

# Gliding Assemblies



» A simple solution  
for manual  
positioning tasks. «

Our adjusting units (VST) are gliding assemblies in which the different guide components, the profile and the carriages operate on gliding elements rather than being separated by roller bearings. The large contact surfaces and special coating make the gliding assemblies virtually maintenance free. The adjusting units can be supplied in different shapes and combinations as required.

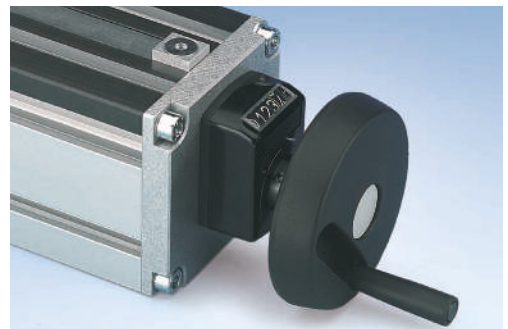
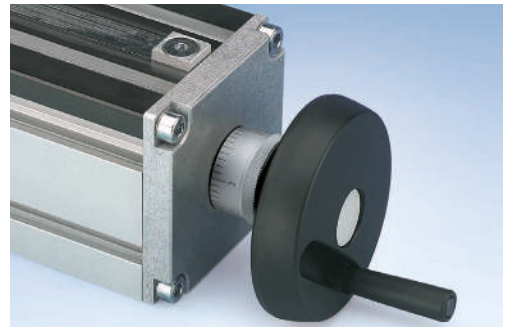
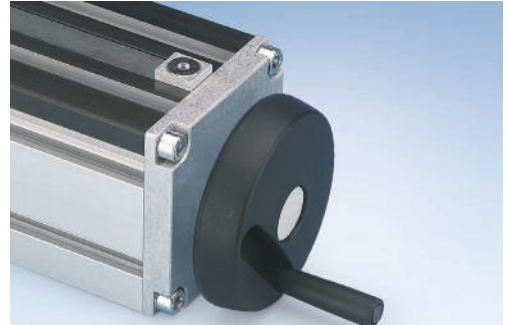
The two basic sizes of adjusting unit use mk 2015 (50x50) and mk 2011 (100x100) aluminium profiles as the profiles. A high-quality coating is mechanically applied to the contact surfaces to ensure good gliding properties and a wear-resistant surface. The standard version of the adjusting units is equipped with ball-bearing-mounted trapezoidal threaded spindles with POM nuts, which are protected from dirt by a stainless steel cover. The nuts, the bearing and the gliding assembly are low maintenance. Custom modifications are available on request, e.g. rust-proof spindles, bronze trapezoidal nuts, ball screws or motorised drives.

The position of the slide carriages can be adjusted with different operating options. When using the adjusting unit with a handwheel, you turn the wheel manually and cannot view the adjustment. When using the adjusting unit with a handwheel and scaling, the adjustment can be viewed on the scaling. In the variant of the adjusting unit with a handwheel and mechanical digital display, the adjustment can be viewed on the digital display.

If requested, the adjusting units can also be operated with a motor. The maximum speed is  $v = 1 \text{ m/min}$ .

## Features of mk Gliding Assemblies

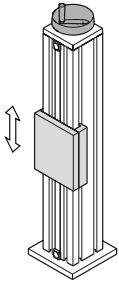
- For applications that require manual adjustment
- High static load capacity
- Low-maintenance
- Good dry-running characteristics
- Good damping
- Compact design
- Low-noise running



# Gliding Assemblies

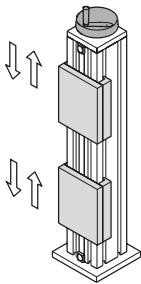
## Designs

Adjusting unit with one slide carriage

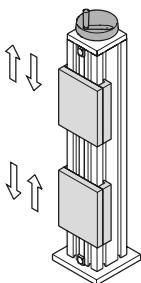


Adjusting unit with two slide carriages (even adjustment)

