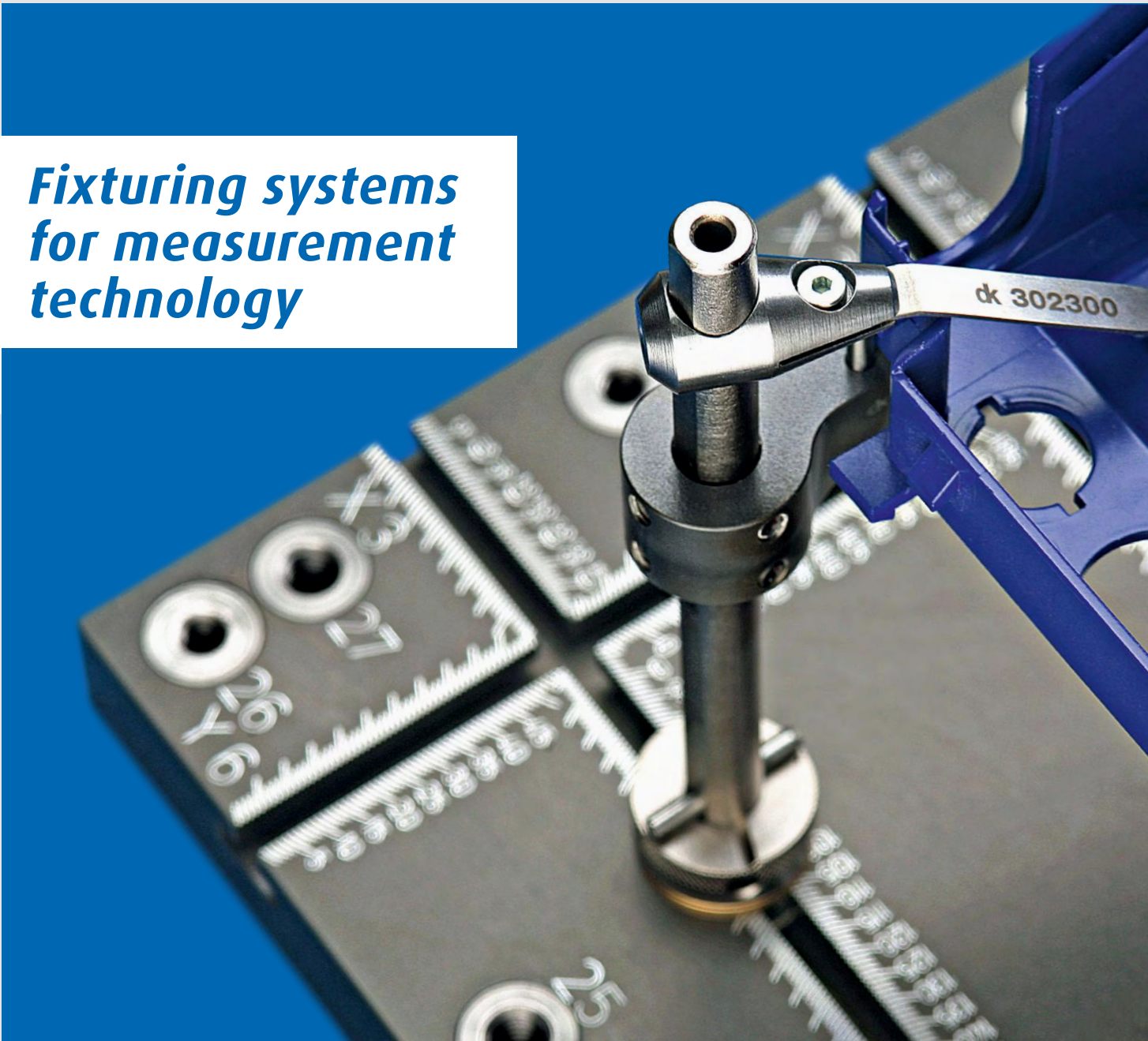


*Fixturing systems*

*Fixturing systems  
for measurement  
technology*



## Recommended usage

Our range includes some 900 products. We have divided these into several clear categories. Please consult the table of contents on the right-hand page.

The symbols and the illustration of two "modular structures" will also make it easier to use the product catalogue:

### » **Symbol captions**

The last page of this catalogue contains a short fold-out which explains all symbols in detail. The symbols show the possible combinations and how to make the individual base, structural and clamping elements into complete fixturing systems.

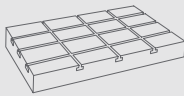
### » **Modular structure**

The base, clamping and structural elements that can be combined are shown in examples at the start of the product section. The modular structure of *SPANNFIX* can be found on pages 12–13 and *SCHIENENFIX* on pages 154–155.

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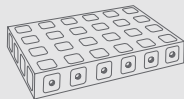
004



### **SPANNFIX**

*Fixturing systems for tactile measurement*

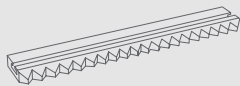
006



### **QUADERFIX**

*Fixturing system for tactile measurement – Quader elements*

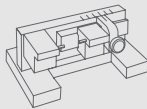
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### **SCHIENENFIX**

*Fixturing systems for optical measurement – multi-sensory*

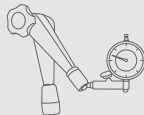
150



### **MICROFIX**

*Fixturing solutions for micro parts from 0.3 mm to 10 mm*

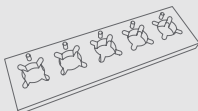
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### **MESSFIX**

*Dial gauges, squares, magnet stands, etc.*

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### **SPEZIALFIX**

*Customer-specific fixturing devices*

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Article numbers and notes

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## Company

The dk Fixiersysteme company specialises in the design, manufacture and sale of fixturing systems for measurement technology. We developed the modular *SPANNFIX* concept in 1990, and further innovations followed continuously. A wide professional range of modular fixturing elements for optical and tactile measurement developed. The modular *SCHIENENFIX* system has since put us among the market leaders.

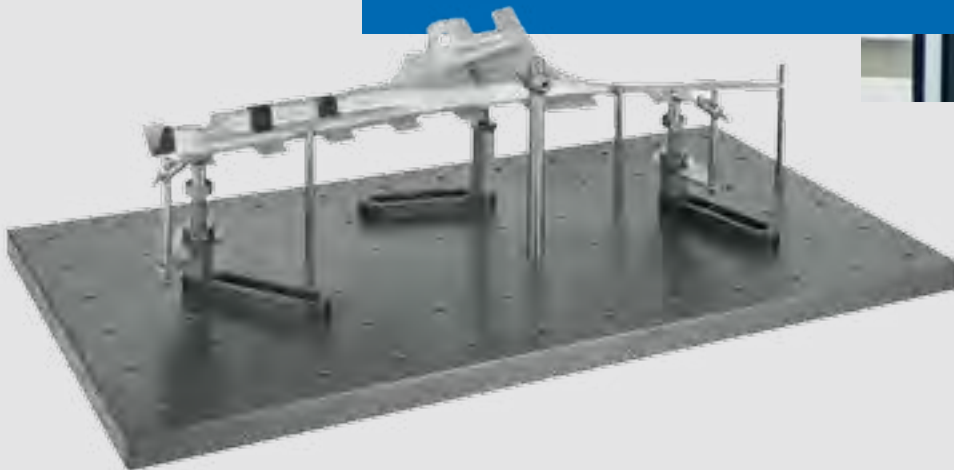
We have always aimed to solve the fixturing problems of our customers and make their work easier, more successful and more efficient. Many of our product solutions are the result of direct dialogue with you.

We will continue to pursue this objective, and will also focus on innovative product development in the future. In our new catalogue, we once again present numerous new products which will make the work of the measurement engineer easier and more efficient.



Norbert Badstieber  
CEO

**» Our mission:**  
We resolve the fixturing problems of our customers and make their work easier, more successful and more efficient.





## Product advantages

When measuring workpieces, the components being tested must be held in the right position. This applies both to one-off jobs and to repeated measuring tasks.

The most professional and cost-effective solution is to use modular fixturing systems with many benefits:



### » Quick assembly

With only a few modular parts, it is easy to construct complete fixturing devices and quick to clamp workpieces.

### » Accessible measurement points

Optimum accessibility to the workpiece to be measured, so that all or the maximum possible number of measurement points can be reached in a single clamping position.

### » Low equipment costs

This intelligent concept from dk even allows more complex fixturing devices to be created using only a few components. This reduces assembly time and the cost for parts.

### » Reproducible configuration

Workpieces can be positioned again and again in the same position after the first measurement.

### » Reliable measuring


The parts to be measured are held rigidly. Measurement results are not distorted and procedures pass off without problems.

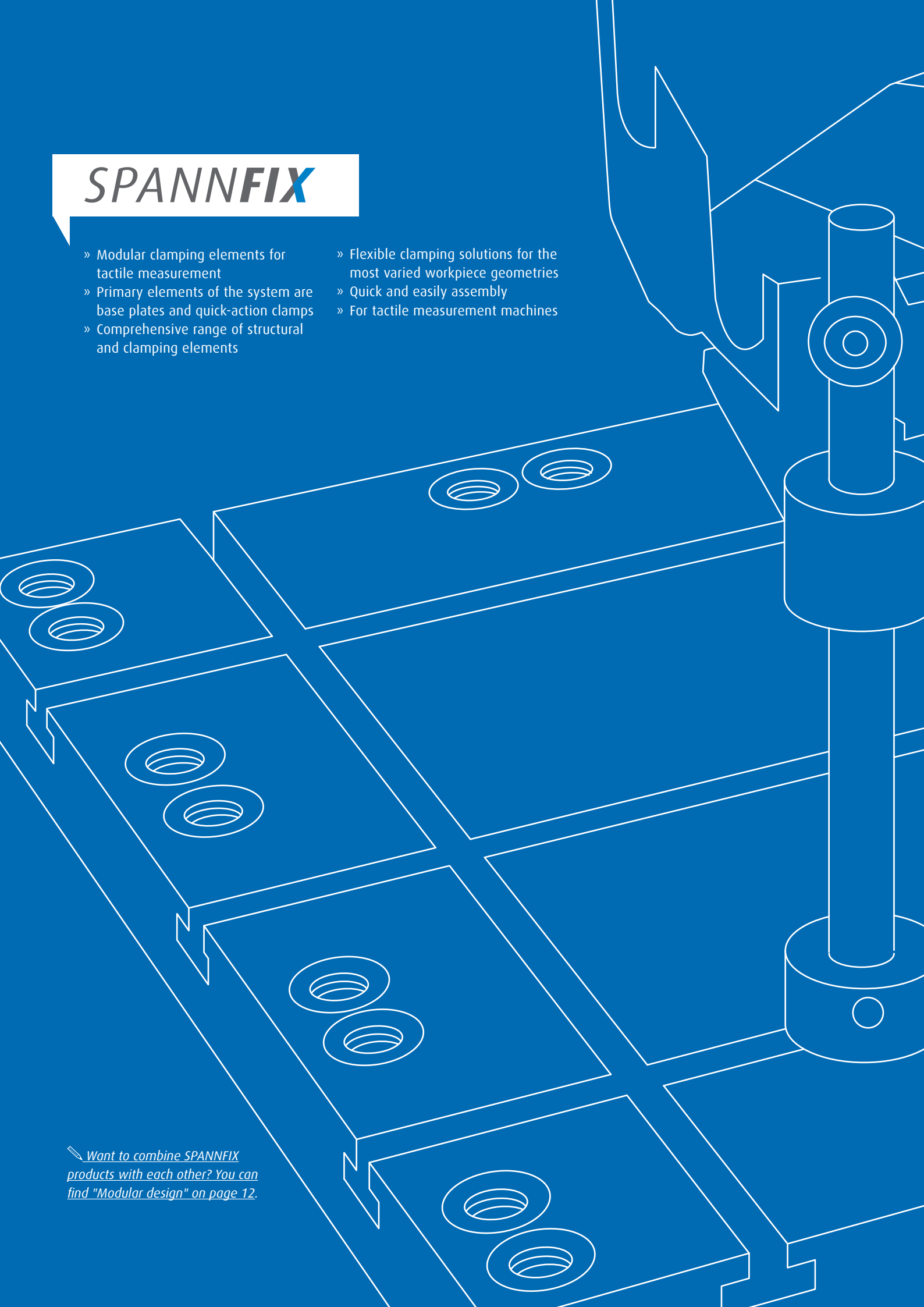
### » Combinable systems

Our wide range of products offers solutions for practically any clamping problem. Individual product lines are inter-compatible.





# SPANNFIX

- » Modular clamping elements for tactile measurement
- » Primary elements of the system are base plates and quick-action clamps
- » Comprehensive range of structural and clamping elements
- » Flexible clamping solutions for the most varied workpiece geometries
- » Quick and easily assembly
- » For tactile measurement machines

 *Want to combine SPANNFIX products with each other? You can find "Modular design" on page 12.*



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**Vacuum system**

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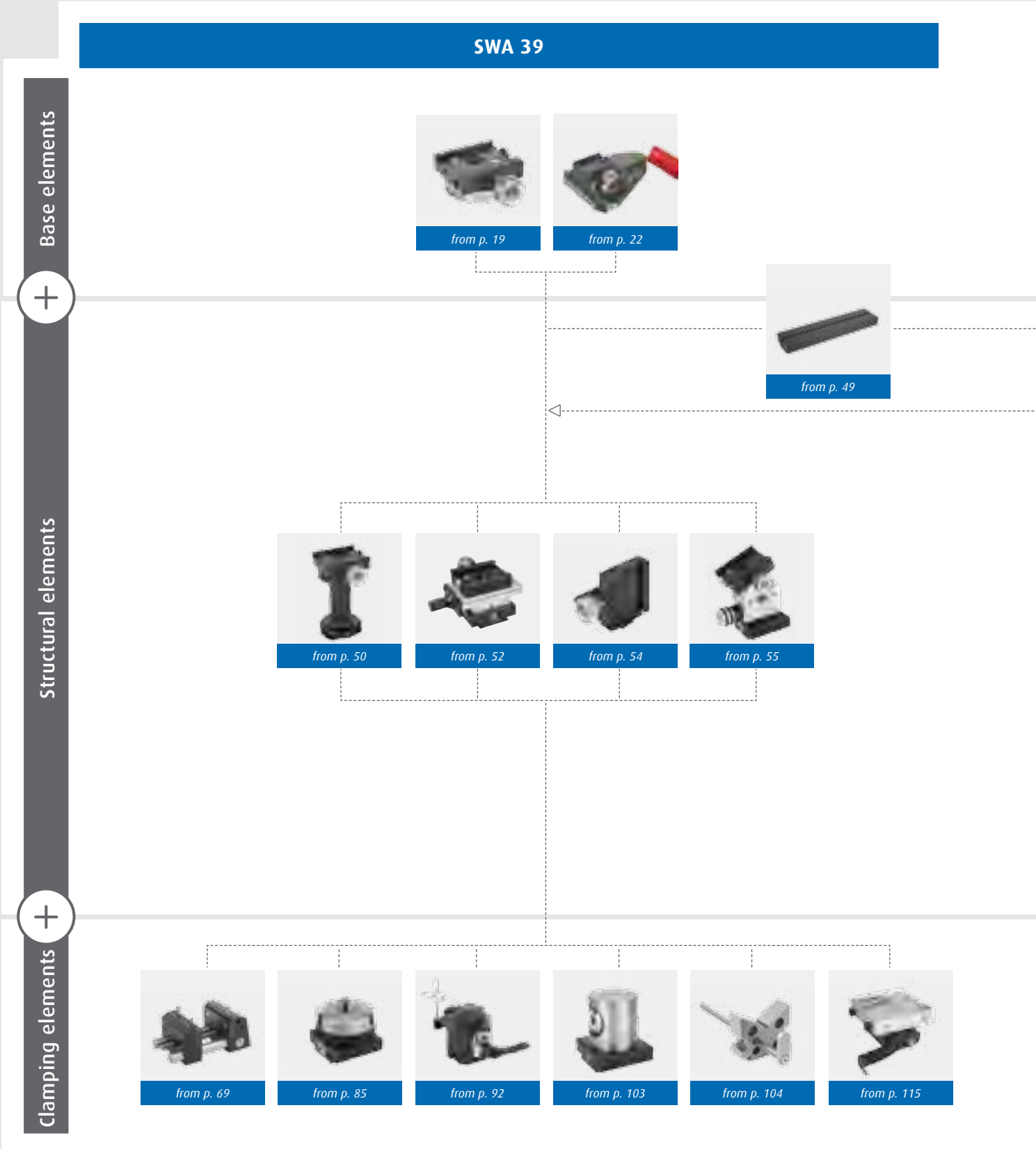
Sets



**Sets**

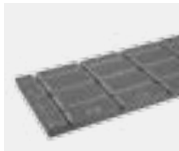
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↳ Fixturing devices can be assembled from basic, structural and clamping elements. The modular elements have a standard interface for quick and easy combination. The diagram below shows different combination possibilities, but is only a selection of the available modular elements and possible combinations.

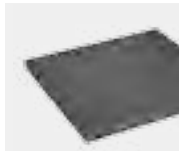


SWA 5 / SWA 8

T-Slot / M 10 / D12



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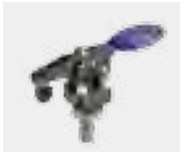
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T-slot base plates

Description

Base plate with 6 mm T-slot and connection thread.  
As an option, may include scale for exact and reproducible positioning of clamping elements.

Material

Hard-coated aluminium / threaded bushings in stainless steel.

↳ Versions with non-standard dimensions available on request. For set versions, see page 124.



Example application



						T-Slot 6	M 8	M 10
With scale								
Order number	Dimensions	Scale	Longitudinal / transverse slots	Thread	Weight			
281200	400 x 400 x 24	With	4/4	M 8	10.2			
280500	500 x 250 x 24	With	2/4	M 8	10.5			
280800	600 x 300 x 24	With	3/5	M 8/M 10	12.4			
280900	800 x 400 x 24	With	4/6	M 8/M 10	22.4			
Without scale								
Order number	Dimensions	Scale	Longitudinal / transverse slots	Thread	Weight			
281205	400 x 400 x 24	Without	4/4	M 8	10.2			
280505	500 x 250 x 24	Without	2/4	M 8	10.5			
280805	600 x 300 x 24	Without	3/5	M 8/M 10	12.4			
280905	800 x 400 x 24	Without	4/6	M 8/M 10	22.4			



## T-slot base plates, round

### Description

Base plate with 6 mm T-slot and connection thread.  
Includes scale for exact positioning of clamping elements.  
Ideal for clamping rotationally-symmetrical parts.

### Material

Hard-coated aluminium / threaded bushings in stainless steel.

↪ Versions without scale and with non-standard dimensions available on request.



T-Slot 6 M 8

Order number	Diameter	Height	Slots	Thread	Weight
281000	250	24	6	M 8	3.1
281100	350	24	6	M 8	5.9

### Example application



## Mounting frame with T-slot

### Description

Mounting frame with T-slot. Includes scale for exact positioning of clamping elements.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes 2 longitudinal and 3 transverse rails and fasteners.

🔗 *Version without scale available on request.*



T-Slot 6

Order number	Length	Width	Height	Weight
281600	500	300	24	3.6
281900	650	350	24	4.3

## Intermediate plates

### Description

T-slot plates for mounting on base plates with T-slot or M6 mounting thread. For x/y adjustment.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes block for T-slot.



T-Slot 6  
M 6

Order number	Slot quantity	Length	Width	Height	Weight
325000	2	117	117	20	0.71
325100	3	117	117	20	0.68

## Base plates with tapped hole

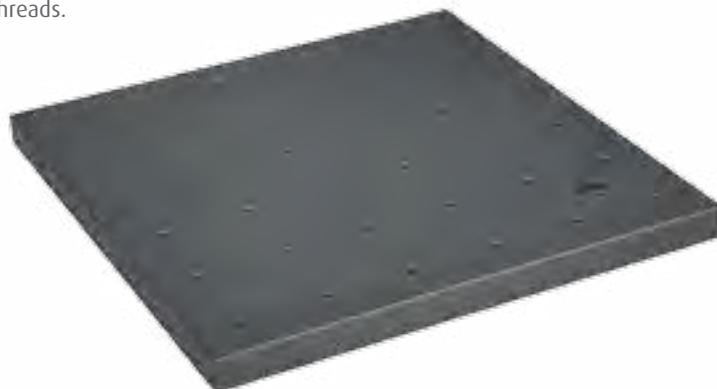
### Description

Base plate with a 50 mm pattern of M 6 connection threads.

### Material

Hard-coated aluminium.

↳ For set versions, see page 120.



M 6

Order number	Dimensions	Thread	Weight
395020	300 x 300 x 20	M 6	5.0
395030	500 x 250 x 20	M 6	7.4
395040	600 x 300 x 20	M 6	10.6

### Example application



Base plate accessories

+ Claws

Description

1 set of claws for base plates in thicknesses of 20 / 24 mm.

Order number	For plate thickness	Thread
281436	20	M 6
281438	20	M 8
281430	20	M 10
281432	20	M 12
281406	24	M 6
281408	24	M 8
281410	24	M 10
281412	24	M 12



M...

+ Plate connectors

Description

Fasteners for joining T-slot base plates.

Material

Steel.

Order number	Plate connector length
328400	75
328300	100



T-Slot 6

+ Handgrip

Description

Grip that attaches to a T-slot to make T-slot base plates easier to carry.

Scope of delivery

One set of two handgrips including fasteners.

Order number	Length	Height
328500	150	45



T-Slot 6

## Quick-action clamp with fastening screw

### Description

SWA 39 quick-action clamp for direct anchoring in tapped holes. Mounted on a 12 mm high intermediate plate.

### Material

Hard-coated aluminium / stainless steel.

### Scope of delivery

Includes fastening screw.



SWA 39  
M...

Order number	Fastening screw	Height
285205	M 5	23.5
285206	M 6	23.5
285208	M 8	23.5
285210	M 10	23.5
285212	M 12	23.5

### Example application





Quick-action clamp for T-slot

**Description**

SWA 39 quick-action clamp for direct anchoring on T-slot plates. Mounted on a 12 mm high intermediate plate.

**Material**

Hard-coated aluminium / stainless steel.

**Scope of delivery**

Includes T-slot block and fastening screw.



SWA 39  
T-Slot 6

Order number	Height
285300	23.5

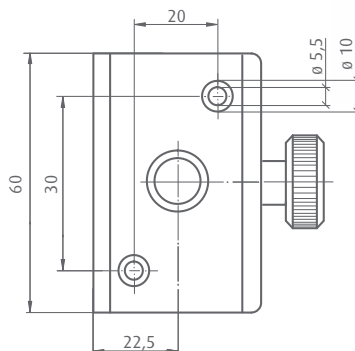
Quick-action clamp for special fixturing arrangements

**Description**

SWA 39 for screwing onto special fixturing arrangements.

**Material**

Hard-coated aluminium.



SWA 39  
M...

Order number	Height
273300	11.5

## Quick-action clamp with extension element

### Description

SWA 39 quick-action clamp for direct anchoring in tapped holes. Mounted on 50 mm / 100 mm extension elements.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes fastening screw.



SWA 39  
M...

Order number	Fastening screw	Height
330506	M6	61.5
330508	M8	61.5
330510	M10	61.5
330512	M12	61.5
330606	M6	111.5
330608	M8	111.5
330610	M10	111.5
330612	M12	111.5

## Quick-action clamp for mounting in a vice

### Description

SWA 39 quick-action clamp for mounting in any commercially available vice (min. opening 40 mm).

### Material

Hard-coated aluminium / steel.



SWA 39

Order number	Height
330800	52

**Airbase**

**Description**

Base anchorage for smooth surfaces. Easy-glide air cushion. Fixturing by vacuum. Connection modules with SWA 39 interface. Maximum load capacity of approximately 15 kg. Operating pressure of 4.5 to 6 bar. Operation only with dry and oil-free air; use maintenance unit (270400) if necessary.



**Scope of delivery**

Includes spiral hose and G 1/4" nipple.

**Accessories**

Maintenance unit (270400) with filter, separator and pressure relief valve.

SWA 39

Order number	Length	Width	Height	Version	Weight
270000	300	200	56	-	3.3
270200	300	200	56	With external vacuum connection	3.3

**Airbase:**

- The airbase air-powered sliding foot provides ideal basic attachment to smooth bases where the mounting options do not include, for example mounting holes.
- The Airbase glides like an air cushion and is secured in position by a vacuum. A clamping fixture can therefore be manoeuvred into any position on the measuring bench – no screws required.
- An SWA 39 interface fitted to the product surface is ideal for the quick, reliable and straightforward mounting of any connection module required for swivelling and fixturing measurement parts and test parts.



## Quick-action clamp with manual suction attachment

### Description

SWA 39 quick-action clamp for anchoring on smooth surfaces. High retention forces maintained by 2 separate suction modules.

### Material

Hard-coated aluminium.



SWA 39

Order number	Length	Width	Height	Weight
270010	90	180	50	1.1

## Quick-action clamp for Alufix

### Description

SWA 39 quick-action clamp mounted on Alufix 16 or 25 base plate.

### Material

Hard-coated / anodised aluminium.



SWA 39

Order number	System	Length (Alufix)	Width (Alufix)	Height
274510	16	64	32	27.5
274500	25	75	50	36.5
274600	25	100	50	36.5

Quick-action clamp with magnet

**Description**

SWA 39 quick-action clamp with switchable permanent magnet for anchoring on steel plates. Vertical pull force 100 kg.

**Material**

Hard-coated aluminium / steel.



SWA 39

Order number	Length	Width	Height	Weight
313800	68	76	70	1.5

Magnetic mount

**Description**

Switchable permanent magnet with M 10 connection thread. Vertical pull force 100 kg.

**Material**

Steel.



M 10

Order number	Length	Width	Height	Weight
314800	68	53	59	1.4



## Quick-action clamp with swivel unit

### Description

SWA 39 quick-action clamp mounted on base plate.  
Includes swivel element, swivels up to max. 90°.

### Material

Hard-coated aluminium / stainless steel.



SWA 39

Order number	Length	Width	Height*	Weight
270560	100	80	82	1.1

\* minimum height with horizontal quick-action clamp

### Example application



Satellite mounts, universal

Description

Basic mount for M 8, M 10 or SWA 8 modules. M6 base connection thread. Anchoring by thread and/or block for T-slot.

Material

Stainless steel / brass.

Scope of delivery

Without T-slot block.

🔗 For compatible T-slot blocks, see page 27.



M ...	SWA 8
M 6	M6

Order number	Version	Fig.
290610	M 8 female thread	1
290710	M 10 female thread	1
292200	SWA 8	2

Satellite mounts with T-slot block

Description

Mount for M 8 and M 10 modules. Includes block for 6 mm T-slot for freely-variable location on base plates.

Material

Stainless steel / brass.

Scope of delivery

Includes T-slot block for 6 mm T-slot.



M 8	M 10
T-Slot 6	T-Slot 6

Order number	Version
290600	M 8 female thread
290700	M 10 female thread

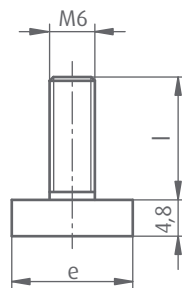
## T-slot blocks with male thread

### Description

T-slot blocks with M 6 male thread for T-slot.

### Material

Stainless steel.



M 6  
T-Nut 6

Order number	Version	Compatible with	e	l	Thread	Fig.
326800	Standard	6 mm T-slot	16	16.2	M6	1
284800	Rhombus T-slot block	6 mm T-slot	5.9	14	M6	2

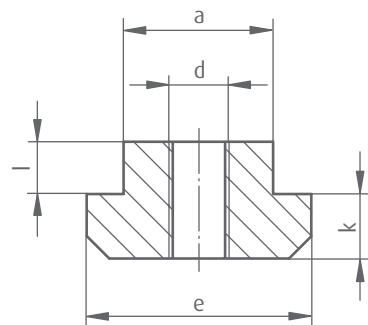
## T-slot blocks with female thread

### Description

T-slot blocks for mounting on rails and for non-standard applications. Version 326400 for 6 mm T-slot.

### Material

Stainless steel / steel.



M 6  
T-Nut

Order number	d	a	e	k	l
326400	M6	5.9	16	4.8	4.9
284200	M6	10	16	5.7	6.3
284300	M6	12	18	7	7
284400	M6	14	22	8	8
284500	M6	16	25	9	9
284600	M6	18	28	10	10
284700	M6	20	32	12	12

M 10 base rails

Description

Adjustable base rail with slot and M 10 mounting thread.

Material

Hard-coated aluminium.

Scope of delivery

Includes M 4 to M 10 fastening screws as specified by the customer.

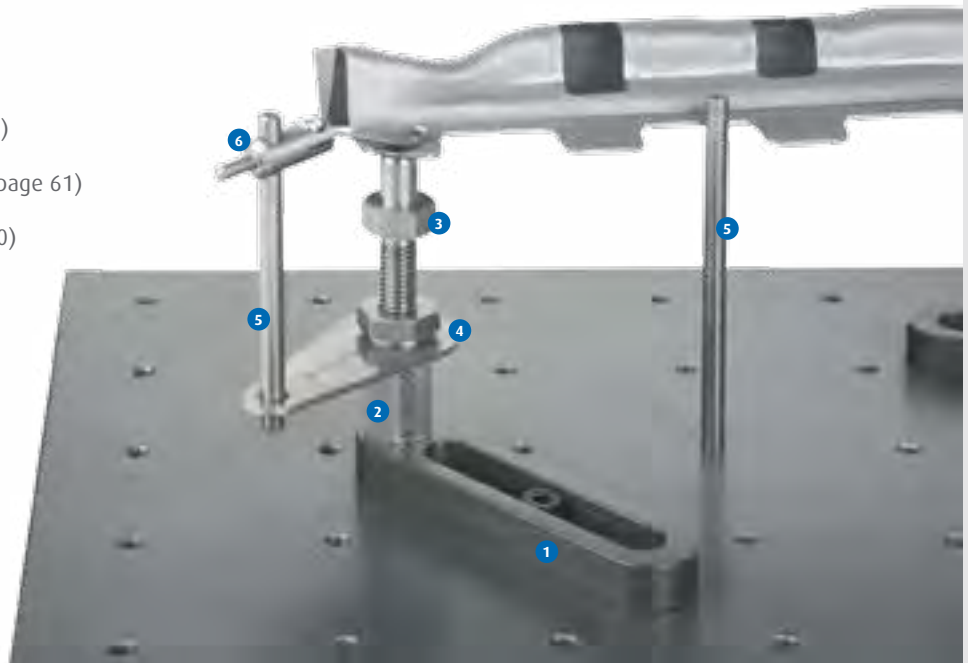


M 10	M 10
M ...	T-Slot

Order number	Slot width	Adjustment range	Length	Width	Height
322010	6	60	105	25	12
322100	6	60	105	32	16
357900	10	40	108	35	20

Example application

- 1 Base rails (page 28)
- 2 Extension element (page 33)
- 3 Formed support (pages 33-35)
- 4 Retaining plate for columns (page 61)
- 5 Columns with thread (page 60)
- 6 Spring clamp (page 59)



1 + 2 + 3 or 1 + 2 + 3 + 4 + 5 + 6 also available as screw frame set (page 32).

## Adjustable multi-purpose rails

### Description

Base rail for mounting M 10 modules and adjustable height extension elements.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes M 6 to M 10 fastening screws as specified by the customer.

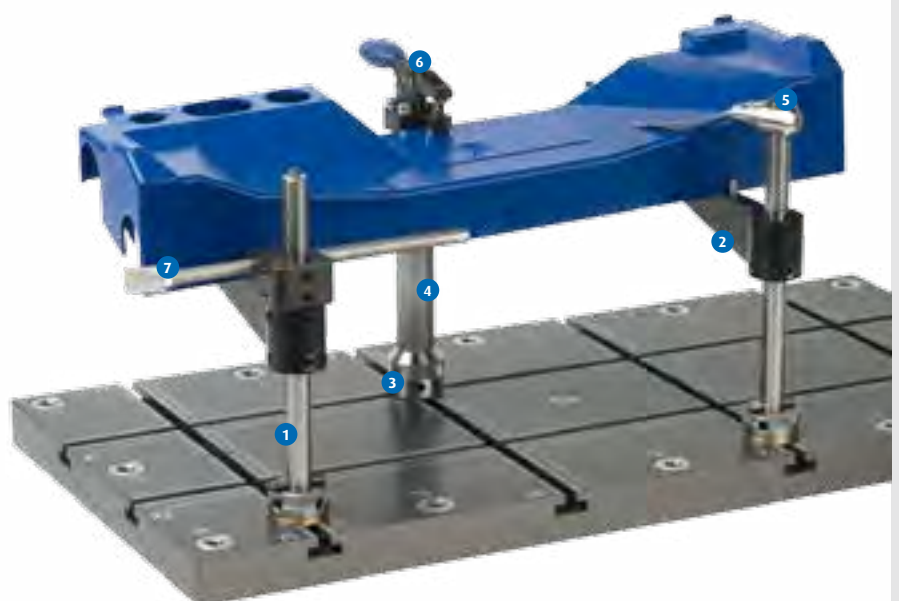
↳ Adjustable height extension elements, see page 51.



Order number	Slot width	Adjustment range	Length	Width	M ...	
					M ...	T-Slot
397010	6.5	65	130	49	20	
397011	10.5	30	100	50	20	
397012	10.5	80	150	50	20	
397013	10.5	130	200	50	20	

### Example application

- 1 Columns with T-slot blocks (page 36)
- 2 Arm (page 39)
- 3 Satellite mount (page 26)
- 4 Extension element (page 33)
- 5 Spring clamp (page 59)
- 6 Horizontal clamp (page 62)
- 7 Adjustable stop (page 43)



Extension elements for clamping supports

**Description**

Extension pieces for raising stop and positioning elements.  
M 6 mounting thread.

**Material**

Hard-coated aluminium.

**Scope of delivery**

With T-slot block.



M 6	M 6
T-Slot 6	M ...

Order number	Height	Fig.
324000	50	
324100	100	1
324200	150	
324600	88 - 112	2

Example application



## Accessories

### + Clamping supports

#### Description

Clamping supports featuring 4 mm Ø pin hole for mounting on T-slot or extension modules.



#### Scope of delivery

Includes block for T-slot and stop pin.

M 6

T-Slot 6

Order number	Version	Length	Width	Height	Fig.
320200	Clamping support with self-aligning surface	57	25	30	1
320000	Fixed clamping support	57	25	20	2
320100	Stepped clamping support	65	25	36	3

### + Clamping supports with pull-down jaw

#### Description

Clamping support with fixed stop and pull-down jaw. For mounting on extension elements or block in T-slot.



#### Scope of delivery

Includes block for T-slot.

