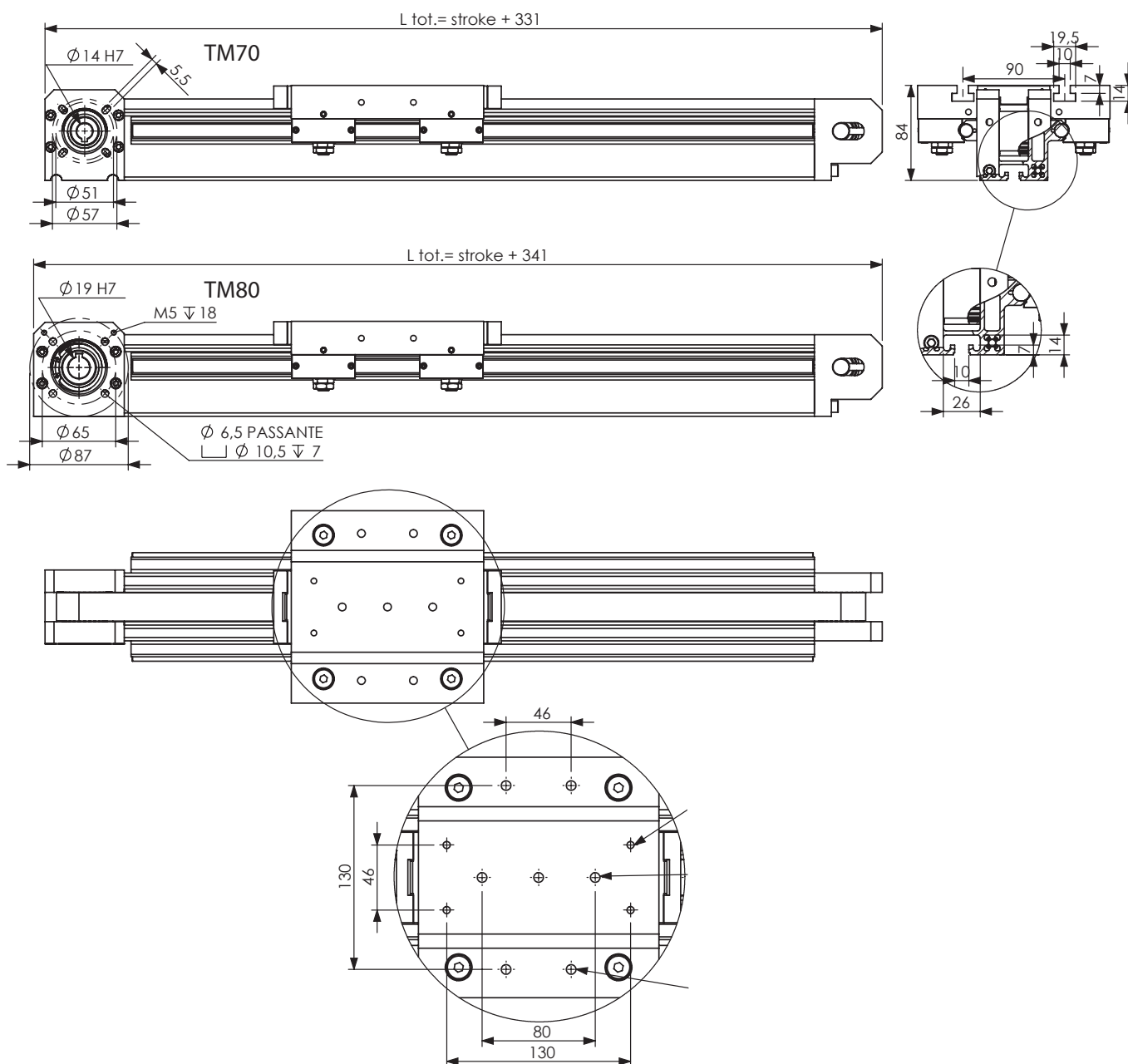
SEZIONE B-B



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6

ML72-170

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	5,14 Kg
100 MM stroke	0,71Kg
Entire carriage	2,50 Kg

Forces [N]	max dynamics***	break
Fx	762	1715
Fy	2500	3660
Fz	1300	2500
Moments [Nm]	max dynamics***	break
Mx	42	158
My	59	141
Mz	137	206

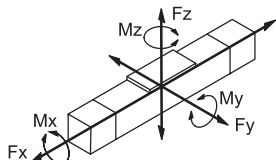
TECHNICAL DATA

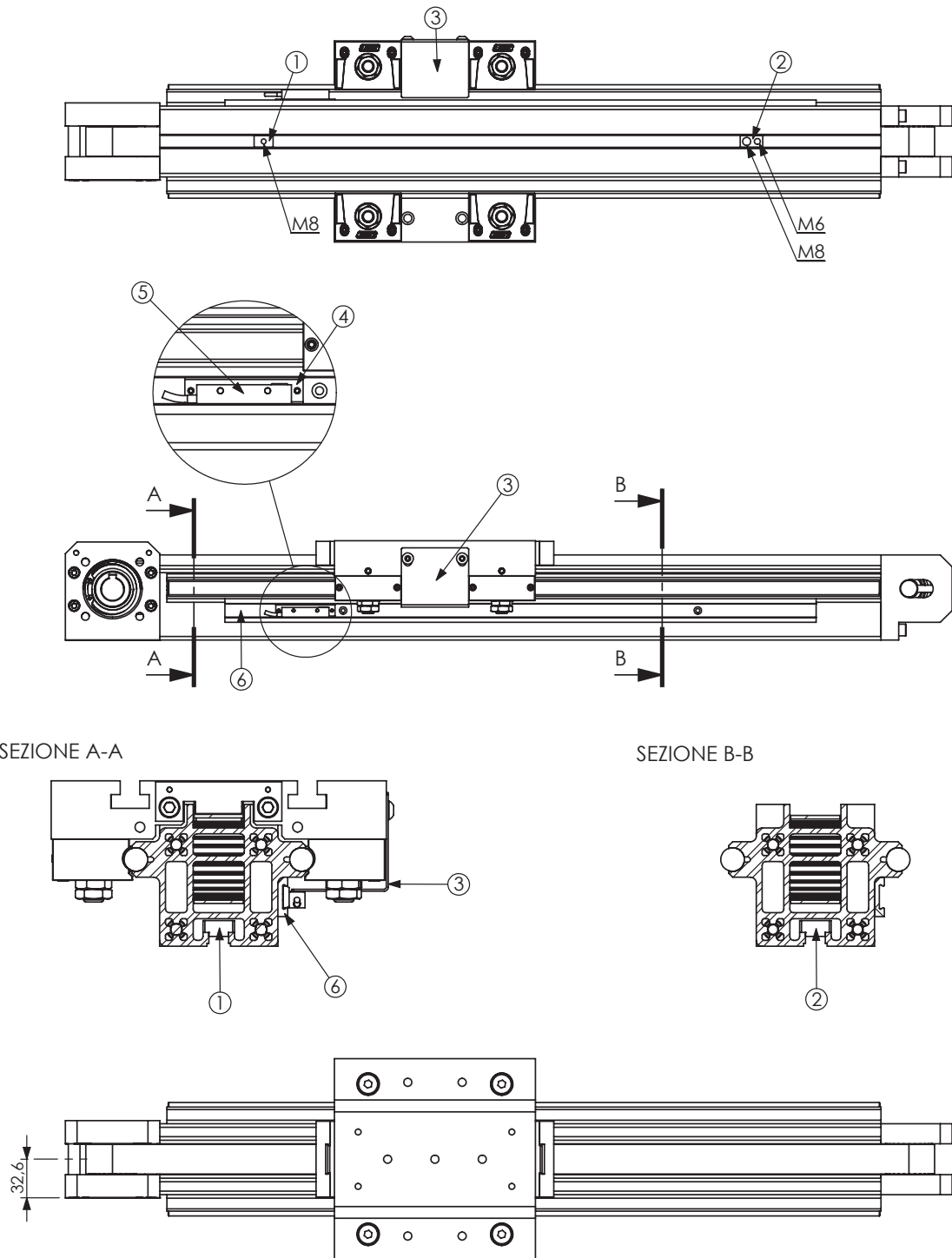
Max speed***	8m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	0,6 Nm
Max stroke	6300mm**
Max total length	130mm
Stroke per revolution	belt RPP5M25

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department





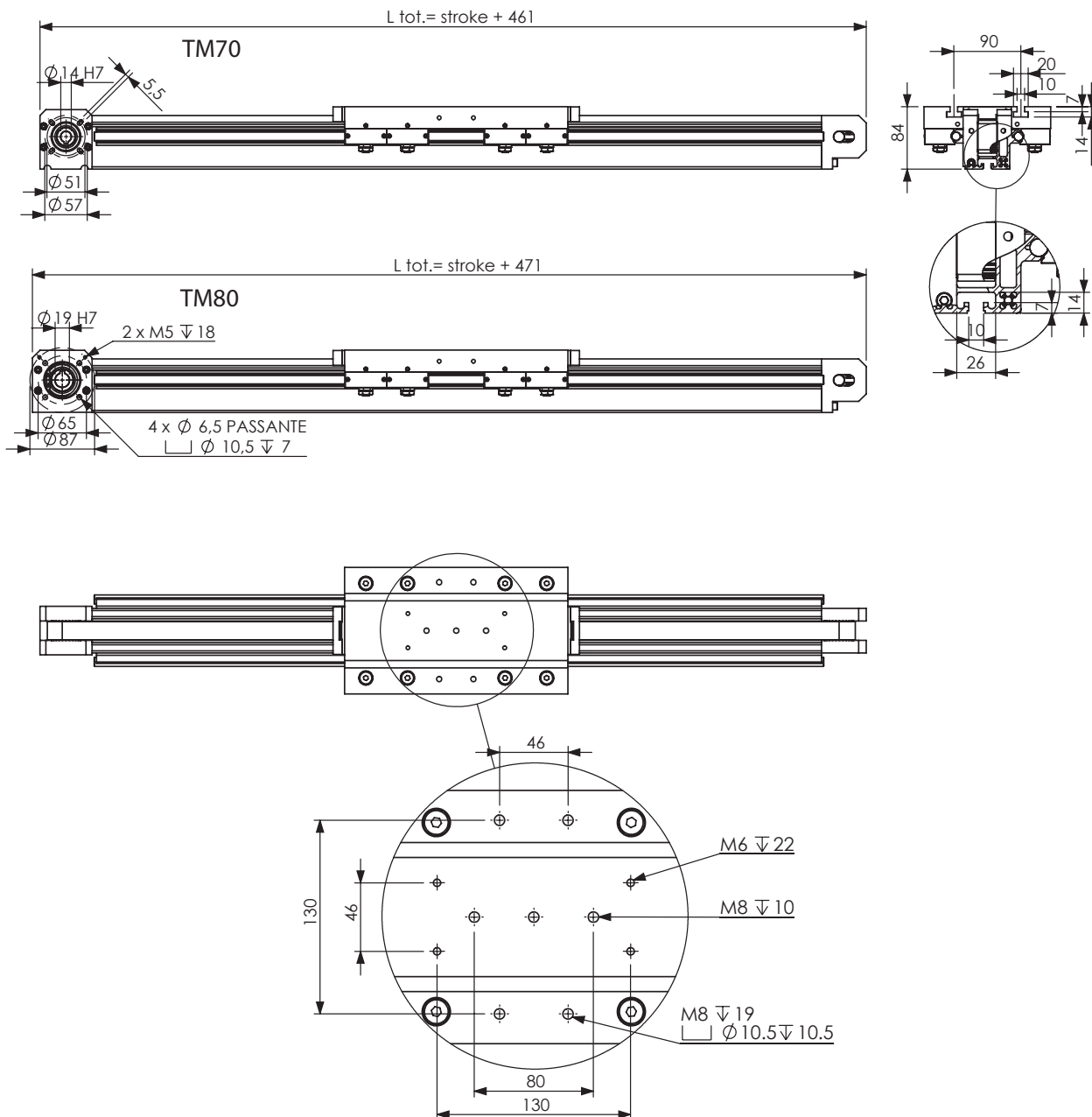
SEZIONE A-A

SEZIONE B-B

Num.item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ072PR205	Reference limit switch
4	FZ000SS231	Limit switch bracket
5	Sensore	see pg. 110-111 of the catag.
6	FZ000CS301	Cablecover

ML72-300

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	7,58 Kg
100 MM stroke	0,71Kg
Entire carriage	4,20 Kg

Forces [N]	max dynamics***	break
Fx	762	1715
Fy	2500	6000
Fz	2600	4300
Moments [Nm]	max dynamics***	break
Mx	84	273
My	234	402
Mz	451	467

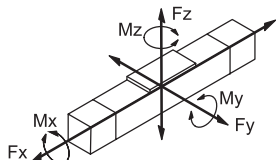
TECHNICAL DATA

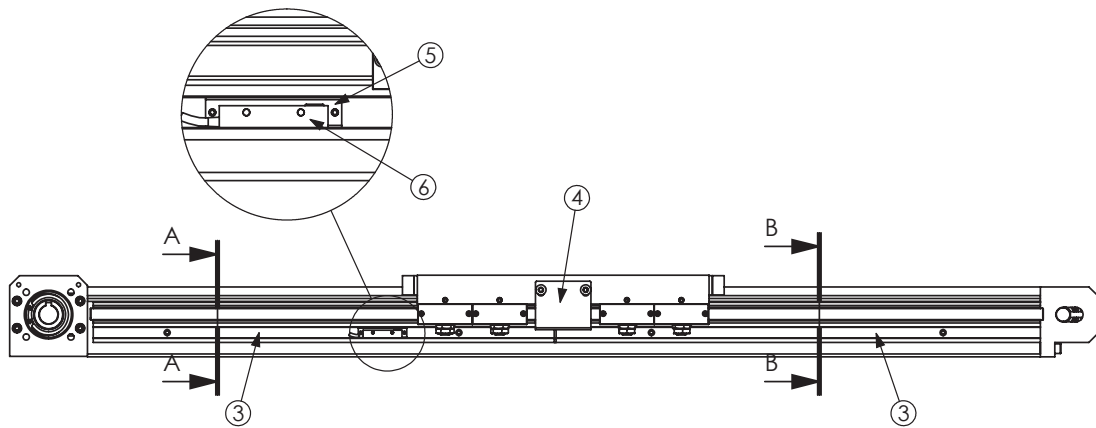
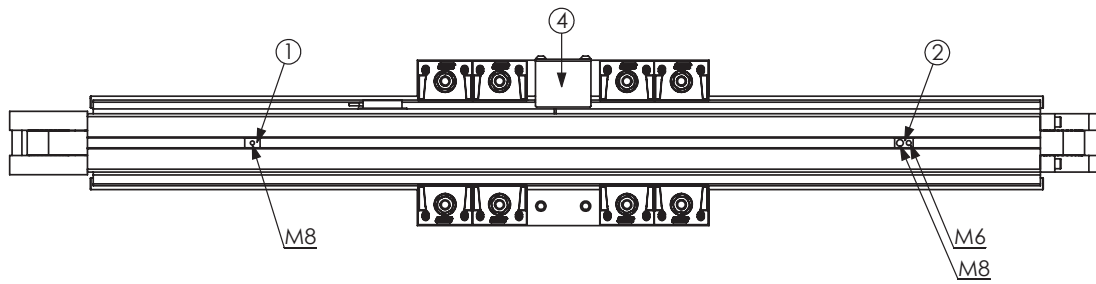
Max speed***	6m/s
Max acceleration***	20m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1,2 Nm
Max stroke	6100mm**
Max total length	130mm
Stroke per revolution	belt RPP5M25

*maximumno-load value

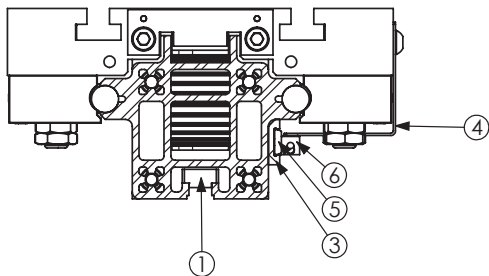
** higher strokes on request

*** for special applications contact technical department

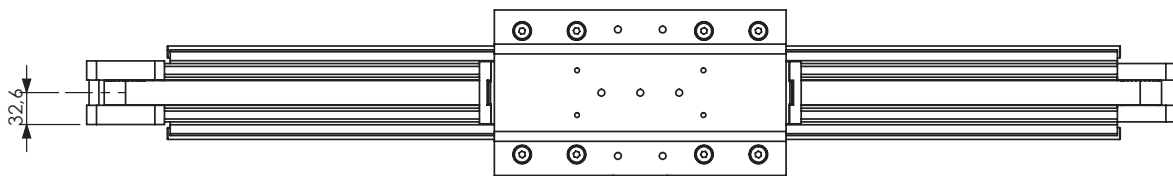
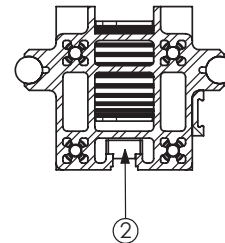




SEZIONE A-A



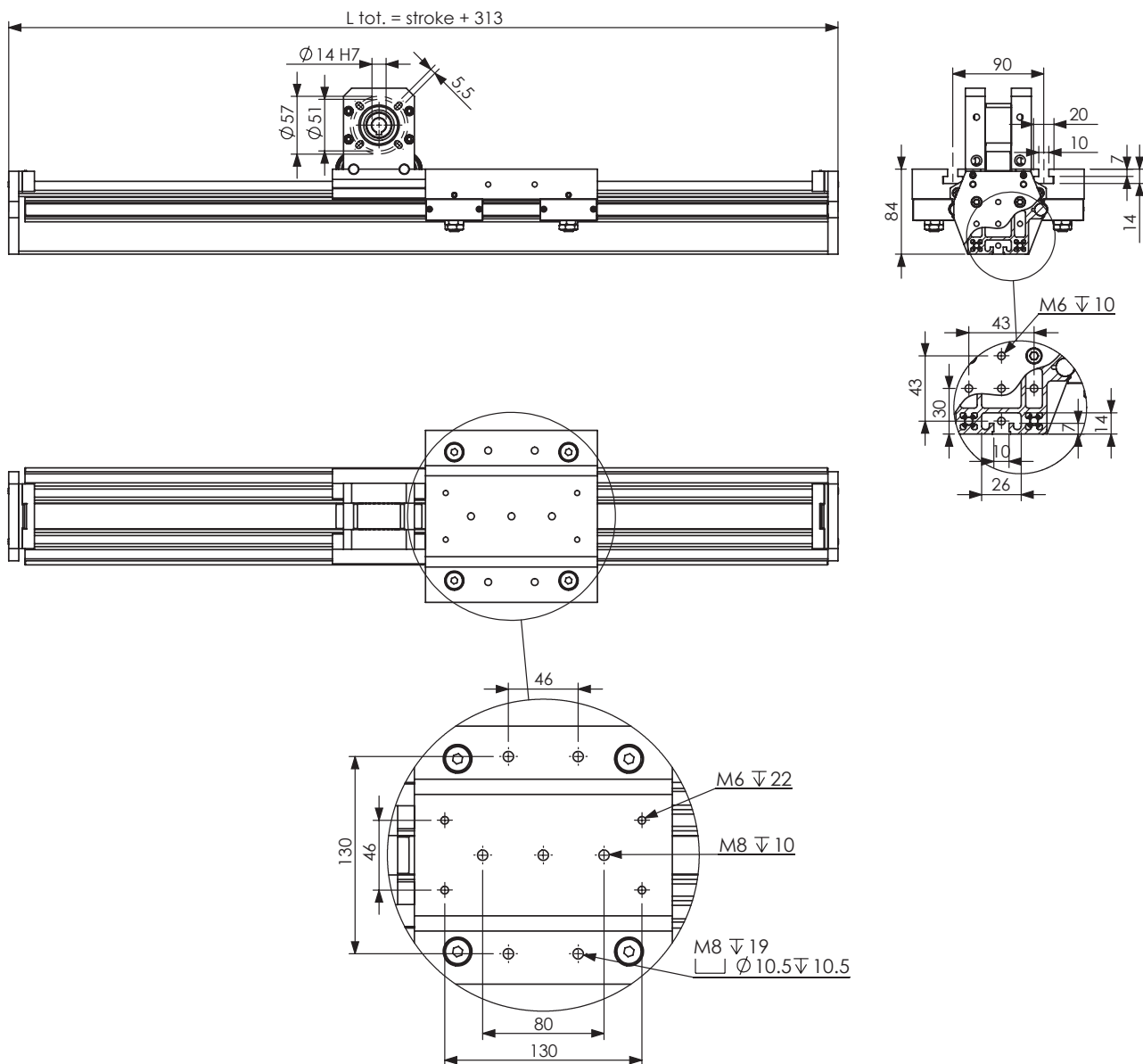
SEZIONE B-B



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000CS301	Cablecover
4	FZ072PR205	Reference limit switch
5	FZ000SS231	Limit switch bracket
6	Sensore	See pg. 110-111 of the catag.

CM72-170

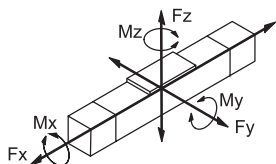
Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	5,44 Kg
100 MM stroke	0,71Kg
Entire carriage	3,78 Kg

Forces [N]	max dynamics***	
	break	break
Fx	762	1715
Fy	2500	3660
Fz	1300	2500
Moments [Nm]	max dynamics***	
	break	break
Mx	42	158
My	71	141
Mz	1,37	206



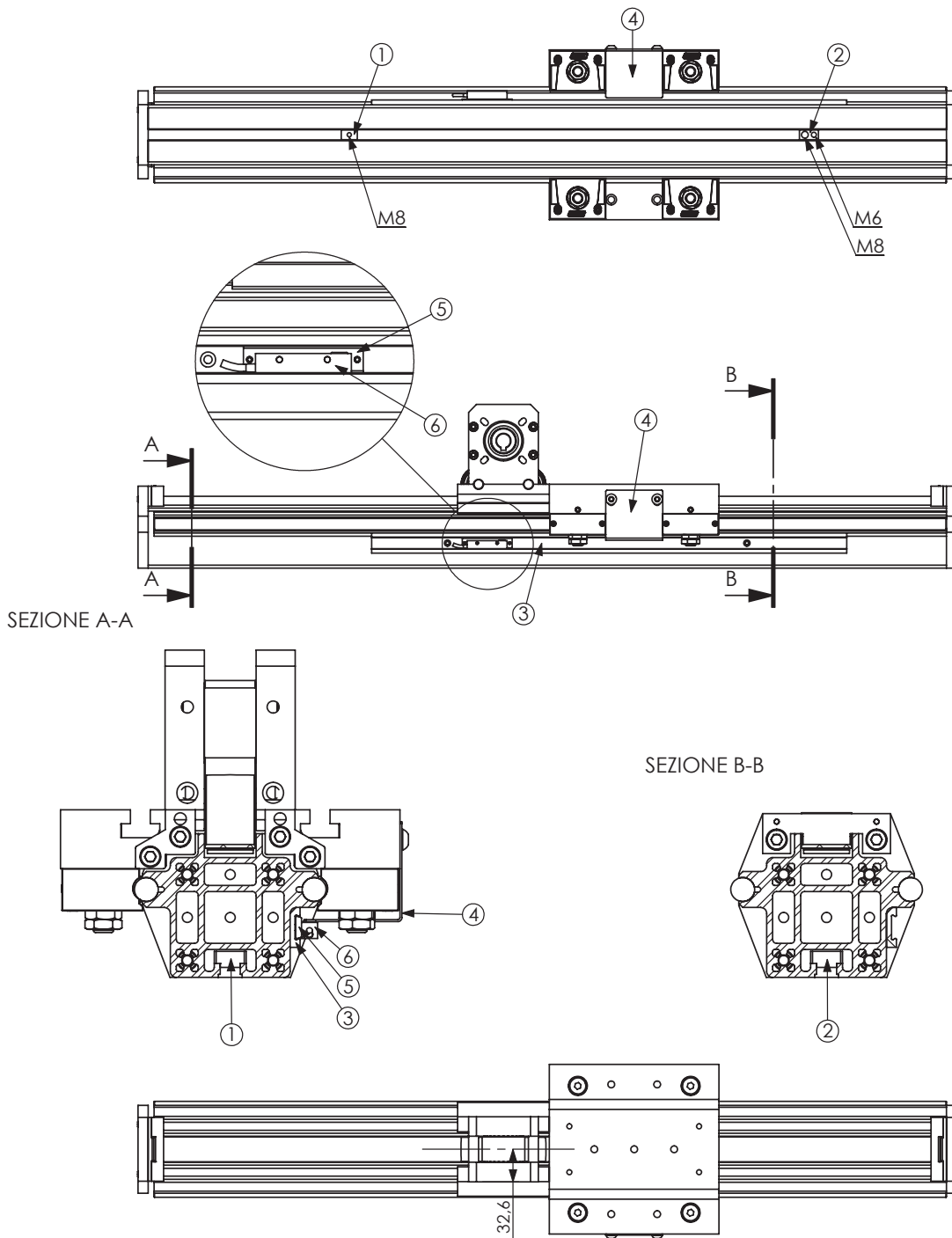
TECHNICAL DATA

Max speed***	8m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	0,6 Nm
Max stroke	6000mm**
Max total length	130mm
Stroke per revolution	belt RPP5M25

*maximumno-load value

** higher strokes on request

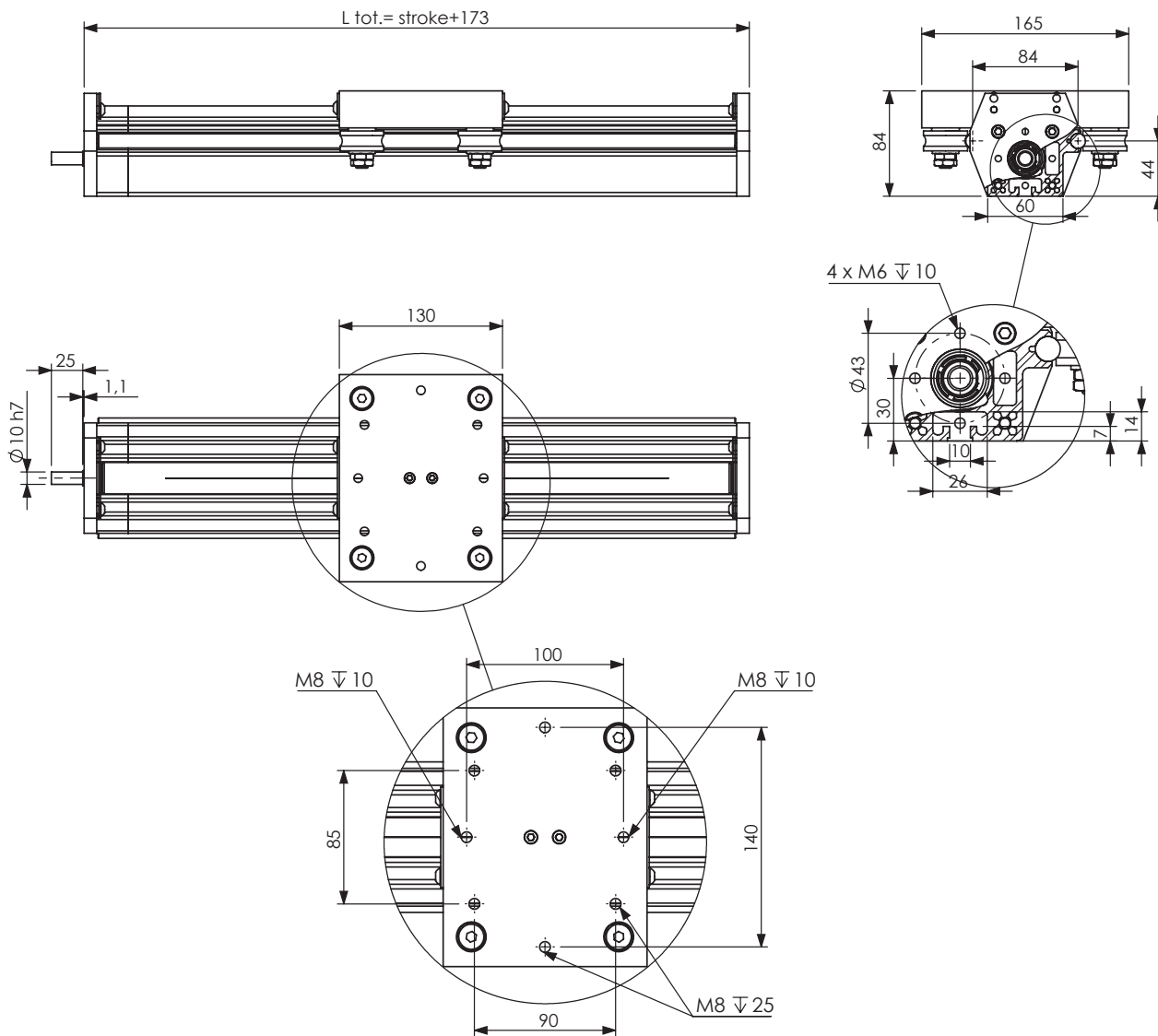
*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000CS301	Cablecover
4	FZ072PR205	Reference limit switch
5	FZ000SS231	Limit switch bracket
6	Sensore	See pg. 110-111 of the catag.

MR72-130

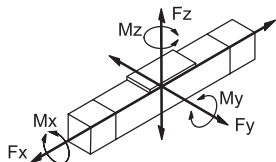
TPN screw translation unit on track rollers



WEIGHTS

Basic length without stroke	3,7 Kg
100 MM stroke	0,82 Kg
Entire carriage	2,2 Kg

Forces [N]	max dynamics***	break
Fx	264	396
Fy	800	1500
Fz	650	900
Moments [Nm]	max dynamics***	break
Mx	21	55
My	30	45
Mz	57	70



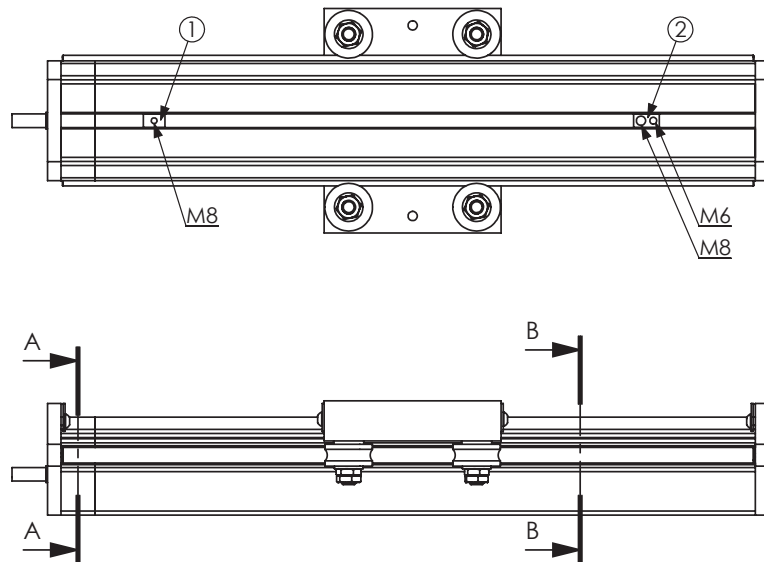
TECHNICAL DATA

Max speed***	0,066m/s
Max acceleration***	1m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	2500mm**
Max total length	4mm
Stroke per revolution	vite TPN Ø 16

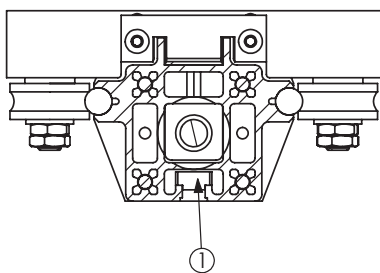
*maximumno-load value

** higher strokes on request

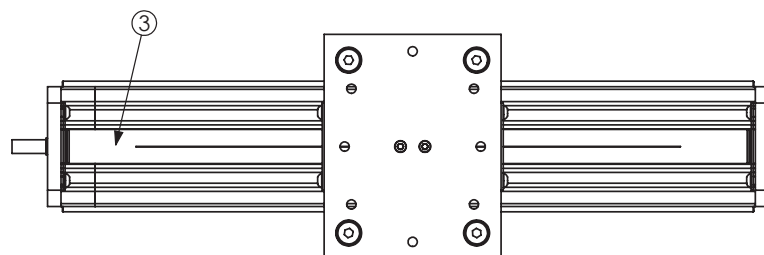
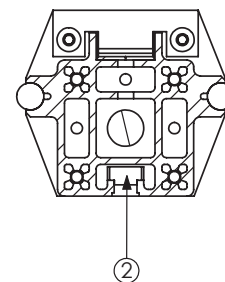
*** for special applications contact technical department



SEZIONE A-A



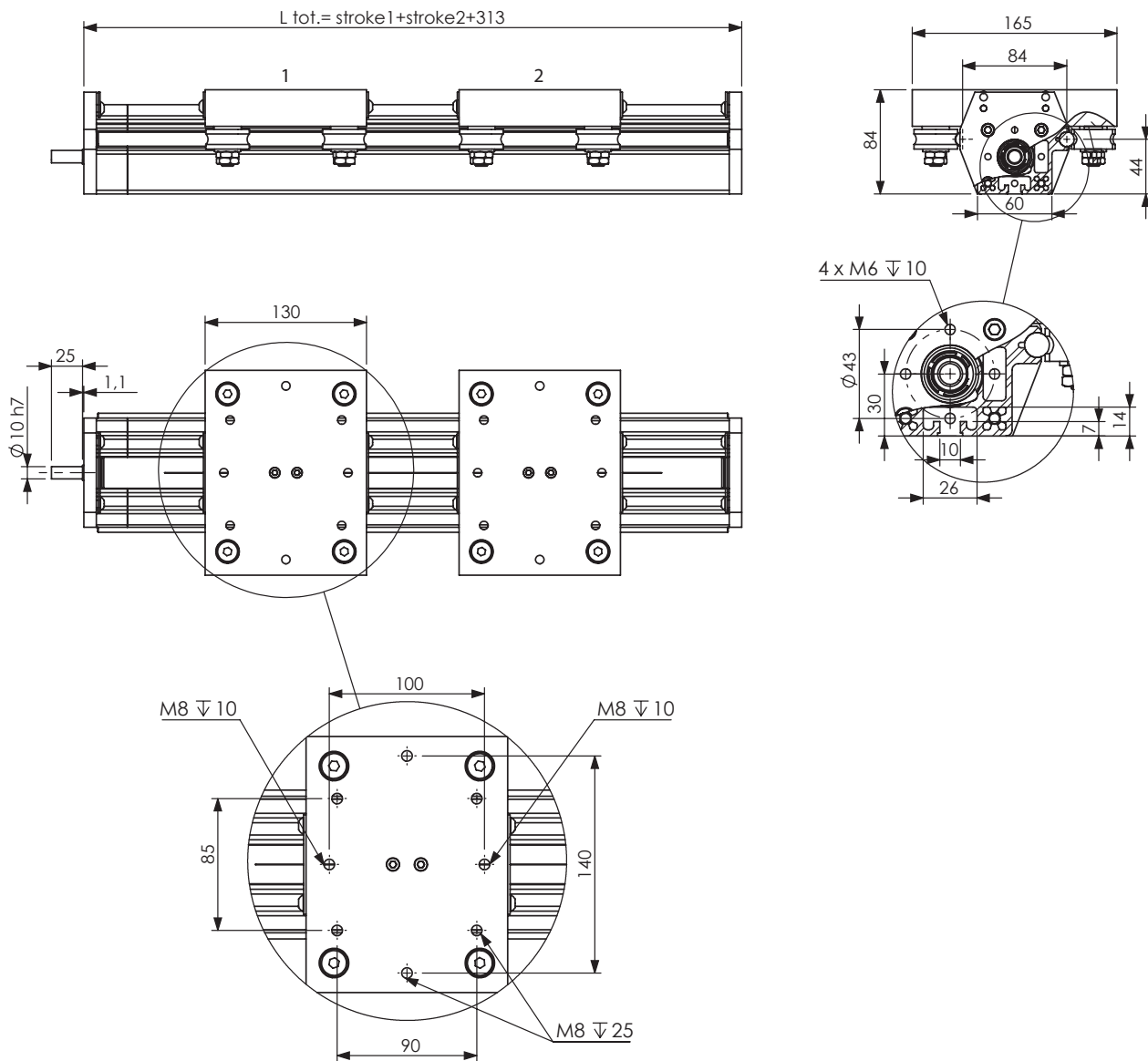
SEZIONE B-B



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	MR72BA	Cover strip

MR72-130-2

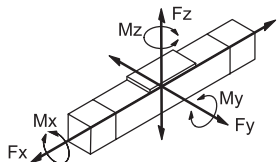
TPN screw symmetric double translation unit on track rollers



WEIGHTS

Basic length without stroke	7,1 Kg
100 MM stroke	0,82 Kg
Entire carriage	2,2 Kg

Forces [N]	max dynamics***	break
Fx	264	396
Fy	800	1500
Fz	650	900
Moments [Nm]	max dynamics***	break
Mx	21	55
My	30	45
Mz	57	70



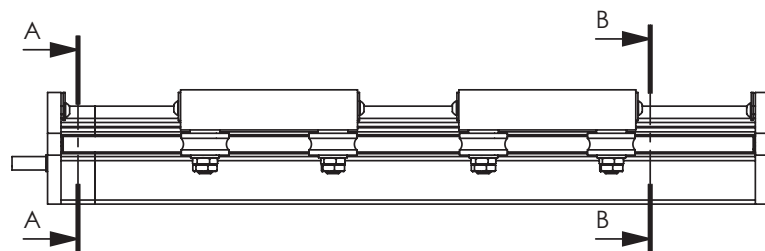
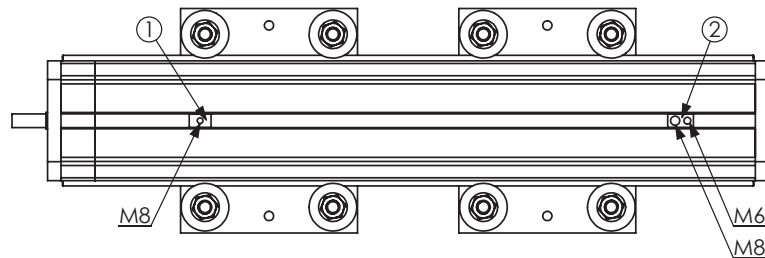
TECHNICAL DATA

Max speed***	0,066m/s
Max acceleration***	1m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2 Nm
Max stroke	1200+1200mm**
Max total length	4+4mm
Stroke per revolution	vite TPN Ø 16

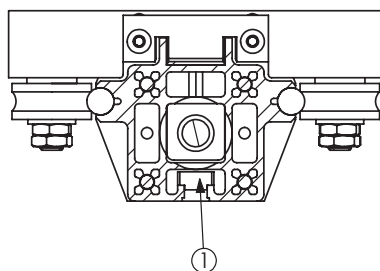
*maximumno-load value

** higher strokes on request

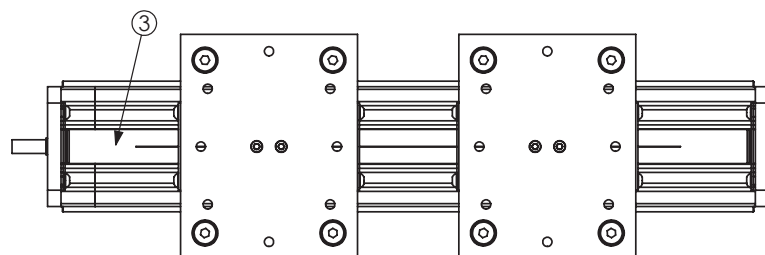
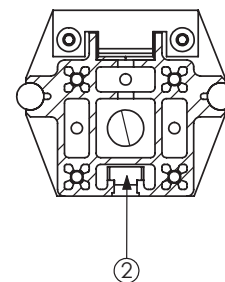
*** for special applications contact technical department



SEZIONE A-A



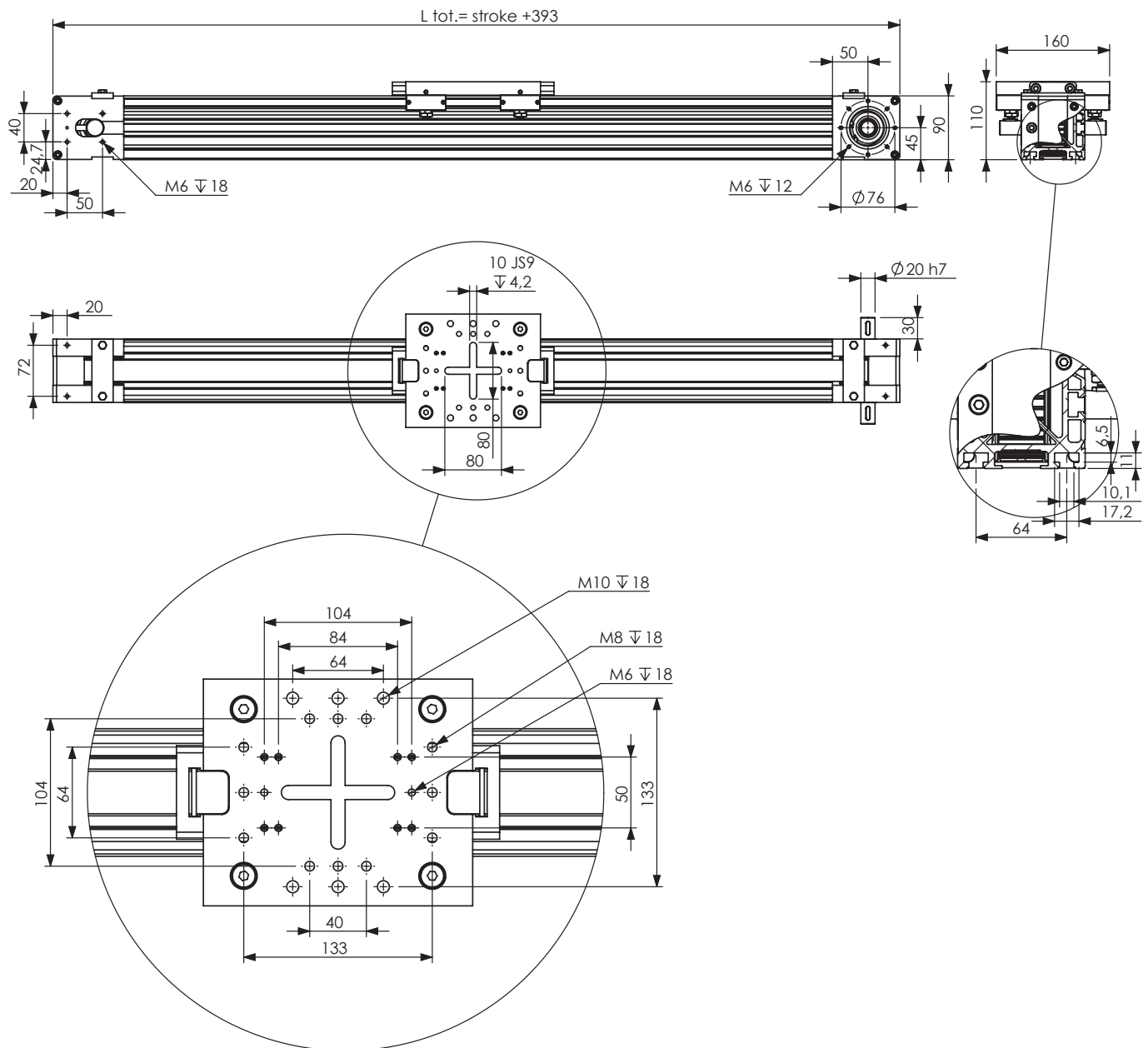
SEZIONE B-B



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	MR72BA	Cover strip

ML90-190

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	8,2 Kg
100 MM stroke	0,88 Kg
Entire carriage	2,25 Kg

Forces [N]	max dynamics***	break
Fx	2005	4510
Fy	2500	10000
Fz	1300	5200
Moments [Nm]	max dynamics***	break
Mx	40	156
My	83	322
Mz	160	643

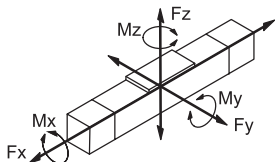
TECHNICAL DATA

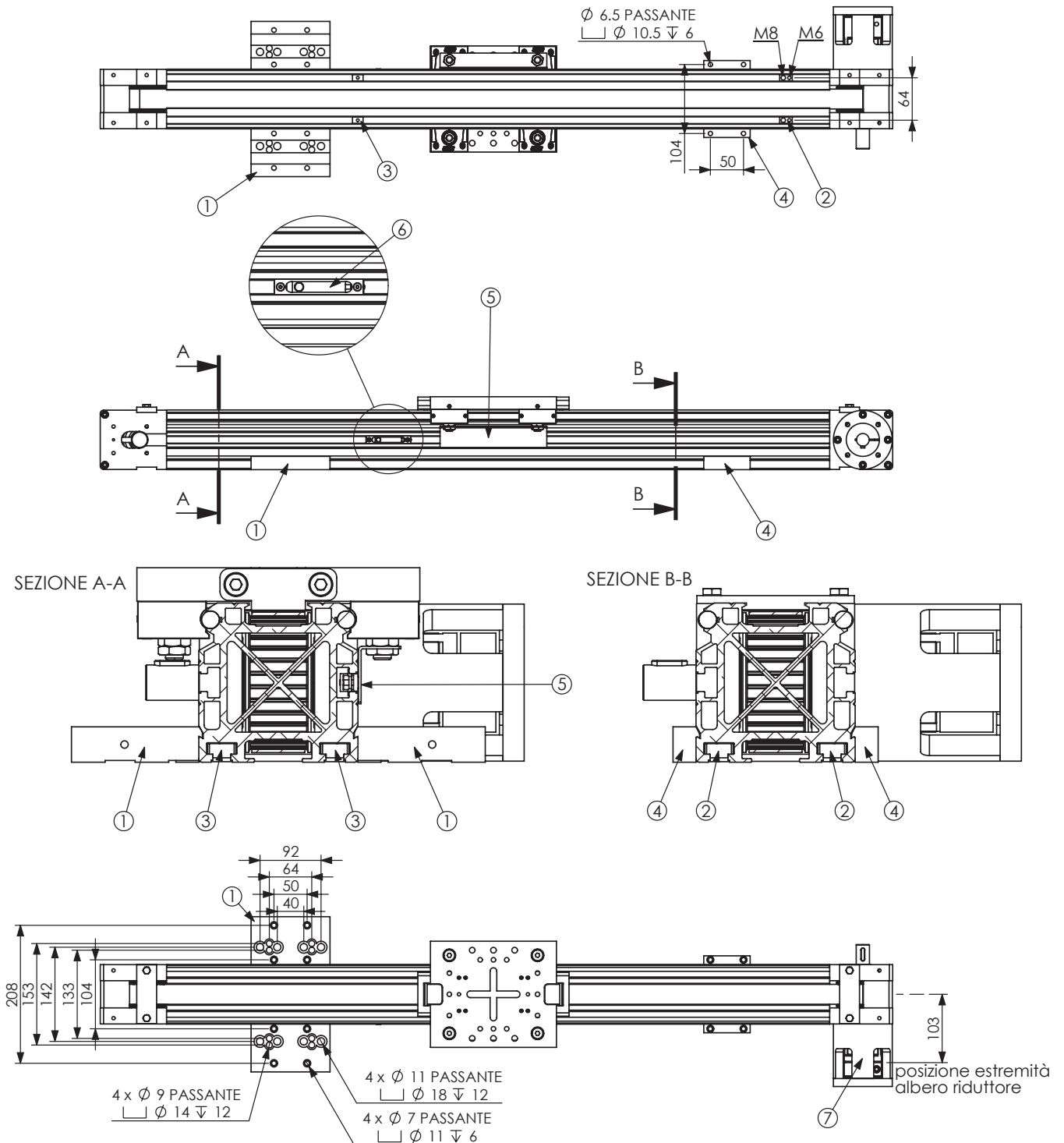
Max speed***	8m/s
Max acceleration***	50m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1,5 Nm
Max stroke	6250mm**
Max total length	240mm
Stroke per revolution	belt RPP8M30

*maximum-no-load value

** higher strokes on request

*** for special applications contact technical department

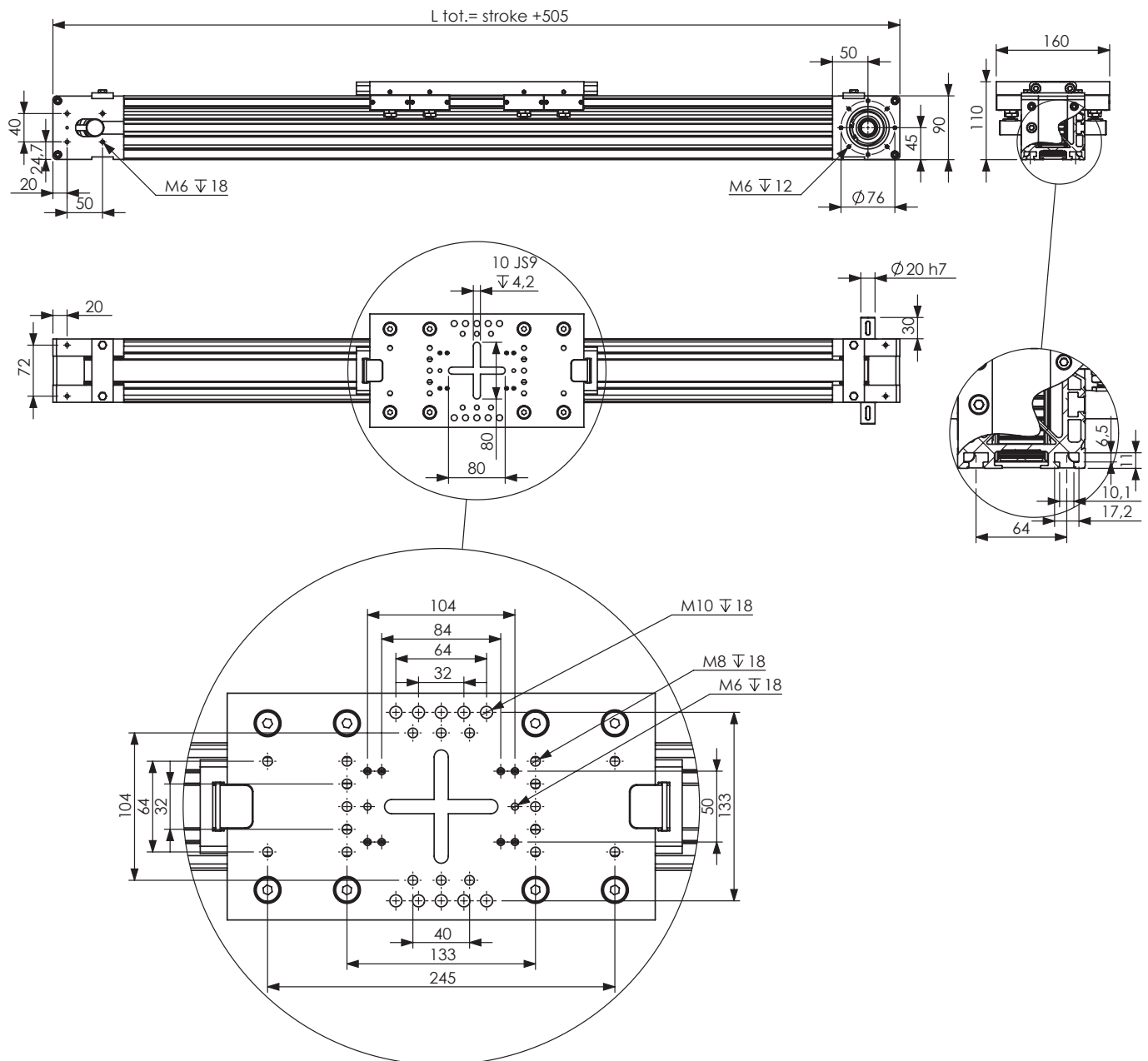




Num. articolo	Num. parte	Descrizione
1	FZ000SS416	Bracket
2	FZ000SM802	T-slot M8-M6
3	FZ000SM801	T-slot M5
4	FZ000SS406	Bracket
5	FZ090LS366	Reference limit switch
6	Sensore	See pg. 110-111 of the catag.
7	Motor adapter	

ML90-302

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	11,5 Kg
100 MM stroke	0,88 Kg
Entire carriage	3,85 Kg

Forces [N]	max dynamics***	break
Fx	2005	4510
Fy	5000	16875
Fz	2600	10400
Moments [Nm]	max dynamics***	break
Mx	78	312
My	236	943
Mz	457	1827

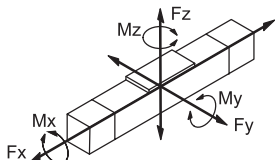
TECHNICAL DATA

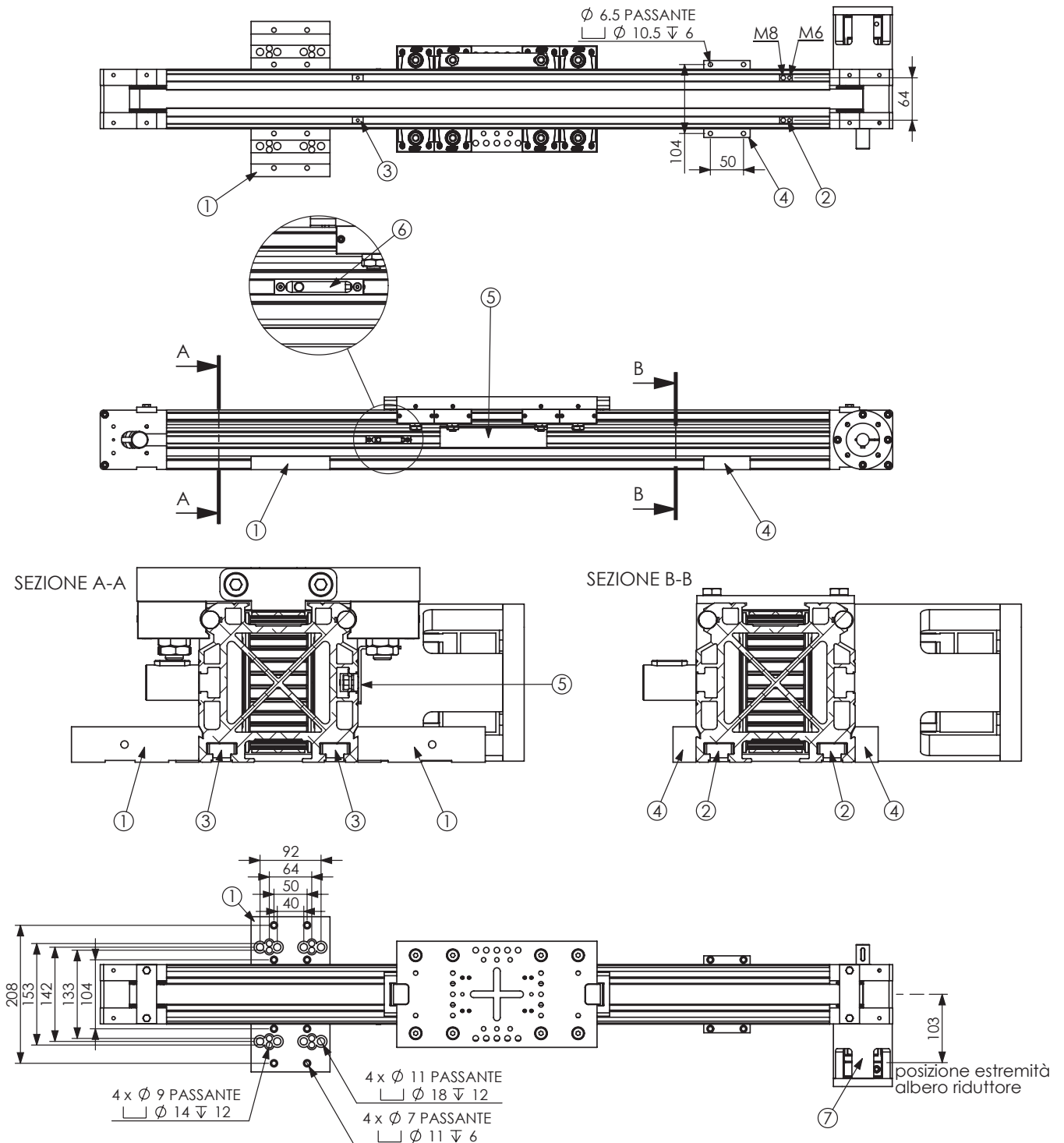
Max speed***	6m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1,5 Nm
Max stroke	6150mm**
Max total length	240mm
Stroke per revolution	belt RPP8M30

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



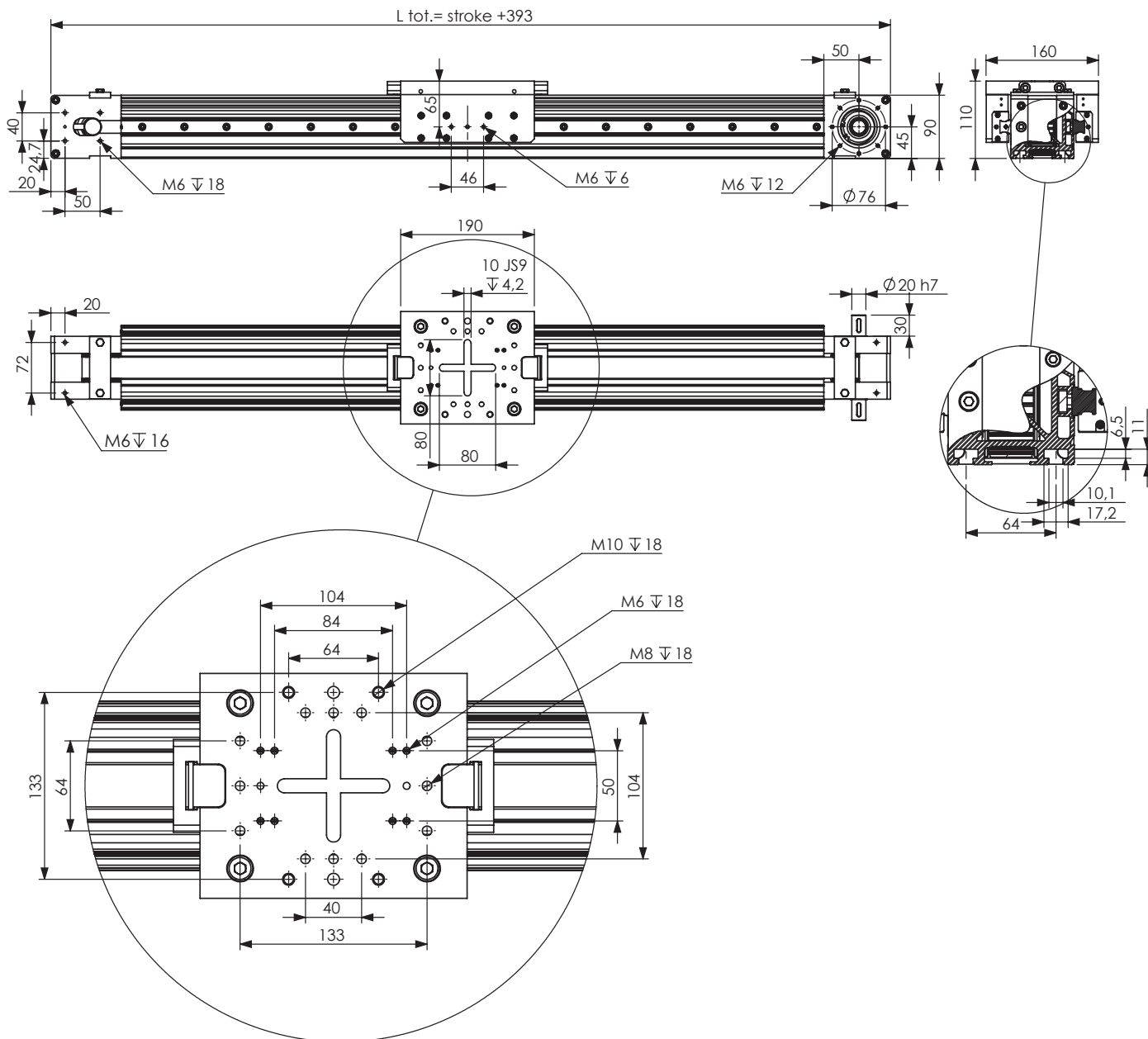


Num. item	Num. part	Description
1	FZ000SS416	Bracket
2	FZ000SM802	T-slot M8-M6
3	FZ000SM801	T-slot M5
4	FZ000SS406	Bracket
5	FZ090LS366	Reference limit switch
6	Sensore	See pg. 110-111 of the catag.
7	Motor adapter	

MG90-190

Belt translation unit on recirculating ball bearing guide

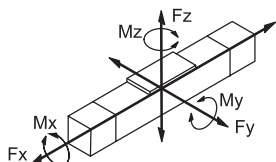
LITEK®



WEIGHTS

Basic length without stroke	8,6 Kg
100 MM stroke	1,1 Kg
Entire carriage	2,9 Kg

Forces [N]	max dynamics***	break
Fx	2005	4510
Fy	6600	10000
Fz	13100	21667
Moments [Nm]	max dynamics***	break
Mx	710	1147
My	628	1198
Mz	628	1006



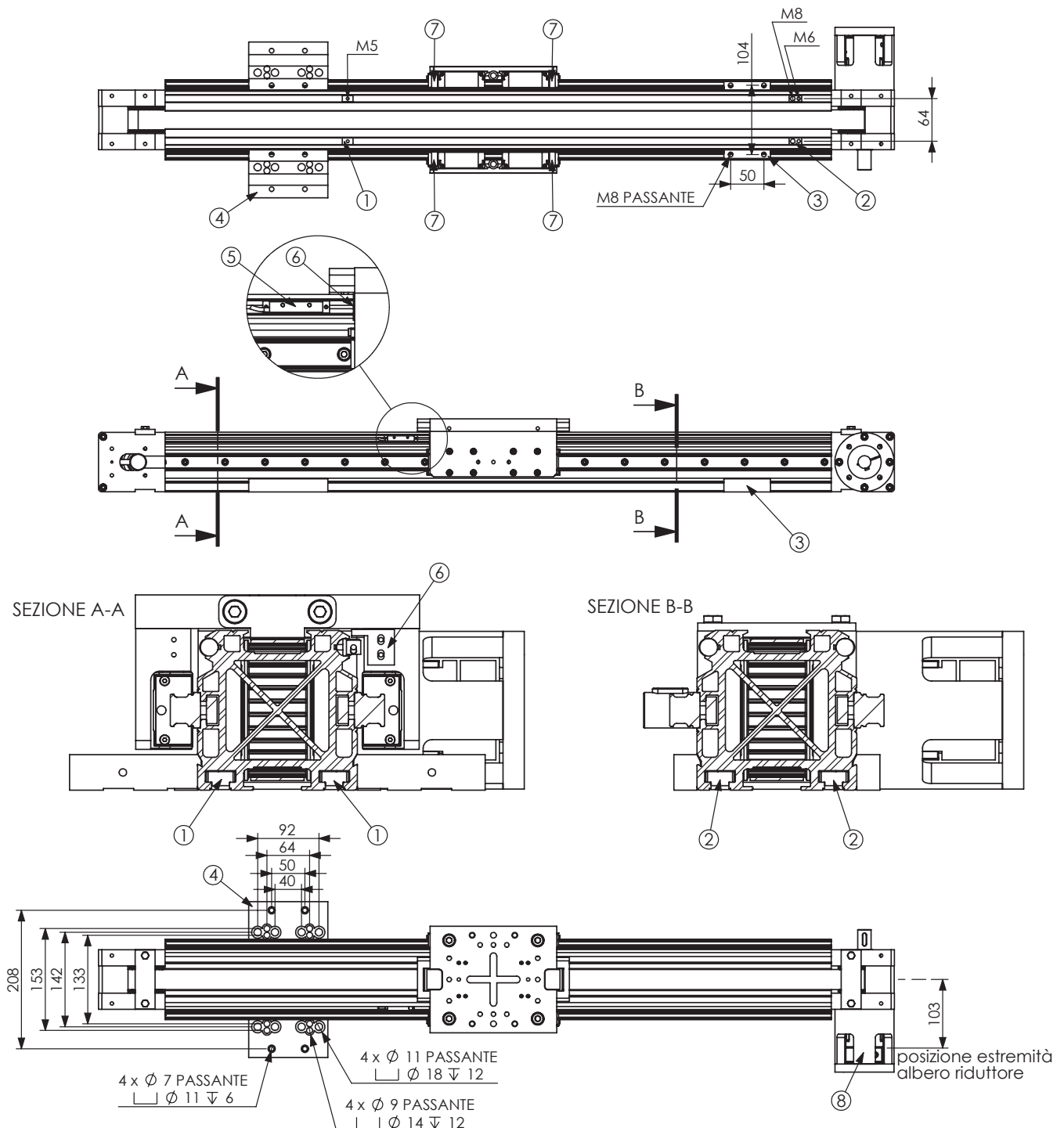
TECHNICAL DATA

Max speed***	3m/s
Max acceleration***	40m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2 Nm
Max stroke	5500mm**
Max total length	240mm
Stroke per revolution	belt RPP8M30

*maximumno-load value

** higher strokes on request

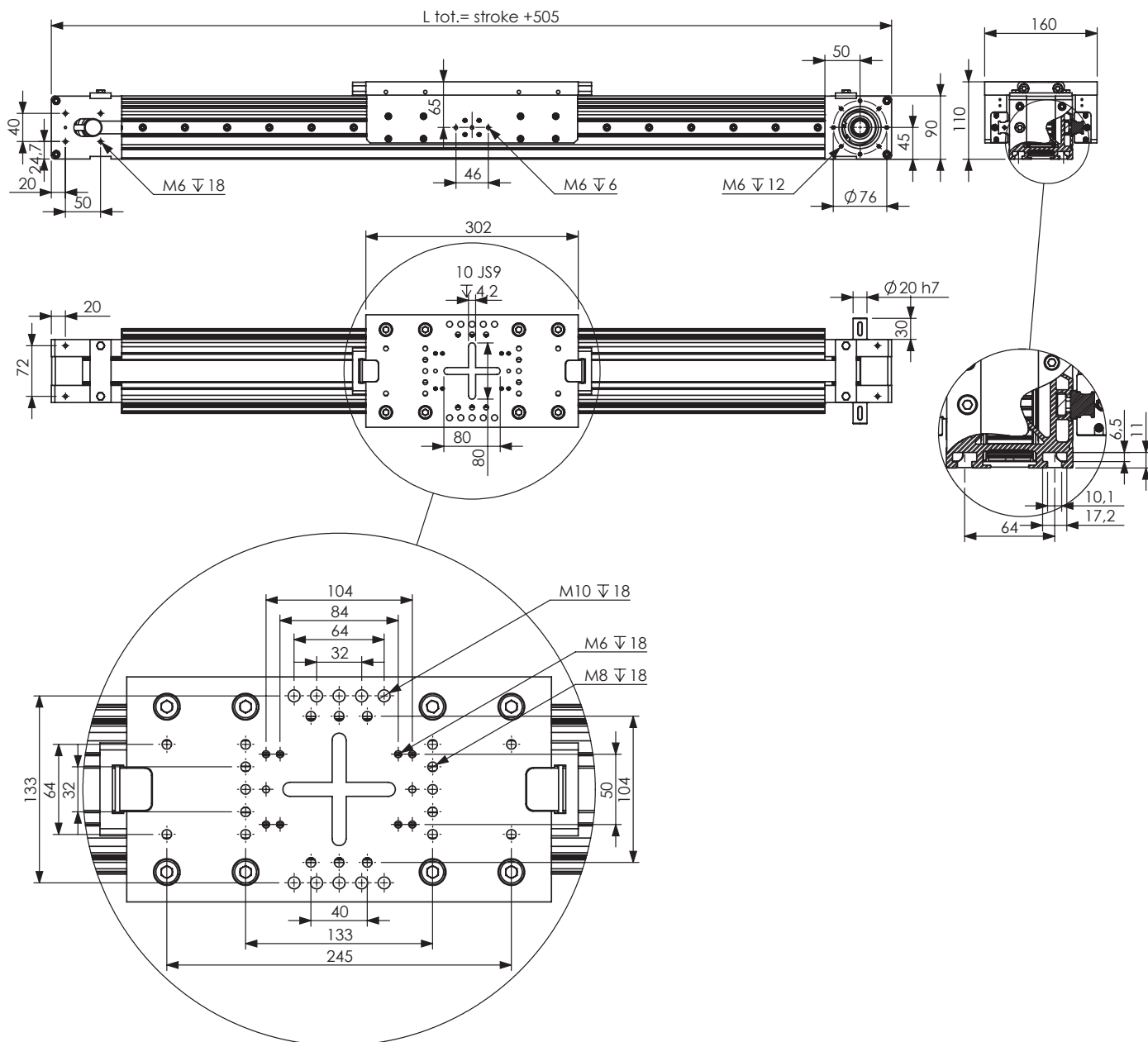
*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS408	Bracket 2 x M8
4	FZ000SS416	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	CR090RS556	Reference limit switch
7	KIT-20-400	Sealing and lubrication elements KIT
8	Motor adapter	

MG90-302

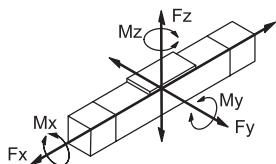
Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	11,4 Kg
100 MM stroke	1,1 Kg
Entire carriage	4,5 Kg

Forces [N]	max dynamics***	break
Fx	2005	4510
Fy	10620	15930
Fz	16200	24694
Moments [Nm]	max dynamics***	break
Mx	878	2133
My	1522	2992
Mz	1522	2405



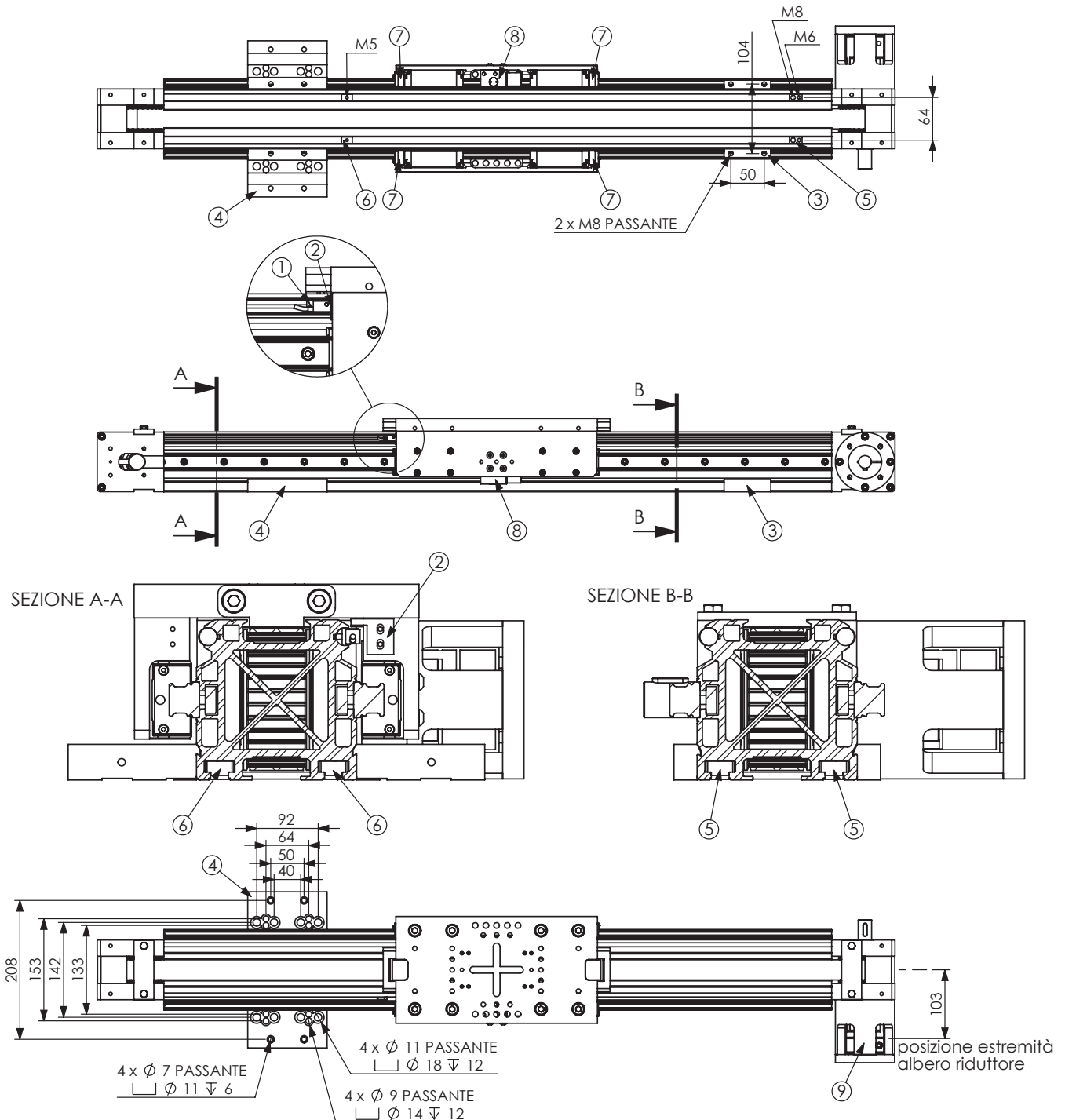
TECHNICAL DATA

Max speed***	3m/s
Max acceleration***	40m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2,6 Nm
Max stroke	5500mm**
Max total length	240mm
Stroke per revolution	belt RPP8M30

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department

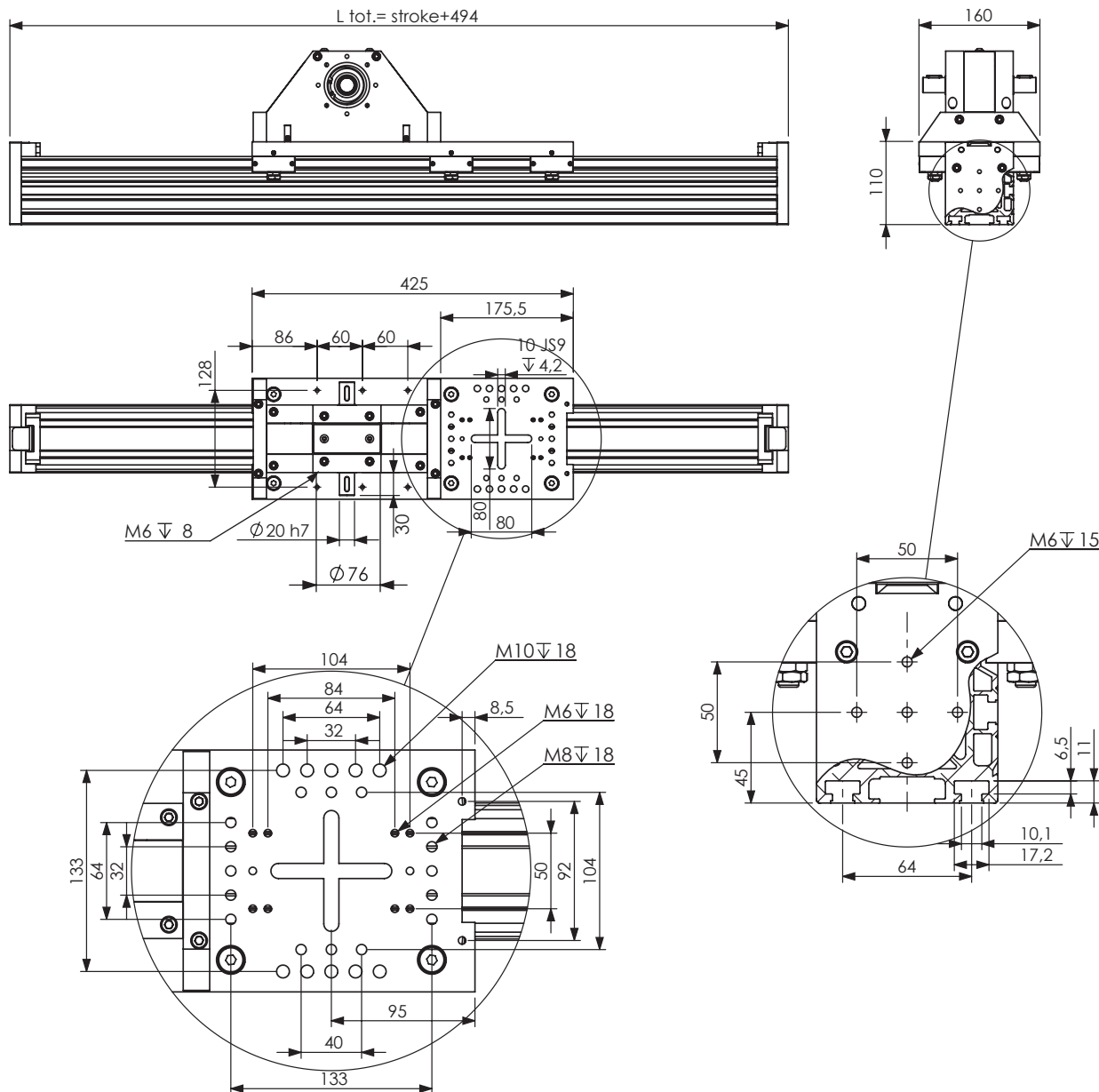


BOM table			
Num. item	Num. part	Description	Note
1	Sensore	See pg. 110-111 of the catag.	
2	CR090RS556	Reference limit switch	
3	FZ000SS408	Bracket 2 x M8	***
4	FZ000SS416	Bracket	***
5	FZ000SM802	T-slot M8-M6	
6	FZ000SM801	T-slot M5	
7	KIT-20-400	Sealing and lubrication elements KIT	
8	MKS2002K	Clamping and braking elements	incompatible with***
9	Motor adapter		

CM90-425

Belt translation unit on track rollers

LITEK®



WEIGHTS

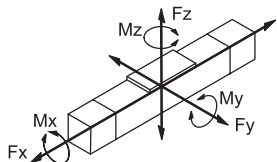
Basic length without stroke	13,5 Kg
100 MM stroke	0,86 Kg
Entire carriage	8,5 Kg

Forces [N]

	max dynamics***	break
Fx	2005	4510
Fy	3750	15000
Fz	16200	7800

Moments [Nm]

	max dynamics***	break
Mx	59	234
My	270	1080
Mz	523	2093



TECHNICAL DATA

Max speed***	6m/s
Max acceleration***	20m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1,5 Nm
Max stroke	6000mm**
Max total length	160mm
Stroke per revolution	belt RPP8M30

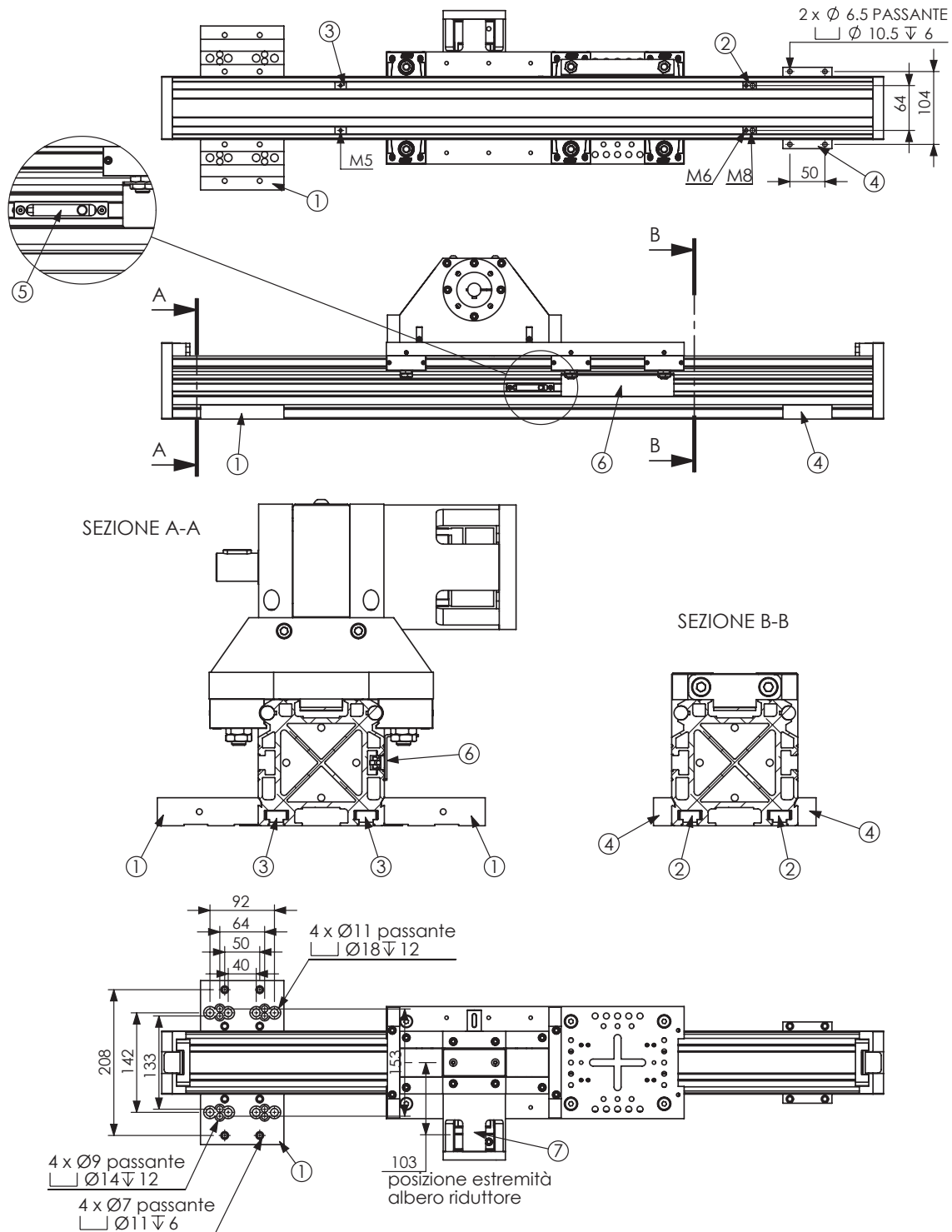
*maximum no-load value

** higher strokes on request

*** for special applications contact technical department

CM90-425 ACCESSORIES

LITEK®

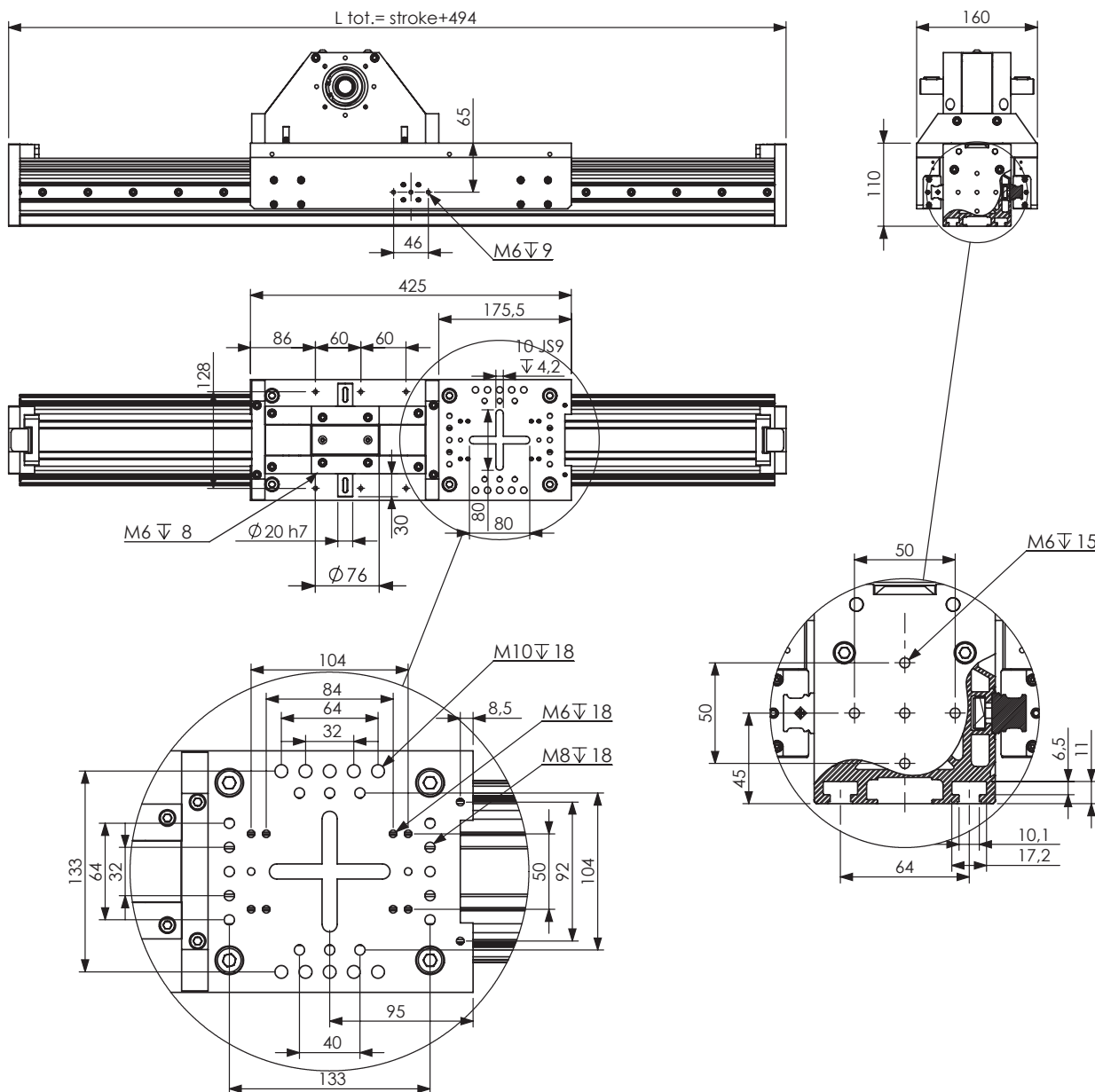


Num. item	Num. part	Description
1	FZ000SS416	Bracket
2	FZ000SM802	T-slot M8-M6
3	FZ000SM801	T-slot M5
4	FZ000SS406	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ090LS366	Reference limit switch
7	Motor adapter	

CG90-425

Belt translation unit on recirculating ball bearing guide

LITEK®



WEIGHTS

Basic length without stroke	14,9 Kg
100 MM stroke	1,1 Kg
Entire carriage	10,5 Kg

Forces [N]

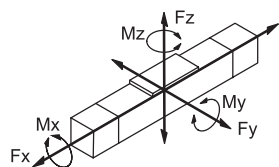
	max dynamics***	break
Fx	2005	4510
Fy	6000	9000
Fz	13100	20000

Moments [Nm]

	max dynamics***	break
Mx	710	234
My	2141	1080
Mz	2141	2093

TECHNICAL DATA

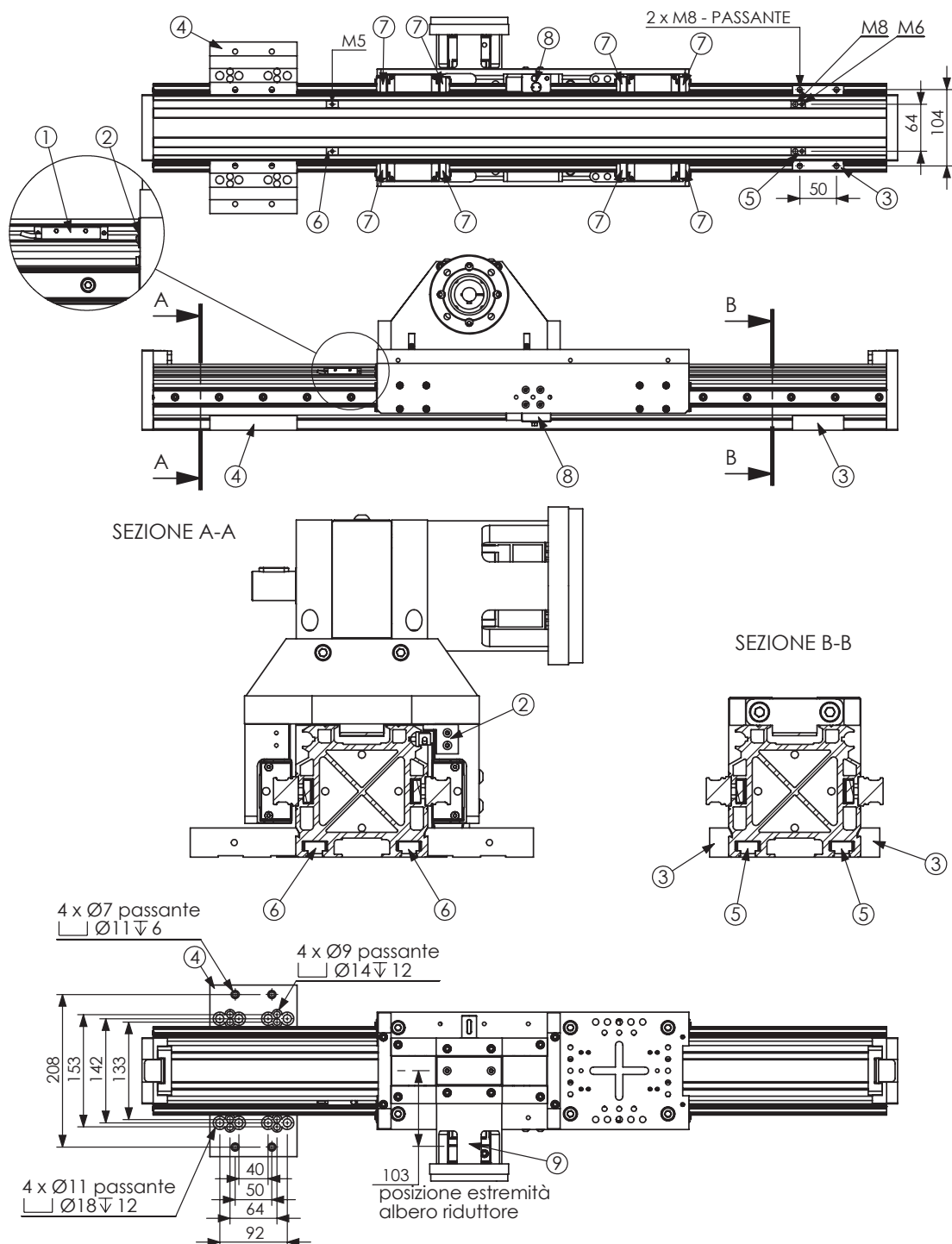
Max speed***	3m/s
Max acceleration***	40m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2,5 Nm
Max stroke	5500mm**
Max total length	160mm
Stroke per revolution	belt RPP8M30



*maximum no-load value

** higher strokes on request

*** for special applications contact technical department

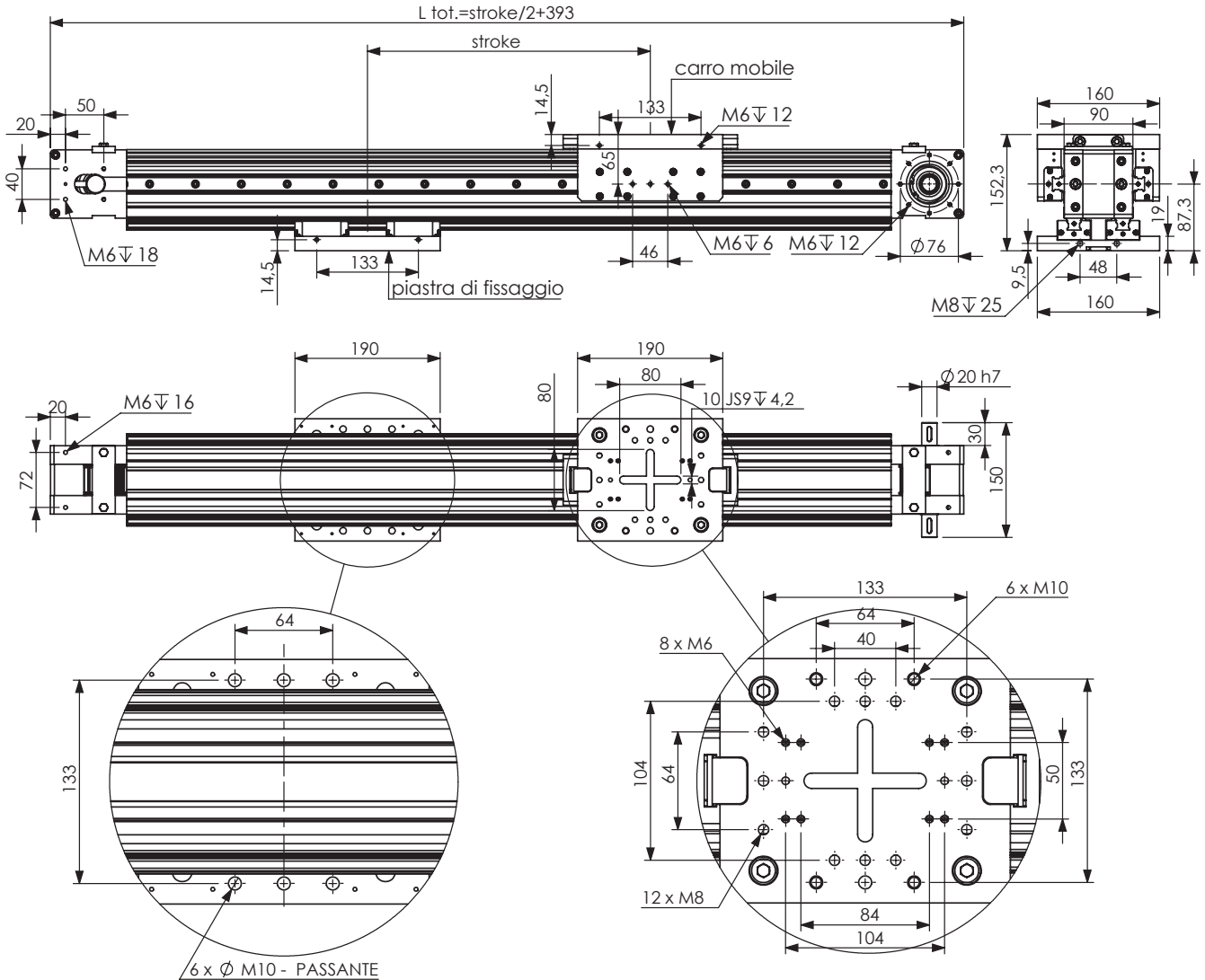


BOM table

Num. item	Num. part	Description	Note
1	Sensore	See pg. 110-111 of the catag.	
2	CR090RS556	Reference limit switch	
3	FZ000S5408	Bracket 2 x M8	***
4	FZ000S5416	Bracket	***
5	FZ000M802	T-slot M8-M6	
6	FZ000M801	T-slot M5	
7	KIT-20-400	Sealing and lubrication elements KIT	
8	MKS2002K	Clamping and braking elements	compatible with***
9	Motor adapter		

