

9.1 Frictionless Tables Type UCT



- 1 to multi-axis models; table components in steel or aluminum
- 2 Sizes
- Lengths from 300 to 3000 mm
- Strokes up to 2000 mm
- Linear Bearings Type MONORAIL
- With protective bellows

9.2 Material

Available in either steel or aluminum version

9.3 Standard Model

The UCT is available in the sizes UCT 15 and 25 and includes the corresponding profile guideway. In essence, they differ with respect to their maximum dimensions and by their different load ratings. The UCT is only available with a U-bellows cover.

9.4 Overview Options

- Ballscrews in various pitches and precision classes
- Inductive limit switches and reference switches
- Linear measuring system, measuring steps 1 μm or 0.5 μm
- Central lubrication for carriages and ballscrew nut
- Coupling housing and coupling for customer specific motor

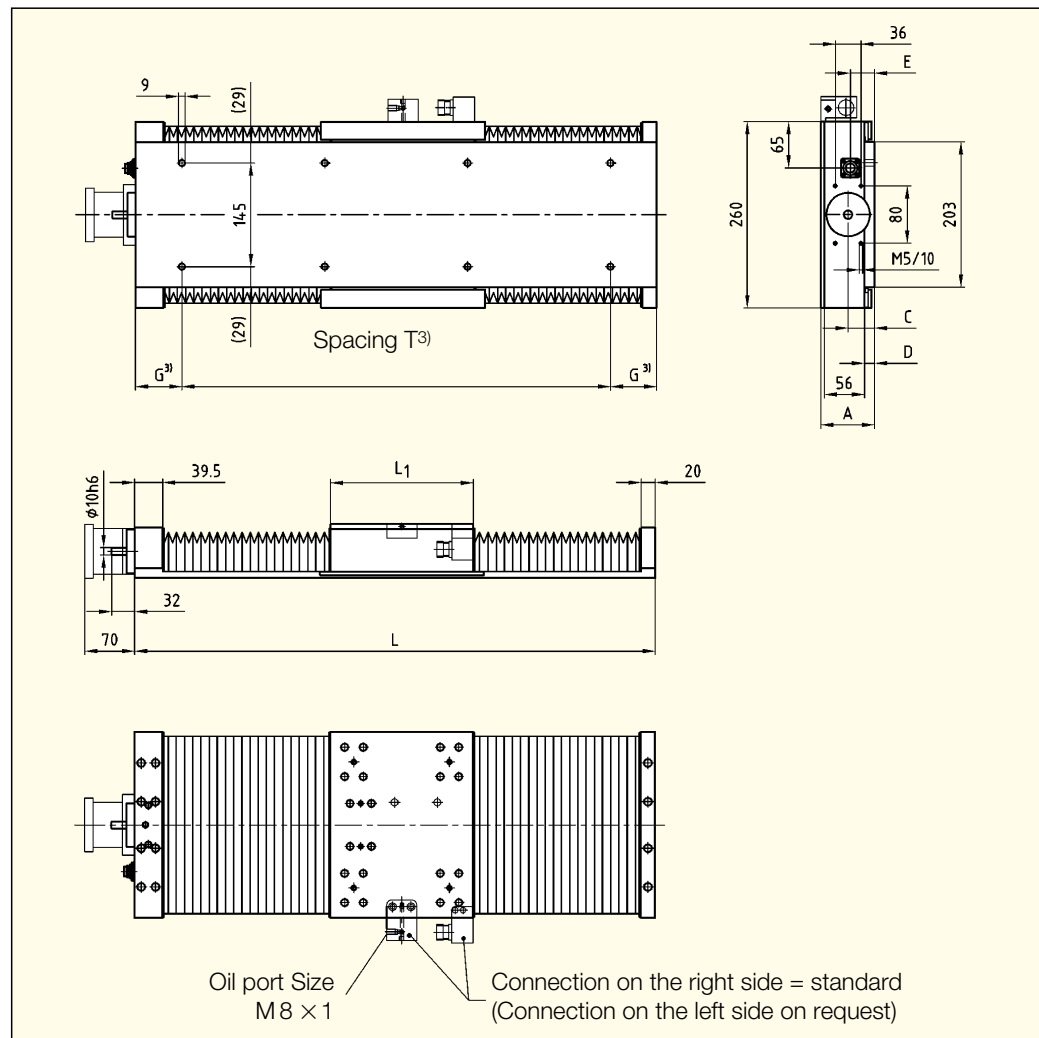
9.5 Special Model

Mounting holes in the upper table are made to user requirements.