M 6

T-Slot 6

Order number	Version	Adjustment range	Length	Width	Height
320500	Straight fixed stop	2.5	65	25	27
320600	Radial fixed stop	2.5	65	25	27

### + Pairs of adjustable V-blocks

#### Description

Pairs of V-blocks with tapped holes in the side for mounting a tensioning strap fixture or spring clamp. For mounting on extension elements or block in T-slot.



#### Scope of delivery

Includes block for T-slot.

M 6

T-Slot 6

Order number	V-block	V-block width	Height	Fig.
305600	90°	18	70	
305500	120°	18	42	1
305700	120°	25	42	
306500	120°	40	60	

Screw frame set

Description

Adjustable base rails with support.  
Height-adjustable support.

Material

Hard-coated aluminium / stainless steel.

Scope of delivery

Base rails (322010), extension element (322200)  
Support (322700), lock nut and fastening screw.

↳ For base rails anchored by T-slot,  
see T-slot blocks, page 27.



M 6

T-Slot

Order number	Adjustment range	Length	Width	Height
322000	60	105	25	80-90

Screw frame set with spring clamp

Description

Adjustable base rails with support and spring clamp. Height-adjustable support.

Material

Hard-coated aluminium / stainless steel.

Scope of delivery

Base rails (322010), extension element (322200),  
support (322700), retaining plate for columns (353700),  
column with thread (368300), spring clamp (302800),  
lock nut and fastening screw.

↳ For base rails anchored by T-slot,  
see T-slot blocks, page 27.



M 6

T-Slot

Order number	Adjustment range	Length	Width	Height of support
322005	60	105	25	80-90



## M 8 and M 10 extension elements

### Description

Extension pieces with male thread at the bottom end and female thread at the top end. Width across flats 17 mm.

### Material

Stainless steel.



M 8

M 10

Order number	Male thread	Female thread	Length
304100	M8	M8	50
304200	M8	M8	100
322200	M10	M10	25
322300	M10	M10	35
322400	M10	M10	50
322500	M10	M10	60
304400	M10	M10	100
253500	M10	M10	150

## M 10 self-aligning support

### Description

Support with a flattened, moving ball to compensate for draught angles.

### Material

Stainless steel.

### Scope of delivery

With lock nut.



M 10

Order number	Support	Self-alignment range	Adjustment range	Length
323000	Ø 8	± 15°	15	46

M 10 formed supports

Description

Height-adjustable supports for the centring and supporting of test parts. Version 319600 with female thread for the mounting of non-standard elements.

Material

Stainless steel.

Scope of delivery

With lock nut.



M 10

Order number	Version	Adjustment range	Length	Fig.
322600	with cone point 90°, Ø 10	15	50	1
322700	with 5 mm dome radius	25	63	2
319600	flat with M 5 female thread	10	28	

M 10 ball supports

Description

Support with DIN-standard ball.

Material

Stainless steel.

Scope of delivery

With lock nut.



M 10

Order number	Diameter	Adjustment range	Length
355700	6	25	70
322800	8	25	71
355800	10	25	72
355900	12	25	74

## M 10 quick-change mounts

### Description

M 10 quick-change mount for SWA 5 / SWA 8 modules.

### Material

Stainless steel.

### Scope of delivery

With lock nut.



SWA 5	SWA 8
M 10	M 10

Order number	Version	Adjustment range	Length	Fig.
329400	SWA 5	25	55	
329500	SWA 8	25	57	1

## Accessories



### Centre points

#### Description

90° centre points with SWA 8 quick-change mount.

#### Material

Hard-coated aluminium.



SWA 8

Order number	Diameter	Height	Fig.
303600	15	20	1
303700	25	20	2
303800	40	24	3



### V-supports

#### Description

120° V-support with quick-change mount SWA 5/SWA 8.

#### Material

Hard-coated aluminium.



SWA 5    SWA 8

Order number	Clamping range	V-block length	Connection	Height	Fig.
285800	Ø 2-15	15	SWA 5	16	1
323500	Ø 2-60	8	SWA 8	35	2
323400	Ø 2-60	40	SWA 8	33	

Columns with T-slot blocks

**Description**

Column with integrated T-slot block and quick-action lock.

**Material**

Quenched and tempered steel, nickel-plated.

**Scope of delivery**

Includes Ø 5 mm stop pin and adjustable stop.



D 12  
T-Slot 6

Order number	Column Ø	Length	Effective height
288700	12	85	56
288600	12	125	96
288800	12	170	142
288900	12	205	176
289000	12	255	226
352600	12	305	276

## Column extension elements

### Description

Column extension for support columns. Mounted using column connector or transverse column connector.

### Material

Quenched and tempered steel, nickel-plated.

### Scope of delivery

Includes  $\varnothing$  5 mm stop pin.

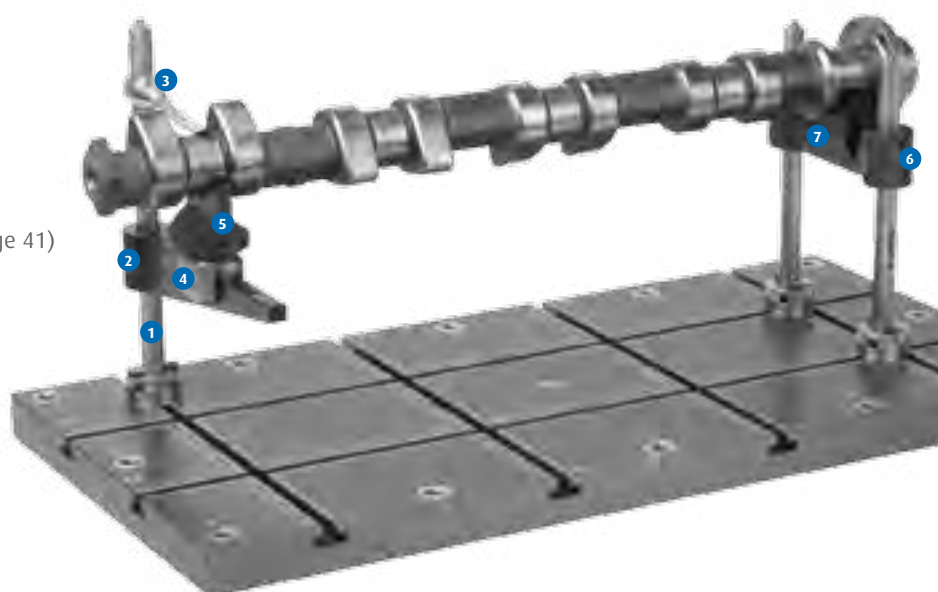
D 12

Order number	Column $\varnothing$	Length
352200	12	100
352300	12	150
352400	12	200



### Example application

- 1 Columns with T-slot blocks (page 36)
- 2 Arm (page 39)
- 3 Spring clamp (page 59)
- 4 Mount with slot (page 41)
- 5 V-support (page 35)
- 6 Bridge support (page 40)
- 7 Pair of adjustable V-blocks (page 41)



Column connector

**Description**

Connection for extending Ø 12 mm support columns with Ø 12 mm column extension elements.

**Material**

Hard-coated aluminium.



D 12

Order number	Length	Width	Height
352000	37	28	30

Transverse column connector

**Description**

Connection element enabling support columns and Ø 12 mm column extension elements to be fitted together at an angle of 90°.

**Material**

Hard-coated aluminium.



D 12

Order number	Length	Width	Height
352100	40	30	35

## Adjustable collars

### Description

Supports for accurate height positioning of modules on  $\varnothing$  12 mm support columns. Fixed or adjustable version (adjustment range 10 mm).

### Material

Stainless steel.



D 12

Order number	Version	Length	Width	Height	Fig.
303100	Fixed	22	22	22	1
303400	Adjustable	25	25	36-46	2

## Arm

### Description

Arm for mounting on  $\varnothing$  12 mm support columns. With holes ( $\varnothing$  4 mm) for lock-pins and support domes. 10 mm space between holes for mounting pairs of V-blocks and adjustable supports.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes  $\varnothing$  4 mm pin.

↪ Support domes, see page 40.

↪ Pairs of V-blocks and adjustable mounts, see page 41.



D 12

Order number	Overhang	Pin holes	Hole spacing	Height	Fig.
286800	60	2	15	20	
286700	100	4	15	30	1
286600	150	6	20	30	

Support domes

Description

Support domes and centring pin for installation in arms with  $\varnothing$  4 mm mount

Material

Stainless steel.



Order number	Version	Diameter	Fig.
319400	R 4 x 15 mm support	8	1
319500	R 4 x 20 mm support	8	2
319300	90° centre point	12	3

Bridge supports

Description

Bridge mount with 10 mm between holes for connection to two  $\varnothing$  12 mm support columns. Mounting of pairs of V-blocks and supports possible. If the bridge mounts are not adjustable (287000, 287100), adjustable stop units can be mounted at the side ( $\varnothing$  7 mm).



D 12

Order number	Distance between centres	Fig.
287000	90	1
287100	125	1
287800	70-110	2
287900	70-170	2



## Mounts with slot

### Description

Adjustable mounts with 10 mm slot, for mounting on arms and bridge supports.

### Material

Hard-coated aluminium / stainless steel.

🔗 *Accessories, see pages 33 to 35.*



### Example application



Order number	Version	Length	Width	Height	Fig.
303200	SWA 8	35	25	35	1
303300	M10	35	25	45	2

## Pair of adjustable V-blocks

### Description

Pair of 120° adjustable V-blocks featuring 10 mm slot, for mounting on arms and bridge supports.

### Material

Hard-coated aluminium.



Order number	V-block width	Total height	Fig.
287210	10	47	1
287200	24	27	

V-supports

Description

120° V-supports for connection to Ø 12 mm columns.

Material

Hard-coated aluminium.



D 12

Order number	Max. clamping diameter	Overhang	Length	Height	Fig.
285900	30	21	44	20	1
286000	30	46	70	20	2

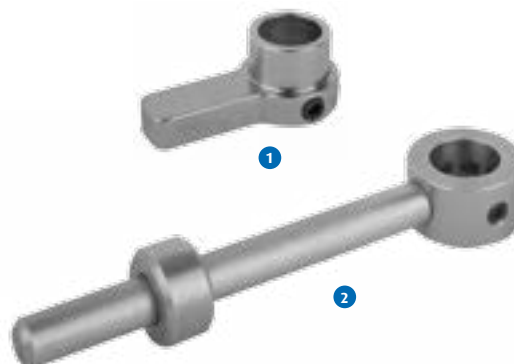
Support finger

Description

Height-adjustable mount for Ø 12 mm columns. Version 286200 contains an adjustable collar as an auxiliary stop.

Material

Steel.



D 12

Order number	Length	Height	Fig.
286100	40	16	1
286200	90	16	2

## Adjustable stop

### Description

Module with adjustable stop for connection to  $\varnothing$  12 mm columns. Effective length of the stop unit 150 mm.

### Material

Hard-coated aluminium / nickel-plated steel.



D 12

Order number	Length	Width	Height
287500	35	30	20



### Example application

Rail for support domes

**Description**

Adjustable rail for installing Ø 4 mm dome mounts. Width of elongated hole 6 mm.

**Material**

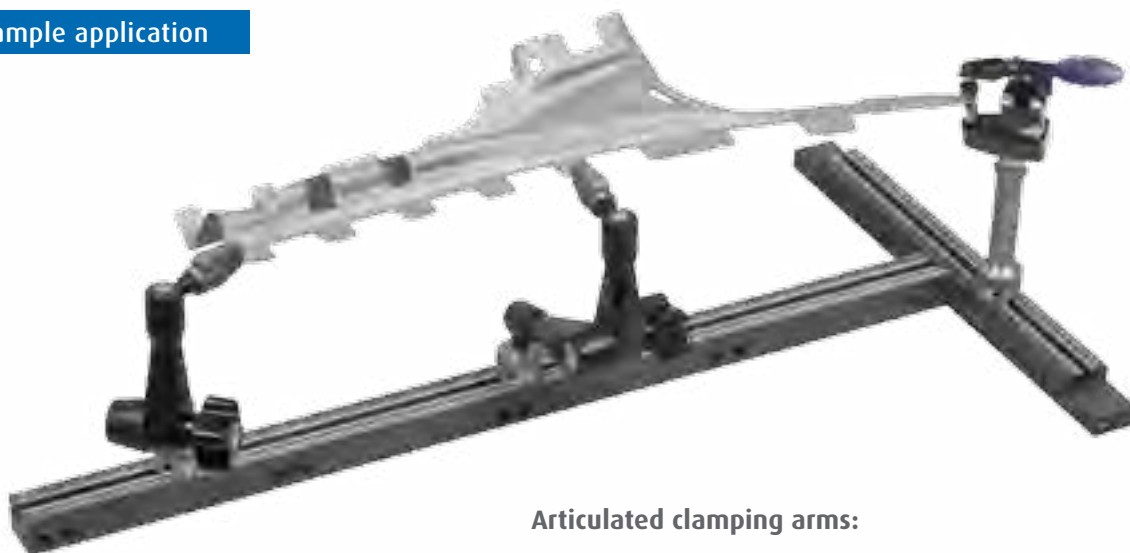
Hard-coated aluminium.

↳ Support domes, see page 40.



Order number	Length	Width	Height	Adjustment range
357700	72	20	12	25

Example application



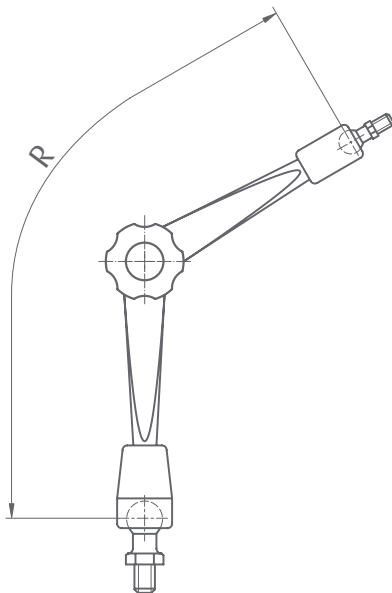
**Articulated clamping arms:**

- Maximum clamping force thanks to specially conceived patented mechanical clamping principle
- Easy to operate thanks to progressive locking action: articulations are both fixtured and released in a defined sequence
- Quick fixturing – all rotary movements are inhibited by a clamping screw

## Articulated clamping arms

### Description

Articulated stands with progressive clamping effect featuring a threaded mount in the base and a quick-change mount on the arm. Mechanical articulated clamping arm. Clamping effect provided by central grip. Retention force in case of right-angle mounting 100 N (MU type) or 80 N (SU type).



SWA 5	SWA 8
M ...	M ...

Order number	Model	Connection at bottom	Connection at top	Operating range (R)
296800	SU	M8	SWA 5	160
296700	SU	M8	SWA 8	160
296900	MU	M10	SWA 5	280
297000	MU	M10	SWA 8	280

Thread adapter

**Description**

Reducer for mounting articulated clamping arms, for instance. Width across flats 13 mm.

**Material**

Stainless steel.



M ...

Order number	Male thread	Female thread
275030	M4	M8
369000	M5	M6
269500	M5	M8
275000	M6	M8
275010	M6	M10
297800	M8	M10
275110	M10	M6
275100	M10	M8
275200	M12	M8
275300	M12	M10

M 10 mounts

**Description**

Quick-change mount with M 10 female thread for quick and flexible positioning of M 10 structural elements (see pages 33-35). Ideal in conjunction with articulated clamping arms. Width across flats 17 mm.

**Material**

Stainless steel.



M10	M10
SWA 5	SWA 8

Order number	Connection	Length	Fig.
336700	SWA 5 radial	50	1
336800	SWA 5 axial	50	
336500	SWA 8 radial	50	1
336600	SWA 8 axial	50	

## Fixed stops

### Description

Changeable stop for quick and flexible positioning by articulated clamping arms.

### Material

Steel.



SWA 5

SWA 8

Order number	Connection	Length	Contact Ø	External Ø
285400	SWA 5	16	13	16
285500	SWA 8	20	16	20

## Angular stops

### Description

Support angle with quick-change mount for quick positioning by articulated clamping arms.

### Material

Hard-coated aluminium.



SWA 5

SWA 8

Order number	Connection	Side length	Total length
285700	SWA 5	25 x 25	37
377200	SWA 8	25 x 25	37

## Adapter plates

### Description

Base plate with SWA 39 quick-change adapter. With standard or cross interface. The adapter with standard interface can be installed in one of two or, in the case of a cross interface, four positions in the quick-change mount.

### Material

Hard-coated aluminium.



SWA 39

Order number	Version	Length	Width	Height	Fig.
273000	Standard interface	60	60	20	1
314500	Cross interface	60	60	20	

## Adapter plates with mounting thread

### Description

Base plate with SWA 39 quick-change adapter and centre mounting thread.

### Material

Hard-coated aluminium.



M ...  
SWA 39

Order number	Version	Length	Width	Height
273006	M6	60	60	20
273008	M8	60	60	20
273010	M10	60	60	20
273012	M12	60	60	20



## Adapter plates with mounting holes

### Description

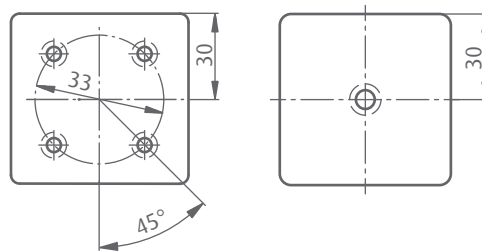
Base plate with holes. Either with a centre hole or four mounting holes arranged in a square. With counterbore as per DIN 974-1 for M 4 or M 6 screws as per DIN EN ISO 4762.

### Material

Hard-coated aluminium.

### Scope of delivery

Includes 4 x M 4 fastening screws or 1 x M 6 fastening screw.



M ...  
SWA 39

Order number	Version	Length	Width	Height	Fig.
397020	4 holes for M 4 with standard interface	60	60	20	1
397030	4 holes for M 4 with cross interface	60	60	20	
397040	1 hole for M 6 with standard interface	60	60	20	

## Adapter plates with T-slot

### Description

Base plate with T-slot for mounting various modules. Includes an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium.



T-Slot 6  
SWA 39

Order number	Length	Width	Height	Fig.
315600	60	60	20	
325300	80	60	20	
305000	140	60	24	
305100	250	60	24	1
305110	500	60	24	

Quick-action clamp with height extension

**Description**

Extension modules with SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium.



SWA 39

Order number	Length	Width	Height
273600	60	80	61.5
273700	60	80	111.5

Example application



## Quick-action clamp with adjustable height extension (quick adjustment)

### Description

Extension modules, freely adjustable and lockable. With M 4 mounting thread or SWA 39 quick-change adapter. The version with M 4 mounting thread can, for instance, be mounted on the adjustable multi-purpose rails.

### Material

Hard-coated aluminium.

↳ For multi-purpose rails, see page 29.



SWA 39	SWA 39
	M 4

Order number	Length	Width	Height	Connection	Fig.
397001	60	80	65-95	4 x M 4	1
397006	60	80	65-95	SWA 39	
397000	60	80	95-150	4 x M 4	
397005	60	80	95-150	SWA 39	

## Quick-action clamp with adjustable height extension (precision adjustment)

### Description

Extension modules with threaded spindle and knurled screw and lock for continuously variable precision adjustment. Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium.



SWA 39

Order number	Length	Width	Height
273800	60	80	60-80
273900	60	80	80-120

Quick-action clamp with 90° offset

**Description**

SWA 39 quick-action clamp for the mounting of modules offset through 90°.

**Material**

Hard-coated aluminium.



SWA 39

Order number	Length	Width	Height
314400	60	80	31.5

Quick-action clamp with carriage guide

**Description**

Quick-action clamp with precise adjustment. Adjustment range max. 25 mm. Play-free guide. Mounted on an SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium.



SWA 39

Order number	Adjustment range	Length	Width	Height
314450	25	80	80	55

## Quick-action clamp with cross table

### Description

Quick-action clamp with x/y adjustment. Each adjustment range max. 25 mm. Play-free guides. Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium.

### Example application



SWA 39

Order number	Adjustment range	Length	Width	Height
314460	25 each way	80	80	78

## Quick-action clamp, rotating

### Description

Quick-action clamp, freely adjustable and in 90° increments. Locking function can be removed. Angular adjustment on a precise 2° scale. Lockable using knurled nuts. Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium, stainless steel shaft.



SWA 39

Order number	Rotatability	Length	Width	Height
283450	360°	60	80	52

Quick-action clamp 90° angle element

**Description**

90° angle element for the horizontal mounting of positioning and stop elements with an SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium.



SWA 39

Order number	Angle	Length	Width	Height
283300	90°	60	90	60

Quick-action clamp 25°/45° angle element

**Description**

25° and 45° angle mounts for the mounting of positioning and stop elements with an SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium.

↪ Other angle elements available on request.



SWA 39

Order number	Angle	Length	Width	Height
283310	25°	60	60	50
283320	45°	60	60	70

## Quick-action clamp, swivel unit (quick adjustment)

### Description

Quick-action clamp, can be swivelled  $\pm 90^\circ$ , freely and in  $45^\circ$  increments. Scale with divisions of  $5^\circ$ . Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium.



SWA 39

Order number	Swivel range	Length	Width	Height
314000	$+90^\circ / -90^\circ$	60	80	87

## Quick-action clamp, swivel unit (precision adjustment)

### Description

Quick-action clamp that swivels freely through  $+90/-55^\circ$ . Pivoting is driven by a worm gear. Angular adjustment on a precise  $2^\circ$  scale. Repeat accuracy  $<0.05^\circ$ . Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium, steel screw.



SWA 39

Order number	Swivel range	Length	Width	Height
314010	$+90^\circ / -55^\circ$	85	80	97

Quick-action clamp, rotary and swivel unit

**Description**

Quick-action clamp, rotating and swivelling. +90° / -55° Pivoting is driven by a worm gear. Repeat accuracy <0.05°. Can be freely rotated 360°, or in 90° increments. Locking function can be removed. Angular adjustment on a precise 2° scale. Lockable using knurled nuts. Mounted on an SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium, stainless steel shaft. Steel screw.



SWA 39

Order number	Length	Width	Height	Swivel range	Rotatability
314020	85	80	116	+90° / -55°	360°

Example application





## Swivel unit with universal joint

### Description

Quick-action clamp for fast and flexible clamping of parts with three-dimensional adjustment. Swivels up to max. 90°. Swivel element can be fixed using a clamping screw. Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium / stainless steel shaft.



SWA 39

Order number	Length	Width	Height*	Weight
270570	60	60	90	0.52

\* minimum height with horizontal quick-action clamp

## Swivel unit Monoball

### Description

Swivel unit for quick and flexible clamping of parts with three-dimensional adjustment. Rotatable 360°. Swivels up to max. 90°. Mounted on an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium.



SWA 39

Order number	Length	Width	Height	Weight
270500	70	90	120	0.86

Cube swivel unit

**Description**

Swivel unit Cube for quick and flexible clamping of parts with three-dimensional adjustment. Both the entire swivel unit and the upper quick-action clamp can be rotated through 360°. Swivels up to 90° with two separate goniometers and a tipping device. Mounted on an SWA 39 quick-change adapter.

**Material**

Base body made from hard-coated aluminium.  
Guides and drive made from brass / steel.



SWA 39

Order number	Length	Width	Height	Weight
270650	110	110	126	1.3

Example application



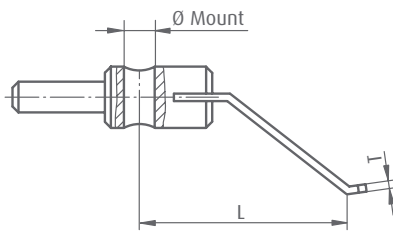
Spring clamp

Description

Enables the quick and easy clamping of test parts.

Material

Stainless steel.



Order number	Mount Ø	T	L	Version	Fig.
269037	4	0.4	30	Flat	
343700	4	0.8	30	Flat	
269038	4	1.1	40	Round	
269039	4	1.1	60	Round	
302800	6	1.0	50	Flat	1
302900	6	1.0	75	Flat	
302810	6	1.0	90-125	Flat	2
302910	6	1.0	115-150	Flat	
302300	12	1.0	75	Flat	3
302400	12	1.0	95	Flat	
302320	12	1.0	120-150	Flat	
302500	12	1.5	75	Flat	
302600	12	1.5	95	Flat	
302520	12	1.5	120-150	Flat	
302350	12	2.5	80	Round	4
302340	12	3.0	80	Round	
302510	12	1.5	75	Forked	5
302610	12	1.5	95	Forked	

Columns with thread

Description

Columns with threaded connection for mounting spring clamps or for use as stop element.

Material

Stainless steel.



Example application



M ...

Order number	Column Ø	Length	Thread
269042	4	30	M4
269043	4	50	M4
368100	6	30	M6
368120	6	30	M8
368200	6	50	M6
368220	6	50	M8
368300	6	75	M6
368400	6	100	M6
368500	6	125	M6
368505	6	150	M6
368600	12	50	M6
368620	12	50	M8
368700	12	100	M6
368720	12	100	M8
368800	12	150	M6
368900	12	200	M6
368610	12	50	M10
368710	12	100	M10
368810	12	150	M10
368910	12	200	M10

## Retaining plates for columns

### Description

Locating plates for columns, featuring an M6 thread and spring clamp for mounting on extension pieces.

### Material

Stainless steel.



Order number	Hole	Overhang
353700	Ø 10	50
353800	Ø 10	72

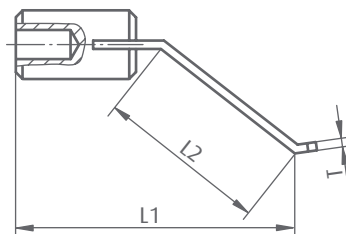
## Spring clamp with quick-change mount

### Description

Spring clamp with SWA 5 or SWA 8 quick-change mount for fastening to articulated clamping arms.

### Material

Stainless steel.



SWA 5

SWA 8

Order number	Connection	T	L1	L2	Version	Fig.
269300	SWA 5	1.1	60	34	Round	
268300	SWA 5	1.1	75	50	Round	1
268400	SWA 5	0.6	70	40	Flat	
327800	SWA 8	1.0	85	50	Flat	2
327700	SWA 8	1.0	105	70	Flat	

### Horizontal clamp

**Description**

Horizontal clamp with M10 thread.

**Scope of delivery**

With lock nut.



M 10

Order number	Overhang	Clamp adjustment range	M10 bolt adjustment range	Height
288400	18-32	0-8	0-15	70
288500	30-50	0-14	0-15	85

### Horizontal clamp with support

**Description**

Horizontal clamp with support and M10 thread.

**Scope of delivery**

With lock nut.



M 10

**Example application**



Order number	Overhang	Clamping range	Height
336300	32	0-20	100
336400	51	0-27	115

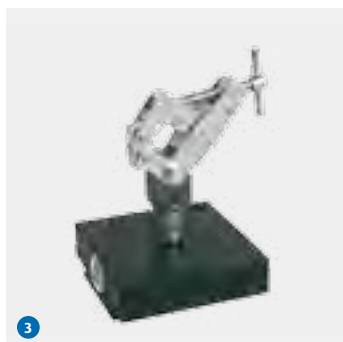
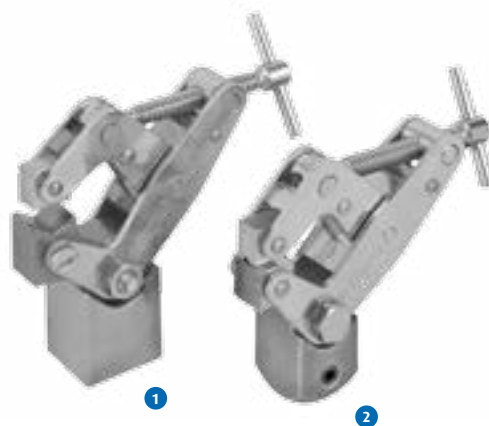
## Toggle clamps

### Description

Toggle clamps with a maximum clamping range of 75 mm. The clamping surfaces on the jaws are available in different versions. Either flat, or with a V-block for fixing round workpieces in place, or alternatively with a convex surface for clamping workpieces that are highly sensitive to bending. The clamping hands are mounted on quick change adapters SWA 5, SWA 8 or SWA 39.

### Material

Stainless steel/steel/aluminium.



SWA 5 SWA 8 SWA 39

Order number	Clamping range	Connection	Clamping surfaces on jaws	Version	Fig.
278800	0-25	SWA 5	3 flat, 1 with longitudinal V-block	Both jaws can be turned	2
278600	0-25	SWA 5	2 flat, 1 with longitudinal V-block 1 with convex surface	Both jaws can be turned	2
278900	0-25	SWA 5	bottom with transverse V-block top 3 flat and 1 with longitudinal V-block	Upper jaw can be turned	1
278400	0-25	SWA 8	3 flat, 1 with longitudinal V-block	Both jaws can be turned	2
334900	0-25	SWA 8	2 flat, 1 with longitudinal V-block 1 with convex surface	Both jaws can be turned	2
278910	0-25	SWA 8	bottom with transverse V-block top 3 flat and 1 with longitudinal V-block	Upper jaw can be turned	1
278500	0-25	SWA 39	3 flat, 1 with longitudinal V-block	Both jaws can be turned	3
279610	0-50	SWA 8	with transverse V-block in lower jaw	Both jaws can be turned	
279620	0-75	SWA 8	3 flat, 1 with longitudinal V-block	Both jaws can be turned	

Toggle clamps with locating pin

Description

Toggle clamp with locating pin to secure the jaws against twisting. Mounted on quick change adapters SWA 5, SWA 8 or SWA 39.

Material

Stainless steel / aluminium.



Order number	Clamping range	Connection	Version	Fig.
279200	0-25	SWA 5	with transverse V-block in lower jaw	
279210	0-25	SWA 8	with transverse V-block in lower jaw	
279600	0-50	SWA 8	with transverse V-block in lower jaw	1
279300	0-50	SWA 39	with transverse V-block in lower jaw	2

Example application





## Toggle clamps with articulated clamping arm

### Description

Toggle clamp with articulated clamping arm for quick and flexible fixturing of parts. Mounted on an SWA 39 quick-change adapter.

↳ Versions without SWA 39, see page 45.



SWA 39

Order number	Clamping range	Reach	Articulated clamping arm model	Fig.
284000	0-25	200	SU	
284100	0-50	340	MU	1

## Pipe toggle clamps

### Description

Toggle clamp for the quick clamping of pipes. Includes an SWA 8 quick-change adapter.

### Material

Stainless steel / steel.



SWA 8

Order number	Clamping range	Connection	Weight
334600	6-35	SWA 8	0.7
334610	6-60	SWA 8	0.7
334620	8-90	SWA 8	1.1

Pressure clamp

Description

Spring-loaded pressure clamp for articulated clamping arms with quick-change mount. Used in conjunction with articulated clamping arms, the pressure clamp is pressed on by hand and then gripped by the articulated clamping arm.

Material

Stainless steel / brass / plastic.



Order number	Connection	Material	Contact	Spring deflection	Clamping pressure (N)	Fig.
288200	SWA 5 axial	Brass	Ø 8	4	30	
288100	SWA 5 axial	Stainless steel	V-block for max. Ø 20	4	60	1
376600	SWA 8 axial	Plastic	Ø 10	5	30	
376700	SWA 8 radial	Plastic	Ø 10	5	60	2

Example application



## Tensioning clamp

### Description

Tensioning clamp for mounting on articulated clamping arms. Used in conjunction with articulated clamping arms, the draw hook is attached to the part to be clamped, tensioned by hand and gripped by the articulated clamping arms. Connection with quick-change mount SWA 8.

### Material

Stainless steel.



SWA 8

Order number	Connection	Size	Length	Tensioning length	Tensile force (N)
376800	SWA 8	Draw hook Ø 10	81	11	80

## V-support with spring clamp

### Description

120° V-block support with column and spring clamp. Connection with quick-change mount SWA 8.

### Material

Stainless steel.



SWA 8

Order number	Connection	Clamping range	V-block length	Height
285810	SWA 8	Ø 2-25	20	45

Grips

Description

Clamping grip for fixturing thin, stable parts.  
Clamping effect provided by ball-head screw.

Material

Steel.



SWA 5    SWA 8

Order number	Connection	Clamping depth	Clamping height
302100	SWA 5	5	3
302000	SWA 8	5	3

Example application



## 15 mm precision vice

### Description

Miniature vice with V-block jaw. Includes SWA 39, SWA 5 or M 4 connection. Version in brass but also available in stainless steel. Hole separation on M 4 connectors is 42 mm.

### Scope of delivery

Includes stainless steel (270921) and plastic changeable jaws.



SWA 39 SWA 5 M ...

Order number	Version	Jaw width	Span	Total height	Material	Fig.
270910	SWA 39	15	14.5	61	Brass	1
270915	SWA 39	15	14.5	61	Stainless steel	1
270900	SWA 5	15	14.5	27	Brass	2
270905	SWA 5	15	14.5	27	Stainless steel	2
270920	2 x M4	15	14.5	15	Brass	3
270925	2 x M4	15	14.5	15	Stainless steel	3

### Accessories

#### + Formed jaws with V-block

Order number	Material	Jaw width	Scope of delivery	Description
270921	Stainless steel	15	One set with one flat and one V-block jaw	Includes vertical and horizontal V-block



#### + Stepped jaw

Order number	Material	Jaw width	Scope of delivery	Description
270922	Stainless steel	15	1 jaw	Height adjustment 1.5 mm. Length adjustment 1.0 mm



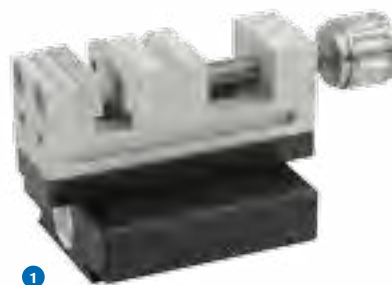
25 mm precision vice

Description

Miniature vice with V-block jaw. Includes SWA 39, SWA 5 or M 4 connection. Version in aluminium but also available in stainless steel. Hole separation on M 4 connectors is 62.5 mm.

Scope of delivery

Includes stainless steel (270971) and plastic changeable jaws.