MD90-190

Belt translation unit on recirculating ball bearing guide



WEIGHT

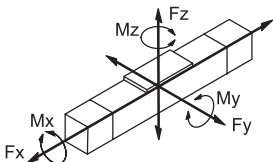
Basic length without stroke	14,4 Kg
100mm stroke	1,85 Kg
Moving Carriage	4,1 Kg
Holding Carriage	2,8 Kg

Forces [N]

	max dynamic***	break
F _x	2005	4510
F _y	****	****
F _z	****	****

Moments [Nm]

	max dynamic***	break
M _x	710	1147
M _y	628	1198
M _z	628	1006



TECHNICAL DATA

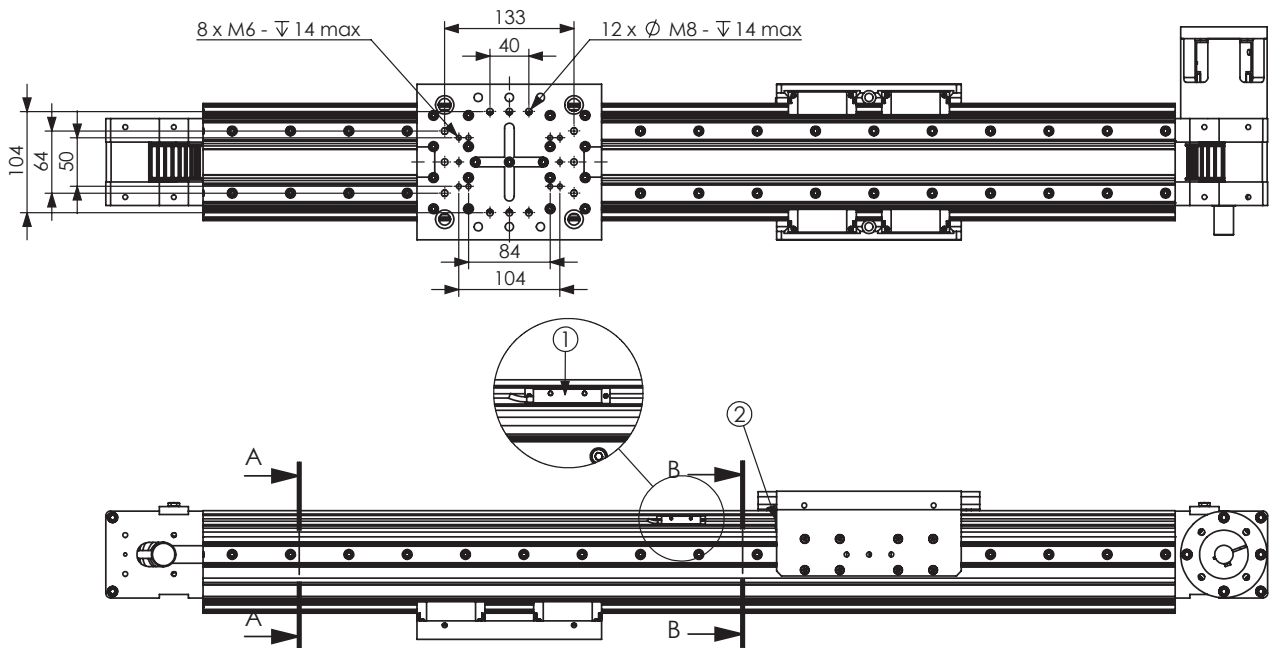
Max speed***	3m/s
Max acceleration***	30m/s ² **
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3 Nm
Max stroke	10000**
Max total length	480mm
Stroke per revolution	belt RPP8M30

*maximumno-load value

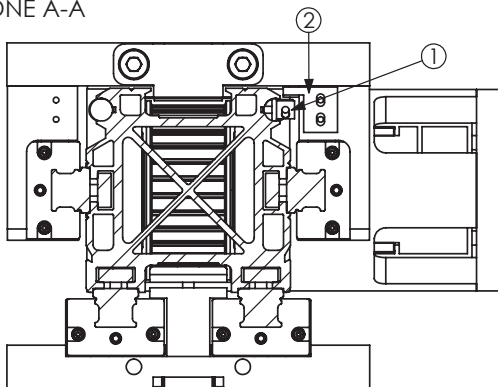
** higher strokes on request

*** for special applications contact technical department

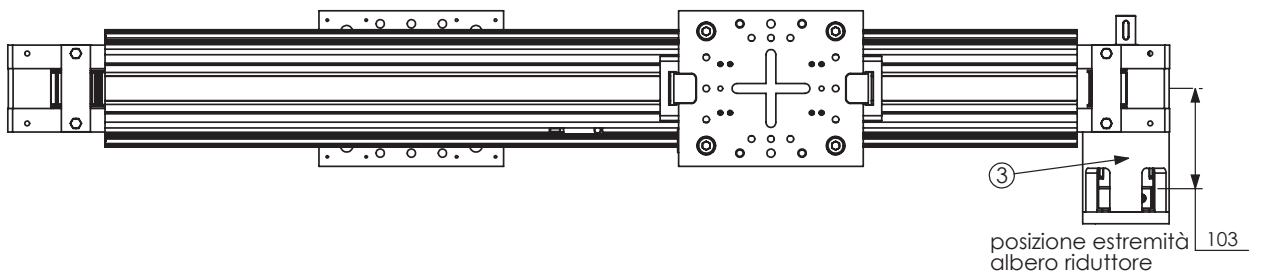
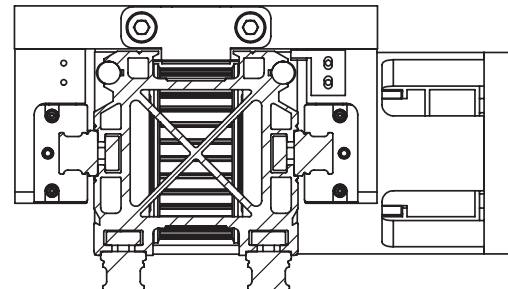
**** F_y and F_z seals depend on the position of the movable carriage relative to the fixed carriage. The deformation of the profile in the two directions is: **dY**=0.022mm (10N at 1mt) / **dZ**=0.025mm (10N at 1mt)



SEZIONE A-A



SEZIONE B-B

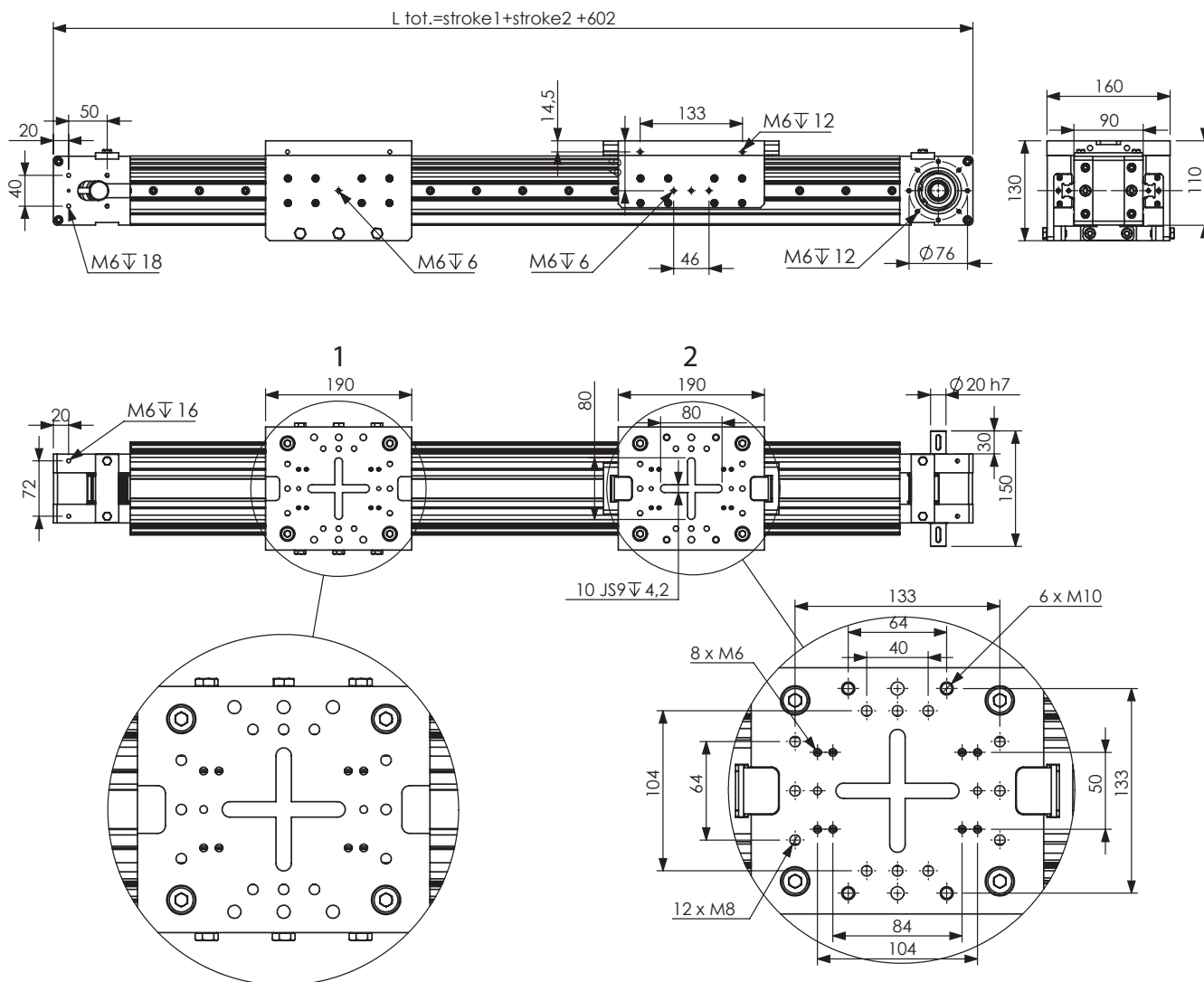


Num.item	Num. part	Description
1	Sensore	See pg. 110-111 of the catag.
2	CR090RS556	Reference limit switch
3	Motor adapter	

MDS90-190

Belt translation unit on recirculating ball bearing guide

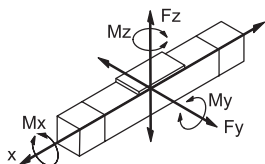
LITEK®



WEIGHT

Basic length without stroke	18 Kg
100mm stroke	1,3 Kg
Carriage 1	5 Kg
Carriage 2	4,1 Kg

Forces [N]	max dynamic***	break
Fx	2500	4510
Fy	****	****
Fz	****	****
Moments [Nm]	max dynamic***	break
Mx	710	1147
My	628	1198
Mz	628	1006



TECHNICAL DATA

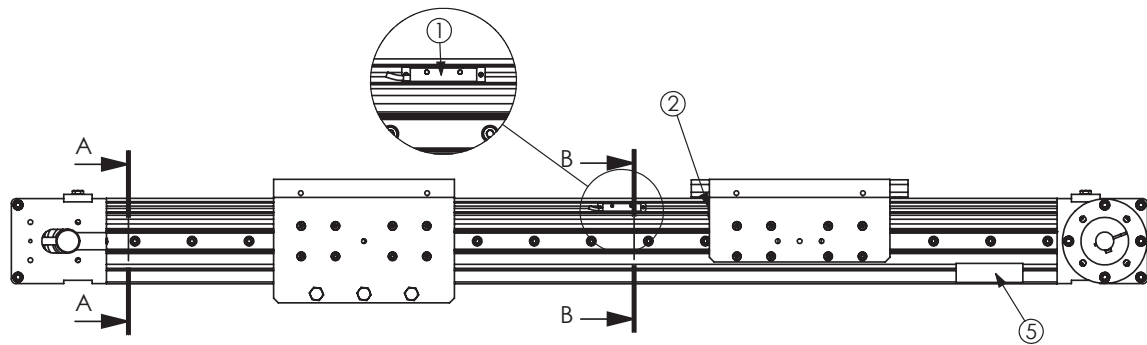
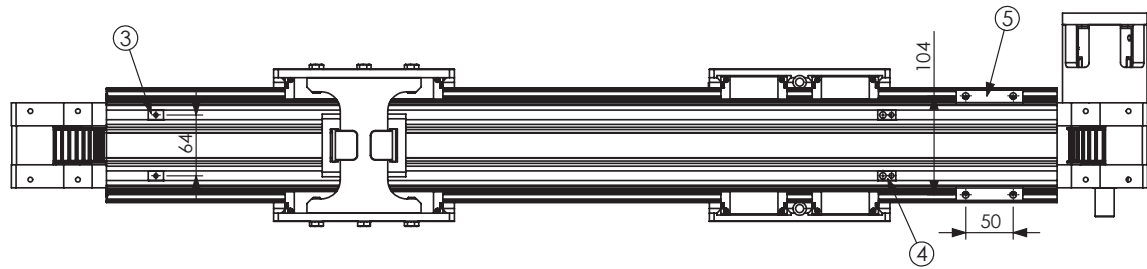
Max speed***	3m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3 Nm
Max stroke	5000+5000**
Max total length	240+240mm
Stroke per revolution	belt RPP8M30

* maximum no-load value

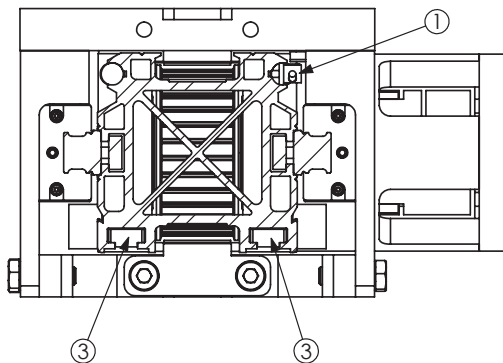
** higher strokes on request

*** for special applications contact technical department

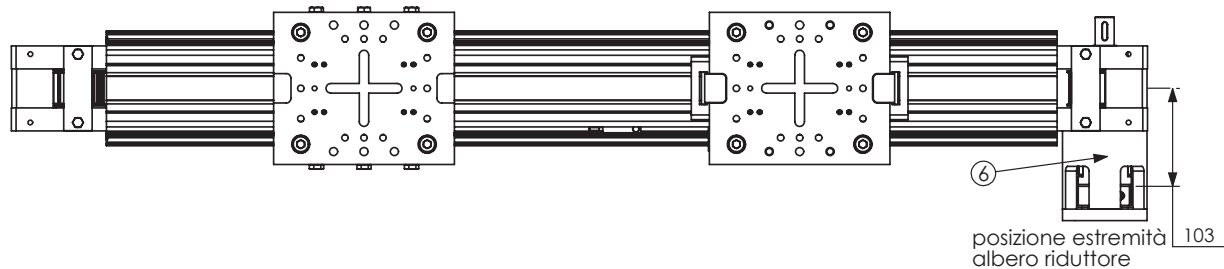
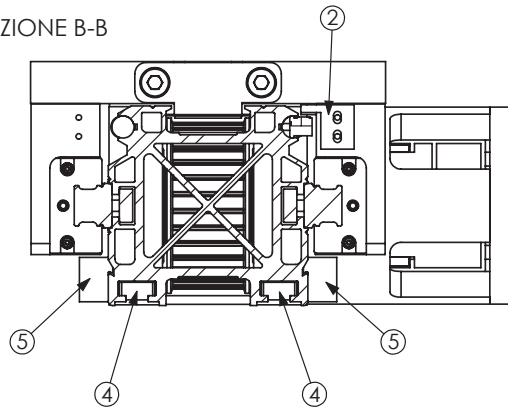
**** Fy and Fz seals depend on the position of the movable carriage relative to the fixed carriage. The deformation of the profile in the two directions is: $dY=0.022\text{mm}$ (10N at 1mt) / $dZ=0.025\text{mm}$ (10N at 1mt)



SEZIONE A-A



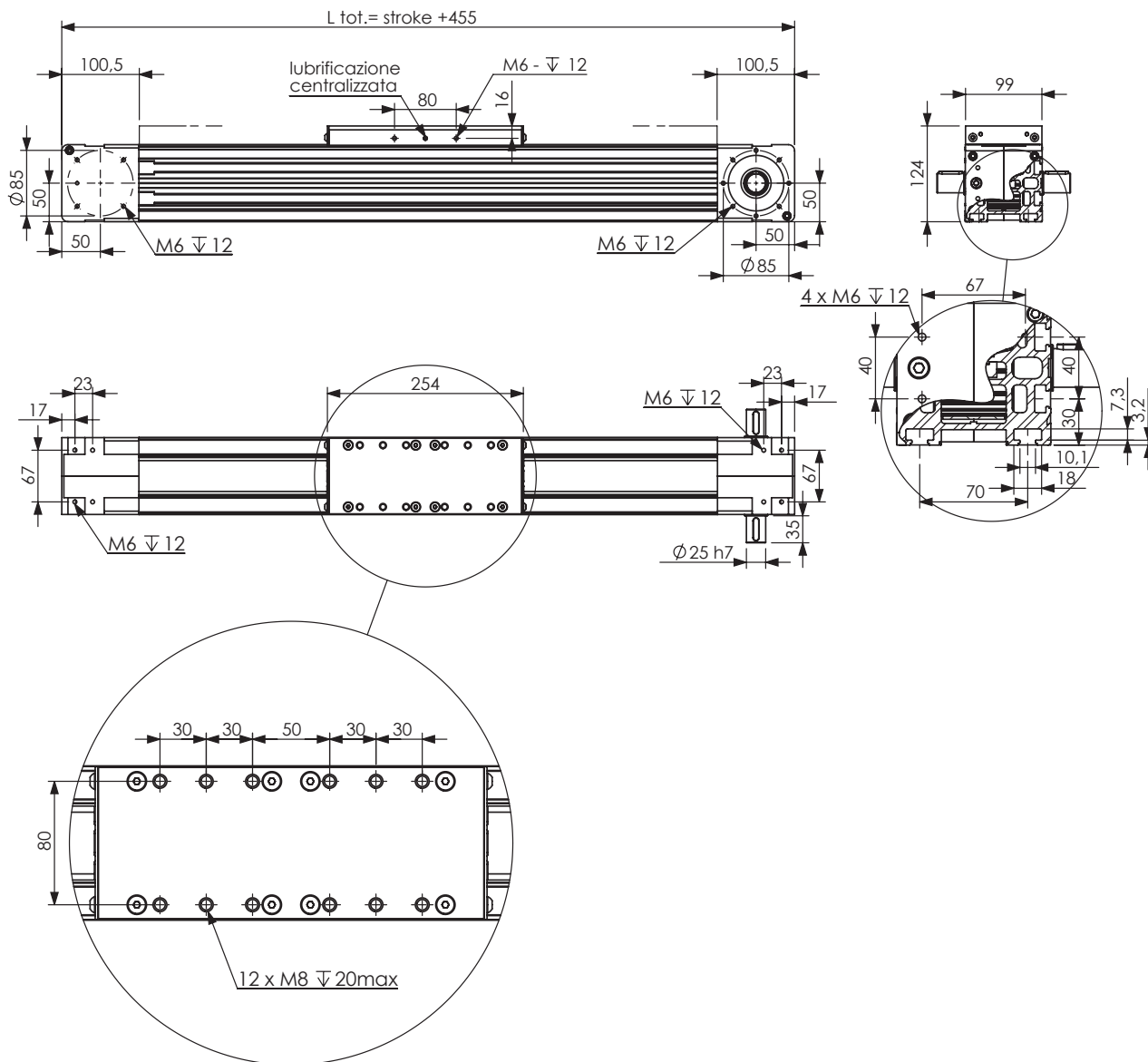
SEZIONE B-B



Num. item	Num. part	Description
1	Sensore	See pg. 110-111 of the catag.
2	CR090RS556	Reference limit switch
3	FZ000SM801	T-slot 5
4	FZ000SM802	T-slot M8-M6
5	FZ000SS408	Bracket
6	Motor adapter	

MP100-254

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	10,3 Kg
100 MM stroke	1,454 Kg
Entire carriage	2,64 Kg

Forces [N]

	max dynamics***	break
Fx	2673	6015
Fy	3366	5050
Fz	8950	24344

Moments [Nm]

	max dynamics***	break
Mx	255	267
My	460	1487
Mz	460	598

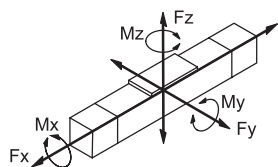
TECHNICAL DATA

Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	1 Nm
Max stroke	5500mm**
Max total length	160mm
Stroke per revolution	belt RPP8M30

*maximum no-load value

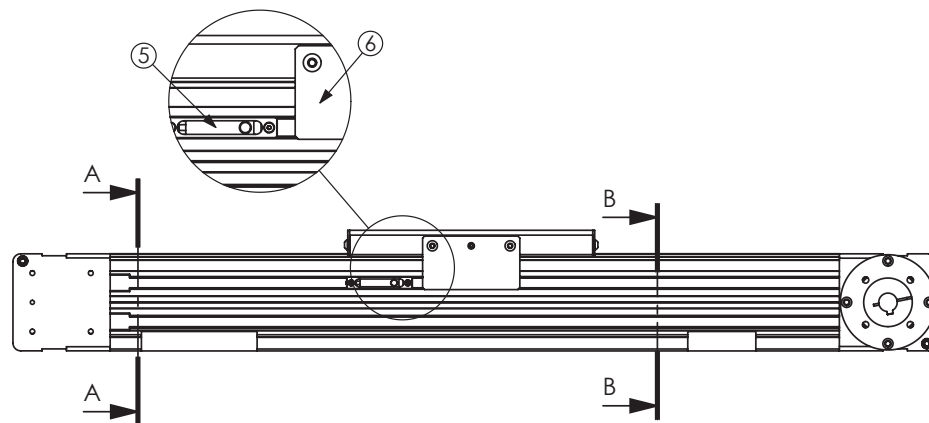
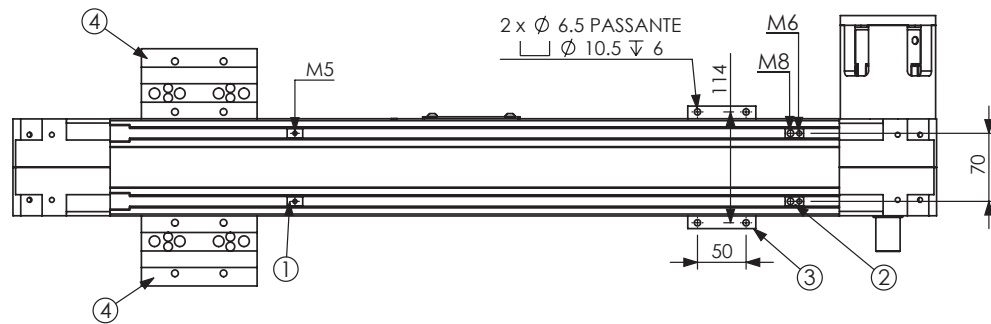
** higher strokes on request

*** for special applications contact technical department

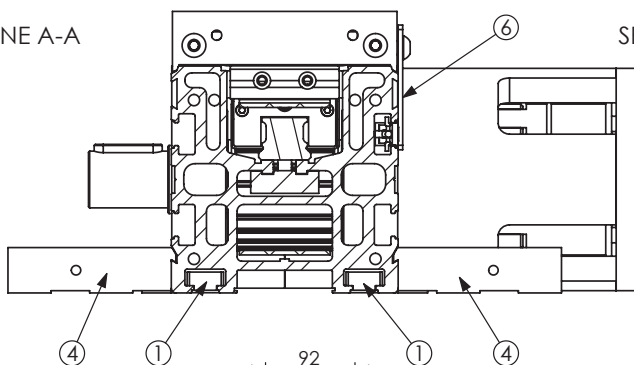


MP100-254 ACCESSORIES

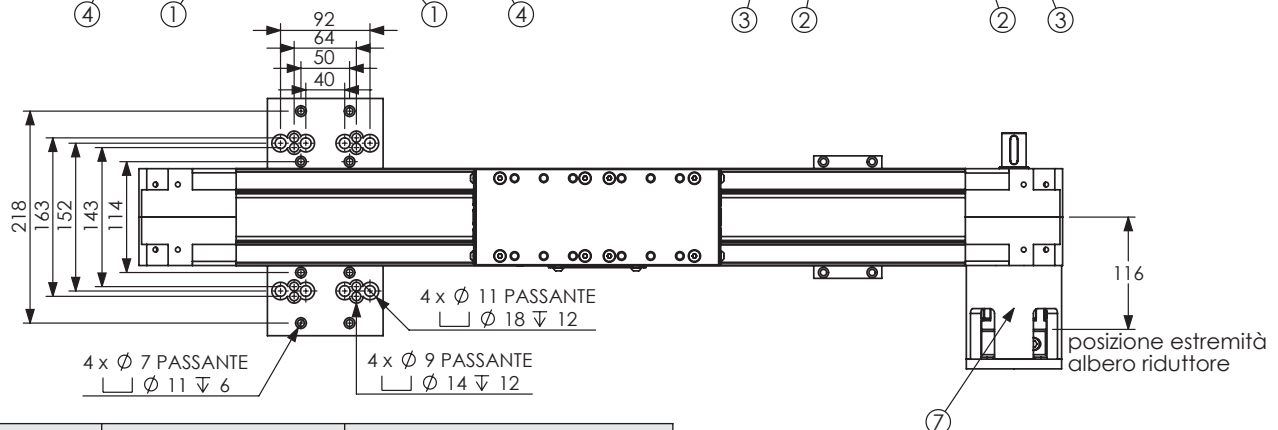
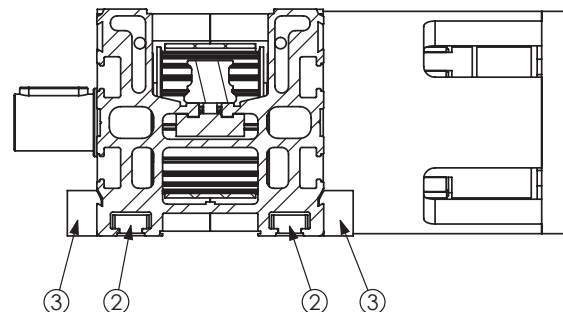
LITEK®



SEZIONE A-A



SEZIONE B-B

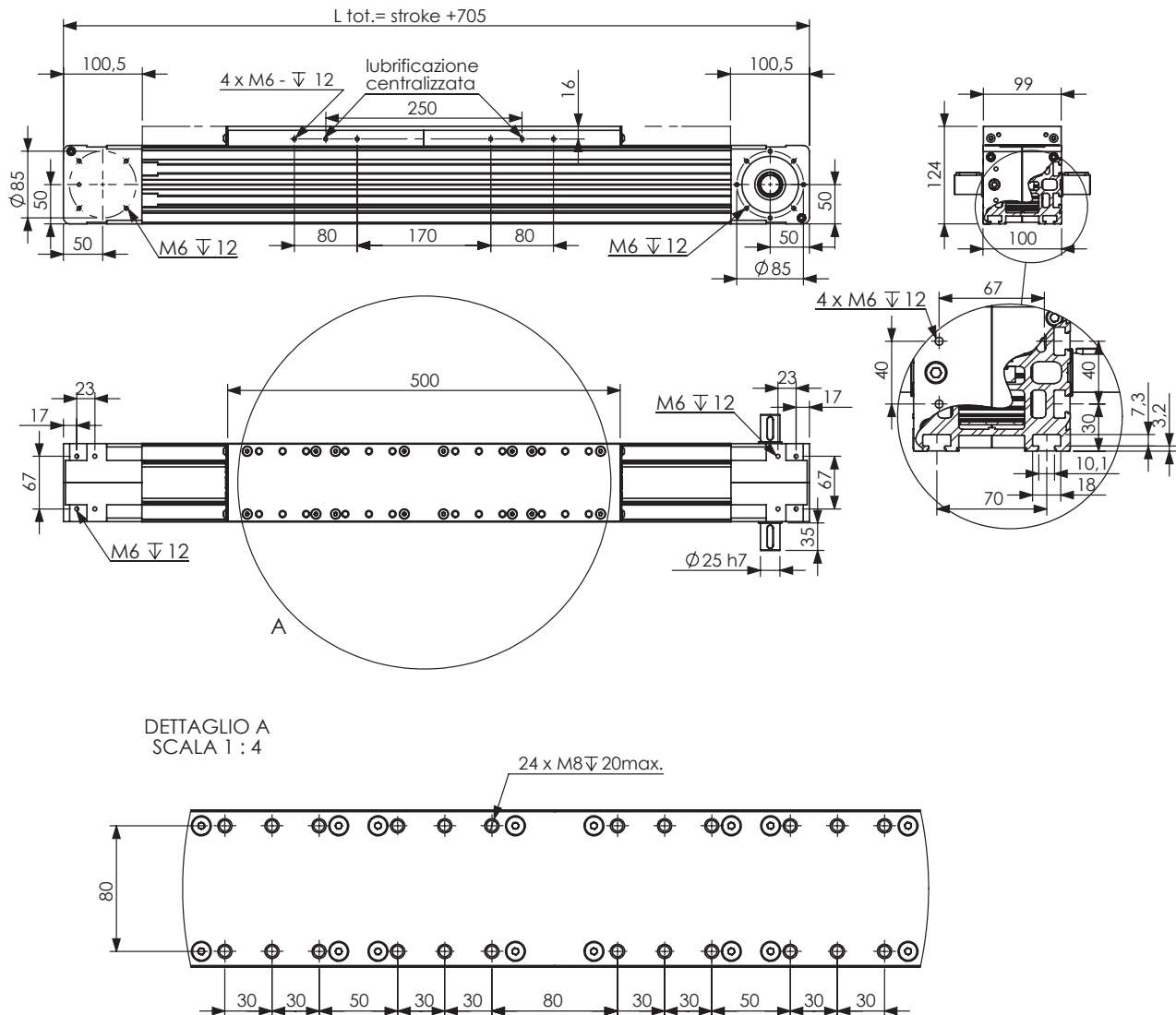


Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ100PS261	Reference limit switch
7	Motor adaptor	

MP100-500

Belt translation unit on recirculating ball bearing guide

LITEK®



DETTAGLIO A
SCALA 1 : 4

WEIGHTS	
Basic lenght without stroke	12,83 Kg
100 MM stroke	1,454 Kg
Entire carriage	5,17 Kg

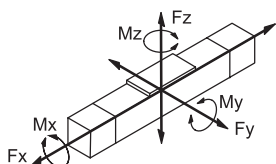
Forces [N]	max dynamics***		
	break		
Fx	2673	6015	
Fy	6700	10000	
Fz	17900	30000	
Moments [Nm]	max dynamics***		
	break		
	Mx	360	540
	My	2230	6000
Mz	840	1200	

TECHNICAL DATA	
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2 Nm
Max stroke	6000mm**
Max total length	200mm
Stroke per revolution	belt RPP8M40

*maximumno-load value

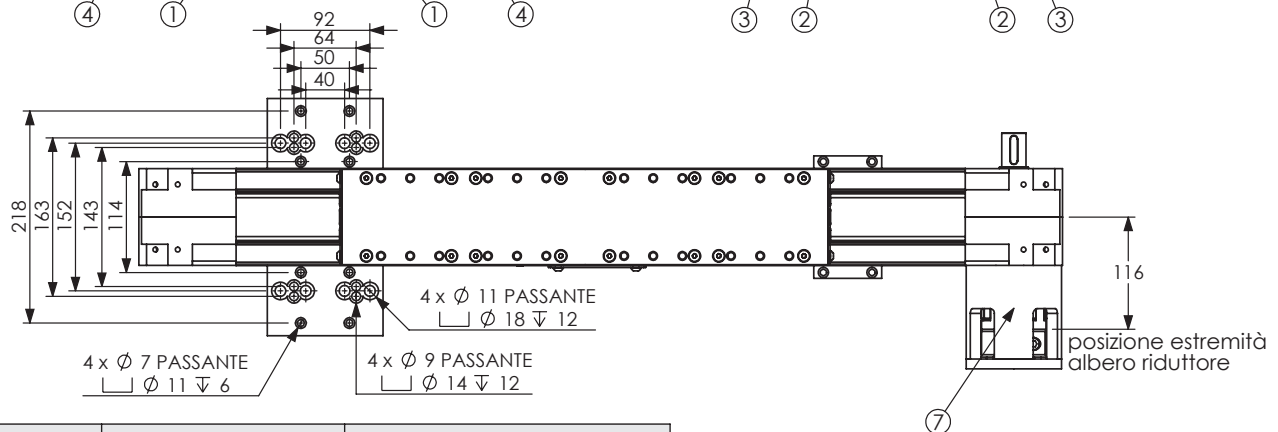
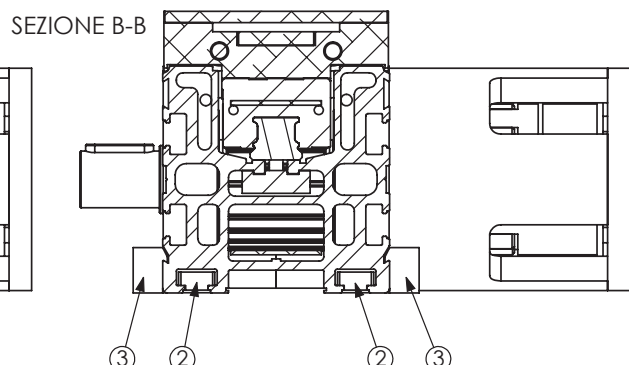
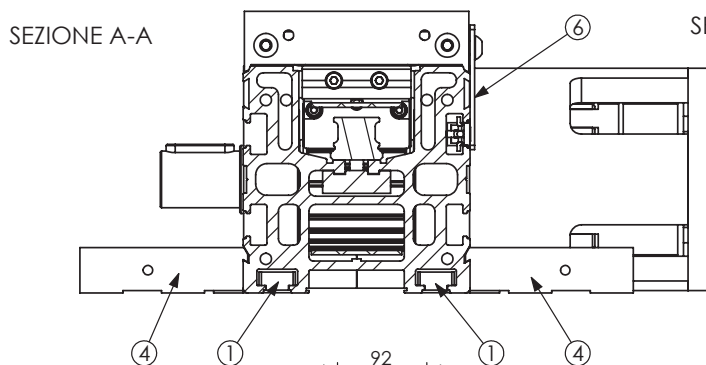
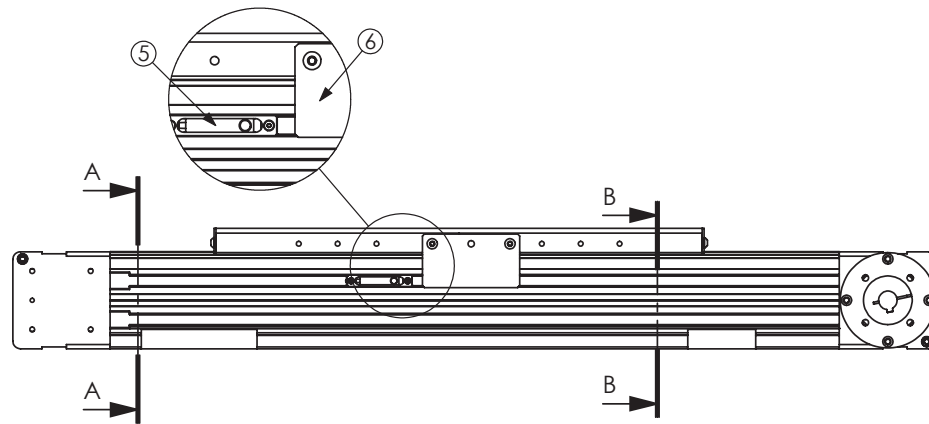
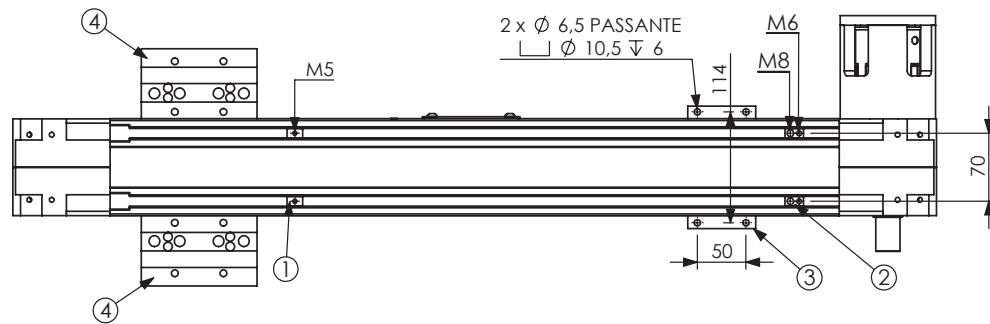
** higher strokes on request

*** for special applications contact technical department



MP100-500 ACCESSORIES

LITEK®



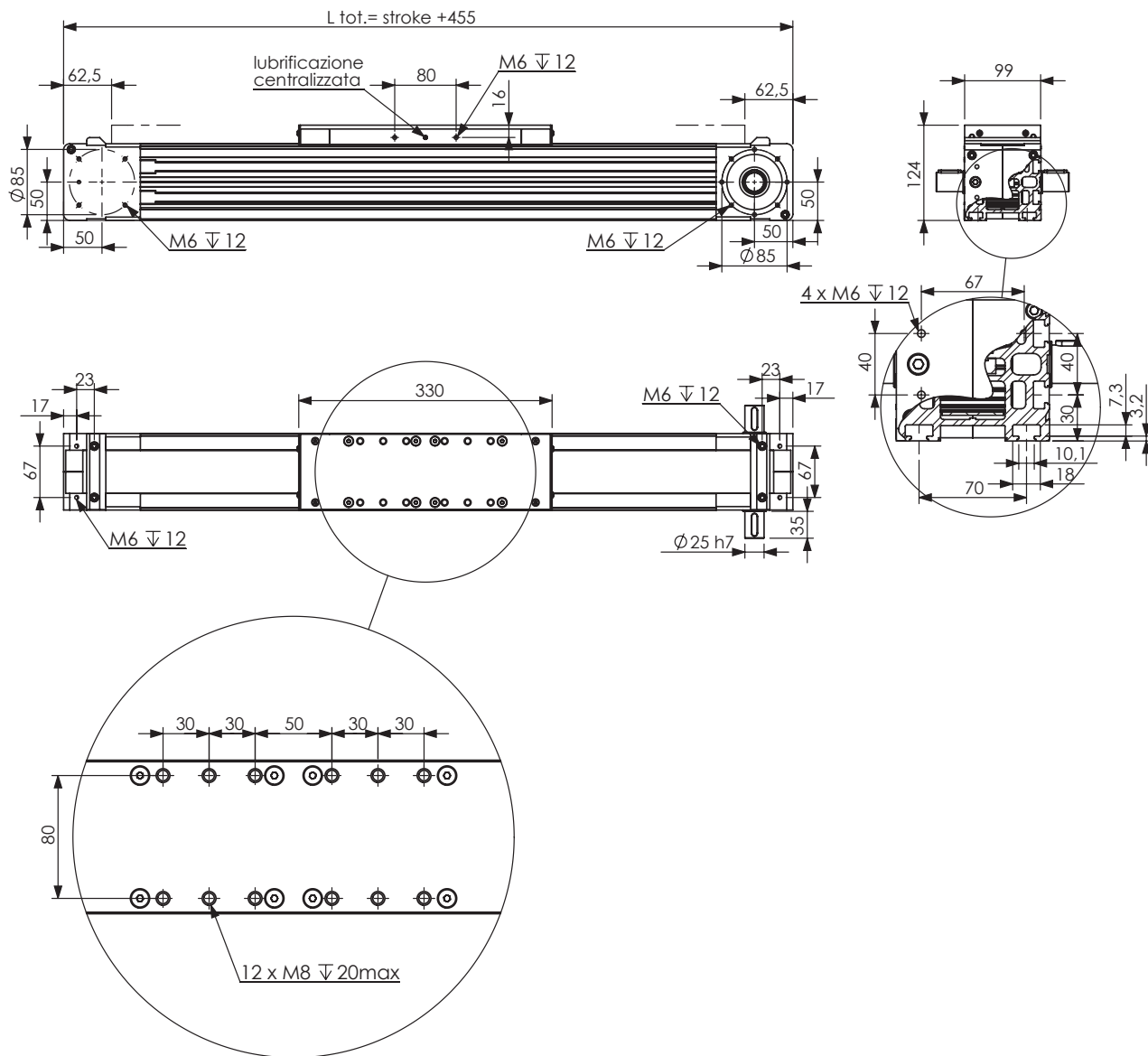
Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ100PS261	Reference limit switch
7	Motor adapter	

MPC100-330

COVER STRIP

LITEK®

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	10,7 Kg
100 MM stroke	1,456 Kg
Entire carriage	2,99 Kg

Forces [N]

	max dynamics***	break
Fx	2673	6015
Fy	3366	5050
Fz	8950	24344

Moments [Nm]

	max dynamics***	break
Mx	255	267
My	460	1487
Mz	460	598

TECHNICAL DATA

Max speed***	2m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2 Nm
Max stroke	6000mm**
Max total length	200mm
Stroke per revolution	belt RPP8M40

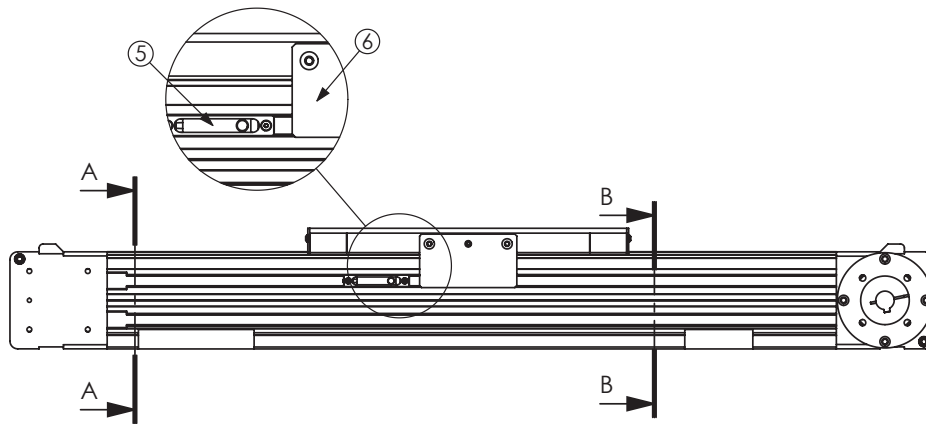
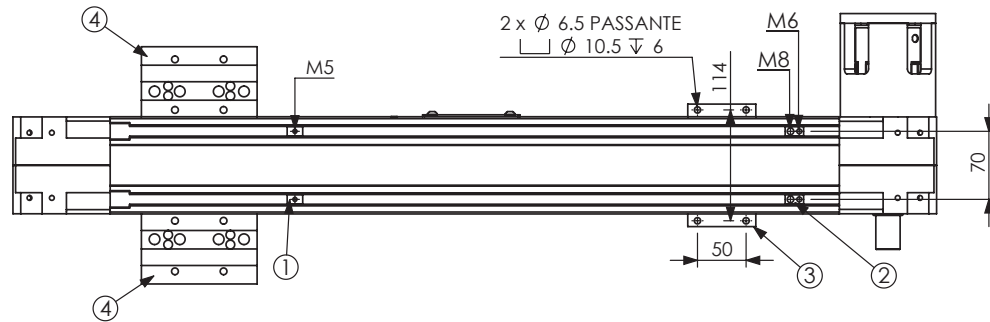
*maximumno-load value

** higher strokes on request

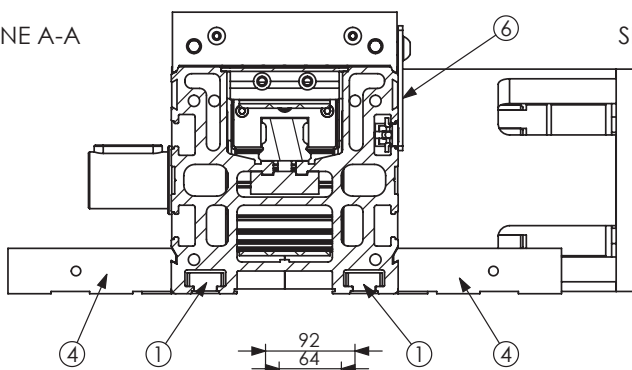
*** for special applications contact technical department

MPC100-330 ACCESSORIES

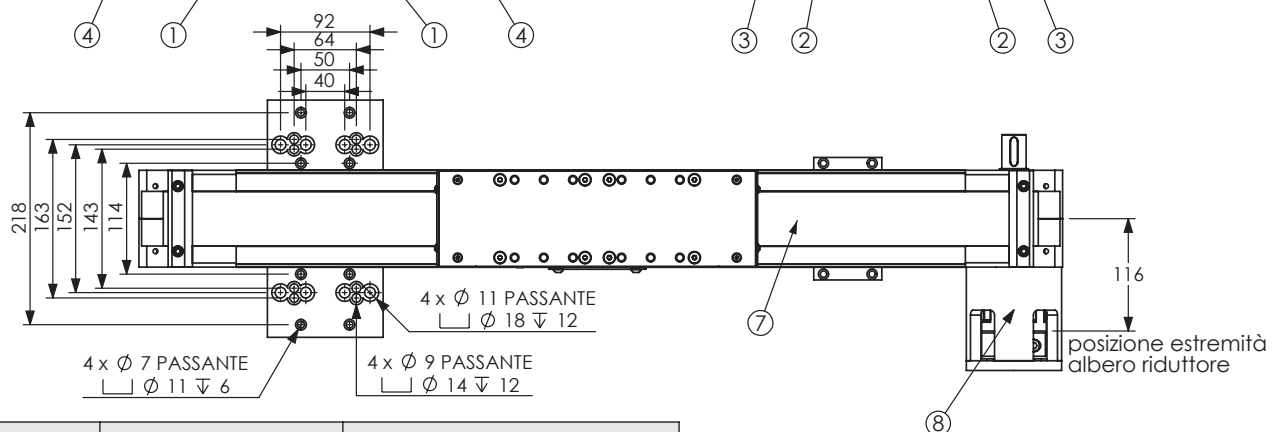
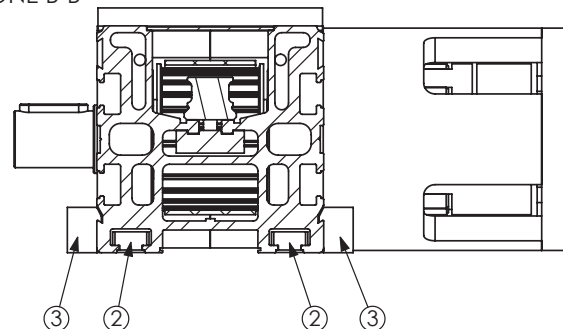
LITEK®



SEZIONE A-A



SEZIONE B-B



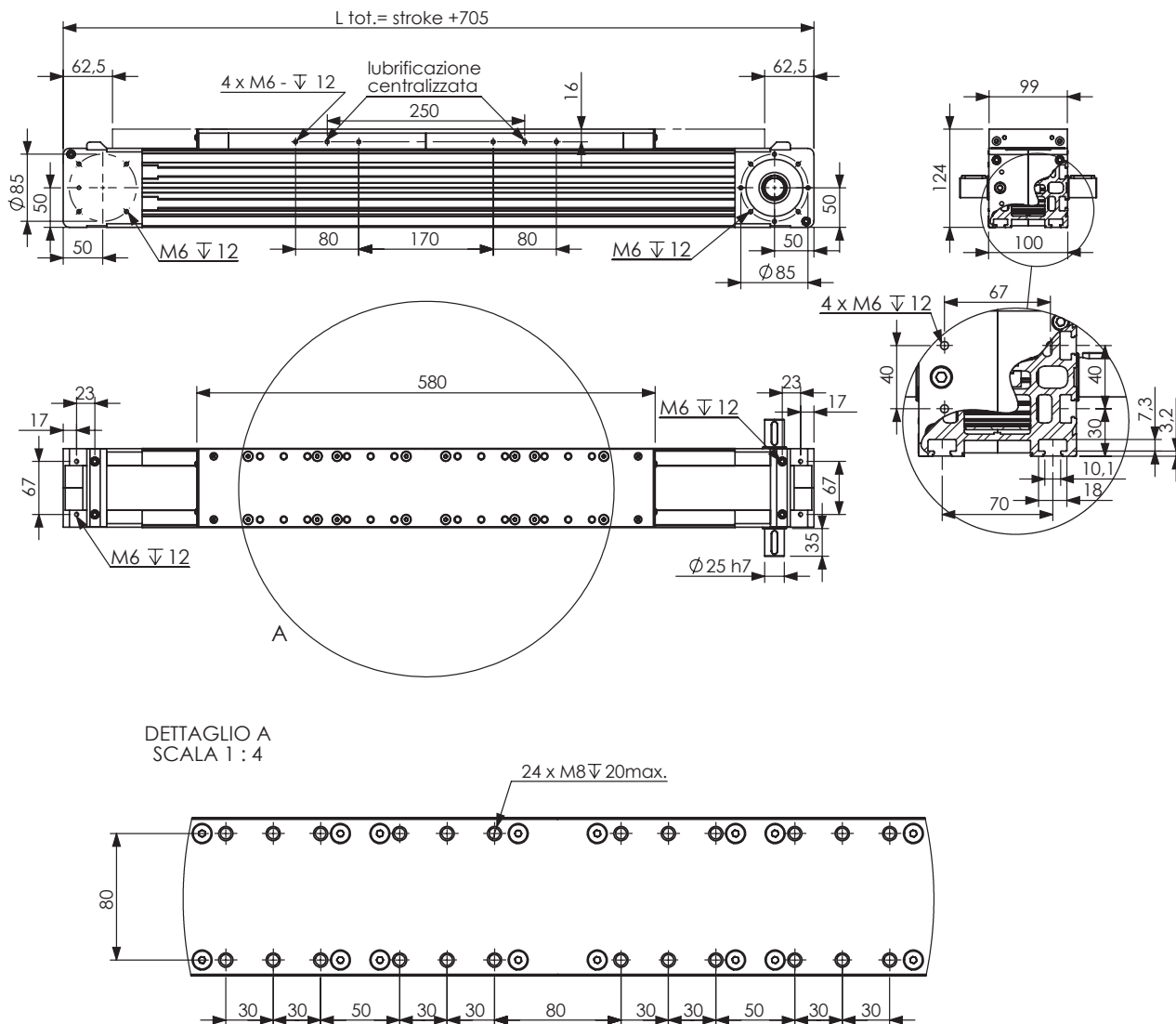
Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000S406	Bracket
4	FZ000S416	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ100PS261	Reference limit switch
7	8R10H10BC-55	Sealing strip
8	Motor adapter	

MPC100-580

COVER STRIP

LITEK®

Belt translation unit on recirculating ball bearing guide



DETTAGLIO A
SCALA 1 : 4

WEIGHTS

Basic length without stroke	13,3 Kg
100 MM stroke	1,45 Kg
Entire carriage	5,6 Kg

Forces [N]	max dynamics***		
	break	break	
Fx	2673	6015	
Fy	6700	10000	
Fz	17900	30000	
Moments [Nm]	max dynamics***		
	break	break	
	Mx	360	540
	My	2230	6000
Mz	840	1200	

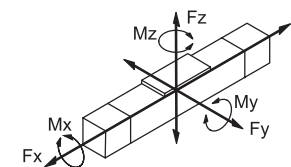
TECHNICAL DATA

Max speed***	2m/s
Max acceleration***	15m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	5 Nm
Max stroke	6000mm**
Max total length	200mm
Stroke per revolution	belt RPP8M40

*maximumno-load value

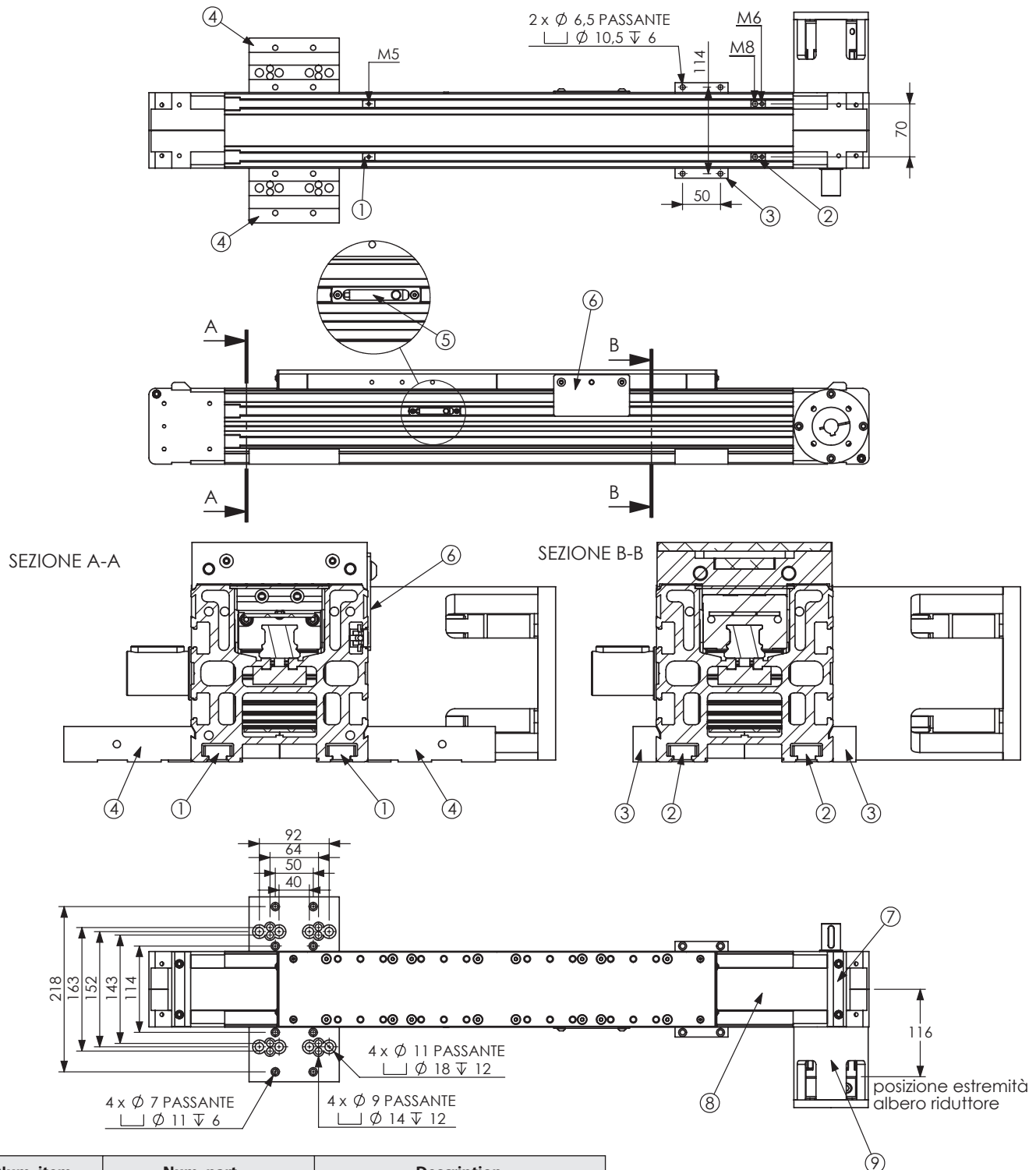
** higher strokes on request

*** for special applications contact technical department



MPC100-580 ACCESSORIES

LITEK®



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ100PS261	Reference limit switch
7	FZ100TC156	Sealing strip bracket
8	8R10H10BC-55	Sealing strip
9	Motor adapter	

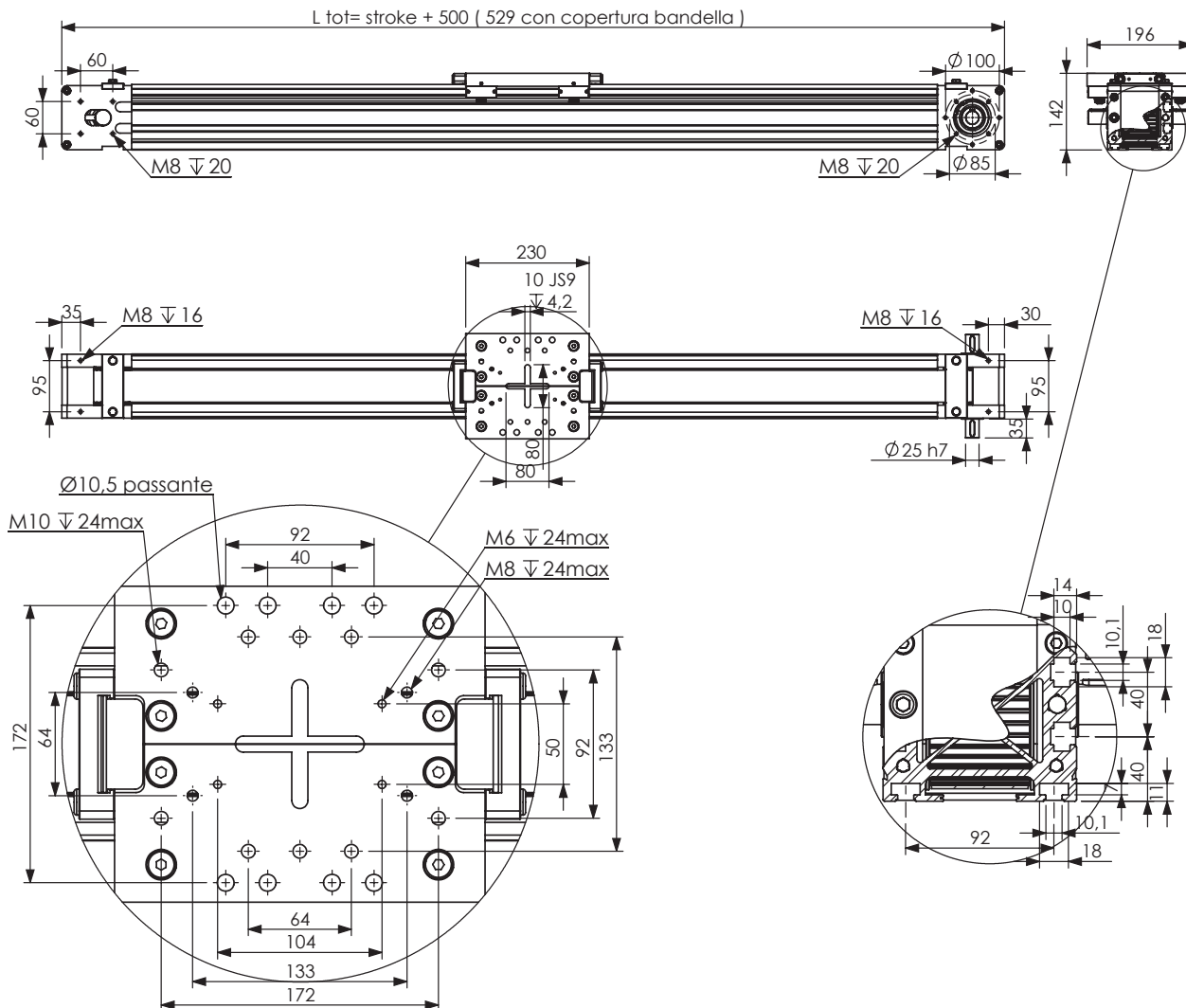
Linear system

120

LITEK®

ML120-230

Belt translation unit on track rollers



WEIGHTS

Basic length without stroke	16,7 Kg
100 MM stroke	1,54 Kg
Entire carriage	4,45 Kg

Forces [N]

	max dynamics***	break
Fx	4091	9205
Fy	3000	4454
Fz	2600	10400

Moments [Nm]

	max dynamics***	break
Mx	120	478
My	215	860
Mz	260	383

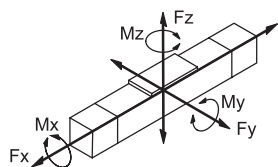
TECHNICAL DATA

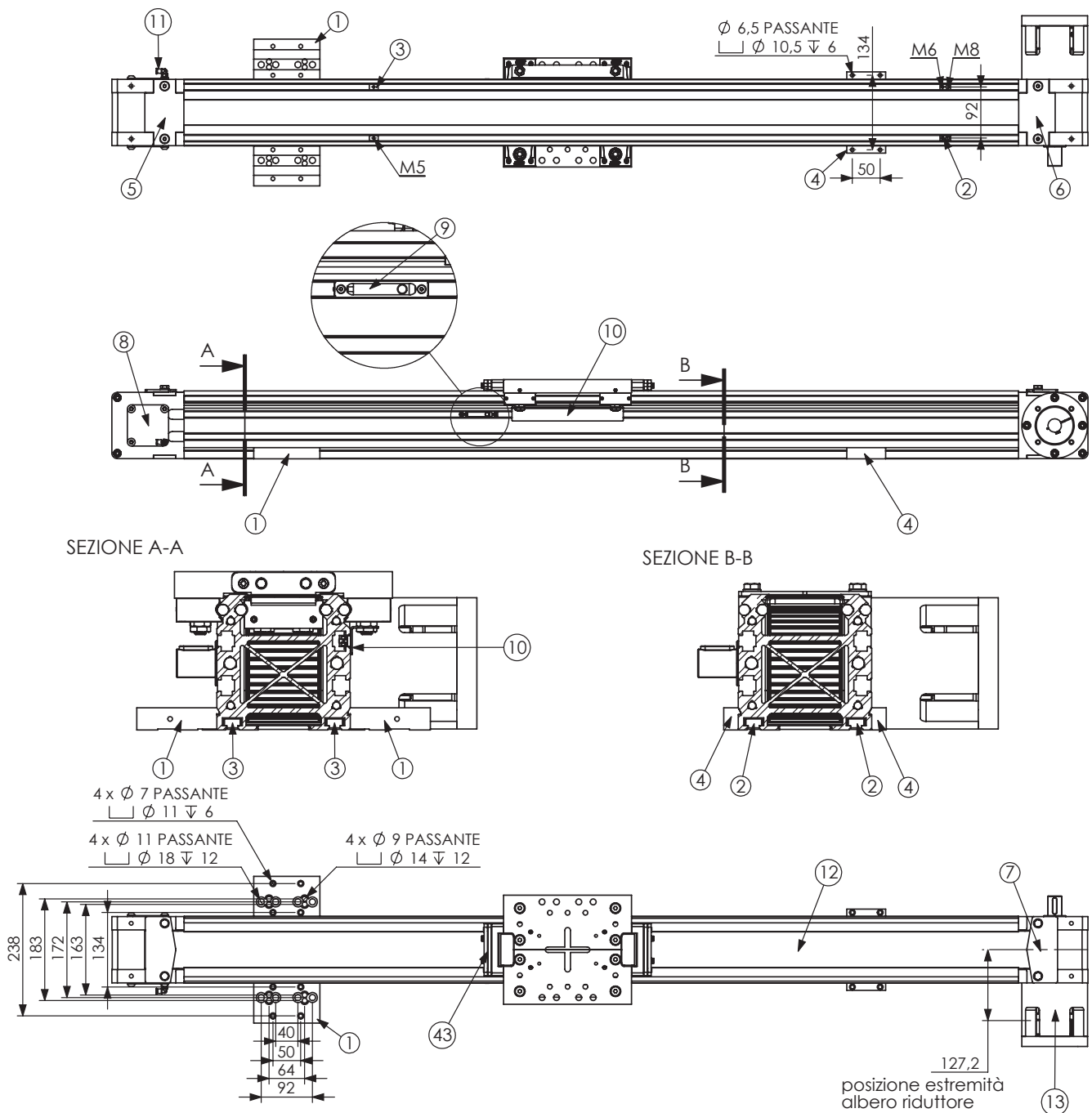
Max speed***	6m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	4 Nm
Max stroke	7800mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department





Num. item	Num. part	Description
1	FZ000SS416	Bracket
2	FZ000SM802	T-slot M8-M6
3	FZ000SM801	T-slot M5
4	FZ000SS406	Bracket
5	FZ120BM815R	Sealing strip cover
6	FZ120BM815	Sealing strip cover
7	FZ120BM814	Sealing strip scraper

Num. item	Num. part	Description
8	FZ120PC722	Cover bearing housing
9	Sensore	See pg. 110-111 of the catag.
10	FZ120LS366	Reference limit switch
11	PL4M6C	Air pressure adapter M6
12	8R10H10BC/67	Sealing strip
13	Motor adapter	

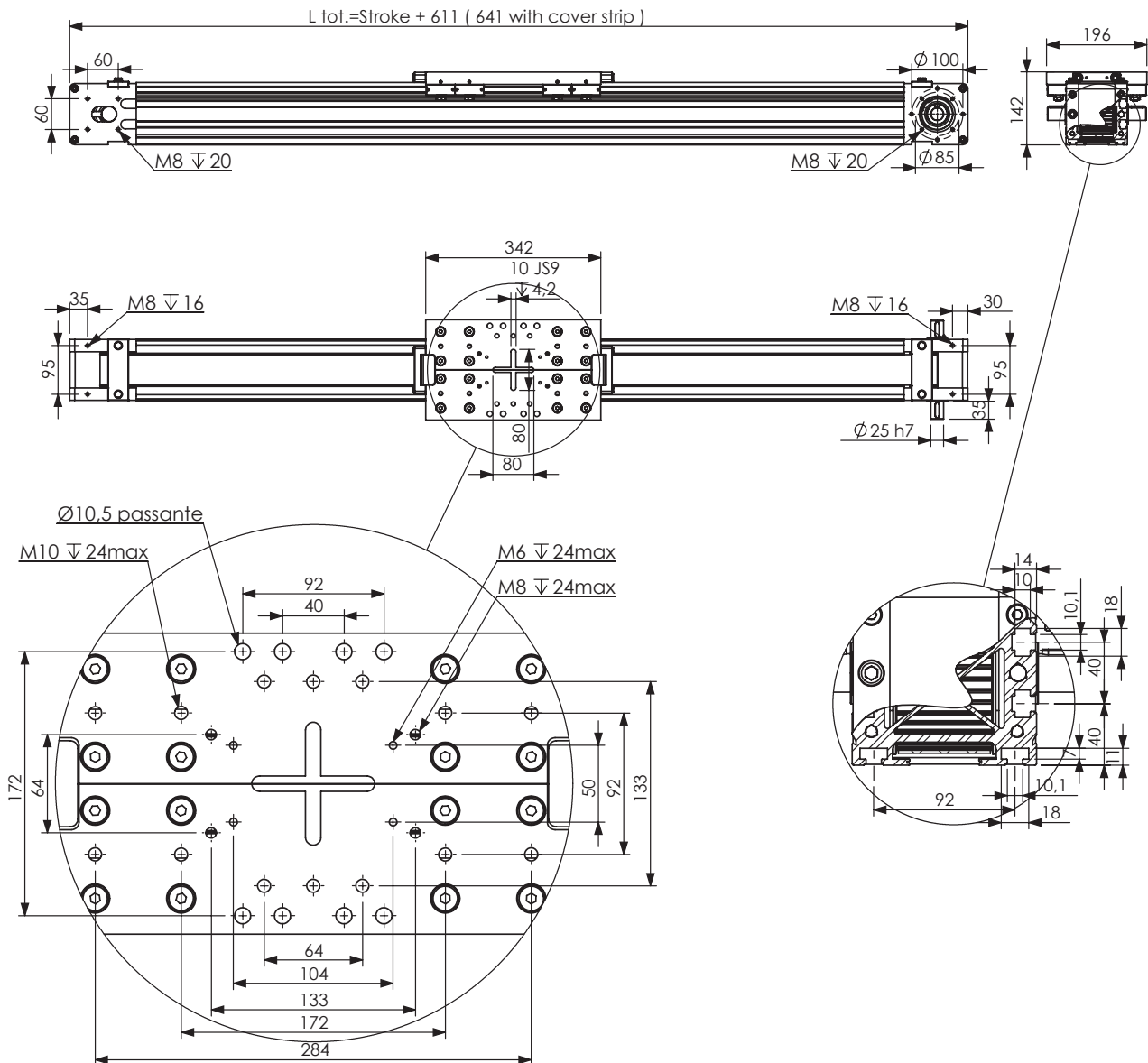
Linear system

120

LITEK®

ML120-342

Belt translation unit on track rollers



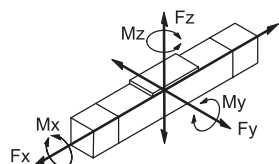
WEIGHTS

Basic length without stroke	21,3 Kg
100 MM stroke	1,54 Kg
Entire carriage	6,95 Kg

Forces [N]	max dynamics***	
	break	break
Fx	4091	9205
Fy	5000	7140
Fz	5200	20800
Moments [Nm]	max dynamics***	
	break	break
Mx	239	956
My	570	2280
Mz	550	810

TECHNICAL DATA

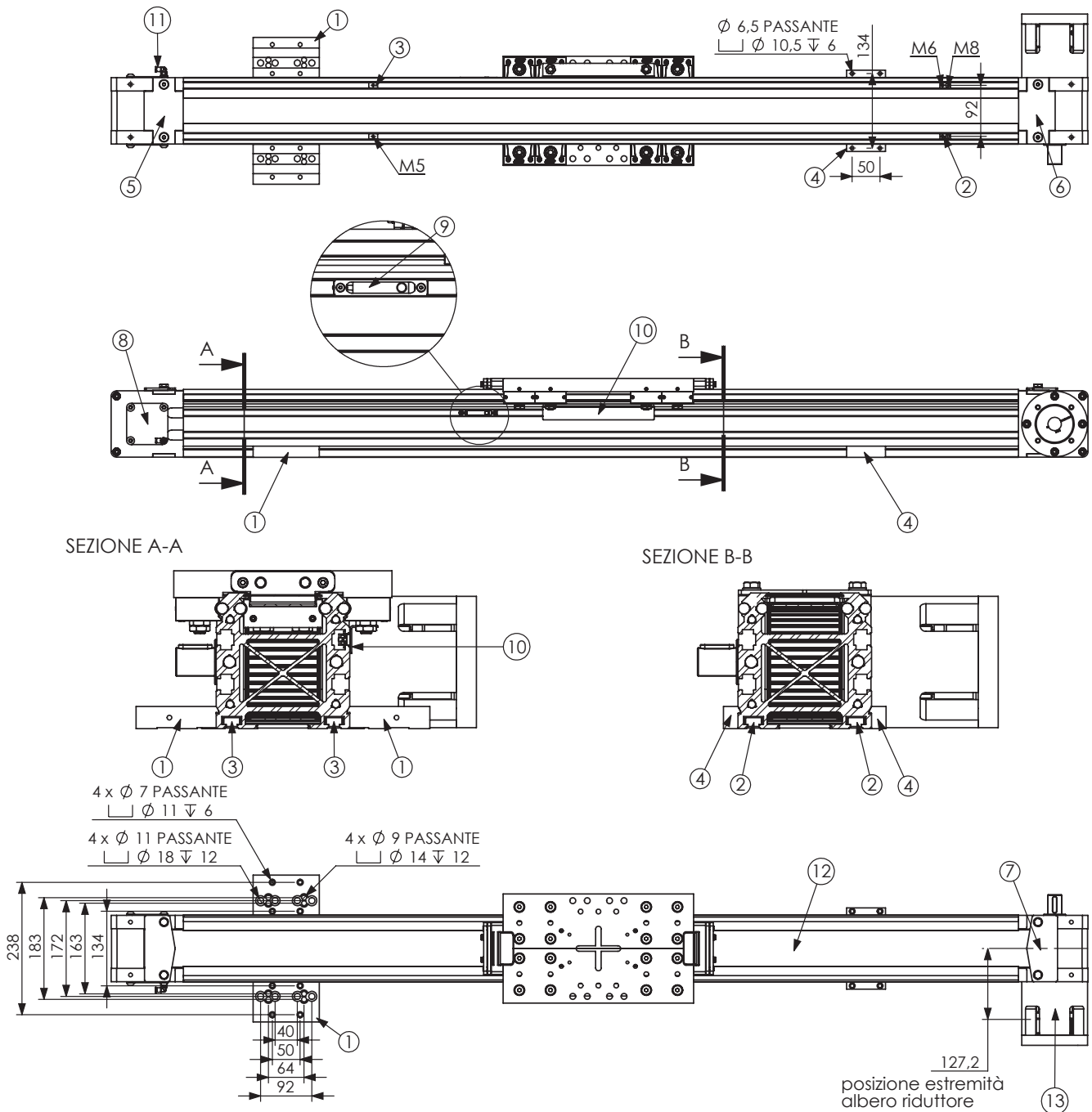
Max speed***	5m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	5,5 Nm
Max stroke	7650mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60



*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



N° item	Num. part	Description
1	FZ0005S416	Bracket
2	FZ0005M802	T-slot M8-M6
3	FZ0005M801	T-slot M5
4	FZ0005S406	Bracket
5	FZ120BM815R	Sealing strip cover
6	FZ120BM815	Sealing strip cover
7	FZ120BM814	Sealing strip scraper

N° item	Num. part	Description
8	FZ120PC722	Cover bearing housing
9	Sensore	See pg. 110-111 of the catag.
10	FZ120LS366	Reference limit switch
11	PL4M6C	Air pressure adapter M6
12	8R10H10BC/67	Sealing strip
13	Motor adapter	

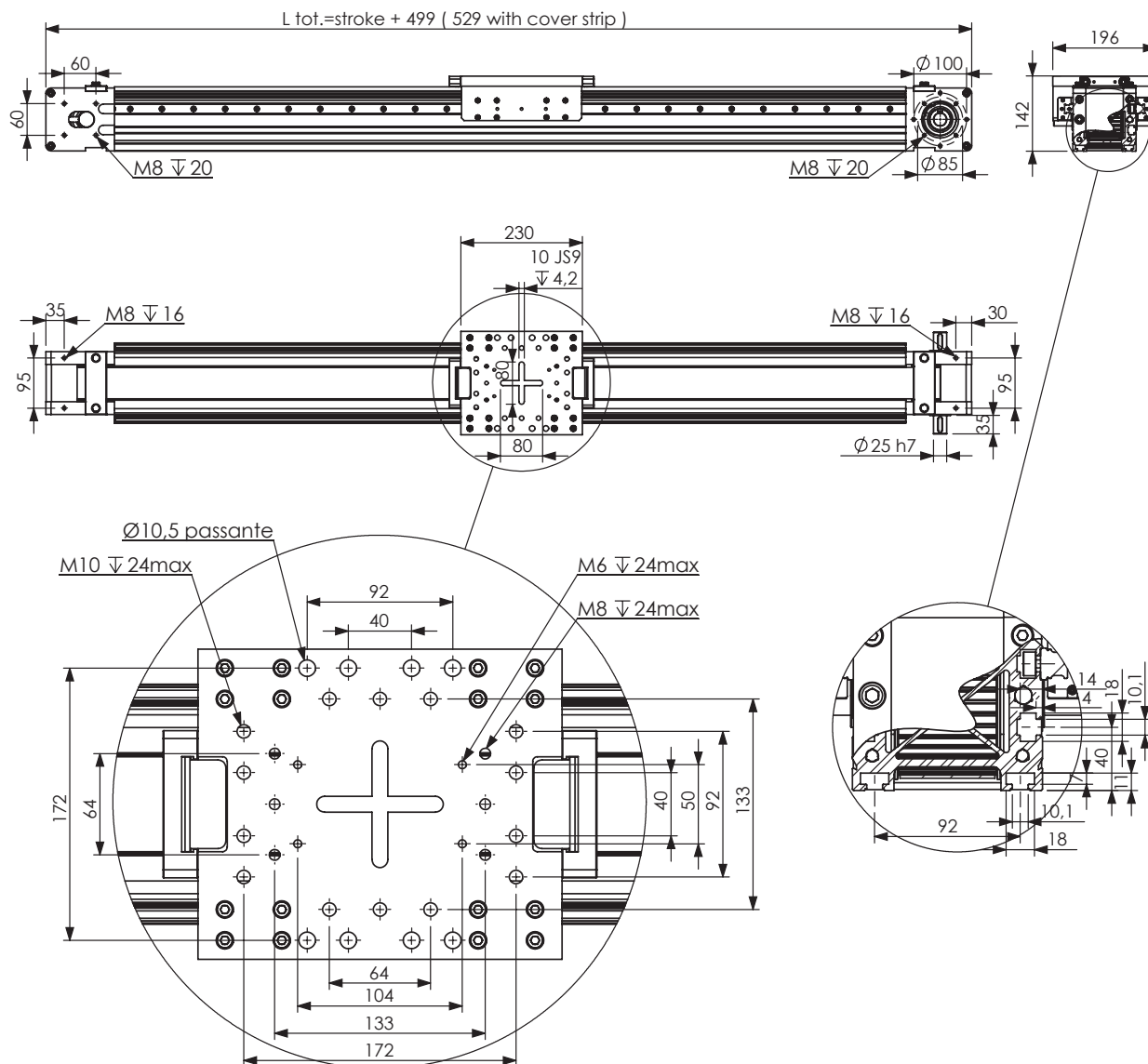
Linear system

120

LITEK®

MG120-230

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	18,2 Kg
100 MM stroke	1,88 Kg
Entire carriage	5,4 Kg

Forces [N]	max dynamics***	break
Fx	4091	9205
Fy	13100	16248
Fz	13100	18711
Moments [Nm]	max dynamics***	break
Mx	913	2083
My	851	1353
Mz	851	2076

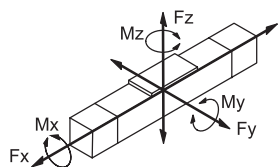
TECHNICAL DATA

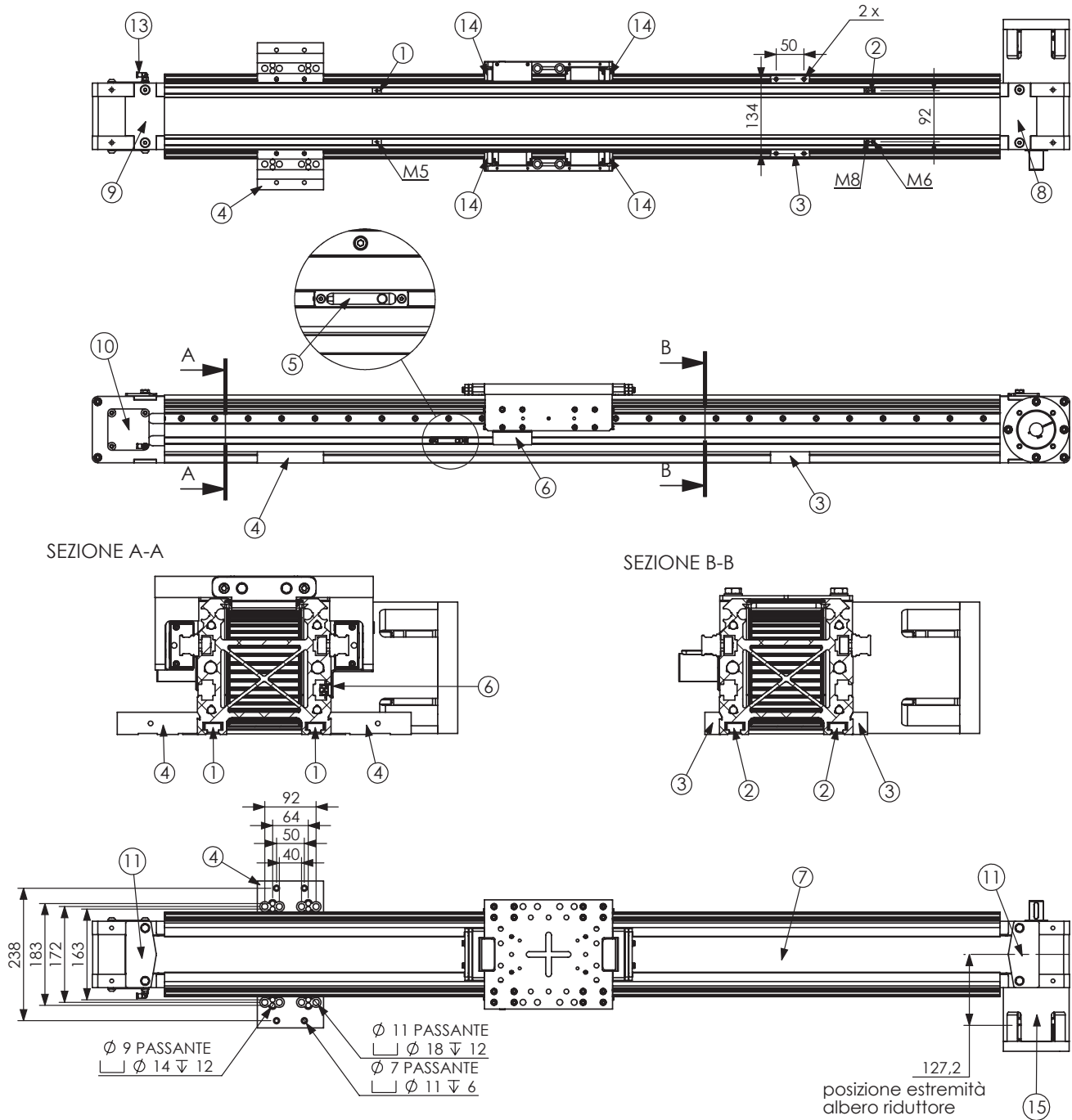
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	5 Nm
Max stroke	7000mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



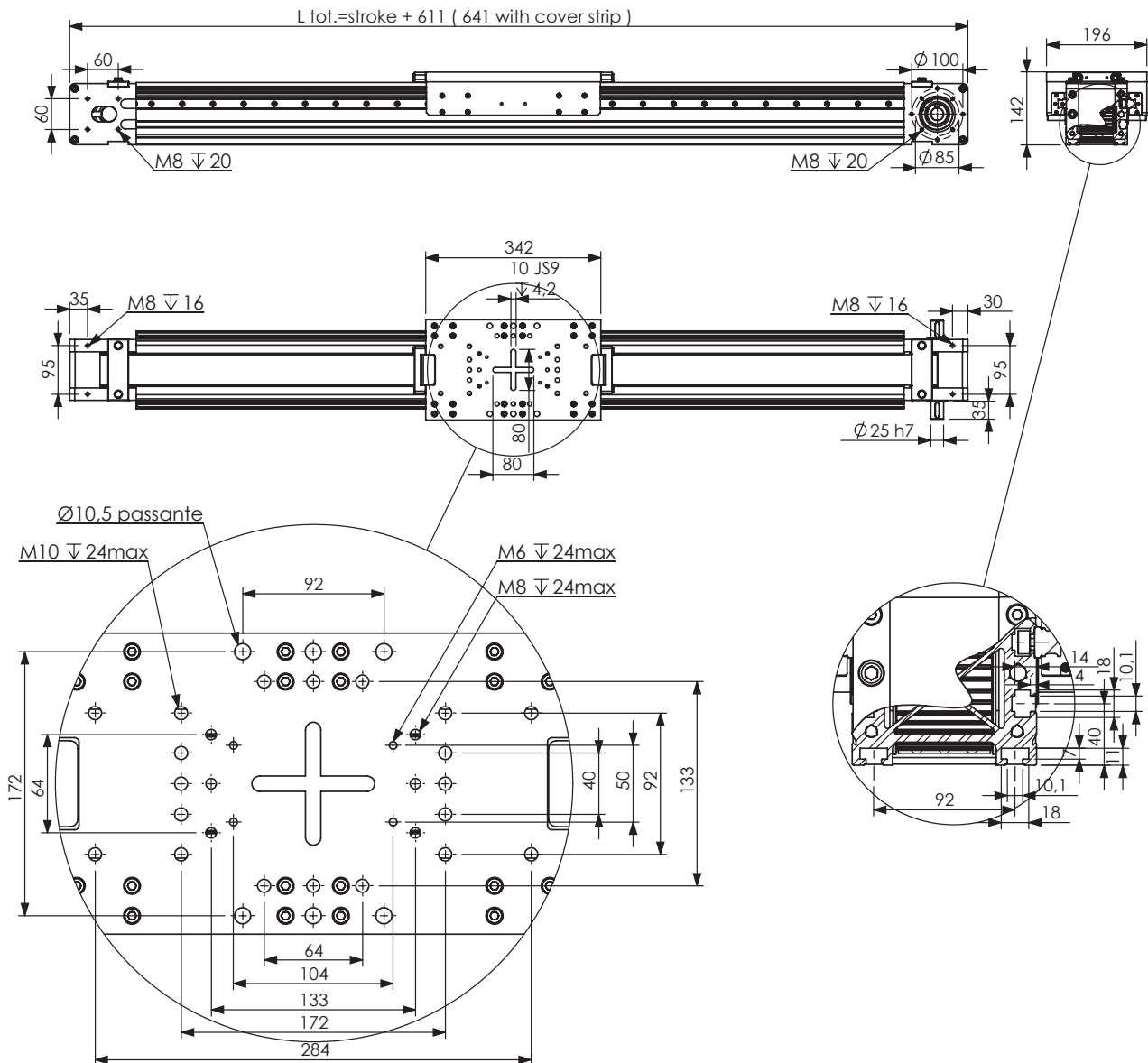


Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg.-110-111 of the catag.
6	FZ120LS367	Reference limit switch (MG120)
7	8R10H10BC/67	Sealing strip
8	FZ120BM815	Sealing strip cover

Num. item	Num. part	Description
9	FZ120BM815R	Sealing strip cover
10	FZ120PC722	Cover bearing housing
11	FZ120BM814	Sealing strip scraper
12	FZ120BM846	Sealing strip below cover
13	PL4M6C	Air pressure adapter M6
14	KIT-20-400	Sealing and lubrication elements KIT
15	Motor adapter	-

MG120-342

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	22,7 Kg
100 MM stroke	1,88 Kg
Entire carriage	7,67 Kg

Forces [N]

	max dynamics***	break
Fx	4091	9205
Fy	16200	18000
Fz	16200	17420

Moments [Nm]

	max dynamics***	break
Mx	1130	2090
My	1846	2860
Mz	1846	2975

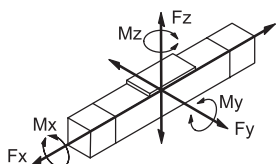
TECHNICAL DATA

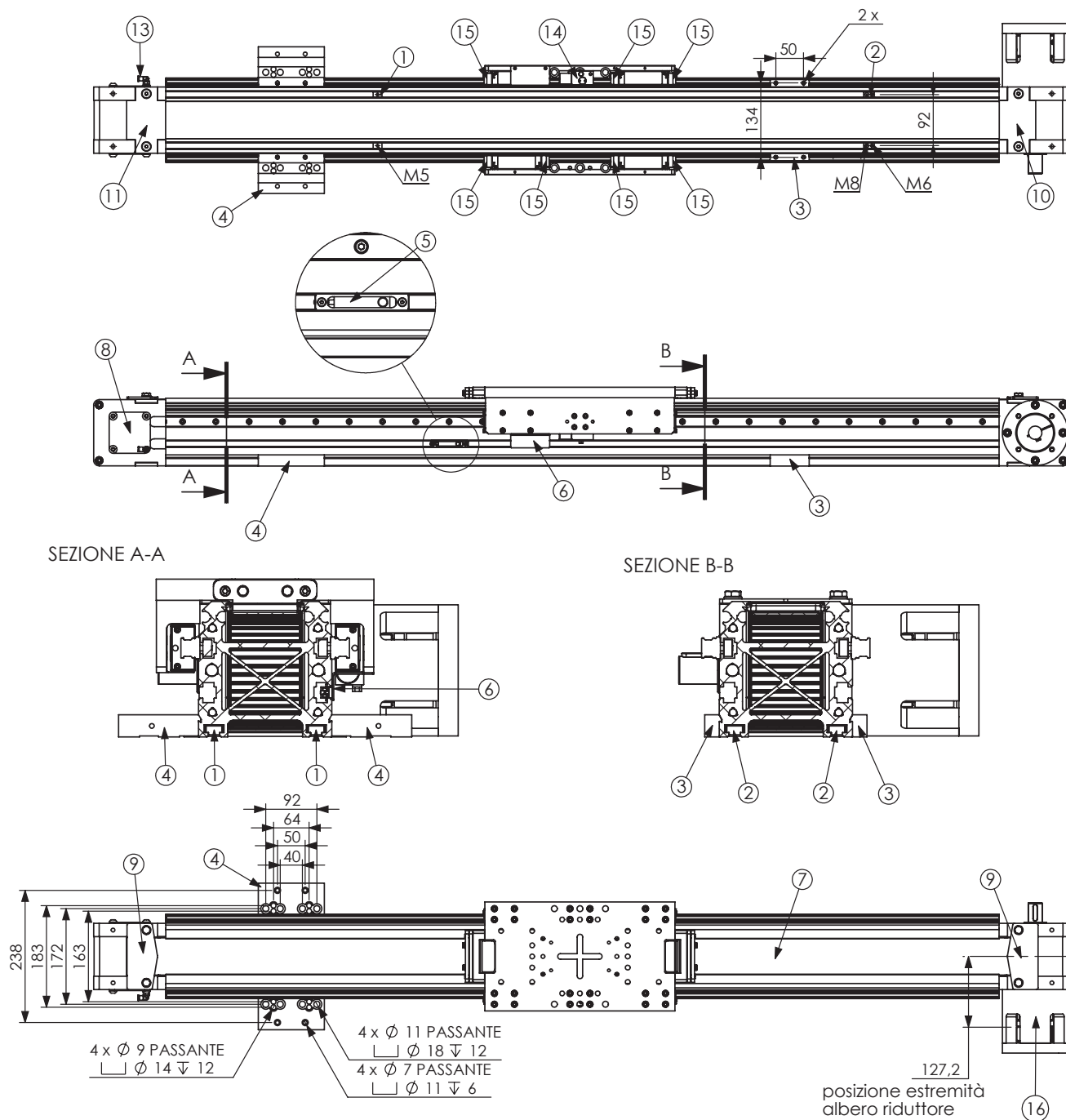
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	6 Nm
Max stroke	7000mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department





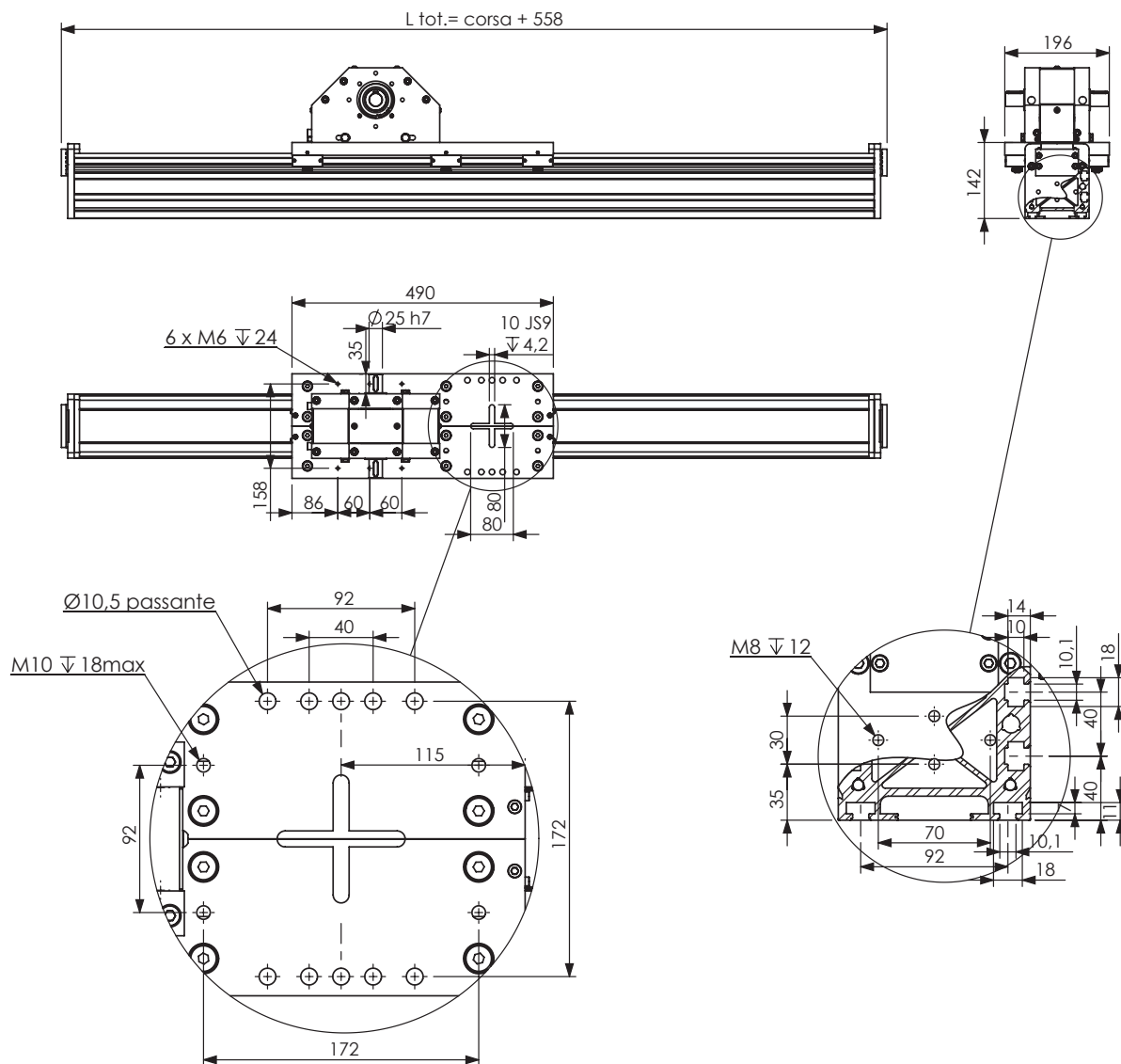
Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg.-110-111 of the catag.
6	FZ120LS367	Reference limit switch (MG120)
7	8R10H10BC/67	Sealing strip
8	FZ120PC722	Sealing strip cover

Num. item	Num. part	Description
9	FZ120BM814	Sealing strip scraper
10	FZ120BM815	Sealing strip cover
11	FZ120BM815R	Sealing strip cover
12	FZ120BM846	Sealing strip below cover
13	PL4M6C	Air pressure adapter M6
14	MKS2002K	Clamping and braking element
15	KIT-20-400	Sealing and lubrication elements KIT
16	Motor adapter	-

CM120-490

Belt translation unit on track rollers

LITEK®



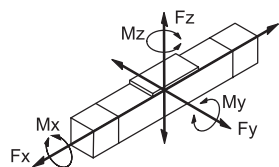
WEIGHTS

Basic lenght without stroke	24,7 Kg
100 MM stroke	1,51 Kg
Entire carriage	15,9 Kg

Forces [N]	max dynamics***	break
Fx	4091	9205
Fy	3000	4000
Fz	2600	10500
Moments [Nm]	max dynamics***	break
Mx	180	717
My	647	2590
Mz	550	810

TECHNICAL DATA

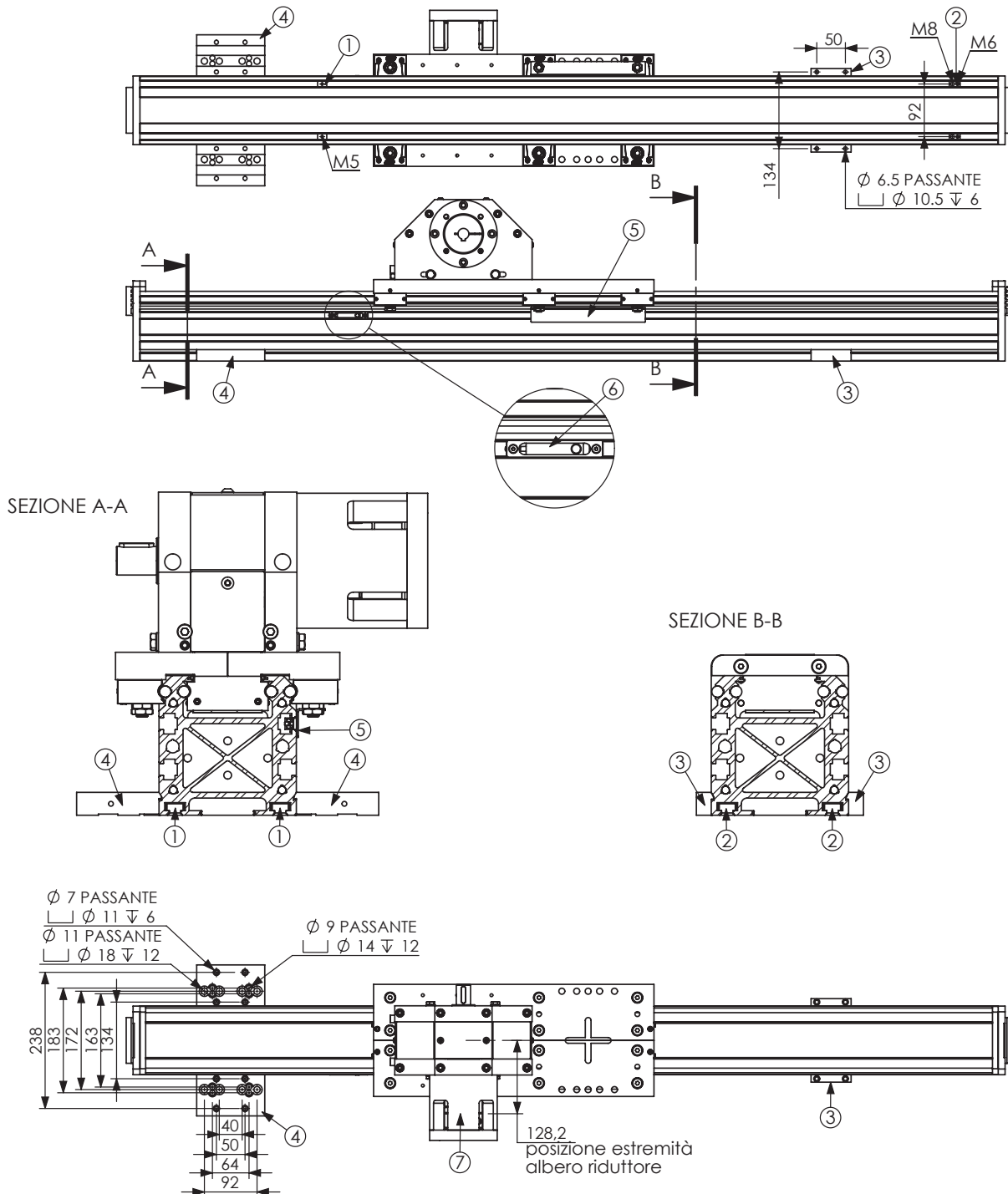
Max speed***	5m/s
Max acceleration***	20m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	2,5 Nm
Max stroke	7000mm**
Max total length	240mm
Stroke per revolution	belt RPP8M60



*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	FZ120LS366	Reference limit switch
6	Sensore	See pg.-110-111 of the catag.
7	Motor adapter	

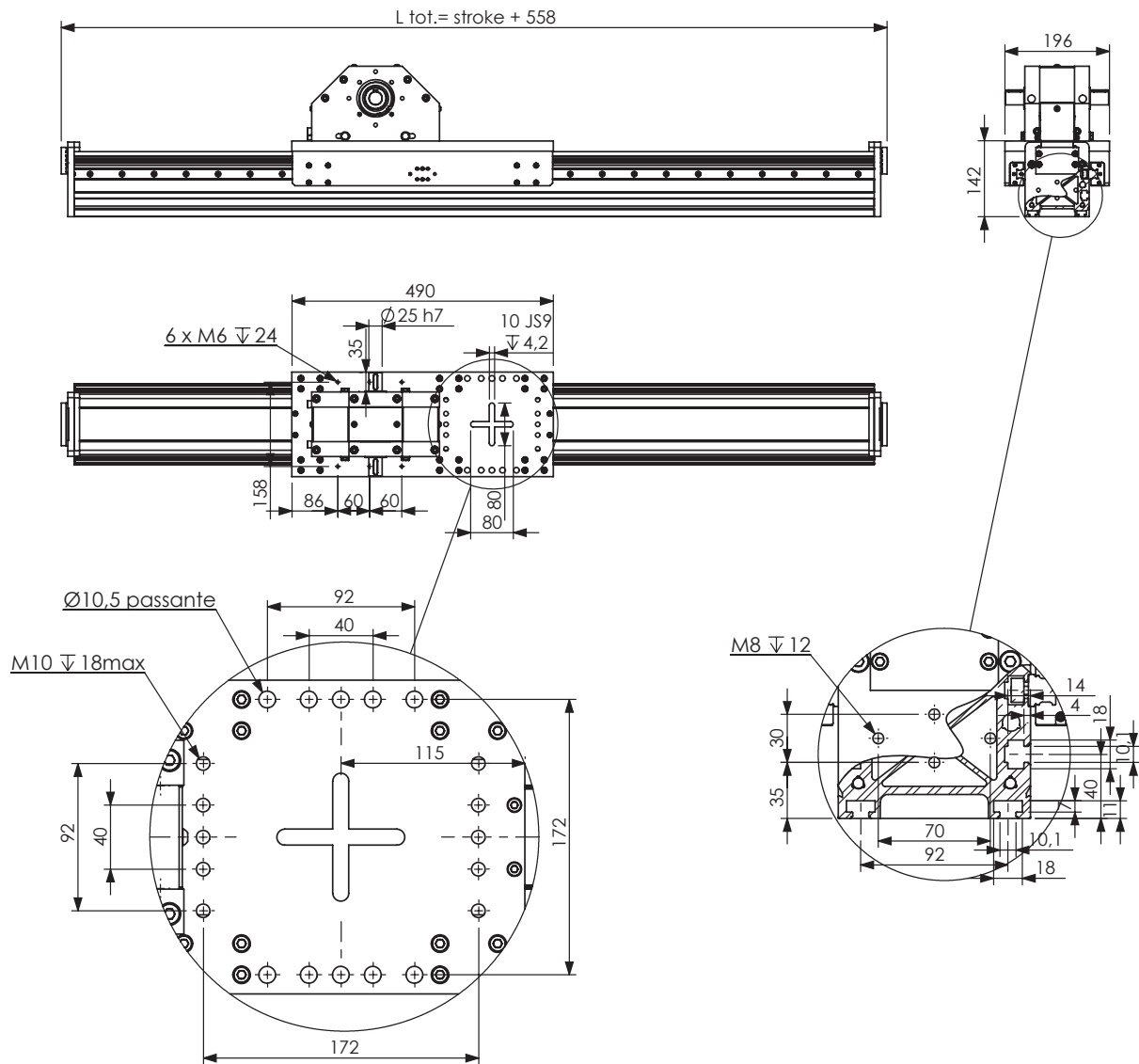
Linear system

120

CG120-490

Belt translation unit on recirculating ball bearing guide

LITEK®



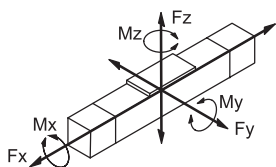
WEIGHTS

Basic length without stroke	28 Kg
100 MM stroke	1,87 Kg
Entire carriage	17,4 Kg

Forces [N]	max dynamics***	
	break	break
Fx	4091	9205
Fy	6506	9760
Fz	7484	11226
Moments [Nm]	max dynamics***	
	break	break
Mx	548	1250
My	2550	4000
Mz	2550	6200

TECHNICAL DATA

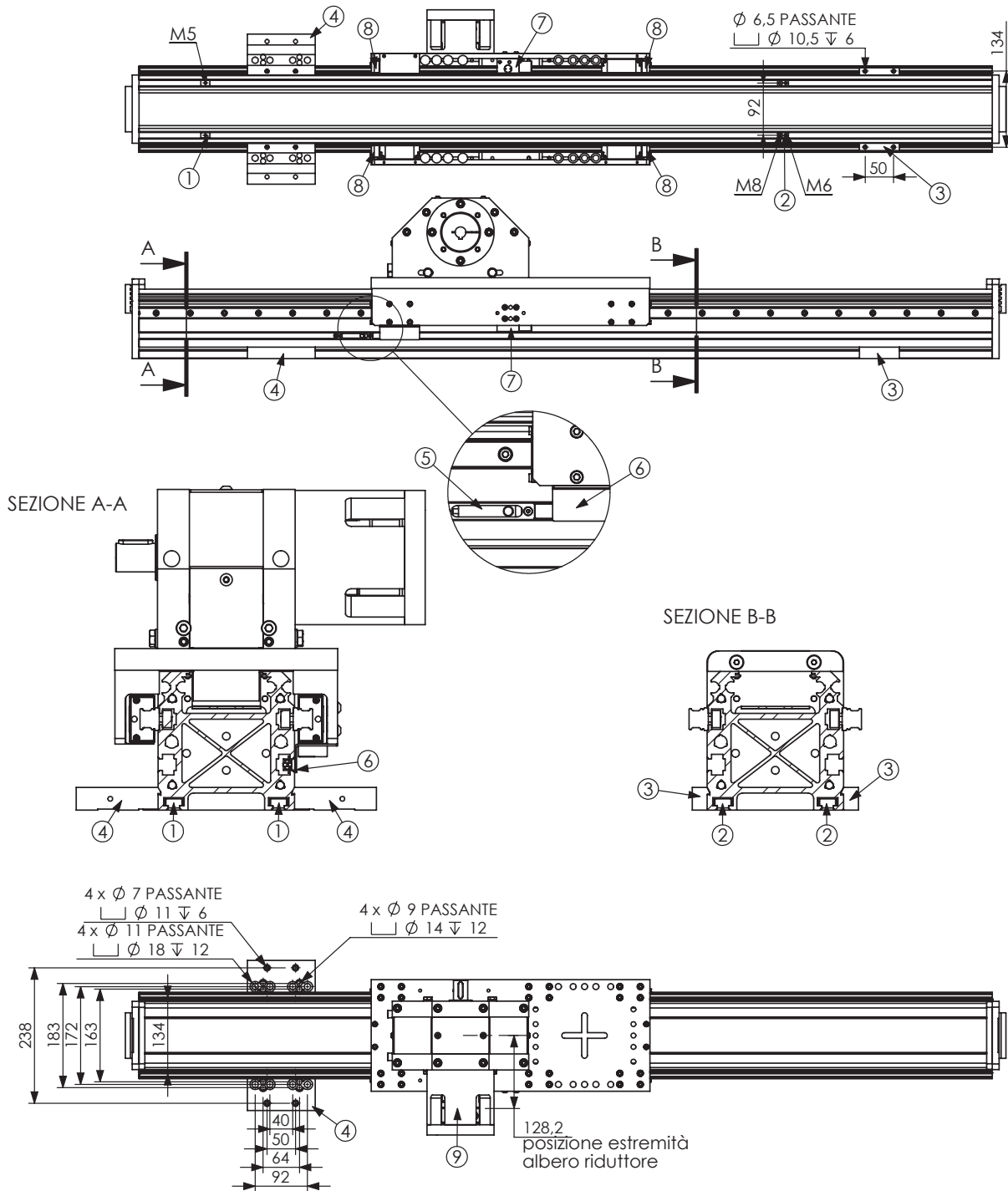
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3,5 Nm
Max stroke	7000mm**
Max total length	240mm
Stroke per revolution	belt RPP8M60



*maximum no-load value

** higher strokes on request

*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ000SS406	Bracket
4	FZ000SS416	Bracket
5	Sensore	See pg.-110-111 of the catag.
6	FZ120LS367	Reference limit switch (MG120)
7	MKS2002K	Clamping and braking element
8	KIT-20-400	Sealing and lubrication elements KIT
9	Motor adapter	

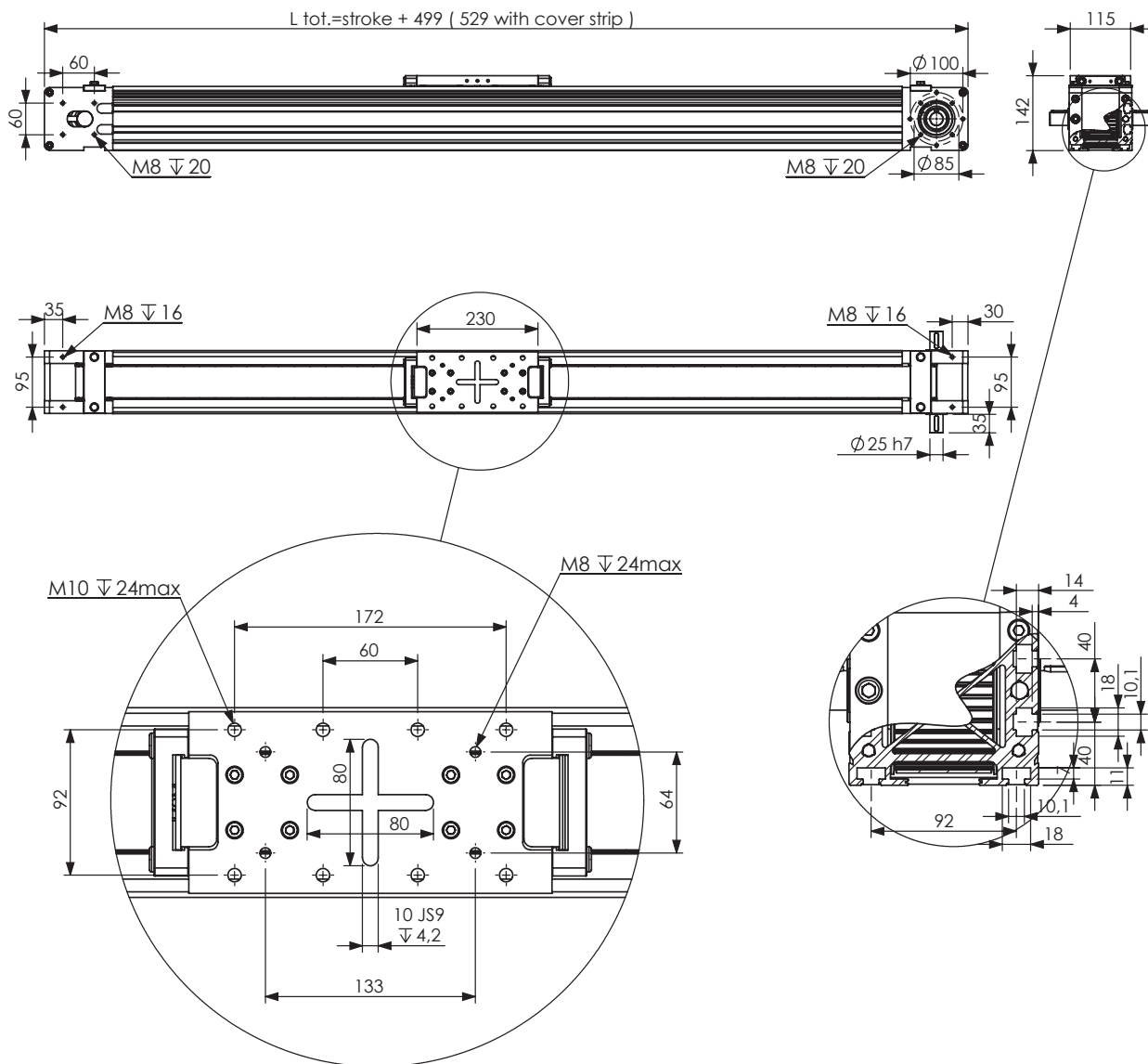
Linear system

120

LITEK®

MP120-230

Belt translation unit on recirculating ball bearing guide

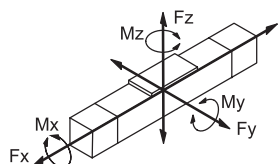


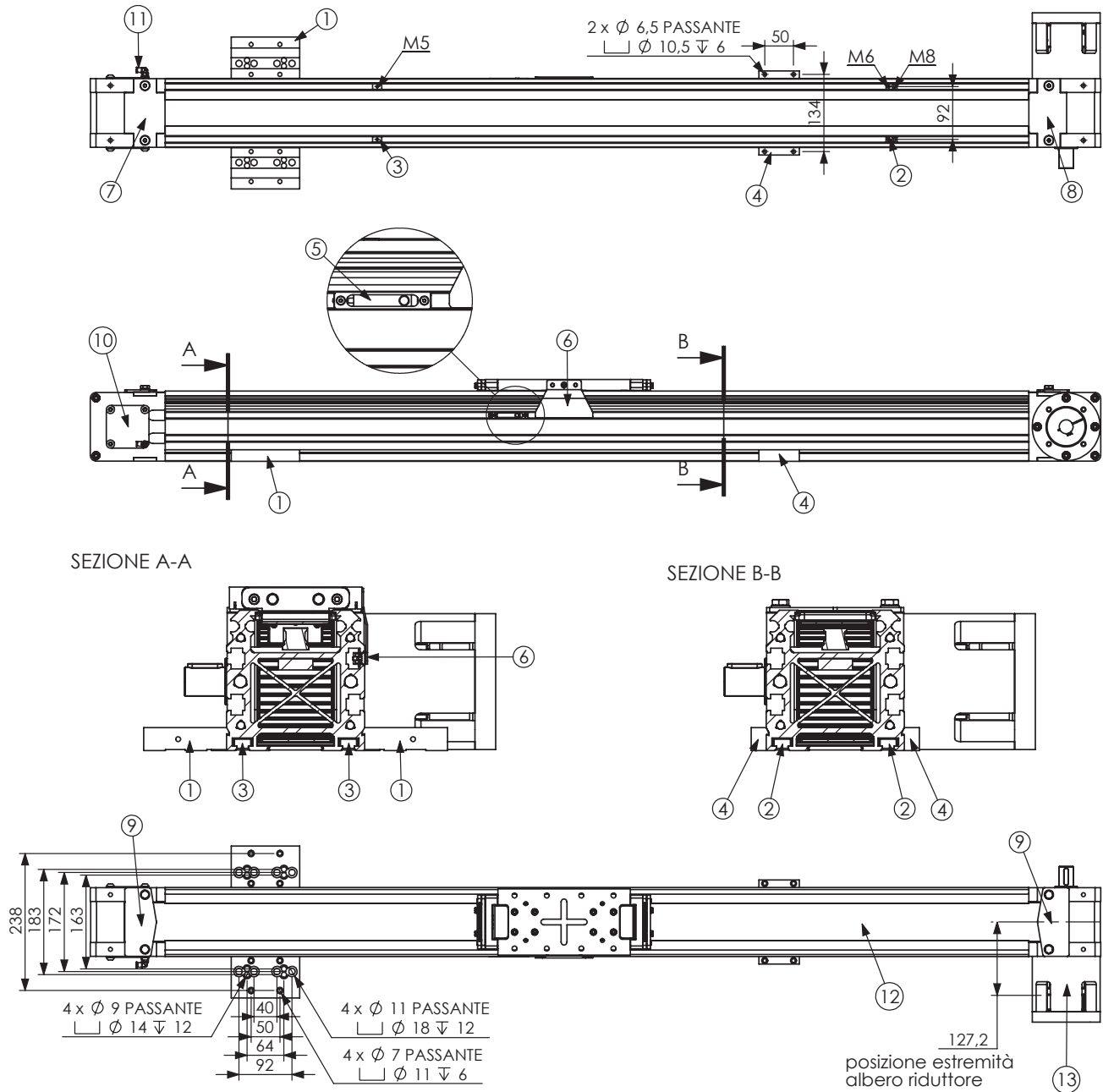
WEIGHTS	
Basic length without stroke	15,5 Kg
100 MM stroke	1,75 Kg
Entire carriage	2,96 Kg

Forces [N]	max dynamics***	break
Fx	4091	9205
Fy	8950	22100
Fz	5757	8636
Moments [Nm]	max dynamics***	break
Mx	160	1250
My	613	4000
Mz	613	6200

TECHNICAL DATA	
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	3 Nm
Max stroke	7000mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60

*maximumno-load value
 ** higher strokes on request
 *** for special applications contact technical department



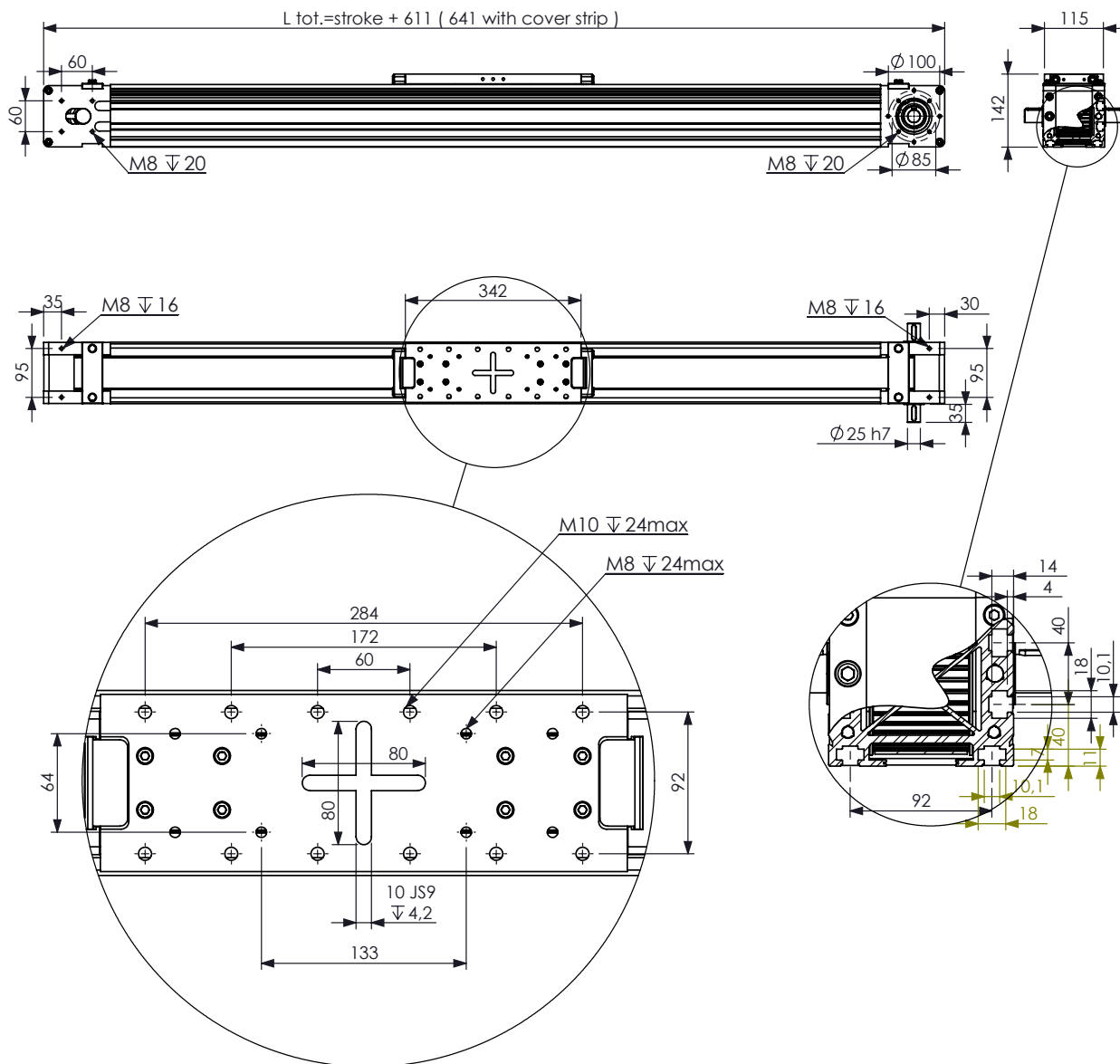


N° item	Num. part	Description
1	FZ0005S416	Bracket
2	FZ0005M802	T-slot M8-M6
3	FZ0005M801	T-slot M5
4	FZ0005S406	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ120PS261	Reference limit switch
7	FZ120BM815R	Sealing strip cover

N° item	Num. part	Description
8	FZ120BM815	Sealing strip cover
9	FZ120BM814	Sealing strip scraper
10	FZ120PC722	Cover bearing housing
11	PL4M6C	Air pressure adapter M6
12	8R10H10BC/67	Sealing strip
13	Motor adapter	

MP120-342

Belt translation unit on recirculating ball bearing guide



WEIGHTS

Basic length without stroke	18,5 Kg
100 MM stroke	1,75 Kg
Entire carriage	4,21 Kg

Forces [N]	max dynamics***	
	max dynamics***	break
Fx	4091	9205
Fy	11700	35100
Fz	8800	13000
Moments [Nm]	max dynamics***	
	max dynamics***	break
Mx	160	241
My	933	1400
Mz	1368	3123

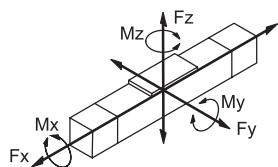
TECHNICAL DATA

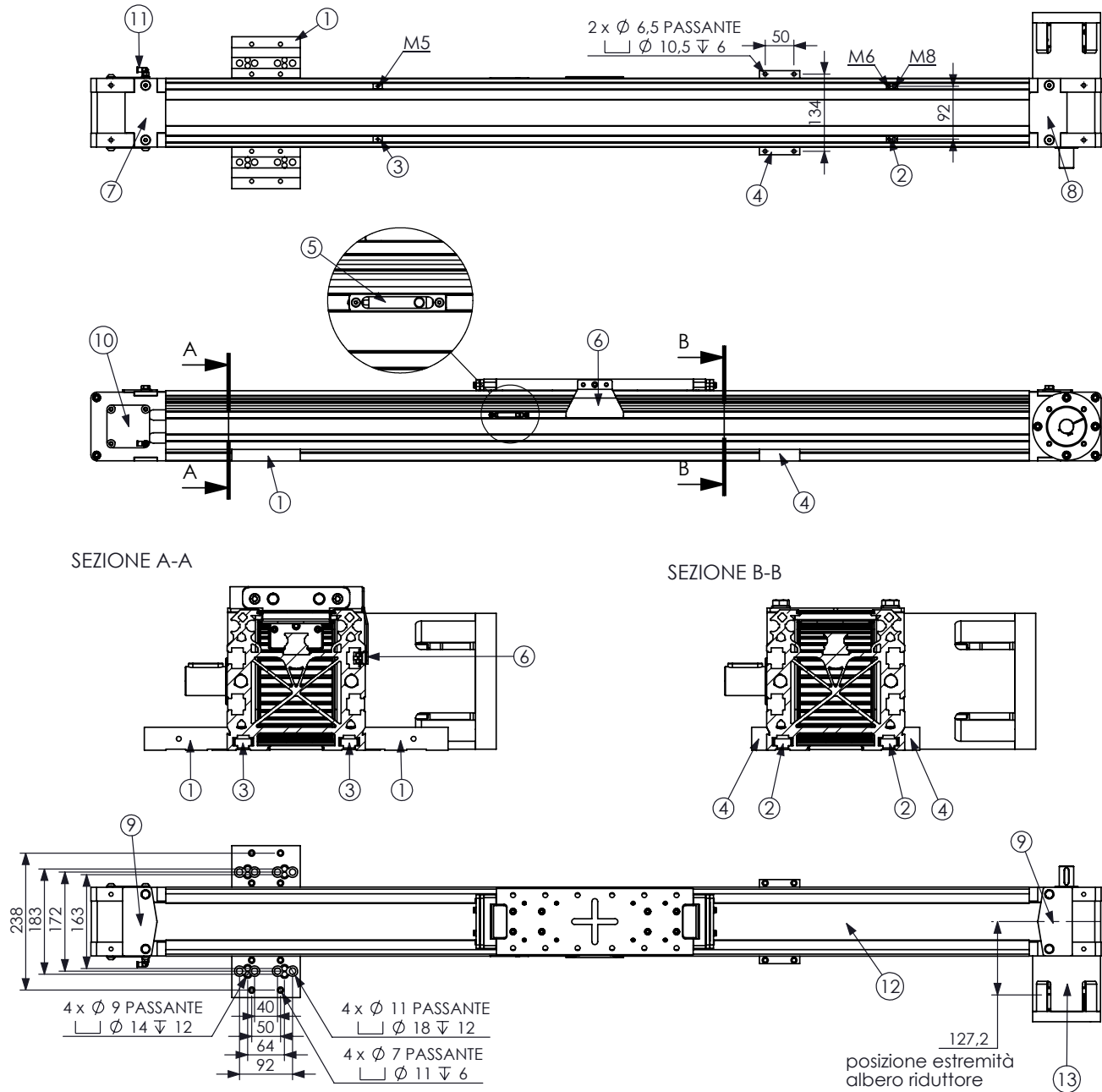
Max speed***	3m/s
Max acceleration***	30m/s ²
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	4 Nm
Max stroke	7000mm**
Max total length	320mm
Stroke per revolution	belt RPP8M60

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



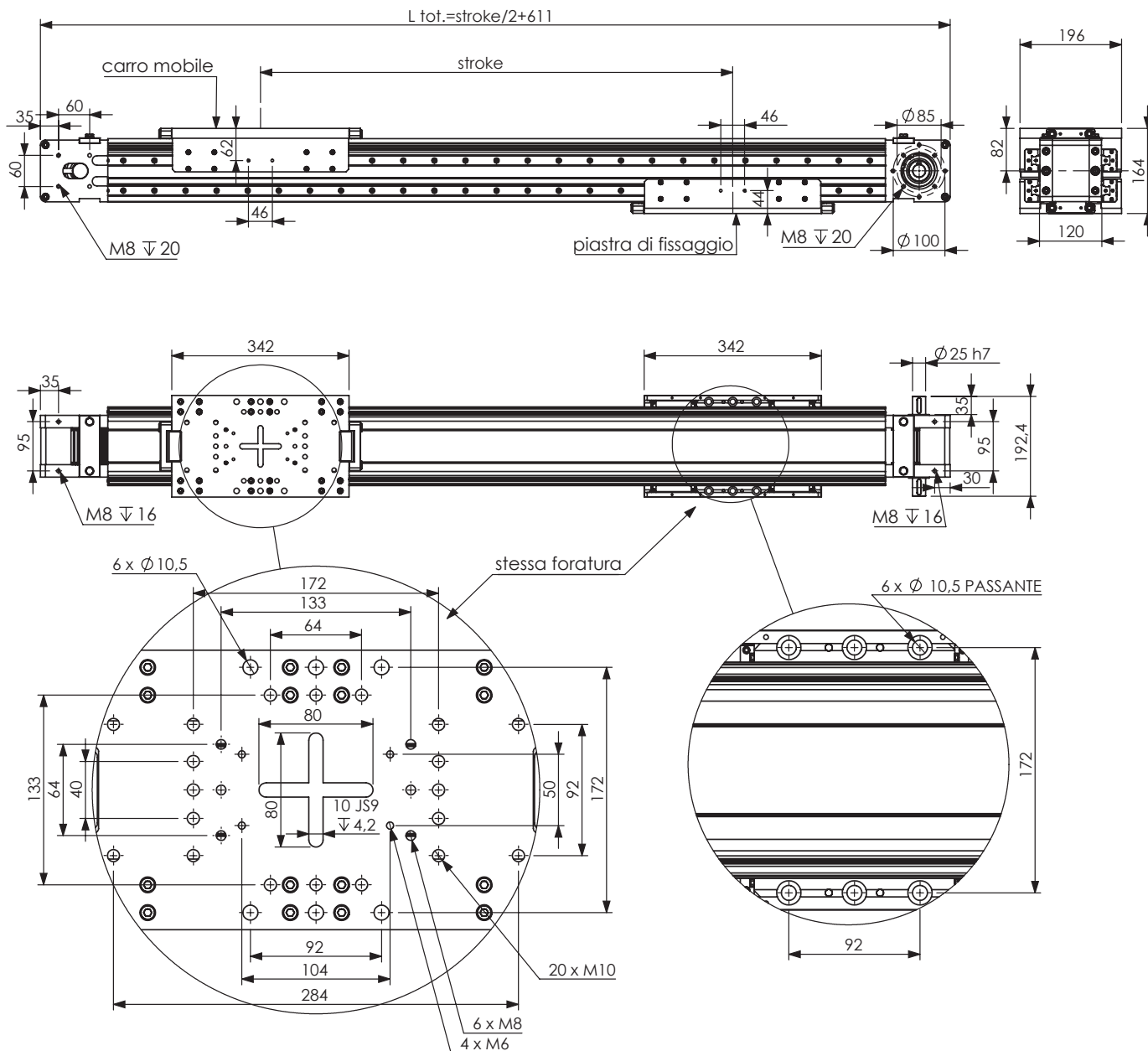


N° item	Num. part	Description
1	FZ0005S416	Bracket
2	FZ0005M802	T-slot M8-M6
3	FZ0005M801	T-slot M5
4	FZ0005S406	Bracket
5	Sensore	See pg. 110-111 of the catag.
6	FZ120PS261	Reference limit switch
7	FZ120BM815R	Sealing strip cover

N° item	Num. part	Description
8	FZ120BM815	Sealing strip cover
9	FZ120BM814	Sealing strip scraper
10	FZ120PC722	Cover bearing housing
11	PL4M6C	Air pressure adapter M6
12	8R10H10BC/67	Sealing strip
13	Motor adapter	

MD120-342

Double belt translation unit on rollers and recirculating ball guides



WEIGHT

Basic length without stroke	32 Kg
100mm stroke	2,3 Kg
Moving Carriage	7,7 Kg
Holding Carriage	6,5 Kg

Forces [Nm]

	max dynamics***	break
Fx	4091	9205
Fy	****	****
Fz	****	****

Moments [Nm]

	max dynamics***	break
Mx	1130	2090
My	1846	2860
Mz	1846	2975

TECHNICAL DATA

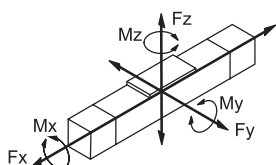
Max speed***	3m/s
Max acceleration***	30m/s ² *
Repeat	+/-0,05mm
Accuracy	+/-0,1mm/mt
Idle Torque	12 Nm
Max stroke	10000**
Max total length	640mm
Stroke per revolution	belt RPP8M60

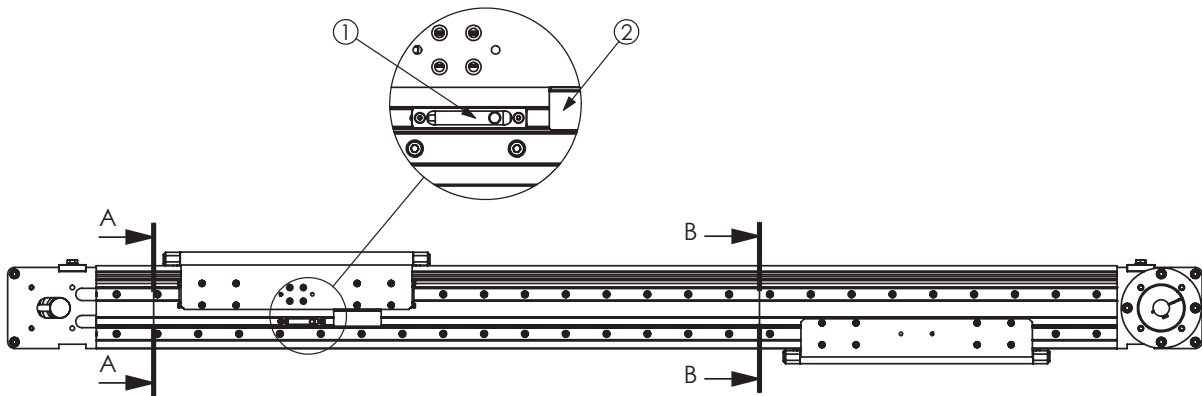
*maximum-no-load valu

** higher strokes on request

*** for special applications contact technical department

**** Fy and Fz seals depend on the position of the movable carriage relative to the fixed carriage. The deformation of the profile in the two directions is: $dY=0.009\text{mm}$ (10N at 1mt) / $dZ=0.007\text{mm}$ (10N at 1mt)



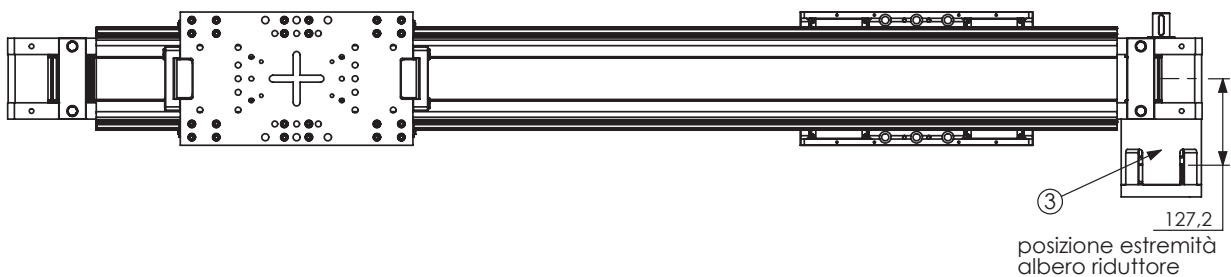
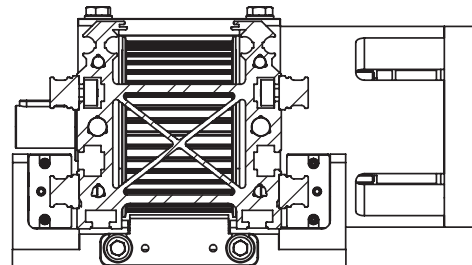
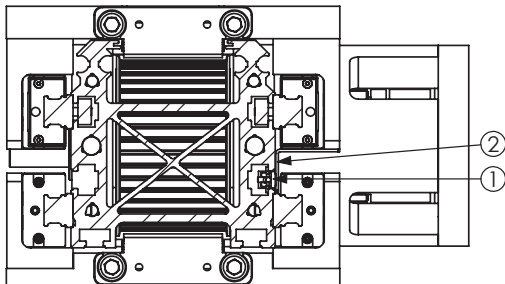


SEZIONE A-A

SEZIONE B-B

SCALA 1 : 4

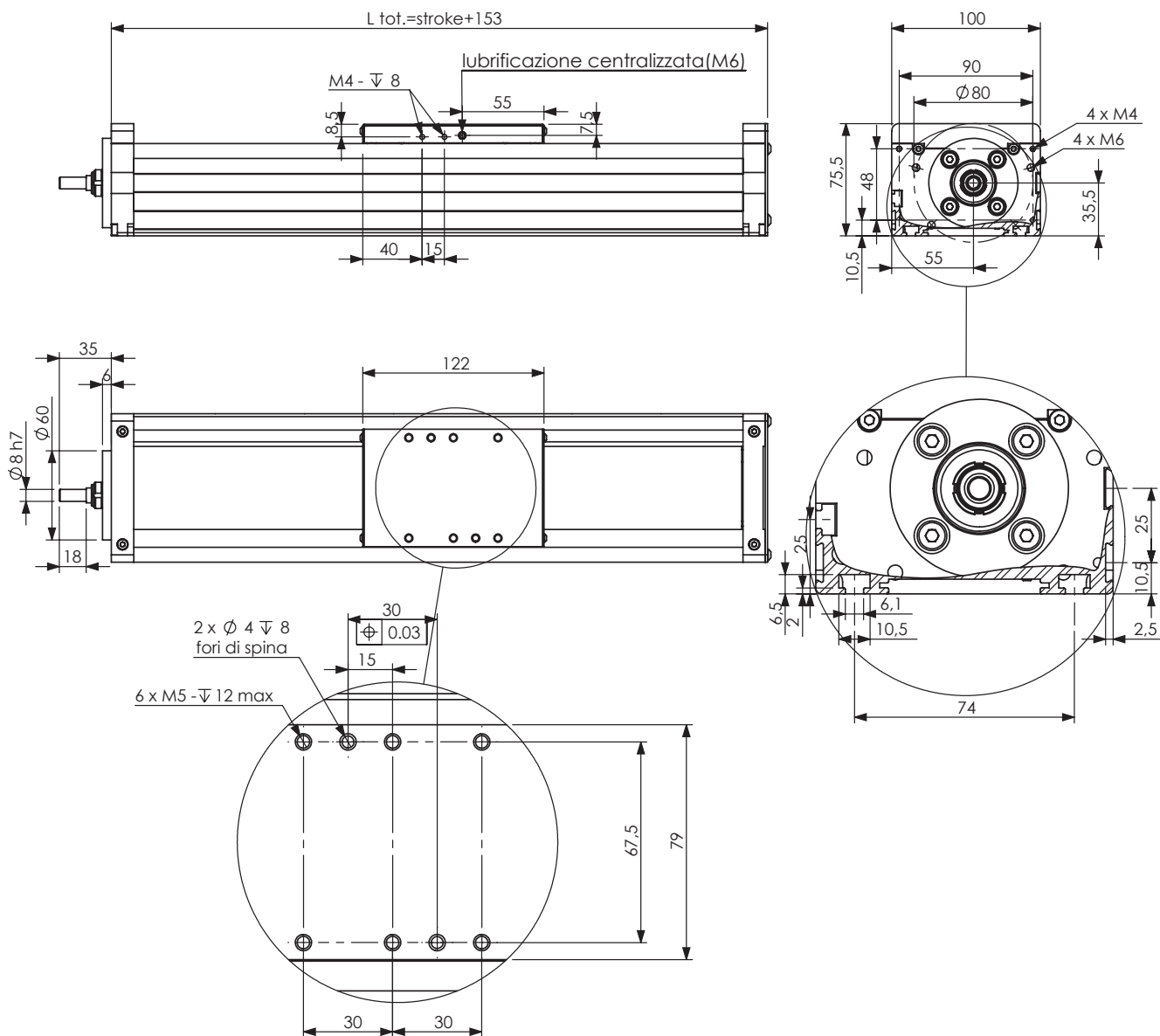
SCALA 1 : 4



Num. item	Num. part	Description
1	Sensore	See pg. 110-111 of the catag.
2	FZ120LS367	Reference limit switch (MG120)
3	Motor adapter	

LV101-122

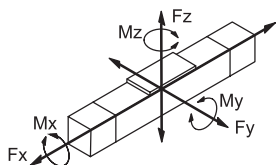
Mechanical Linear Drive with ball screw and rail guide



WEIGHTS

Basic length without stroke	2,2 Kg
100MM stroke	0,7 Kg
Entire carriage	0,66 Kg

Forces [N]	max dynamic***	break
Fx	Ø 16 p2,5 => C=3500N	C0=5500
	Ø 16 p4 => C=4600N	C0=7200
	Ø 16 p5 => C=4600N	C0=7200
	Ø 16 p10 => C=4200N	C0=6500
	Ø 16 p20 => C=1900N	C0=2500
Fy	200	500
Fz	200	500
Moments [Nm]	max dynamic***	break
Mx	25	50
My	25	50
Mz	25	50



TECHNICAL DATA

Max speed***	1m/s
Max acceleration***	20m/s ² *
Repeat	0,03
Accuracy	0,05
Idle Torque	1 Nm
Max stroke	2700mm**
Max total length	2,5/4/5/10/20mm
Stroke per revolution	screw RDS Ø16

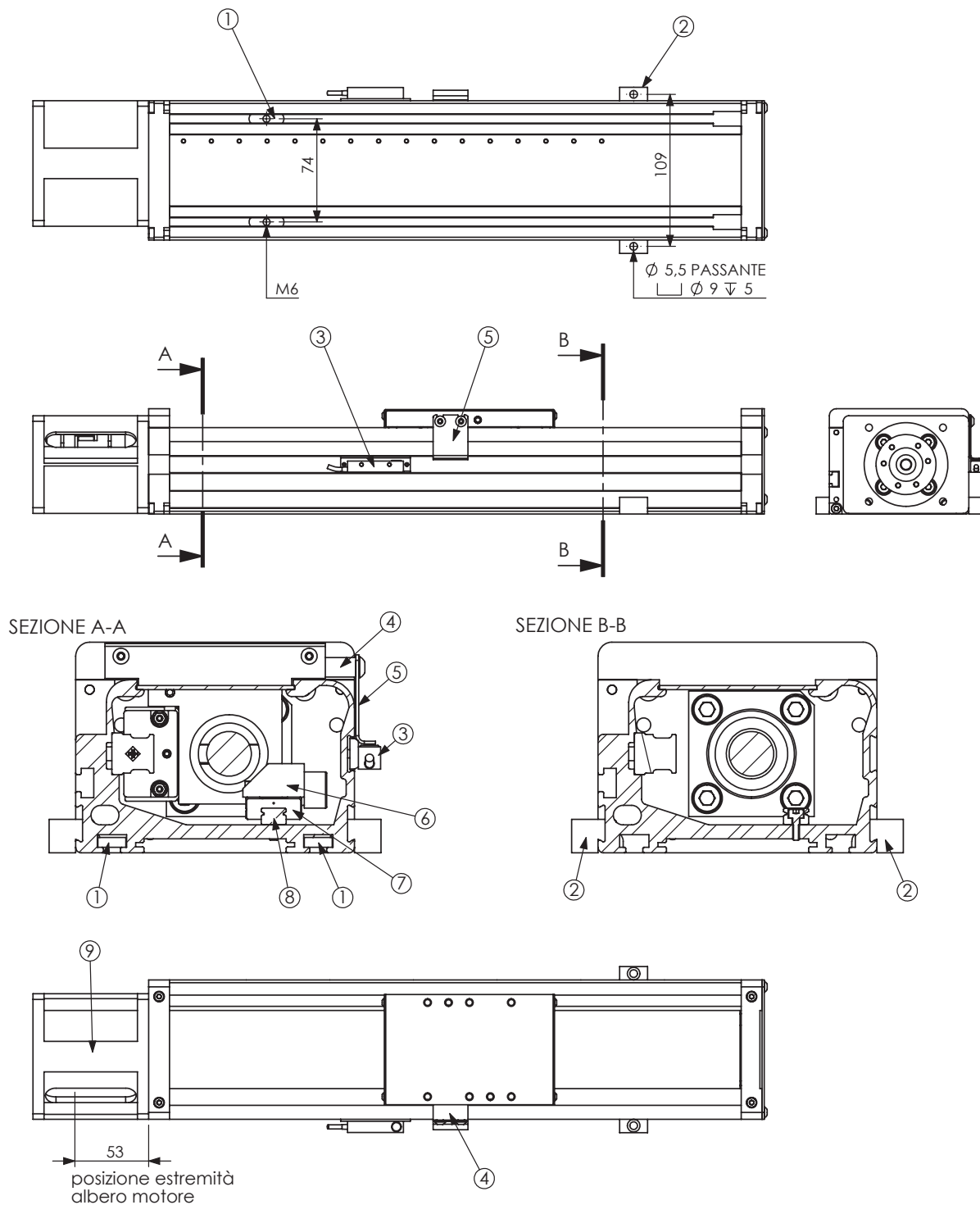
*maximumno-load value

** higher strokes on request

*** for special applications contact technical department

LV101-122 ACCESSORIES

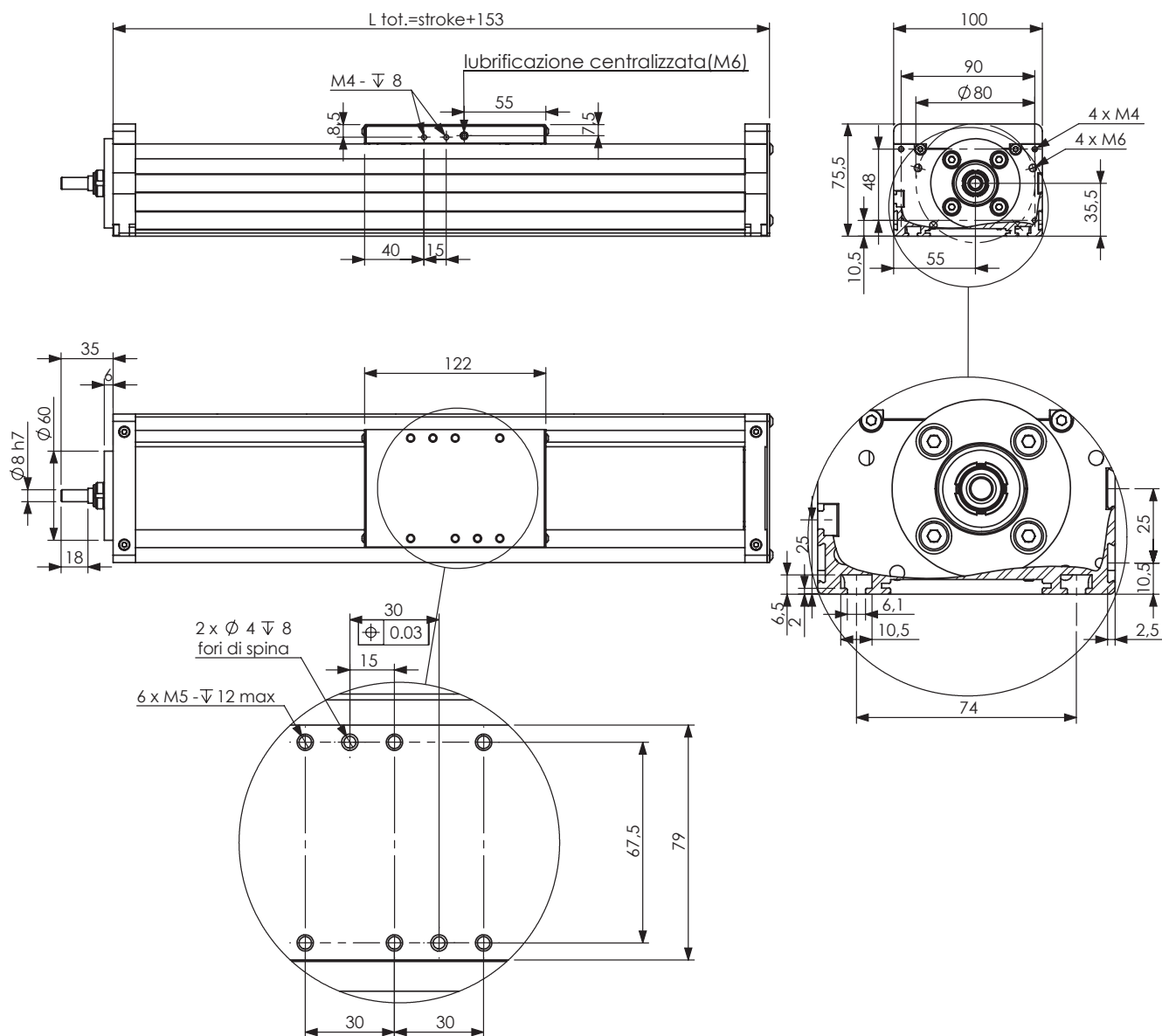
LITEK®



Num. item	Num. part	Description
1	ISE2090010005	T-slot 1xM6 ISEL
2	FZ000SF225	Bracket
3	Sensore	See pg. 110-111 of the catag.
4	FZ101SL235	Bracket
5	FZ101RS241	Reference limit switch
6	CR101SM567	Block Adapter
7	KWEM09	Miniature Block
8	TKDM9	Rail miniature
9	Motor adapter	

LV101-122TR

Mechanical Linear Drive with trapezoidal screw and rail guide

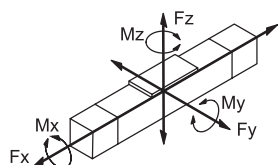


WEIGHTS

Basic length without stroke	2,2 Kg
100MM stroke	0,7 Kg
Entire carriage	0,66 Kg

TECHNICAL DATA

Max speed***	0,2m/s
Max acceleration***	10m/s ²
Repeat	--
Accuracy	--
Idle Torque	2 Nm
Max stroke	2700mm**
Max total length	12mm
Stroke per revolution	screw TR ∅20



Forces [N]	max dynamic***	break
Fx	300N -> 500rpm****	500
Fy	200	500
Fz	200	500
Moments [Nm]	max dynamic***	break
Mx	25	50
My	25	50
Mz	25	50

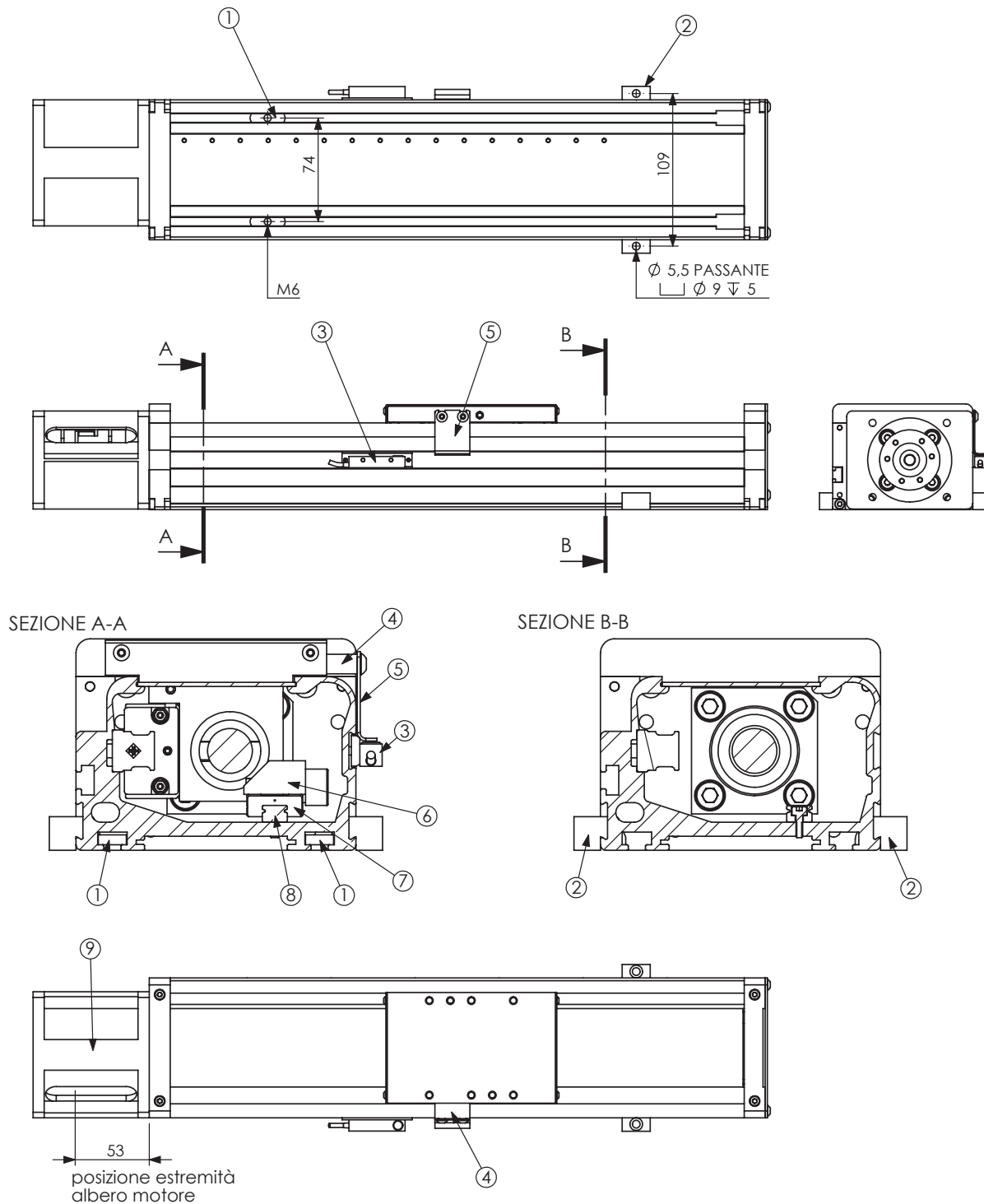
*maximumno-load value

** higher strokes on request

*** for special applications contact technical department

LV101-122TR ACCESSORIES

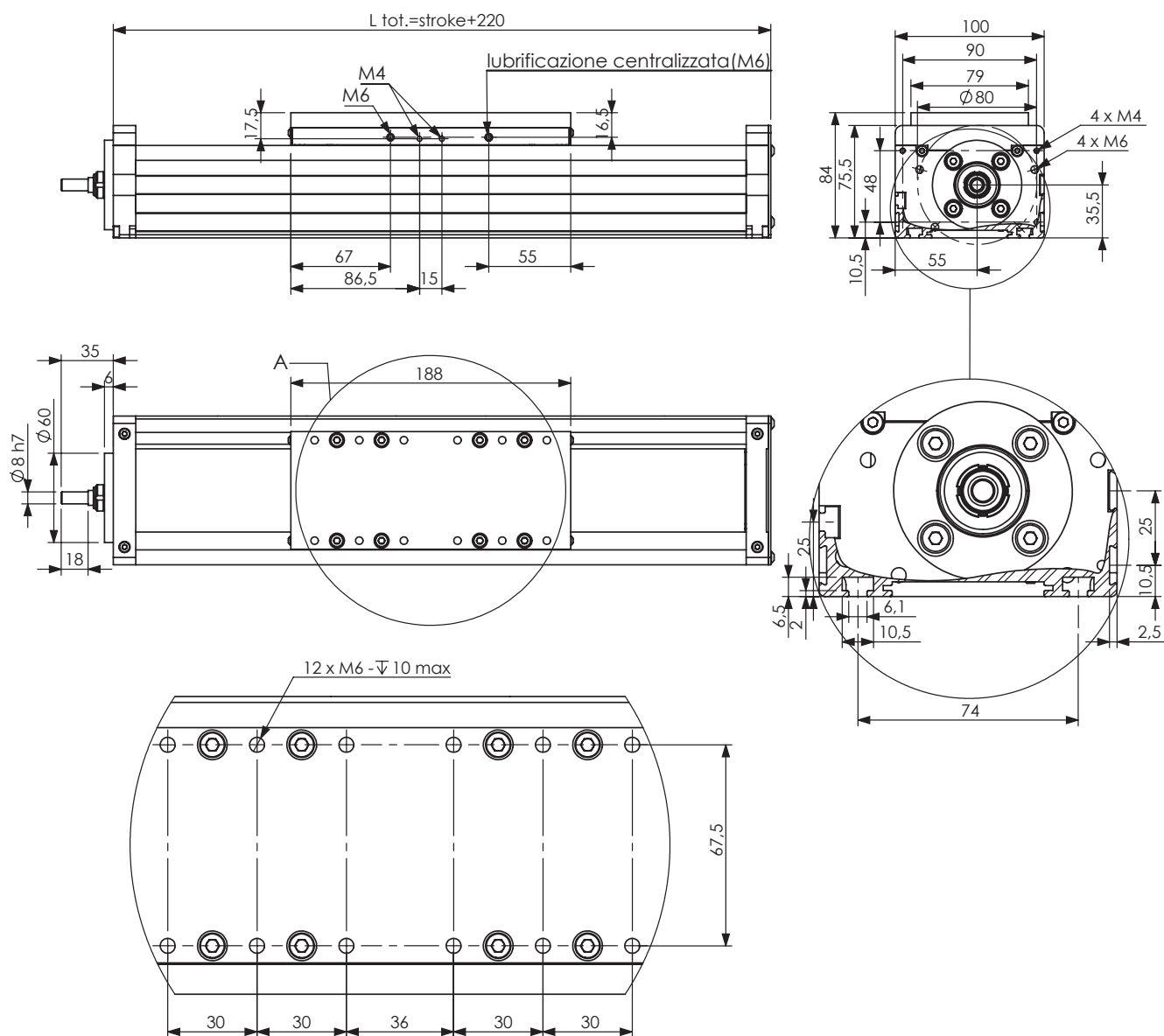
LITEK®



Num. item	Num. part	Description
1	ISE2090010005	T-slot 1xM6 ISEL
2	FZ000SF225	Bracket
3	Sensore	See pg. 110-111 of the catag.
4	FZ101SL235	Bracket
5	FZ101RS241	Reference limit switch
6	CR101SM567	Block Adapter
7	KWEM09	Miniature Block
8	TKDM9	Rail miniature
9	Motor adapter	

LV101-188

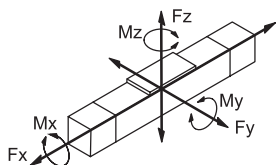
Mechanical Linear Drive with ball screw and rail guide



WEIGHTS

Basic length without stroke	3,5 Kg
100MM stroke	0,7 Kg
Entire carriage	1,5 Kg

Forces [N]	max dynamic***	break
Fx	Ø 16 p2,5 => C=3500N	C0=5500
	Ø 16 p4 => C=4600N	C0=7200
	Ø 16 p5 => C=4600N	C0=7200
	Ø 16 p10 => C=4200N	C0=6500
	Ø 16 p20 => C=1900N	C0=2500
Fy	300	600
Fz	300	600
Moments [Nm]	max dynamic***	break
Mx	40	80
My	75	150
Mz	75	150



TECHNICAL DATA

Max speed***	1m/s (p20)
Max acceleration***	20m/s ² *
Repeat	0,03
Accuracy	0,05
Idle Torque	1,5 Nm
Max stroke	2700mm**
Max total length	2,5/4/5/10/20mm
Stroke per revolution	screw RDS Ø16

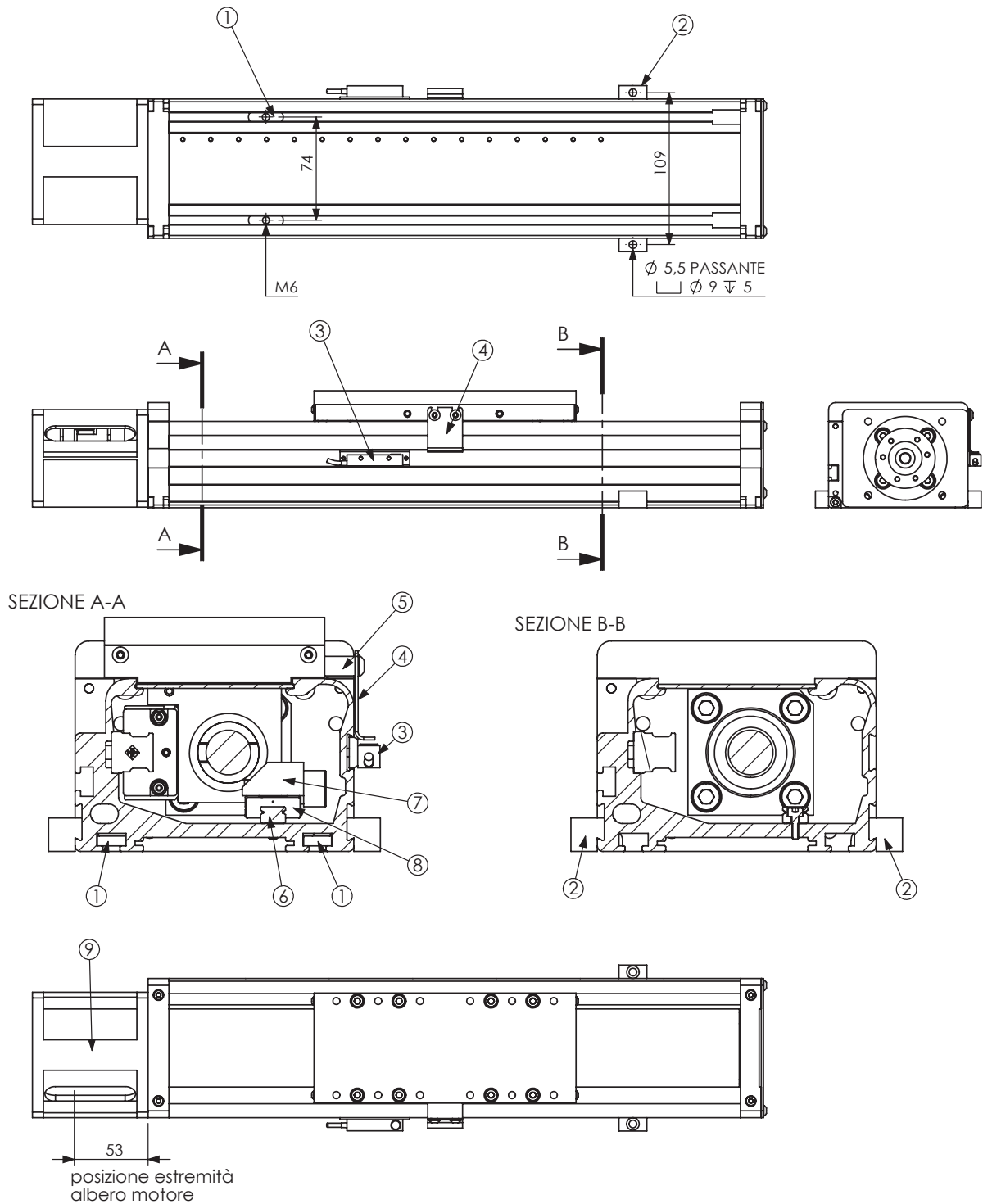
*maximumno-load value

** higher strokes on request

*** for special applications contact technical department

LV101-188 ACCESSORIES

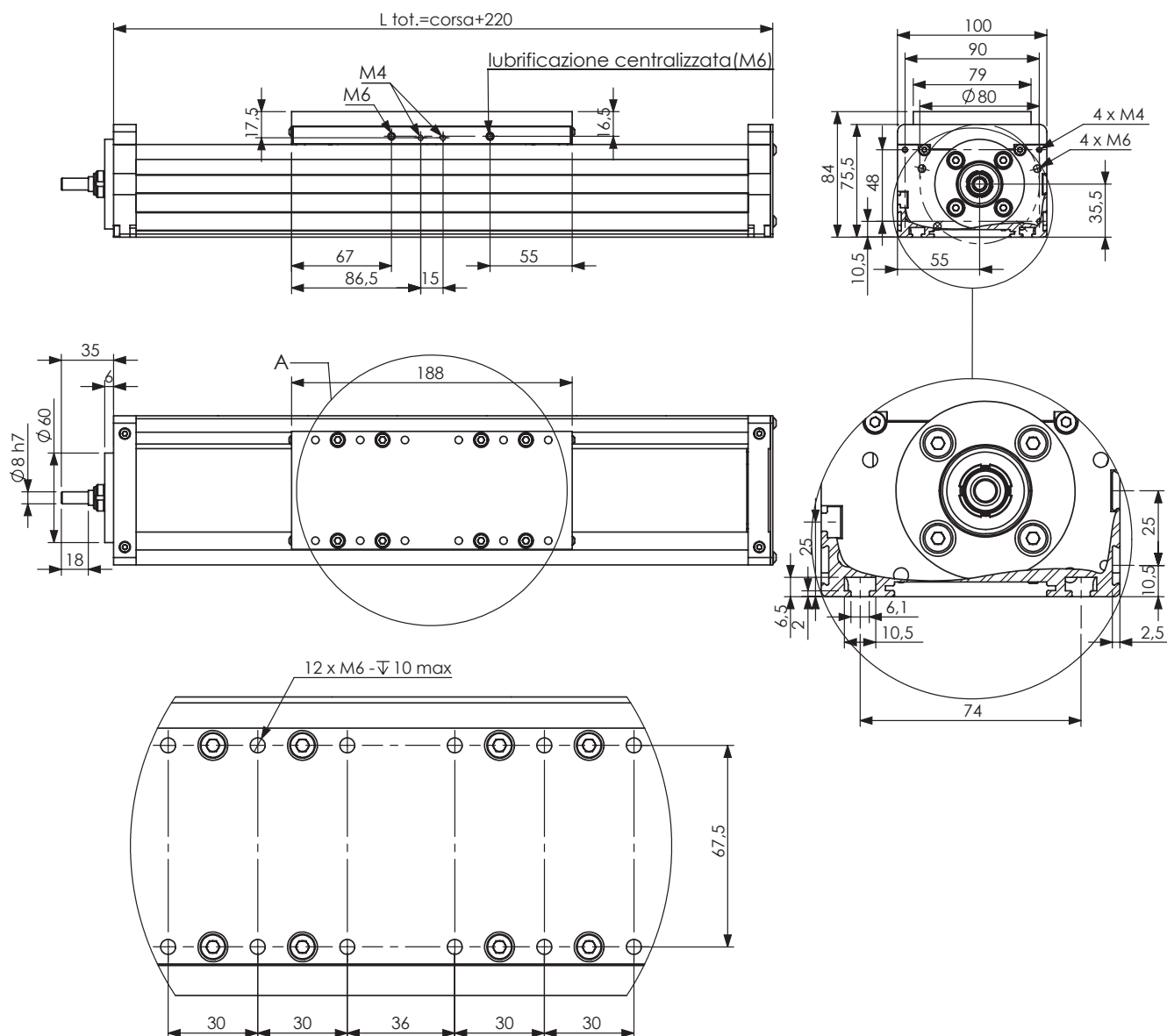
LITEK®



Num. item	Num. part	Description
1	ISE2090010005	T-slot 1xM6 ISEL
2	FZ000SF225	Bracket
3	Sensore	See pg. 110-111 of the catag.
4	FZ101RS241	Reference limit switch
5	FZ101SL235	Bracket
6	TKDM9	Rail miniature
7	CR101SM567	Block Adapter
8	KWEM09	Miniature Block
9	Motor adapter	

LV101-188TR

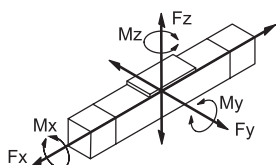
Mechanical Linear Drive with trapezoidal screw and rail guide



WEIGHTS

Basic length without stroke	2,2 Kg
100MM stroke	0,7 Kg
Entire carriage	1,5 Kg

Forces [N]	max dynamic***	break
Fx	300N -> 500rpm****	500
Fy	300	600
Fz	300	600
Moments [Nm]	max dynamic***	break
Mx	40	80
My	75	150
Mz	75	150



TECHNICAL DATA

Max speed***	0,2m/s
Max acceleration***	10m/s ²
Repeat	--
Accuracy	--
Idle Torque	3 Nm
Max stroke	2700mm**
Max total length	12mm
Stroke per revolution	screw TR Ø20

*maximum no-load value

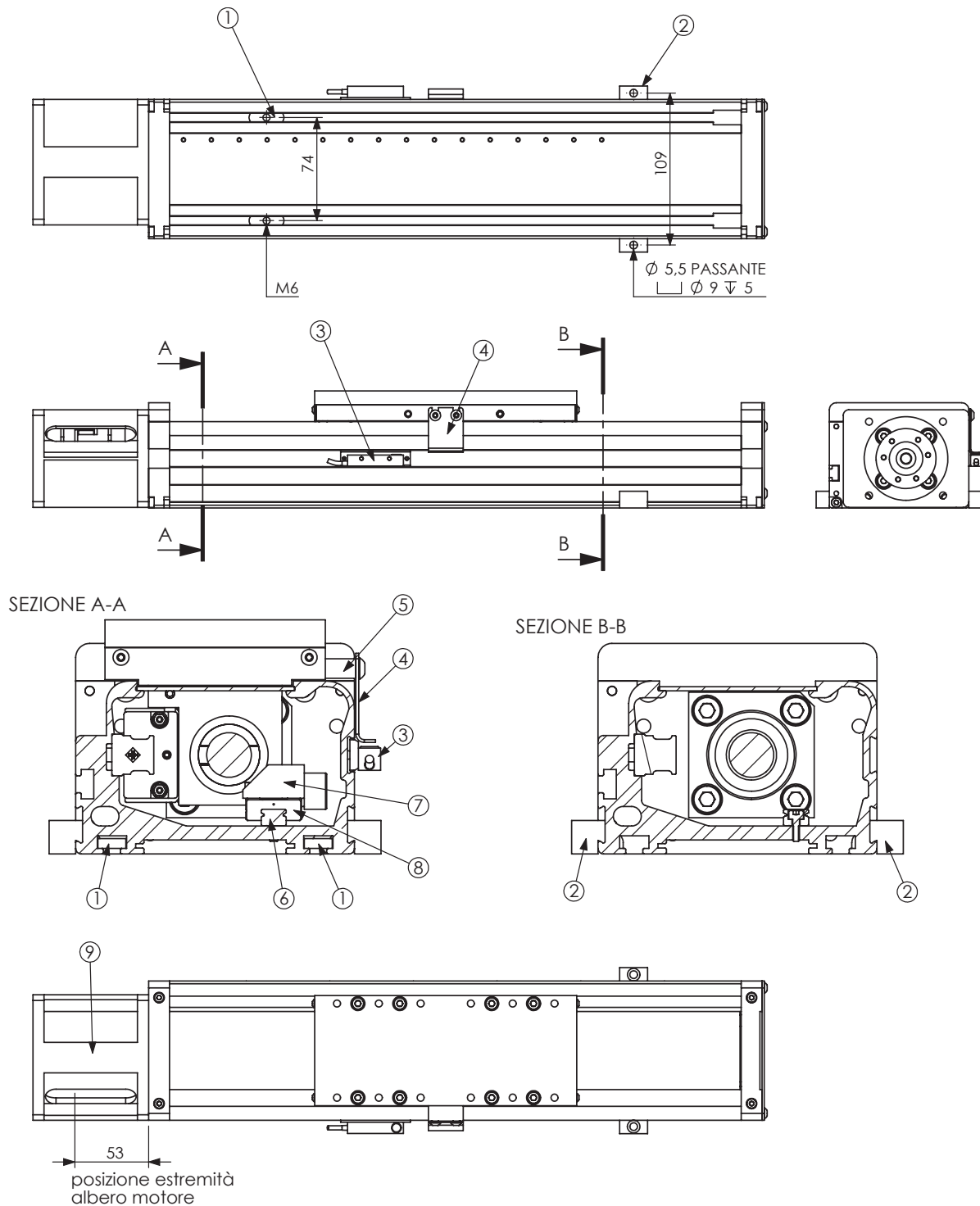
** higher strokes on request

*** for special applications contact technical department

****Load varying inversely with respect to rpm

LV101-188TR ACCESSORIES

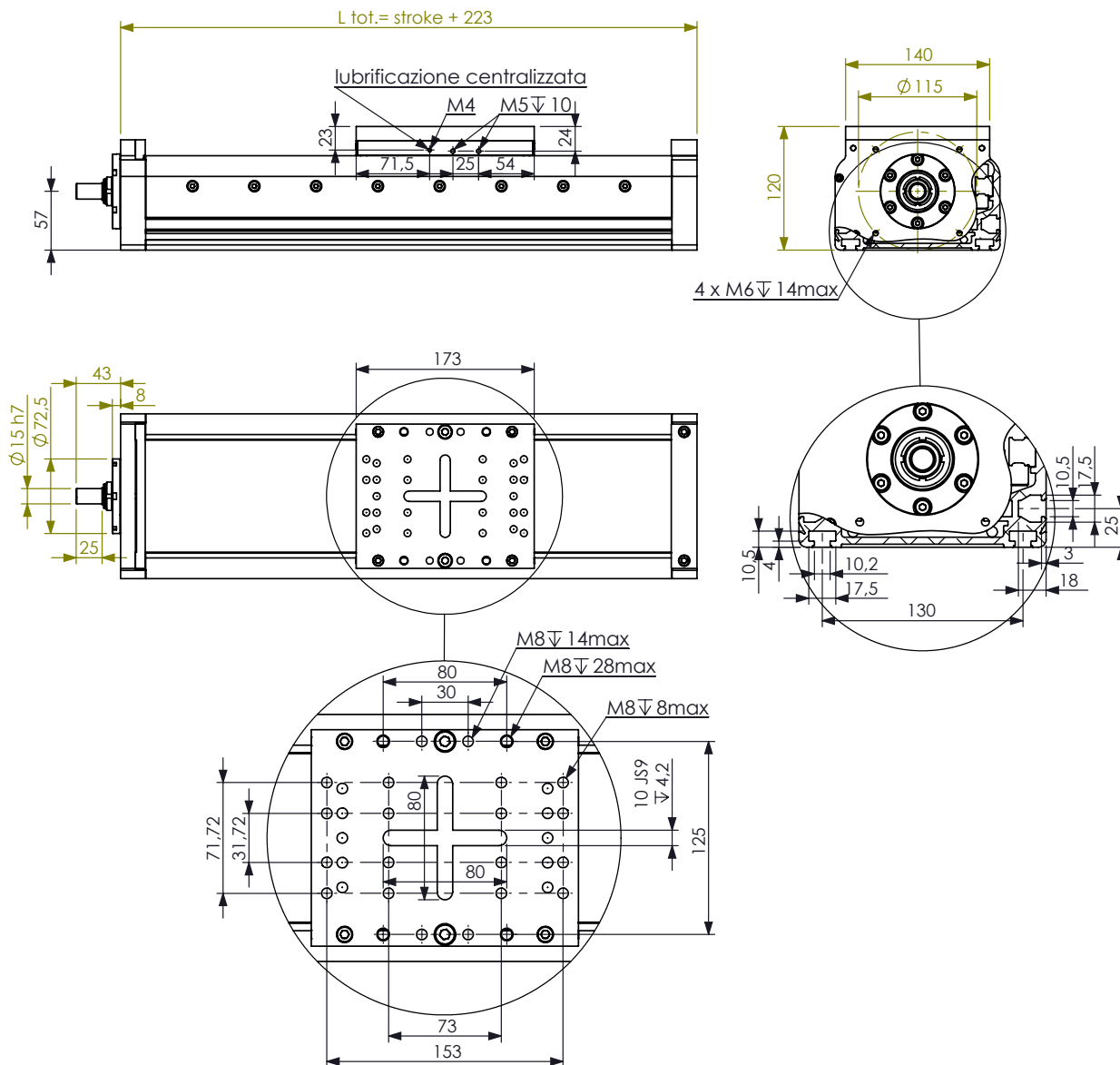
LITEK®



Num. item	Num. part	Description
1	ISE2090010005	T-slot 1xM6 ISEL
2	FZ000SF225	Bracket
3	Sensore	See pg. 110-111 of the catag.
4	FZ101RS241	Reference limit switch
5	FZ101SL235	Bracket
6	TKDM9	Rail miniature
7	CR101SM567	Block Adapter
8	KWEM09	Miniature Block
9	Motor adapter	

LV160-173

Mechanical Linear Drive with ball screw and rail guide



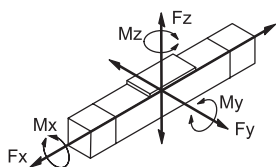
WEIGHTS

Basic length without stroke	9 Kg
100MM stroke	1,385Kg
Entire carriage	3,65 Kg

TECHNICAL DATA

Max speed***	1m/s (p20)
Max acceleration***	20m/s ² *
Repeat	0,03
Accuracy	0,05
Idle Torque	1,5 Nm
Max stroke	2700mm**
Max total length	5/10/20mm
Stroke per revolution	screw RDS Ø25p5/10/20

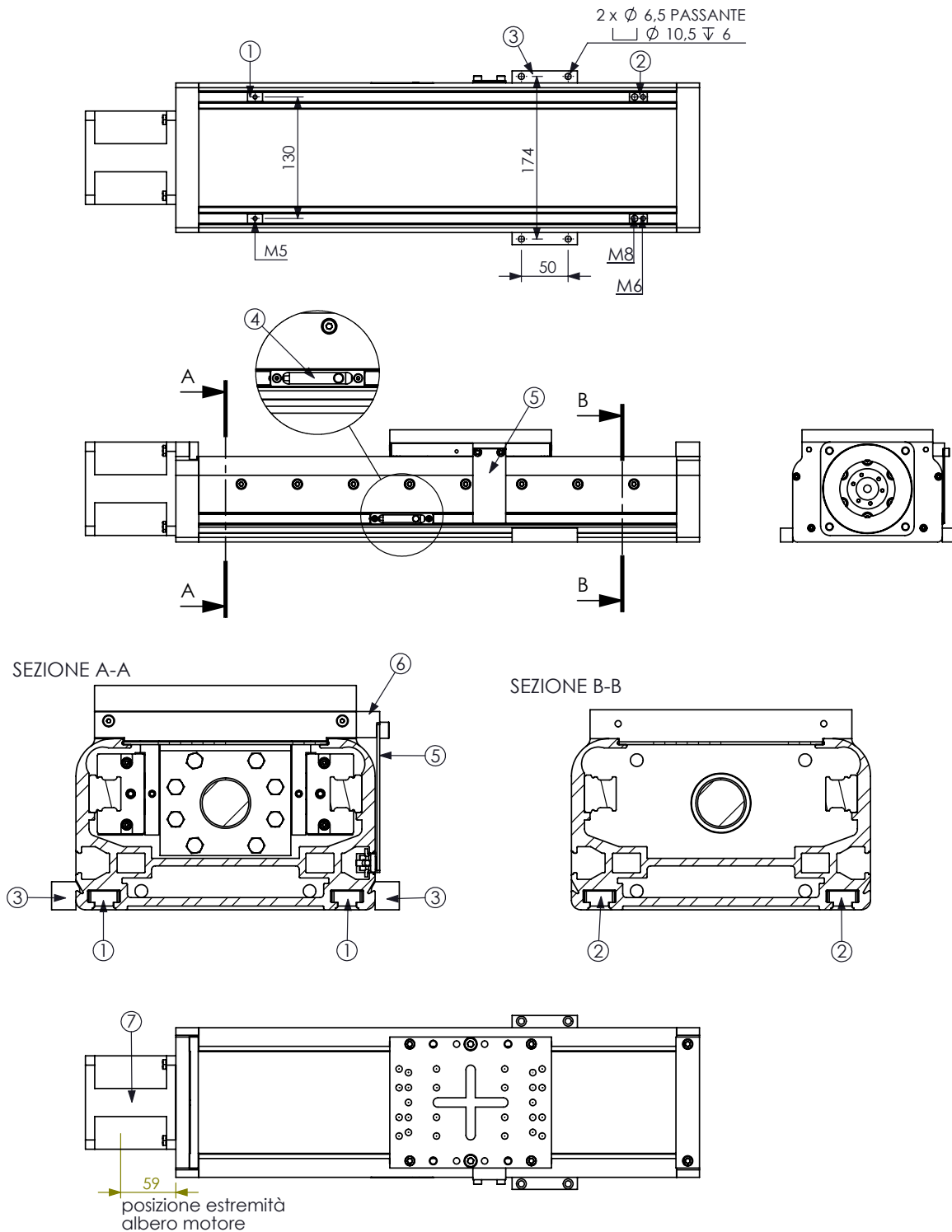
Forces [N]	max dynamic***	break
Fx	Ø25 p5 => C=5100N Ø25 p10 => C=5100N Ø25 p20 => C=3750N	C0=12600 C0=12600 C0=8800
Fy	5443	8165
Fz	7560	11340
Moments [N]	max dynamic***	break
Mx	254	382
My	215	769
Mz	215	748



*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



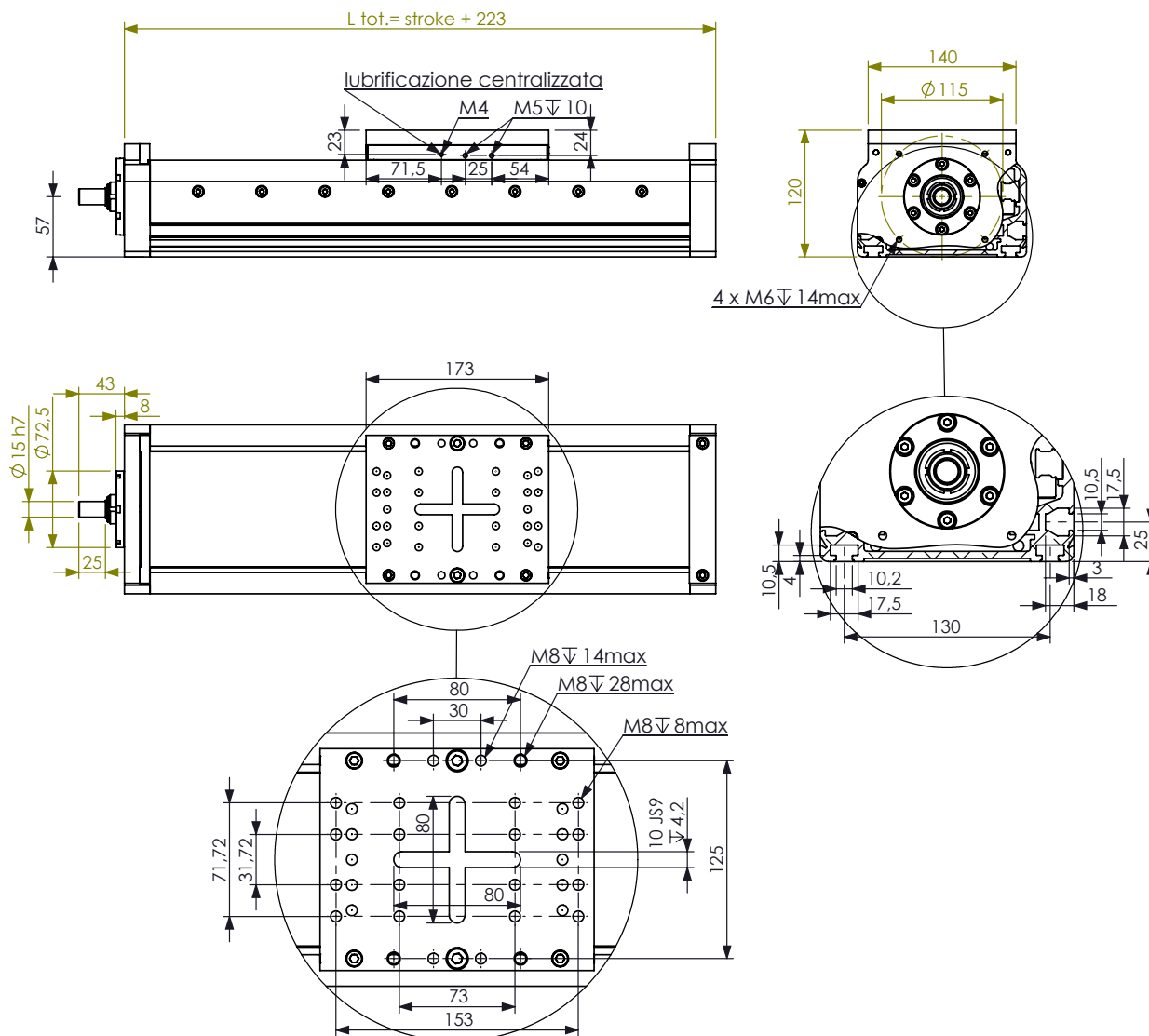
Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ160SM336	Bracket
4	Sensore	See pg. 110-111 of the catag.
5	FZ160AS346	Limit switch
6	CR160SM327	Bracket
7	Motor adapter	

LV160-173T

Right - Left

LITEK®

Mechanical Linear Drive with trapezoidal screw and rail guide

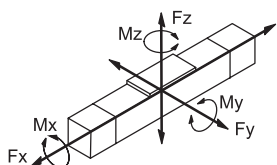


WEIGHTS

Basic length without stroke	9 Kg
100MM stroke	1,385Kg
Entire carriage	3,65 Kg

TECHNICAL DATA

Max speed***	0,2m/s
Max acceleration***	20m/s ²
Repeat	--
Accuracy	--
Idle Torque	1,5 Nm
Max stroke	2700mm**
Max total length	5mm
Stroke per revolution	screw TPN 25x5

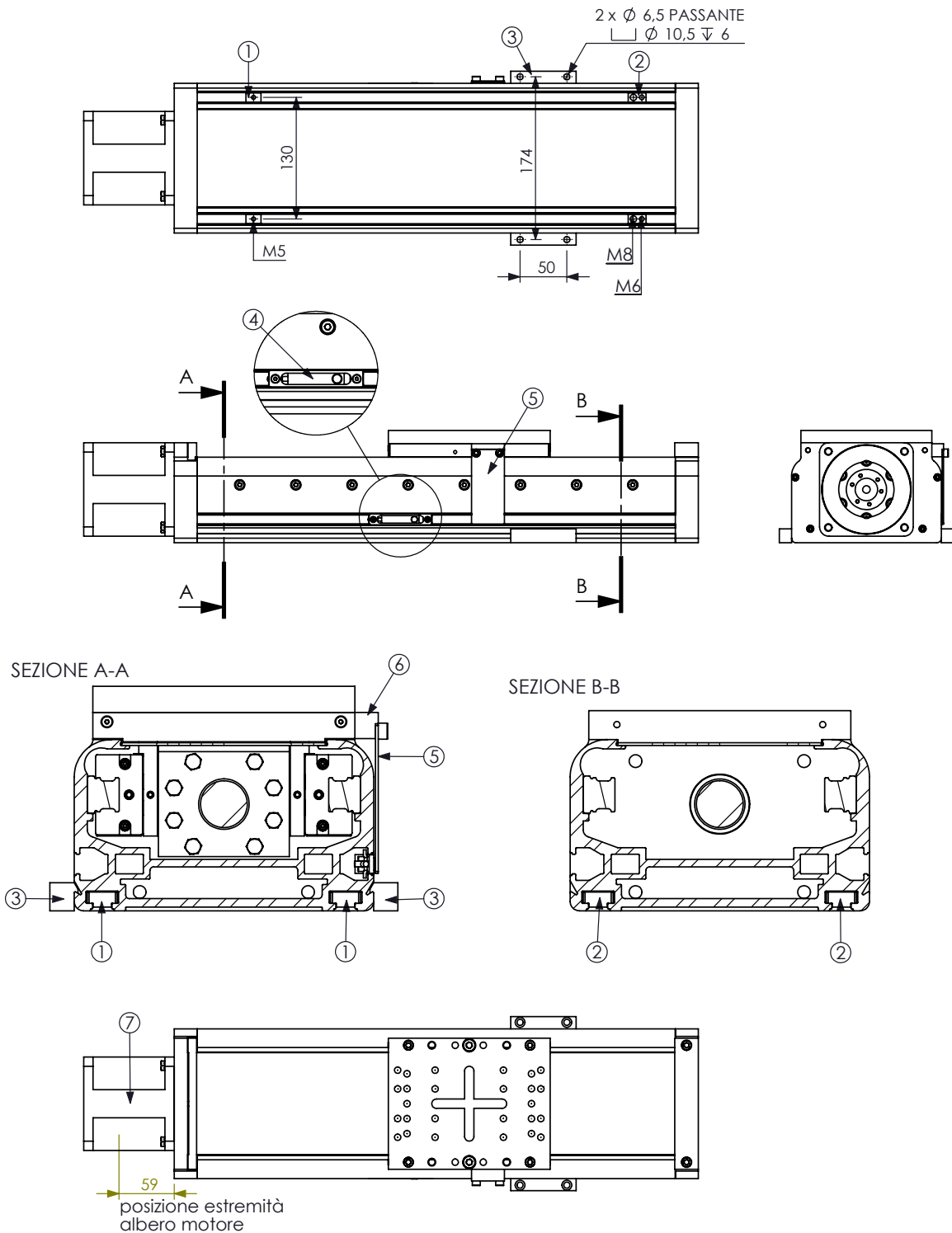


Forces [N]	max dynamic***	break
Fx	6000	
Fy	5443	8165
Fz	7560	11340
Moments [Nm]	max dynamic***	break
Mx	254	382
My	215	769
Mz	215	748

*maximum no-load value

** higher strokes on request

*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ160SM336	Bracket
4	Sensore	See pg. 110-111 of the catag.
5	FZ160AS346	Limit switch
6	CR160SM327	Bracket
7	Motor adapter	