9.6 Specifications UCT 15

Dimensions

The length L_1 and the width B of the upper part (or overall length) can be selected by the user himself in 10 mm steps. The smallest and largest possible dimensions are listed in the table on the right. For the total height A , the listed sizes are available.

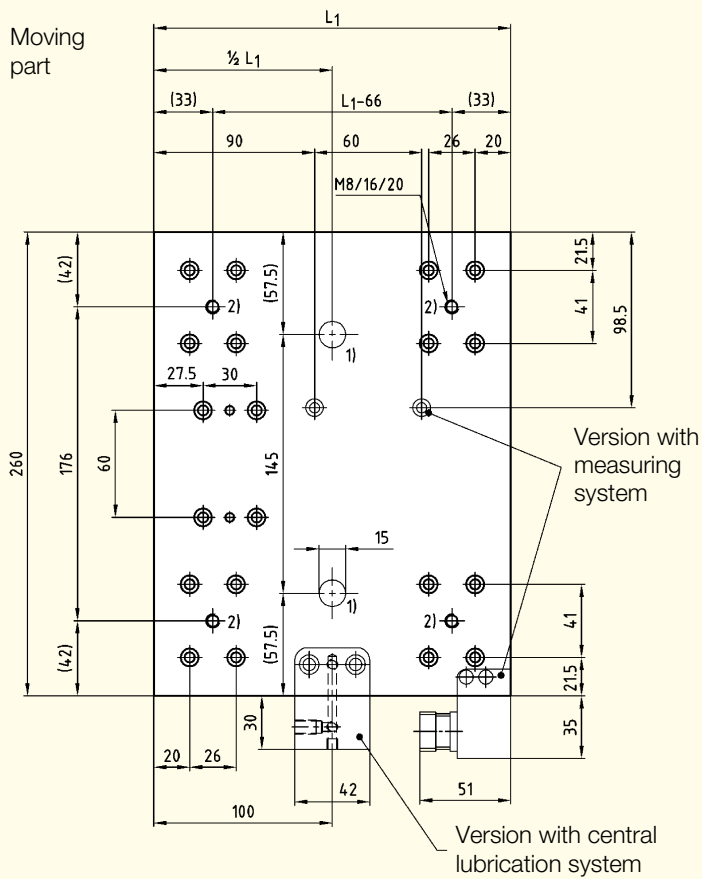


Limits UCT 15

Stroke	Length L	min. length of the moving part L_1	
Up to 2500	300–3000	without measuring system	140
		with measuring system	180
		with central lubrication	200
		with central lubrication and measuring system	200

All data in mm

- 1) Only with an effective stroke of ≤ 180 mm
- 2) 4 x M8 connection threads (different hole pattern on request)
- 3) Dimensions dependent on the length



