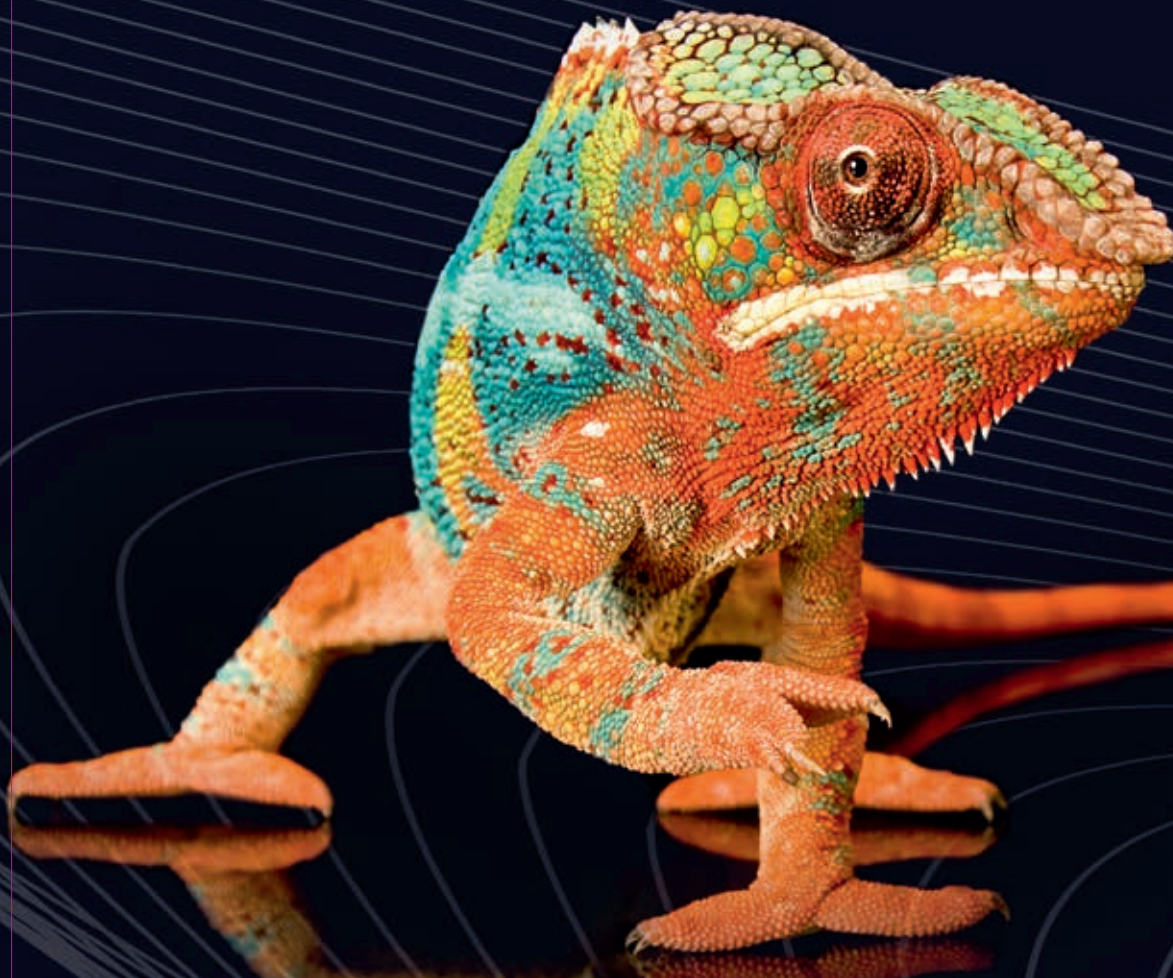
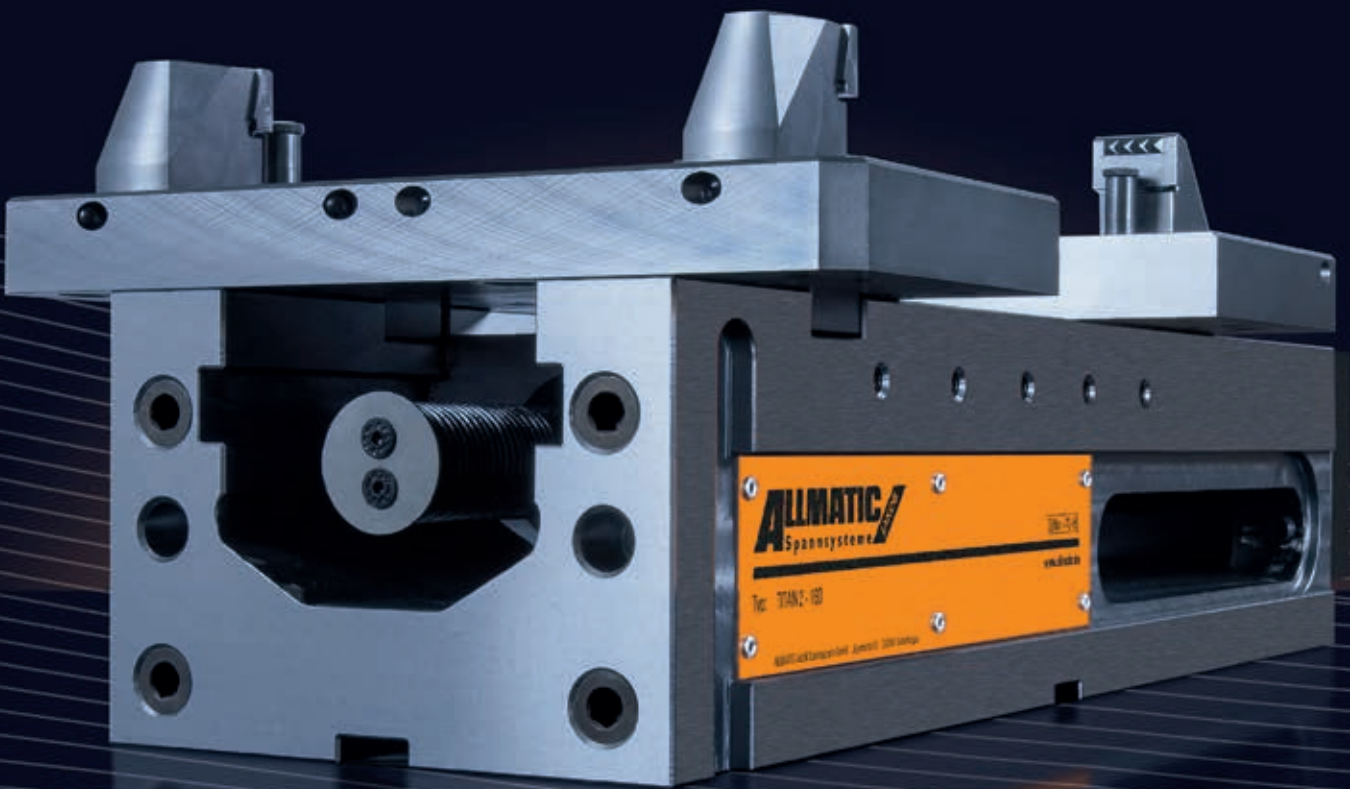


# ALLMATIC TITAN 2-160 – HEAVY DUTY CUTTING. MADE FOR WHAT IS BIG!

Large workpieces - big machines - this is its world.

The TITAN 2-160 opens new doors in the segment of the clamping of large parts. It combines the advantages of raw material clamping and the accuracy of its little brother the TITAN 2-125 with the stability of the basic 160 body.





# ALLMATIC GRIPP – MECHANICAL VERSION TITAN 2-160

## Scope of application:

- For horizontal and vertical usage - suitable for CNC controlled milling machines and large machining centres.
- Clamping unmachined parts, saw-cut or flame-cut material by penetration of hardened, replaceable gripper elements into the workpiece
- With the support jaws, unmachined parts in highly varied materials, or with complex geometries, can be clamped securely and economically.
- Gripper studs suitable for materials with a strength of up to approx. 1700N/mm<sup>2</sup>

## Product features:

- High versatility – the modular clamping system combines practically all the possibilities of our tried-and-tested models
- Fully compatible with the accessories of the LC/TC 160 series, for example gripper studs, universal gripper set and pull down sets
- Grounded sides so that all sides can be used
- High-pressure spindle with mechanical force amplifier (increased power stroke) for the safe clamping of raw parts in combination with gripping and pull down spring function
- Lost clamping margin 8 mm with pull-down, 3 mm with GRIPPER
- Clamping fixture extension possible (This is on the TITAN 2-160 attached to the front of the titanium clamp.)
- Clamping with torque wrench – max. 30 Nm.

This makes it possible to work above the table with an unfavourable clamping arrangement on the tool



Accurate slots for fastening the range of clamping jaws

Inductively hardened and polished guideway

Rigid spindle nut

Robust base made of GGG 60

Accurate spindle nut guidance


For initial positioning of the movable jaw with heavy workpieces (wrench size 22) Distance separated from power intensifier

Clamping shoulder for vertical use

M8 thread for workpiece stop

Accurate aligning slots (longitudinal/transverse) in the ground bottom surface for optimum alignment on the machine table

Outlet for coolant and chips

 Optional: Mounting holes for zero-point clamping systems are possible.

**Order no. jaw width 160: 6921848000055**

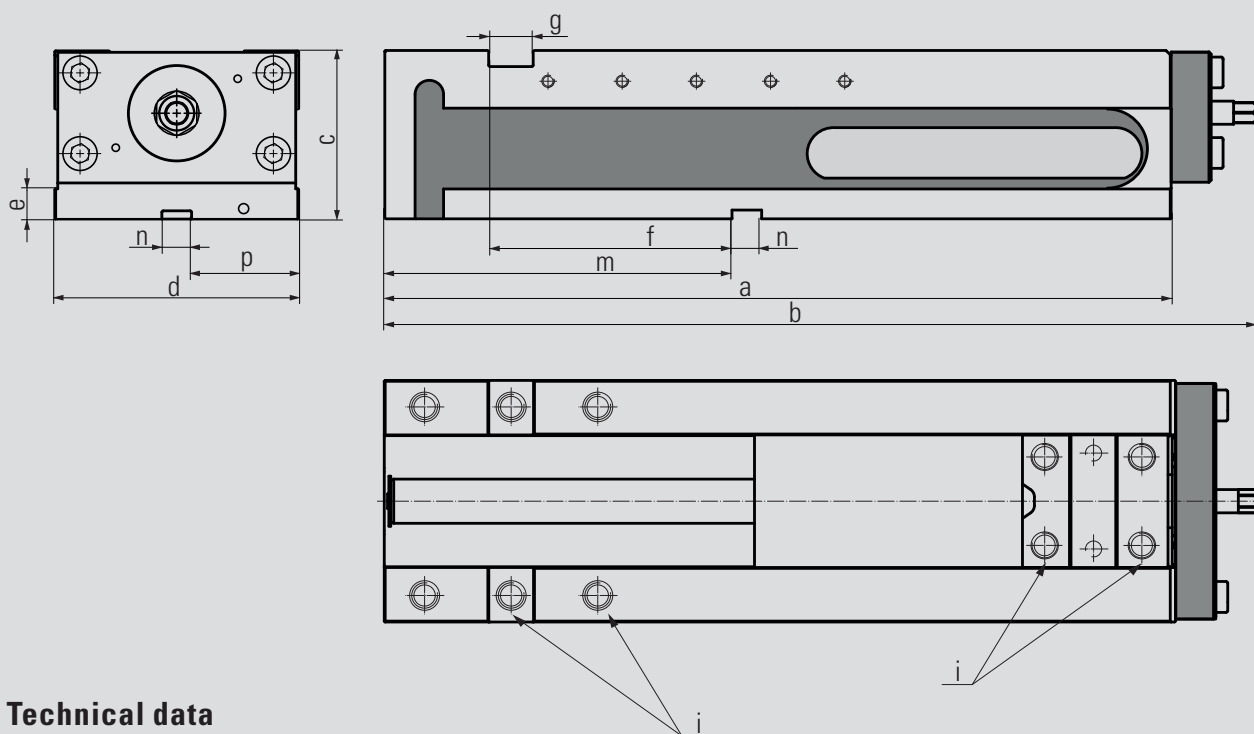
## Scope of supply:

- 1 high-pressure vice without jaws
- 4 side clamps
- 5 socket screw wrenches

**Please order the clamping jaws separately.**

An overview of the clamping jaws and other accessories is given on the following pages.



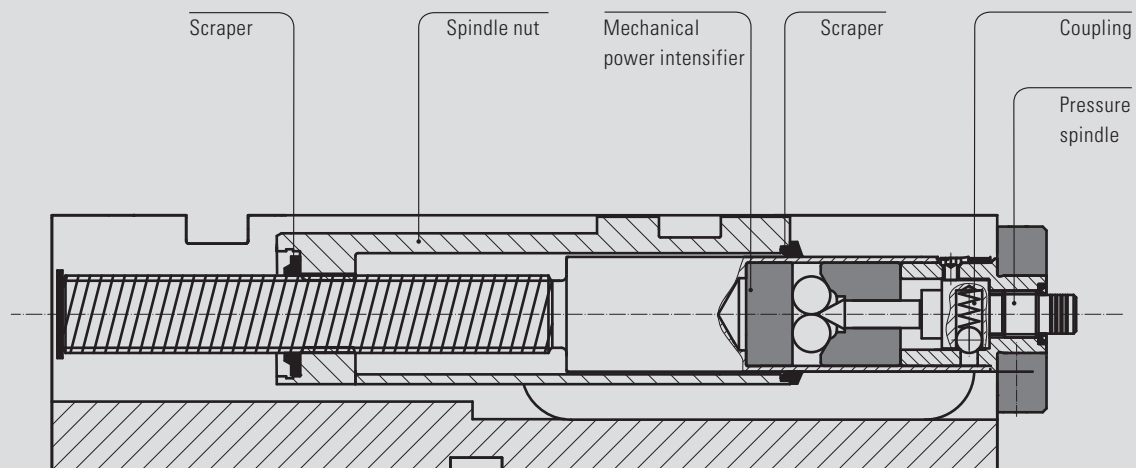


### Technical data

Jaw width		160
Dimensions / tolerances in mm	a	530
	b	587
	c	115
	d	164
	e	21
	f	164
	g	30
	m	234
	i	M 16
	n	20
p	72	

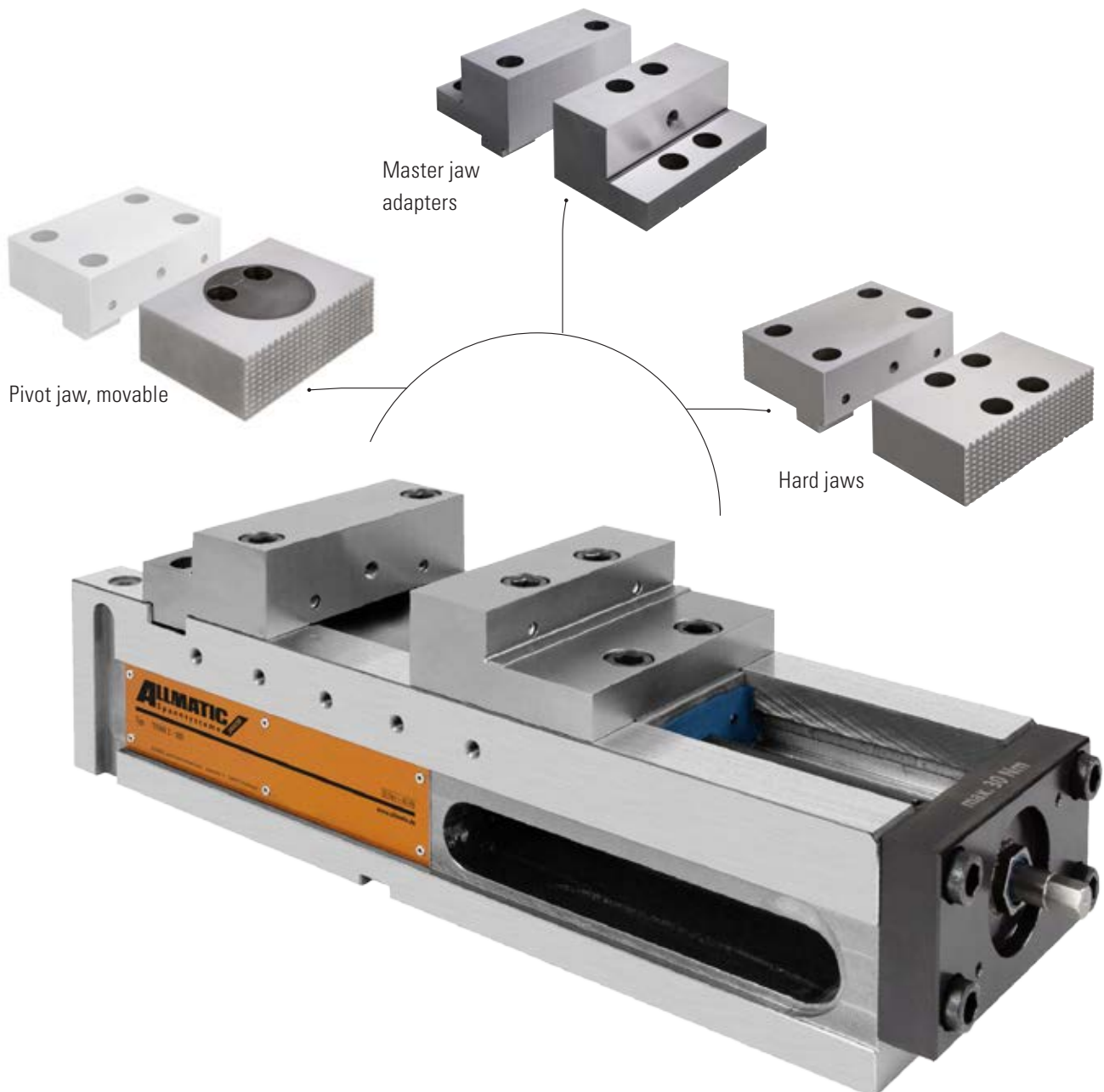
Jaw width		160
Max. torque in Nm		30
Max. clamping force in kN		40
Weight in kg		68

### Spindle cross-section



# TITAN 2-160

## CONVENTIONAL CLAMPING



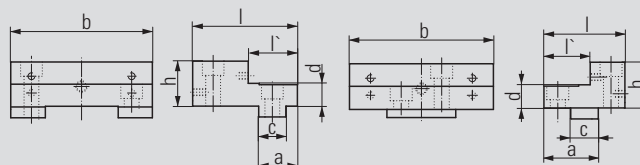
### For conventional clamping of workpieces

On the following pages you will find a wide range of jaws suitable for clamping pre-machined workpieces.

**ALLMATIC GRIPP – mechanical / version TITAN 2-160 (conventional clamping accessories)**

**Step jaws**

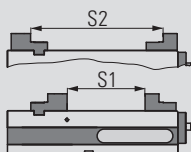
Order no. fixed: 6921704006731 Order no. movable: 6921304002731



- Material: hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws
- Click system on the high side

Jaw width	160	
Dimen- sions in mm	a	40
	b	160,4
	c	30
	d	25
	h	49,8
	l	104
	l'	54

Jaw width	160	
Dimen- sions in mm	a	63
	b	160,4
	c	30
	d	25
	h	49,8
	l	96
	l'	64

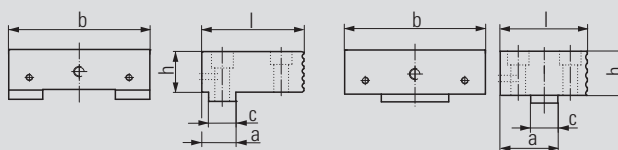
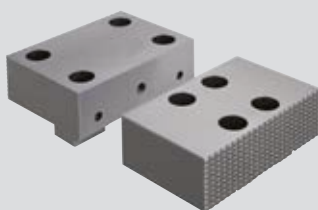


Clamping width S1	17 – 263
Clamping width S1 with enlargement*	259 – 505
Clamping width S2	189 – 435
Clamping width S2 with enlargement*	431 – 677

\*Clamping range enlargement: 6921705008055

**Hard base jaws**

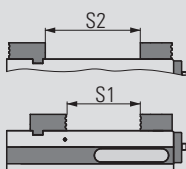
Order no. fixed: 6921704005731 Order no. movable: 6921704004731



- Material: hardened steel
- One side smooth and ground, one side errated
- Additional thread for parallels and for mounting the HD jaws on the smooth side
- Mountings for click system on both sides of the jaw

Jaw width	160	
Dimen- sions in mm	a	40
	b	160,4
	c	30
	h	49,8
	l	104

Jaw width	160	
Dimen- sions in mm	a	65
	b	160,4
	c	30
	h	49,8
	l	100



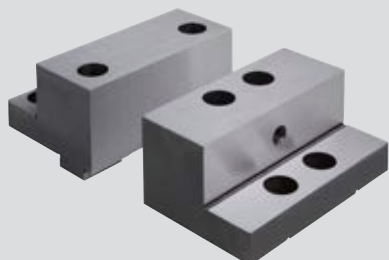
Clamping width S1	15 – 261
Clamping width S1 with enlargement*	257 – 503
Clamping width S2	69 – 315
Clamping width S2 with enlargement*	311 – 557

\*Clamping range enlargement: 6921705008055

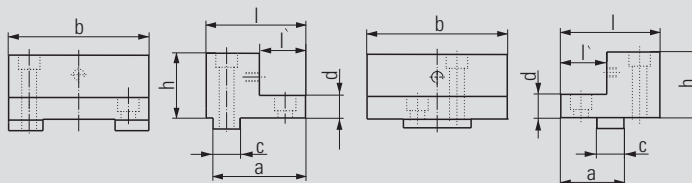
## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (conventional clamping accessories)

### Master jaw adapters

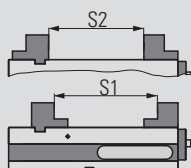
Order no. fixed: 6921704012231 Order no. movable: 6921304011231



- Material: steel
- High side of the jaw hardened
- Additional thread for mounting the HD jaws
- Ground clamping surfaces
- Click system on the high side



Jaw width		160	Jaw width		160
Dimen- sions in mm	a	89	Dimen- sions in mm	a	65
	b	164		b	164
	c	30		c	30
	d	24		d	24
	h	73		h	73
	l	100		l	100
	l'	34		l'	34

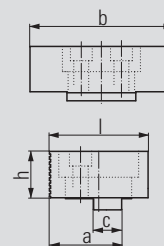
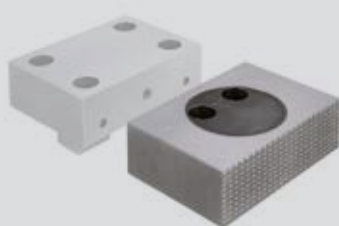


Clamping width S1	88 – 334
Clamping width S1 with enlargement*	330 – 576
Clamping width S2	68 – 314
Clamping width S2 with enlargement*	210 – 556

\*Clamping range enlargement: **6921705008055**

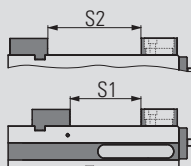
### Pivot jaw, movable

Order no. 6921704020042



- Material: Hardened steel
- With click system
- One side smooth and ground, one side serrated
- 360° rotatable
- Picture with hard base jaw  
(see order no.: 6921704005731)

Jaw width		160
Dimensions in mm	a	86
	b	160,4
	c	30
	h	49,8
	l	118



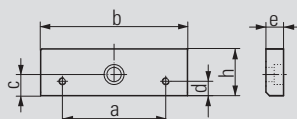
Clamping width S1	0 – 240
Clamping width S1 with enlargement*	236 – 482
Clamping width S2	48 – 294
Clamping width S2 with enlargement*	290 – 536

\*Clamping range enlargement: **6921705008055**

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (conventional clamping accessories)

### Compensation jaw

Order no. 6921704022031

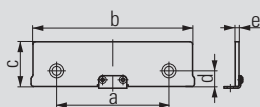


Jaw width	160	
Dimensions in mm	a	88
	b	160,4
	c	20
	d	12,25
	e	18
	h	49,8

- Material: hardened steel
- Ground and polished clamping surfaces
- For clamping range from 0 mm

### Click parallels (pair)

Order no. 6921205044042



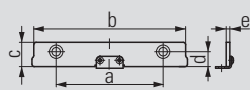
Jaw width	160	
Dimensions in mm	a	88
	b	160
	c -0,01	44
	d	12,25
	e	3

- For parallel raising of workpieces
- Hardened and ground parallels

- Parallels with click system or screw-on
- For the high side of the jaws

### Click parallels (pair)

Order no. 6921205025042



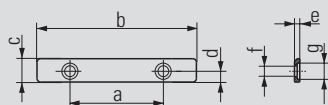
Jaw width	160	
Dimensions in mm	a	88
	b	160
	c -0,01	25
	d	12,25
	e	3

- For parallel raising of workpieces
- Hardened and ground parallels

- Parallels with click system or screw-on
- For the high side of the jaws

### Parallels (pair)

Order no. 6921305019031



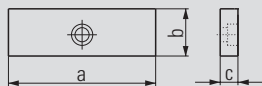
Jaw width	160	
Dimensions in mm	a	88
	b	160
	c	19
	d	6
	e	3
	f	Ø 6
	g	Ø 9

- For parallel raising of workpieces
- Hardened and ground parallels
- Parallels for screwing on
- For the stepped side of the jaws



## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (conventional clamping accessories)

### Smooth jaws (pair)



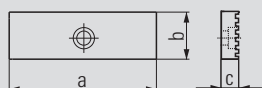
Order no. 6921034022031

Jaw width	160	
Dimensions in mm	a	160
	b	50
	c	20

- Material: hardened steel
- For parts with delicate clamping surfaces

- Please order fastening bolts separately (order no. 6921011023000)

### Serrated jaws (pair)



Order no. 6921031005031

Jaw width	160	
Dimensions in mm	a	160
	b	50
	c	20

- Material: hardened steel
- Standard jaws with small surface area

- To increase the specific contact pressure
- Please order fastening bolts separately (order no. 6921011023000)

### Soft jaws (pair)



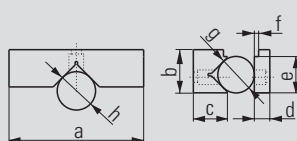
Order no. 6921034023031

Jaw width	160	
Dimensions in mm	a	160
	b	50
	c	30

- Material: 21MnCr5G, type 1.23162 steel
- Jaws of case-hardening steel

- For self-made special jaws
- Please order fastening bolts separately (order no. 6921011023000)

### Prismatic jaws (set)



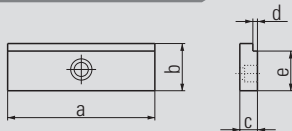
Order no. 6921034024031

Jaw width	160	
Dimensions in mm	a	160
	b	50
	c	45
	d	20
	e	45
	f	3
	g	Ø 15 – 40
	h	Ø 22 – 65

- Material: hardened steel
- For horizontal and vertical clamping of round and flat workpieces
- Please order fastening bolts separately (Order no.: 6921011023000)

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (conventional clamping accessories)

### Step jaws (pair)



Order no. 6921034025031

Jaw width		160
Dimensions in mm	a	160
	b	50
	c	20
	d	3
	e	45

- Material: hardened steel
- For horizontal clamping of flat workpieces
- Please order fastening bolts separately (order no.: 6921011023000)

### Roller pull-down jaws (pair)

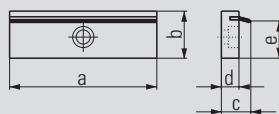


Order no. 6921034005131

Jaw width		160
Dimensions in mm	a	160
	b	50
	c	35,5
	d	45

- Material: hardened steel
- For parts with delicate clamping surfaces
- Jaw parts in contact with the workpiece press the workpiece onto the support surface
- Please order fastening bolts separately (order no.: 6921011023000)

### Spring leaf pull-down jaws (pair)



Order no. 6921034001042

Jaw width		160
Dimensions in mm	a	160
	b	50
	c	23
	d	15
	e	43

- Material: hardened steel
- For parts with rough clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are replaceable (see 6921034002131 below)
- Please order fastening bolts separately (order no.: 6921011023000)

### Spring leaves (pair)



Order no. 6921034002131

- Spring leaves (replacement) for the spring leaf pull-down jaws (see above)