Independently adjustable lower carriages available as an option

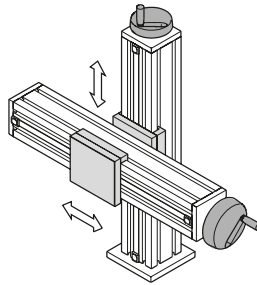


Adjusting unit with two slide carriages (even adjustment)



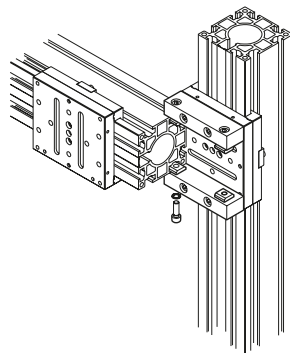
## Combinations

A connecting kit lets you combine two adjusting units into one two-axis system.



Connecting kit for cross-VST 2015  
**B46.07.020**

Connecting kit for cross-VST 2011  
**B46.07.021**



## Clamping Levers and Wipers

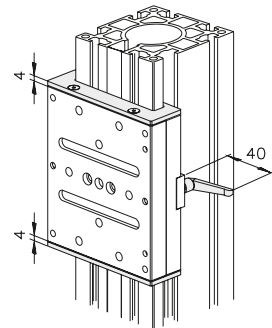
The felt wiper prevents solid objects from entering between the slide carriages and guide. It can easily be bolted onto the standard slide carriages as an accessory.

In the standard system, the slide carriage is clamped using a clamping plate that is fastened by tightening a screw. This can also be done using an optional clamping lever.

Felt wiper system 2015  
**B03.00.011**

Felt wiper system 2011  
**B03.00.012**

Clamping lever  
**K110030061**



## Sample order

Adjusting unit	VST 2011-H		
Item no.	B85.00.020		
Length	L = ..... mm		
Stroke	H = ..... mm		
Operating option	Handwheel	Scaling	Digital*
Base plate	Version A	Version B	
Felt wiper	Yes	No	
Clamping lever	Yes	No	

For the adjusting unit with two slide carriages with even adjustment, please specify whether it uses one or two trapezoidal nuts.

With two trapezoidal nuts, Lx = ..... mm (+\_ 2 mm)

\*For the digital display, please specify "Front" or "Top" for the reading direction and display of numbers.

# Gliding Assemblies

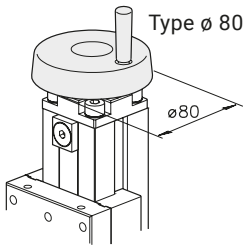
## Adjusting Units VST 2015

Mounting profile: mk 2015 (50 x 50 mm)  
 Trapezoid-thread spindle: Tr 16 x 4  
 Axial spindle load: 500 N  
 Standard lengths L: 250 mm, 500 mm,  
 750 mm and 1000 mm

The stroke per revolution is 4 mm,  
 the minimum stroke length is 10 mm,  
 and the maximum length L = 1400 mm.

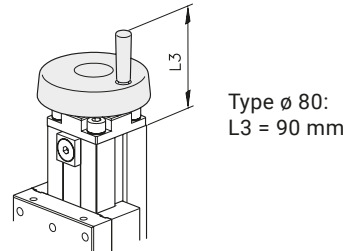


### Handwheel

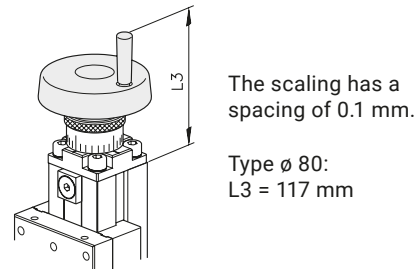


### Scaling

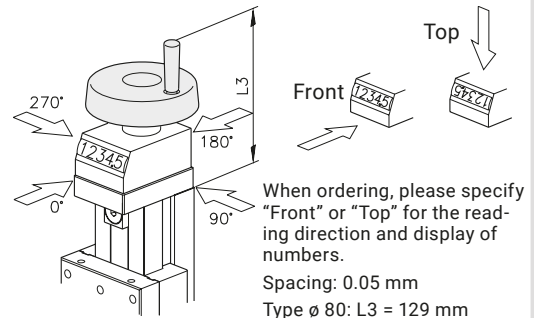
#### System 2015 without scale



#### System 2015 with scale

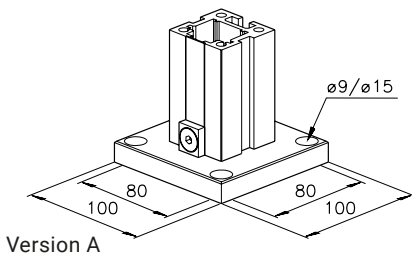
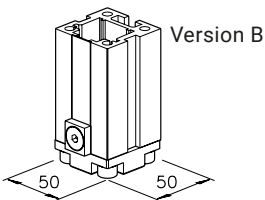


#### System 2015 with Mechanical Digital Display

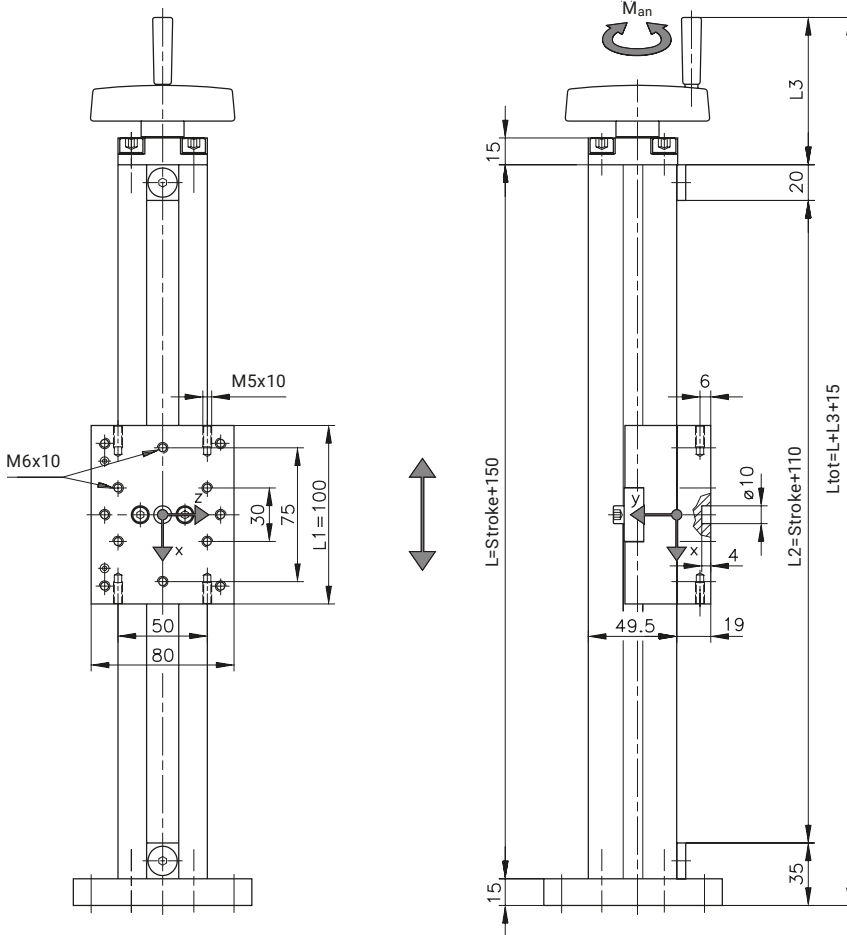


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### Base Plates



## VST 2015 with one Slide Carriage



### Designs

Design	Without scale	Scale	Digital display
Designation	VST 2015-H	VST 2015-S	VST 2015-D
Type	∅ 80	∅ 80	∅ 80
Item no.	<b>B85.00.015</b>	<b>B85.00.016</b>	<b>B85.00.017</b>