width of the moving part B
260

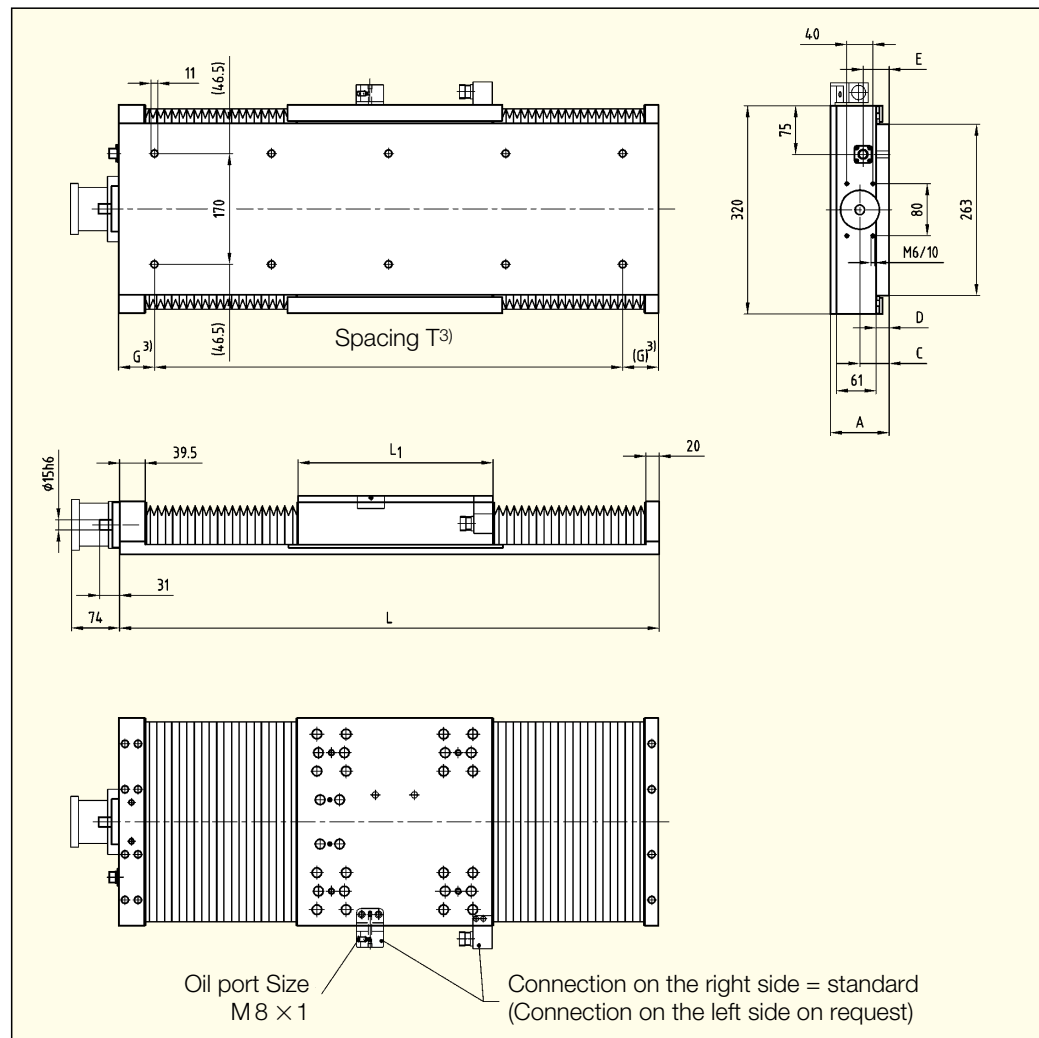
Total height A ± 0.2	base plate	moving part	C	D	E
75	30	25	37	14	34
80	30*	30*	37	14	34
90	35*	35*	42	19	39

*other versions on request

9.7 Specifications UCT 25

Dimensions

The length L_1 and the width B of the upper part (or overall length) can be selected by the user himself in 10 mm steps. The smallest and largest possible dimensions are listed in the table on the right. For the total height A , the listed sizes are available.



Limits UCT 25

Stroke	Length L	min. length of the moving part L_1	
Up to 2500	300–3000	without measuring system	200
		with measuring system	300
		with central lubrication	300
		with central lubrication and measuring system	300

All data in mm

¹⁾ Only with an effective stroke of ≤ 180 mm

²⁾ $4 \times M 10$ connection threads (different hole pattern on request)

³⁾ Dimensions dependent on the length

9.8 Options

Ballscrew

The tables are driven by playfree preloaded ballscrew and nut assemblies with single nut. The screw and nut assemblies are available in pitches of 5, 10 and 20 mm. The standard precision classes are 10 and 50 μm (micron), measured on a length of 300 mm.