SWA 39	SWA 5	M ...
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Order number	Version	Jaw width	Span	Total height	Material	Fig.
270960	SWA 39	25	24.5	53	Aluminium	1
270965	SWA 39	25	24.5	53	Stainless steel	1
270950	SWA 5	25	24.5	38	Aluminium	2
270955	SWA 5	25	24.5	38	Stainless steel	2
270970	2 x M4	25	24.5	25	Aluminium	3
270975	2 x M4	25	24.5	25	Stainless steel	3

Accessories

+ Formed jaw with V-block

Order number	Material	Jaw width	Scope of delivery	Description
270971	Stainless steel	25	One set with one flat and one V-block jaw	Includes vertical and horizontal V-block



+ Stepped jaw

Order number	Material	Jaw width	Scope of delivery	Description
270972	Stainless steel	25	1 jaw	Height adjustment 1.8 mm. Length adjustment 1.3 mm



## 35 mm precision vice

### Description

Miniature vice with V-block jaw. Includes SWA 39 or M 5 connection. Version in aluminium but also available in stainless steel. Jaws with holes (Ø 2 mm) for lock-pins. Hole separation on M 5 connectors is 83 mm.

### Scope of delivery

Includes stainless steel (270861) and plastic changeable jaws.



SWA 39

M ...

Order number	Version	Jaw width	Span	Total height	Material	Fig.
270850	SWA 39	35	34.5	55	Aluminium	1
270855	SWA 39	35	34.5	55	Stainless steel	1
270860	2 x M5/4 x M4	35	34.5	35	Aluminium	2
270865	2 x M5	35	34.5	35	Stainless steel	2

### Accessories

#### + Formed jaw with V-block

Order number	Material	Jaw width	Scope of delivery	Description
270861	Stainless steel	35	One set with one flat and one V-block jaw	Includes vertical and horizontal V-block



#### + Stepped jaw

Order number	Material	Jaw width	Scope of delivery	Description
270862	Stainless steel	35	1 jaw	Height adjustment 2.0 mm. Length adjustment 1.5 mm



#### + Intermediate plate

Order number	Material	Height	Scope of delivery	Description
270863	Aluminium	25	With fastening screws	-



50 mm precision vice – pull-down

**Description**

Pull-down vice featuring quick adjustment and adjustable stop unit. SWA 39 quick-change adapter integrated in the base of the vice. With stepped jaws and holes (Ø 4 mm) for lock pins. Mounting of changeable jaws in steel, aluminium or plastic optional.



**Material**

Surface-hardened and high-polished steel.

**Scope of delivery**

Includes adjustable stop unit (318110), four pins for lock-pin action and control apparatus. Changeable jaws not included.

SWA 39

Order number	Jaw width	Span	Weight
270700	50	80	1.46

Accessories

+ Smooth jaws

Order number	Material	Jaw width	Scope of delivery	Description
271200	Soft steel	50	1 set with changeable	-
271300	Aluminium	50	jaws and fastening	
271400	Plastic	50	screws	



+ Formed jaws with small V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
271500	Soft steel	50	1 set with changeable	Recommended from 2 mm to 6 mm
271600	Aluminium	50	jaws and fastening	
271700	Plastic	50	screws	



+ Formed jaws with large V-blocks

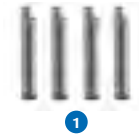
Order number	Material	Jaw width	Scope of delivery	Clamping diameter
271900	Soft steel	50	1 set with changeable	Recommended from 6 mm to 20 mm
272000	Aluminium	50	jaws and fastening	
272100	Plastic	50	screws	





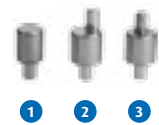
## + Cylindrical pins with stepped profile

Order number	Support surface	Length	Scope of delivery	Description
282300	1 straight	24 x Ø 4	Set of 4	For raised parts clamping
282310	1 straight	35 x Ø 4	Set of 4	
326500	V-block 120°	25 x Ø 4	Two pairs of V-blocks	



## + Clamping pins

Order number	Version	Length/width/height	Scope of delivery	Description
338000	1 Mounting pin	22 x 10 x 10	Sets of 3	For raised parts clamping
338200	2 Eccentric pin	22 x 10 x 10	Sets of 3	
338100	3 Insert pin	16 x 8 x 10	Sets of 3	



## + Universal stop

Order number	Material	Scope of delivery
277510	Steel	With two exchangeable stop points



## + Stop unit for vices

Order number	Material	Length	Overhang	Description
318100	Steel	50	20	-
318200	Steel	50	40	
318110	Steel	150	20	
318210	Steel	150	40	



## Example application



50 mm precision vice

Description

Vice with exchangeable guide columns for extending clamping span. With stepped jaws and holes (Ø 4 mm) for lock-pin action. Versions with and without SWA 39 quick-change adapter, as well as with and without accessories. The version without quick-change adapter contains 4 support surfaces, at right angles to one another.

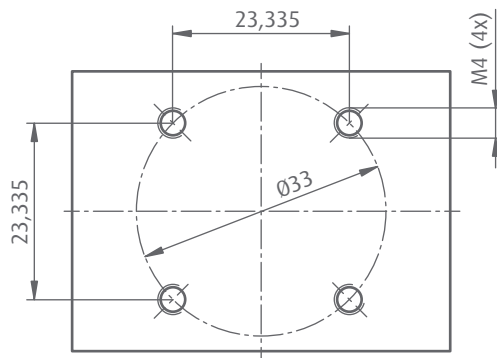
Material

Surface-hardened steel.

Scope of delivery

Versions with accessories incl. adjustable stop (318110) and extra column set for extending the clamping span to 75 mm. Plus 4 pins and magnetic knurled knob (282101).

↳ A quick-change adapter (397020) can be mounted on versions without SWA 39 subsequently, see page 49.



SWA 39	M ...
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Order number	Jaw width	Version	Accessories	Span	Weight	Fig.
282100	50	SWA 39	incl.	75*	1.05	1
282105	50	SWA 39	without	35*	0.87	
282110	50	4 support surfaces	incl.	75*	1.01	2
282115	50	4 support surfaces	without	35*	0.82	2

\* with extra column set, can be extended up to 150 mm.

## Accessories

### + Column set for clamping range extension

Order number	Material	Jaw width	Scope of delivery	Description
282200	Surface-hardened steel	-	2 sets with guide columns and 1 threaded spindle	Clamping range extension to 100 mm or 150 mm



### + Smooth jaws

Order number	Material	Jaw width	Scope of delivery	Description
282400	Soft steel	50	One set	-
282500	Aluminium	50		
282600	Plastic	50		



### + Formed jaws with V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
282700	Soft steel	50	One set	Recommended
282800	Aluminium	50		2 mm to 10 mm
282900	Plastic	50		10 mm



### + Formed jaws with V-blocks for side face clamping

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
306600	Aluminium	50	One set	15-50 mm
306700	Aluminium	50		25-60 mm
306710	Soft steel	50		25-60 mm



### + Smooth jaws for narrow parts

Order number	Material	Jaw width	Scope of delivery	Description
282410	Stainless steel	50	1 jaw	for clamping narrow parts



## Example application



+ V-blade jaws

Order number	Material	Jaw width	Scope of delivery	Description
309800	Hardened steel	-	One set	For clamping in slots and recesses



+ V-block jaws – two-point contact

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
306900	Hard-coated aluminium	5	One V-block jaw and one straight clamping jaw	3-20 mm



+ V-block jaws – three-point contact

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
306800	Hard-coated aluminium	5+16	One double V-block jaw and one straight clamping jaw	Recommended diameters: to 30 mm



+ Cylindrical pins with stepped profile

Order number	Support surface	Length	Scope of delivery	Description
282300	straight	24 x Ø 4	Set of 4	For raised parts clamping
282310	straight	35 x Ø 4	Set of 4	
326500	V-block 120°	25 x Ø 4	Two pairs of V-blocks	



+ Clamping pins

Order number	Version	Length/width/height	Scope of delivery	Description
338000	1 Mounting pin	22 x 10 x 10	Set of 3	For raised parts clamping
338200	2 Eccentric pin	22 x 10 x 10	Set of 3	
338100	3 Insert pin	16 x 8 x 10	Set of 3	



+ Universal stop

Order number	Material	Scope of delivery
277510	Steel	With two exchangeable stop points



+ Stop unit for vices

Order number	Material	Length	Overhang	Description
318100	Steel	50	20	
318200	Steel	50	40	
318110	Steel	150	20	
318210	Steel	150	40	



+ Knurled knob

Order number	Version
282101	1 magnetic
282102	magnetic with adjustable torque, approx. 0.1 - 0.3 Nm



## 80 mm precision vice

### Description

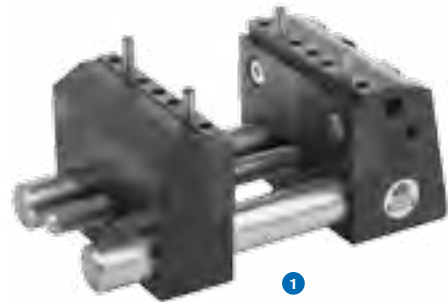
Vice with exchangeable guide columns for extending clamping span. SWA 39 quick-change adapter integrated in the base of the vice. For flexible anchoring of the vice, version 308300 includes two additional SWA 39 quick-change adapters offset through 90°. With stepped jaws and holes (Ø 5 mm) for lock pins.

### Material

Hard-coated aluminium with surface-hardened steel jaws.

### Scope of delivery

Includes an adjustable stop unit (318110) and an extra set of columns for extending the clamping span up to 130 mm. Four lock pins and control apparatus.



SWA 39

Order number	Jaw width	Span	Anchorage	Weight	Fig.
308200	80	130*	Via base	1.65	1
308300	80	130*	Via base or two 90° offset sides	1.70	

\* with extra column set that can be extended to 200 mm.

## Accessories

### + Column set for clamping range extension

Order number	Material	Jaw width	Scope of delivery	Description
307700	Surface-hardened steel	-	One set of guide columns and threaded spindle	For clamping range extension to 200 mm



### + Smooth jaws

Order number	Material	Jaw width	Scope of delivery	Description
307000	Soft steel	80	One set	-
307100	Aluminium	80		
307200	Plastic	80		



### + Formed jaws with small V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
307300	Soft steel	80	One set	Recommended for vertical and horizontal: 5 mm to 15 mm
307400	Aluminium	80		
307500	Plastic	80		



Accessories

+ Formed jaws with large V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
307410	Aluminium	80	One set	Recommended for vertical and horizontal: 6 mm to 20 mm



+ Formed jaws with V-blocks for side face clamping

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
307600	Aluminium	80	One set	Recommended: 20 mm to 85 mm



+ V-blade jaws

Order number	Material	Jaw width	Scope of delivery	Description
309810	Hardened steel	-	One set	For clamping in slots and recesses



+ V-block jaws – two-point contact

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
306915	Aluminium hard-coated	7,5	One V-block jaw and one straight clamping jaw	8-50 mm



+ V-block jaws – three-point contact

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
306810	Aluminium hard-coated	5 + 16	One double V-block jaw and one straight clamping jaw	2-50 mm



+ Spring-loaded clamping jaws

Order number	Material	Jaw width	Scope of delivery	Description
307030	Aluminium/steel	80	One set	With soft (307030) or hard (307040) set of springs. Adjustment range max. 6 mm
307040	Aluminium/steel	80	One set	



+ Jaws with 2 rows of pins

Order number	Material	Jaw width	Scope of delivery	Description
307610	Steel	80	One set	for Ø 5 mm pins



## + Universal stop

Order number	Material	Scope of delivery	Description
277510	Steel	With two exchangeable stop points	-



## + Stop unit for horizontal support

Order number	Material	Scope of delivery	Description
308210	Hard-coated aluminium	Two stop pins with a length of 120 mm. Longer stop pins on request	for positioning when using spring-loaded clamping jaws, for example. Positioning in X-Y-Z direction



## + Cylindrical pins with stepped profile

Order number	Support surface	Length	Scope of delivery	Description
307800	straight	26 x Ø 5	Set of 4	For raised parts clamping
307810	straight	36 x Ø 5	Set of 4	
326600	V-block 120°	30 x Ø 5	Two pairs of V-blocks	
326610	V-block 120°	35 x Ø 5	Two pairs of V-blocks	



## + Stop unit for vices

Order number	Material	Length	Overhang	Description
318100	Steel	50	20	-
318200	Steel	50	40	
318110	Steel	150	20	
318210	Steel	150	40	



### Example application



100 mm precision vice

**Description**

Vice with exchangeable guide columns for extending clamping span. SWA 39 quick-change adapter integrated in the base of the vice. With stepped jaws and holes (Ø 5 mm) for lock pins.

**Material**

Hardcoated aluminium with surface-hardened steel jaws.

**Scope of delivery**

Includes an adjustable stop unit (318110) and an extra set of columns for extending the clamping span up to 170 mm. Four pins and control apparatus.



SWA 39

Order number	Jaw width	Span	Weight
308500	100	170*	2.45

\* with extra column set that can be extended to 220 mm.

Accessories

+ Column set for clamping range extension

Order number	Material	Jaw width	Scope of delivery	Description
309600	Steel surface-hardened	-	One set of guide columns and threaded spindle	For clamping range extension to 220 mm



+ Smooth jaws

Order number	Material	Jaw width	Scope of delivery	Description
308700	Soft steel	100	One set	-
308800	Aluminium	100		
308900	Plastic	100		



+ Formed jaws with small V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309000	Soft steel	100	One set	Recommended for vertical and horizontal: 5 mm to 15 mm
309100	Aluminium	100		
309200	Plastic	100		







### Formed jaws with large V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309110	Aluminium	100	One set	Recommended for vertical and horizontal: 7 mm to 22 mm



### Formed jaws with V-blocks for side face clamping

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309300	Aluminium	100	One set	Recommended diameters: 20 mm to 120 mm



### Cylindrical pins with stepped profile

Order number	Support surface	Length	Scope of delivery	Description
307800	straight	26 x Ø 5	Set of 4	For raised parts clamping
307810	straight	36 x Ø 5	Set of 4	
326600	V-block 120°	30 x Ø 5	Two pairs of V-blocks	
326610	V-block 120°	35 x Ø 5	Two pairs of V-blocks	



### Universal stop

Order number	Material	Scope of delivery
277510	Steel	With two exchangeable stop points



### Stop unit for vices

Order number	Material	Length	Overhang	Description
318100	Steel	50	20	
318200	Steel	50	40	
318110	Steel	150	20	
318210	Steel	150	40	



125 mm precision vice

**Description**

Vice with exchangeable guide columns for extending clamping span. SWA 39 quick-change adapter integrated in the base of the vice. With stepped jaws and holes (Ø 6 mm) for lock pins.

**Material**

Hardcoated aluminium with surface-hardened steel jaws.

**Scope of delivery**

Includes an adjustable stop unit (318110) and an extra set of columns for extending the clamping span up to 170 mm. Four pins and control apparatus.



SWA 39

Order number	Jaw width	Span	Weight
308600	125	170*	3.30

\* with extra column set that can be extended to 220 mm.

Accessories

+ **Column set for clamping range extension**

Order number	Material	Jaw width	Scope of delivery	Description
309600	Steel surface-hardened	-	One set of guide columns and threaded spindle	For clamping range extension to 220 mm



+ **Smooth jaws**

Order number	Material	Jaw width	Scope of delivery	Description
308810	Aluminium	125	1 set	-
308820	Stainless steel	125	with fastening screws	
308830	Plastic	125		



+ **Formed jaws with small V-blocks**

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309400	Soft steel	125	1 set	Recommended for vertical and horizontal: 5 mm to 15 mm
309410	Aluminium	125	with fastening screws	



### + Formed jaws with large V-blocks

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309430	Aluminium	125	One set	Recommended for vertical and horizontal: 10 mm to 30 mm



### + Formed jaws with V-blocks for side face clamping

Order number	Material	Jaw width	Scope of delivery	Clamping diameter
309500	Aluminium	125	One set	25 mm to 180 mm



### + Cylindrical pins with stepped profile

Order number	Support surface	Length	Scope of delivery	Description
307850	straight	32 x Ø 6	Set of 4	For raised parts clamping
326650	V-block 120°	30 x Ø 6	Two pairs of V-blocks	



### + Universal stop

Order number	Material	Scope of delivery
277510	Steel	With two exchangeable stop points



### + Stop unit for vices

Order number	Material	Length	Overhang	Description
318100	Steel	50	20	-
318200	Steel	50	40	
318110	Steel	150	20	
318210	Steel	150	40	



Precision mini chuck

Description

Precision mini chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. Mounted on quick change adapters SWA 39 or SWA 5.

Material

Hard-coated aluminium/steel.



SWA 39	SWA 5
--------	-------

Order number	Connection	Internal clamping Ø	External clamping Ø	Height	Diameter	Fig.
283700	SWA 39	0-3	3-5	59	-	
283900	SWA 39	0-5	5-9	79	-	1
283500	SWA 39	0-8	8-13	90	-	
283600	SWA 5	0-3	3-5	60	24	2
283800	SWA 5	0-5	5-9	80	32	

Example application



## 50 mm precision three-jaw chuck

### Description

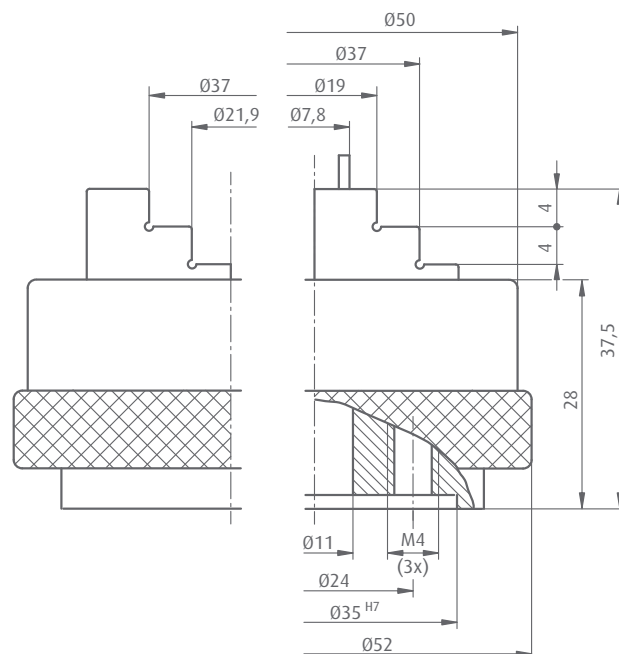
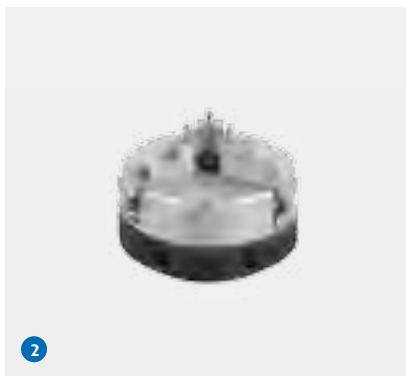
Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. With three additional pins ( $\varnothing 2$  mm) on the top of each jaw for raising the height at which small parts can be clamped. The pins can be removed. With or without an SWA 39 quick-change adapter. Alternatively with MK 2 mount.

### Material

Hard-coated aluminium/steel.

### Scope of delivery

Extra set of changeable jaws with jaws stepped inwards.  
Control apparatus.



SWA 39

M ...

MK 2

Order number	Size	Connection	Height	Fig.
329705	50	SWA 39	58	1
329720	50	3 x M4	38	2
329725	50	MK 2*	46.5	3

\* Additional mounts available on request.

65 mm precision three-jaw chuck

Description

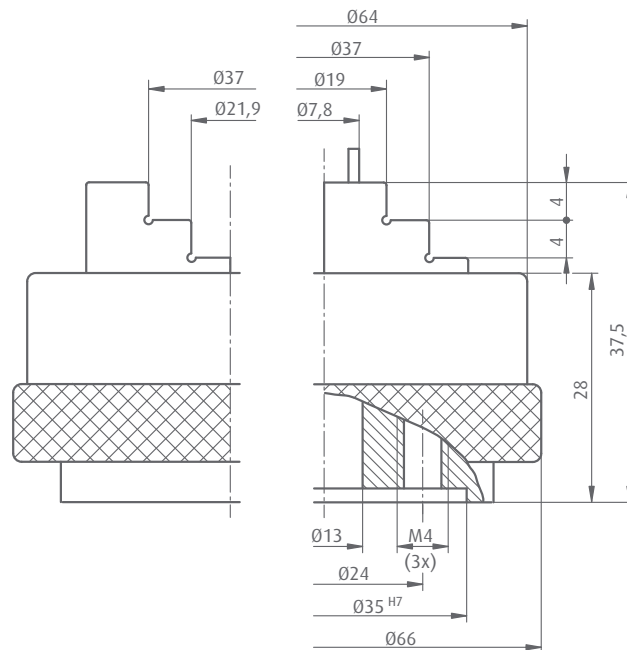
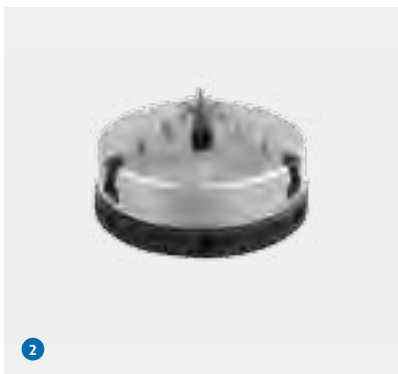
Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. With three additional pins ( $\varnothing 2$  mm) on the top of each jaw for raising the height at which small parts can be clamped. The pins can be removed. With or without an SWA 39 quick-change adapter. Alternatively with MK 2 mount.

Material

Hard-coated aluminium/steel.

Scope of delivery

Extra set of changeable jaws with inwardly stepped jaws. Control apparatus.



SWA 39	M...	MK 2
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Order number	Size	Connection	Height	Fig.
329700	65	SWA 39	58	1
329710	65	3 x M4	38	2
329715	65	MK 2*	46.5	3

\* Additional mounts available on request.

## 80 mm precision three-jaw chuck

### Description

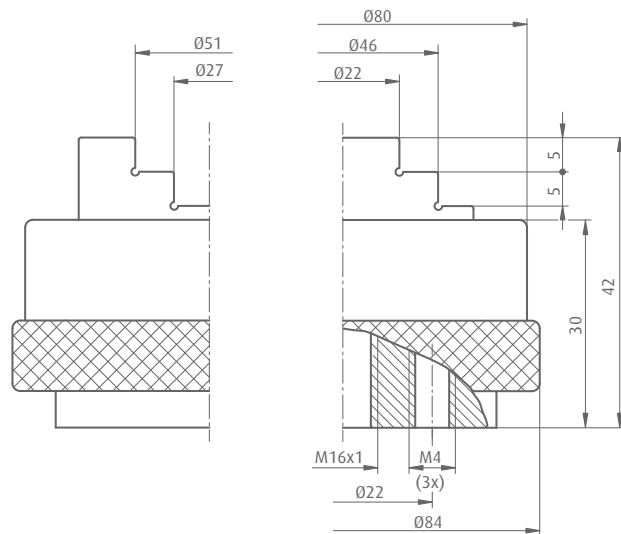
Three-jaw chuck featuring outwardly stepped reversible clamping jaws. Simple version. For clamping the inside and outside of rotationally symmetrical parts. With or without an SWA 39 quick-change adapter.

### Material

Hard-coated aluminium/steel.

### Scope of delivery

Includes control apparatus.



SWA 39

M...

Order number	Size	Version	Height	Fig.
283100	80	SWA 39	62	1
283105	80	3 x M 4 / M 16x1	42	2

100 mm precision three-jaw chuck

**Description**

Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. Housing made of aluminium for weight reduction. With or without an SWA 39 quick-change adapter.

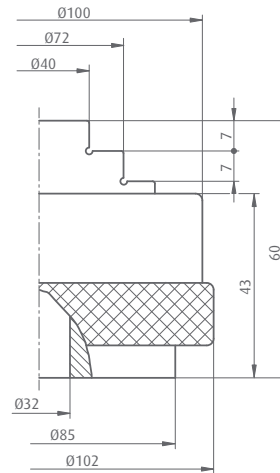
**Material**

Hard-coated aluminium / steel jaws.

**Scope of delivery**

Includes control apparatus.

↳ Connection thread for multi-purpose rails, see page 90



SWA 39	M ...
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Order number	Size	Version	Height	Weight
283210	100	SWA 39	80	1.9
283215	100	4 x M6	60	1.7

Accessories

**Jaw, inwardly-stepped**

Order number	Material	Size	Scope of delivery	Description
283211	Steel	100	Set with 3 jaws	Hardened



**Block jaw**

Order number	Material	Size	Scope of delivery	Description
283212	Steel	100	Set with 3 jaws	Unhardened





## 125 mm precision three-jaw chuck

### Description

Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. Housing made of aluminium for weight reduction. With or without an SWA 39 quick-change adapter.

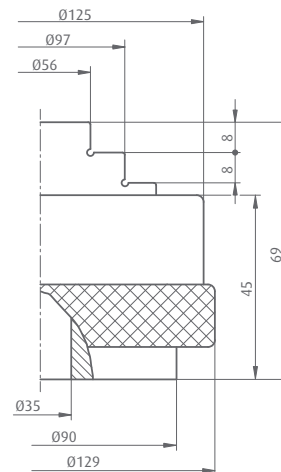
### Material

Hard-coated aluminium / steel jaws.

### Scope of delivery

Includes control apparatus.

↪ Connection thread for 330325, see page 90



SWA 39

M ...

Order number	Size	Version	Height	Weight
330320	125	SWA 39	89	2.9
330325	125	4 x M6	69	2.7

### Accessories

#### + Jaw, inwardly-stepped

Order number	Material	Size	Scope of delivery	Description
330321	Steel	125	Set with 3 jaws	Hardened



#### + Block jaw

Order number	Material	Size	Scope of delivery	Description
330322	Steel	125	Set with 3 jaws	Unhardened



160 mm precision three-jaw chuck

**Description**

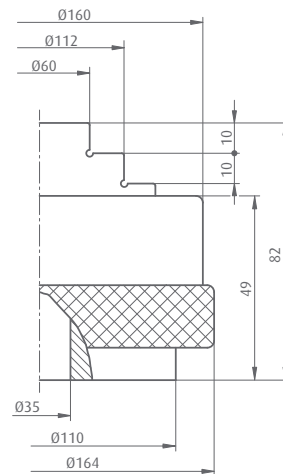
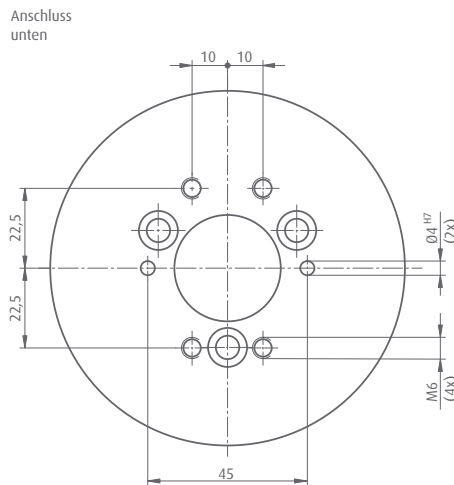
Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. Housing made of aluminium for weight reduction. With or without an SWA 39 quick-change adapter.

**Material**

Hard-coated aluminium / steel jaws.

**Scope of delivery**

Includes control apparatus.



SWA 39    M ...

Order number	Size	Version	Height	Weight
330330	160	SWA 39	102	4.9
330335	160	4 x M6	82	4.7

## Accessories

### + Jaw, inwardly-stepped

Order number	Material	Size	Scope of delivery	Description
330331	Steel	160	Set with 3 jaws	Hardened



### + Block jaw

Order number	Material	Size	Scope of delivery	Description
330332	Steel	160	Set with 3 jaws	Unhardened



## Rotary table with precision three-jaw chuck

### Description

Rotating 70 mm three-jaw chuck with high concentricity. For clamping the inside and outside of rotationally symmetrical parts. With three additional pins ( $\varnothing$  2 mm) on the top of each jaw for raising the height at which small parts can be clamped. The pins can be removed.

### Material

Hard-coated aluminium/steel.

### Scope of delivery

Extra set of changeable jaws with inwardly stepped jaws. Control apparatus.

↪ An SWA 39 (397020) quick-change adapter can be mounted on this version subsequently, see page 49.



Order number	Size	Version	Radial runout	Height
267350	70	Table support	+/- 0.04	71

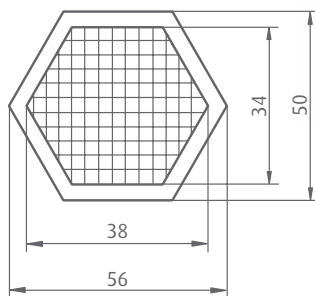
Nadelfix 2.5

**Description**

Ideal for clamping formed parts. Includes SWA 39 quick-change mount. Version 396031 with approx. 30% reduced spring tension.

**Scope of delivery**

Includes clamping fixture, comprising rail (396120), column (269043) and spring clamp (269038). Fasteners included.

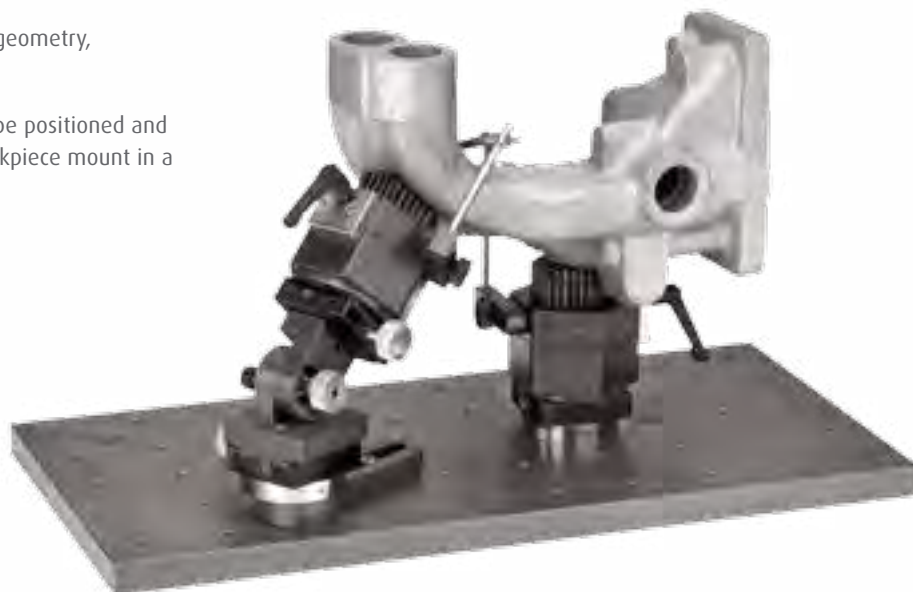


SWA 39

Order number	Pin Ø	Support surface	Total height	Spring deflection	Version
396030	2.5	38 x 34	55	max. 10	-
396031	2.5	38 x 34	55	max. 10	red. spring tension

**Nadelfix:**

- The needles adapt to any geometry, no matter how complex.
- Workpieces can therefore be positioned and fixtured in the formed workpiece mount in a reproducible manner.



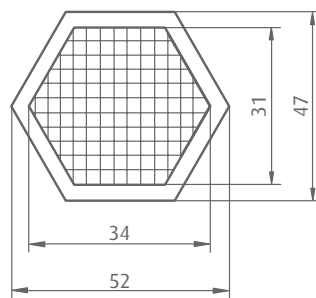
## Nadelfix 5 Mini

### Description

Ideal for clamping formed parts. Includes SWA 8 or SWA 39 quick-change mount.

### Scope of delivery

Includes clamping fixture, comprising rail (396100), column (368300) and spring clamp (302800). Fasteners included.



SWA 8

SWA 39

Order number	Pin Ø	Support surface	Total height	Spring deflection	Interface	Fig.
396000	5	34 x 31	90	max. 12	SWA 39	1
396005	5	34 x 31	80	max. 12	SWA 8	2

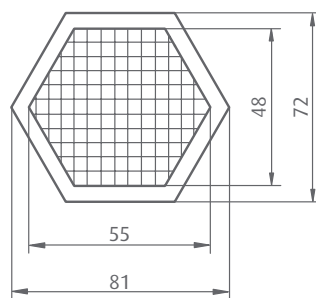
## Nadelfix 5 Midi

### Description

Ideal for clamping formed parts. Includes an SWA 39 quick-change mount.

### Scope of delivery

Includes clamping fixture, comprising rail (396100), column (368300) and spring clamp (302800). Fasteners included.



SWA 39

Order number	Pin Ø	Support surface	Total height	Spring deflection
396010	5	55 x 48	80	max. 12

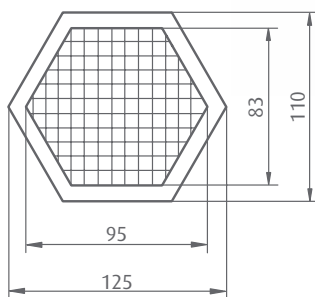
Nadelfix 5 Maxi

**Description**

Ideal for clamping formed parts. Includes an SWA 39 quick-change mount.

**Scope of delivery**

Includes clamping fixture, comprising rail (396100), column (368300) and spring clamp (302800). Fasteners included.



SWA 39

Order number	Pin Ø	Support surface	Total height	Spring deflection
396020	5	95 x 83	90	max. 12

Example application



## Nadelfix accessories

### + Attachment rails

#### Description

For flexible positioning of the spring clamp on the „Nadelfix“ module.

#### Material

Hardcoated aluminium

Order number	Total length	Adjustment range	Thread
396120	50	34	M4
396110	60	33	M6
396100	90	60	M6



### + Columns for spring clamps

#### Description

Column for the mounting of spring clamps.

#### Material

Stainless steel.

Order number	Column Ø	Length	Thread
269042	4	30	M4
269043	4	50	M4
368100	6	30	M6
368200	6	50	M6
368300	6	75	M6
368400	6	100	M6
368500	6	125	M6

↳ Column diameter 12 mm, see page 60.



### + Spring clamp

#### Description

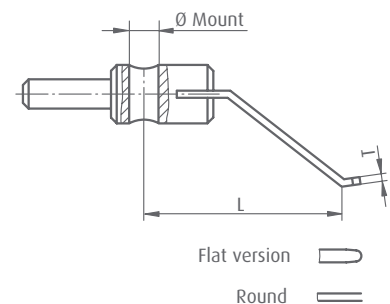
Enables the quick and easy clamping of test parts.

#### Material

Stainless steel.

Order number	Mount Ø	T	L	Version	Fig.
269037	4	0.4	30	Flat	
343700	4	0.8	30	Flat	1
269038	4	1.1	40	Round	
269039	4	1.1	60	Round	
302800	6	1	50	Flat	
302900	6	1	75	Flat	

↳ Spring clamp for 12 mm column diameter, see page 59.



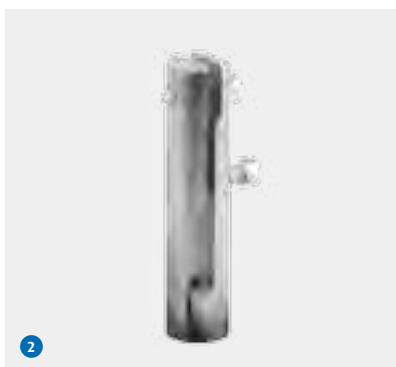
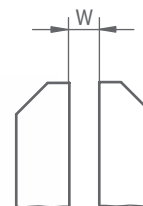
Small-parts clamp, smooth

**Description**

Small-parts clamp with smooth grip face for clamping small parts. Versions available with quick-change adapter SWA 39, SWA 5 or with M 6 female thread.

**Material**

Hard-coated aluminium/steel.



SWA 39	SWA 5	M 6
--------	-------	-----

Order number	Version	Clamping width	Span (W)	Height	Fig.
275400	SWA 39	4.8	0-3	100	
275600	SWA 39	12	0.5-5	100	
276000	SWA 39	18	1.5-8	100	1
276200	SWA 39	25	3-10	120	
390900	SWA 5	12	0-4	68	
275410	M6	4.8	0-3	80	
390200	M6	12	0.5-5	80	
391600	M6	18	1.5-8	80	2
276210	M6	25	3-10	100	



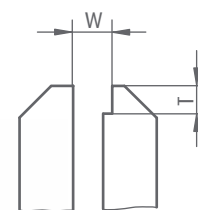
## Small-parts clamp stepped on one side

### Description

Small-parts clamp with stepped grip face for clamping small parts. Versions available with quick-change adapter SWA 39, SWA 5 or with M 6 female thread.

### Material

Hard-coated aluminium/steel.



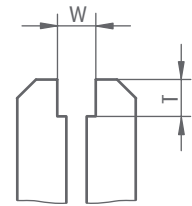
SWA 39    SWA 5    M 6

Order number	Version	Clamping width	Span (W)	Clamping depth (T)	Height	Fig.
275500	SWA 39	4.8	0-3	1.5	100	
275700	SWA 39	12	1-5	2	100	
276100	SWA 39	18	2.5-8	2	100	1
276300	SWA 39	25	4-10	2	120	
391000	SWA 5	12	1-5	2	68	
275510	M6	4.8	0-3	1.5	80	
390300	M6	12	1-5	2	80	
390100	M6	12	1-5	4	80	
391500	M6	18	2.5-8	2	80	2
276310	M6	25	4-10	2	100	

Small-parts clamp stepped on both sides

Description

Small-parts clamp stepped on both sides for gripping small parts. In versions with quick-change adapter SWA 39, SWA 5 or with M 6 female thread.

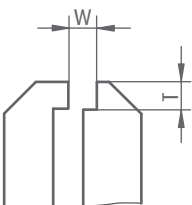


Order number	Version	Clamping width	Span (W)	Clamping depth (T)	Height	Fig.
390005	SWA 39	12	1.6-4	2	100	
391705	SWA 39	18	2-6	3.5	100	2
391805	SWA 39	25	6-10	2	120	
391100	SWA 5	12	2-6	4	68	
390000	M6	12	1.6-4	2	80	
391700	M6	18	2-6	3.5	80	1
391800	M6	25	6-10	2	100	

Small-parts clamp with elongated opening

Description

Small-parts clamp with a stepped clamping depth of 4 mm for gripping small parts. Mounted on an SWA 39 quick-change adapter or with M 6 female thread.

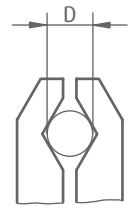


Order number	Version	Clamping width	Span (W)	Clamping depth (T)	Height	Fig.
390405	SWA 39	12	0-5	4	88	2
390400	M6	12	0-5	4	68	1

## Small-parts clamp with horizontal V-block

### Description

Small-parts clamp with horizontally arranged V-blocks. For clamping rotationally symmetrical parts. Versions available with quick-change adapter SWA 39, SWA 5 or with M 6 female thread.



SWA 39

SWA 5

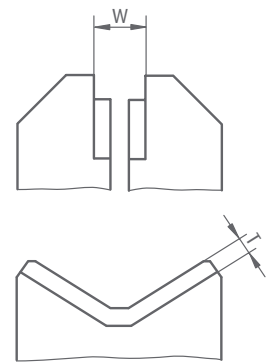
M 6

Order number	Version	Clamping width	Clamping $\emptyset$ (D)	Height	Fig.
275800	SWA 39	3.5	3.2-6	100	
275900	SWA 39	5	5-8.5	100	1
391200	SWA 5	3.5	3.2-6	80	
391300	SWA 5	5	5-8.5	80	
275810	M6	3.5	3.2-6	80	
275910	M6	5	5-8.5	80	2

## Small-parts clamp with end-face V-block

### Description

Small-parts clamp with V-blocks and stepped grip face for clamping small, rotationally symmetrical parts. Mounted on an SWA 39 quick-change adapter or with M 6 female thread.



SWA 39

M 6

Order number	Version	Clamping $\emptyset$	Span (W)	Clamping depth (T)	Height	Fig.
277305	SWA 39	3-25	3-6	2	100	1
277320	SWA 39	5-35	4-10	2	100	
277300	SWA 39	6-55	4-12	3	120	
390010	M6	3-25	3-6	2	80	2
277315	M6	5-35	4-10	2	80	
277325	M6	6-55	4-12	3	100	

Small-parts clamp with lock-pin action

Description

Small-parts clamp with lock-pin action. The pins can be repositioned through 120° on multiple hole patterns. For clamping small parts. Mounted on an SWA 39 quick-change adapter or with M 6 threaded mount.

Scope of delivery

Includes clamping pins.



SWA 39 M 6

Order number	Version	Clamping Ø	Rows of holes	Height	Fig.
276500	SWA 39	10-26	4	120	1
276600	SWA 39	10-36	5	140	2
276700	SWA 39	20-100	8	120	3
276510	M6	10-26	4	100	4
276610	M6	10-36	5	120	5
276710	M6	20-100	8	100	6

Small-parts clamp with external lock

Description

Small-parts clamp with external lock. The clamping depth increases 2 mm with each increment. For clamping rotationally symmetrical parts. Mounted on an SWA 39 quick-change adapter or with M 6 threaded mount.



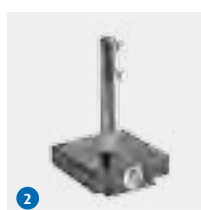
SWA 39 M 6

Order number	Version	Clamping Ø	Height	Fig.
277000	SWA 39	5-22	120	1
277100	SWA 39	15-33	120	
277010	M6	5-22	100	2
277110	M6	15-33	100	

## Small-parts clamp with end-face V-block on one side

### Description

Small-parts clamp with 120° threaded mount for the vertical clamping of small, rotationally-symmetrical parts. Mounted on an SWA 39 quick-change adapter or with M 6 threaded mount.



SWA 39

M 6

Order number	Version	Clamping Ø	Clamping depth (T)	Height	Fig.
390505	SWA 39	1.5-4.0	5	100	1
390605	SWA 39	2.5-5.0	5	100	1
390500	M6	1.5-4.0	5	80	2
390600	M6	2.5-5.0	5	80	2

## Small-parts clamp with internal lock

### Description

Small-parts clamp with internal lock for mounting in holes. The clamping diameter increases by 3 mm with each increment (276800 + 276805 first increment = 4 mm). Mounted on an SWA 39 quick-change adapter or with M 6 threaded mount.



SWA 39

M 6

Order number	Version	Clamping Ø	Increment height	Height	Fig.
276800	SWA 39	5-30	2	120	1
276810	SWA 39	12-30	3	120	
276900	SWA 39	18-40	3	120	
276805	M6	5-30	2	100	2
276815	M6	12-30	3	100	
276905	M6	18-40	3	100	

Stop unit for small-parts clamps

**Description**

Stop for reproducible clamping of small parts for all types of small-parts clamps with SWA 39 adapter.

**Scope of delivery**

Set complete with M 6 connection thread and a stepped centre and Ø 2 mm ball centre (M 2.5 centre mount).



M 6

Order number

277500

Overhang

100

Example application



## Magnetic clamping mounts, permanent

### Description

Permanent magnet enabling the quick and easy clamping of steel parts. Mounted on an SWA 39 quick-change adapter.



SWA 39

Order number	Height	Magnet Ø	Magnetic force (N)	Weight	Fig.
278000	80	32	350	0.29	1
278100	80	32	720	0.53	2

## Magnetic clamping mounts, switchable

### Description

Switchable permanent magnet enabling the quick and easy clamping of steel parts. Mounted on an SWA 39 quick-change adapter.

### Scope of delivery

Includes control lever.



SWA 39

Order number	Height	Magnet Ø	Magnetic force (N)	Weight	Fig.
278200	70	50	85	0.86	1
278210	85	80	500	2.50	

Magnetic V-block, permanent

Description

Magnetic 90° V-block for clamping rotationally-symmetrical parts. Mounted on an SWA 39 quick-change adapter.

Material

Hardcoated aluminium.



SWA 39

Order number	Clamping range	V-block length	Magnetic force (N)	Height
313700	Ø 15-35	16	15	100

Magnetic V-block, switchable

Description

Switchable 110° magnetic V-block for the clamping of rotationally symmetrical parts. With mounting hole for adjustable length stop. Mounted on an SWA 39 quick-change adapter.

Material

Hard-coated aluminium/steel.

↳ Longitudinal stop, see page 73.



SWA 39

Order number	Clamping range	V-block length	Magnetic force (N)	Height
278300	Ø 5-50	37	50	80
278310	Ø 5-50	67	100	80



## Small V-block with spring clamp

### Description

Small 120° V-block for the spring-clamping of rotationally symmetrical parts. Mounted on an SWA 39 quick-change adapter.

### Material

Aluminium / stainless steel.

### Scope of delivery

Complete with bracket (343800) and spring clamp (343700).



1

SWA 39

SWA 5

Order number	Clamping range	V-block length	Connection	Height	Fig.
277410	Ø 2-25	10	SWA 39	65	1
277400	Ø 2-25	25	SWA 39	45	2
267900	Ø 2-25	25	SWA 5	25	3

### Example application



V-block

Description

V-block for mounting rotationally-symmetrical test parts. Adjustable length stop for reproducible clamping. With an SWA 39 quick-change adapter integrated in the base of the V-block and SWA 8 connection option. Also features tapped holes in the side for mounting a tensioning strap fixture, clamping bracket or spring clamp.

Material

Hardened steel.

Scope of delivery

Includes adjustable length stop (318110).



SWA 39 SWA 8

Order number	V-block length	V-block width	V-block angle	Fig.
272700	20	60	120°	1
272800	60	60	90°	

Example application



## Accessories



### Clamping bracket

#### Description

For clamping rotationally-symmetrical parts.

#### Material

Aluminium.



#### Order number

272920

#### Clamping range

Ø 4-50 (for 90° V-block)

Ø 4-55 (for 120° V-block)



### Spring clamp with mounting

#### Description

Enables parts to be clamped quickly and easily.

#### Scope of delivery

With spring clamp (302800), column (368300) and column bracket (272910).



#### Order number

272930

#### Clamping range

Ø 4-50 (for 90° V-block)

Ø 4-90 (for 120° V-block)



### Tensioning strap fixture

#### Description

Ideal for clamping irregularly-shaped parts.

#### Scope of delivery

Includes M 5 fastening screws, control apparatus and 5 m tensioning strap.



#### Order number

272900

#### Clamping range

Ø 4-80 (for 90° V-block)

Ø 4-120 (for 120° V-block)

Reducer 272901 available as spare part.

Pairs of adjustable V-blocks

Description

Pairs of V-blocks for T-slot. The clamping range is freely adjustable. Features tapped holes in the side for mounting a tensioning strap fixture or spring clamp. Article 306500 with mounting hole for stops.

↳ Longitudinal stop, see page 73.

Material

Hard-coated aluminium/steel.

Scope of delivery

Includes screws and T-slot blocks.



T-Slot 6

Order number	V-block	V-block length	Height	Fig.
305600	90°	18	70	
305500	120°	18	42	1
305700	120°	25	42	
306500	120°	40	52	

Example application



## Accessories

### + Spring clamp with mounting

#### Description

Enables parts to be clamped quickly and easily.

#### Scope of delivery

With adjustable spring clamp (302810), column (368500) and column bracket (272910).



Order number	Clamping range
272940	Ø 4-50 (for 90° V-block) Ø 4-55 (for 120° V-block)

↳ Additional spring clamp, see page 59.

### + Tensioning strap fixture

#### Description

Ideal for clamping irregularly-shaped parts.

#### Scope of delivery

Includes M 5 fastening screws, control apparatus and 5 m tensioning strap.



Order number	Clamping range
272900	Ø 4-80 (for 90° V-block) Ø 4-120 (for 120° V-block)

↳ Reducer 272901 available as spare part.

Tailstock

Description

Pair of tailstocks featuring one fixed and one movable mount. The movable mount is spring-loaded and engageable. Gripped by T-slot.

Material

Hard-coated aluminium/steel.

Scope of delivery

Includes T-slot blocks and Ø 15 / 60° clamping centres.



T-Slot 6

Order number	Centre height	Length	Width	Height	Weight
306000	50	150	25	75	0.72

Accessories

+ Live tailstock centre

Description

60° live centre for movable tailstock mount.

Material

Steel. Centre hardened.



Order number	Centre angle	Diameter
306110	60°	10
306120	60°	20

+ Dead tailstock centres

Description

Pair of dead tailstock centres.

Material

Hardened steel.



Order number	Centre angle	Diameter
306100	60°	30
306200	90°	15
306300	90°	30

## Clamping supports

### Description

Clamping supports featuring 4 mm Ø pin hole for mounting on T-slot or extension modules.

### Material

Steel / hard-coated aluminium.

### Scope of delivery

Includes block for T-slot and stop pin.



T-Nut 6

M ...

Order number	Version	Length	Width	Height	Fig.
320200	Clamping support with self-aligning surface	57	25	30	1
320000	Fixed clamping support	57	25	20	2
320100	Stepped clamping support	65	25	36	3

## Clamping supports with pull-down jaw

### Description

Clamping support featuring fixed stop and pull-down jaw for mounting on T-slot or extension modules.

### Material

Steel / hard-coated aluminium.

### Scope of delivery

Includes block for T-slot.



T-Nut 6

M ...

Order number	Version	Adjustment range	Length	Width	Height	Fig.
320500	Straight fixed stop	2.5	65	25	27	1
320600	Radial fixed stop	2.5	65	25	27	

**Airbase**

**Description**

Base anchorage for smooth surfaces. Easy-glide air cushion. Fixturing by vacuum. Connection modules with SWA 39 interface. Maximum load capacity of approximately 15 kg. Operating pressure of 4.5 to 6 bar. Operation only with dry and oil-free air: use maintenance unit art. no. 270400 if necessary. With vacuum connection (D 5).



**Scope of delivery**

Includes spiral hose and G 1/4" nipple.

**Accessories**

Maintenance unit (270400) with filter, separator and pressure relief valve.

SWA 39

Order number	Length	Width	Height	Weight
270200	300	200	110	3.3

**Vacuum clamping plates – round**

**Description**

Round vacuum clamping plates in high-strength aluminium. With seal grooves and stops for the reproducible mounting of parts. ON/OFF switch with rapid air release. Mounted on an SWA 39 quick-change adapter.

**Material**

Aluminium.

**Scope of delivery**

Includes sealing cord and connection hose (D 5).



SWA 39

Order number	Max. suction area
294700	Ø 30
294800	Ø 50



## Vacuum clamping plate – square

### Description

Vacuum clamping plate in high-strength aluminium. With seal grooves and stops for the reproducible mounting of parts. ON/OFF switch with rapid air release. Mounted on an SWA 39 quick-change adapter.

### Material

Aluminium.

### Scope of delivery

Includes sealing cord and connection hose (D 5).



SWA 39

Order number	Max. suction area
294000	100 x 100

### Example application



Suction cups

Description

Suction units with removable support pin.

Material

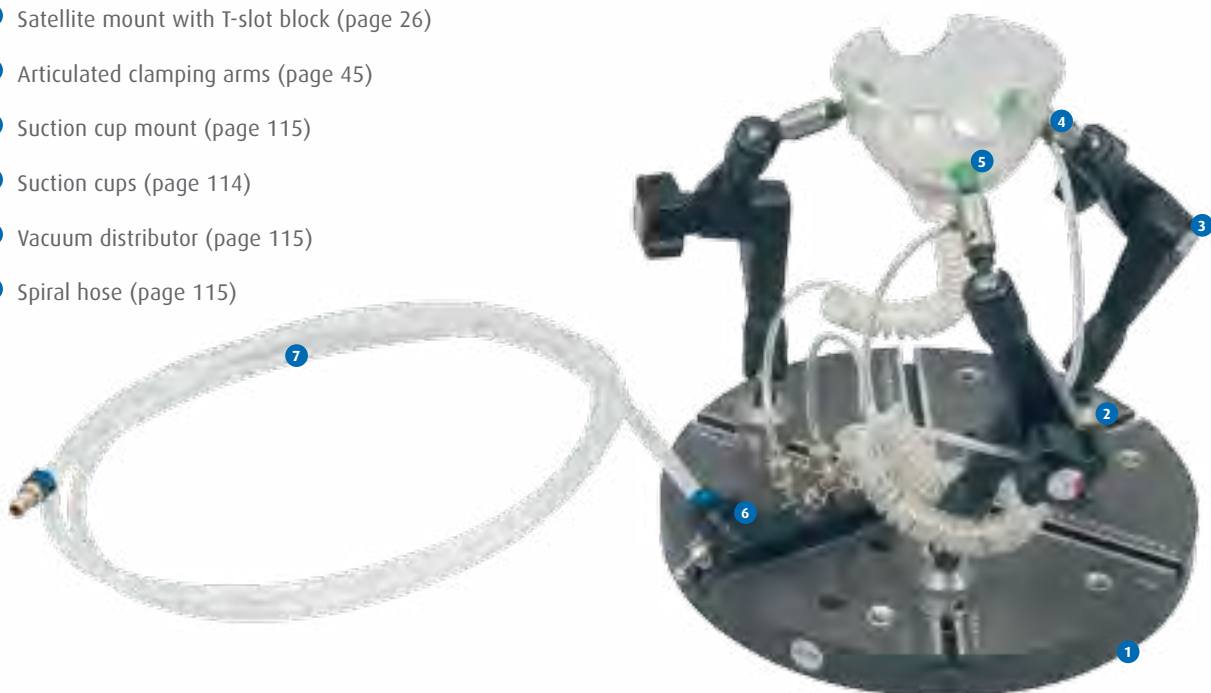
Silicone / brass.



Order number	Suction cup Ø	Connection thread
295800	12	M5
295900	18	M5
296000	25	1/8"
296100	34	1/8"

Example application

- 1 T-slot base plate, round (page 15)
- 2 Satellite mount with T-slot block (page 26)
- 3 Articulated clamping arms (page 45)
- 4 Suction cup mount (page 115)
- 5 Suction cups (page 114)
- 6 Vacuum distributor (page 115)
- 7 Spiral hose (page 115)



## Accessories for vacuum system

### + Spiral hose

#### Description

Transparent spiral hose with quick-action coupling (D 5) and M 5 connection thread.



Order number	Length (normal)	Max. length	Internal Ø
293600	350	1000	2

### + Vacuum distributor

#### Description

Multi-port vacuum distributor (D 5) with 1/8" connection line to vacuum pump. ON/OFF switch with rapid air release.

#### Material

Aluminium / steel.



Order number	Number of ports	Scope of delivery
293800	6	Includes connection line

T-Slot 6

### + Suction cup mount

#### Description

SWA 5 mount for suction cups. Connection for M 5 suction hose.

#### Material

Steel / stainless steel.



Order number	Version
292700	for suction cups with M 5 mount
292800	for suction cups with 1/8" mount

SWA 5

Vacuum pumps

**Description**

Dry-running rotary-vane vacuum pump. Absolutely oil-free. Mains voltage 220–240 V. Mounted on rubber vibration-damping elements, ON/OFF switch on power cable and 1/8" coupler socket for vacuum outlet connection.



Order number	Nominal displacement	Final pressure	Nominal motor power	Noise level	Weight
298500	3 m <sup>3</sup> /h	150 mbar	0.1 kW	57 dB (A)	7.1
298600	7.3 m <sup>3</sup> /h	150 mbar	0.25 kW	62 dB (A)	9.8

Vacuum pump for compressed-air operation

**Description**

Pneumatically powered vacuum pump with connection hose and ON/OFF switch.

**Material**

Aluminium.



Order number	Nominal displacement	Operating pressure	Air consumption
298700	7.4 m <sup>3</sup> /h	5 bar	30 L / min.

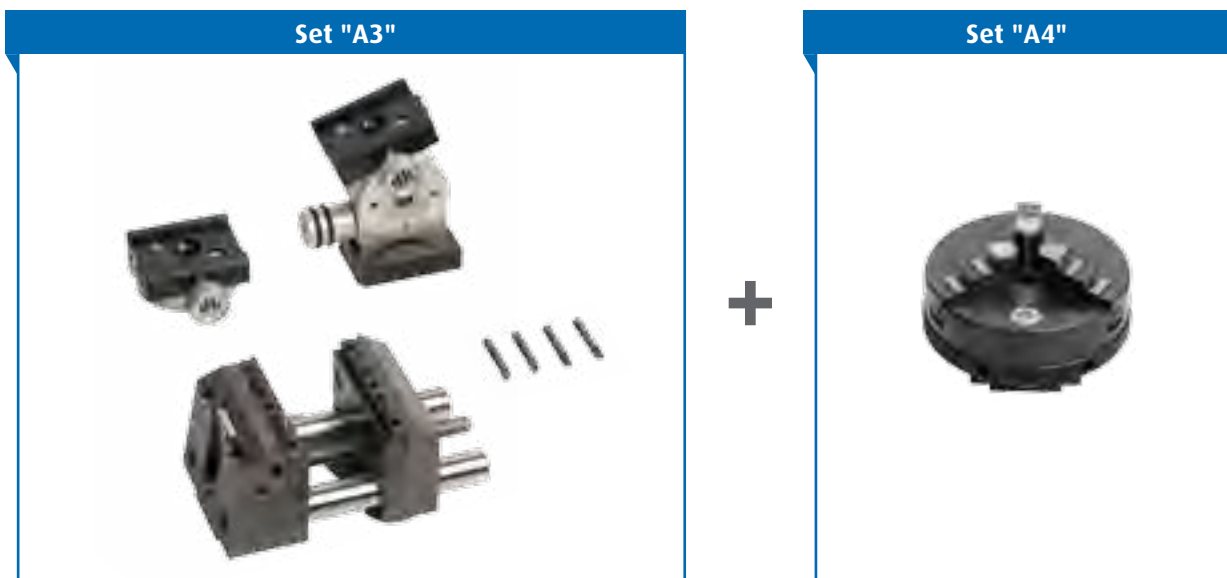
## Clamping sets "A"

### Description

Set "A3" with quick-action clamp, swivel unit and vice can, for example, be used for clamping milled and turned parts. The swivel unit allows the vice and the workpiece to be tilted to the desired position. The clamping elements are mounted using a quick-action clamp, which is secured either directly to the measuring bench, or on a base plate. Set "A4" also contains a three-jaw chuck ideal for holding turned parts or workpieces containing holes. The swivel unit allows the three-jaw chuck to be positioned at any angle.

### Ordering information

When ordering, select the appropriate quick-action clamp or tell us at the time of order the size of the mounting hole or T-slot on your measuring bench.



### Set versions

Order number	Designation
340530	Clamp set "A3"
340540	Clamp set "A4"

### Set contents

Order number	Designation	Set "A3"	Set "A4"
308200	80 mm precision vice	1	1
307800	Cylindrical pins for vice jaws with straight support surface (4 pcs)	1	1
326600	Cylindrical pins for vice jaws with inclined support surface (4 pcs)	1	1
283210	100 mm precision three-jaw chuck		1
314010	Quick-action clamp swivel unit	1	1
see right	Quick-action clamp	1	1

Order number	Connection
285206	M6
285208	M8
285210	M10
285212	M12
285300	T-slot

**Clamp set "B"**

**Description**

Set of various clamping elements, including precision vice, precision chuck, toggle clamp and small-parts clamp. The individual clamping elements can be tilted into the desired position using the Monoball swivel unit. All modules can be anchored quickly and easily using an SWA 39 quick-change mount. Structural and clamping elements are mounted using a quick-action clamp, which is secured either directly to the measuring bench, or on a base plate.

**Ordering information**

When ordering, select the appropriate quick-action clamp or tell us at the time of order the size of the mounting hole or T-slot on your measuring bench.



**Set version**

Order number	Designation
340610	Clamp set "B"

**Set contents**

Order number	Designation	Quantity
308200	80 mm precision vice	1
329705	50 mm precision three-jaw chuck	1
267500	Small-parts clamp, smooth	1
270500	Swivel unit Monoball	1
284000	Articulated clamping arm SU with toggle clamp (0-25 mm)	1
see right	Quick-action clamp	1

Order number	Connection
285206	M6
285208	M8
285210	M10
285212	M12
285300	T-slot

## Clamping sets "C"

### Description

Set of various clamping elements, including precision vice, precision chuck, toggle clamp and small-parts clamp and V-block. The individual clamping elements can be tilted into the desired position using the Monoball (clamping set "C1") or Cube (clamping set "C3") swivel unit. All modules can be anchored quickly and easily using an SWA 39 quick-change mount. Structural and clamping elements are mounted using a quick-action clamp, which is secured either directly to the measuring bench, or on a base plate.

### Ordering information

For set versions "C1" and "C3", select the appropriate quick-action clamp or tell us at the time of order the size of the mounting hole or T-slot on your measuring bench.



### Set versions

Order number	Designation
340710	Clamp set "C1"
340730	Clamp set "C3"

### Set contents

Order number	Designation	Set "C1"	Set "C3"
276600	Small-parts clamp with internal lock	1	1
282100	50 mm precision vice	1	1
282300	Cylindrical pins for 50 mm vice	1	1
308200	80 mm precision vice	1	1
329705	50 mm precision three-jaw chuck	1	1
270500	Swivel unit Monoball	1	-
270650	Cube swivel unit	-	1
272700	V-block	1	1
272920	Clamping bracket	1	1
279300	Toggle clamp (0-50 mm) with locating pin	1	1
284000	Articulated clamping arm SU with toggle clamp (0-25 mm)	1	1
see right	Quick-action clamp	1	1

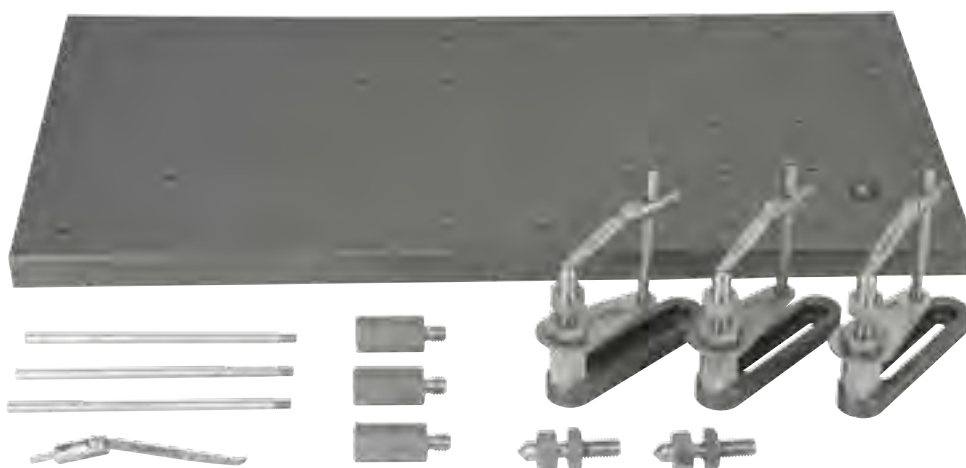
  

Order number	Connection
285206	M6
285208	M8
285210	M10
285212	M12
285300	T-slot

Spannfix basic sets Eco

Description

Set with different supports, extension elements and stop units. Workpieces are clamped using spring clamps. The base forms a base plate with M6 mounting holes to enable module elements to be positioned flexibly and quickly.



Example application



Set versions

Order number	Designation
285130	Spannfix basic set Eco "1"
285140	Spannfix basic set Eco "2"

Set contents

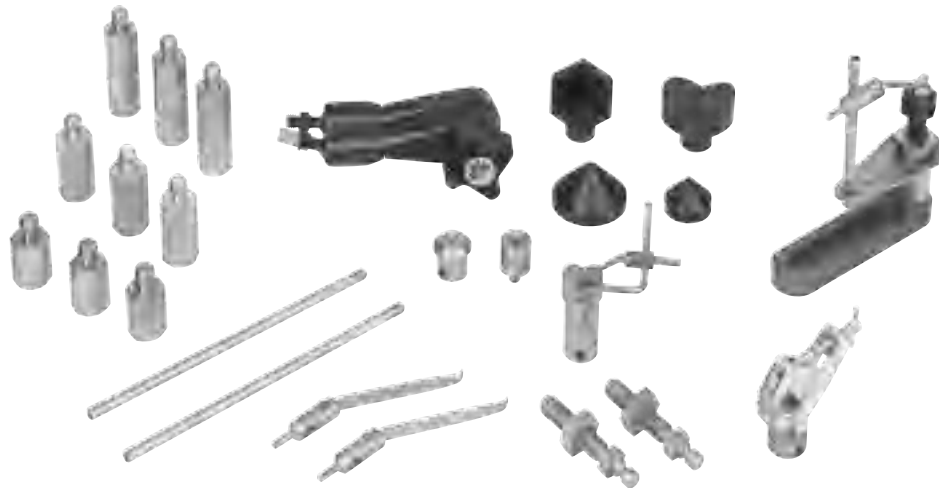
Order number	Designation	Set "1"	Set "2"
395030	Base plate with tapped holes, 500 x 250 mm	1	-
395040	Base plate with tapped holes, 600 x 300 mm	-	1
322005	Screw frame sets with spring clamp	3	3
322600	Formed support with 90° point	2	2
322300	35 mm extension pieces	3	3
368500	125 mm columns, for spring clamp or as stop unit	3	3
302900	75 mm spring clamp	1	1



## Spannfix expansion set Eco

### Description

Expansion set with different support, extension and clamping modules.



### Set version

Order number	Designation
285150	Spannfix Eco expansion set

### Set contents

Order number	Designation	Quantity
296700	Articulated clamping arm SU	1
322010	Adjustable base rail	1
322200	25 mm extension pieces	4
322300	35 mm extension pieces	3
322400	50 mm extension pieces	3
323000	Self-aligning support	1
368300	Column for 75 mm spring clamp	1
368505	Columns for 150 mm spring clamp	2
302800	50 mm spring clamp	1
302900	75 mm spring clamp	2
275000	Adapter - male M 6 / female M 8	1
334900	Toggle clamp, 0-25 mm	1
285500	Stop unit for support surface, 20 mm	1
285810	V-support with spring clamp	1
329500	Quick-change mount SWA 8	2
377200	25 mm angle	1
323400	120° V-support	1
303700	25 mm centre point, 90°	1
303800	40 mm centre point, 90°	1

**Spannfix complete sets Eco**

**Description**

The set contains different supports, extension elements and stop units. Workpieces are clamped using spring or toggle clamps. The base forms a base plate with mounting holes to enable module elements to be positioned flexibly and quickly. Complete set "1" contains a base plate with dimensions of 500 x 250 mm, while complete set "2" has a large base plate with dimensions of 600 x 300 mm. The complete set allows the clamping of a wide variety of metal and plastic, milled and turned parts.



**Set versions**

Order number	Designation
285160	Spannfix Eco "1" complete set
285170	Spannfix Eco "2" complete set

**Set contents**

Order number	Designation	Set "1"	Set "2"
395030	Base plate with tapped holes, 500 x 250 mm	1	
395040	Base plate with tapped holes, 600 x 300 mm		1
281436	Base plate anchoring claws (1 set)	1	1
285206	Quick-action clamp	1	1
322005	Screw frame sets with spring clamp	6	6
322600	Formed support with 90° point	3	3
323000	Self-aligning supports	3	3
368500	125 mm columns, for spring clamp or as stop unit	6	6

### Set contents (continued)

Order number	Designation	Set "1"	Set "2"
368505	150 mm columns, for spring clamp or as stop unit	3	3
353800	Retaining plates for columns	3	3
302900	75 mm spring clamp	3	3
322200	25 mm extension elements	6	6
322300	35 mm extension elements	6	6
322400	50 mm extension elements	6	6
304400	100 mm extension elements	3	3
336400	Horizontal clamp with support dome	3	3
329500	Quick-change mounts	3	3
323500	8 mm V-support, 120°	1	1
323400	40 mm V-support, 120°	1	1
303700	25 mm centre point, 90°	1	1
303800	40 mm centre point, 90°	1	1
275000	Thread adapter, M6/M8	2	2
296700	Articulated clamping arms, model SU	2	2
334900	0 - 25 mm toggle-clamps	2	2
285810	V-support 120° with spring clamp	1	1

### Example application



**Spannfix basic sets**

**Description**

Set with supports, extension elements and stop units. The base forms a base plate with T-slots and mounting holes.

**Ordering information**

Tell us at the time of order the size of the mounting hole on your measuring bench.



**Set versions**

Order number	Designation
399710	Spannfix basic set "3"
399720	Spannfix basic set "4"

**Set contents**

Order number	Designation	Set "3"	Set "4"
280500	Base plate with T-slot, 500 x 250 mm	1	
280800	Base plate with T-slot, 600 x 300 mm		1
see right	Claws for anchoring Spannfix base plates Order numbers 281406, 281408, 281410, 281412 for mounting M 6, M 8, M 10 or M 12	1	1
290700	Satellite mount M 10	2	2
322200	25 mm extension element	1	1
322300	35 mm extension element	2	2
322400	50 mm extension element	1	1
322500	60 mm extension element	1	1
288800	Columns with 170 mm T-slot blocks	2	2
288900	Columns with 205 mm T-slot blocks	1	1
286700	100 mm arm	2	2
286600	150 mm arm	1	1
319300	Support domes with 90° centre point	3	3
319400	Formed pins R4 x 20 mm	3	3
287200	Pair of V-blocks	1	1
287500	Adjustable stop	1	1
323000	Self-aligning support	1	1
322600	Formed support with cone point	1	1
322700	Formed support with dome	1	1
302300	75 mm spring clamp	2	2
302400	95 mm spring clamp	1	1

## Spannfix expansion set

### Description

Expansion set featuring various support and fixturing modules for reproducible fixturing of test parts.



### Set versions

Order number	Designation
399730	Spannfix expansion set

### Set contents

Order number	Designation	Quantity
325100	Intermediate plate	1
297000	Articulated clamping arm MU	1
322010	Base rails	2
326400	T-slot blocks	2
322200	25 mm extension elements	2
322300	35 mm extension elements	2
322400	50 mm extension elements	2
288600	Columns with 125 mm T-slot blocks	2
288900	Columns with 205 mm T-slot blocks	2
286700	100 mm arm	2
286600	150 mm arm	1
287200	Pairs of V-blocks	1
303200	SWA 8 mount for arm	1
303300	M 10 mount for arm	1
322700	Formed supports with dome	2
329500	Quick-change mounts	2
303600	Centre point 15 mm Ø for quick-change mount	1
303700	Centre point 25 mm Ø for quick-change mount	1
303800	Centre point 40 mm Ø for quick-change mount	1
323500	8 mm V-support for quick-change mount	1
323400	40 mm V-support for quick-change mount	1
302300	75 mm spring clamp	2
302400	95 mm spring clamp	1
368710	100 mm columns	2
368810	150 mm columns	2
368910	200 mm columns	2
334900	Toggle clamp	1
279600	Toggle clamp with locating pin	1

**Spannfix complete set**

**Description**

Set that includes articulated clamping arms and toggle clamps for quick and flexible positioning of various test parts. Structural and clamping elements are anchored on a Spannfix base plate measuring 600 mm x 300 mm. Various support and clamping modules can be used to achieve reproducible fixturing. The high clamping forces of the articulated clamping arms allow even heavy parts to be fixtured securely.

**Ordering information**

Tell us at the time of order the size of the mounting hole on your measuring bench.



**Set version**

Order number	Designation
399700	Spannfix complete set

**Set contents**

Order number	Designation	Quantity
280800	Base plate with T-slot, 600 x 300 mm	1
288700	85 mm support columns	2
288800	170 mm support columns	3
288900	205 mm support columns	2
see right	Claws for anchoring Spannfix base plates Order numbers 281406, 281408, 281410, 281412 for mounting M 6, M 8, M 10 or M 10	1
285300	Quick-action clamp for T-slot	1
320500	Clamping supports with pull-down jaw	3
305500	Pairs of V-blocks	2
324100	100 mm extension pieces	3
286700	100 mm arm	3
286600	150 mm arm	3

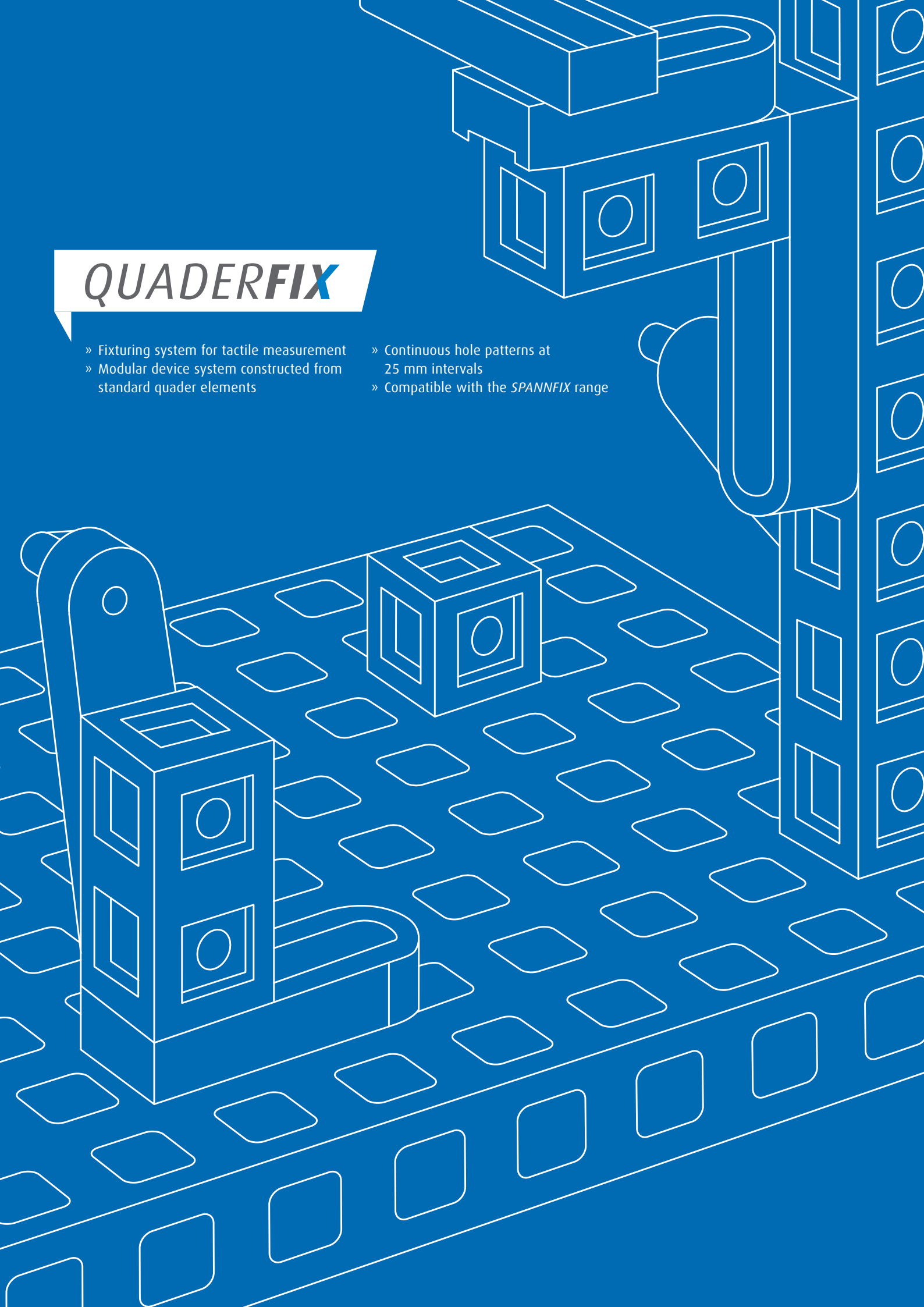
### Set contents (continued)

Order number	Designation	Quantity
287200	Pairs of adjustable V-blocks	2
286100	Support finger	3
322000	Screw frame sets	3
326400	T-slot blocks	3
322200	25 mm extension elements	3
322300	35 mm extension elements	3
322400	50 mm extension elements	3
322600	Formed supports with cone point	3
329500	M 10 quick-change mounts	3
323000	M 10 self-aligning supports	2
287500	Adjustable stop	1
287100	Bridge support, centre-to-centre 125 mm	2
302500	75 mm spring clamp	3
302600	95 mm spring clamp	3
297000	Articulated clamping arms MU	3
290700	M 10 satellite mounts	3
279600	Toggle clamp with locating pin	1
334900	Toggle clamps	3
303600	15 mm centre point	1
303700	25 mm centre point	1
303800	40 mm centre point	1
319500	Formed pins R4 x 20 mm	3
319300	Support domes with 90° centre point	3



# QUADERFIX

- » Fixturing system for tactile measurement
- » Modular device system constructed from standard quader elements
- » Continuous hole patterns at 25 mm intervals
- » Compatible with the *SPANNFIX* range





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Quader base plates

**Description**

Base plate with square push-fit sockets for anti-twist fixturing of the modular elements and a 25 mm pattern of M 6 connection threads.

**Material**

Hardcoated aluminium.



Quad

Order number	Length	Width	Height	Weight
361700	400	200	25	4.7
362000	500	250	25	7.4
362100	600	300	25	10.7

Example application



## Accessories

### + Quader plate connectors

#### Description

Plate connector for Quader base plates.

#### Material

Hardcoated aluminium.



Order number	Length	Width	Height	Version
363600	58	25	8	swivelling
363300	100	25	12	rigid

Quad

### + Claws

#### Description

Claws for anchoring Quaderfix base plates.

#### Material

Hardcoated aluminium.



Order number	For plate thickness	Thread	Scope of delivery
281406	25	M 6	One set
281408	25	M 8	One set
281410	25	M 10	One set
281412	25	M 12	One set

M ...

Quader plates

**Description**

Quader plate with 25 mm connection thread pattern. Square push-fit socket for anti-twist fixturing of module elements with M 6 connection threads, M 5 on side faces. Also suitable as base plate for smaller clamping jobs.

**Material**

Hardcoated aluminium.



Quad

Order number	Length	Width	Height	Weight
360000	50	75	25	0.22
360100	50	100	25	0.29
360200	50	125	25	0.36
360300	50	150	25	0.43
360400	50	200	25	0.57
360500	50	250	25	0.72
360600	50	500	25	1.44
360700	100	100	25	0.57
360800	100	150	25	0.84
360900	100	200	25	1.3
361000	150	150	25	1.5
361100	150	200	25	1.7
361200	150	250	25	2.2
361500	200	200	25	2.4
361600	200	300	25	3.6

## Quader columns

### Description

Quader column with 25 mm connection thread pattern.  
Square push-fit socket for anti-twist fixturing of module elements with M 6 connection threads, M 5 on side faces.

### Material

Hardcoated aluminium.



Quad

Order number	Length	Width	Height	Weight
364000	25	25	25	0.03
364100	50	25	25	0.07
364200	75	25	25	0.10
364300	100	25	25	0.13
364400	125	25	25	0.17
364500	150	25	25	0.20
364600	200	25	25	0.27
364700	250	25	25	0.34
364800	500	25	25	0.68

Quader connector

**Description**

For joining Quader columns at the sides.

**Material**

Hard-coated aluminium/steel.

**Scope of delivery**

Includes M 5 fastening screw.



Quad

Order number	Length	Width	Height	Weight
363200	25	25	25	0.05

Example application



## Quader reinforcement bracket

### Description

Square for reinforcement or ease of mounting. Quader columns or V-block elements can be mounted on the base plate from above, using the reinforcement bracket. It is no longer necessary to screw these items on from the underside of the plate.



### Material

Hardcoated aluminium.

Quad

Order number	Length	Width	Height	Weight
366000	25	25	25	0.04
357000	100	50	25	0.24
357100	150	75	25	0.49

## Quader mount, rotating

### Description

Rotating Quader mount. This allows Quader columns or V-blocks, for instance, to be mounted in a rotated position.



### Material

Hardcoated aluminium.

Quad

Order number	Length	Width	Height	Weight
366500	25	25	25	0.04

Quader mounting rails, adjustable

Description

Adjustable rails for mounting Quader elements or threaded columns.

Material

Hardcoated aluminium.



Quad

Order number	Length	Width	Height	Adjustment range
357800	83	25	12.5	38
366400	60	25	25	15

Quader X/Y adjustment element

Description

X/Y adjustment piece for Quader elements, enabling positioning outside the 25 mm connection thread pattern.

Material

Hardcoated aluminium.



Quad

Order number	Length	Width	Height	Adjustment range
357500	65	65	25	15



## Bushes and adapters

### Description

Centring plate and centring ring for guiding Quader elements that are to be screwed together. Centring plate secured against rotation.

### Material

Stainless steel.



Quad

Order number	Description
367000	Centring plate
367200	Centring ring

## Adjusting nut

### Description

Adapter for screwing on Quader elements with M 5 screws.

### Material

Stainless steel.



Quad

Order number	Description
367100	M 5 adjusting nut

M 10 extension elements

**Description**

Extension pieces with male thread at the bottom end and female thread at the top end. Width across flats 17 mm.

**Material**

Stainless steel.



M 10

Order number	Male thread	Female thread	Length
322200	M10	M10	25
322300	M10	M10	35
322400	M10	M10	50
322500	M10	M10	60
304400	M10	M10	100
253500	M10	M10	150

## Thread adapter with extension element

### Description

Adapters with centring diameter for Quader elements.  
Width across flats 17 mm.

### Material

Stainless steel.



M ...  
Quad

Order number	Connection 1	Connection 2	Length
369200	Male M 5	Female M 8	28
356200	Male M 5	Female M 10	39
369100	Male M 6	Female M 8	28
356000	Male M 6	Female M 10	39
356300	Female M 5	Female M 10	30
356100	Female M 6	Female M 10	30

## Quader / M 10 adapter

### Note

Mount for M 10 modules on Quader system.

### Material

Hardcoated aluminium.



M 10  
Quad

Order number	Length	Width	Height	Weight
364900	25	25	75	0.03

T-slot / Quader adapter

**Description**

Adapter for the mounting of Quader modules on Spannfix T-slot plates.

**Material**

Aluminium / steel.

**Scope of delivery**

With T-slot block.



Example application



Quad  
T-Slot 6

Order number	Length	Width	Height	Weight
366300	50	25	35	0.09

Quick-action clamp for Quader

**Description**

SWA 39 quick-action clamp for direct anchoring on Quader plates.

**Material**

Hardcoated aluminium.

**Scope of delivery**

Includes fastening screw.



SWA 39  
Quad

Order number	Height
362900	21.5

## Quader V-plates

### Description

120° V-plate for Quader. Square push-fit socket for anti-twist fixturing of module elements with M 6 connection threads, M 5 on side faces.

### Material

Hardcoated aluminium.

### Scope of delivery

One pair.



Quad

Order number	Length	Width	Height	Clamping Ø	Weight
359400	100	50	25	100	0.27
359500	150	50	25	200	0.36

## Pairs of Quader V-blocks

### Description

Pair of V-blocks. Square push-fit sockets for anti-twist fixturing of module elements with M 6 connection threads, M 5 on underside.

### Material

Hardcoated aluminium.

### Scope of delivery

One pair.



Quad

Order number	Support point	Length	Width	Height	Weight
359600	90°	25	25	25	0.04
359700	90°	50	25	25	0.08
359800	120°	25	25	25	0.04
359900	120°	50	25	25	0.07

Pair of Quader V-blocks with ridge

**Description**

Pair of V-blocks with ridged support. Square push-fit sockets for anti-twist fixturing of module elements with M 6 connection threads, M 5 on underside.

**Material**

Hardcoated aluminium.

**Scope of delivery**

One pair.



Quad

Order number	Support point	Length	Width	Height	Weight
357300	90°	50	25	25	0.07
357400	120°	50	25	25	0.07

Rail for support domes

**Description**

Adjustable rails for support domes. Mount Ø 4 mm / width of elongated hole 6 mm.

**Material**

Hardcoated aluminium.



Order number	Length	Width	Height	Adjustment range
357700	72	20	12	25

## Mounts for support domes

### Description

Mount  $\varnothing$  4 mm for support domes. With connection thread M 5 or M 6.

### Material

Stainless steel.



Quad

Order number	Male thread	Female thread	Height
356600	M5	-	20
356400	M6	-	20
356700	-	M5	20
356500	-	M6	20

## Support domes

### Description

Support domes and centring pins for  $\varnothing$  4 mm mount.

### Material

Stainless steel.



### Example application



Order number	Version	Diameter	Fig.
319400	R 4 x 15 mm support	8	1
319500	R 4 x 20 mm support	8	2
319300	90° centre point	12	3

Quader stops

Description

Stop units for Quader. Version as a fixed or adjustable stop with ball support.

Material

Hardcoated aluminium.



Quad

Order number	Version	Adjustment range	Fig.
366600	Fixed stop	Rail, 15 mm	1
366700	Adjustable stop	Rail 15 mm, stop unit 20 mm	2

Adjustable stop

Description

Adjustable stop for attachment to the side of Quader connection thread M 5. Effective length of the stop unit 150 mm.

Material

Stainless steel.



Quad

Order number	Length	Width	Height
366800	30	18	18



↪ All clamping elements in the Spannfix section can also be used for the Quaderfix system.

**Spring clamp example**

Spring clamp (see page 59) fitted on columns (see page 60).



**Horizontal clamp example**

Horizontal clamp with M 10 connection thread (see page 62), mounted on extension elements (see page 138).



Quaderfix basic sets

Description

Set with different Quader elements for mounting medium-sized test parts. The base forms a Quader plate with the dimensions 400 x 200 mm or 600 x 300 mm.



\* Screwing material not shown.

Example application



Set versions

Order number	Designation	Base plate	Fig.
369910	Quaderfix basic set "1"	400 x 200	
369920	Quaderfix basic set "2"	600 x 300	1

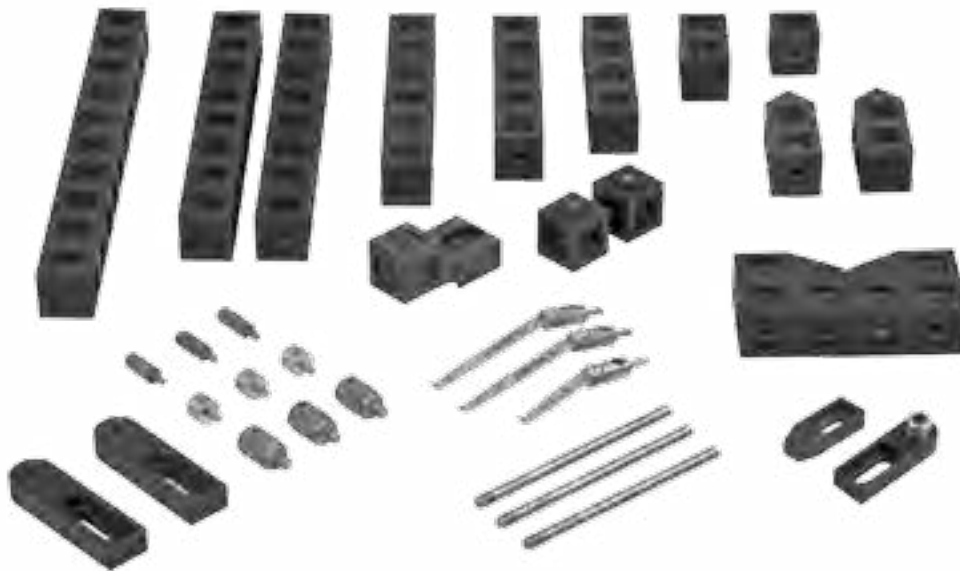
### Set contents (continued)

Order number	Designation	Set "1"	Set "2"
361700	Quader base plate, 400 x 200 mm	1	-
362100	Quader base plate, 600 x 300 mm	-	1
364700	Quader columns, 250 mm	2	2
364500	Quader columns, 150 mm	2	2
364300	Quader columns, 100 mm	2	2
364100	Quader columns, 50 mm	2	2
364000	Quader columns, 25 mm	2	2
366500	Quader mount, rotating	1	1
366400	Quader mount, adjustable	1	1
366700	Quader stop units, adjustable	2	2
366600	Quader stop unit, fixed	1	1
368200	Columns for 50 mm spring clamp	3	3
368300	Columns for 75 mm spring clamp	3	3
302800	50 mm spring clamp	3	3
356600	M 5 mounts for support domes	2	2
356400	M 6 mount for support domes	1	1
319400	R 4 x 15 mm support domes	3	3
369800	Quaderfix screwing material set "1"	1	1

Quaderfix expansion set

Description

Expansion set with further Quaderfix modules for assembling more complex fixturing devices.



Set version

Order number	Designation
369930	Quaderfix expansion set

Set contents

Order number	Designation	Quantity
364700	Quader column, 250 mm	1
364600	Quader columns, 200 mm	2
364500	Quader column, 150 mm	1
364400	Quader column, 125 mm	1
364300	Quader column, 100 mm	1
364100	Quader column, 50 mm	1
364000	Quader column, 25 mm	1
366500	Quader mount, rotating	2
366400	Quader mount, adjustable	1
366700	Quader stop unit, adjustable	1
366600	Quader stop unit, fixed	1
359700	Pair of 90° Quader V-blocks, 50 mm	1
359400	Pair of 120° Quader V-blocks, 100 mm	1
368400	Columns for 100 mm spring clamp	3
302800	50 mm spring clamp	1
302900	75 mm spring clamp	2
356600	M 5 mount for support domes	1
356400	M 6 mounts for support domes	2
357700	Rails for support dome	2
319500	R 4 x 20 mm support domes	3
319300	90° centre point for support dome	3

## Quaderfix screwing material

### Description

Screwing material for Quaderfix in practical assortment boxes. Consisting, among other items, of bushing, adapters and clamping screws of various lengths, for mounting individual Quader elements. Two set versions available.



### Set versions

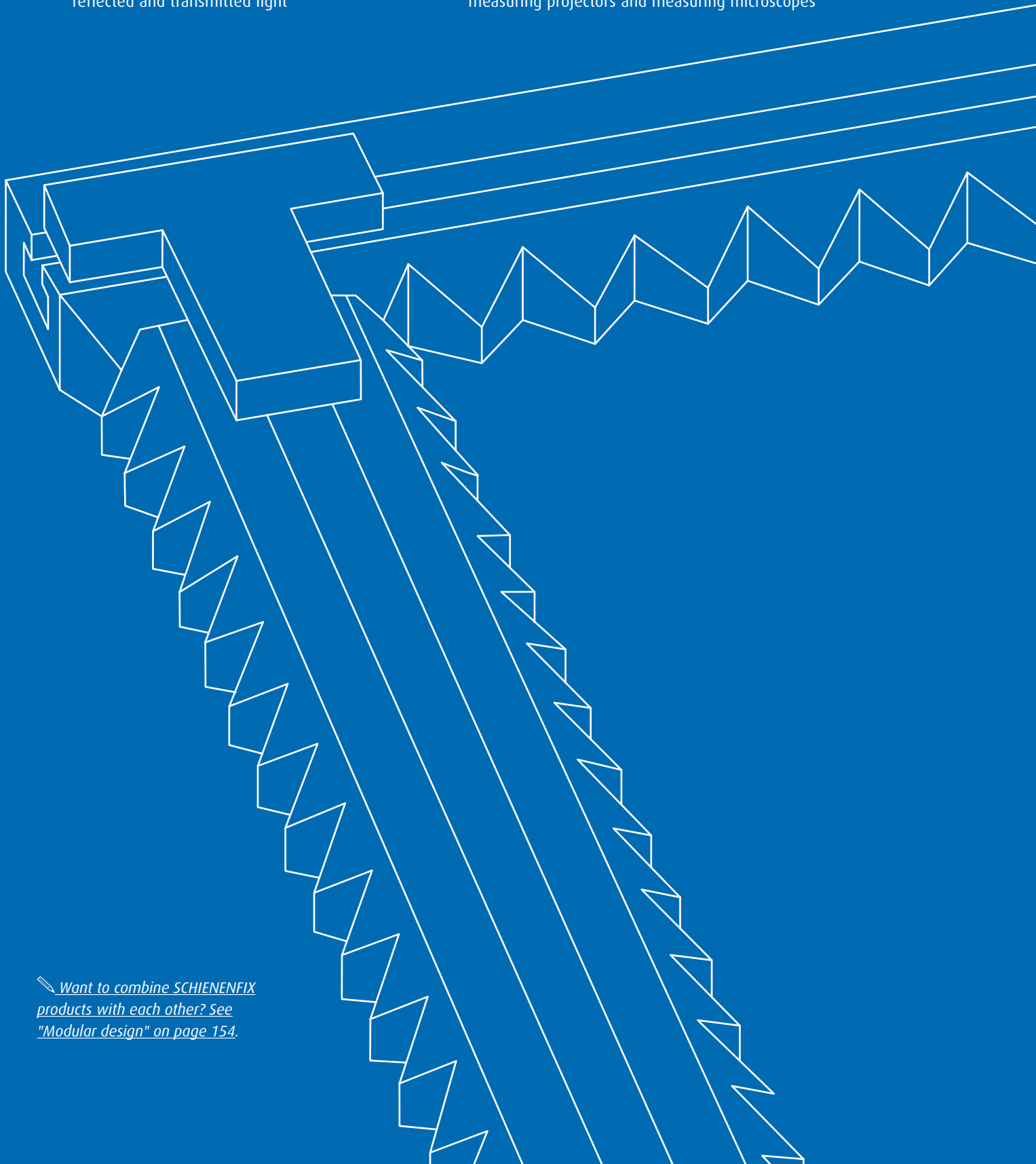
Order number	Designation	Fig.
369800	Quaderfix screwing material set "1"	1
369900	Quaderfix screwing material set "2"	


### Set contents





Order number	Designation	Set "1"	Set "2"
367000	Centring plates	10	20
367100	M 5 threaded bushings	5	10
367200	Centring rings	5	10
369100	Thread adapter – male M 6 / female M 8	-	2
369200	Thread adapter – male M 5 / female M 8	-	1
	Screws M 5 x 14	-	20
	Screws M 5 x 16	10	20
	Screws M 5 x 30	10	20
	Screws M 5 x 45	5	20
	Screws M 6 x 12	10	20
	Screws M 6 x 16	10	20
	Screws M 6 x 20	10	20
	Screws M 6 x 25	10	20
	Washers	20	20
	Washers for Quader	20	20
	Right-angle screwdriver SW 2.5	-	1
	Pin screwdriver 3 mm	-	1
	Pin screwdriver 4 mm	-	1

# SCHIENENFIX

- » Modular clamping elements for optical or optical/tactile measurement
- » For high-precision edge measurements in reflected and transmitted light
- » Toothed rails as workpiece stops or for fastening clamping modules
- » For optical/tactile CNC measuring machines, measuring projectors and measuring microscopes



 *Want to combine SCHIENENFIX products with each other? See ["Modular design"](#) on page 154.*

Product group	Product name	Page	
<b>Base + structural elements</b>			
	<b>Rails, pallets and accessories</b>		
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	Connecting rails	157	
	Rail connecting pieces	158	
	Clamping claws	158	
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	T-slot rails	160	
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90° angle element		163	
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	Articulated clamping arms	164	
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Product group	Product name	Page
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Other fixturing systems



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**Multispannfix**

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**Oktofix**

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Sets



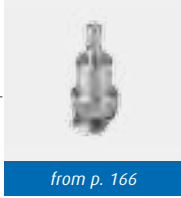
**Sets**

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Pallets with clamping elements	209
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↳ Fixturing devices can be assembled from basic, structural and clamping elements. The modular elements have a standard interface for quick and easy combination. The diagram below shows different combination possibilities, but is only a selection of the available modular elements and possible combinations.

SWA 5

Base and structural elements + Clamping elements



## SWA 39



from p. 162

## T-Slot 5



from p. 156



from p. 162



from p. 163



from p. 169



from p. 182



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from p. 187



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from p. 183



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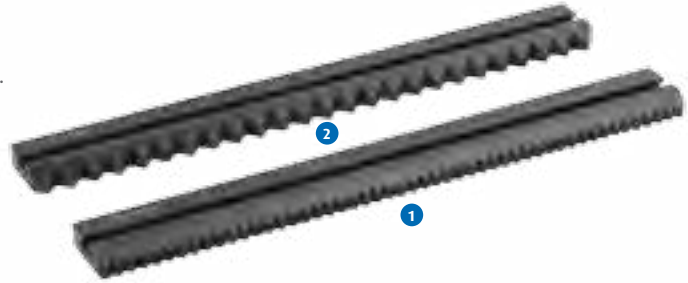
Base rails

Description

Rail with toothing on one side and a T-slot. As a stop unit or for attaching modular structural and clamping elements. With 5 mm or 10 mm tooth spacing.

Material

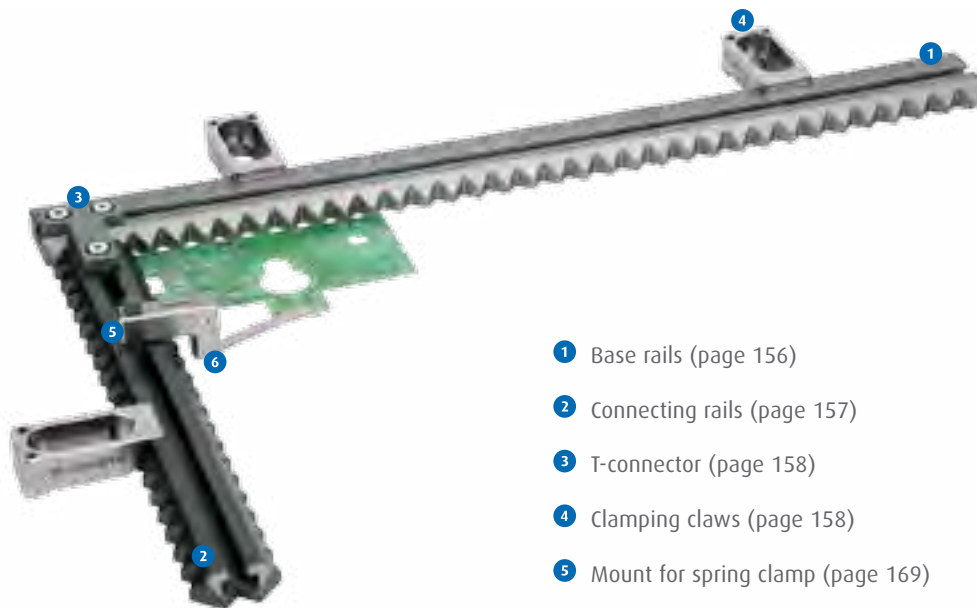
Hardcoated aluminium.



T-Slot 5

Order number	Tooth spacing	Length	Width	Height	Fig.
344920	5	200	28	10	
345020	5	250	28	10	1
345220	5	350	28	10	
345420	5	450	28	10	
345620	5	500	28	10	
344900	10	200	28	10	
345000	10	250	28	10	2
345200	10	350	28	10	
345400	10	450	28	10	
345600	10	500	28	10	

Example application

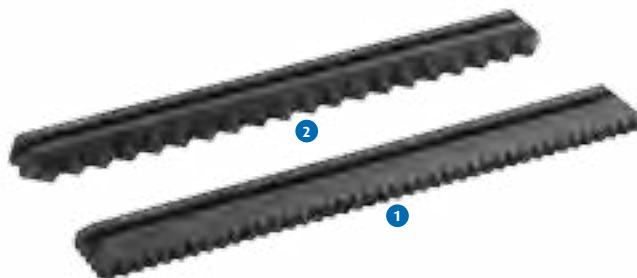


- 1 Base rails (page 156)
- 2 Connecting rails (page 157)
- 3 T-connector (page 158)
- 4 Clamping claws (page 158)
- 5 Mount for spring clamp (page 169)
- 6 Spring clamp for horizontal clamping (page 168)

## Connecting rails

### Description

Rail with tothing all round and T-slot. 60 and 100 mm toothed rails have teeth on 3 sides. As a stop unit or for attaching modular structural and clamping elements. The tothing on the end face enables the rail to be connected to other toothed rails, e.g. for construction of a frame using two existing base rails. With 5 mm or 10 mm tooth spacing. Rails with different tooth spacing can be combined.



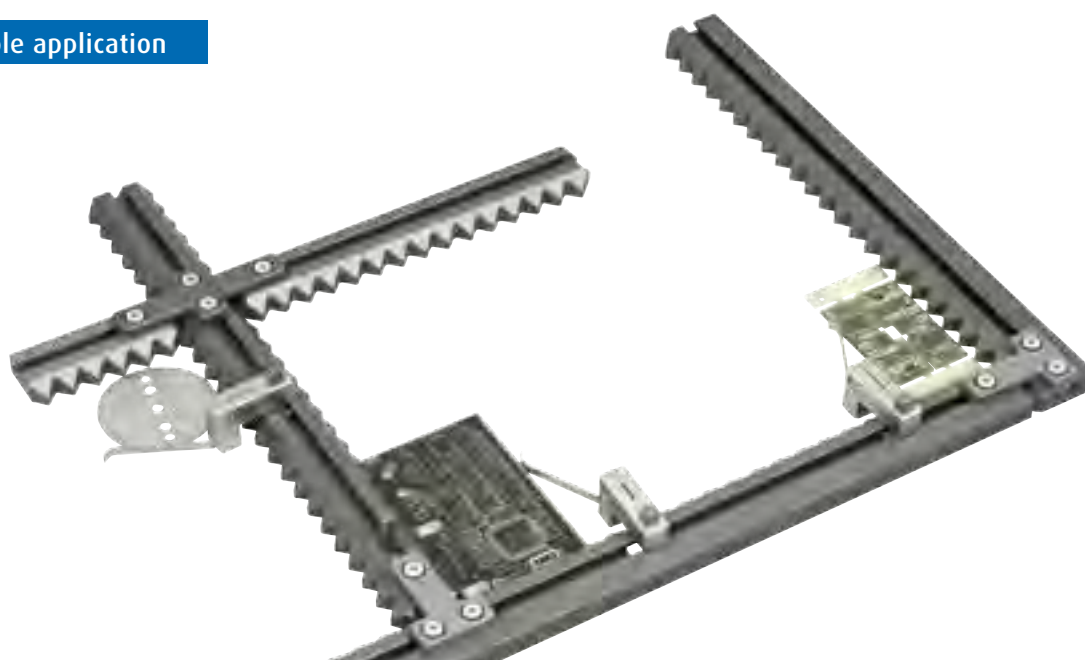
### Material

Hardcoated aluminium.

T-Slot 5

Order number	Tooth spacing	Length	Width	Height	Fig.
347020	5	60	28	10	
347220	5	100	28	10	
347420	5	150	28	10	
346020	5	200	28	10	1
346220	5	250	28	10	
346420	5	350	28	10	
346620	5	400	28	10	
347000	10	60	28	10	
347200	10	100	28	10	
347400	10	150	28	10	
346000	10	200	28	10	2
346200	10	250	28	10	
346400	10	350	28	10	
346600	10	400	28	10	

### Example application



Rail connecting pieces

Description

Connecting piece for toothed rails. Aligned and clamped in T-slot.

Material

Hard-coated aluminium/steel.

Scope of delivery

Includes T-slot blocks and fastening screws.



T-Slot 5

Order number	Shape	Length	Width	Height	Fig.
348000	T-connector	28	40	3.5	1
348200	Cross connector	28	73	3.5	2

Clamping claws

Description

Clamping claw for anchoring toothed rails to the measuring bench. Adjusting screws make it possible to adjust the glass panes to the same height. Different lengths of clamping claw available to compensate for the gap between the measuring range and the mounting holes on the measuring bench.



Scope of delivery

Includes fastening screws. If fastening with a T-slot, T-slot block must be ordered separately.

↳ For T-slot blocks, see page 159.

T-Slot

M ...

Order number	Length	Mount (measuring bench)	Measuring range gap / hole centre
262914	35	M4	35-55
262915	35	M5	35-55
262916	35	M6	35-55
262918	35	M8	35-55
262910	35	T-slot	35-55
262924	45	M4	35-65
262925	45	M5	35-65
262926	45	M6	35-65
262928	45	M8	35-65
262920	45	T-slot	35-65
262921	60	M ... to customer specification, or T-slot	60-80

## Rail fastening joints

### Description

Freely adjustable double joint for anchoring toothed rails to the measuring bench. Adjustment range 25 – 100 mm. Fastening to measuring bench using tapped hole or T-slot.



### Material

Aluminium / steel.

### Scope of delivery

Double joint as standard with M 6 connection thread. Adapters, T-slot blocks, etc. required for alternative fastenings must be ordered separately.

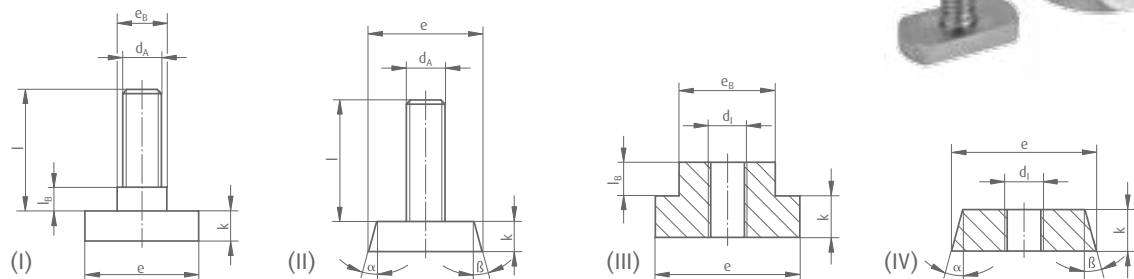
T-Slot 5	T-Slot 5
M ...	T-Slot

Order number	Mount (measuring bench)
348500	M6
348600	Customer specification

## T-slot blocks

### Description

T-slot blocks for clamping claws, fastening joints and satellite mounts.



Order number	$d_A$	$d_i$	$e$	$e_B$	$k$	$l$	$l_B$	$\alpha$	$\beta$	Model
265300	M5	-	10	-	2.5	14.5	-	-	-	I
265310	M5	-	10	-	3	20	-	-	-	I
264100	M5	-	11.8	-	2.8	15	-	-	-	I
265000	M6	-	10.2	-	1.8	12	-	-	-	I
264600	M6	-	11	-	4.8	16	-	-	-	I
264000	M6	-	11.8	-	2.8	10.5	-	-	-	I
264800	M6	-	15	7.9	7	15	5	-	-	I
264300	M6	-	20	-	6	10	-	30°	30°	II
347700	-	M4	10	-	2.5	-	-	-	-	IV
264500	-	M4	17.5	-	7.5	-	-	28°	-	IV
264700	-	M5	11	-	4.8	-	-	-	-	IV
265500	-	M5	15	7.9	7	-	5	-	-	III
264400	-	M5	20	-	6	-	-	30°	30°	IV

T-slot rails

Description

T-slot rail with no toothing for freely variable connection of toothed rails. The T-slot rail is connected to the toothed rails by clamps (349800).



Example application



T-Slot 5

Order number	Length	Width	Height
349810	200	28	10
349820	250	28	10
349830	300	28	10
349840	350	28	10
349850	400	28	10

Clamp

Description

Anchoring set for T-slot rails mounted on toothed rails.



Example application



T-Slot 5

Order number	Scope of delivery
349800	One set of two clamps



## Basic pallets

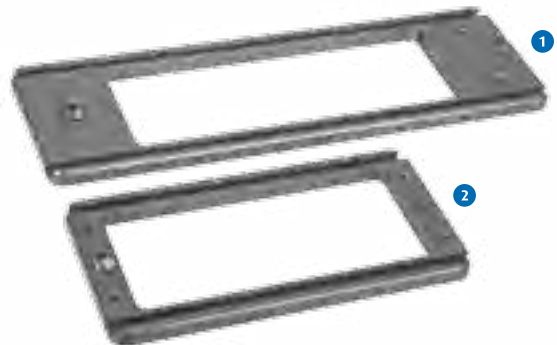
### Description

Pallets with T-slot and M 6 mounting thread for fastening different clamping modules. The pallets can be placed against a square for reproducible positioning and fixed with spring or horizontal clamps.

### Material

Hard-coated aluminium.

↪ Versions with non-standard dimensions available on request.

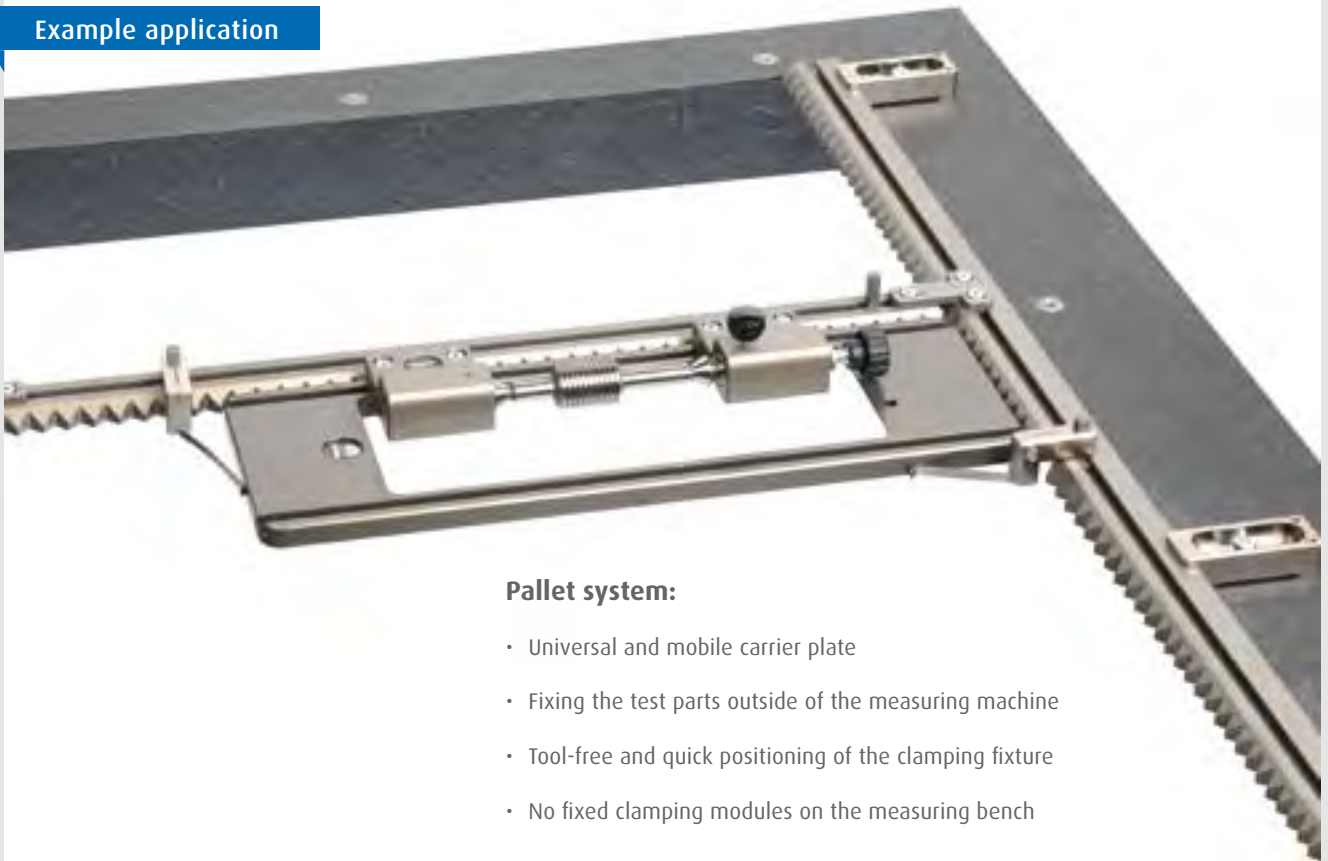


T-Slot 5

M 6

Order number	Outside dimensions	Inspection glass	Version	Fig.
345801	305 x 100 x 10	200 x 72	normal	1
345821	195 x 100 x 10	160 x 72	short	2

### Example application



#### Pallet system:

- Universal and mobile carrier plate
- Fixing the test parts outside of the measuring machine
- Tool-free and quick positioning of the clamping fixture
- No fixed clamping modules on the measuring bench

Base mount

Description

SWA 39 quick-action clamp for the direct mounting of fixturing modules on the measuring bench. With elongated hole for screws up to max. M 6.

Material

Hard-coated aluminium.



SWA 39  
M ...

Order number	Length	Width	Height
263710	150	85	15

Quick-action clamp

Description

SWA 39 quick-change mount for mounting on toothed rails.

Material

Hard-coated aluminium/steel.

Scope of delivery

With T-slot block.



SWA 39  
T-Slot 5

Order number	Length	Width	Height
273320	80	63	15

## Quick-action clamp 90° angle element

### Description

Quick-action clamp angle element for mounting clamping elements. The angle element is fitted to quick-action clamp or alternatively can be fastened with bolts up to a maximum of M 8.

### Material

Hard-coated aluminium.



### Example application



SWA 39

SWA 39  
M ...

Order number	Length	Width	Height
283300	60	90	48

## 90° angle element

### Description

Angle element for mounting quick-action clamp SWA 39. The angle element is fitted directly onto the toothed rail.

### Material

Hard-coated aluminium.

↪ Quick-action clamp, see page 162.



### Example application



T-Slot 5

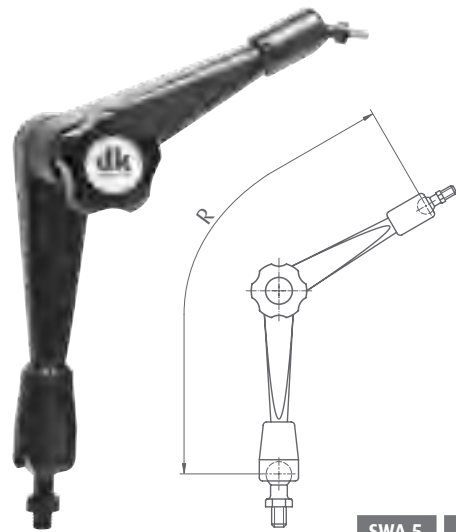
Order number	Length	Width	Height
273330	25	40	50

Articulated clamping arms

Description

Articulated stands with progressive clamping effect featuring a threaded mount in the base and a quick-change mount on the arm. Mechanical articulated clamping arm. Clamping effect provided by central grip. Retention force in case of right-angle mounting 100 N (MU type) or 80 N (SU type).

Example application



SWA 5	SWA 8
M ...	M ...

Order number	Model	Connection at bottom	Connection at top	Operating range (R)
296800	SU	M 8	SWA 5	160
296700	SU	M 8	SWA 8	160
296900	MU	M 10	SWA 5	280
297000	MU	M 10	SWA 8	280

Satellite mounts

Description

Mount for articulated clamping arms on benches having compatible slots.

Material

Stainless steel.

Scope of delivery

Without T-slot block.

🔗 For T-slot blocks, see page 159.



M ...
T-Slot

Order number	Slot connection	Articulation connection	For articulated clamping arms	Mount	Fig.
290610	M 6	M 8	SU	Vertical	1
290710	M 6	M 10	MU	Vertical	1
269700	M 4-M 8	M 8	SU	Horizontal	2

## Thread adapter

### Description

Reducer for mounting articulated clamping arms. Width across flats 13 mm.

### Material

Stainless steel.



M ...

Order number	Male thread	Female thread
264900	UNC 1/4	M8
265200	UNC 10-32	M8
269500	M5	M8
275000	M6	M8
275010	M6	M10
297800	M8	M10

## Rotary unit

### Description

Attachment unit having a defined 90° rotation pattern. The unit enables a small-parts clamp or a magnetic retainer, for example, to be turned to any one of four positions.

### Material

Stainless steel.



### Example application



SWA 5

Order number	Length	Connection 1	Connection 2
269600	30	SWA 5 female	SWA 5 male

Quick-change mount SWA 5

Description

Quick-change mount SWA 5. Fitted onto quick-action clamp SWA 39, or with T-slot block for fitting to T-slot.

Material

Stainless steel.



1



2

SWA 5	SWA 5
T-Slot 5	SWA 39

Order number	Length	Width	Height	Width across flats	Mount	Fig.
314620	15	15	17	13	T-slot	1
314100	60	60	34	-	SWA 39	2

Angular mounts SWA 5

Description

Fixed 90° angular mount for SWA 5 modules.

Material

Hard-coated aluminium.



1



2

SWA 5	SWA 5	SWA 5
SWA 39	M ...	T-Slot

Order number	Anchorage	Fig.
314610	By SWA 39 quick-change mount	1
315000	By screws up to M 6	2

## Rotary swivel mount

### Description

Lockable rotary spindle with SWA 5 connection. Angles of rotation are freely adjustable. Alternatively, the mount can be turned through defined increments of 30°. For horizontal alignment, the spindle has a swivel range of  $\pm 15^\circ$ . The mount can be fitted onto the toothed rail or directly onto the measuring bench using M 6 screws.

### Material

Hard-coated aluminium/steel.

### Scope of delivery

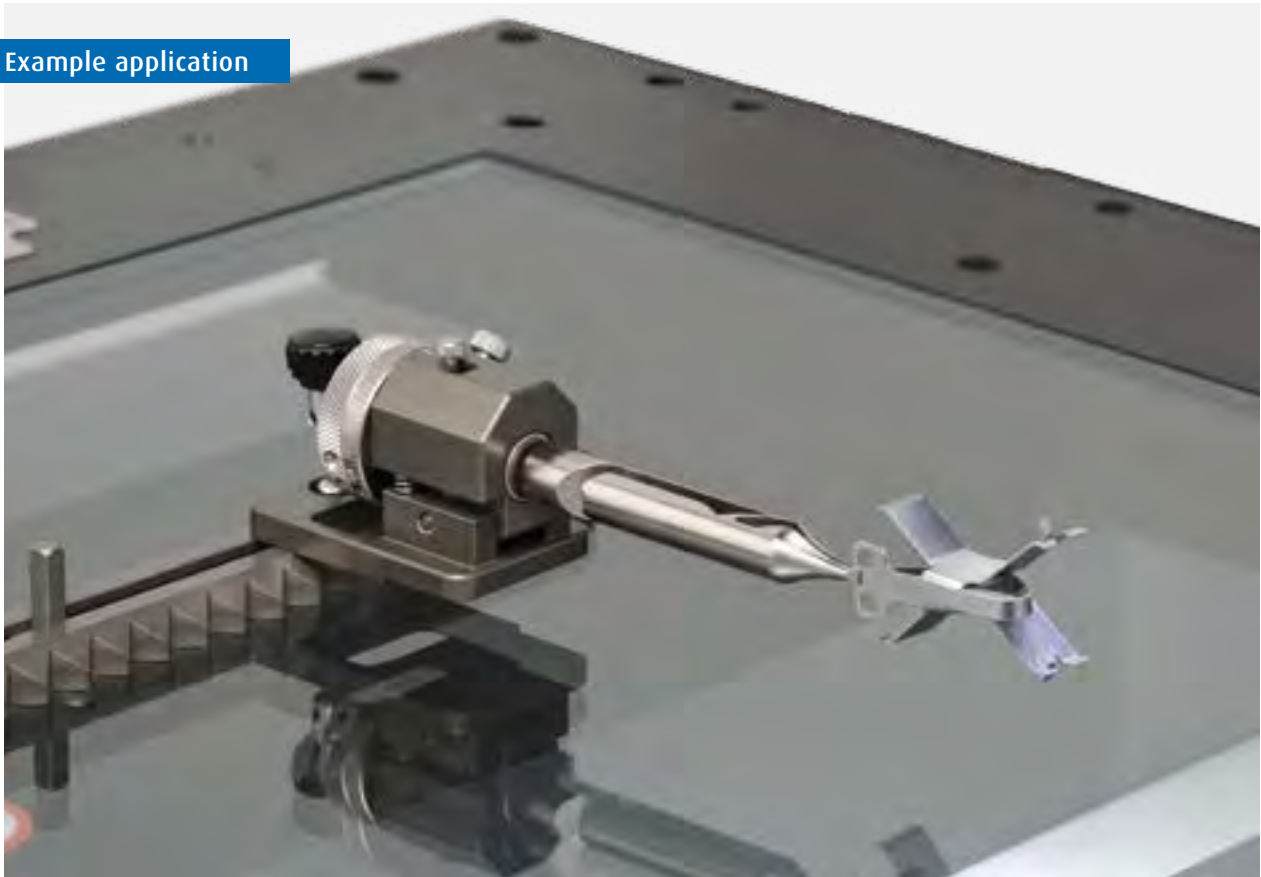
Includes T-slot block and fastening screw for mounting on toothed rail. Control apparatus.



SWA 5	SWA 5
T-Slot	M ...

Order number	Centre height	Swivelling	Weight
314900	23	$\pm 15^\circ$	0.17

### Example application



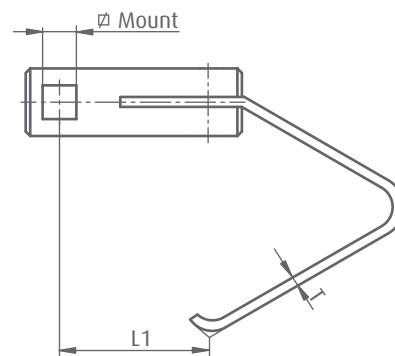
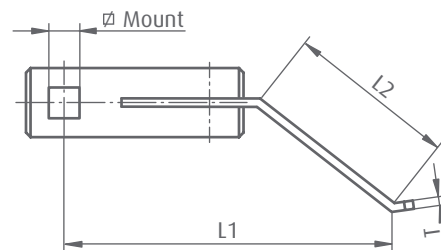
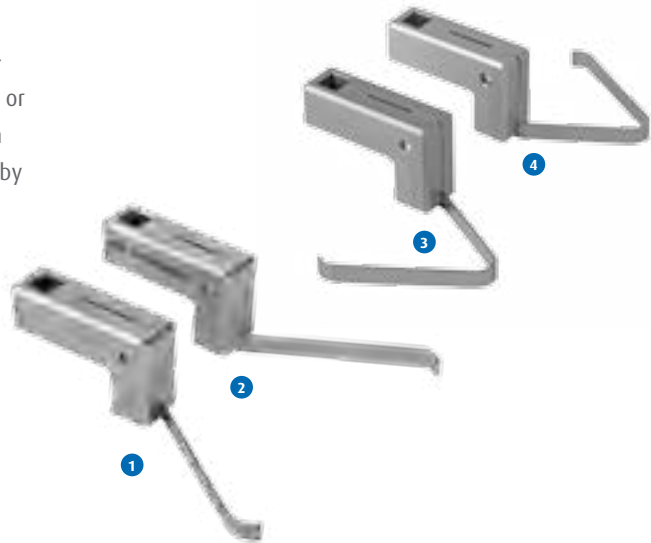
Spring clamp for horizontal clamping

Description

Spring clamp for clamping workpieces on toothed rails horizontally. Versions with different spring lengths and for right or left direction of clamping. Small parts can be clamped at an angle using the bent spring version. Clamp effect achieved by tilting with spring clamp mount (5 mm square).

Material

Brass/stainless steel.



Example application



Order number	Mount $\varnothing$	Clamping direction	T	L1	L2	Fig.
349100	5	Left	0.6	60	34	1
349200	5	Right	0.6	60	34	2
349300	5	Left	0.6	66	50	
349400	5	Right	0.6	66	50	
269200	5	Left (suitable only for angle 268900)	0.6	55	34	
268200	5	Right (suitable only for angle 268900)	0.6	66	50	
349150	5	Left	0.6	23	-	3
349250	5	Right	0.6	23	-	4



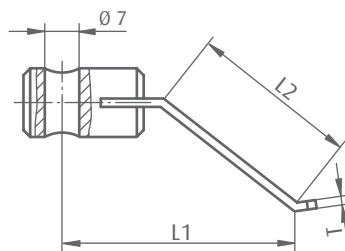
## Spring clamp for vertical clamping

### Description

Spring clamp for the vertical clamping of test parts on rail elements. Clamp effect achieved by tilting with spring clamp mount (5 mm square).

### Material

Hard-coated aluminium/steel.



Order number	Mount- $\square$	Version	T	L1	L2
269100	5	Round	1.1	50	34
268100	5	Round	1.1	70	50

## Mounts for spring clamps

### Description

Clamping column (5 mm square) for T-slots, enabling the mounting of spring clamps.

### Material

Hard-coated aluminium.



T-Slot 5

Order number	Mount $\square$	Length
268500	5	20
268600	5	30
268700	5	50

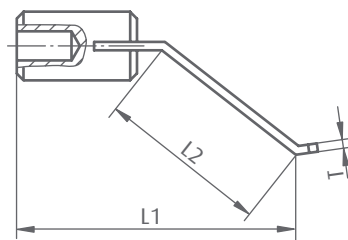
Spring clamp for vertical clamping – SWA 5

**Description**

Spring clamp with quick-change mount SWA 5. Using an articulated clamping arm, the spring clamp can be flexibly positioned.

**Material**

Stainless steel.



SWA 5

Order number	Mount	Version	T	L1	L2
269300	SWA 5	Round	1.1	60	34
268300	SWA 5	Round	1.1	75	50

Spring clamp with mounting

**Description**

Spring clamp with mounting on toothed rail. Columns with M 4 threads can be mounted vertically or horizontally on the column bracket.

**Material**

Aluminium / stainless steel.

**Scope of delivery**

With spring clamp (343700), column (269043) and column bracket (272910).

↪ For additional spring clamps, see the "spannfix" section on page 59 or for columns with other lengths, see page 60.



T-Slot 5

Order number	Length	Width	Height
267915	90	12	14

## Try square with spring clamp

### Description

Toothed rail angle with T-slot and two spring clamps for clamping small parts. Using the integrated quick-change interface SWA 5 or SWA 8, the angle can be flexibly positioned with an articulated clamping arm on the measuring bench.

### Material

Hard-coated aluminium/steel.

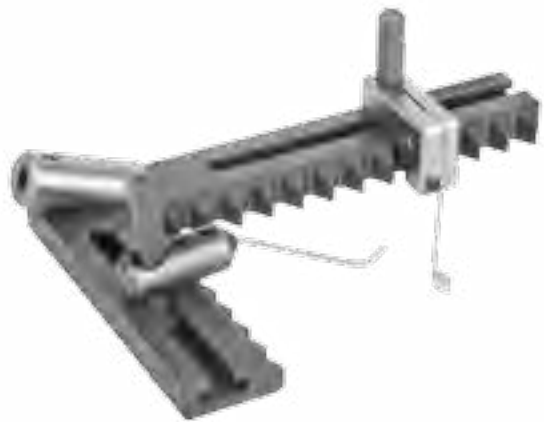
### Scope of delivery

Includes 2 T-slot blocks (268600) and 2 spring clamps.

For 268900: 1 x 269200, 1 x 269100

For 268800: 1 x 349100, 1 x 269100

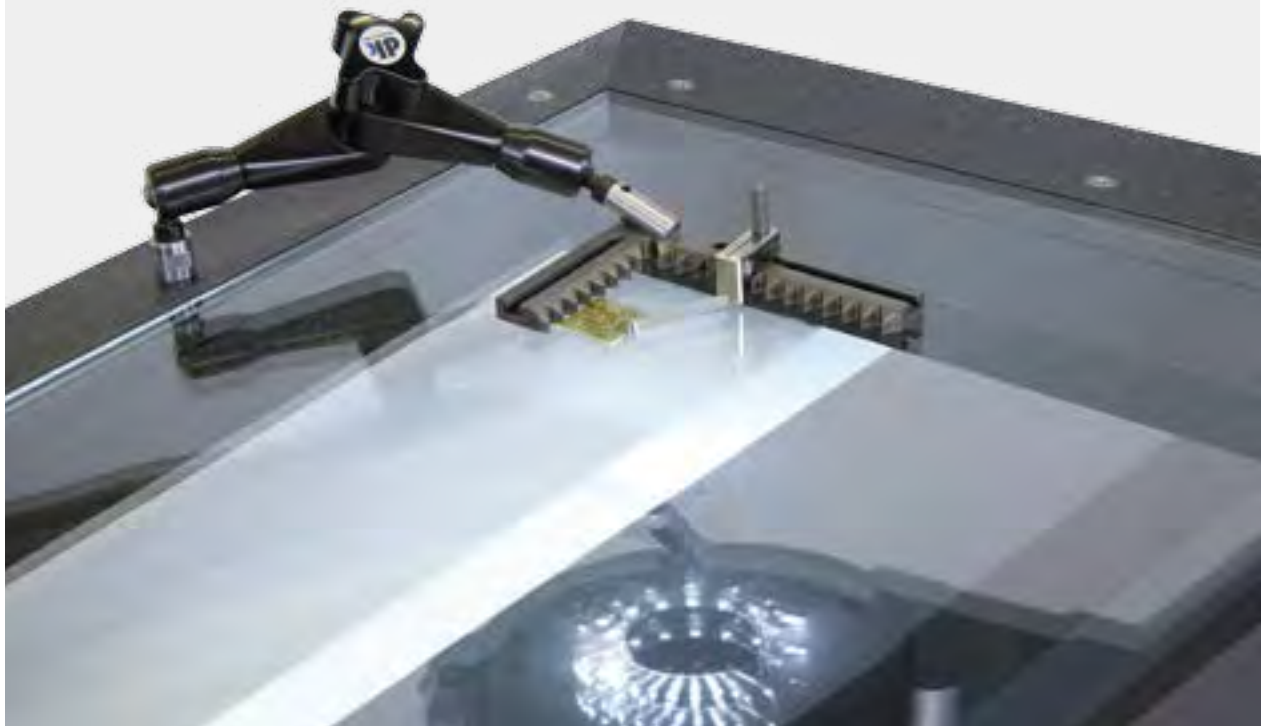
↪ *Articulated clamping arms, see page 164.*



T-Slot 5	T-Slot 5
SWA 8	SWA 5

Order number	Connection	Side length	Side height	Tooth spacing
268900	SWA 5	120 x 80	8	7.5
268800	SWA 8	200 x 100	10	10

### Example application



Screw frame, small

Description

Adjustable base rail with height-adjustable support.

Scope of delivery

1 x base rail (322050), 1 x 15 mm extension element (322250), 1 x formed support (322750).



T-Slot 5

Order number	Adjustment range	Length	Width	Height
322001	50	81	12	53

Small screw frame with spring clamp

Description

Adjustable base rail with height-adjustable support.  
With spring clamp for fixturing the workpiece.

Scope of delivery

1 x base rail (322050), 1 x 15 mm extension element (322250), 1 x formed support (322750), 1 x 30 mm retaining plate (353750), 1 x column for spring clamp (269043), 1 x spring clamp (343700).



T-Slot 5

Example application



Order number	Adjustment range	Length	Width	Height
322006	50	81	12	80

## Accessories

### + Base rail

#### Description

Adjustable base rail with slot and M6 mounting thread.

#### Scope of delivery

Incl. fastening screw and T-slot block



Order number	Adjustment range	Total length	Width	Height
322050	50	81	12	10
322051	50	131	12	10

### + Retaining plates

#### Description

Mounting plates for spring clamp columns with M4 or M6 thread. For mounting on extension pieces or directly on base rail.



Order number	Thread for columns	Mounting hole	Overhang
353750	M4	6	30
353850	M6	6	50

### + Columns for spring clamps

#### Description

Columns for mounting spring clamps.

Order number	Column dia.	Length	Thread
269042	4	30	M4
269043	4	50	M4
269044	4	75	M4
368100	6	30	M6
368200	6	50	M6
368300	6	75	M6

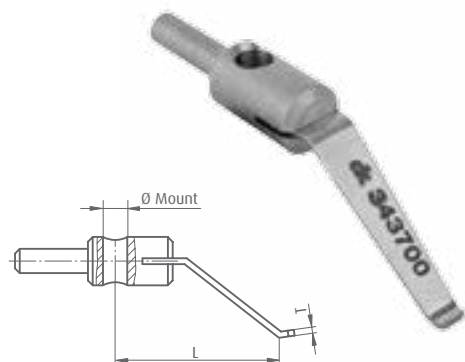


### + Spring clamp

#### Description

Quick and easy clamping of workpieces. Spring clamp 343710 with narrow spring design.

Order number	Mount Ø	T	L
269037	4	0.4	30
343700	4	0.8	30
343710	4	0.8	30
302800	6	1.0	50



Accessories (cont.)

+ Supports

Description

Height-adjustable supports for supporting test parts.  
With M6 thread and an adjustment range of 15 mm.



Order number	Version	Length	Fig.
322750	Formed support with 3 mm dome radius	40	1
323050	Self-aligning support, steel, +/- 10°	35	2
323060	Self-aligning support, plastic, +/- 10°	35	2
323070	Magnetic support, dia. 6 mm, magnetic force 5 N	42	3

+ Extension elements

Description

Extension pieces with M6 male and female thread.  
Width across flats 17 mm.



Order number	Male thread	Female thread	Length
322250	M6	M6	15
322350	M6	M6	25
322450	M6	M6	50

## Horizontal clamp for toothed rails

### Description

Horizontal clamp for mounting on toothed rails.

### Material

Steel / hard-coated aluminium.

↳ Spacers can be used to increase the clamping range, see page 185.



T-Slot 5

Order number	Overhang	Clamping range	Height
336900	18-32	0-16	35

### Example application



15 mm precision vice

Description

Miniature vice with V-block jaw. Includes SWA 39, SWA 5 or M 4 connection. Version in brass but also available in stainless steel. Hole separation on M 4 connectors is 42 mm.

Scope of delivery

Includes stainless steel (270921) and plastic changeable jaws.

↳ For accessories, see the "Spannfix" section on page 69.



SWA 39	SWA 5	M ...
--------	-------	-------

Order number	Version	Jaw width	Span	Total height	Material	Fig.
270910	SWA 39	15	14.5	61	Brass	1
270915	SWA 39	15	14.5	61	Stainless steel	1
270900	SWA 5	15	14.5	27	Brass	
270905	SWA 5	15	14.5	27	Stainless steel	
270920	2 x M4	15	14.5	15	Brass	
270925	2 x M4	15	14.5	15	Stainless steel	

25 mm precision vice

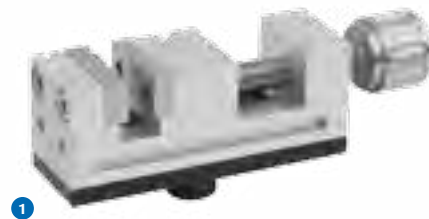
Description

Miniature vice with V-block jaw. Includes SWA 39, SWA 5 or M 4 connection. Version in aluminium but also available in stainless steel. Hole separation on M 4 connectors is 62.5 mm.

Scope of delivery

Includes stainless steel (270971) and plastic changeable jaws.

↳ For accessories, see the "Spannfix" section on page 70.



SWA 39	SWA 5	M ...
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Order number	Version	Jaw width	Span	Total height	Material	Fig.
270960	SWA 39	25	24.5	53	Aluminium	
270965	SWA 39	25	24.5	53	Stainless steel	
270950	SWA 5	25	24.5	38	Aluminium	1
270955	SWA 5	25	24.5	38	Stainless steel	1
270970	2 x M4	25	24.5	25	Aluminium	
270975	2 x M4	25	24.5	25	Stainless steel	



## 35 mm precision vice

### Description

Miniature vice with V-block jaw. Includes SWA 39 or M 5 connection. Version in aluminium but also available in stainless steel. Jaws with holes ( $\varnothing$  2 mm) for lock-pin action. Hole separation on M 5 connectors is 83 mm.

### Scope of delivery

Includes stainless steel (270861) and plastic changeable jaws.

🔗 For accessories, see the "Spannfix" section on page 71.



SWA 39

M ...

Order number	Version	Jaw width	Span	Total height	Material	Fig.
270850	SWA 39	35	34.5	55	Aluminium	2
270855	SWA 39	35	34.5	55	Stainless steel	2
270860	2 x M5/4 x M4	35	34.5	35	Aluminium	1
270865	2 x M5	35	34.5	35	Stainless steel	1

### Example application



50 mm precision vice

Description

Vice with exchangeable guide columns for extending clamping span. With stepped jaws and holes (Ø 4 mm) for lock-pin action. Versions with and without SWA 39 quick-change adapter, as well as with and without accessories. The version without quick-change adapter contains 4 support surfaces, at right angles to one another.

Material

Surface-hardened steel.

Scope of delivery

Versions with accessories incl. adjustable stop (318110) and extra column set for extending the clamping span to 75 mm. Plus 4 pins and magnetic knurled knob (282101).

↳ A quick-change adapter (397020) can be mounted on versions without SWA 39 subsequently, see the "Spannfix" section on page 49.

↳ For accessories, see the "Spannfix" section on page 75.



1



2

SWA 39	M ...
--------	-------

Order number	Jaw width	Version	Accessories	Span	Weight	Fig.
282100	50	SWA 39	incl.	75 <sup>*</sup>	1.05	1
282105	50	SWA 39	without	35 <sup>*</sup>	0.87	
282110	50	4 support surfaces	incl.	75 <sup>*</sup>	1.01	2
282115	50	4 support surfaces	without	35 <sup>*</sup>	0.82	2

\* with extra column set, can be extended up to 150 mm.



Example application

## Stop unit set

### Description

The stop unit teeth are fastened to the toothed rails and can be positioned anywhere along the T-slot. Complex parts can be positioned securely and reproducibly with three points of contact. The stop unit teeth are available in two lengths of aluminium or acrylic.

### Material

Hard-coated aluminium or acrylic glass / steel

### Scope of delivery

3 x stop unit teeth and 3 x connector (348100).



Order number	Tooth length	Version	Fig.
347500	30 mm	Aluminium	1
347505	30 mm	Acrylic	
347510	50 mm	Aluminium	
347515	50 mm	Acrylic	

### Example application



Acrylic glass V-block

Description

120° V-block for fastening to toothed rails. Acrylic glass version.

↪ Spring clamps can be used to fix the parts, see pages 168 and 170.



Example application



T-Slot 5

Order number	Width	Height	Material
267940	30	10	Acrylic glass / aluminium

Acrylic glass rail element

Description

Rail element with 5 mm or 5 mm tooth spacing. For fastening to toothed rails. Acrylic glass version.

↪ Spring clamps can be used to fix the parts, see pages 168 and 170.



T-Slot 5

Order number	Width	Height	Material
267950	30	10	Acrylic glass / aluminium

## V-block with spring clamp

### Description

Small 120° V-block for the spring-clamping of parts. With SWA 5 quick-change mount or mounted on SWA 39.

### Scope of delivery

Complete with bracket (343800) and spring clamp (343700).



1

SWA 5

SWA 39

Order number	Clamping range	V-block length	Mount	Height	Fig.
277410	Ø 2-25	10	SWA 39	45	2
277400	Ø 2-25	25	SWA 39	45	1
267900	Ø 2-25	25	SWA 5	25	3

## V-block with magnetic insert

### Description

Small 120° V-block for the clamping of parts using magnetism. Includes an SWA 5 quick-change mount.

### Material

Hard-coated aluminium.



SWA 5

Order number	Clamping range	V-block length	Mount	Height
268000	Ø 2-25	25	SWA 5	25

V-block bracket

**Description**

90° support for mounting small V-blocks on T-slot.  
The V-blocks can be clamped in different positions.

**Material**

Hard-coated aluminium/steel.

↳ V-blocks, see page 181.



T-Slot 5

Order number	Length	Width	Height
267910	20	42	52

Example application



## V-support

### Description

V-support set for horizontal fixturing of shafts. The ends of the test pieces can be seen through the openings in the mount. The V-supports can be spaced as desired on the rail system. A V-block is vertically adjustable. Width of support 4 mm.

### Material

Aluminium / steel.

### Scope of delivery

Two V-supports with T-slot blocks, columns and spring clamps.



T-Slot 5

Order number	Clamping range	Length	Width	Height
345100	Ø 2-28	75	50	40

### Example application



Tailstock, small

Description

Pair of tailstocks for mounting on T-slot with one fixed and one movable mount. The movable mount is spring-loaded and engageable. The tailstock centres are interchangeable for left-/right-handed operation. When fitted on a toothed rail, the centre height of 21.5 mm can be increased with spacers or T-slot rails.

Material

Hard-coated aluminium/steel.

Scope of delivery

Includes tailstock centres  $\emptyset 12/60^\circ$  (2 x 349758), T-slot blocks and fastening screws.



T-Slot 5

Order number	Centre height
349600	11.5 (mounted on 21.5 mm toothed rail)

Example application





## Accessories

### + Tailstock centres

#### Description

60° centre for tailstocks.

#### Material

Steel.

Order number	Centre	Diameter	Version	Fig.
349758	60°	12	-	1
349765	60°	17	-	
349759	60°	12	Stepped	2



### + Hollow centres

#### Description

The length of the test piece can be discovered seen through the slots.

Order number	Centre	Clamping range	Gap width	Fig.
349700	90°	Ø 0.5-5	0.3	1
349710	90°	Ø 0.5-10	0.4	
349720	90°	Ø 2-15	1	2
349750	90°	Ø 4-13	3	
349730	90°	Ø 14-30	3	
349755	90°	Ø 12-20	5	



### + Stepped hollow centres

#### Description

The length of the test piece can be discovered seen through the slots.

#### Material

Steel.

Order number	Centre	Clamping range	Gap width
349751	90°	Ø 4-13	3



### + Spacers

#### Description

1 pair spacers to increase tailstock height.

#### Material

Hard-coated aluminium.

Order number	Height
349640	12
349645	30



T-slot 5

Precision mini chuck

Description

Precision mini chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. Mounted on quick change adapters SWA 39 or SWA 5.

Material

Hard-coated aluminium/steel.



SWA 39    SWA 5

Order number	Connection	Internal clamping Ø	External clamping Ø	Height	Diameter	Fig.
283700	SWA 39	0-3	3-5	59	-	
283900	SWA 39	0-5	5-9	79	-	1
283500	SWA 39	0-8	8-13	90	-	
283600	SWA 5	0-3	3-5	60	24	2
283800	SWA 5	0-5	5-9	80	32	

Example application



## 50 mm precision three-jaw chuck

### Description

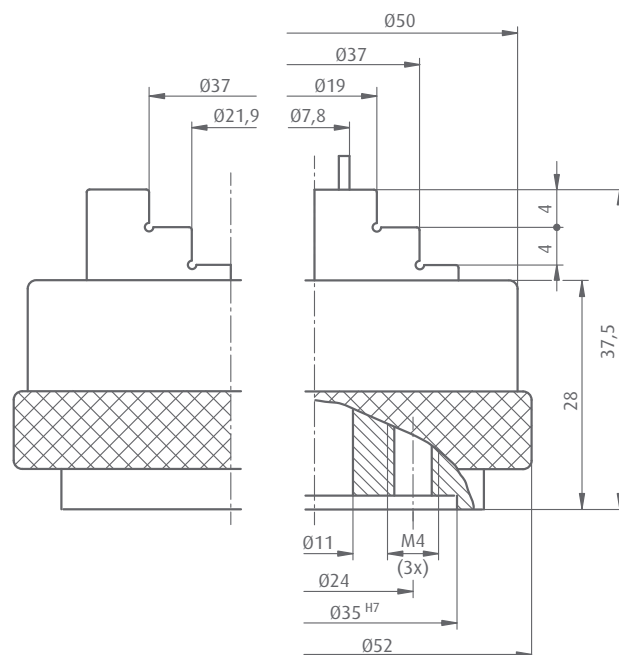
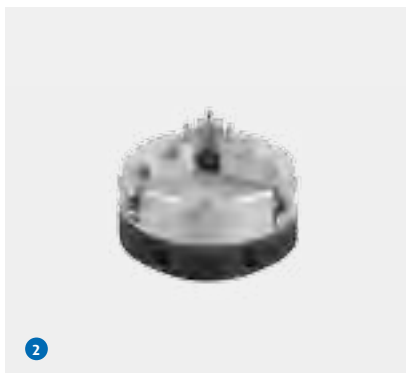
Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. With three additional pins ( $\varnothing 2$  mm) on the top of each jaw for raising the height at which small parts can be clamped. The pins can be removed. With or without an SWA 39 quick-change adapter. Alternatively with MK 2 mount.

### Material

Hard-coated aluminium/steel.

### Scope of delivery

Extra set of changeable jaws with inwardly stepped jaws.  
Control apparatus.



SWA 39

M ...

MK 2

Order number	Size	Connection	Height	Fig.
329705	50	SWA 39	58	1
329720	50	3 x M4	38	2
329725	50	MK 2*	46.5	3

\* Additional mounts available on request.

65 mm precision three-jaw chuck

Description

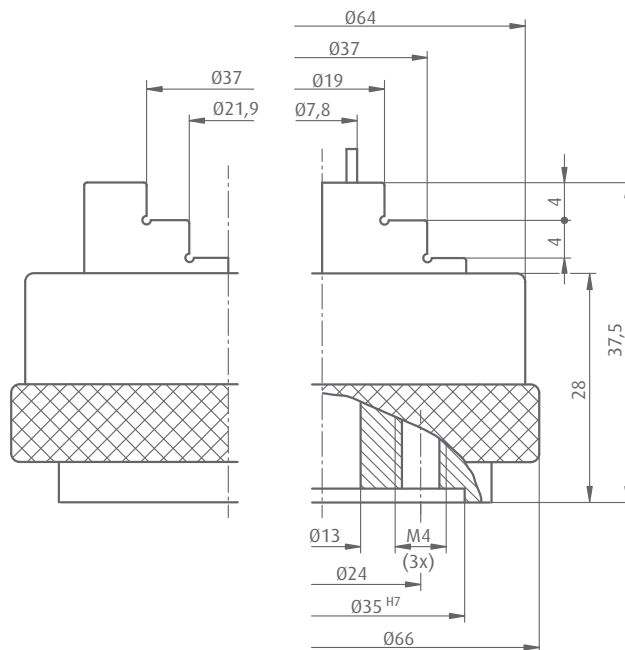
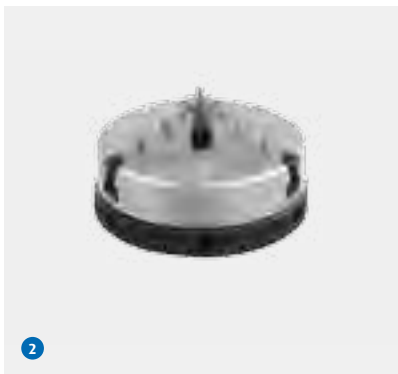
Three-jaw chuck featuring outwardly stepped clamping jaws. For clamping the inside and outside of rotationally symmetrical parts. With three additional pins ( $\varnothing 2$  mm) on the top of each jaw for raising the height at which small parts can be clamped. The pins can be removed. With or without an SWA 39 quick-change adapter. Alternatively with MK 2 mount.

Material

Hard-coated aluminium/steel.

Scope of delivery

Extra set of changeable jaws with inwardly stepped jaws. Control apparatus.



Order number	Size	Connection	Height	Fig.
329700	65	SWA 39	58	1
329710	65	3 x M4	38	2
329715	65	MK 2*	46.5	3

\* Additional mounts available on request.

## Nadelfix 2.5

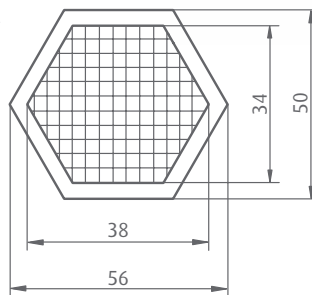
### Description

Ideal for clamping formed parts. Includes SWA 39 quick-change mount. Version 396031 with approx. 30% reduced spring tension.

### Scope of delivery

Includes clamping fixture, comprising rail (396120), column (269043) and spring clamp (269038).  
Fasteners included.

↳ Other Nadelfix clamping elements and accessories, see "Spannfix" section from page 92 onwards.



SWA 39

Order number	Pin Ø	Support surface	Total height	Spring deflection
396030	2.5	38 x 34	55	max. 10
396031	2.5	38 x 34	55	max. 10

### Example application



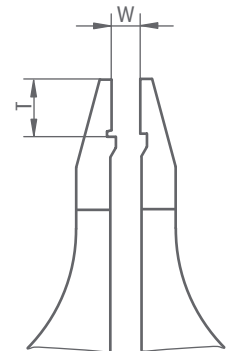
Small-parts clamp with stepped profile

Description

Small-parts clamp with stepped grip face. For clamping small parts. Spring-loaded grip. Includes an SWA 5 quick-change mount.

Material

Steel.



SWA 5

Order number	Clamping width	Span (W)	Clamping depth (T)	Length
265700	1.5	0-1.6	2.1	80
266100	3	0-1.6	2.1	80
266600	5	0-1.6	2.1	80
267100	8	0-1.6	2.1	80

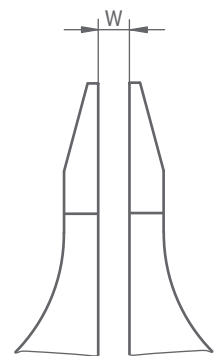
Small-parts clamp, smooth

Description

Small-parts clamp with smooth grip face. For clamping small parts. Spring-loaded grip. Includes an SWA 5 quick-change mount.

Material

Steel.



SWA 5

Order number	Clamping width	Span (W)	Length
265800	1.5	0-1.6	80
266000	3	0-1.6	80
266500	5	0-1.6	80
267000	8	0-1.6	80

## Small-parts clamp with V-block

### Description

Small-parts clamp with V-block. For clamping rotationally symmetrical parts. Spring-loaded grip. Includes an SWA 5 quick-change mount.

### Material

Steel.



SWA 5

Order number	Clamping width	Clamping diameter	Length
265900	1.5	0.3-1.5	80
266200	2	0.5-2.0	80
266700	2.5	1.5-3.0	80
267200	3.5	3.0-4.0	80

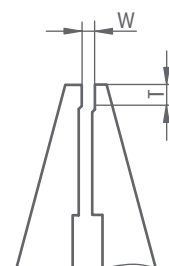
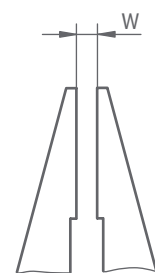
## Small-parts clamp with "screw-tightened grip"

### Description

Small-parts clamp. Fixturing of small parts achieved by screw preload. Includes an SWA 5 quick-change mount.

### Material

Steel.



SWA 5

Order number	Grip face	Clamping width	Span (W)	Clamping depth (T)	Length
267500	Smooth	4.8	0-5	-	80
267600	Stepped	4.8	0-5	1.8	80

Stop unit for small-parts clamps

Description

Adjustable stop for small-parts clamp. Compatible with all spring-loaded small-parts clamps.

Material

Steel / stainless steel.



Example application



Order number	Length	Width	Height
266800	55	17	27

Forked clamp

Description

Micro forked clamp for the fixturing of small parts by screw preload. Anchored by an SWA 5 quick-change mount.

Material

Stainless steel.



SWA 5

Order number	Jaw width	Span	Clamping depth
266900	4	0-12	15



## Magnetic retainer

### Description

Permanent magnet featuring an SWA 5 quick-change mount.

### Material

Brass, neodymium.



SWA 5

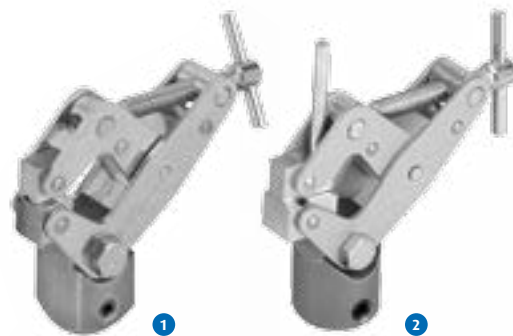
Order number	Support Ø	Magnetic force (N)	Length
267800	15	55	26

## Toggle clamps

### Description

Toggle clamps with a clamping range of 0–25 mm.

The clamping jaws can be turned. Optional version with guide pin. The clamping surfaces on the jaws are available in different versions. Either flat, or with a V-block for fixing round workpieces in place, or alternatively with a convex surface for clamping very pressure-sensitive workpieces. The clamping hands are mounted on quick change adapter SWA 5.



### Material

Stainless steel/steel/aluminium.

SWA 5

Order number	Clamping surface of lower jaw	Clamping surface of upper jaw	Version	Fig.
278800	3 flat, 1 with longitudinal V-block	3 flat, 1 with longitudinal V-block	Both jaws can be turned	1
278600	2 flat, 1 with longitudinal V-block and 1 with convex surface	2 flat, 1 with longitudinal V-block and 1 with convex surface	Both jaws can be turned	1
278900	With transverse V-block	3 flat, 1 with longitudinal V-block	Upper jaw can be turned	
279200	With transverse V-block	With flat surface	With guide pin	2

Rotary tables

**Description**

Rotary table with spindle ratio reduction 1:40. Precise indexing thanks to graduated dial and vernier scale. Version with ER 16 collet chuck holder for collet chucks 0–10 mm or with three-jaw chucks. Spindle clamped by screw.

**Material**

Aluminium / steel.

**Scope of delivery**

Includes control apparatus.



Order number	Version	Spindle concentricity	Vernier scale indexing accuracy	Centre height
261000	with collet chuck holder	± 0.01 mm	± 10 min.	24
261100	with three-jaw chuck, 65 mm	± 0.04 mm	± 10 min.	24

Example application



## Accessories

### + Display unit

#### Description

Digital display unit for rotary tables. Display accuracy  $\pm 10$  s.  
Connection 230 V / 50 Hz.

#### Scope of delivery

Includes rotary encoders and connectors for standard rotary tables.



Order number	Length	Width	Height
261200	235	220	85

### + Three-jaw chuck

#### Description

For retrofitting to rotary tables. May require intermediate plates in order to raise the rotary table.



Order number	External Ø	Max. radial runout
263310	50	$\pm 0.04$
263300	65	$\pm 0.04$

### + Collet chucks

#### Description

Collet chuck ER16 for rotary tables.

#### Material

Steel

Order number	Clamping Ø
263400	0-1
263401	1-2
263402	2-3
263403	3-4
263404	4-5
263405	5-6
263406	6-7
263407	7-8
263408	8-9
263409	9-10



Accessories

+ Rotary plate

**Description**

Base plate for rotary tables. With knurled screw which can be rotated through 360°. Clamping option. Vernier scale for reading accuracy of 0.1°.

**Material**

Hard-coated aluminium.



Order number	Length	Width	Height
261700	120	120	30

+ Attachment plates for screwed connection

**Description**

Intermediate plates for rotary tables, for attachment to measuring instruments and for raising centres when used in conjunction with three-jaw chucks.



Order number	Height	Anchorage
262700	20	Holes Ø 4.5; spacing 60 and 80
263200	30	Holes Ø 4.5; spacing 60 and 80

+ Attachment plates for clamping claws

**Description**

Intermediate plates for rotary tables, for attachment to measuring instruments and for raising centres when used in conjunction with three-jaw chucks.



Order number	Height	Anchorage
262600	20	with clamping claws
262800	30	with clamping claws

## Accessories

### + Clamping claws

#### Description

Clamping claw set for the fixturing of attachment plates for rotary tables. With elongated hole for screws up to max. M 8.

#### Scope of delivery

Two claws with fastening screws to customer specification.



Order number	Adjustment range	Length
263000	20	60

### + Mounting plate

#### Description

Base plate with quick-change mount SWA 39 for rotary tables for fitting on quick-action clamps.

#### Material

Hard-coated aluminium.



Order number	Length	Width	Height
263100	60	60	20

SWA 39

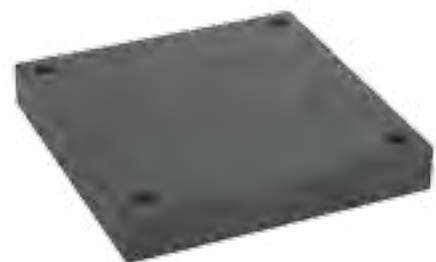
### + Intermediate plate

#### Description

10 mm spacer plate for raising rotary tables.

#### Material

Hard-coated aluminium.



Order number	Height
263500	10

**Tailstock**

**Description**

Pair of tailstocks featuring one fixed and one movable mount. The movable mount is spring-loaded and engageable. Gripped by T-slot (6 mm) on adjustable base plate or Spannfix plates.

**Material**

Hard-coated aluminium/steel.

**Scope of delivery**

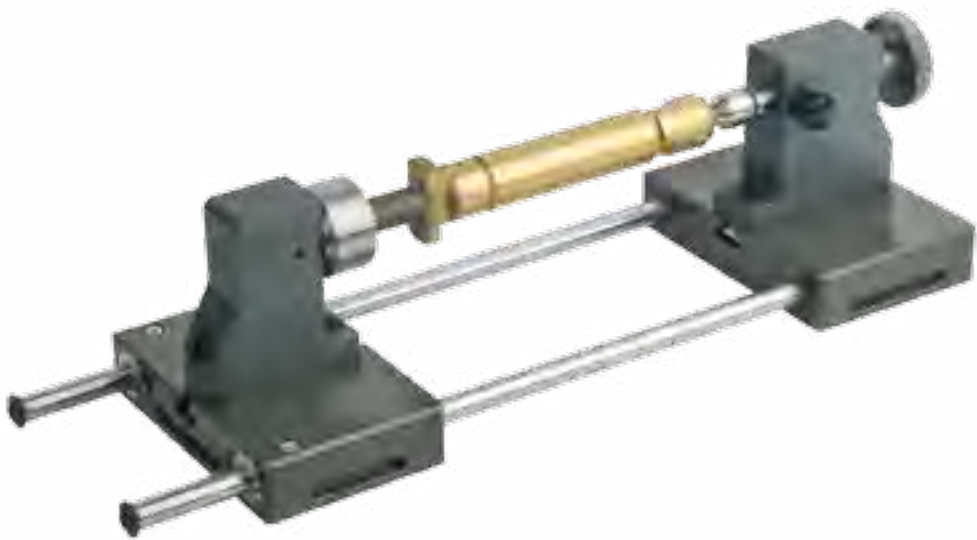
Includes T-slot blocks and  $\varnothing 15 / 60^\circ$  centres.



T-Slot 6

Order number	Centre height	Length	Width	Height
306000	50	150	30	75

**Example application**



## + Adjustable base plate

### Description

Mounting plates with T-slot (6 mm) for the mounting of tailstocks and/or rotary tables. Suitable for transmitted light measurements on projectors. Continuously variable spindle adjustment with lock clamp. Plate can be fastened with clamping claws.

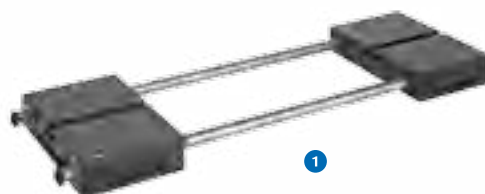
↳ Clamping claws, see page 197.

### Material

Hard-coated aluminium/steel.

### Span

0–210 mm.



Order number	Length	Width	Height	Version
262510	370	120	25	1
262500	370	120	25	With tailstock (movable mount only)

T-Slot 6

## + Live tailstock centre

### Description

60° live centre for movable tailstock mount.

### Material

Stainless steel. Centre hardened.



Order number	Centre angle	Diameter
306110	60°	10
306120	60°	20

## + Dead tailstock centres

### Description

A pair of dead tailstock centres.

### Material

Hardened steel.



Order number	Centre angle	Diameter
306100	60°	30
306200	90°	15
306300	90°	30

**Multispannfix**

**Description**

Universal clamping device for simple, quick fixturing of rotationally symmetrical and cubic parts. Stop frame height 5 mm.

**Material**

Hard-coated aluminium / safety glass / acrylic glass stop frame.

**Scope of delivery**

Includes cone point (269055).



Order number	Size	Length	Width	Clamping range	Fig.
269050	1	124	100	40	1
269051	2	210	150	90	

**Example application**





## Accessories

### + Spring-loaded pressure clamp

#### Description

Spring-loaded pressure clamp with cone point and mount for T-slot.

#### Material

Stainless steel / brass.



Order number	Length	Application
269057	115	for size 1
269058	175	for size 2

T-Slot 5

### + Cone point

#### Description

Clamping point for spring-loaded pressure clamp for high, precise transfer of clamping forces.

#### Material

Stainless steel.



Order number	Version
269055	Cone point

### + Movable clamping point

#### Description

Movable clamping point thanks to ball joint arrangement. Secure grip even if spring-loaded pressure clamps are not in perfect alignment.

#### Material

Stainless steel.



Order number	Version
269056	Movable clamping point

**Oktofix**

**Description**

Fixturing system for optical measurement tasks involving transmitted light. Test parts can be freely positioned as desired using support pins and then fixtured by spring clamps. The clamping frame features horizontal mounting holes with Ø 4 mm for support pins and spring-loaded pressure clamps as well as vertical M 4 mounting threads for the mounting of clamping columns with spring clamp. The entire clamping frame can turn through 360°.

**Material**

Hard-coated aluminium / stainless steel.

**Scope of delivery**

Includes base plate and rotating clamping frame, 3 x 80 mm support pins (269029), 2 x eccentric (269032), 2 x 40 mm spring clamps (269038), 2 x 50 mm columns (269043).



Order number	Size	Height	Clamping range	Fig.
269010	1	45	5-75	1
269020	2	45	5-100	

**Example application**



## Accessories

### + Spacer rings

Order number	Size	Height	Material	Description
269025	1	15	Hard-coated aluminium	For increasing the installation height by a further 15 mm.
269026	2	15	Hard-coated aluminium	



### + Support pins

Order number	Length	Shaft Ø	Material	Description
269028	60	4	Stainless steel	Support pins stepped on one side.
269029	80	4	Stainless steel	
269030	100	4	Stainless steel	
269049	150	4	Stainless steel	



### + Multi-purpose support pin

Order number	max. Ø V-block	Length	Shaft Ø	Description
269034	10	90	4	Multi-purpose support pin featuring a 120° V-support and a 7.5 mm angular stop.



### + Eccentric supports

Order number	Disc Ø	Length	Shaft Ø	Version	Description
269032	15	80	4	Flat support	Height-adjustable workpiece support (Ø 15 mm)
269040	15	80	4	V-support	



### + Support block

Order number	Length	Width	Height	Material	Description
269048	20	20	8	Stainless steel	Support that acts as a stay and stop unit, ideal for a large surface area. Fixturing by two support pins.



### + Spring-loaded pressure clamp

Order number	Length	Spring deflection	Shaft Ø	Material	Description
269035	81	15	4	Stainless steel	Test part clamping device. For direct anchoring in the mounting holes of the "Oktofix" system.
269036	110	15	4	Stainless steel	



↳ Spring clamps and columns for spring clamps, see "Spannfix" section on pages 59–60.

Schienenfix basic sets

Description

Clamping set for optical measurement tasks. For constructing a simple frame that can be anchored to the tapped holes in the measuring bench by clamping claws. Includes four spring clamps for quick and easy fixturing of test parts. There are sets with 5 mm or 10 mm tooth spacing, each available in three versions for different measuring bench sizes.

Ordering information

All sets are supplied with M 4, M 5, M 6 screws. If the thread on your mount is different, please advise us at the time of order.

↳ Toothed rails for other bench sizes available on request.



Set versions

Order number	Designation	Tooth spacing	Measuring window
269915	Basic set, type "1"	5	200 x 100
269925	Basic set, type "2"	5	300 x 200
269935	Basic set, type "3"	5	400 x 200
269910	Basic set type "4"	10	200 x 100
269920	Basic set type "5"	10	300 x 200
269930	Basic set type "6"	10	400 x 200

### Set content – toothed rail with fine toothing

Order number	Designation	Set "1"	Set "2"	Set "3"
345020	Base rail, 250 mm / T 5	1	-	-
345220	Base rail, 350 mm / T 5	-	1	-
345420	Base rail, 450 mm / T 5	-	-	1
347220	Connecting rail, 100 mm / T 5	2	1	1
346020	Connecting rail, 200 mm / T 5	-	1	1
348000	Rail connecting pieces	2	2	2
262924...28	45 mm clamping claw M 4-M 8	3	3	3
349100	34 mm spring clamp, left	1	1	1
349200	34 mm spring clamp, right	1	1	1
349300	50 mm spring clamp, left	1	1	1
349400	50 mm spring clamp, right	1	1	1
268500	Mount for spring clamp, 20 mm	4	4	4
-	Screws M 4 / M 5 / M 6 (3 of each)	1	1	1

### Set content – toothed rails with standard toothing

Order number	Designation	Set "4"	Set "5"	Set "6"
345000	Base rail, 250 mm / T 10	1	-	-
345200	Base rail, 350 mm / T 10	-	1	-
345400	Base rail, 450 mm / T 10	-	-	1
347200	Connecting rail, 100 mm / T 10	2	1	1
346000	Connecting rail, 200 mm / T 10	-	1	1
348000	Rail connecting pieces	2	2	2
262924...28	45 mm clamping claw M 4-M 8	3	3	3
349100	34 mm spring clamp, left	1	1	1
349200	34 mm spring clamp, right	1	1	1
349300	50 mm spring clamp, left	1	1	1
349400	50 mm spring clamp, right	1	1	1
268500	Mount for spring clamp, 20 mm	4	4	4
-	Screws M 4 / M 5 / M 6 (3 of each)	1	1	1

Schienenfix expansion sets for turned parts

Description

Expansion set featuring various support and clamping elements for rotationally symmetrical parts. The modules are designed to be attached to Schienenfix toothed rails.

"Standard" set

"Small" set



Set versions

Order number	Designation
269950	"Standard" Schienenfix turned part expansion set
269951	"Small" Schienenfix turned part expansion set

Set contents

Order number	Designation	"Standard" set	"Small" set
267900	V-block with spring clamp	1	1
267910	V-block bracket	1	1
273320	Quick-action clamp	1	-
283300	Quick-action clamp 90° angle element	1	-
329705	50 mm precision three-jaw chuck	1	-
345100	V-supports (1 pair) with spring clamp	1	-
349600	Tailstock	1	1

## Schienenfix milled and sheet parts expansion sets

### Description

Expansion sets with different clamping elements for milled and sheet parts. The modules can be attached to Schienenfix toothed rails.

### "Standard" set

#### "Small" set



### Set versions

Order number	Designation
269960	"Standard" Schienenfix milled and sheet parts expansion set
269961	"Small" Schienenfix milled and sheet parts expansion set

### Set contents

Order number	Designation	"Standard" set	"Small" set
266100	Small-parts clamp with stepped profile	1	-
269050	Multispannfix	1	-
273320	Quick-action clamp	1	1
283300	Quick-action clamp 90° angle element	1	1
282100	50 mm precision vice	1	1
282300	Cylindrical pins for raised parts clamping	1	1
314900	Rotary swivel mount	1	-

3-point support set

Description

3-point support for sheet metal parts, bent components and formed parts. Flexible adjustment of supports in X, Y and Z directions. Quick and easy fixturing of the workpiece using spring clamps. The adjustable base rails can be fixtured flexibly along the T-slot on the toothed rails. The supports are height-adjustable. Further height differences are possible using extension pieces.



Set version

Order number	Designation
269965	3-point support set

Set contents

Order number	Designation	"Standard" set
322006	Screw frame with spring clamp	3
322350	25 mm extension elements	3
322450	50 mm extension elements	3
323050	Steel self-aligning supports	2
269042	Columns for 30 mm spring clamp	3

Example application

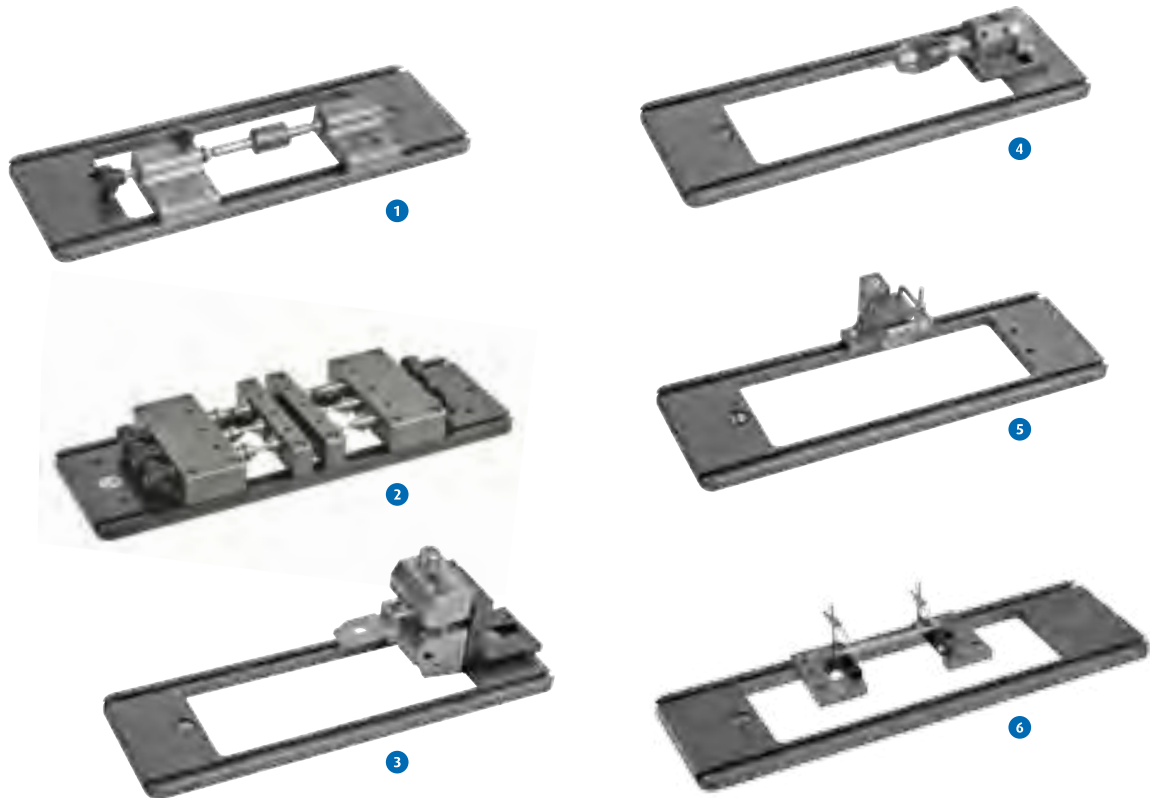




## Pallets with clamping elements

### Description

Pallets with clamping elements fitted differently.



↳ The clamped workpieces are example applications, and not supplied with the order.

### Set versions

Order number	Description	Basic pallet	Scope of delivery	Fig.
345802	Pallet with 1 tailstock	305 x 100 x 10	349600	1
345822	Pallet with 1 tailstock	195 x 100 x 10	349600	
345803	Pallet with 6 tailstocks	305 x 100 x 10	without tailstock centres	2
345804	Pallet with precision vice	305 x 100 x 10	283300, 282100	3
345824	Pallet with precision vice	195 x 100 x 10	283300, 282100	
345805	Pallet with mini chuck and rotary/swivel mount	305 x 100 x 10	314900, 283600	4
345825	Pallet with mini chuck and rotary/swivel mount	195 x 100 x 10	314900, 283600	
345806	Pallet with small V-block	305 x 100 x 10	267910, 267900	5
345826	Pallet with small V-block	195 x 100 x 10	267910, 267900	
345807	Pallet with V-support	305 x 100 x 10	345100	6
345827	Pallet with V-support	195 x 100 x 10	345100	

## Universal clamping sets

### Description

Clamping set for quick and flexible clamping of round and cubic workpieces, such as plastic, punched and turned parts. The clamping elements can be placed directly onto the measuring bench or, if the quick-change adapter SWA39 is fitted, they can be positioned using the swivel unit.



### Set versions

Order number	Designation	Fig.
269850	"Universal with swivel unit" clamping set incl. case	1
269855	"Universal" clamping set incl. case	

## Set contents

Order number	Designation	"Universal with swivel unit" set	"Universal" set
270920	15 mm precision vice	1	1
270860	35 mm precision vice	1	1
282115	50 mm precision vice	1	1
282300	Cylindrical pins with stepped profile, 4 pcs, for vice	1	1
267900	V-block with spring clamp	1	1
270560	Swivel unit with attachment plate and quick-action clamp	1	
397020	Adapter plate SWA39 for 35 mm and 50 mm vices	1	
314100	Adapter plate SWA39 for 15 mm vice or V-block	1	
329705	50 mm precision three-jaw chuck with SWA 39 quick-change adapter	1	



The clamping elements contained in the set.



The clamping elements can be placed directly onto the measuring bench or they can be positioned at any angle using the swivel unit.

**Clamping component sets**

**Description**

For optical measuring instruments and microscopes. For clamping plastic, punched or turned parts, for example. The base is a high-quality articulated clamping arm, on which clamping elements such as a mini chuck, spring clamp or toggle clamp can be mounted.

**Ordering information**

When ordering, please tell us the mounting thread or T-slot size of your measuring bench.



**Set versions**

Order number	Designation	Fig.
269805	"Standard model II" clamping component set with storage box	1
269815	"Small model II" clamping component set with storage box	

### Set contents

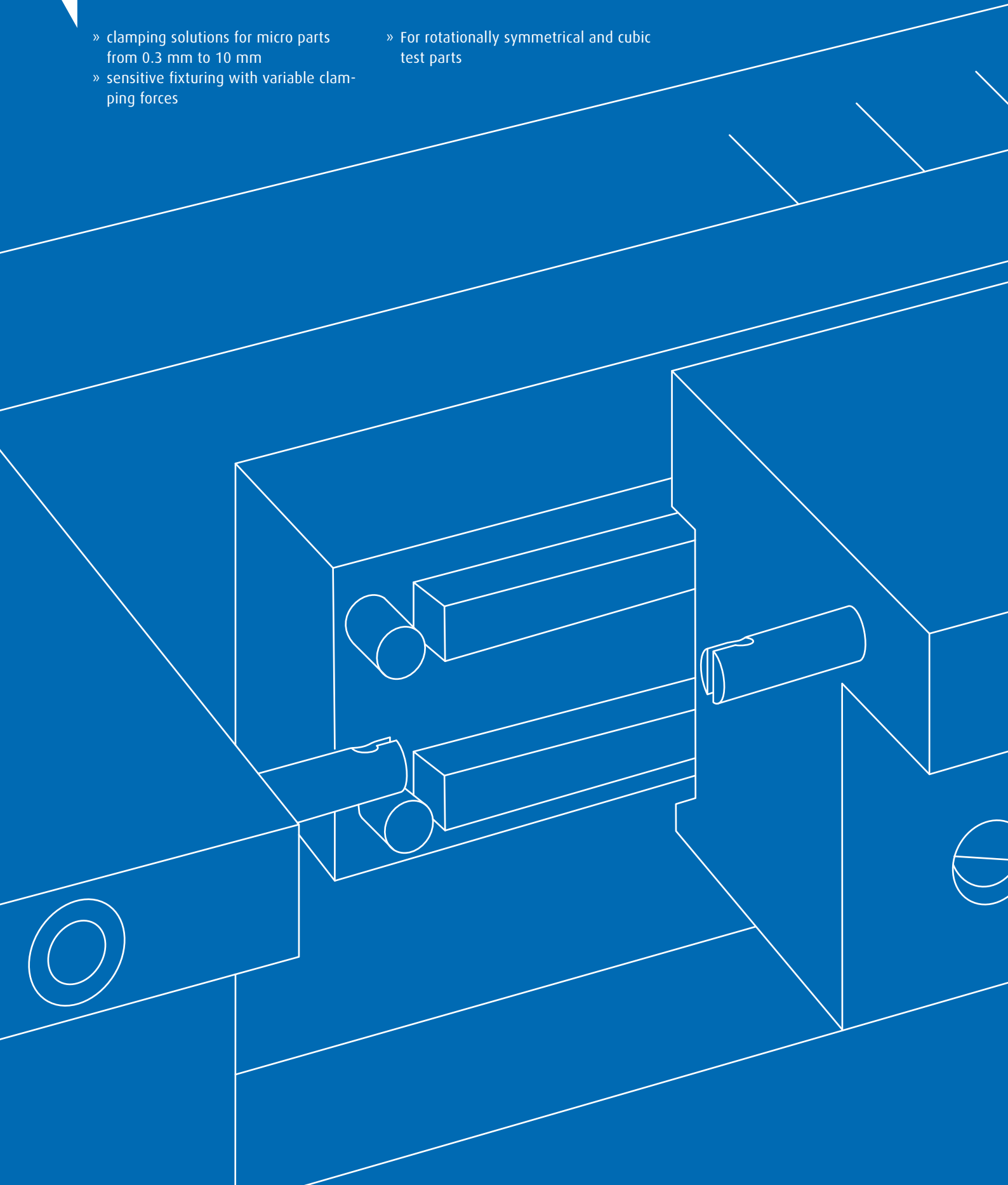
Order number	Designation	"Standard model II" set	"Small model II" set
296800	Articulated clamping arm, model SU	1	1
268900	Try square with spring clamp containing: 120 x 80 mm try square 2 columns for spring clamps (268600) Left-hand spring clamp for horizontal clamping (269200) 35 mm spring clamp for vertical clamping (269100)	1	1
268200	Right-hand spring clamp for horizontal clamping	1	
268100	50 mm spring clamp for vertical clamping	1	
283600	Precision mini chuck	1	
267900	V-block with spring clamp	1	1
266100	Small-parts clamp with stepped profile	1	
278800	Toggle clamp	1	1
269300	Spring clamp with SWA5	1	
269600	Rotary unit	1	
269700	Satellite mount, horizontal	1	
270900	15 mm precision vice	1	1
333000	Four-way hexagon socket spanner	1	1
Customer specification	Adapter or T-slot block (see ordering information)	1	1

### Example application



# MICROFIX

- » clamping solutions for micro parts from 0.3 mm to 10 mm
- » sensitive fixturing with variable clamping forces
- » For rotationally symmetrical and cubic test parts





Product group

Product name

Page

Clamping elements



Clamping elements

Micro fixture for cubic parts	216
"V-block" micro fixture	216
Micro tailstock	217

Micro fixture for cubic parts

Description

For measuring cubic parts by means of a constant and adjustable clamping force. The clamping force is generated by the slanting flat and can be changed to suit by adding balls. To ensure that test parts are gripped securely even when weak clamping forces are required, it is possible to adjust the fixed clamping jaw using adjustable stop units. The movable part of the fixture is fitted with a pendulum jaw.



Example application



Order number	Clamping range	Length	Width	Height	Jaw width	Scope of delivery
398030	< 0.3-10	85	60	30	6	10 steel balls

"V-block" micro fixture

Description

For measuring rotationally symmetrical test parts having a diameter of 0.5 to 6 mm or up to 10 mm with accessories. The fixturing force is adjustable and exerted by several micro springs.

Accessories

Interchangeable plates (398035) which allow the clamping range for rotationally symmetrical test parts to be increased to 5 mm and up to 10 mm.



Example application



Order number	Clamping range	Length	Width	Height	Jaw width
398032	< 0.5-6	85	60	32	10



## Micro tailstock

### Description

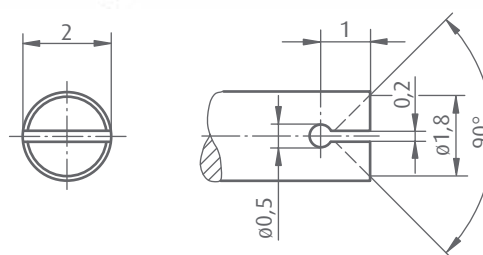
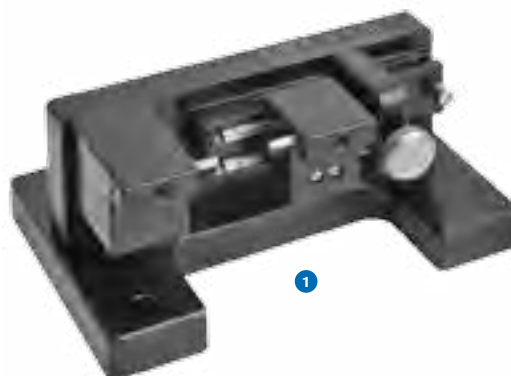
For measuring rotationally symmetrical test parts. The test pieces can be measured along their whole length because they are mounted between hollow centres which have measurement slots. Adjustable fixturing force. The clamping range can be increased freely up to a maximum of 25 mm.

### Scope of delivery

Includes hollow mounting centres (see technical drawing).

### Accessories

60° tailstock centres (398060).






Order number	Centre height	Length	Width	Height	Version	Fig.
398050	27	85	37	30	-	
398052	37	90	60	40	with mounting plate	1



# MESSFIX

- » Precision dial gauges, sensors and lever dial gauges
- » High-quality dial gauge stands with progressive mechanical clamping
- » Reference square and pair of V-blocks



Product group	Product name	Page
  	<b>Dial gauges</b>	
	Dial gauges	220
	Precision dial indicator	220
	Lever gauges	222
	<b>Dial gauge stands</b>	
	Dial gauge stands (model MU "Standard")	223
	Dial gauge stands (model SU "Small")	224
	<b>Squares, V-blocks and accessories</b>	
	Bevelled square without stop	225
	Reference square	225
Two pairs of V-blocks	226	
Pairs of four-way V-blocks	226	
Pairs of two-way V-blocks with clamping bracket	227	
Four-way hexagon socket spanner	227	

**Dial gauges**

**Description**

Precision dial indicator with a housing diameter of 58 mm. Exchangeable M 2.5 feeler tips and Ø 8 mm clamping shaft. DIN 878 accuracy.

**Scope of delivery**

Includes plastic case.



Order number	Measuring range	Scale division	Version	Model	Weight
520810	10 mm	0.01 mm	-	Käfer MU 52 T	0.20
520820	10 mm	0.01 mm	Premium version with extra-long service life	Käfer M 2 T	0.18
520830	10 mm	0.01 mm	with anti-shock protection	Käfer M2 SN	0.18

**Precision dial indicator**

**Description**

Precision dial indicator with a housing diameter of 62 mm. Exchangeable M 2.5 feeler tips and Ø 8 mm clamping shaft. With spindle release and anti-shock protection. DIN 879-1 accuracy.

**Scope of delivery**

Includes plastic case.

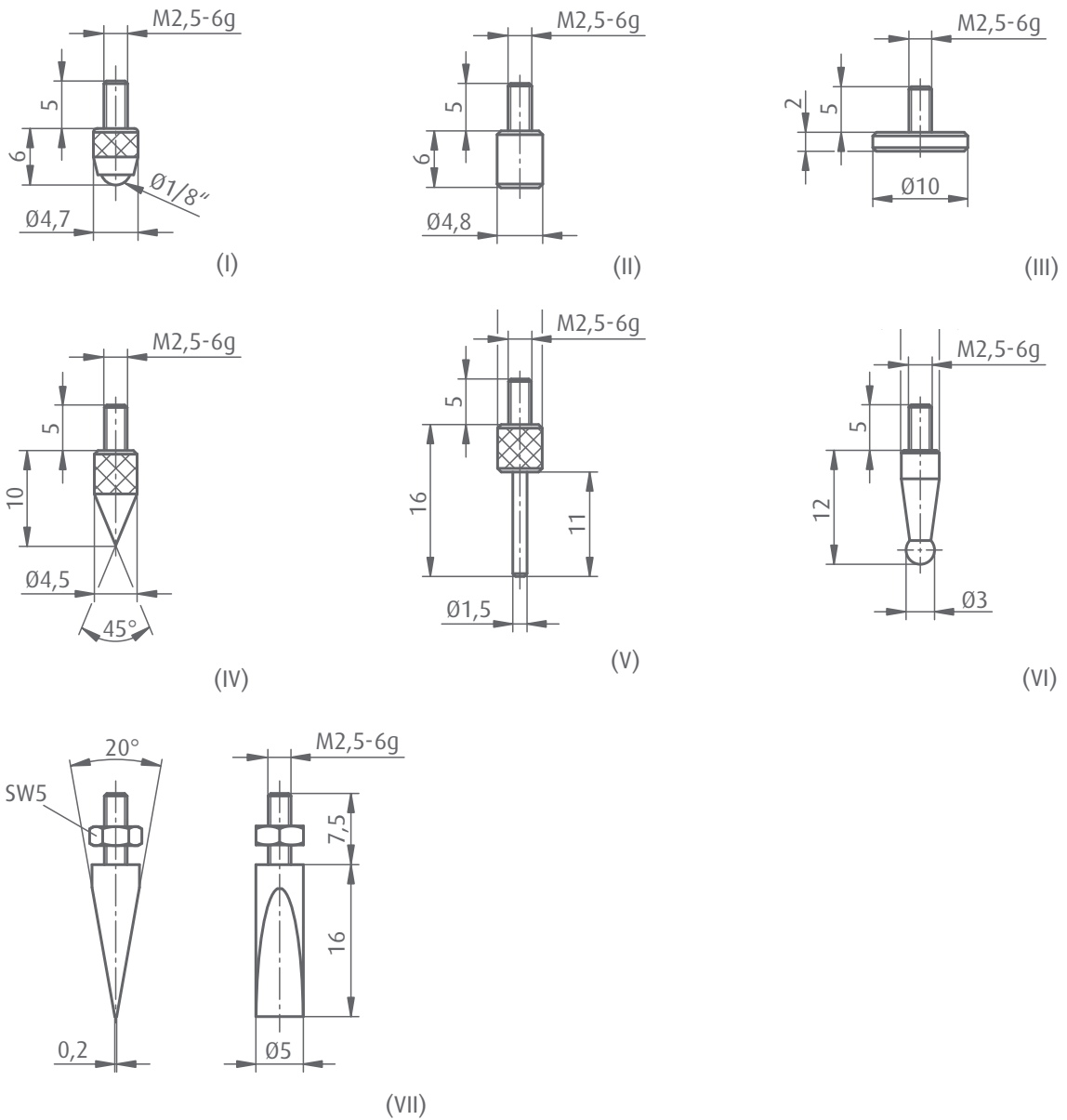


Order number	Measuring range	Scale division	Numbering	Version	Model	Weight
520950	0.1 mm	0.001 mm	50-0-50	-	Käfer Complica 1001	0.3
520960	0.1 mm	0.001 mm	50-0-50	water-tight	Käfer Complica 1001 wa	0.3

## + Dial gauge inserts

### Description

Dial gauge inserts. M 2.5 connection thread.



Order number	Version	Fig.
520501	Spherical insert, L = 6 mm	I
520502	Flat, $\varnothing 4.8$ mm	II
520503	Flat, $\varnothing 10$ mm	III
520504	45° point	IV
520505	Pin length 11 mm, $\varnothing 1.5$ mm	V
520506	Spherical insert $\varnothing 3$ mm	VI
520507	Knife-shaped, with adjustment nut	VII

**Lever gauges**

**Description**

Lever dial gauge with a housing diameter of 32 mm. Shockproof thanks to integrated slip coupling. Standard version features inserts with hard-metal Ø 2 mm ball. Length of insert 12 mm. DIN 2270 accuracy.

**Scope of delivery**

Includes plastic case.



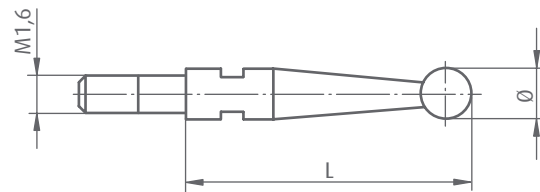
Order number	Measuring range	Scale division	Numbering	Model	Weight
520910	0.8	0.01	0-40-0	Käfer K 30	0.13
520920	0.2	0.002	0-100-0	Käfer K 36	0.13

**Accessories**

**Inserts for lever dial gauges**

**Description**

Inserts for lever dial gauges. M 1.6 connection thread.



Order number	Ball material	Ball Ø	Length (L)
520521	Hard metal	2	12.8
520522	Hard metal	1	12.3
520523	Ruby	2	12.8

## Dial gauge stands (model MU "Standard")

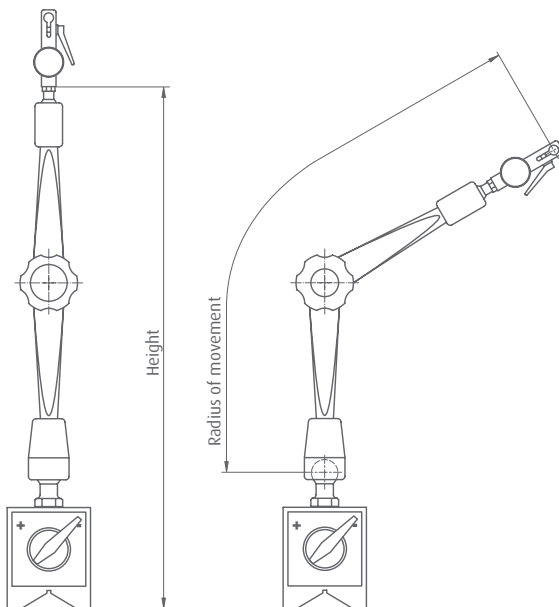
### Description

Magnetic stand mechanically locked by a central clamping screw. The lower articulated arm is clamped first, followed by the upper arm and the dial gauge holder. Optional joint sleeves available for use in heavily dusty environments. Optional two-part (DGH 1) or one-part (DGH 3, DGH 4) dial gauge holders. DGH 4 version with greater adjustment accuracy. Switchable magnet with a magnetic force of 900 N.

### Accessories

254010: Anti-loss protection for dial gauge holders DGH 3 and DGH 4.

253500: 150 mm extension element, mounting on lower threaded mount.



Order number	Reach	Total height	Dial gauge holder	Extra dust protection	Designation
250100	345	430	DGH 1	-	MU/F-DGH1
250110	345	430	DGH 1	incl.	MU/FG-DGH1
250000	345	430	DGH 3	-	MU/F-DGH3
254400	345	430	DGH 3	incl.	MU/FG-DGH3
254200	345	430	DGH 4	-	MU/F-DGH4
254500	345	430	DGH 4	incl.	MU/FG-DGH4

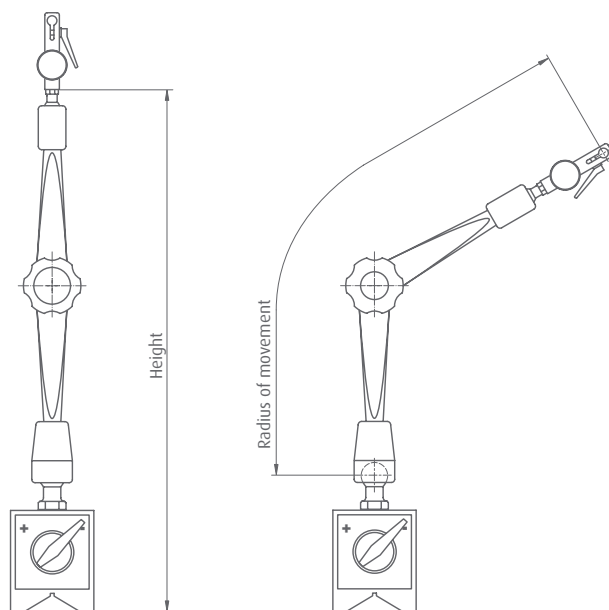
**Dial gauge stands (model SU "Small")**

**Description**

Magnetic stand mechanically locked by a central clamping screw. The lower articulated arm is clamped first, followed by the upper arm and the dial gauge holder. Includes joint sleeves for use in heavily dusty environments. Optional play-free patented DGH 3 or DGH 4 dial gauge holders. DGH 4 version with greater adjustment accuracy. Switchable magnet with a magnetic force of 500 N.

**Accessories**

254010: Anti-loss protection for dial gauge holders DGH 3 and DGH 4.



Order number	Reach	Total height	Dial gauge holder	Extra dust protection	Designation
254700	225	300	DGH 3	incl.	SU/FG-DGH3
254800	225	300	DGH 4	incl.	SU/FG-DGH4



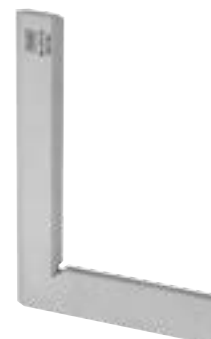
## Bevelled square without stop

### Description

Hardened bevelled square without stop.  
Accuracy GG 00. DIN 875.

### Material

Stainless steel.



Order number	Side length	Cross-section	Weight
530730	50 x 40	14 x 4.5	0.03
530731	75 x 50	16 x 4	0.05
530732	100 x 70	20 x 5	0.10
530733	150 x 100	28 x 6	0.26
530734	200 x 130	30 x 7	0.43
530735	300 x 200	40 x 8	0.96

## Reference square

### Description

Hardened reference square with or without stop.  
Accuracy GG 0. DIN 875.

### Material

Stainless steel.



Order number	Stop	Side length	Cross-section	Weight
530710	With	50 x 40	15 x 4	0.05
530711	With	75 x 50	15 x 4	0.08
530712	With	100 x 70	20 x 5	0.20
530713	With	150 x 100	30 x 6	0.46
530714	With	200 x 130	30 x 7	0.75
530715	With	300 x 200	40 x 8	1.68
530720	Without	50 x 40	15 x 4	0.04
530721	Without	75 x 50	15 x 4	0.05
530722	Without	100 x 70	20 x 5	0.11
530723	Without	150 x 100	30 x 6	0.22
530724	Without	200 x 130	30 x 7	0.54
530725	Without	300 x 200	40 x 8	1.12

**Pairs of V-blocks**

**Description**

Pair of 90° V-blocks. Grade 0, parallelism tolerance < 0.008 mm. V-blocks and bases are precision-ground and machined in pairs.

**Material**

Special cast iron.



Order number	Dimensions	For shaft Ø	Weight
530810	100 x 40 x 30	6-40	2.0

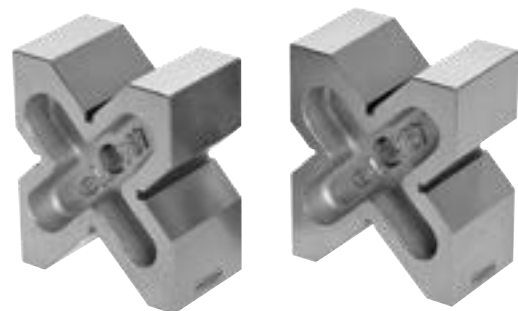
**Pairs of four-way V-blocks**

**Description**

Pair of V-blocks with four differently sized 90° Vs. Grade 0, parallelism tolerance < 0.008 mm. V-blocks and bases are precision-ground.

**Material**

Special cast iron.



Order number	Dimensions	For shaft Ø	Weight
530850	60 x 120 x 100	8-90	6.0

## Pairs of two-way V-blocks with clamping bracket

### Description

Pair of double V-blocks with clamping brackets, machined in pairs. Two 90° vees. Angled side, end and standing surfaces. Flatness, parallelism and perpendicularity tolerances 0.004 mm.

### Material

Hardened special steel.



Order number	Dimensions	For shaft Ø	Weight
530910	50 x 40 x 40	5-30	1.1
530920	75 x 55 x 55	5-50	2.8
530930	100 x 75 x 75	7-70	6.4

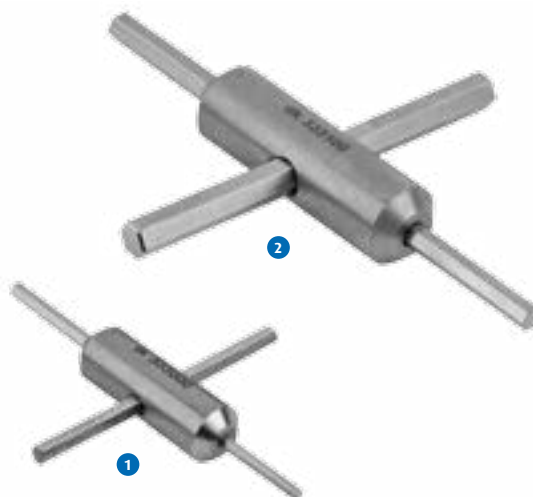
## Four-way hexagon socket spanner

### Description

Practical and compact four-way design featuring three spanner sizes per tool. Covers each and every hexagon socket size used in the Spannfix and Schienenfix ranges.

### Material

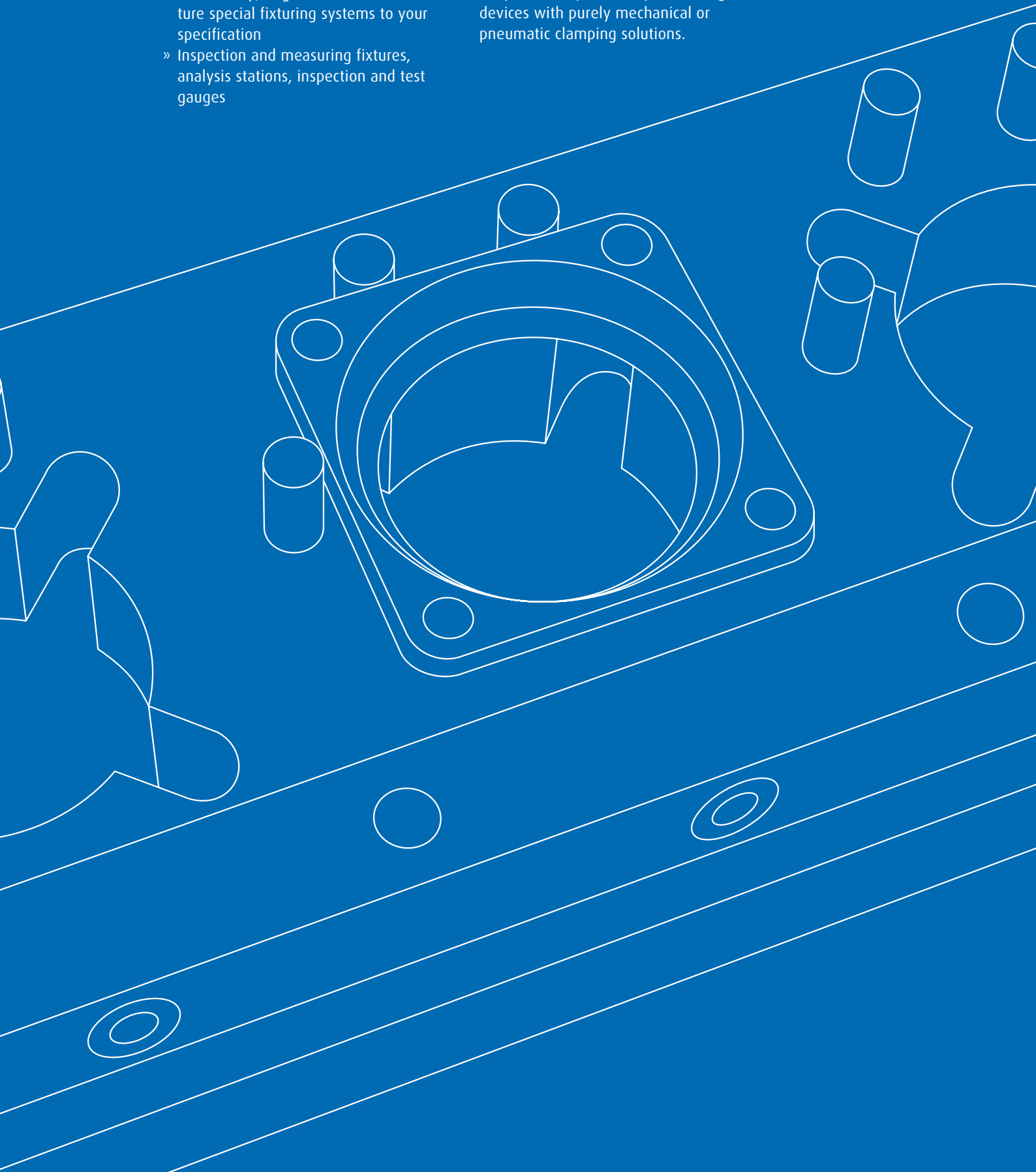
Steel.



Order number	Size	Fig.
333000	WAF 2.0 / WAF 2.5 / WAF 3.0	1
333100	WAF 4.0 / WAF 5.0 / WAF 6.0	2

# SPEZIALFIX

- » We develop, engineer and manufacture special fixturing systems to your specification
- » Inspection and measuring fixtures, analysis stations, inspection and test gauges
- » Simple to complex multiple fixturing devices with purely mechanical or pneumatic clamping solutions.



### Multiple fixturing systems for optical measurement

- 20-way fixturing device for small plastic parts for medical applications
- With insertion device
- Individual clamping
- For optical measuring instruments



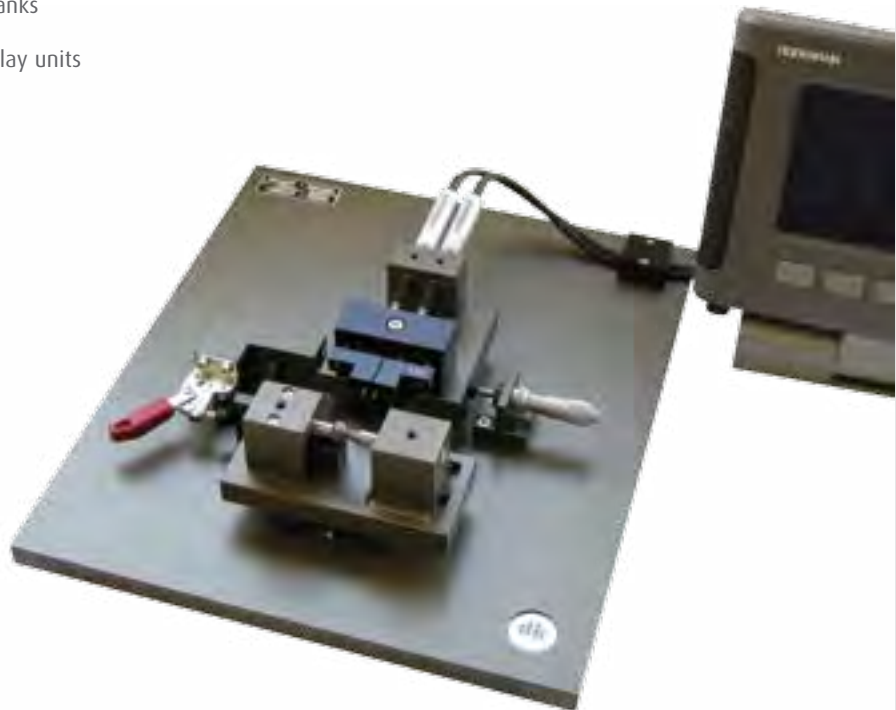
### Multiple fixturing systems for optical and tactile measurement

- 4-way fixturing device for sheet metal parts
- Individual clamping
- For multi-sensor measuring equipment



## Control and reference gauges

- Measuring device for milling cutter blanks
- Electronic measuring probes with display units
- With calibrated master part



## Vacuum fixturing devices

- 12-way clamping for disc-shaped test pieces
- Each clamping point is individually switchable
- Maximum population for given measuring volume
- For tactile measurement machine



## Single device combined with Schienenfix/Spannfix components

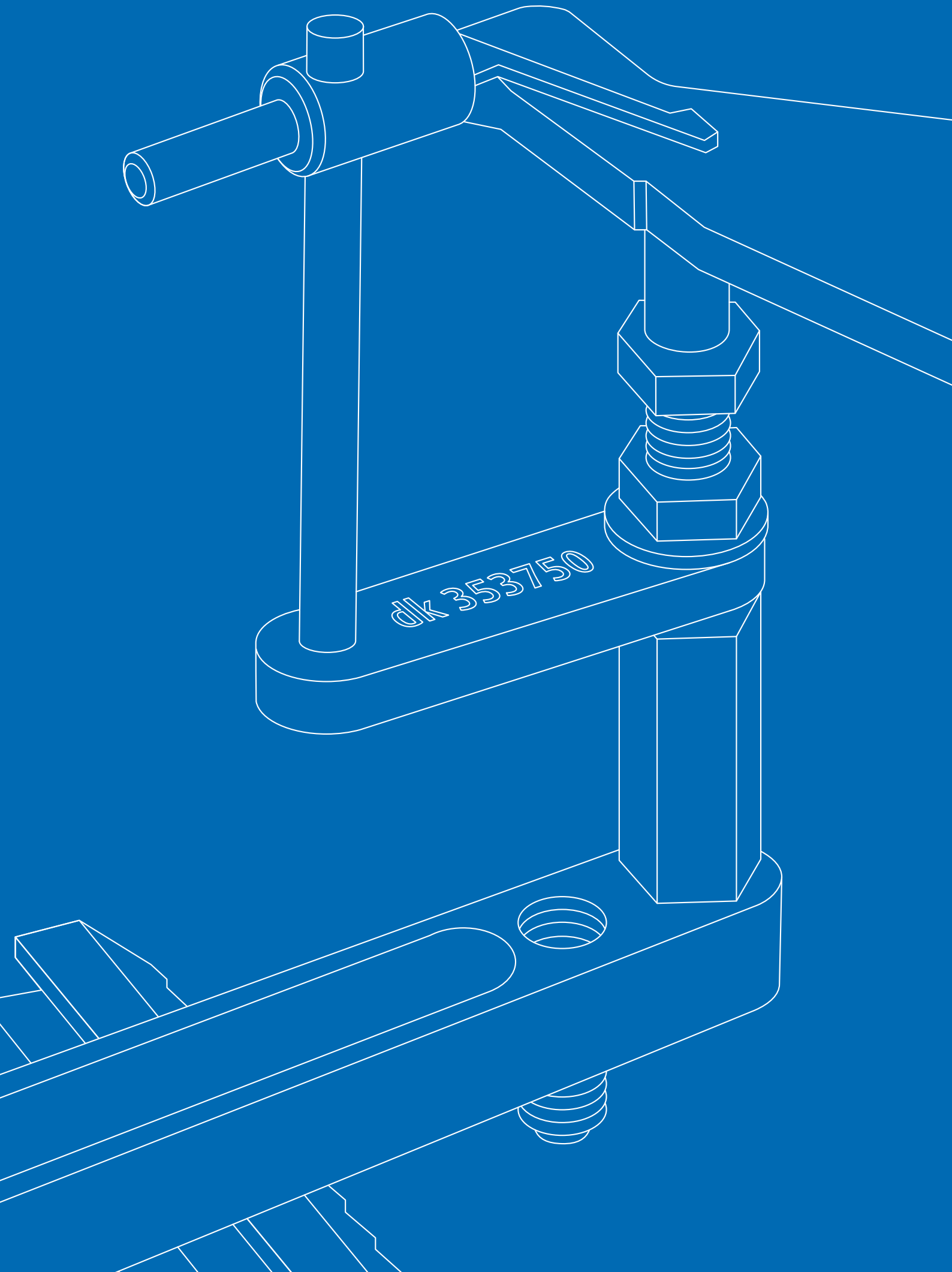
- Single device for a cast-iron housing
- Three-point mount with stop units
- Clamping with spring clamps from the Schienenfix/Spannfix standard range
- For tactile measurement machine



## Device with several different clamping points

- Round table with multiple clamping points
- For inspecting injection system components for car engines
- For contour and surface measuring equipment







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364500	133/147/148			396110	95
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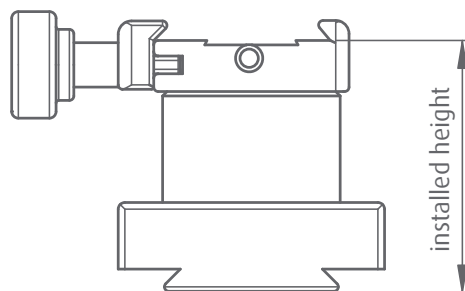
## Table notes

### Weight:

All the weights in this product catalogue are given in kilograms.

### Height:

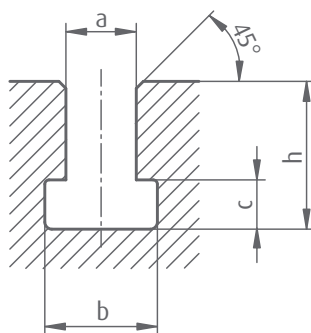
The heights given in the tables may be either absolute values or installed heights. The installed height is the size by which the height of a device changes with the structural element installed.



### T-slots and T-slot blocks, terminology:

If you send us dimensions for T-slots or T-slot blocks, please use the following DIN terminology:

DIN 650



DIN 508