### Maximum load specifications for VST 2015

$F_y$ [N]	$F_z$ [N]	$M_x$ [Nm]	$M_y$ [Nm]	$M_z$ [Nm]	$M_{Drive}$ [Nm]	$n$ [min <sup>-1</sup> ]	$v$ [m/min]
750	750	25	25	25	2.5	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary

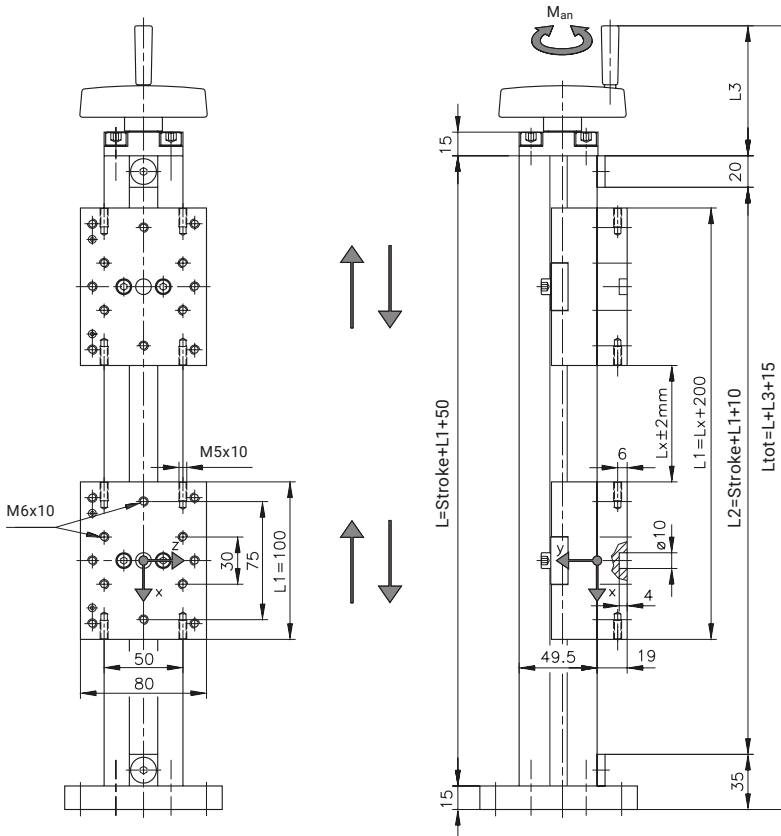
# Gliding Assemblies

## VST 2015 with two Synchronised or Independent Slide Carriages

Options:

VST with two trapezoidal nuts: the two slide carriages are synchronised (see the arrow directions)

VST with one trapezoidal nut: the lower slide carriages can be separately adjusted manually



### Designs

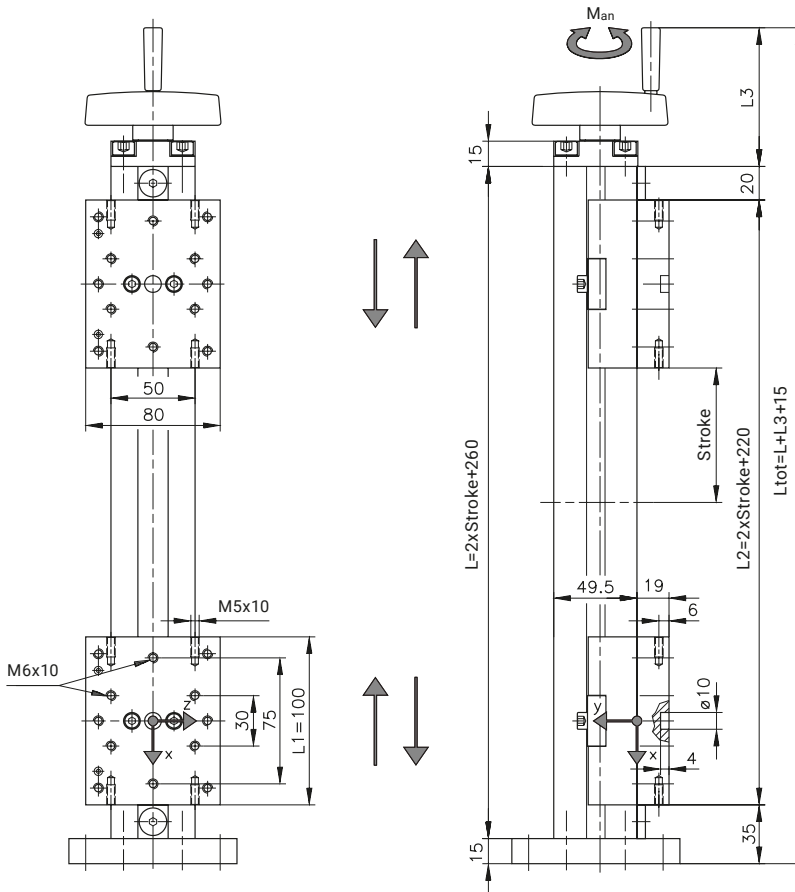
Design	Without scale	Scale	Digital display
Designation	VST 2015-H-2	VST 2015-S-2	VST 2015-D-2
Type	ø 80	ø 80	ø 80
Item no.	<b>B85.00.115</b>	<b>B85.00.116</b>	<b>B85.00.117</b>

### Maximum load specifications for VST 2015

$F_y^*$ [N]	$F_z^*$ [N]	$M_x^*$ [Nm]	$M_y^*$ [Nm]	$M_z^*$ [Nm]	$M_{Drive}$ [Nm]	$n$ [min <sup>-1</sup> ]	$v$ [m/min]
750	750	25	25	25	2.5	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary. \*Max. load specifications per slide carriage.

## VST 2015 with Two Synchronised Slide Carriages



### Designs

Design	Without scale	Scale	Digital display
Designation	VST 2015-H-G	VST 2015-S-G	VST 2015-D-G
Type	ø 80	ø 80	ø 80
Item no.	B85.00.215	B85.00.216	B85.00.217

### Maximum load specifications for VST 2015

F <sub>y</sub> *	F <sub>z</sub> *	M <sub>x</sub> *	M <sub>y</sub> *	M <sub>z</sub> *	M <sub>Drive</sub>	n	v
[N]	[N]	[Nm]	[Nm]	[Nm]	[Nm]	[min <sup>-1</sup> ]	[m/min]
750	750	25	25	25	2.5	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary. \*Max. load specifications per slide carriage.



# Gliding Assemblies

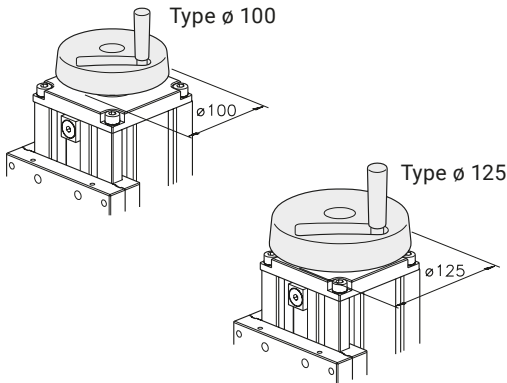
## Adjusting Units VST 2011



Mounting profile: mk 2011 (100 x 100 mm)  
 Trapezoid-thread spindle: Tr 20 x 4  
 Axial spindle load: 1000 N  
 Standard lengths L: 250 mm, 500 mm, 750 mm and 1000 mm

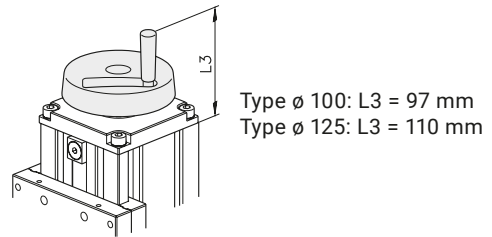
The stroke per revolution is 4 mm, the minimum stroke length is 10 mm, and the maximum length L = 1400 mm.

### Handwheel

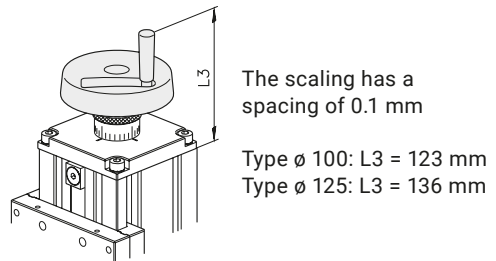


### Scaling

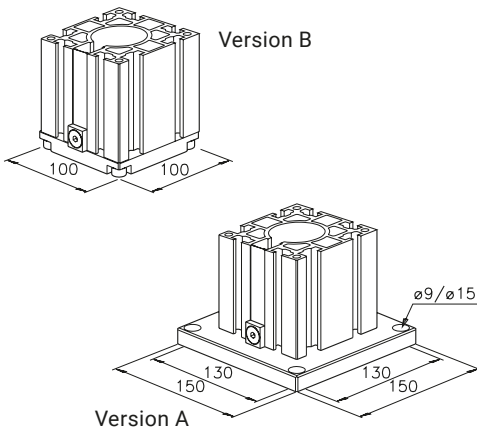
#### System 2011 without scale



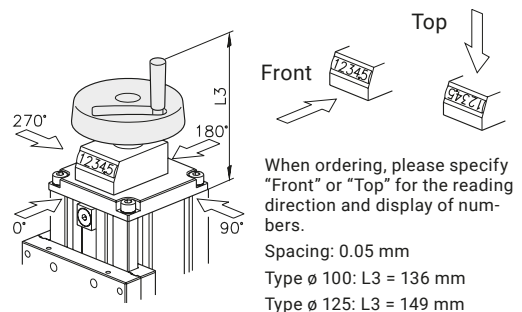
#### System 2011 with scale



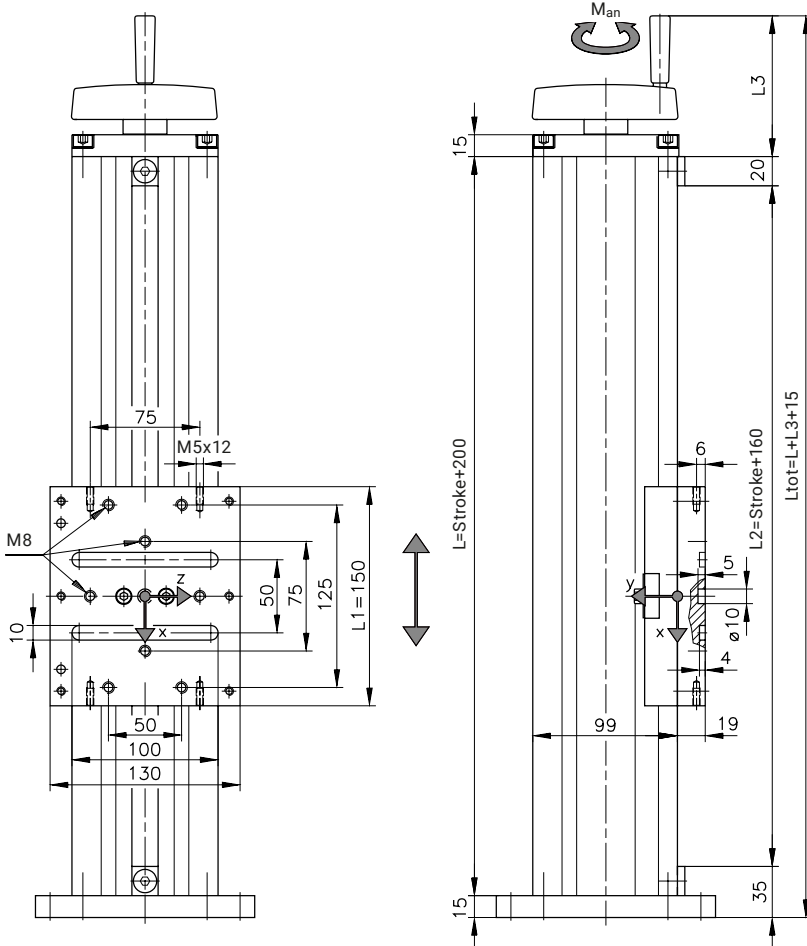
### Base Plates



#### System 2011 with Mechanical Digital Display



## VST 2011 with one Slide Carriage



### Designs

Design	Without scale		Scale		Digital display	
Designation	VST 2011-H	VST 2011-H	VST 2011-S	VST 2011-S	VST 2011-D	VST 2011-D
Type	∅ 100	∅ 125	∅ 100	∅ 125	∅ 100	∅ 125
Item no.	B85.00.020	B85.00.025	B85.00.021	B85.00.026	B85.00.022	B85.00.027

### Maximum load specifications for VST 2011

$F_y$ [N]	$F_z$ [N]	$M_x$ [Nm]	$M_y$ [Nm]	$M_z$ [Nm]	$M_{Drive}$ [Nm]	$n$ [min <sup>-1</sup> ]	$v$ [m/min]
2000	2000	75	100	100	6	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary.

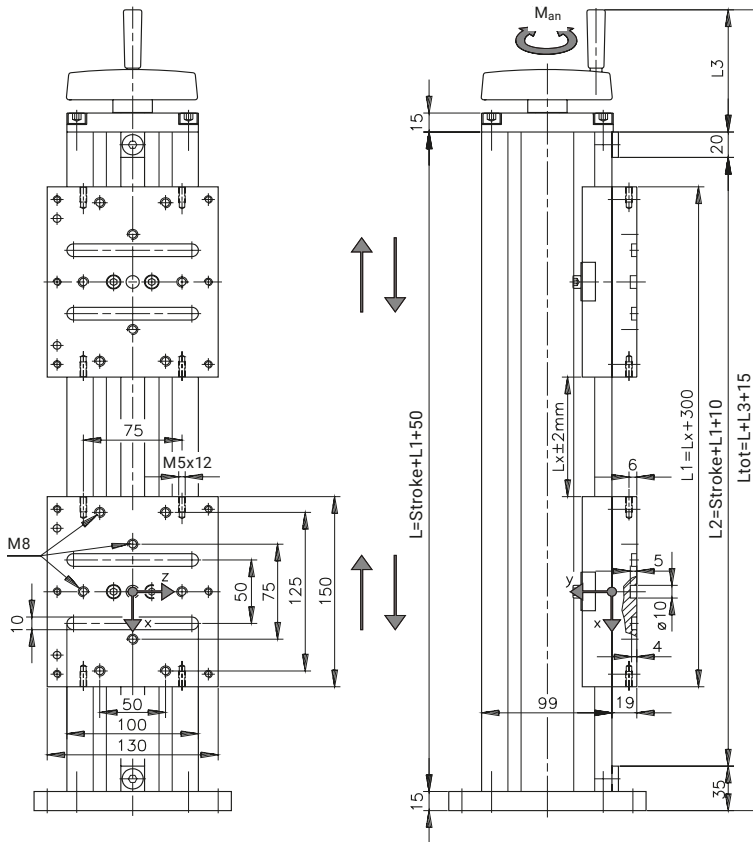
# Gliding Assemblies

## VST 2011 with Two Synchronised or Independent Slide Carriages

Options:

VST with two trapezoidal nuts: the two slide carriages are synchronised (see the arrow directions)

VST with one trapezoidal nut: the lower slide carriages can be separately adjusted manually



### Designs

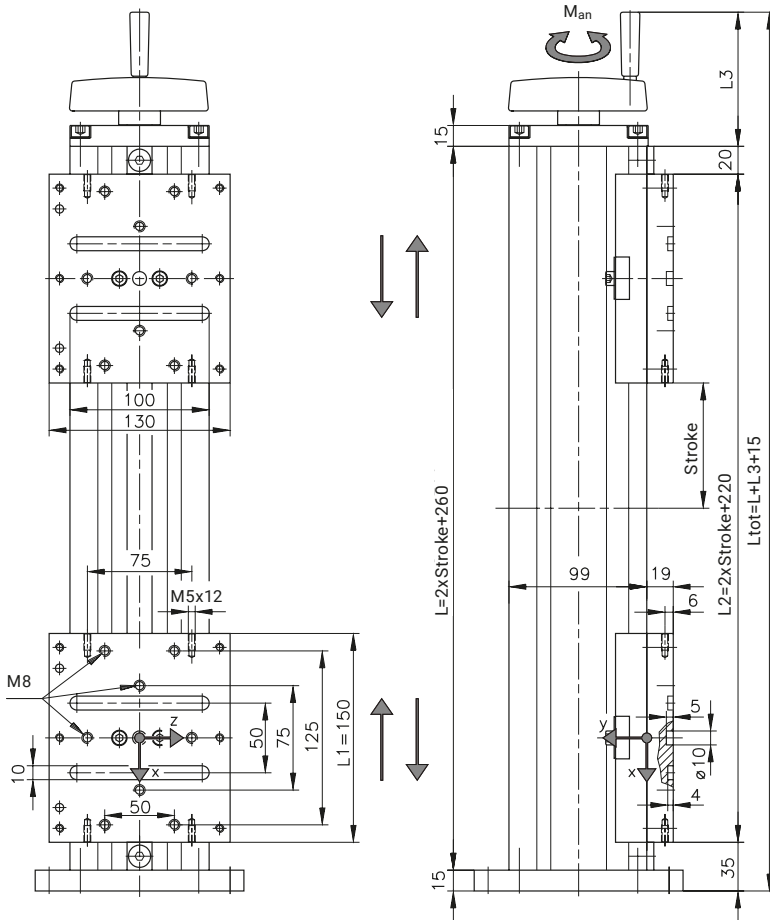
Design	Without scale		Scale		Digital display	
Designation	VST 2011-H-2	VST 2011-H-2	VST 2011-S-2	VST 2011-S-2	VST 2011-D-2	VST 2011-D-2
Type	∅ 100	∅ 125	∅ 100	∅ 125	∅ 100	∅ 125
Item no.	B85.00.120	B85.00.125	B85.00.121	B85.00.126	B85.00.122	B85.00.127

### Maximum load specifications for VST 2011

F <sub>y</sub> *	F <sub>z</sub> *	M <sub>x</sub> *	M <sub>y</sub> *	M <sub>z</sub> *	M <sub>Drive</sub>	n	v
[N]	[N]	[Nm]	[Nm]	[Nm]	[Nm]	[min <sup>-1</sup> ]	[m/min]
2000	2000	75	100	100	6	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary. \*Max. load specifications per slide carriage.

## VST 2011 with Two Synchronised Slide Carriages



### Designs

Design	Without scale		Scale		Digital display	
Designation	VST 2011-H-G	VST 2011-H-G	VST 2011-S-G	VST 2011-S-G	VST 2011-D-G	VST 2011-D-G
Type	∅ 100	∅ 125	∅ 100	∅ 125	∅ 100	∅ 125
Item no.	B85.00.220	B85.00.225	B85.00.221	B85.00.226	B85.00.222	B85.00.227

### Maximum load specifications for VST 2011

F <sub>y</sub> *	F <sub>z</sub> *	M <sub>x</sub> *	M <sub>y</sub> *	M <sub>z</sub> *	M <sub>Drive</sub>	n	v
[N]	[N]	[Nm]	[Nm]	[Nm]	[Nm]	[min <sup>-1</sup> ]	[m/min]
2000	2000	75	100	100	6	250	1

Check max. load specifications for slide carriages, and suitability for use if necessary. \*Max. load specifications per slide carriage.