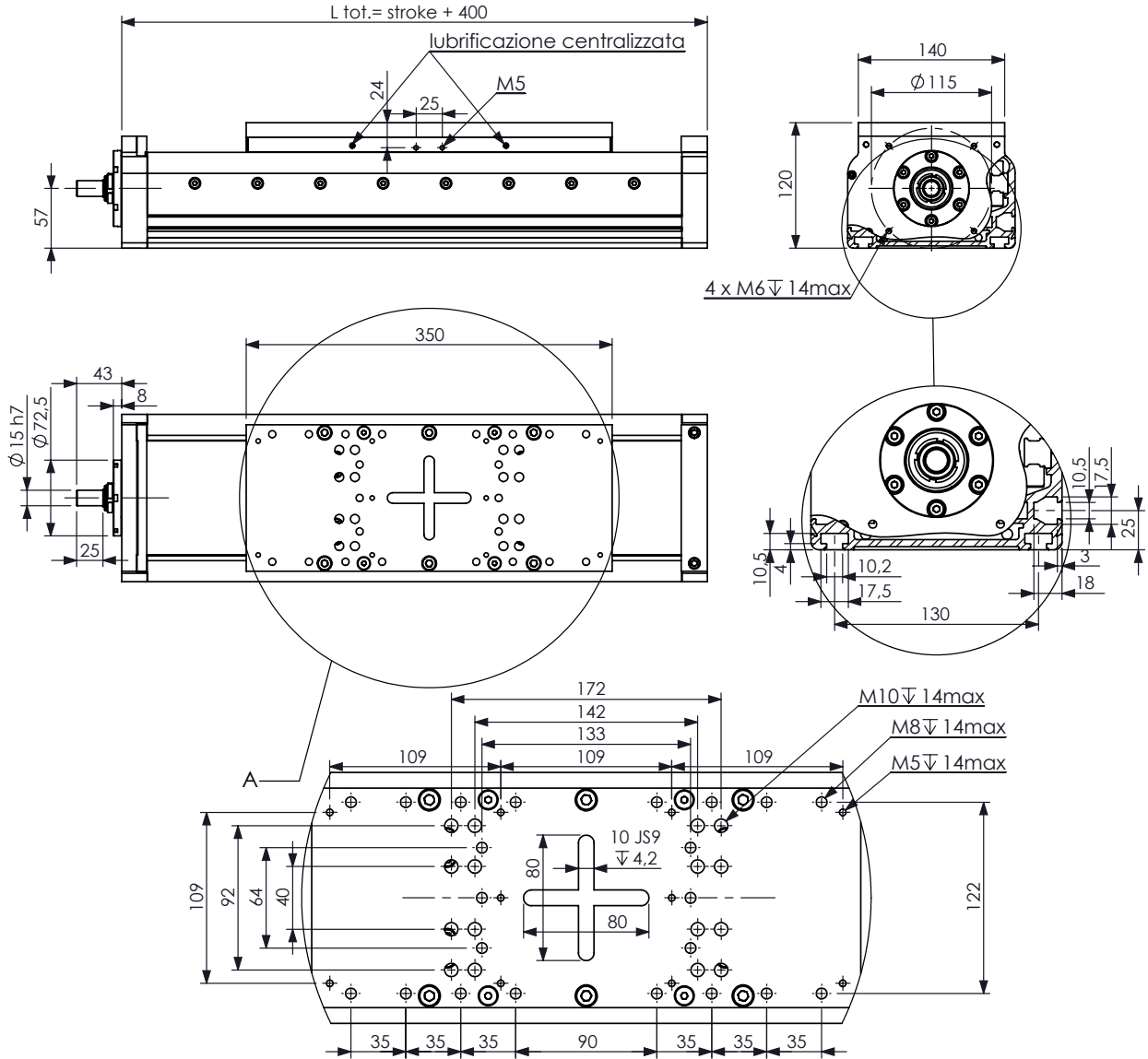
Linear system

160

LV160-350

Mechanical Linear Drive with ball screw and rail guide

LITEK®



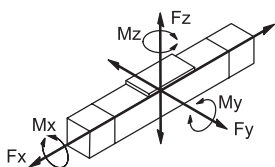
WEIGHTS

Basic length without stroke	14 Kg
100MM stroke	1,385Kg
Entire carriage	6,44 Kg

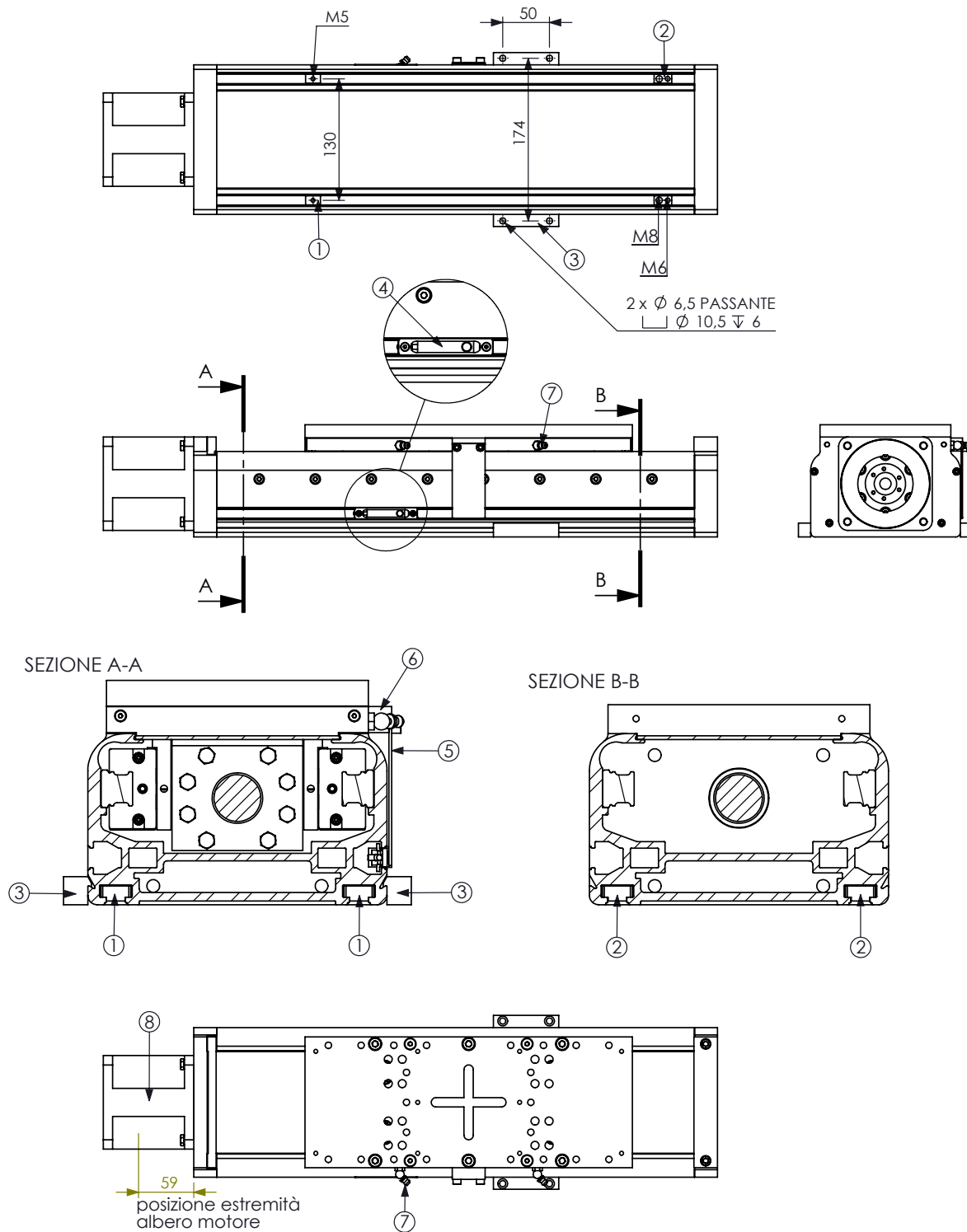
TECHNICAL DATA

Max speed***	1m/s (p20)
Max acceleration***	20m/s ² *
Repeat	0,03
Accuracy	0,05
Idle Torque	2 Nm
Max stroke	2500mm**
Max total length	5/10/20mm
Stroke per revolution	screw RDS Ø25p5/10/20

Forces [N]	max dynamic***	break
Fx	Ø25 p5 => C=5100N Ø25 p10 => C=5100N Ø25 p20 => C=3750N	C0=12600 C0=12600 C0=8800
Fy	6825	10238
Fz	11333	17000
Moments [N]	max dynamic***	break
Mx	480	724
My	840	1261
Mz	1433	1950



*maximumno-load value
** higher strokes on request
*** for special applications contact technical department



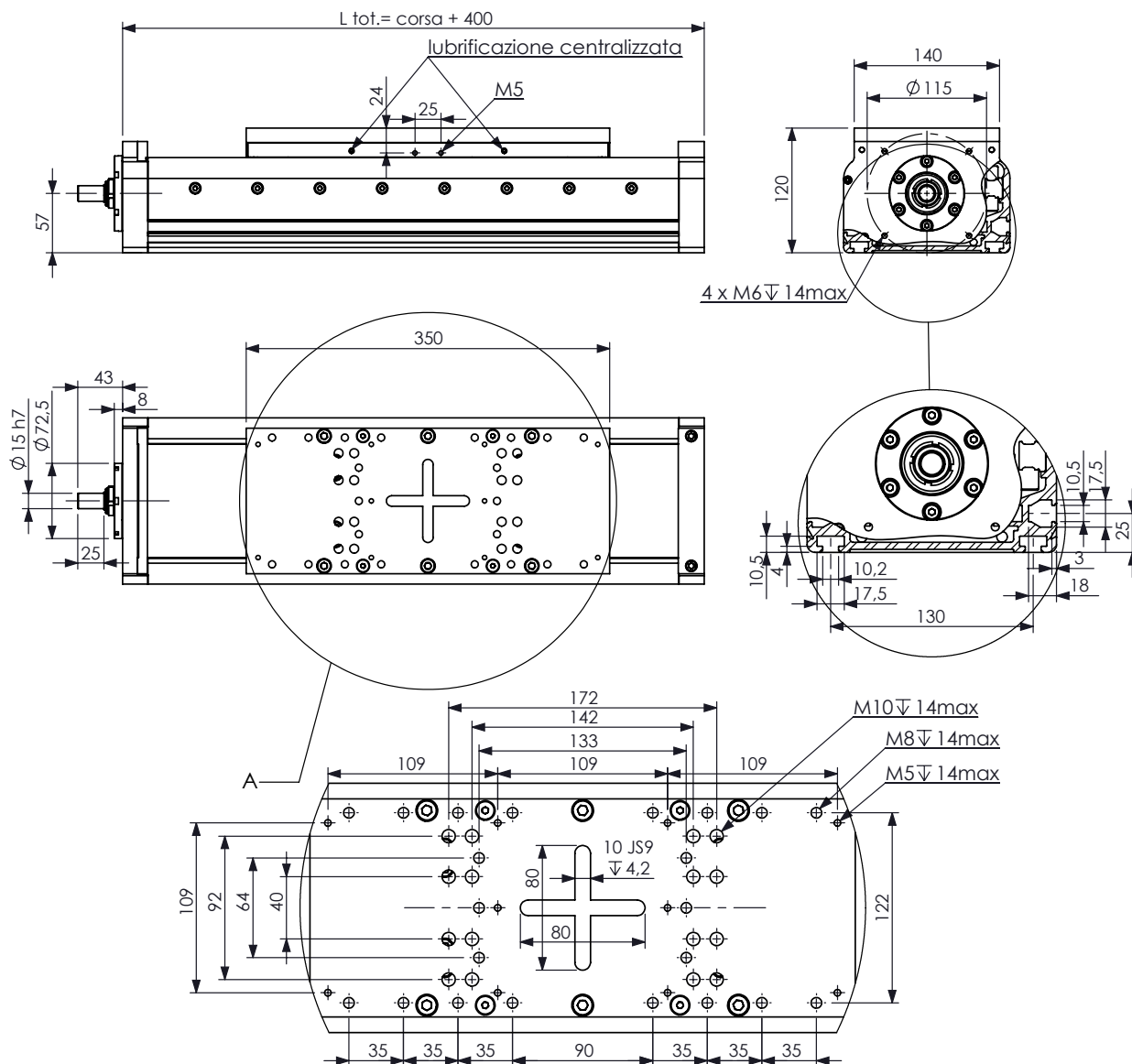
Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ160SM336	Bracket
4	Sensore	See pg. 110-111 of the catag.
5	FZ160AS346	Limit switch
6	CR160SM327	Bracket
7	i5x90	Nipple grease
8	Motor adapter	

LV160-350T

Right - Left

LITEK®

Mechanical Linear Drive with trapezoidal screw and rail guide

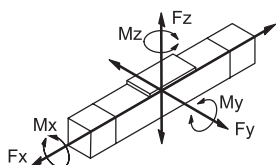


WEIGHTS

Basic length without stroke	14 Kg
100MM stroke	1,385Kg
Entire carriage	6,44 Kg

TECHNICAL DATA

Max speed***	0,2m/s
Max acceleration***	20m/s ²
Repeat	--
Accuracy	--
Idle Torque	1,5 Nm
Max stroke	2700mm**
Max total length	5mm
Stroke per revolution	screw TPN 25x5

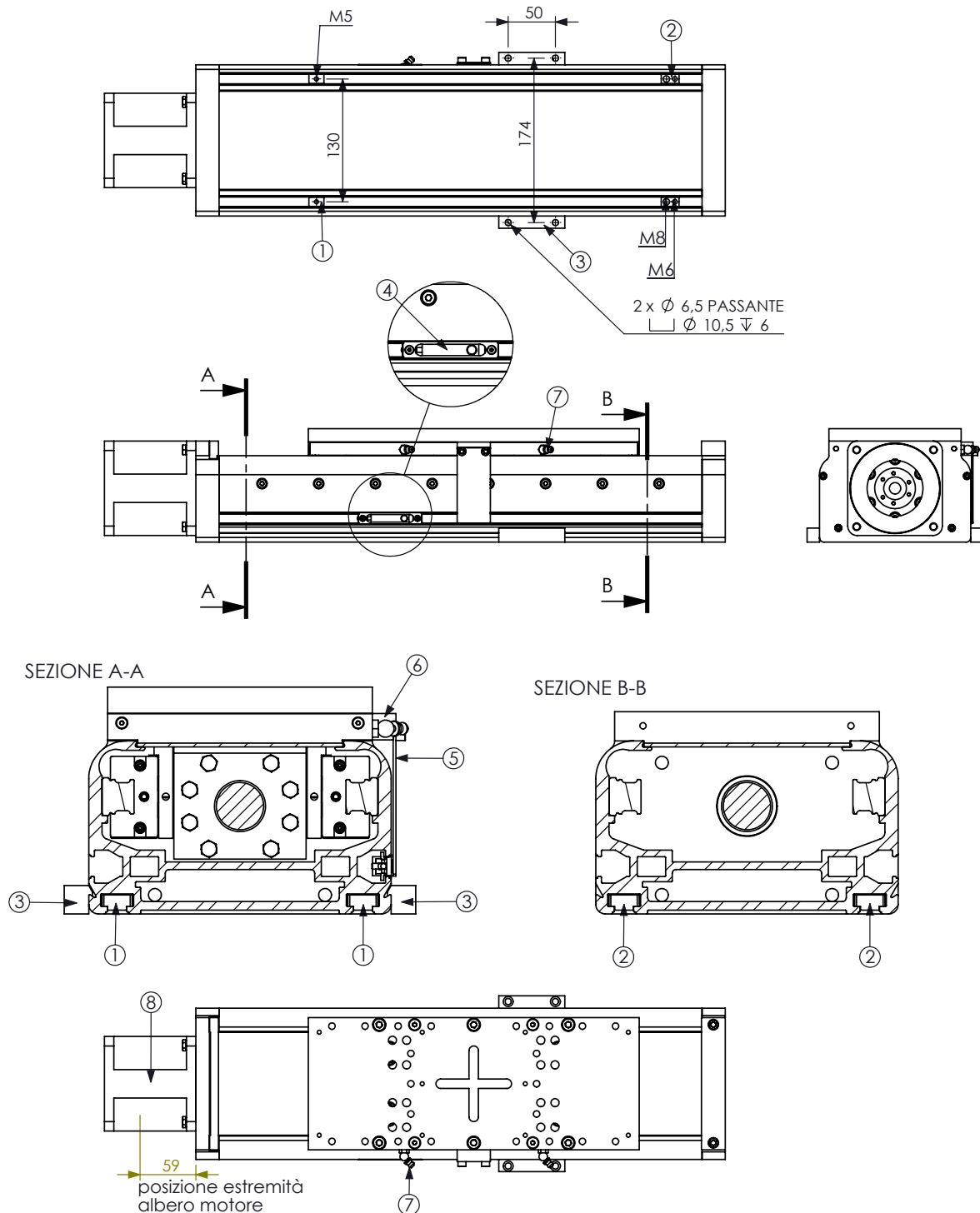


Forces [N]	max dynamic***	break
Fx	6000	
Fy	6000	10238
Fz	15000	17000
Moments [Nm]	max dynamic***	break
Mx	480	724
My	840	1261
Mz	1433	1950

*maximumno-load value

** higher strokes on request

*** for special applications contact technical department



Num. item	Num. part	Description
1	FZ000SM801	T-slot M5
2	FZ000SM802	T-slot M8-M6
3	FZ160SM336	Bracket
4	Sensore	See pg. 110-111 of the catag.
5	FZ160AS346	Limit switch
6	CR160SM327	Bracket
7	i5x90	Nipple grease
8	Motor adapter	

SPECIAL APPLICATIONS

- Magnetic scale 0.01 mm resolution
- Rubber end pads
- Dust cover tape
- Adjustable magnetic sensors
- Safety lock

Con monoguida large 100 high 60 mm

NOMINAL CONTINUOUS THRUST: $F_X = 45 \text{ N} \text{ -- } 90 \text{ N}$

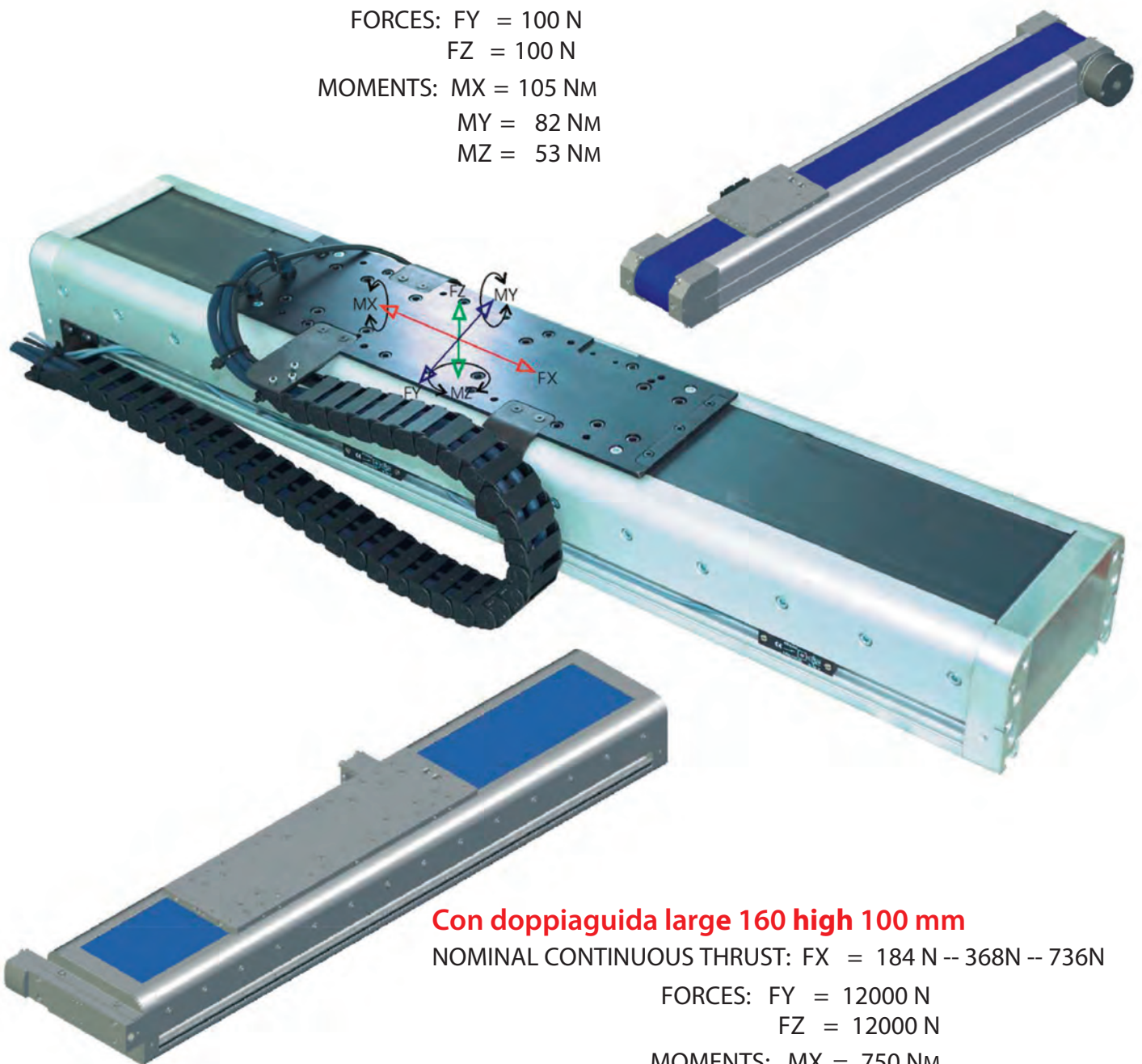
FORCES: $F_Y = 100 \text{ N}$

$F_Z = 100 \text{ N}$

MOMENTS: $M_X = 105 \text{ NM}$

$M_Y = 82 \text{ NM}$

$M_Z = 53 \text{ NM}$



Con doppiaguida large 160 high 100 mm

NOMINAL CONTINUOUS THRUST: $F_X = 184 \text{ N} \text{ -- } 368 \text{ N} \text{ -- } 736 \text{ N}$

FORCES: $F_Y = 12000 \text{ N}$

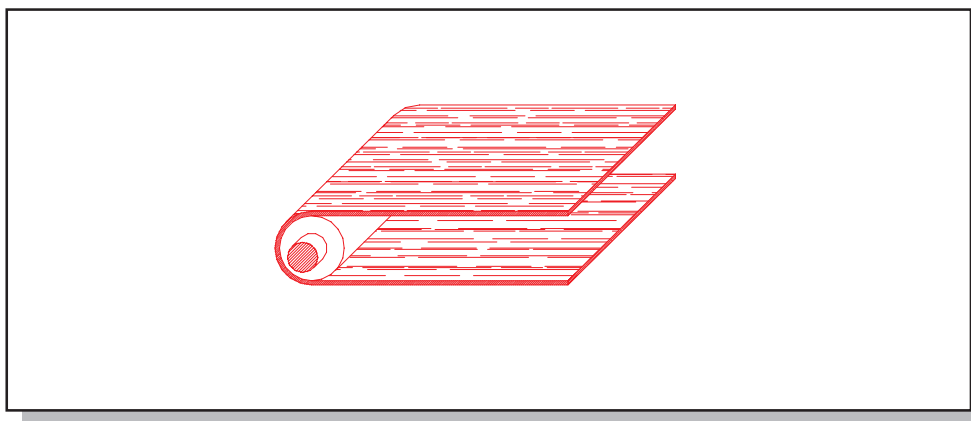
$F_Z = 12000 \text{ N}$

MOMENTS: $M_X = 750 \text{ NM}$

$M_Y = 750\text{-}1500\text{-}3000 \text{ NM}$

$M_Z = 750\text{-}1500\text{-}3000 \text{ NM}$

Data Sheet Cover strip 8R10H10BC



Composition

Cover	material	PU
Side	thickness (mm)	1
Transport	impression	smooth
	color	BLU
	comparative friction coeff.	LF

Features

Total thickness	(mm)	1,8
Weight (belt width 100 mm)	(Kg/mq.)	2,0
Traction	(N/mm) all'1%	8
Maximum allowable traction		10
Max. production width	(mm)	2000
Permanent antistaticity		yes
Temperature resistance	(C°) min.	-20
	(C°) max.	+120
Temperature resistance		NO
FDA compliant (Food & Drugs Administration)		yes

Chemical resistances

Class : **6**

Uses: it is especially suitable for solid materials even in the presence of moisture and harsh conditions of use: dirt, organic waste, etc.

Not resistant to:

CAUSTIC SODA > 10% HYDROCHLORIC ACID > 20%
SODIUM HYPOCHLORITE, SULFURIC ACID > 50%

EKL

Compact elastomer coupling with clamping hub



- Compact design
- Low moment of inertia
- Simplified assembly

EK7

Elastomer coupling with expanding shaft hub



- Uniform rotation
- Axial mounting of the expansion shaft
- High clamping force

EK2

Elastomer coupling with clamping hub



- Uniform rotation
- Balanced version
- Simplified assembly

EK1

Elastomer coupling with keyway mounting



- Reliable and economical version
- Easy to adapt and modify

EKH

Elastomer coupling with fully split clamping hub



- Uniform rotation
- Axial mounting
- Clamping force very high

EK6

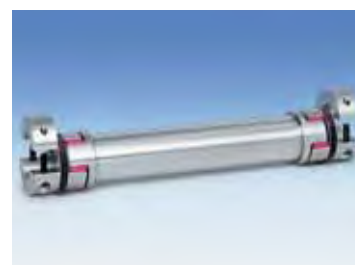
Elastomer coupling with conical clamping ring



- Radial insertion due to hubs with decomposable clamps
- Fastening with tapered clamping set
- Simplified assembly

EZ2

Intermediate spacer



- Radial mounting due to decomposable clamps
- Operation without central support bearing
- Version with tapered clamping set
- Width up to 4 m

EZV

Line shaft with split clamping hub and adjustable length



- Editable length
- Radial mounting due to decomposable clamps
- Does not require intermediate support
- Width up to 4 m

ESL

Torque limiter with keyway mounting and elastomer coupling



- Economic solution
- Compact design
- Multi-position reset

ES2

Torque limiter with clamping hubs and elastomer coupling



- Simplified assembly
- Reliable torque overload protection
- Absence of angular play thanks to the patented R+W solution

EEx

For use in exhibition environment



- Available across the range
- For use in area 1/21 2/22 SERVOMAX EEx elastomer couplings are certified according to ATEX 95a directive

FUNCTION

The equalizing element of EK joints is the elastomer insert. Torque transmission occurs without backlash and vibration. Therefore, the elastomer is the key element of the joint and the entire transmission.

The joint is backlash-free due to the pretensioning of the elastomer between the two half-joints. SERVOMAX couplings are able to compensate for radial, angular and axial disalignments.



Type A
shore hardness 98 Sh A



Tipo B
shore hardness 64 Sh D



Type C
shore hardness 80 Sh A



Tipo D*
shore hardness 92 Sh A

FUNCTION

Type	Shore hardness	Color	Material	Relative damping ()	Temperature of use	Properties
A	98 Sh A	red	TPU	0,4 - 0,5	-30°C to +100°C	high damping
B	64 Sh D	green	TPU	0,3 - 0,45	-30°C to +120°C	high torsional rigidity
C	80 Sh A	yellow	TPU	0,3 - 0,4	-30°C to +100°C	very high damping
D*	92 Sh A	black	TPU	0,3 - 0,45	-10°C to +70°C	electrical conductivity*

* Due to its electrical conductivity properties, this elastomer is not subject to electrostatic charge, and any possibility of sparking, during normal operation. Elastomer D, is used in the EEx version that is certified according to the new regulations European ATEX standards. For more information, see the following paragraphs or contact our technical department.

Relative damping values, are measured at a frequency of 10Hz at a temperature of 20°C

LC



Low backlash at a competitive price

LC Series planetary gearboxes are characterized by low angular backlash, high quietness and easy motor-side coupling.

MP



Good precision for excellent results

MP Series planetary gearboxes are characterized by low angular backlash, several options for the drive side, high quietness and an extremely easy motor-gearbox coupling.

SL



Perfect for timing belt drive systems

Tecnoingranaggi's new SL Series is unrivaled in compactness, efficiency and optimization for timing belt pulley drive systems. SL Series low backlash gearboxes are the ideal complement to conveyor belt servo drives and all other applications that need to combine high precision with ultra-compact dimensions.

TQ



Precision at the highest level

TQ series low backlash planetary gearboxes combine outstanding performance with a clear Italian design, making them immediately recognizable among similar products in the industry of reference. Their design and construction has been developed with the primary objective of offering users a series of products of absolute, reliable and repeatable Quality, such as to constitute a competitive advantage for machines and systems that adopt them as transmission components.

Low backlash planetary gearboxes

As professionals with a technical background, you will certainly be sensitive to issues such as efficiency, productivity and process reliability-priorities of any company in the market today.

alpheno®



The customizable, high-power-density gearbox: more performance in less space.

RP+



The new high-performance gearbox for axial and radial loads far beyond market standards.

SP+/SP+ HIGH SPEED



The great classic among high-performance planetary gears: universal and versatile precision.

TP+/TP+ HIGH TORQUE



The low-backlash planetary gearbox with output flange: compact precision.

LP+/LPB+ Generation 3



The low backlash planetary gearbox, with flange or shaft output interface: convenient precision.

CP-Ares



The ultimate entry-level reducer: simple precision.

Hygienic Design



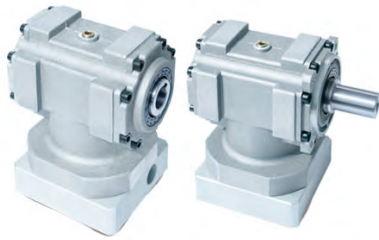
A stainless and clean line.

alpha Value Line



The new alpha Value Line series of gearboxes

KR



The economical, flexible and efficient solution for low backlash angle drives

KR Series low-backlash bevel gearboxes provide the best possible combination of precision, dynamics and compactness. Numerous input and output configurations, as well as various gear ratios, ensure unmatched flexibility.

LCK



The precise, efficient and economical solution when space is a determining factor

LCK series units replicate in ortho-go-nal conformation the brilliant performance characteristics that are already patri-mation of the LC coaxial series, adding greater ease of installation in the case of particularly tight spaces.

TQK



The solution to space-saving problems

The TQK series of low backlash bevel-gearboxes in right-angle configuration are the solution to the space-saving problems sometimes posed by machines that tend toward ever-increasing compactness.

TQK orthogonal assemblies combine high dynamic performance with class-leading preci-sion, and such that they allow great accuracy and repeatability to the placements in which they are used.

TQK groups also feature a typically Italian design, making them immediately recognizable among similar products in the reference industry.

Angular servosystems

Angular servosystems for increased performance.

High-end flexible, multi-purpose machines place high demands on the quality of the drives they employ: maximum dynamics and performance, small footprint and ease of control, extremely quiet and robust, easy commissioning, and maintenance-free.

RPK+



The new high-performance right-angle gearbox with the most innovative hypoidal technology, the heart of the High Performance Linear System (HPLS).

TK+/TPK+/ TPK+ HIGH TORQUE



Wide range of hypoidal gearboxes with TP+ type output flange and hollow shaft.

SK+/SPK+



The hypoidal variant with al-bero output type SP+

HG+



The representative of the hypoi-dal range with hollow shaft on one or en-both sides.

SC+/SPC+/TPC+



High performance, low ratio.

LK+/LPK+/LPBK+



The range of high value-for-money bevel-gearboxes with optional planetary stage.

V-Drive Advanced/ V-Drive Value



The worm gear servo reducer with solid shaft, hollow shaft or hollow through flange output.

Standardfit

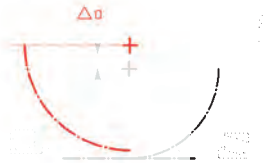


Features



- Hollow shaft interchangeable with gearmotors from major manufacturers
- No additional charge for updating drawings or machine modifications

Performance



- Excellent efficiency, durability and reliability
- Excellent quiet operation
- "Lifetime" lubrication at zero maintenance cost

Carcassa monolitica di ghisa con flangia integrale



- High torsional stiffness and excellent load bearing capacity
- Excellent quietness of operation
- Monolithic cast iron housing with integral flange

Servo motor



SERIES	MKM 70			MKM 85			MKM 120		
SIZE	S	M	L	S	M	L	S	M	L
Mo stall Torque ($\Delta t=100^{\circ}\text{C}$) (Nm)	1.0	1.5	2.0	1.8	3.3	4.8	3.8	7.2	10.8

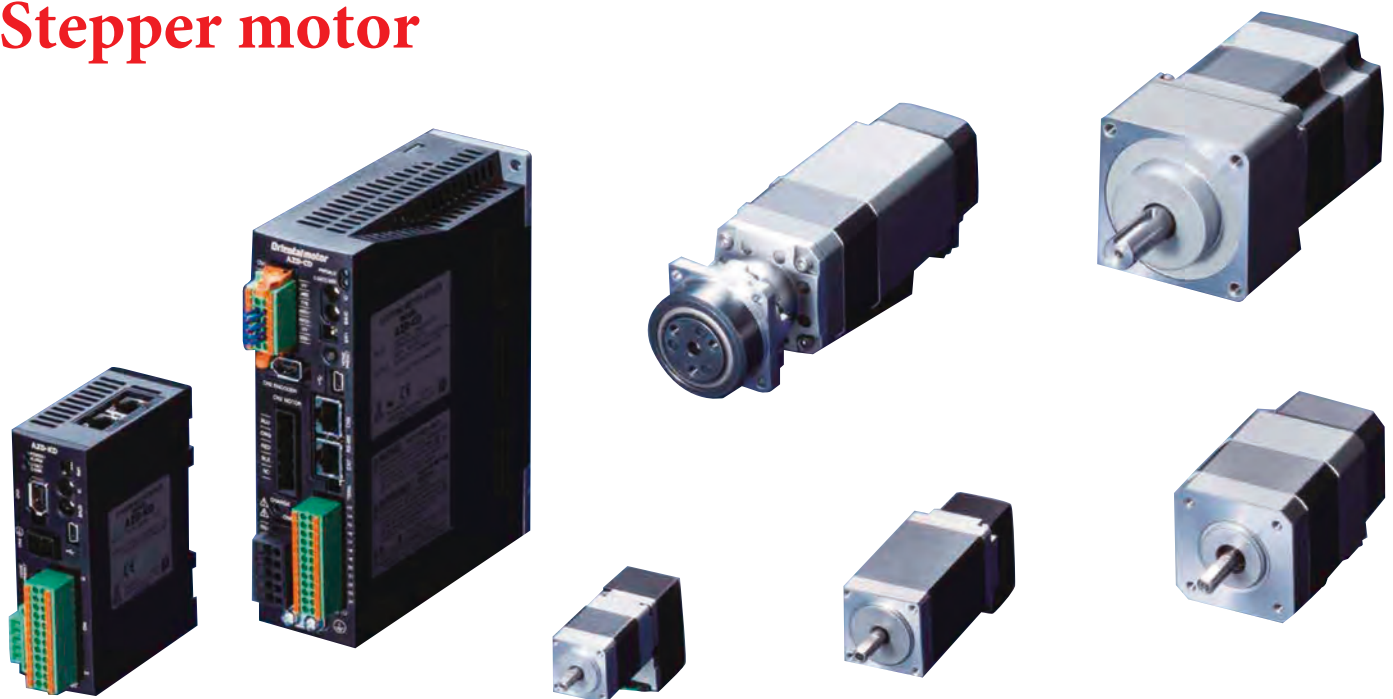
Threephase motor



Options:

- Brake
- Servoventilazione
- Incremental encoder

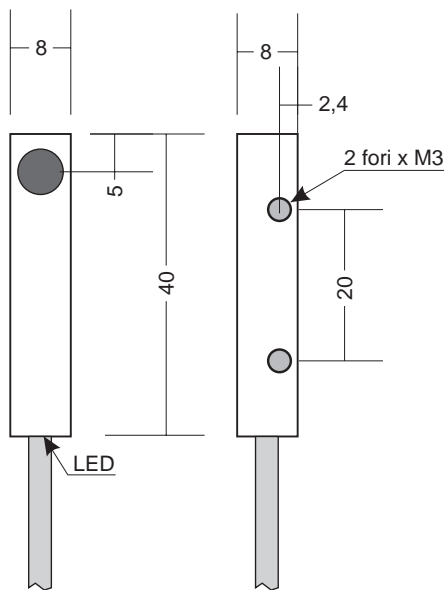
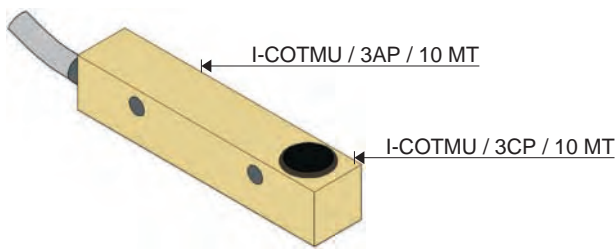
Stepper motor



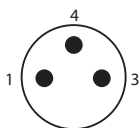
Options:

- Brake
- Incremental or absolute encoder

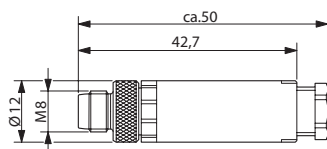
Inductive limit



CONNETTORE PER CAVO COD. 1501252

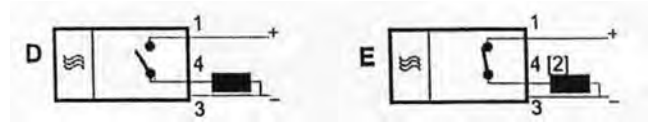


Pinning connettore maschio M8,
3 poli, vista lato maschio



Connettore maschio M8 x 1
versione diritta

MODELS	EXIT	FIG.
.... / AP / ..	PNP, NA	D
.... / CP / ..	PNP, NC	E

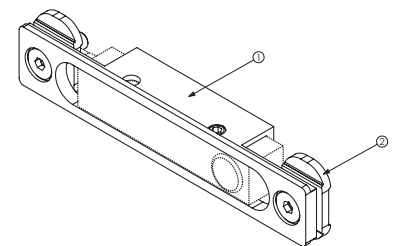


1: Brown (positive)	2: White
3: White (negative)	4: Black

TECHNICAL FEATURES	
External dimensions	8x8x40 mm
Shooting distance	1,5 mm
Exit functions	NPN, PNP; NA, NC
Power supply	5 / 36 Vdc
Absorption	< 10 mA
Voltage drop	<1V (@ I max)
Switching current	150 mA
Working frequency	2 kHz
Material	Ottone nichelato
Shielding	Total
Protection	IP 67
Operating temp.	-25 / + 70 °C
Output connection	Cable L= 10mt

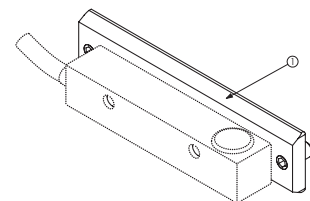
ML/NC/10R ML/NA/10R

N° Item	Num. part	Description	Quantity
1	FZ000CS606	Limit switch holder	1
2	FZ000SC604	Limit switch bracket	2



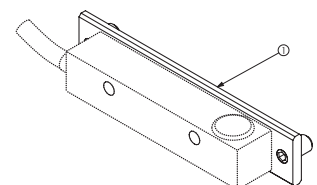
MP/NC/10R MP/NA/10R

N° Item	Num. part	Description	Quantity
1	FZ000SS231	Limit switch bracket	1



MG90/NC/10R MG90/NA/10R

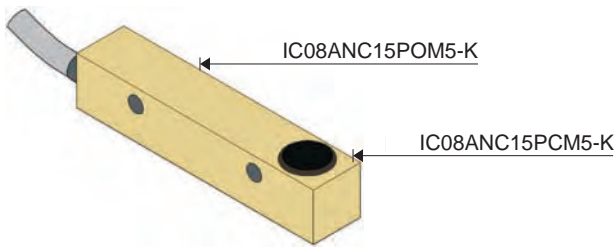
N° Item	Num. part	Description	Quantity
1	FZ000SS233	Limit switch bracket	1



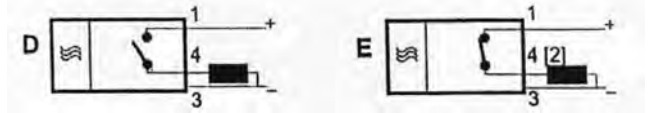
Cod. **METMG016P** COPRICAVA PER MP50
Cod. **4000570** COPRICAVA

Inductive limit with connector

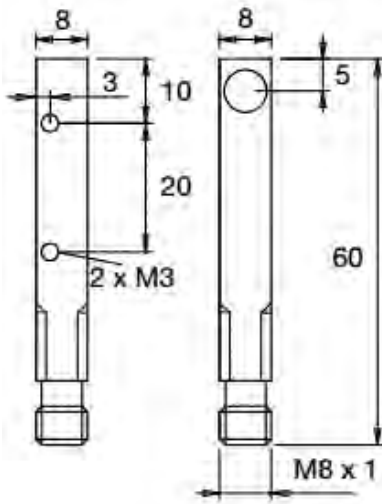
SPECIAL BY REQUEST



MODELS	EXIT	FIG.
..../ PO /..	PNP, NA	D
..../ PC /..	PNP, NC	E



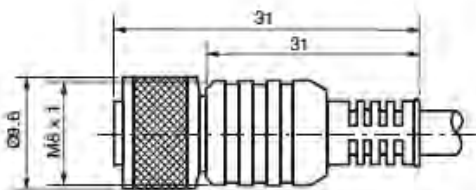
1: Brown (positive)	2: White
3: White (negative)	4: Black



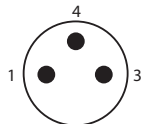
TECHNICAL FEATURES

External dimensions	8x8x60 mm
Shooting distance	1,5 mm
Exit functions	NPN, PNP; NA, NC
Power supply	5 / 36 Vdc
Absorption	< 10 mA
Voltage drop	<1V (@ I max)
Switching current	150 mA
Working frequency	2 kHz
Material	Ottone nichelato
Shielding	Total
Protection	IP 67
Operating temp.	-25 / + 70 °C
Output connection	Connettore M8

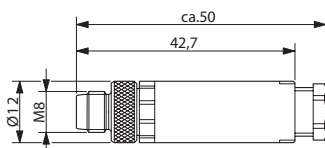
CONNETTORE PER SENSORE



CONNETTORE PER CAVO COD. 1501252



Pinning connettore maschio M8,
3 poli, vista lato maschio



Connettore maschio M8 x 1
per cavo

Cod. **METMG016P** COPRICAVA PER MP50
Cod. **4000570** COPRICAVA

SME51

- Standard sensor for linear and rotary axis
- Gap clearance up to 2 mm
- Hi-flex sensor cable
- Status LED for clearance error
- Optional reference mark LKM1309/5 to be installed along the magnetic tape
- Optional tape cleaning wipers



ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-25°C ÷ +85°C (-13°F +185°F)
Storage temperature range:	-40°C ÷ +100°C (-40°F +212°F)
Protection:	IP67

MECHANICAL SPECIFICATIONS

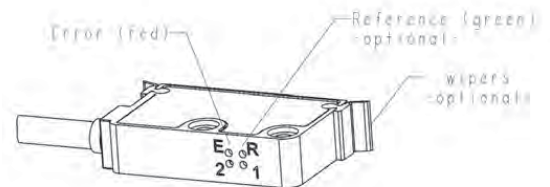
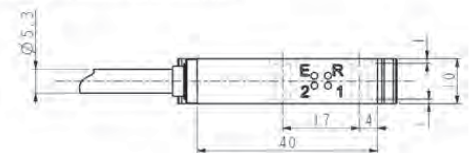
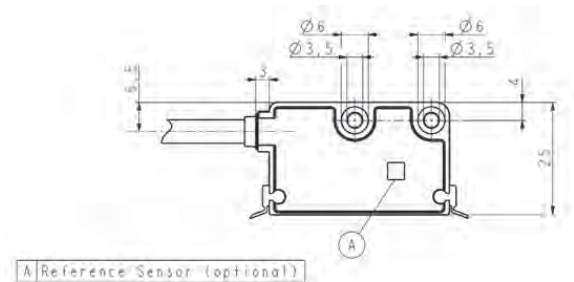
Dimensions:	see drawing
Housing:	die cast aluminium, UNI EN AC-46100
Connection:	Lika Hi-flex cable M8, 2,0 m
Gap sensor-magnetic tape (without cover strip):	0,1 ÷ 2,0 mm
Travel speed:	max 16 m/s (mechanical)
Resolution:	0,05 / 0,025 / 0,01 / 0,005 mm
System accuracy:	±15 µm max.
Repeatability:	±1 increment

ELECTRICAL SPECIFICATIONS

Power supply:	+5Vdc ±5%, +10Vdc ÷ +30Vdc
Output circuits:	Line Driver, Push-Pull
Output signals:	ABI, /ABI
Counting frequency:	acc. to edge distance setting
Output current (per channel):	40 mA max
Input current:	70 mA max
Protection:	against inversion of polarity (except 5Vdc version) and short-circuit

ACCESSORIES

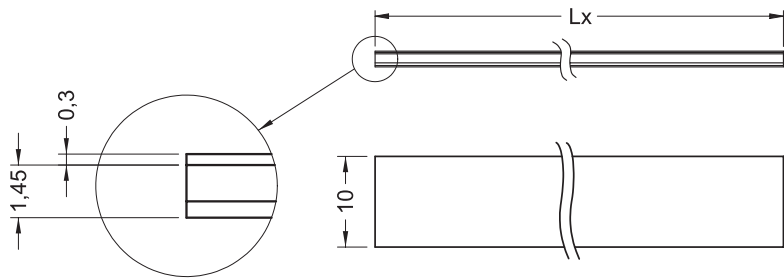
MT50:	Magnetic tape
LKM-1309/5:	Reference pole support
LKM-1440:	Tape terminals
KIT LKM-1722:	Wipers for SMExx/SMSxx, 10 pcs
MRI:	Magnetic ring
PS1:	Protection profile



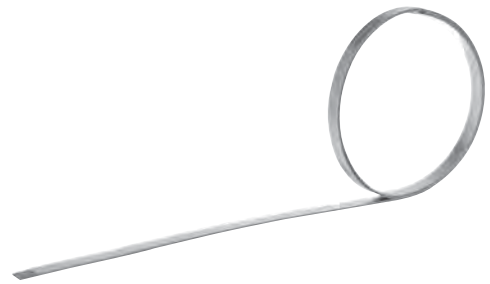
ORDERING CODE

XXXX	-	XX	-	X	-	XX	-	X	-	XX	-	X																																							
SERIES		OUTPUT CIRCUITS		POWER SUPPLY		INDEX		RESOLUTION		EDGE DISTANCE																																									
SME51		<table border="1"> <tr> <td>Push-Pull (AB)</td> <td>Y</td> </tr> <tr> <td>Push-Pull (AB, /AB)</td> <td>YC</td> </tr> <tr> <td>Line Driver (AB, /AB)</td> <td>L</td> </tr> </table>		Push-Pull (AB)	Y	Push-Pull (AB, /AB)	YC	Line Driver (AB, /AB)	L	<table border="1"> <tr> <td>+5Vdc ±5% (L)</td> <td>1</td> </tr> <tr> <td>+10Vdc ÷ +30Vdc (Y and L)</td> <td>2</td> </tr> </table>		+5Vdc ±5% (L)	1	+10Vdc ÷ +30Vdc (Y and L)	2	<table border="1"> <tr> <td>N</td> <td>without</td> </tr> <tr> <td>I</td> <td>every 5 mm</td> </tr> <tr> <td>R</td> <td>unique reference signal</td> </tr> </table>		N	without	I	every 5 mm	R	unique reference signal	<table border="1"> <tr> <td>50</td> <td>0,05 mm (50 µm)</td> </tr> <tr> <td>25</td> <td>0,025 mm (25 µm)</td> </tr> <tr> <td>10</td> <td>0,01 mm (10 µm)</td> </tr> <tr> <td>5</td> <td>0,005 mm (5 µm)</td> </tr> </table>		50	0,05 mm (50 µm)	25	0,025 mm (25 µm)	10	0,01 mm (10 µm)	5	0,005 mm (5 µm)	<table border="1"> <tr> <td>H</td> <td>0,3µs</td> <td>min. edge distance at output*</td> </tr> <tr> <td>J</td> <td>0,5µs</td> <td></td> </tr> <tr> <td>A</td> <td>1µs</td> <td></td> </tr> <tr> <td>B</td> <td>2µs</td> <td></td> </tr> <tr> <td>C</td> <td>4µs</td> <td></td> </tr> </table>			H	0,3µs	min. edge distance at output*	J	0,5µs		A	1µs		B	2µs		C	4µs	
Push-Pull (AB)	Y																																																		
Push-Pull (AB, /AB)	YC																																																		
Line Driver (AB, /AB)	L																																																		
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C	4µs																																																		
										<table border="1"> <tr> <td>xx</td> <td>Cable length on request</td> </tr> <tr> <td></td> <td>Ex: 2= 2 meters</td> </tr> <tr> <td></td> <td>7= 7 meters</td> </tr> </table>			xx	Cable length on request		Ex: 2= 2 meters		7= 7 meters																																	
xx	Cable length on request																																																		
	Ex: 2= 2 meters																																																		
	7= 7 meters																																																		

MT/MTS

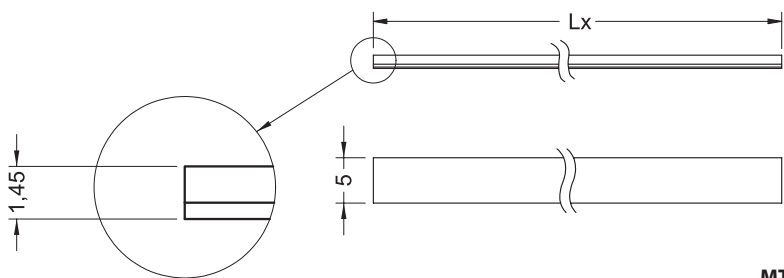


MT



MT-MTS

- Flexible magnetic scale with adhesive tape and cover strip
- Resistant to debris, liquids and oils



MTS

ENVIRONMENTAL SPECIFICATIONS

Operating temperature range:	-40°C ÷ +120°C (-40°F +248°F)
Storage temperature range:	-40°C ÷ +120°C (-40°F +248°F)
Protection:	IP67

MECHANICAL SPECIFICATIONS

Dimensions:	see drawing
Material:	plastic and steel
Accuracy class:	±85 / ±35 / ±8 μm/m
Temperature coefficient:	(11 ± μm/K)
Length:	MT max. 100 m, MTS max. 30 m
Polar pitch	MT/MTS50: 5,0 mm, MT/MTS40: 4,0 mm, MT32: 3,2 mm MT/MTS20: 2,0 mm, MT/MTS25: 2,5 mm, MT10: 1,0 mm

ACCESSORIES

PS1-1,0	Protection profile
---------	--------------------

ORDERING CODE

XXXX	-	X	-	X	-	X
SERIES		LENGTH		ACCURACY CLASS		COVER STRIP
MT40		1,0 m	1	100 ±85 μm/m		0 not supplied (from 30 m)
MT32		2,0 m	2	50 ±35 μm/m (up to 30 m)		1 supplied
MT10		4,0 m	4	10 ±8 μm/m (up to 10 m)		
MT/MTS50		10,0 m	10			
MT/MTS25		20,0 m	20			
MT/MTS20		30,0 m	30			
		(only MT) 50,0 m	50			
		(only MT) 100,0 m	100			

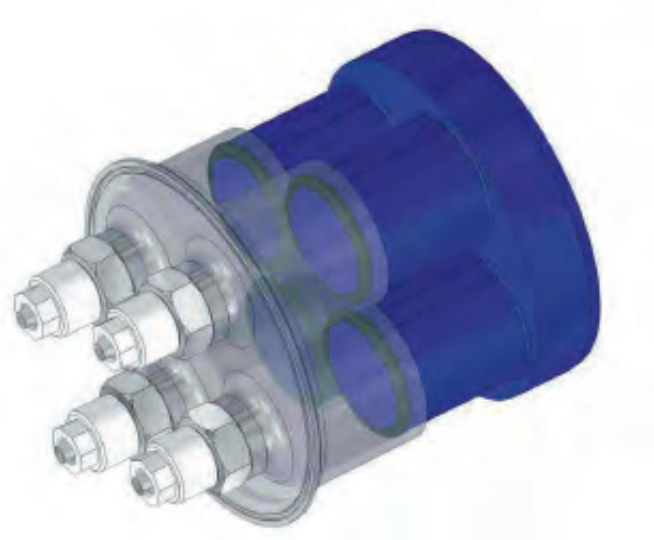
QUATTROMAX 30

Electromechanical relubrication unit

The QuattroMax 30 is an electromechanical relubrication unit for automatic lubrication of 4 different points with greases and oils during a long period.