Size	Ballscrew
UCT 15	\varnothing 20 mm
UCT 25	\varnothing 25 mm

Measuring system

Construction size	Type	Output signal/Signal period	Measuring steps
UCT 15/25	Heidenhain LS 406	$\sim 11 \mu\text{A}_{pp}/20 \mu\text{m}$	*1 μm and 0.5 μm
UCT 25	Heidenhain LS 476	\square TTL/5-fold-interpolation: 4 μm 10-fold-interpolation: 2 μm	1 μm 0.5 μm
	Heidenhain LS 486	1 $V_{ss}/20 \mu\text{m}$	*1 μm and 0.5 μm

9.9 Load rating and speed

Size	Load ratings (N)	
	C_0 (static load rating)	C (dynamic load rating)
UCT 15	40 000	20 000
UCT 25	180 000	80 000

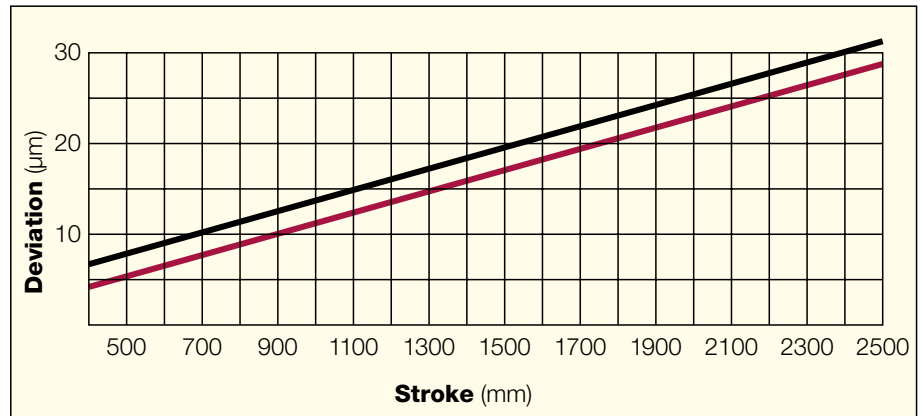
Load ratings for central load

Speed

– maximum 3 m/s (limitations through screw drive and position sensors may apply)

*the Interpolation electronic (EXE) will not be supplied

9.10 Acceptance Tolerances



— steel — aluminum (+ 2µm)

Horizontal and vertical straightness of stroke, measured in the center of the table.

9.11 UCT calculation program

Fit your UCT individually to your requirements and send us your inquiry by e-mail. The calculation program can be used on our Homepage www.schneeberger.com, menu SERVICES.

User name: mat
Password: table

Or send us your inquiry with the following supplementary sheet.

9.12 Supplementary sheet for UCT 15 and 25

Date:

Company:

Name:

Address:

Project no.:

Required delivery time: weeks

Dimensions

UCT 15

UCT 25

Usable stroke:

Quantity:

Length of **L1**:

mm

mm

Moving part **A**:

mm

Reference- and limit switches

None

Two limit switches

One reference switch and two limit switches

Measuring-System

None

LS 406/~11 μA_{pp} /20 μm

LS 476/TTL with 5-fold-interpolation: 4 μm^*

LS 476/TTL with 10-fold-interpolation: 2 μm^*

*only UCT 25

Material

Steel

Aluminum

Lubrication

Directly to carriage and ball screw nut

Central

Ballscrew

Pitch

None

5 mm

10 mm

20 mm

Precision class

10 μm

300 mm

50 μm

Attaching holes

Standard hole pattern in the upper table

Holes in the upper table according to the enclosed drawing

Mounting position:

Additional options

Coupling housing and coupling for customized motor according to the enclosed drawing

Reference face at the lower base

Application:

Remarks: