



G01-93



G01-55

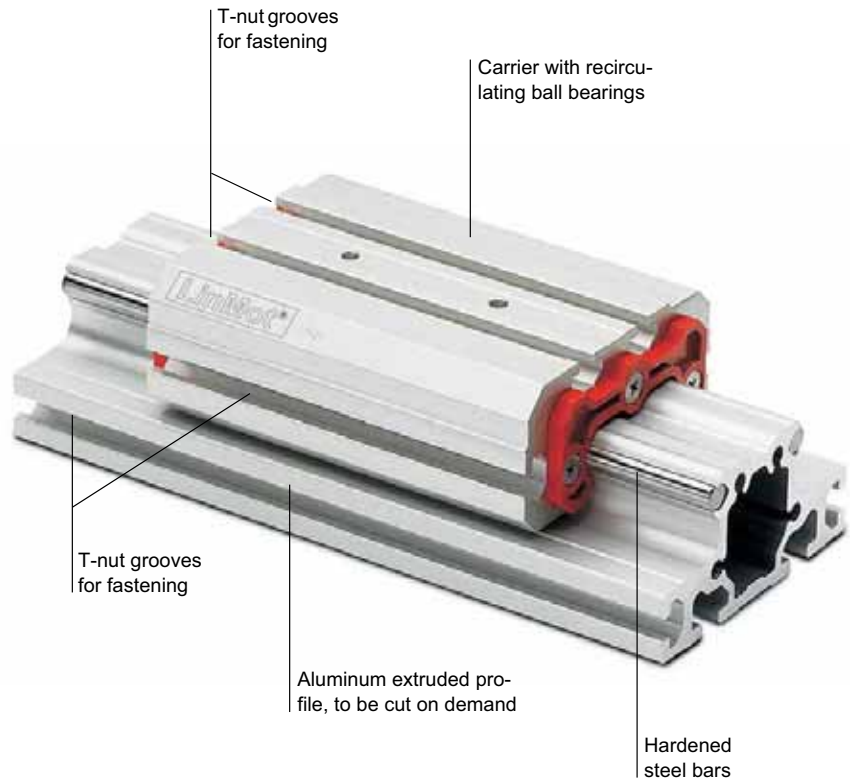


G02-55

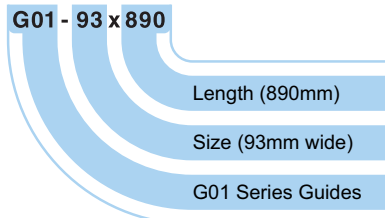
Linear guidance with recirculating ball-bearing series G01

- Patented bearing system.
- Easy fitting and inexpensive.
- Several mounting options with T-nuts.
- Optional kits for accessories.
- Available in any length up to 2000 mm.
- More than one carrier per rail is possible.

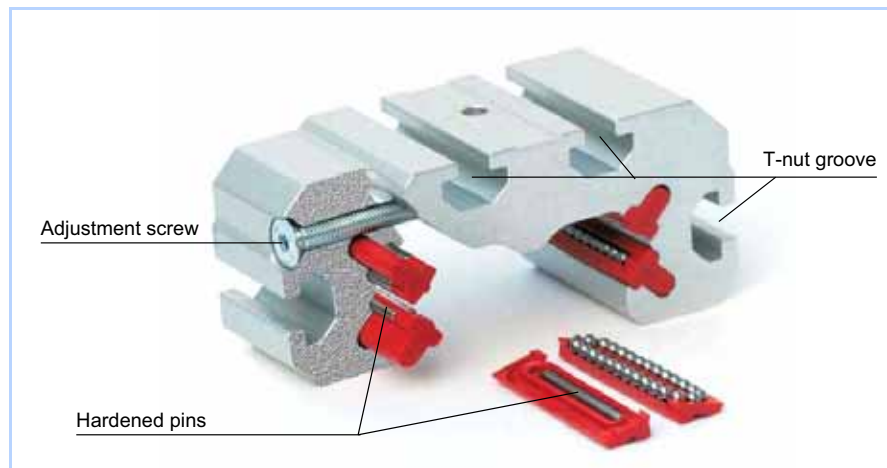
The carrier is made from an aluminium extruded profile, in which the housings for the recirculating ball bearings and the T-nut grooves are located. Thanks to the carrier special profile, with four adjustment screws, it is possible to set to zero the carrier backlash and to adjust the correct bearing preload. The carrier assembling, mounting on the bars, preloading and the first lubrication are made in the factory. Two or more carriers, on demand, can be mounted on the same rail, to increase the load capacity or to get two or more independent slides.



Designation:



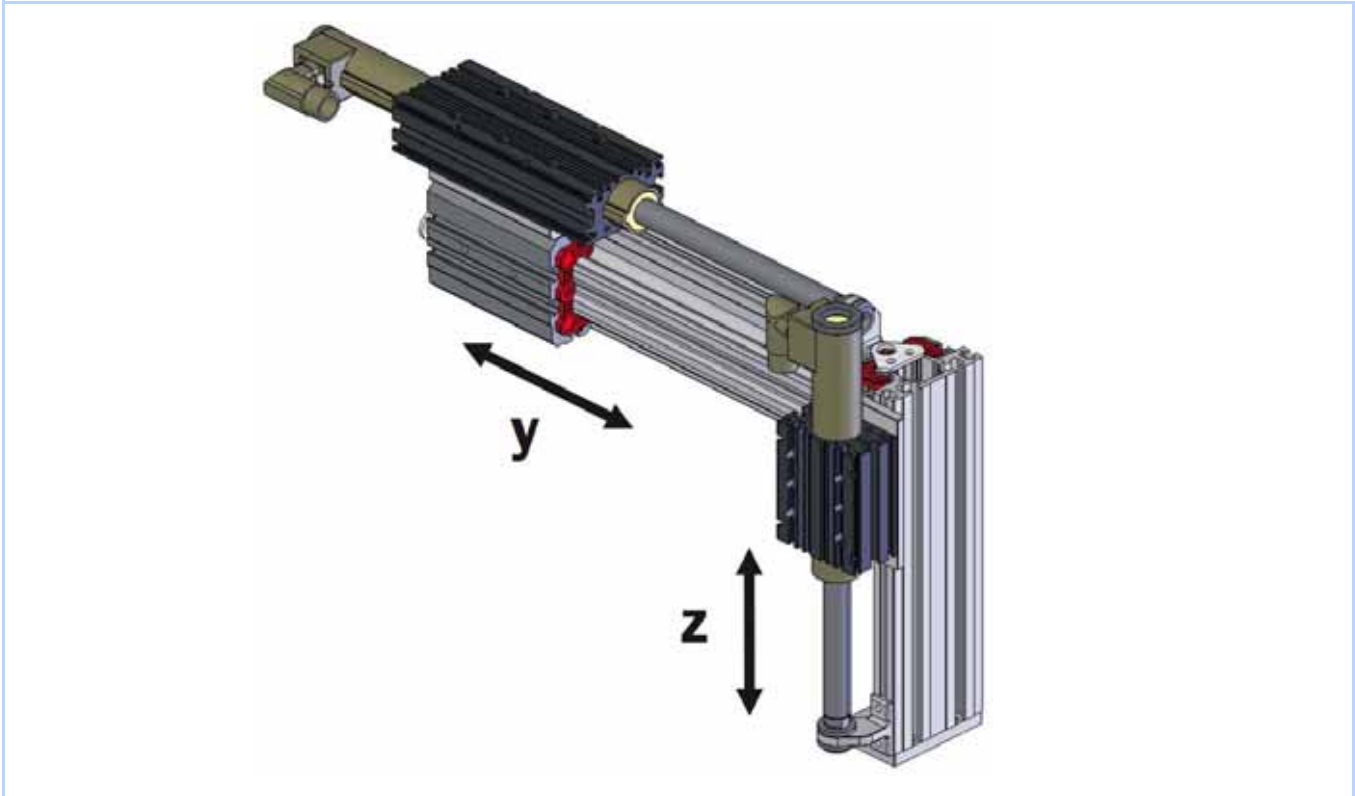
Construction



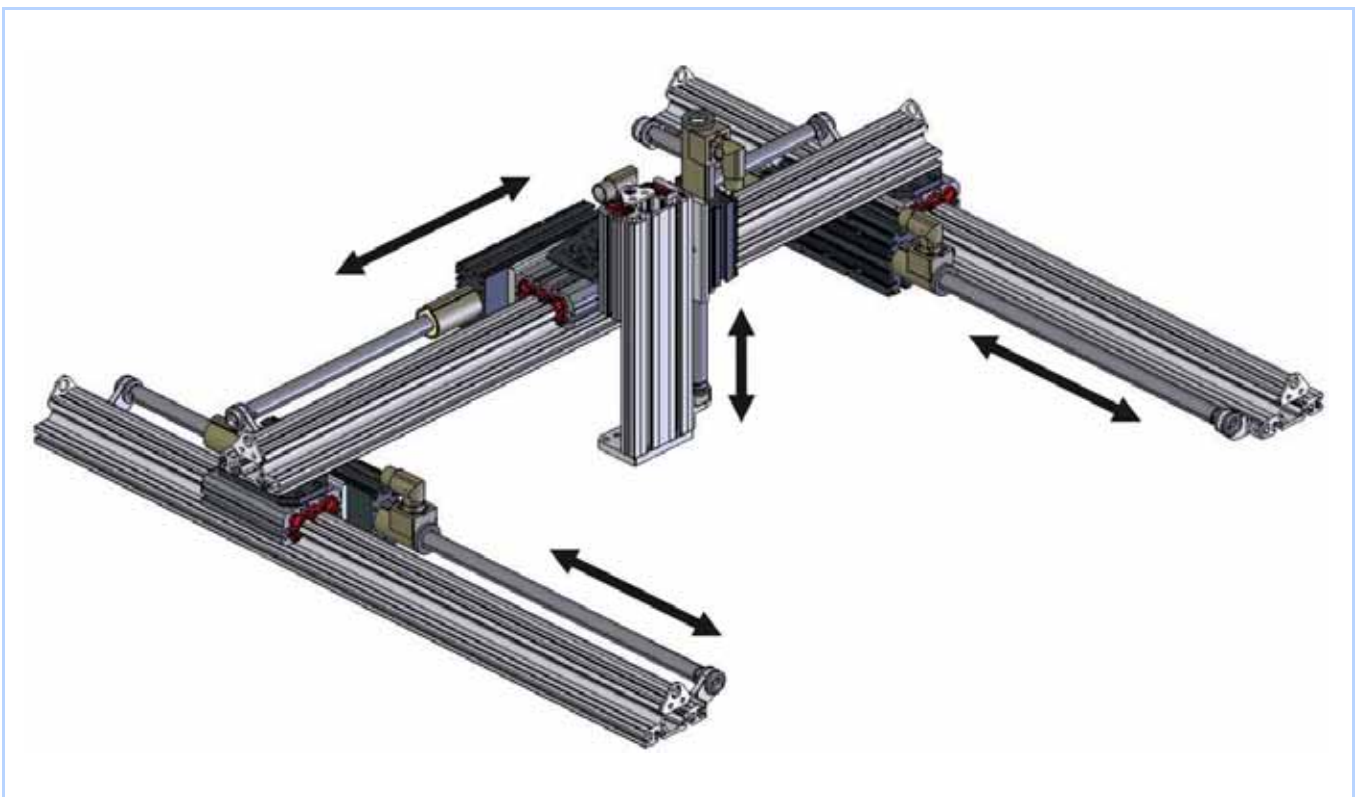
Recirculating ball bearing



Y-Z Pick-and-Place System, powered by LinMot Linear Motors



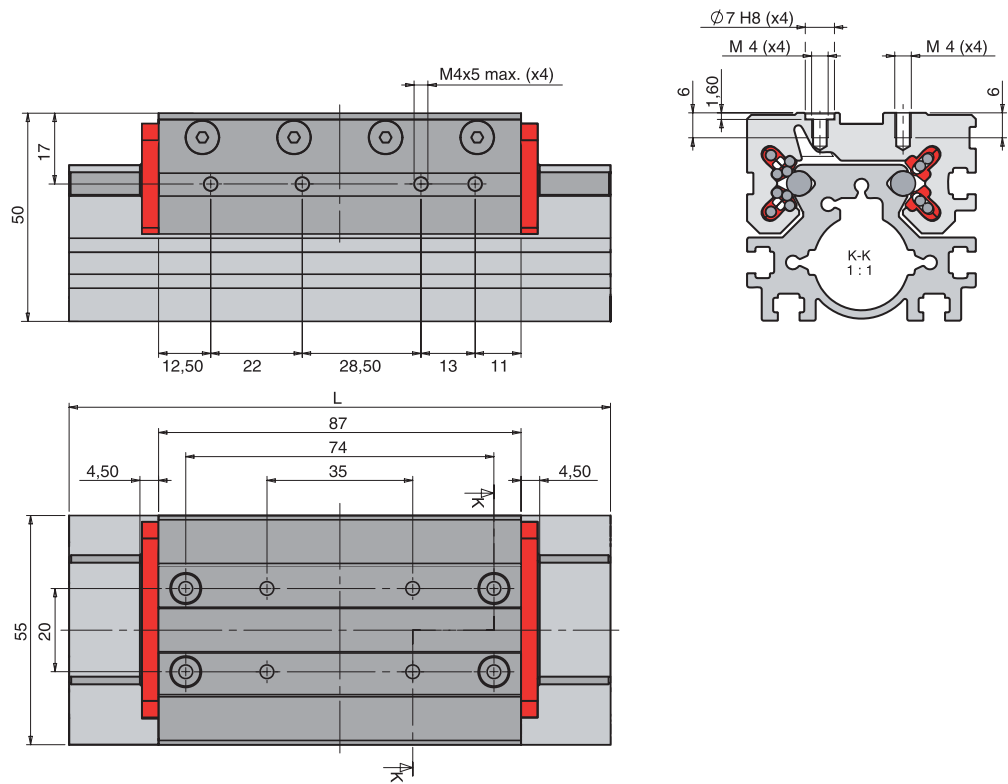
3-axis gantry, assembled with four G01 Linear Guides, powered by LinMot Linear Motors



Available Lengths of Linear Guides G01-55

Weight calculation

The weight of the carrier is 0.22 kg .
The weight of the guidance (alu profile plus steel bars) is 2.28 kg/m .

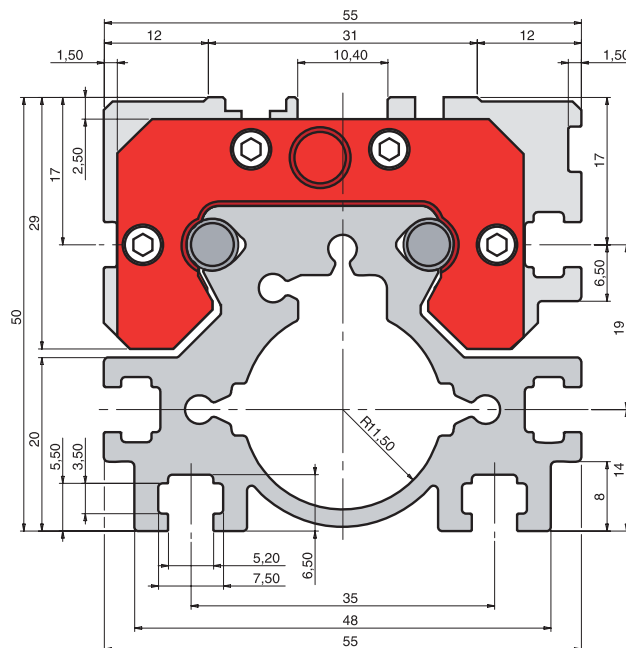


Linear Guide	Bearing	Total Length [mm (inch)]	Carrier Mass [g (lb)]	Rail Mass [g (lb)]	Total Weight [g (lb)]
G01-55x465	Recirculating ball bearing	465 (18.31)	220 (0.49)	1'060 (2.34)	1'280 (2.83)
G01-55x525	Recirculating ball bearing	525 (20.67)	220 (0.49)	1'200 (2.65)	1'420 (3.14)
G01-55x625	Recirculating ball bearing	625 (24.61)	220 (0.49)	1'430 (3.15)	1'650 (3.64)
G01-55x805	Recirculating ball bearing	805 (31.69)	220 (0.49)	1'840 (4.06)	2'060 (4.55)
G01-55x895	Recirculating ball bearing	895 (35.24)	220 (0.49)	2'040 (4.50)	2'260 (4.99)

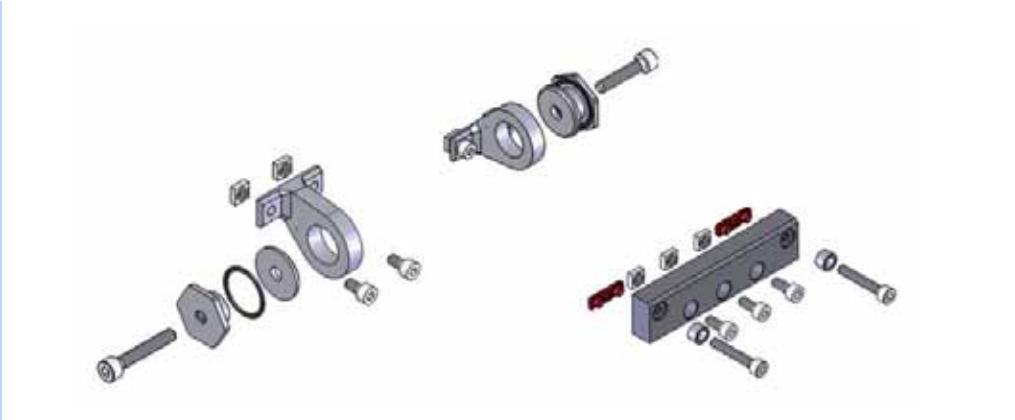
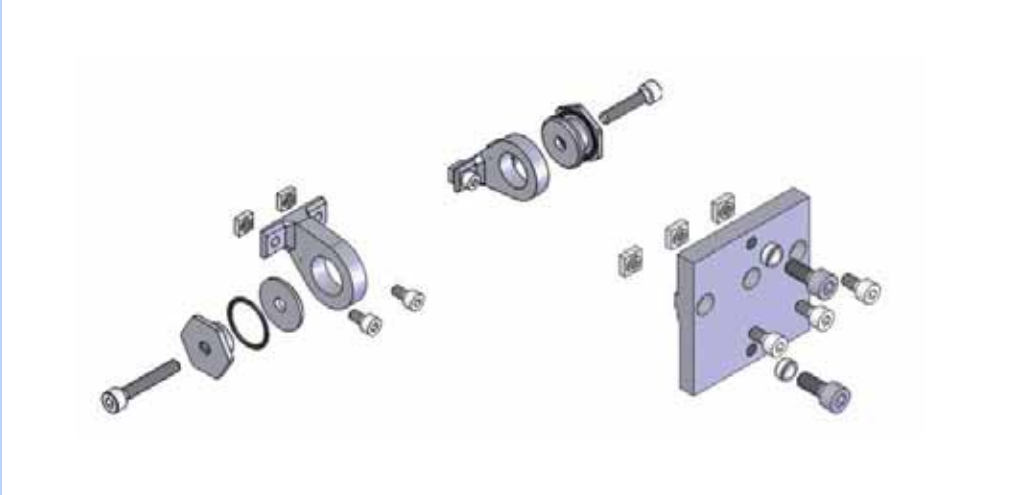


T-nut grooves

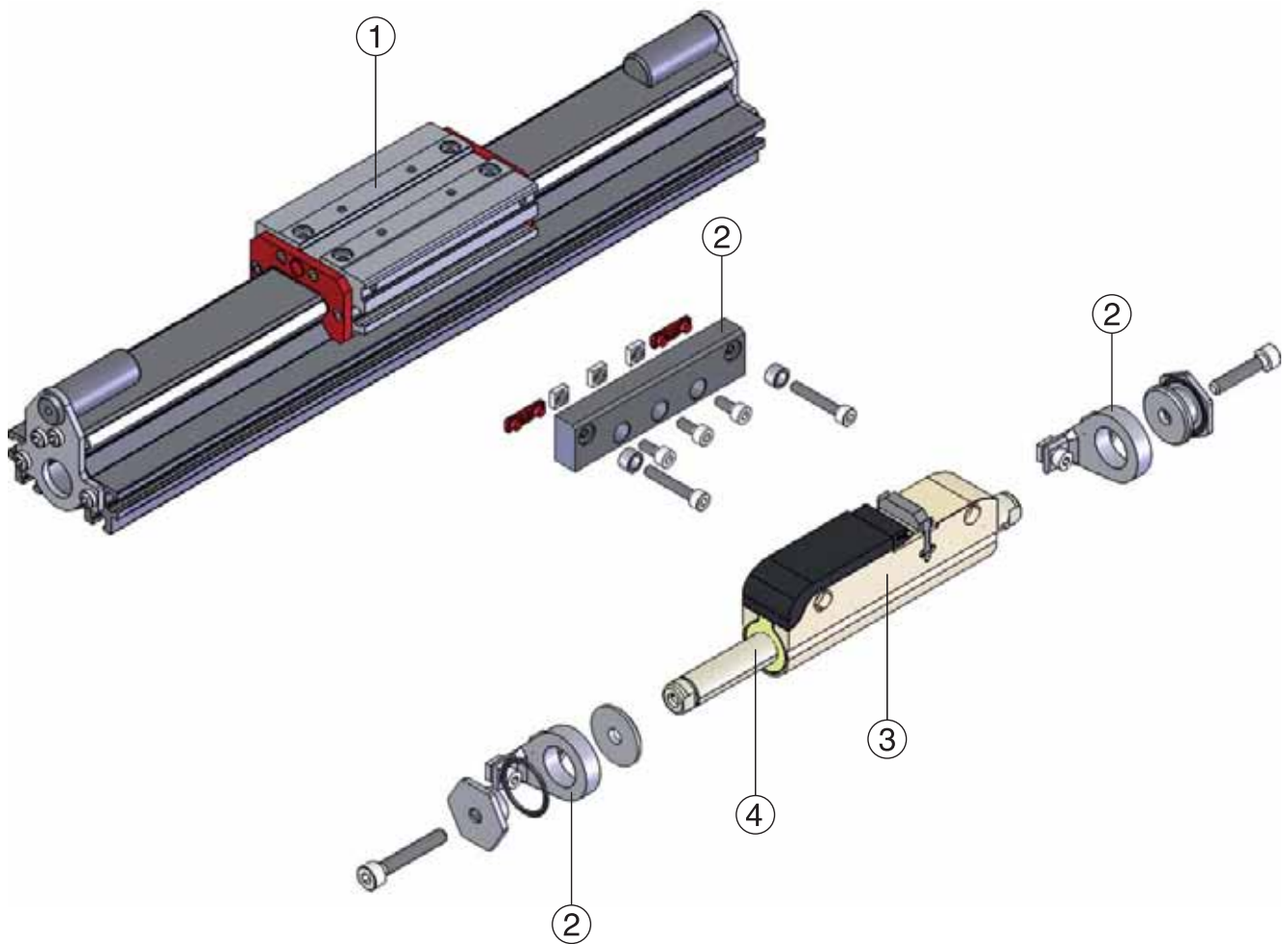
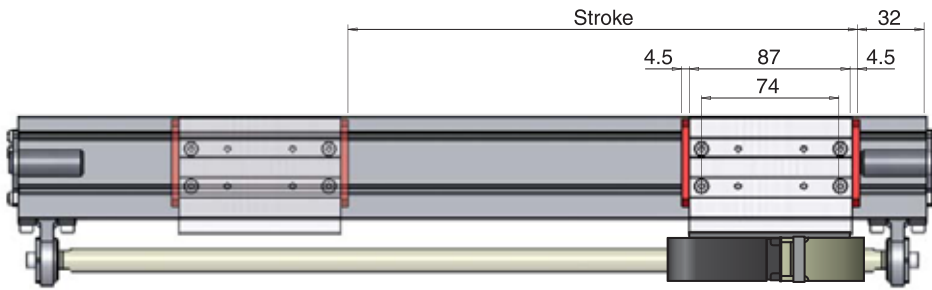
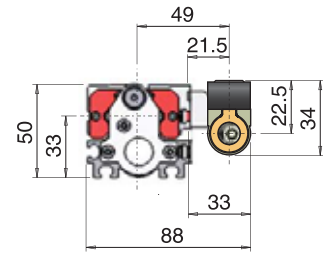
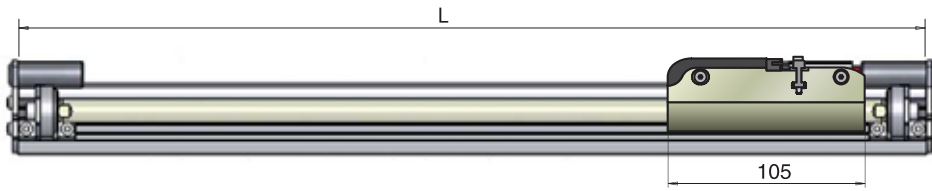
There is one groove size in the Linear Guide G01(5). There are two types of corresponding nuts available: G01-5/M4s which is to be inserted from a groove end and G01-5/M4r which can be inserted from the front and then rotated.

The corresponding T-nut types are available in 100 piece and 10 piece packages.



Dimensions in mm

Item	Description	Part Number
G01-50/MK-23S	Mounting Kit for Linear Motors P01-23Sx80	0150-5239
		
G01-55/MK-23	Mounting Kit for Linear Motor P01-23x80 and P01-23x160	0150-5238
		
G01-5/M4s-100	T-nut 5mm square with M4 thread, 100 pcs.	0150-5335
G01-5/M4s-10	T-nut 5mm square with M4 thread, 10 pcs.	0150-5334
		
G01-5/M4r-100	T-nut 5mm rounded with M4 thread, 100 pcs.	0150-5337
G01-5/M4r-10	T-nut 5mm rounded with M4 thread, 10 pcs.	0150-5336
		



Ordering information

1. Guide

Stroke	Item	Description	Part Number
305	G01-55x465	G01-55 Linear Guide, Length L=465	0150-5223
365	G01-55x525	G01-55 Linear Guide, Length L=525	0150-5224
465	G01-55x625	G01-55 Linear Guide, Length L=625	0150-5225
645	G01-55x805	G01-55 Linear Guide, Length L=805	0150-5226
735	G01-55x895	G01-55 Linear Guide, Length L=895	0150-5227

2. Mounting Kit

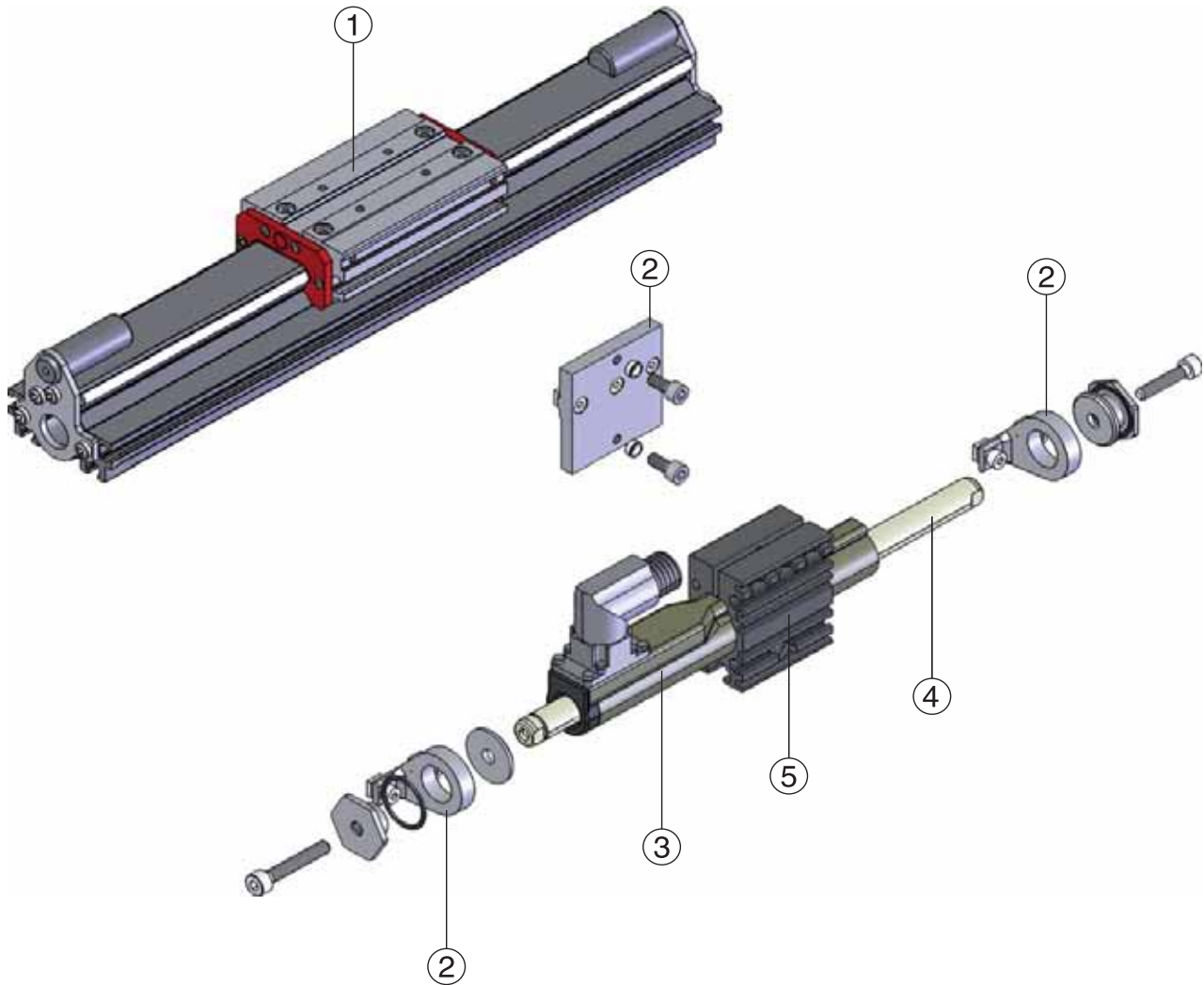
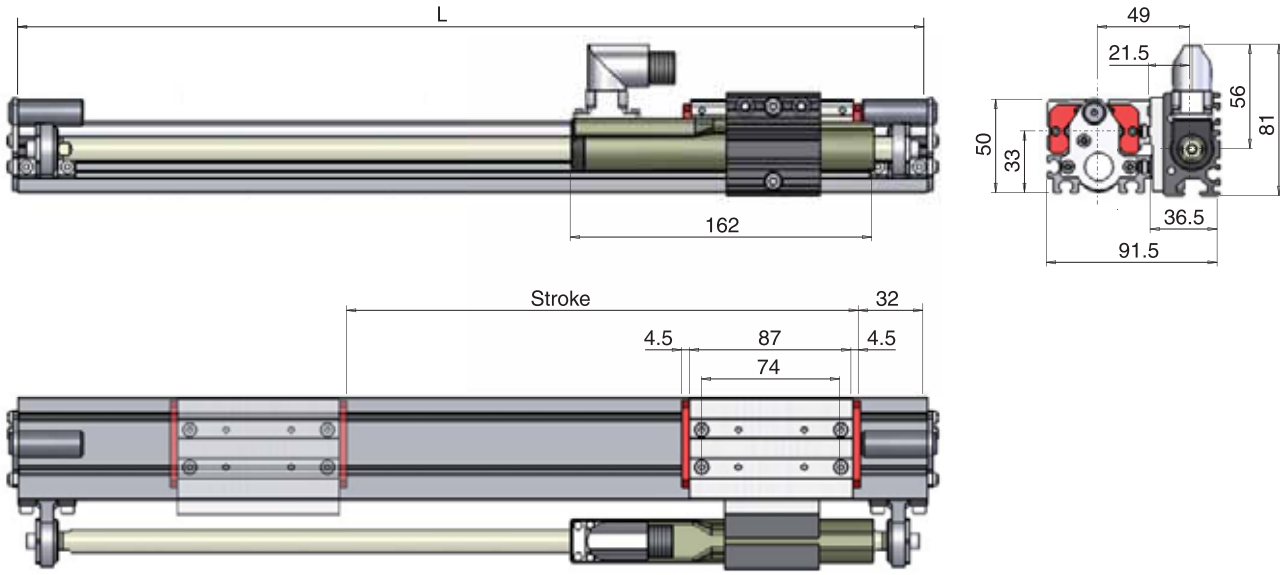
Stroke	Item	Description	Part Number
all	G01-55/MK-23S	Mounting Kit for P01-23Sx80	0150-5228

3. Stator

Stroke	Item	Description	Part Number
all	PS01-23Sx80	Linear motor stator	0150-1207

4. Slider

Stroke	Item	Description	Part Number
305	PL01-12x420/370	Standard Slider	0150-1324
365	PL01-12x480/430	Standard Slider	0150-1372
465	PL01-12x580/530	Standard Slider	0150-1355
645	PL01-12x760/710	Standard Slider	0150-1366
735	PL01-12x850/800	Standard Slider	0150-1365



Ordering information

1. Guide

Stroke	Item	Description	Part Number
250	G01-55x465	G01-55 Linear Guide, Length L=465	0150-5223
310	G01-55x525	G01-55 Linear Guide, Length L=525	0150-5224
410	G01-55x625	G01-55 Linear Guide, Length L=625	0150-5225
590	G01-55x805	G01-55 Linear Guide, Length L=805	0150-5226
680	G01-55x895	G01-55 Linear Guide, Length L=895	0150-5227

2. Mounting Kit

Stroke	Item	Description	Part Number
all	G01-55/MK-23	Mounting Kit for P01-23x80 and P01-23x160	0150-5229

3. Stator

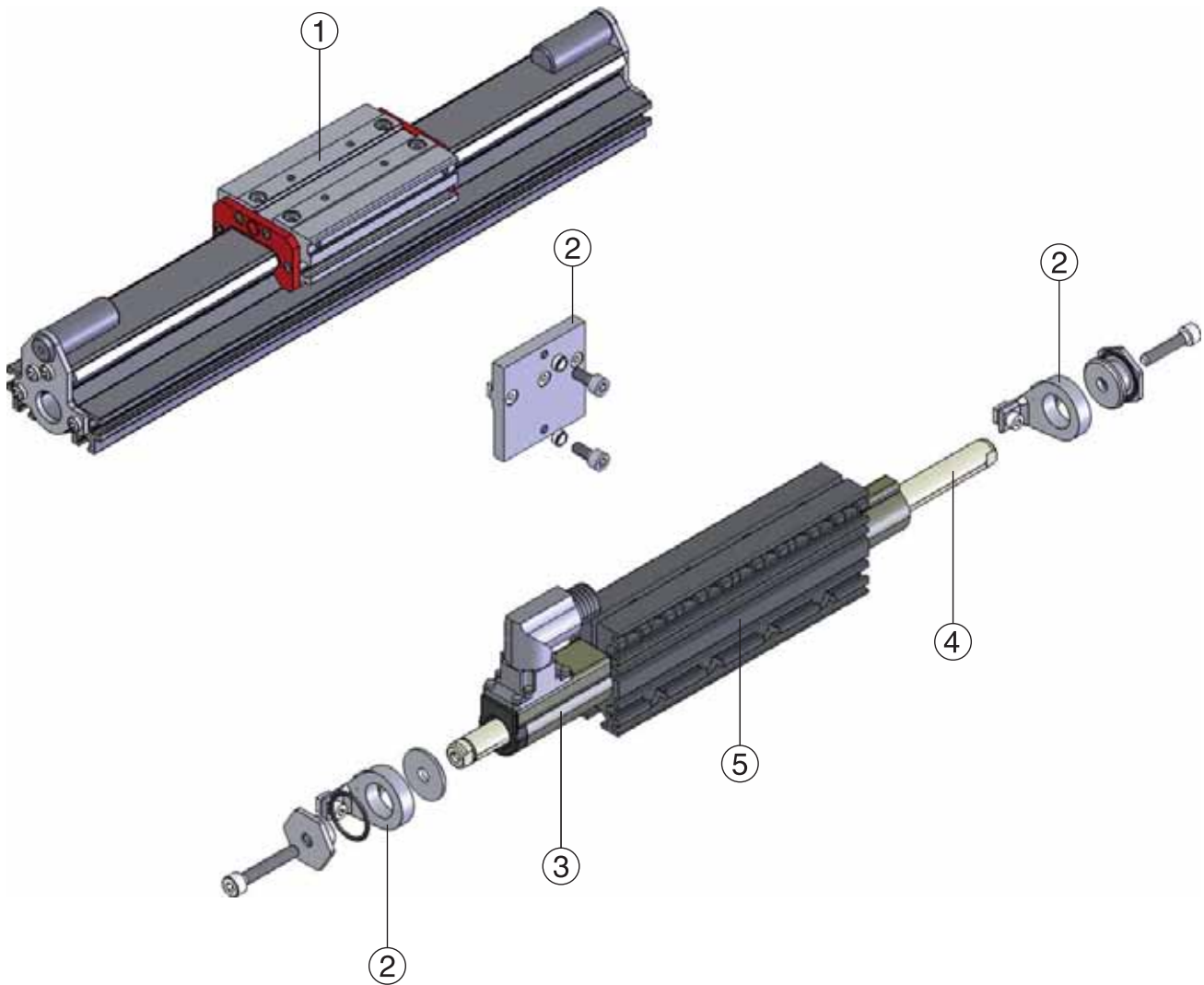
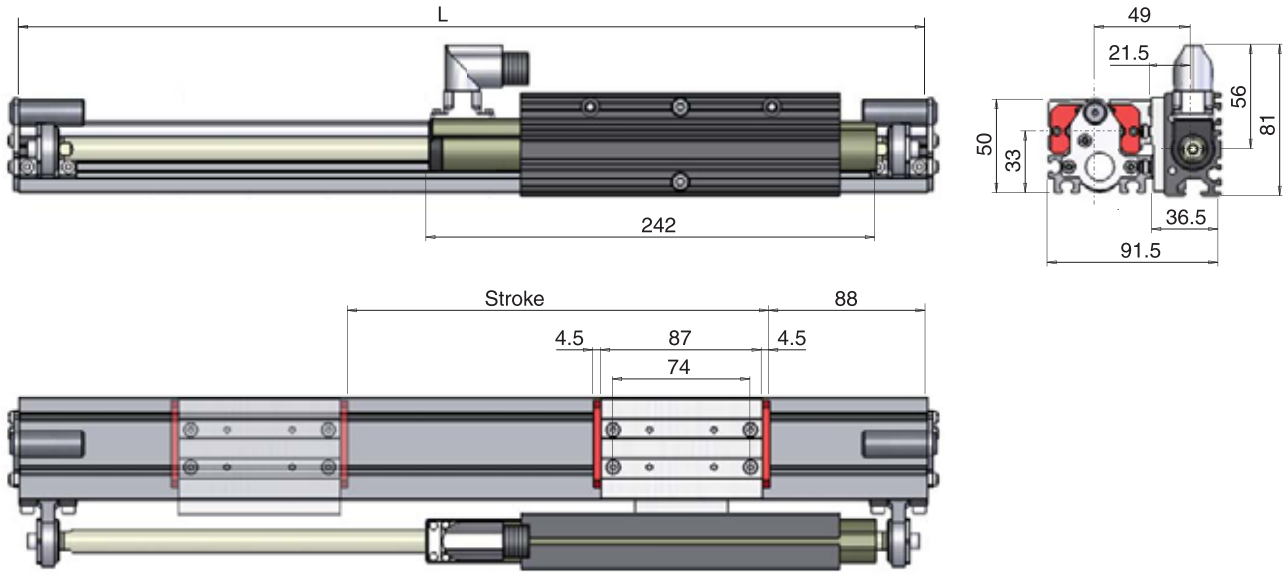
Stroke	Item	Description	Part Number
all	PS01-23x80-R	Linear motor stator, connector type R - IP67, Standard Winding	0150-1233
all	PS01-23x80F-HP-R	Linear motor stator, connector type R - IP67, High Performance	0150-1259

4. Slider

Stroke	Item	Description	Part Number
250	PL01-12x420/370	Standard Slider	0150-1324
	PL01-12x420/380-HP	High Performance Slider	0150-1523
310	PL01-12x480/430	Standard Slider	0150-1372
	PL01-12x480/440-HP	High Performance Slider	0150-1524
410	PL01-12x580/530	Standard Slider	0150-1355
	PL01-12x580/540-HP	High Performance Slider	0150-1525
590	PL01-12x760/710	Standard Slider	0150-1366
	PL01-12x760/720-HP	High Performance Slider	0150-1526
680	PL01-12x850/800	Standard Slider	0150-1365
	PL01-12x850/810-HP	High Performance Slider	0150-1527

5. Flange

Stroke	Item	Description	Part Number
all	PF02-23x50	Flange 23x50mm	0150-2102



Ordering information

1. Guide

Stroke	Item	Description	Part Number
170	G01-55x465	G01-55 Linear Guide, Length L=465	0150-5223
230	G01-55x525	G01-55 Linear Guide, Length L=525	0150-5224
330	G01-55x625	G01-55 Linear Guide, Length L=625	0150-5225
510	G01-55x805	G01-55 Linear Guide, Length L=805	0150-5226
600	G01-55x895	G01-55 Linear Guide, Length L=895	0150-5227

2. Mounting Kit

Stroke	Item	Description	Part Number
all	G01-55/MK-23	Mounting Kit for P01-23x80 and P01-23x160	0150-5229

3. Stator

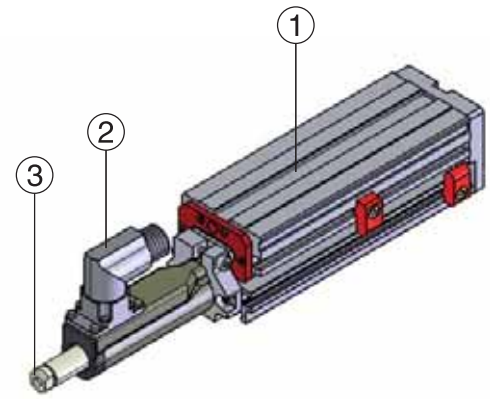
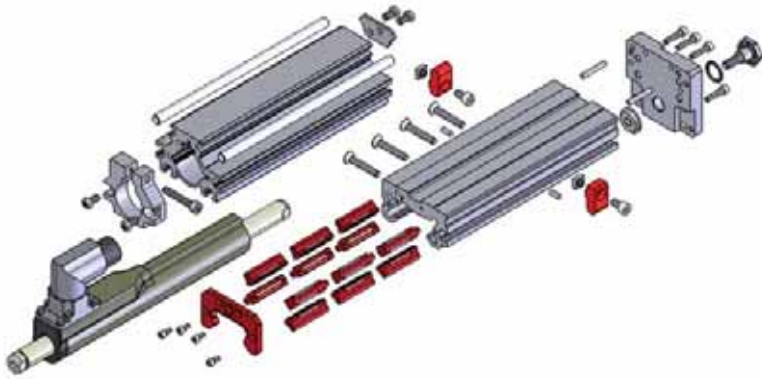
Stroke	Item	Description	Part Number
all	PS01-23x160-R	Linear motor stator, connector type R - IP67, Standard Winding	0150-1234
all	PS01-23x160F-R	Linear motor stator, connector type R - IP67, Fast Winding	0150-1235
all	PS01-23x160H-HP-R	Linear motor stator, connector type R - IP67, High Performance	0150-1254

4. Slider

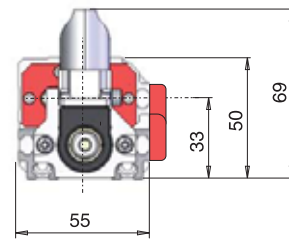
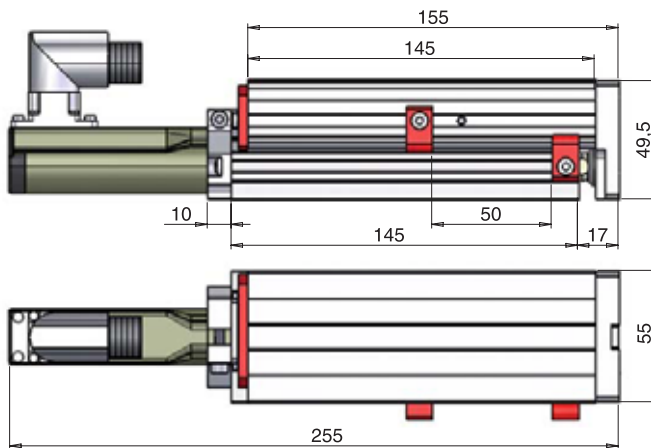
Stroke	Item	Description	Part Number
170	PL01-12x420/370	Standard Slider	0150-1324
	PL01-12x420/380-HP	High Performance Slider	0150-1523
230	PL01-12x480/430	Standard Slider	0150-1372
	PL01-12x480/440-HP	High Performance Slider	0150-1524
330	PL01-12x580/530	Standard Slider	0150-1355
	PL01-12x580/540-HP	High Performance Slider	0150-1525
510	PL01-12x760/710	Standard Slider	0150-1366
	PL01-12x760/720-HP	High Performance Slider	0150-1526
600	PL01-12x850/800	Standard Slider	0150-1365
	PL01-12x850/810-HP	High Performance Slider	0150-1527

5. Flange

Stroke	Item	Description	Part Number
all	PF02-23x120	Flange 23x120mm	0150-2103
all	PF02-23x170	Flange 23x170mm	0150-2117



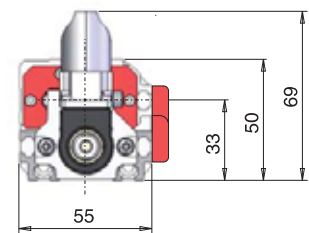
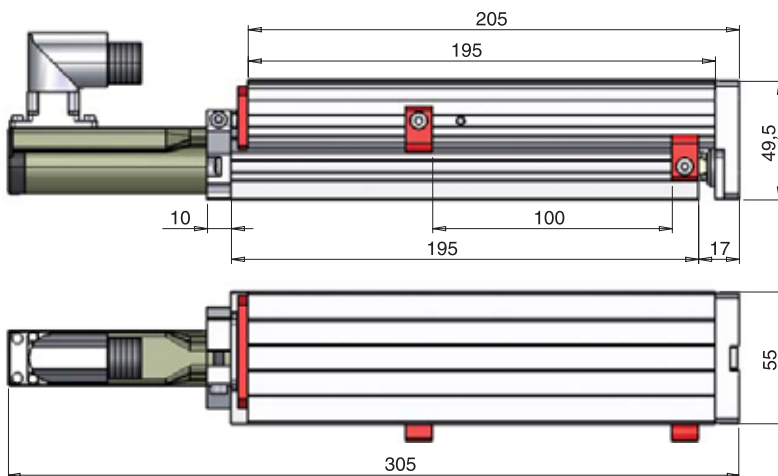
Module with P01-23x80 and 50mm Stroke



Details see Page 4

Weight (with Motor): 1'340g (2.95lb)

Module with P01-23x160 and 100mm Stroke



Details see Page 4

Weight (with Motor): 1'700g (3.75lb)

Ordering information for Module with P01-23x80 and 50mm Stroke

1. Guide

Stroke	Item	Description	Part Number
50mm	G02-55x50	G02-55 Linear Guide, Length L=172	0150-5221

2. Stator

Stroke	Item	Description	Part Number
50mm	PS01-23x80-R	Linear motor stator, connector type R - IP67, Standard Winding	0150-1233
	PS01-23x80F-HP-R	Linear motor stator, connector type R - IP67, High Performance	0150-1259

3. Slider

Stroke	Item	Description	Part Number
50mm	PL01-12x190/140	Standard Slider	0150-1302
	PL02-12x190/140	Heavy Duty Slider	0150-1304
	PL01-12x200/160-HP	High Performance Slider	0150-1518

Ordering information for Module with P01-23x160 and 100mm Stroke

1. Guide

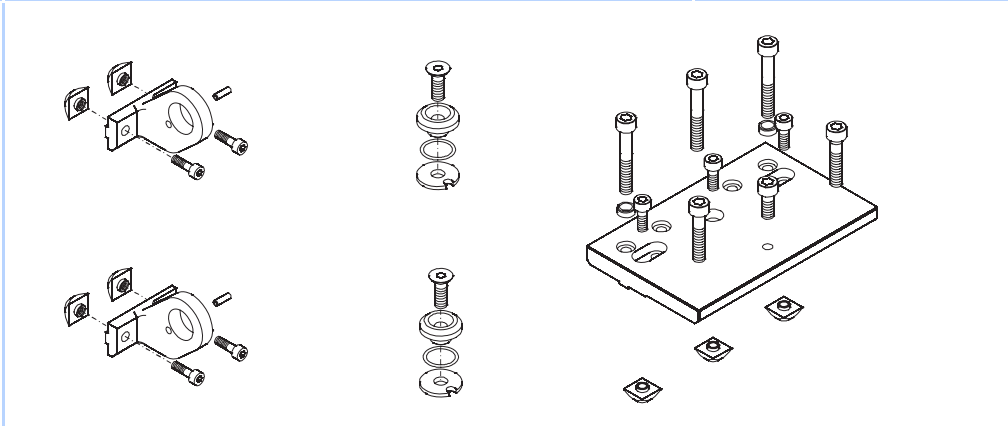
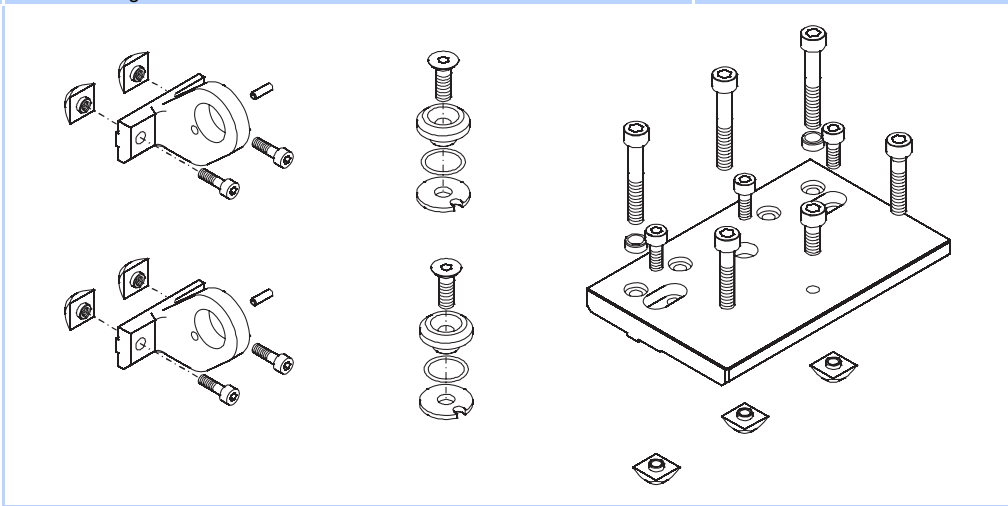
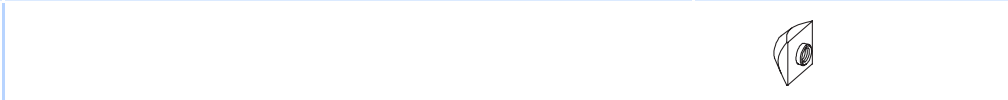
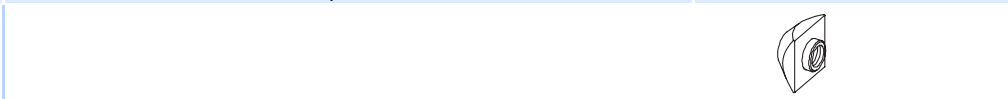
Stroke*	Item	Description	Part Number
100mm	G02-55x100	G02-55 Linear Guide, Length L=222	0150-5222

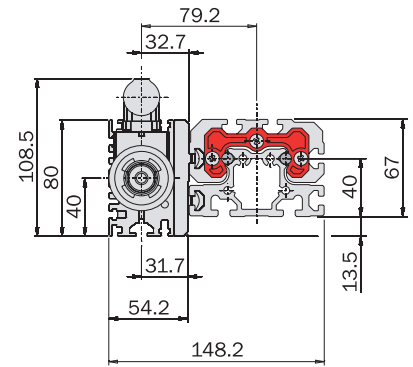
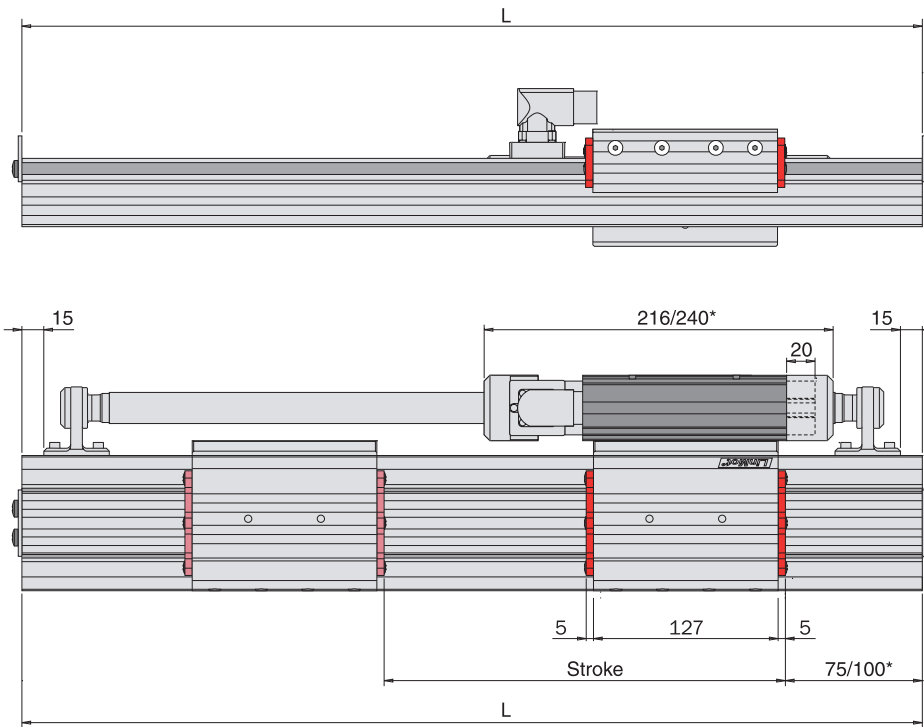
2. Stator

Stroke	Item	Description	Part Number
100mm	PS01-23x160-R	Linear motor stator, connector type R - IP67, Standard Winding	0150-1234
	PS01-23x160F-R	Linear motor stator, connector type R - IP67, Fast Winding	0150-1235
	PS01-23x160H-HP-R	Linear motor stator, connector type R - IP67, High Performance	0150-1254

3. Slider

Stroke*	Item	Description	Part Number
100mm	PL01-12x350/300	Standard Slider	0150-1322
	PL02-12x350/300	Heavy Duty Slider	0150-1323
	PL01-12x350/310-HP	High Performance Slider	0150-1522

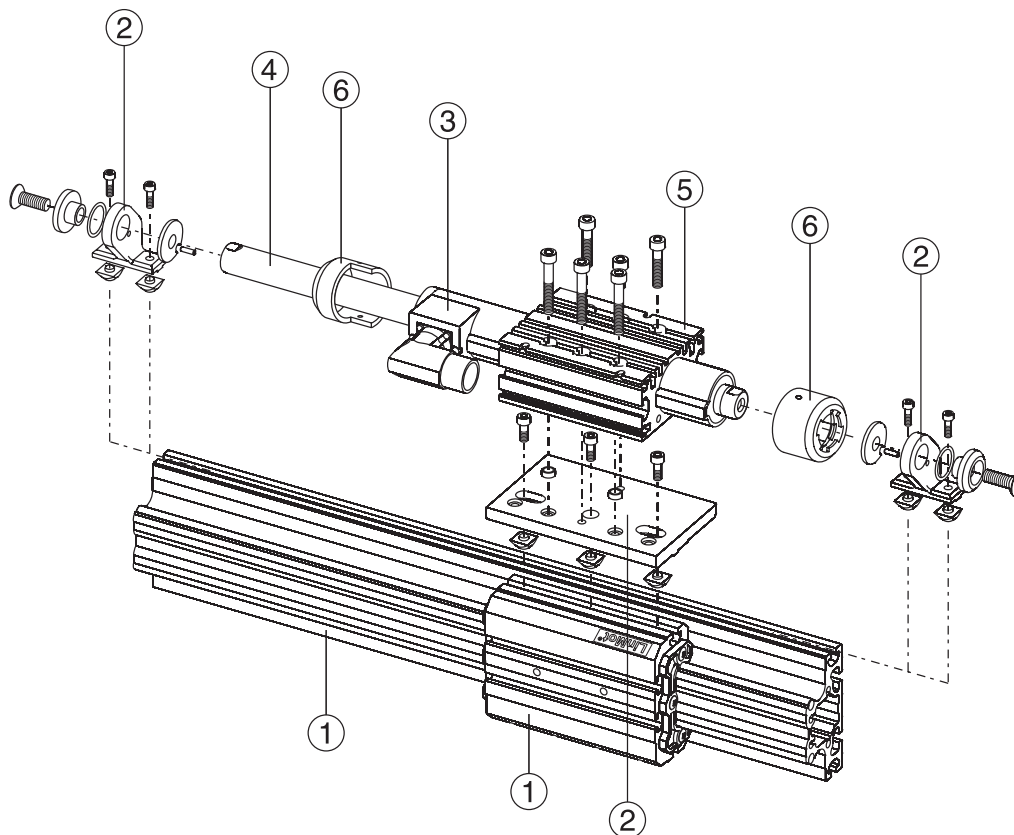
Item	Description	Part Number
G01-93/MK-37	Mounting Kit for Linear Motors P01-37x120 and P01-37x240	0150-5212
		
G01-93/MK-48	Mounting Kit for Linear Motors P01-48x240	0150-5213
		
G01-6/M4-100	T-nut 6mm with M4 thread, 100 pcs.	0150-3257
G01-6/M4-10	T-nut 6mm with M4 thread, 10 pcs.	0150-3259
		
G01-8/M6-100	T-nut 8mm with M6 thread, 100 pcs.	0150-3258
G01-8/M6-10	T-nut 8mm with M6 thread, 10 pcs.	0150-3260
		



FIRST ANGLE PROJECTION



* with Wipers



Ordering information

1. Guide

Stroke*	Item	Description	Part Number
570mm	G01-93x890	G01-93 Linear Guide, Length L=890	0150-5204
670mm	G01-93x990	G01-93 Linear Guide, Length L=990	0150-5205
770mm	G01-93x1090	G01-93 Linear Guide, Length L=1'090	0150-5206
970mm	G01-93x1290	G01-93 Linear Guide, Length L=1'290	0150-5207
1'170mm	G01-93x1490	G01-93 Linear Guide, Length L=1'490	0150-5208
1'370mm	G01-93x1690	G01-93 Linear Guide, Length L=1'690	0150-5209

2. Mounting Kit

Stroke	Item	Description	Part Number
all	G01-93/MK-37	Mounting Kit for P01-37x120 and P01-37x240	0150-5212

3. Stator

Stroke	Item	Description	Part Number
all	PS01-37x120-C	Linear motor stator, connector type C - IP67	0150-1223
all	PS01-37x120F-HP-C	Linear motor stator, connector type C - IP67, high performance	0150-1251

4. Slider

Stroke*	Item	Description	Part Number
570mm	PL01-20x800/720	Standard Slider	0150-1334
	PL01-20x800/740-HP	High Performance Slider	0150-1512
670mm	PL01-20x900/820	Standard Slider	0150-1336
	PL01-20x900/840-HP	High Performance Slider	0150-1513
770mm	PL01-20x1000/920	Standard Slider	0150-1338
	PL01-20x1000/940-HP	High Performance Slider	0150-1514
970mm	PL01-20x1200/1120	Standard Slider	0150-1340
	PL01-20x1200/1140-HP	High Performance Slider	0150-1515
1'170mm	PL01-20x1400/1320	Standard Slider	0150-1342
	PL01-20x1400/1340-HP	High Performance Slider	0150-1516
1'370mm	PL01-20x1600/1520	Standard Slider	0150-1344
	PL01-20x1600/1540-HP	High Performance Slider	0150-1517

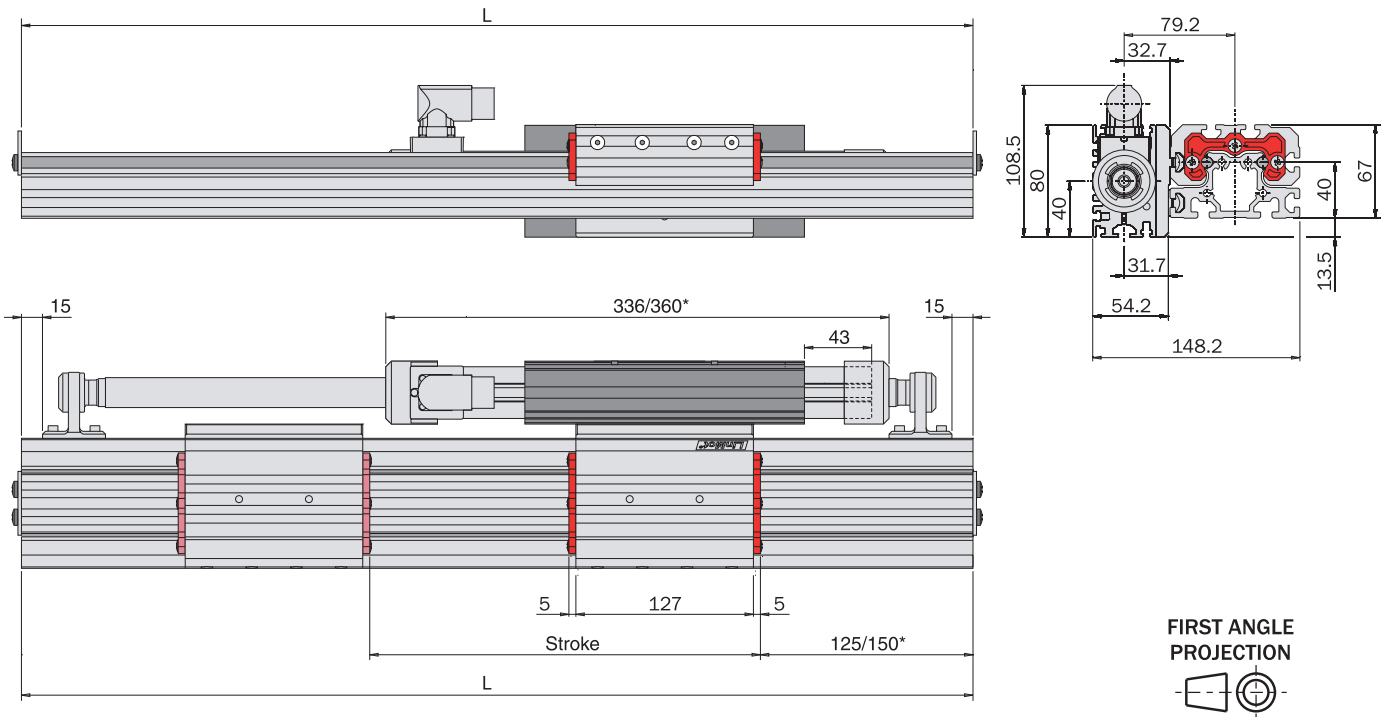
5. Flange

Stroke	Item	Description	Part Number
-	PF02-37x140	Flange 37x140mm	0150-2105

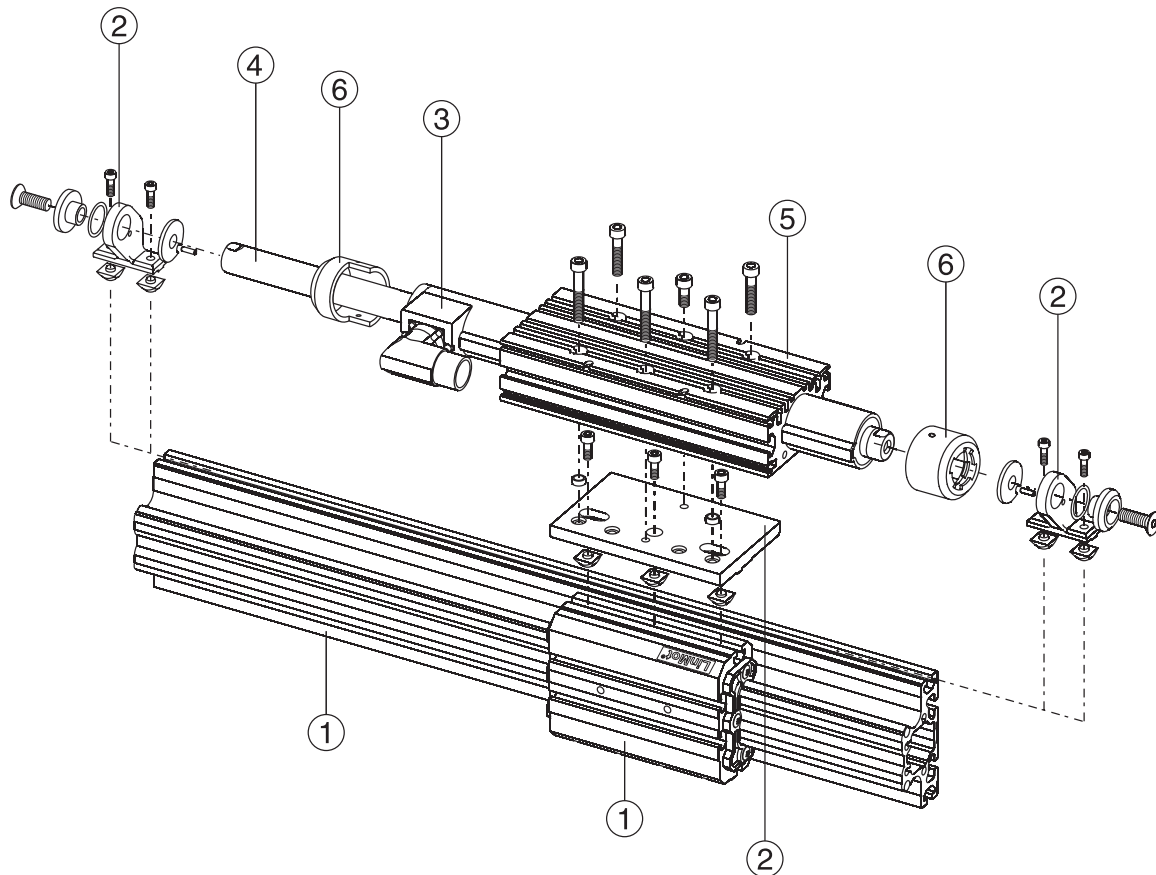
6. Wipers

Stroke	Item	Description	Part Number
-	PA01-37/20-F	Wiper for PS01-37x...(front wiper)	0150-3126
-	PA01-37/20-R	Wiper for PS01-37x...(-C rear wiper)	0150-3201

* maximum Stroke will be reduced by 50mm, if Wipers are used



* with Wipers



Ordering information

1. Guide

Stroke*	Item	Description	Part Number
460mm	G01-93x890	G01-93 Linear Guide, Length L=890	0150-5204
560mm	G01-93x990	G01-93 Linear Guide, Length L=990	0150-5205
660mm	G01-93x1090	G01-93 Linear Guide, Length L=1'090	0150-5206
860mm	G01-93x1290	G01-93 Linear Guide, Length L=1'290	0150-5207
1'060mm	G01-93x1490	G01-93 Linear Guide, Length L=1'490	0150-5208
1'260mm	G01-93x1690	G01-93 Linear Guide, Length L=1'690	0150-5209

2. Mounting Kit

Stroke	Item	Description	Part Number
all	G01-93/MK-37	Mounting Kit for P01-37x120 and P01-37x240	0150-5212

3. Stator

Stroke	Item	Description	Part Number
all	PS01-37x240-C	Linear motor stator, connector type C - IP67, Standard Winding	0150-1224
all	PS01-37x240F-C	Linear motor stator, connector type C - IP67, Fast Winding	0150-1225
all	PS01-37x240H-HP-C	Linear motor stator, connector type C - IP67, High Performance	0150-1257

4. Slider

Stroke*	Item	Description	Part Number
460mm	PL01-20x800/720	Standard Slider	0150-1334
	PL01-20x800/740-HP	High Performance Slider	0150-1512
560mm	PL01-20x900/820	Standard Slider	0150-1336
	PL01-20x900/840-HP	High Performance Slider	0150-1513
660mm	PL01-20x1000/920	Standard Slider	0150-1338
	PL01-20x1000/940-HP	High Performance Slider	0150-1514
860mm	PL01-20x1200/1120	Standard Slider	0150-1340
	PL01-20x1200/1140-HP	High Performance Slider	0150-1515
1'060mm	PL01-20x1400/1320	Standard Slider	0150-1342
	PL01-20x1400/1340-HP	High Performance Slider	0150-1516
1'260mm	PL01-20x1600/1520	Standard Slider	0150-1344
	PL01-20x1600/1540-HP	High Performance Slider	0150-1517

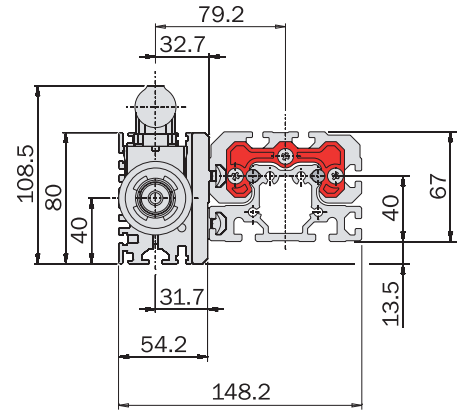
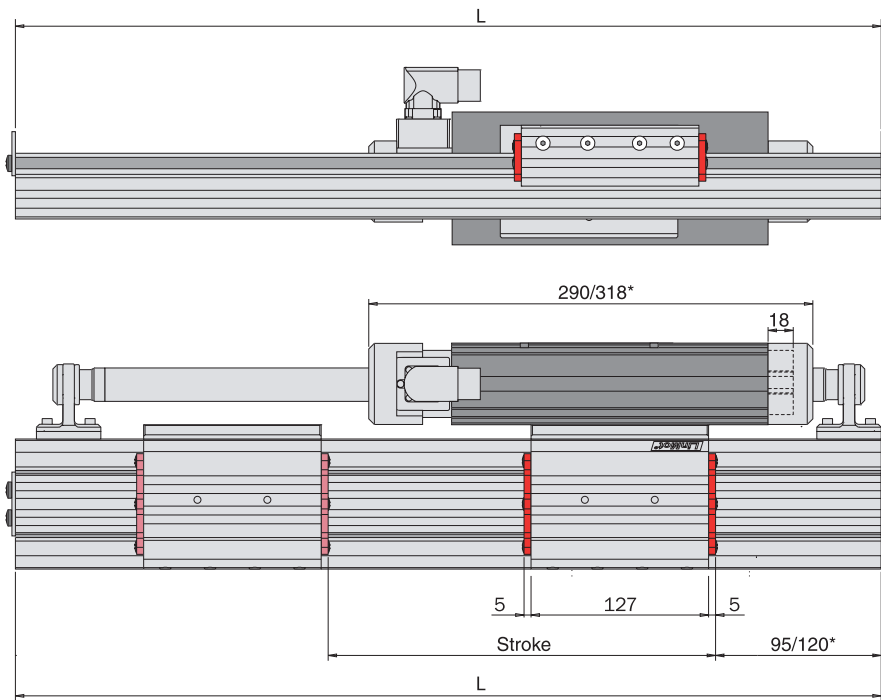
5. Flange

Stroke	Item	Description	Part Number
all	PF02-37x200	Flange 37x200mm	0150-1999

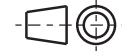
6. Wipers

Stroke	Item	Description	Part Number
all	PA01-37/20-F	Wiper for PS01-37x...(-C front wiper)	0150-3126
all	PA01-37/20-R	Wiper for PS01-37x...(-C rear wiper)	0150-3201

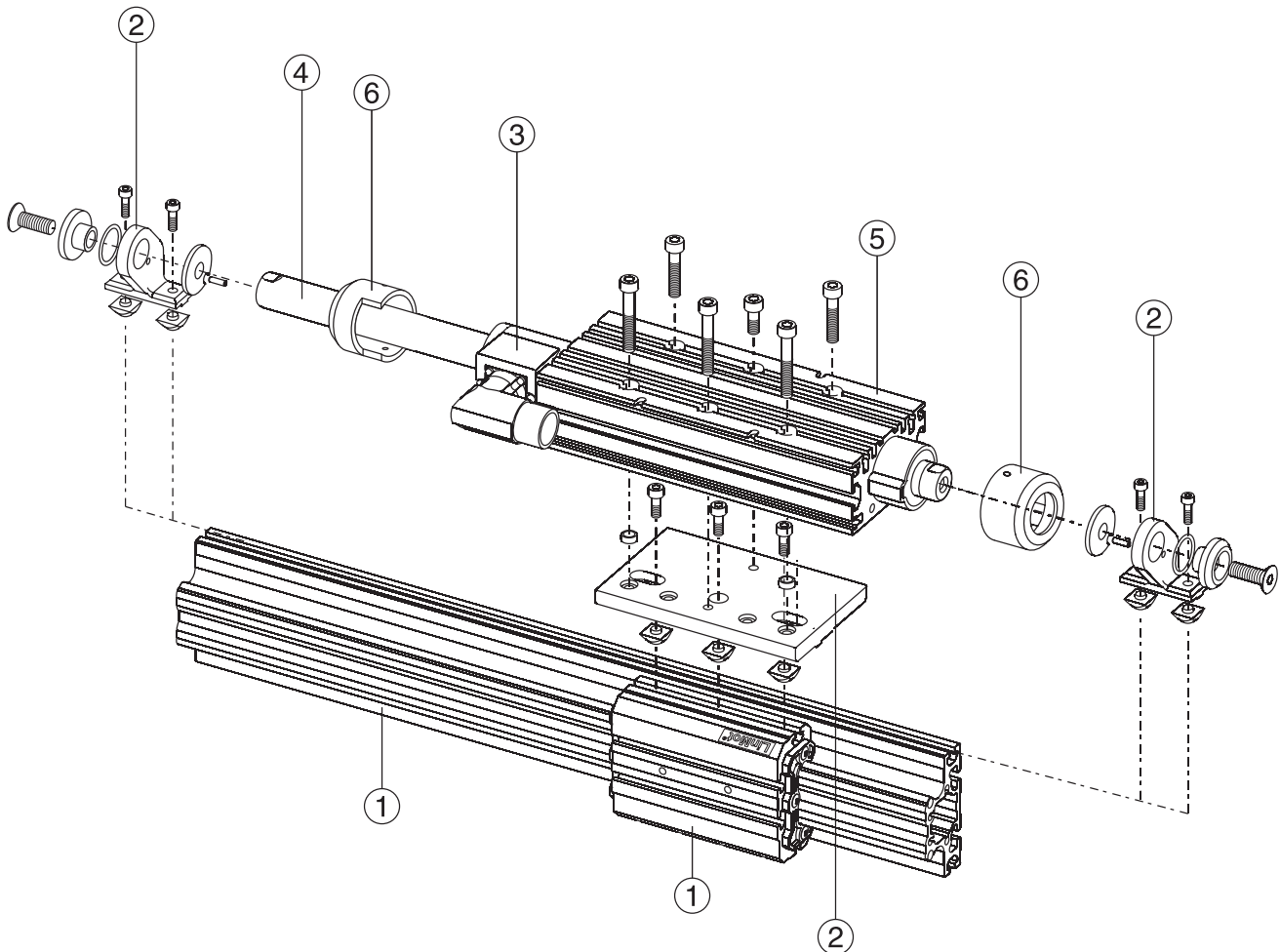
* maximum Stroke will be reduced by 50mm, if Wipers are used



FIRST ANGLE PROJECTION



* with Wipers



Ordering information

1. Guide

Stroke*	Item	Description	Part Number
500mm	G01-93x890	G01-93 Linear Guide, Length L=890	0150-5204
620mm	G01-93x990	G01-93 Linear Guide, Length L=990	0150-5205
710mm	G01-93x1090	G01-93 Linear Guide, Length L=1'090	0150-5206
920mm	G01-93x1290	G01-93 Linear Guide, Length L=1'290	0150-5207
1'100mm	G01-93x1490	G01-93 Linear Guide, Length L=1'490	0150-5208
1'310mm	G01-93x1690	G01-93 Linear Guide, Length L=1'690	0150-5209
1'520mm	G01-93x1890	G01-93 Linear Guide, Length L=1'890	0150-5210
1'700mm	G01-93x2090	G01-93 Linear Guide, Length L=2'090	0150-5211

2. Mounting Kit

Stroke	Item	Description	Part Number
all	G01-93/MK-48	Mounting Kit for P01-48x240	0150-5213

3. Stator

Stroke	Item	Description	Part Number
all	PS01-48x240-C	Linear motor stator, connector type C - IP67, Standard Winding	0150-1219
all	PS01-48x240F-C	Linear motor stator, connector type C - IP67, Fast Winding	0150-1220

4. Slider

Stroke*	Item	Description	Part Number
500mm	PL01-28x800/720	Standard Slider	0150-1385
620mm	PL01-28x920/840	Standard Slider	0150-1386
710mm	PL01-28x1010/930	Standard Slider	0150-1387
920mm	PL01-28x1220/1140	Standard Slider	0150-1388
1'100mm	PL01-28x1400/1320	Standard Slider	0150-1389
1'310mm	PL01-28x1610/1530	Standard Slider	0150-1390
1'520mm	PL01-28x1820/1740	Standard Slider	0150-1395
1'700mm	PL01-28x2000/1920	Standard Slider	0150-1396

5. Flange

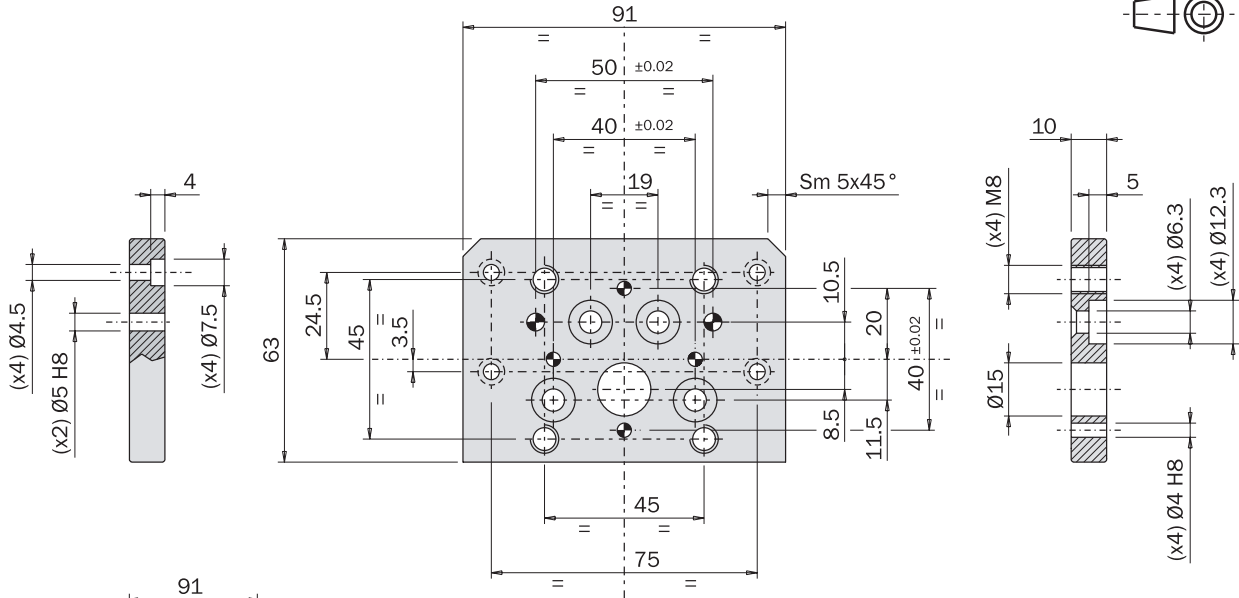
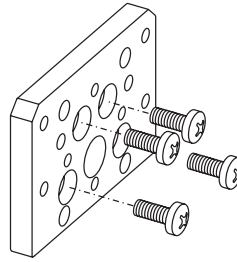
Stroke	Item	Description	Part Number
all	PF02-48x226	Flange 48x226mm	0150-2108

6. Wipers

Stroke	Item	Description	Part Number
all	PA01-48/28-F	Wiper for PS01-48x...(front wiper)	0150-3127
all	PA01-48/28-R	Wiper for PS01-48x...(-C rear wiper)	0150-3202

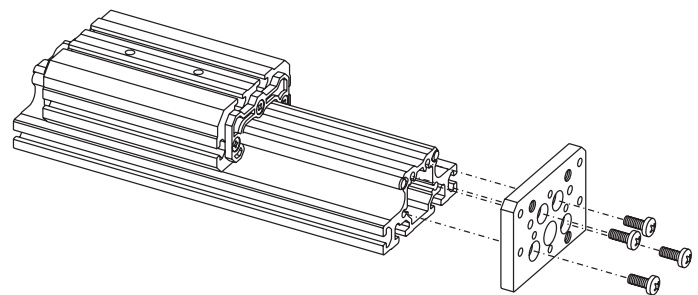
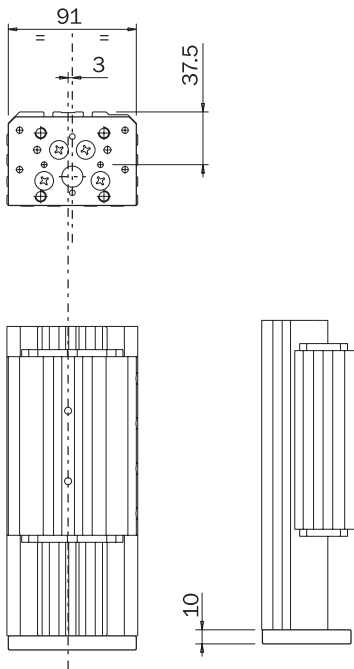
* maximum Stroke will be reduced by 50mm, if Wipers are used.

It must be fixed at the end side of the aluminium profile, by four screws (supplied) and it makes possible to mount directly a second G01-93 guidance. It can be used also to mount other components.



FIRST ANGLE PROJECTION

Weight: 137 g

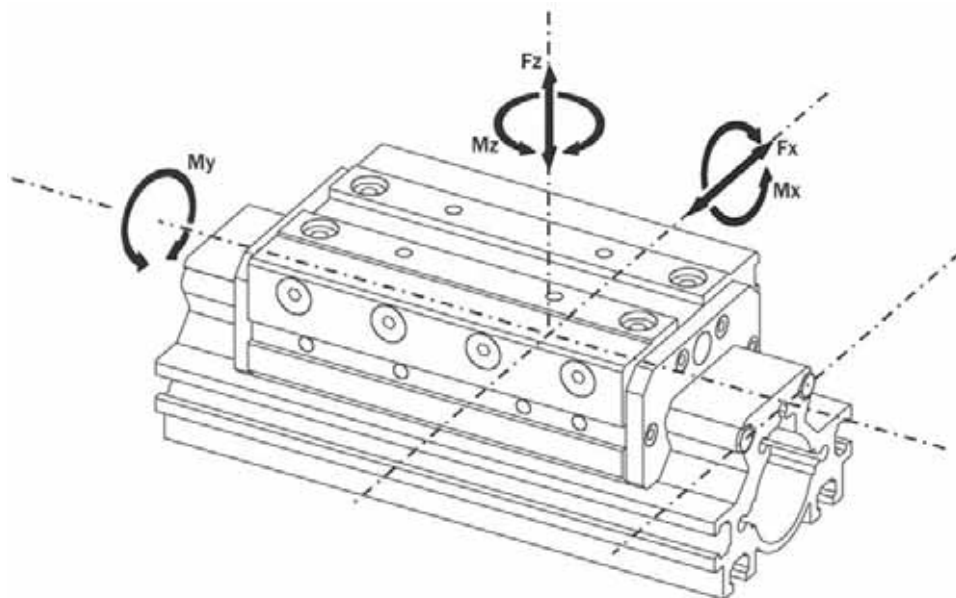


Ordering Information

Item	Description	Part Number
G01-93 end plate	End plate for Linear Guides G01-93	0150-3261

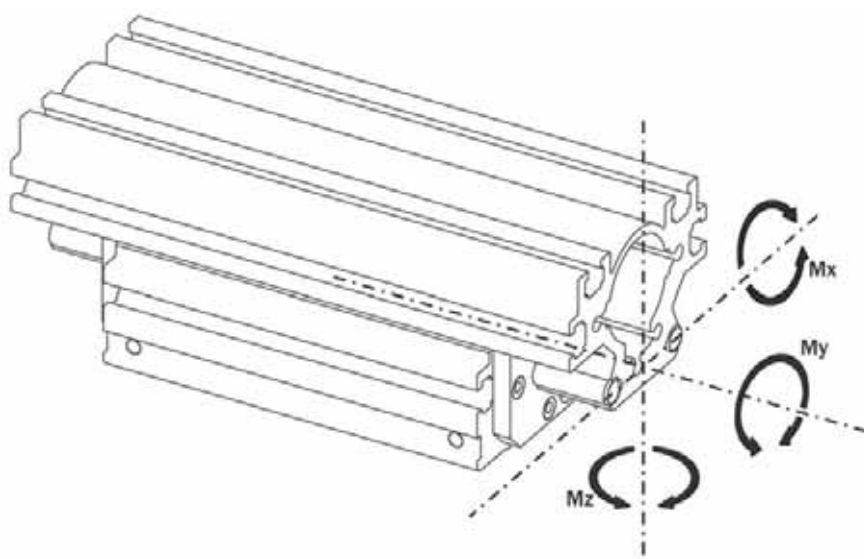


Excessive loads can damage the unit, cause functioning troubles and endanger the safety of the operator. The load factor LF must be lower than 1.

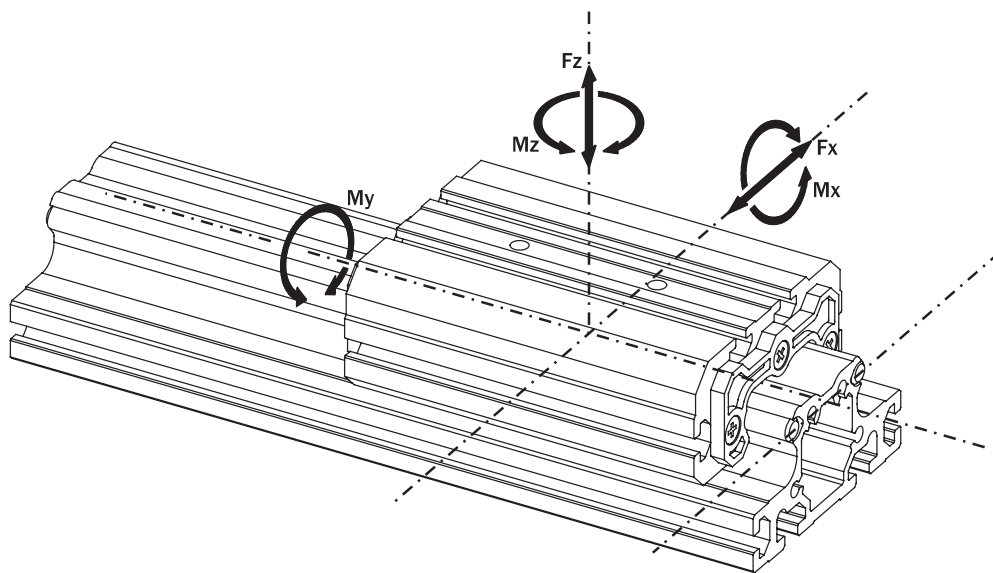


$$LF = \frac{F_x}{F_{x \max}} + \frac{F_z}{F_{z \max}} + \frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} \leq 1$$

	Max
Fx	1200N
Fz	1200N
Mx	20Nm
My	15Nm
Mz	20Nm

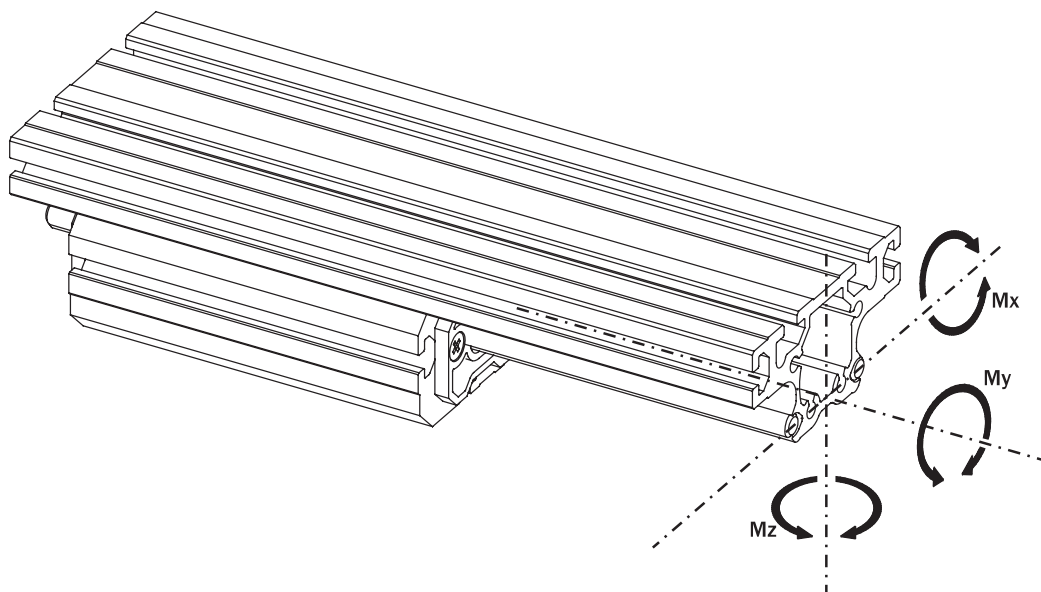


Excessive loads can damage the unit, cause functioning troubles and endanger the safety of the operator. The load factor LF must be lower than 1.

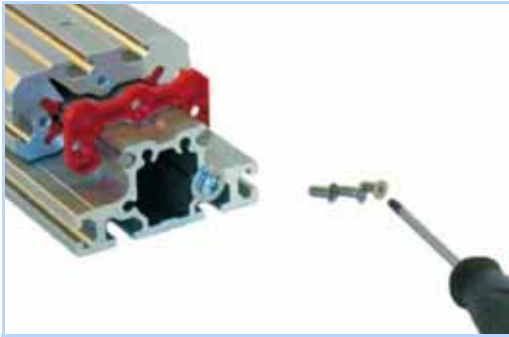


$$LF = \frac{F_x}{F_{x \max}} + \frac{F_z}{F_{z \max}} + \frac{M_x}{M_{x \max}} + \frac{M_y}{M_{y \max}} + \frac{M_z}{M_{z \max}} \leq 1$$

	Max
Fx	2500N
Fz	2500N
Mx	56Nm
My	50Nm
Mz	56Nm



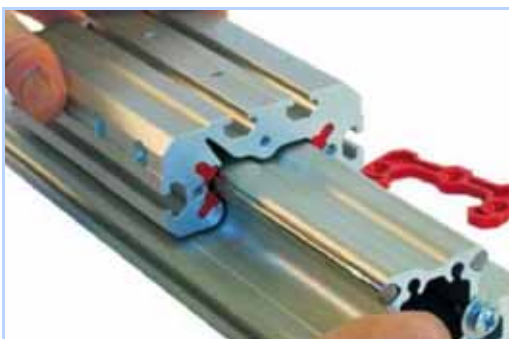
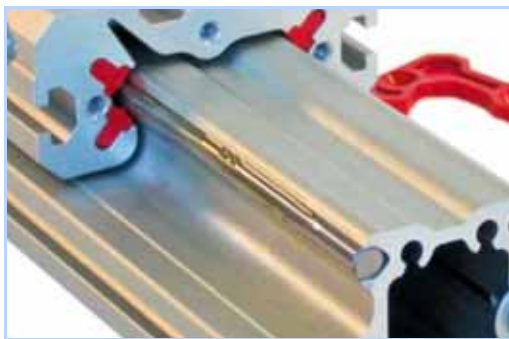
Periodically check the steel bars and lubricate when dry. The suitable grease is available in 90 grams tubes.
Ordering code: LU05-90.



Remove the three screws and then the red plastic plate



Lubricate the steel bars



Move the carrier to distribute the lubricant in the ball bearings

Ordering Information

Item	Description	Part Number
LU05-90	Lubricant for G01 Linear Guides (90gr)	0150-2141

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