Precise lubrication with minimum amount of lubrication points with low consumption.

- Economic
- Robust and reliable
- Long-lasting lubrication
- Exact minimum quantity lubrication



Economic

- Easy assembly and commissioning
- Automatic lubrication at all hours
- Excellent lubricant dosage
- System of a high-quality lubricant and an intelligent relubrication lubricator
- Replenishment of 4 lubrication points

Robust and reliable

- Closed metal house
- Hermetically closed system
- Operable under extreme environmental conditions (dust, water, heat)
- For use in any construction situation

Long-lasting lubrication

- Transit time is to be programmed individually
- Mode of transit time about up to 60 months
- Lubrication apparatus for minimal quantity, e.g. at 5 years of service: 1.5 cm³ per year

QUATTROMAX 30

ACCESSORIES

Fissaggio di metallo e di gomma

PA tube 4.3 x 3

Collegamento di tubo G 1/8"

Collegamento di tubo M5



Techinal data	QuattroMax 30
Lubricant supply	(4 x 7,5 cm ³)
Peso senza lubrificante	470 g
Amount of power supply	0,017 cm ³ /corsa per uscita
Total quantity transported	per 460 corse
Transit time	individualmente, fino a 60 mesi
	oli, grassi fino a NLGI 3
Lubricants to be used	67 mm x 145,5 mm
Dimensions (Ø D x L)	G 1/8"
Threaded connection	aluminum
Box material	2 m
Max. tube length	4,3 mm (outside),
Recommended pipe diameter	3 mm (inside)
Room temperature	-20 °C fino a +70 °C
Max pressurization	20 bar/290 psi
Protection class	IP 68
Drive	electromechanical

THERMOPLEX ALN 1001/00

G HC P 00 N -40

LUBCON-Fluid Synthetic Gear Grease

THERMOPLEX ALN 1001/00 is a high temperature synthetic fluid gear grease based on synthetic hydrocarbons with a special synthetic thickener with high affinity to metal.

FEATURES

- high thermal stability to oxidation
- high resistance to loads
- excellent wear protection
- long service life and wide operating temperature
- excellent lubricating properties with low friction values

Technical data

Color/Appearance	slightly colored
Operating temperature °C	-40 fino + 150
Base Oil/Thickener	PAO/Al-complex Speciale
Drop point DIN ISO 2176	200°C
Machined penetration DIN 51804	400 – 430
Class of consistency (NLGI) DIN 51818	00
Dynamic viscosity (cP)	1600
Welding force (VKA) N	
DIN 51359 T 2	2600
Tensile strength DIN 51354	> 12

Original packaging

1 kg tin

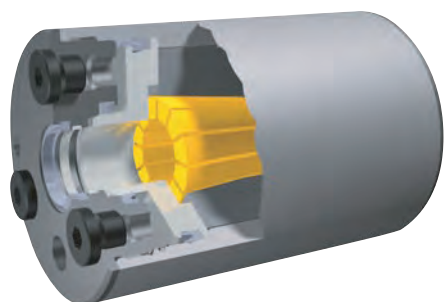
25 kg and 50 kg drum

Linearstop

Hydraulic – Pneumatic – Electromagnetic

Highlights and Advantages

- ❑ Safety brake system acc. fail-safe principle
- ❑ Backlash-free force transmission having an effect on both sides
- ❑ No self-reinforcement during clamping
- ❑ Clearing the clamping device is not necessary
- ❑ Maximum performance density
- ❑ Suitable for EMERGENCY STOP braking actions
- ❑ Suitable for dynamic braking actions
- ❑ Minimum reaction times
- ❑ Integrated switching condition monitoring possible
- ❑ Long service lifetime
- ❑ Can easily be integrated into existing constructions



Linearstop hydraulic

Type 380.0___.0

Clamps a piston rod via a spring-loaded device at the exact position required and backlash-free. The brake is opened with hydraulic pressure of 60 – 75 bar. Suitable for EMERGENCY STOP braking actions.

Nominal holding force: 10000 – 35000 N



Linearstop pneumatic

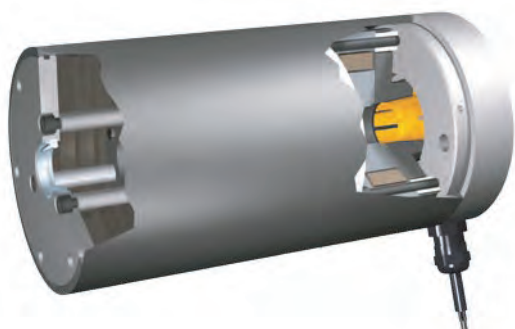
Type 381.0___.0

Clamps a piston rod via a spring-loaded device at the exact position required and backlash-free. The brake is opened with a pneumatic pressure of 4 – 6 bar. Suitable for EMERGENCY STOP braking actions.

Type 381.1___.0 for dynamic braking actions (acc. Trade Association test regulation)

Clamps and brakes a piston rod via a spring-loaded device at the exact position required and backlash-free. The brake is opened with pneumatic pressure of 4 – 6 bar. If the Technical Data are observed, more than 20,000 dynamic braking actions are possible (tested by the **TÜV-SÜD**, German Technical Inspectorate).

Nominal holding force: 800 – 40000 N



Linearstop electromagnetic

Type 382.0___.0 (Clamping unit)

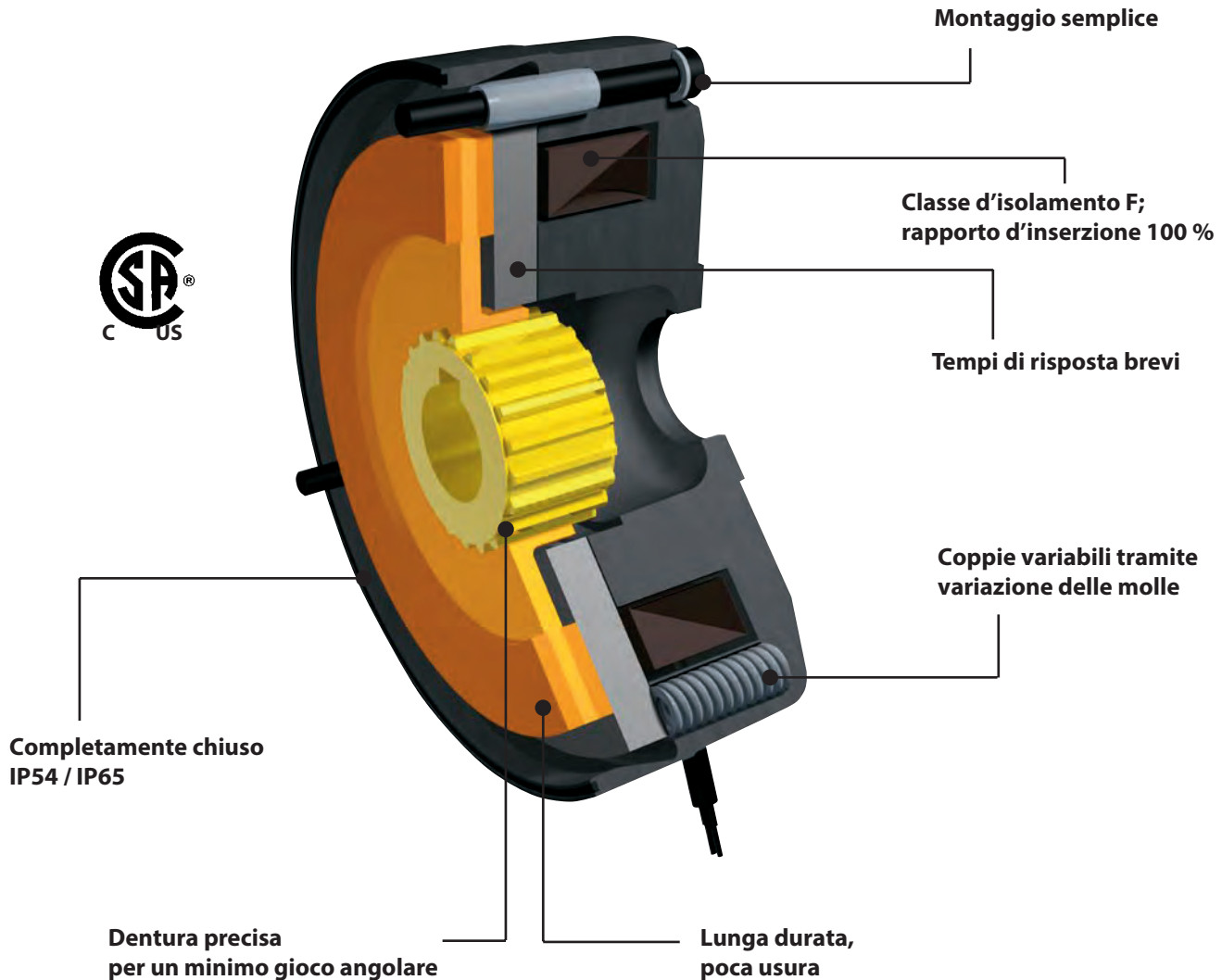
Type 382.1___.0 (for dynamic braking)

Clamps and brakes under spring load a piston rod accurately and backlash-free. Brake is opened through electromagnetic actuation with DC current.

Nominal holding force: 2500 – 17500 N

Electromagnetic Safety Brakes

Your safety brake



Benefits for your applications

- ❑ Simple assembly
- ❑ Hermetically closed brake on outer diameter (other protections also possible)
- ❑ The electromagnetic coil is designed for 100 % insertion ratio.
- ❑ The brake is designed for insulation class F.
- ❑ Nominal air gap is predetermined and controlled
- ❑ Short response times
- ❑ Maintenance-free up to rotor wear limit

Operation

It is an electromagnetic safety brake with compressed springs that intervene in the absence of power.

Operation in the absence of power:

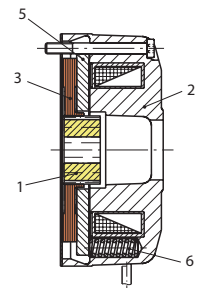
In the absence of power, the coil springs (6) press against the movable anchor (5). The rotor (3) remains pressed between the movable anchor (5) and the wall of the user's machine. The shaft is braked through the hub toothed (1).

Electromagnetic:

Through the magnetic force of the coil in the coil carrier (2), the movable anchor (5) is attracted by winning the thrust of the springs toward the coil carrier (2). The rotor is free (4) and the shaft can rotate freely.

Safety brakes:

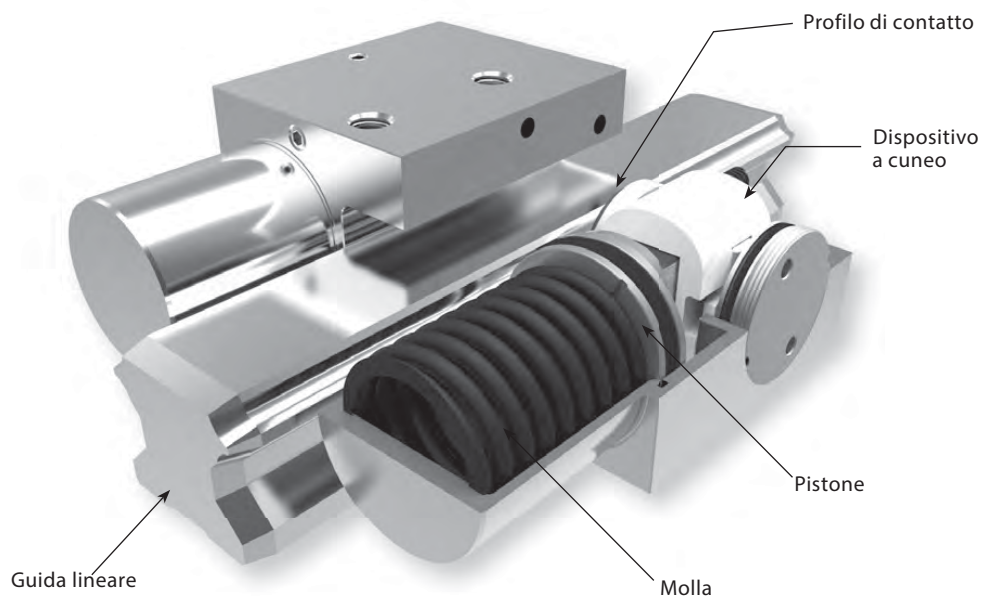
In the event of a power failure or after a power outage or following an EMERGENCY STOP, it brakes reliably and safely.



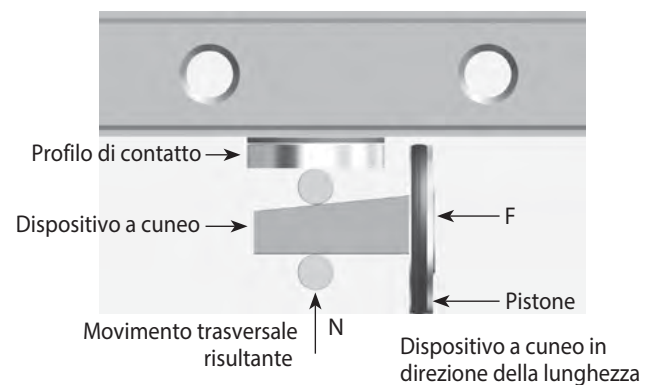
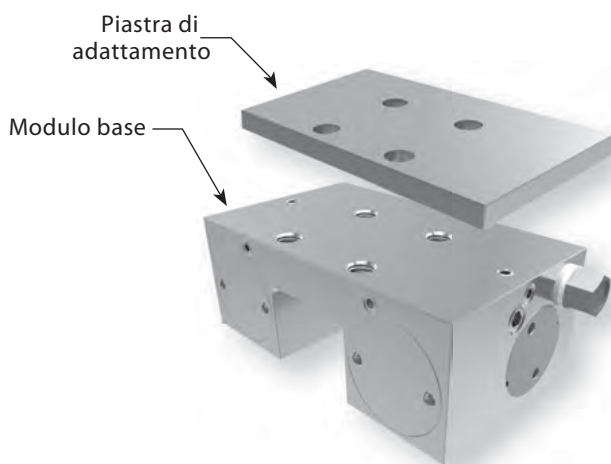
MKS

High stopping forces at low costs

The MKS series is the classic series among clamping elements. The patented wedge device produces high holding forces. The pressure medium moves the wedge device in a lengthwise direction. The contact profiles, due to the resulting transverse movement, press with high force on the free surfaces of the profile rail. MKS clamps by means of a spring-loaded energy accumulator and is opened by air input.



Serie MKS:



MKS series technical features:

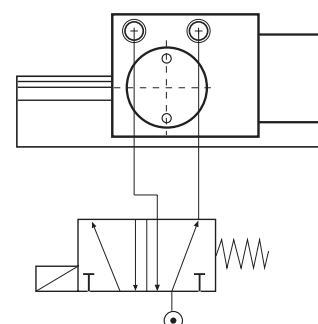
Guide size	12-100
Stopping force	250 N-1 450 N
Pressure min.	5,5 bar
Pressure max.	8 bar
Spring energy accumulator	°
PLUS connector	°
Locking cycles	5 milioni (valore B10d)*
Braking cycles	non indicata

Applications of the MKS element:

- Locking in the event of a pressure drop
- Locking without energy requirement

MKS adapter plate accessory:

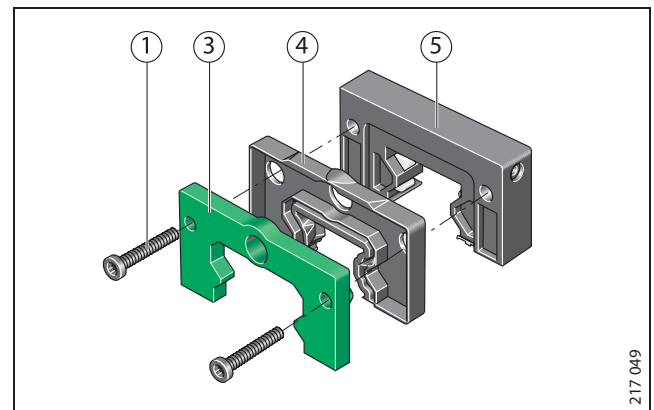
Depending on the height of the carriage (size D), an additional adapter plate must be ordered



Checking the delivered condition

A KIT.KWVE..-B-400 consists of:

- ① fixing screws
- ③ a carrier plate for end wiper
- ④ a double lip end wiper
- ⑤ a ready-to-use long-term lubrication unit with initial grease application.



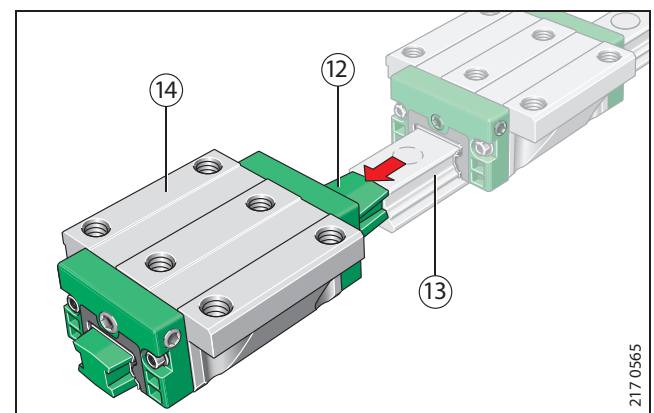
217 049

Dismantling the carriages

- ❑ Position the dummy guideway ⑫ against the guideway ⑬ and slide the carriage ⑭ onto the dummy guideway.

Caution!

Leave the dummy guideway in the carriage. The dummy guideway ⑫ prevents damage to the rolling element set and the loss of rolling elements while the carriage is separate from the guideway.



217 0565

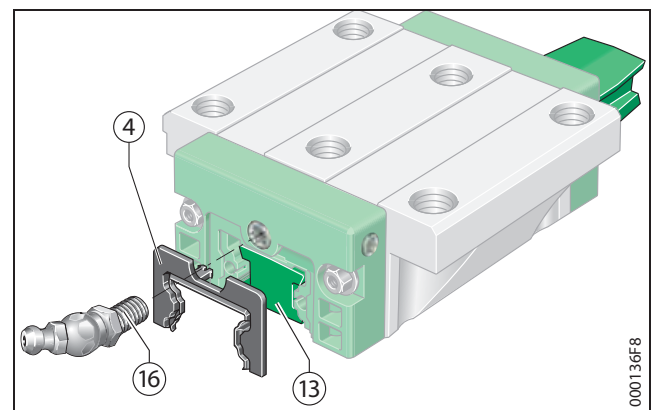
Preparations for fitting the KIT

- ❑ Remove lubrication nipple ⑯ or screw plug
- ❑ Remove the front wiper ④ at the end on which the KIT will be mounted.

The parts that have been removed are no longer required. Dispose of the parts in accordance with the applicable regulations.

Caution!

The dummy guideway ⑬ should remain in the carriage whilst the carriage is separate from the guideway.



000136F8

Fitting KIT.KWVE..-B-400 (430)

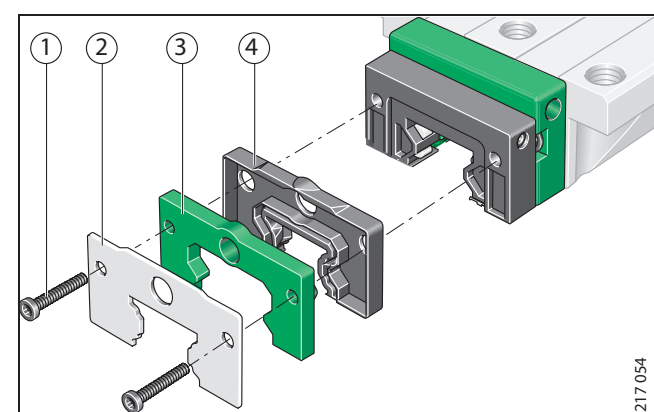
- ❑ Assemble double lip additional wiper ④ and carrier plate ③.

For KIT.KWVE..-B-430 only:

- ❑ Mount the end plate ② on the carrier plate ③.

KIT.KWVE..-B-400 and KIT.KWVE..-B-430:

- ❑ Tighten the fixing screws ① slightly.



217 054

Slide carriage on guideway, final fitting of KIT

Caution!

The KIT centres itself on the guideway.
The end plate must be centred manually.

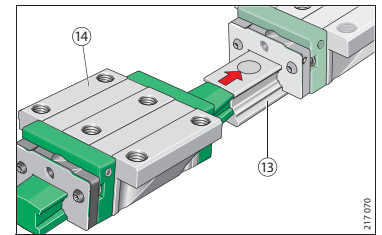
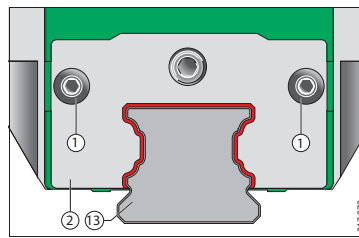
- Slide the carriage (14) onto the guideway (13).

For KIT.KWVE..-B-430 only:

- Align the end plate (2) with the guideway (13) so that there is a uniform gap all the way round.

KIT.KWVE..-B-400 and KIT.KWVE..-B-430:

- Tighten the fixing screws (1), observing the tightening torques.



Lubrication

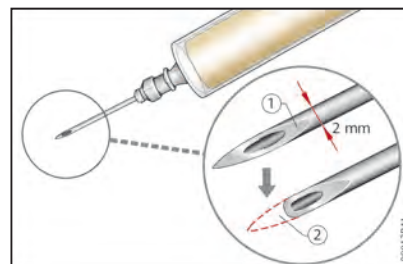
Caution!

Avoid contamination of grease, lubrication holes and tools.

Use only the following grease:
Notropeen LXG 000, see page 15.

When using a conventional injection syringe, observe the needle outside diameter of 2 mm (1) and round off the point (2).

Grease syringe (3) available as special accessory. Please contact us on this item.



Lubrication

Caution!

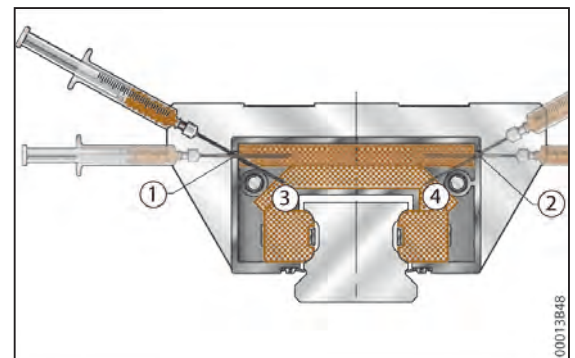
Always move the carriage during lubrication.

The minimum stroke is four times the length of the saddle plate.

Distribute the grease quantity evenly over the four positions.

In order to achieve uniform distribution of lubricant:

- introduce one quarter of the lubricant quantity, see page 13, at position (1)
- repeat the procedure for positions (2), (3) and (4).



Lubrication interval/lubricant quantity

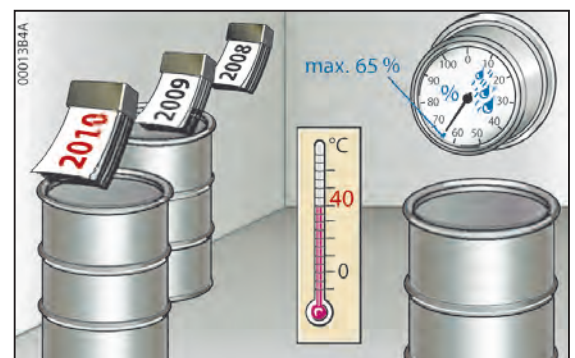
Caution!

Grease is subject to ageing and we recommend regreasing at least every two years.

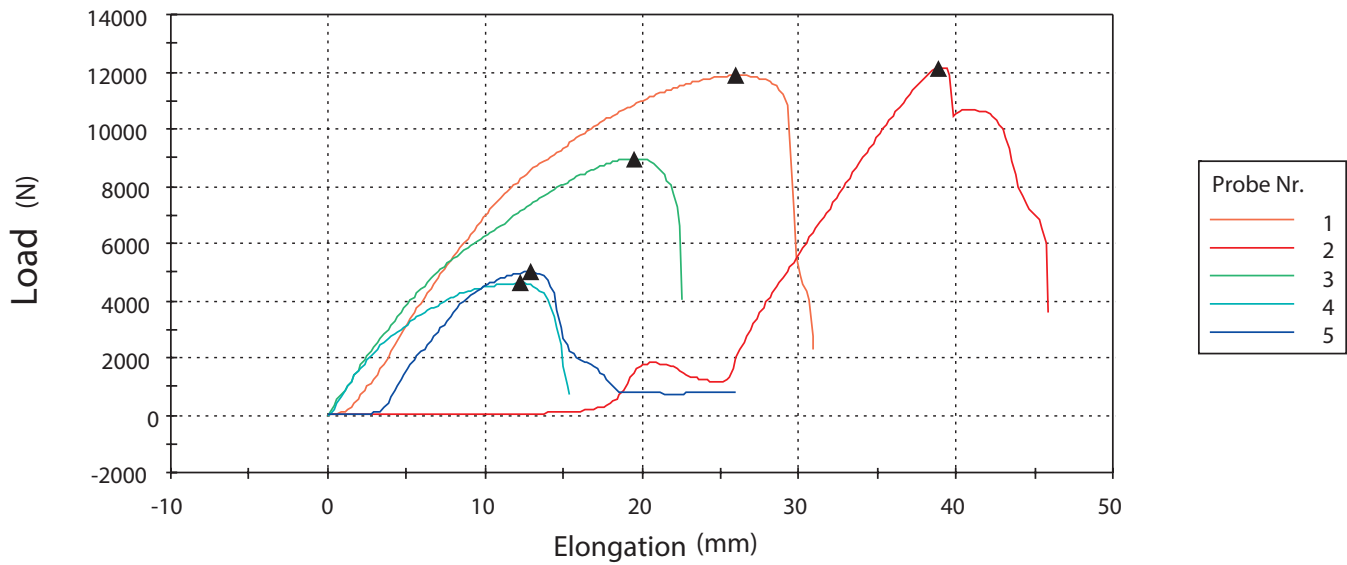
The relubrication interval depends on the application. It is influenced by factors including stroke, the load and the ambient conditions, see catalogue PF1.

Precise values can only be defined under the actual operating conditions of the particular application.

The relubrication quantities are given in the table.



Probe 1 bis 5

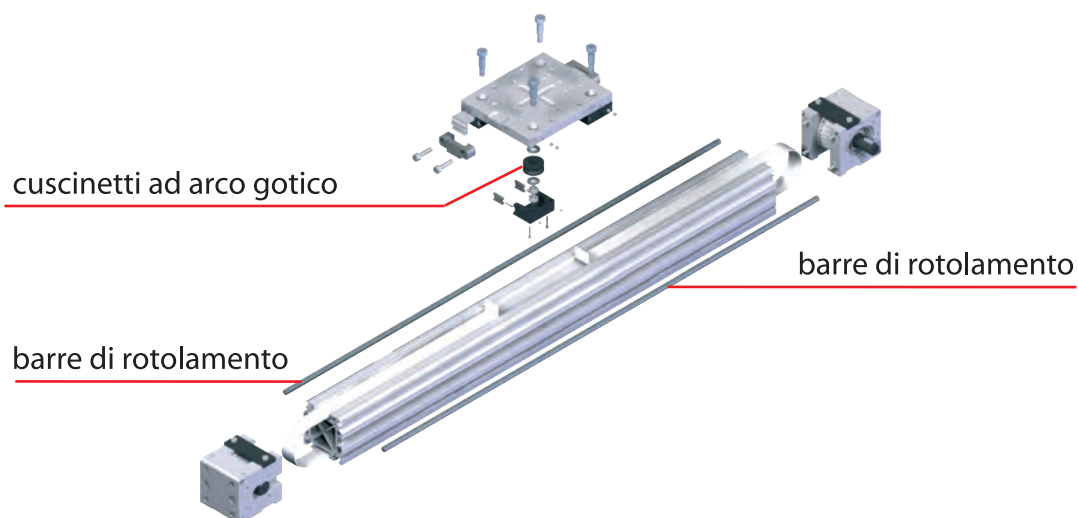


	Breaking load (N)	Pre-break elongation (mm)	Belt type
1	11868,7	26,035	RPP8M40
2	12140,2	38,947	RPP8M60
3	8969,4	19,473	RPP8M30
4	4610,2	12,277	RPP5M22
5	4995,5	12,912	RPP5M25
6	3613,498	11,034	RPP5M40

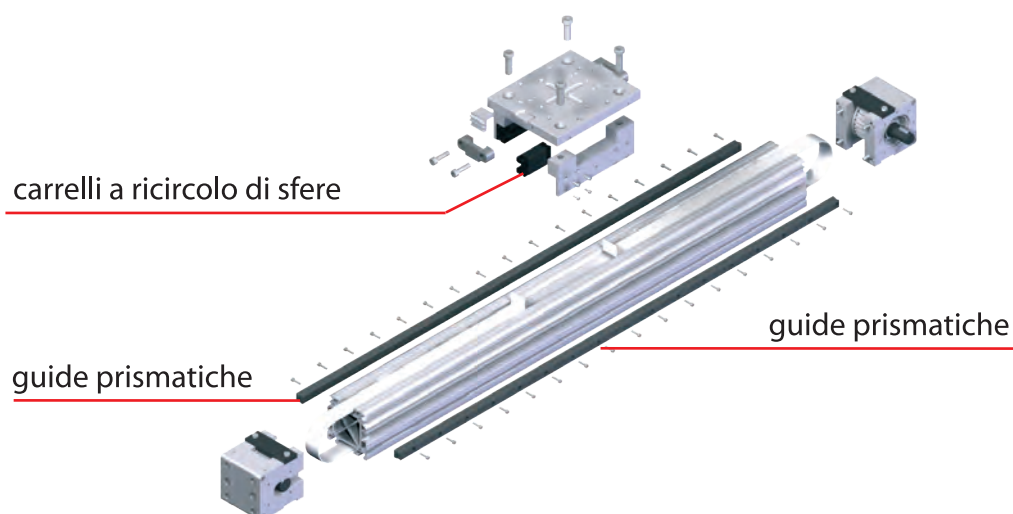
BELTS SPECIFICATIONS

WIDTH TOLERANCE $\pm 0,5$ mm
 PITCH TOLERANCE + 0 / -0,4 mm /1000 m

Track rollers system



Width up to 4 m

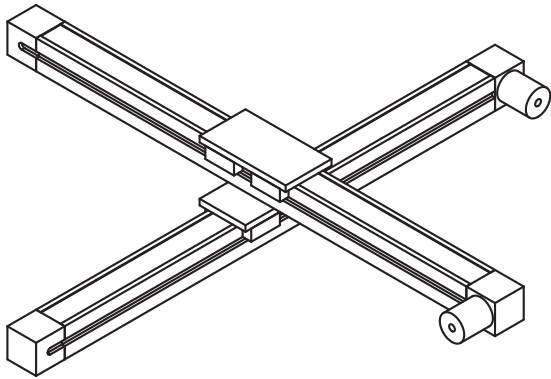


EXPLODED VIEWS FOR SPARE PARTS AVAILABLE ON THE SITE:

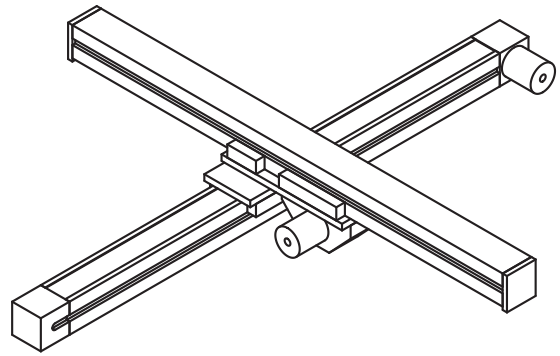
www.litek-ls.eu

OR CONTACT OUR TECHNICAL DEPARTMENT

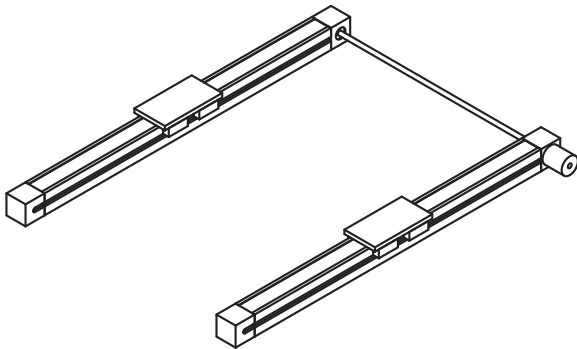




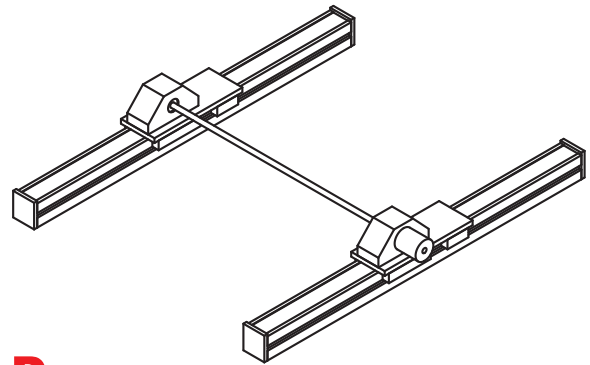
A



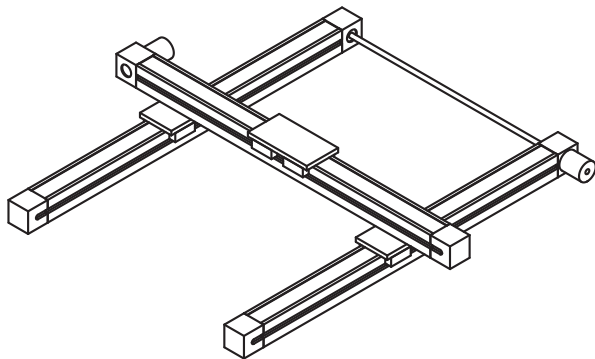
B



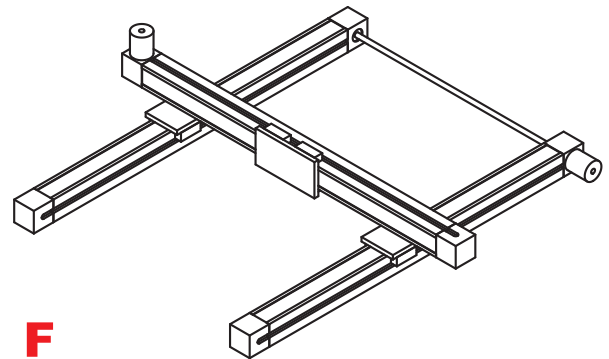
C



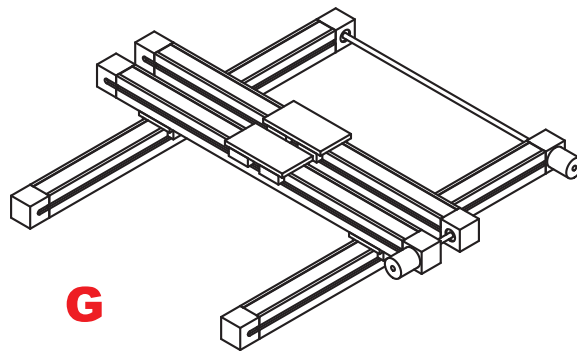
D



E

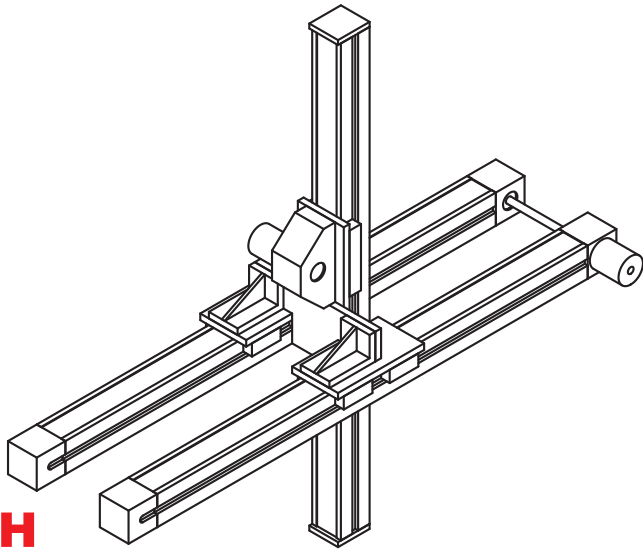


F

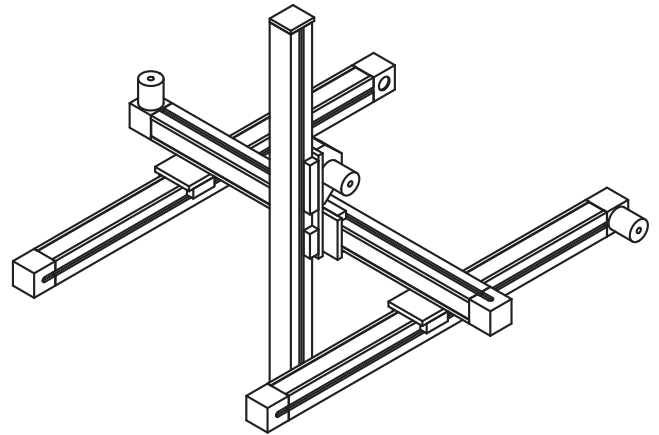


G

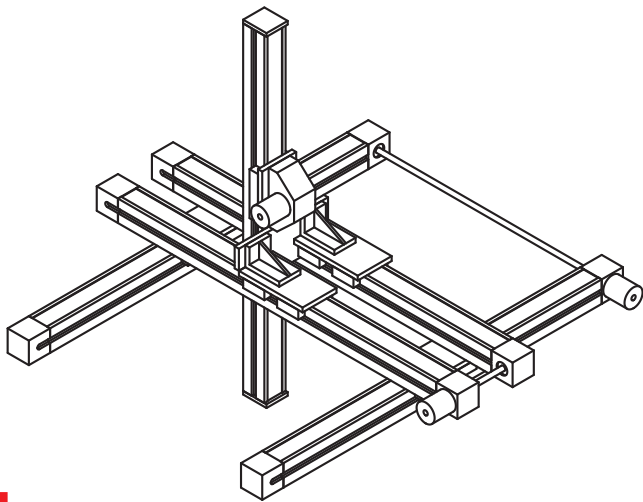




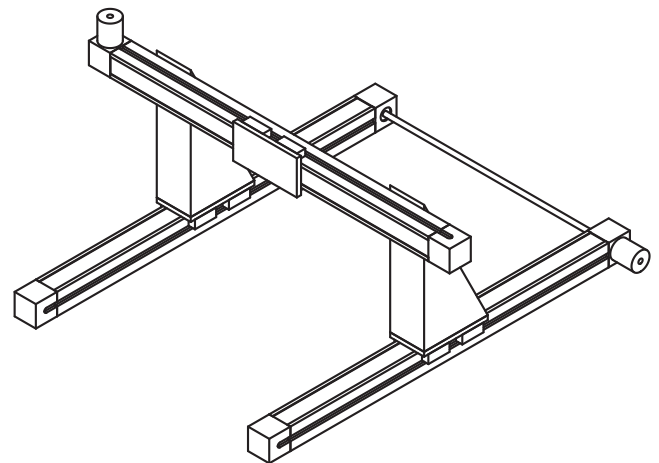
H



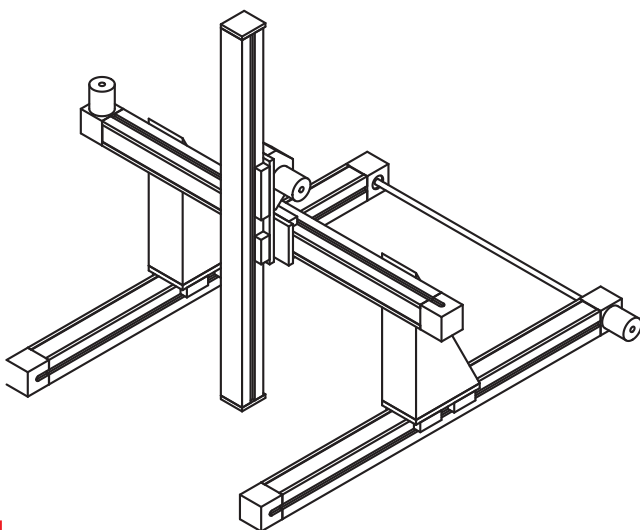
I



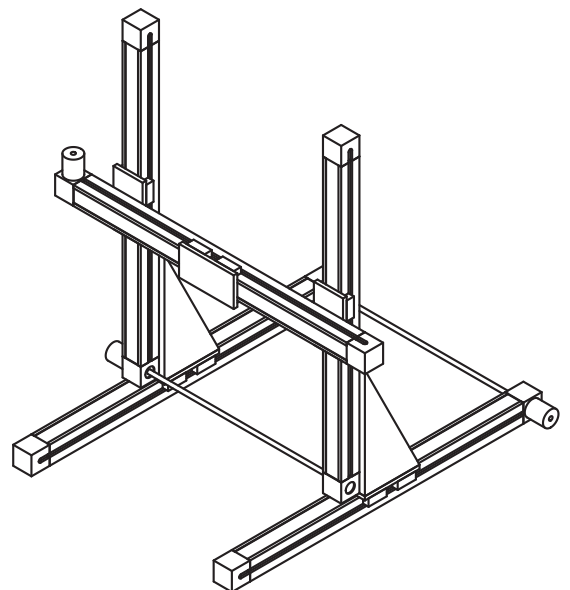
L



M



N



O



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