### Jaw fixing screw

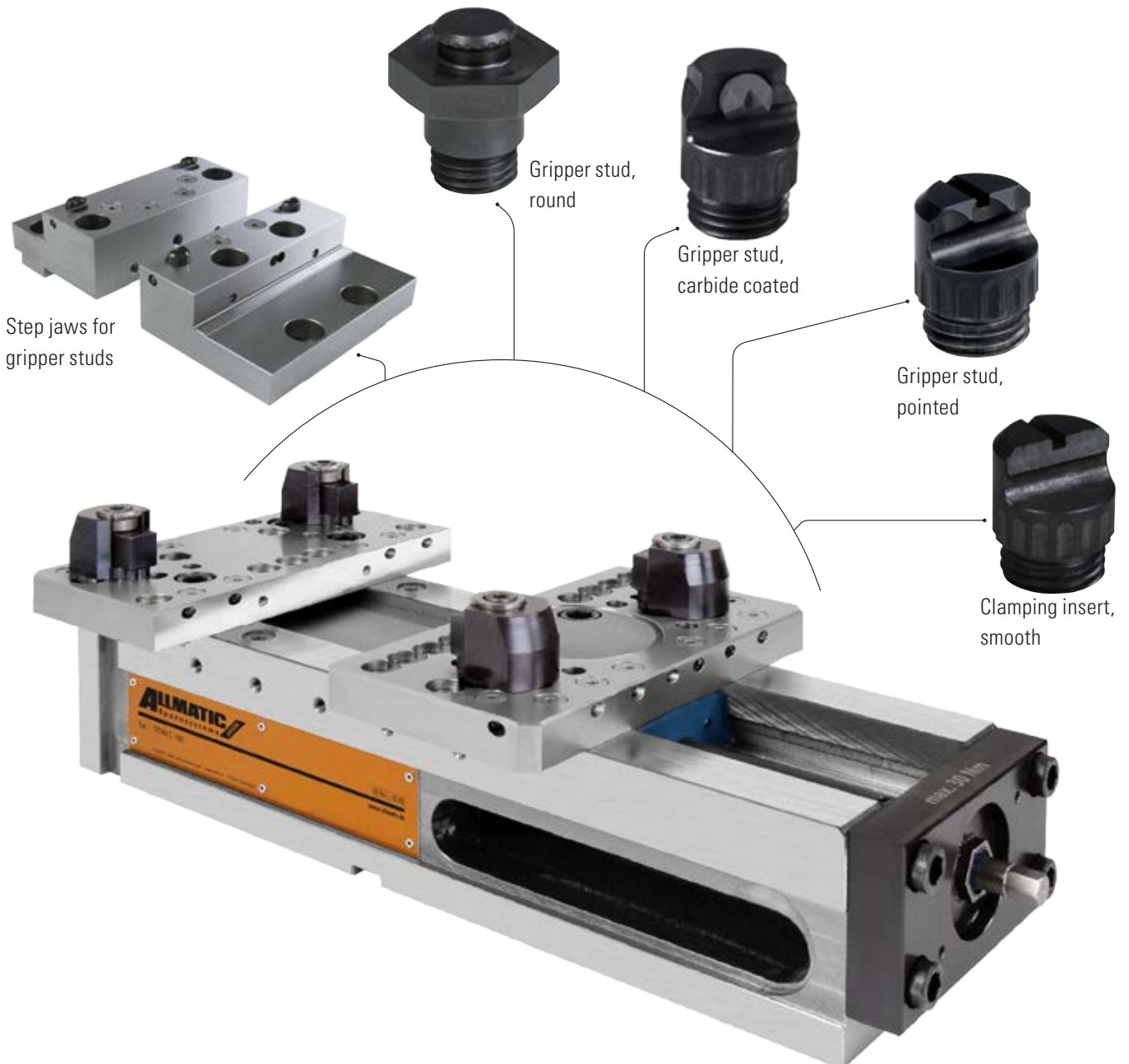


Order no. 6921011023000

- Bolt with shoulder – M10 x 23
- Suitable for all jaws in the 090, 100, 125 and 160 mm series

# TITAN 2-160

## GRIPP CLAMPING



### For clamping complex unmachined parts

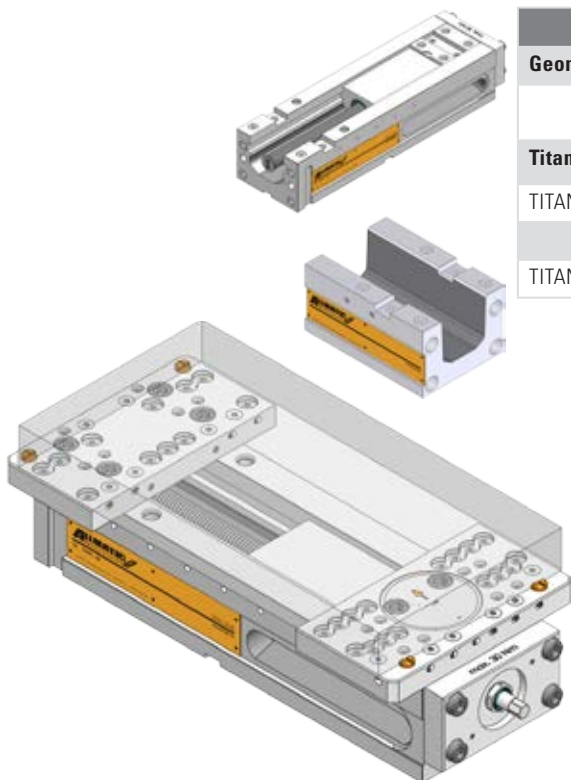
The support jaws enable you to clamp different unmachined parts quickly and securely. You will find jaws for gripper clamping on the following pages.

### GRIPP clamping

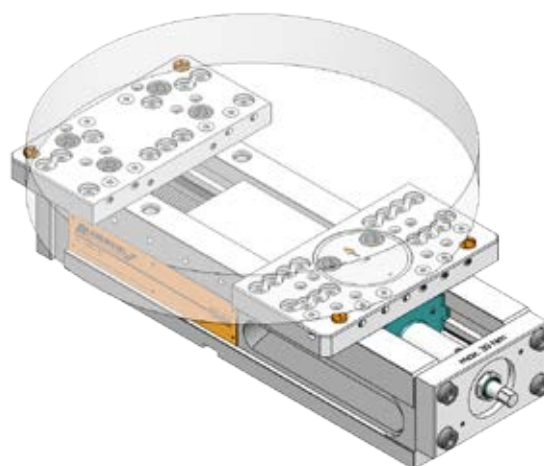
- Support jaws are used to mount different gripper studs (threaded gripper studs or universal gripper set)
- Gripper studs can be screwed in various positions on the grid plate in order to clamp various workpiece geometries securely
- Additional pivot function of the support jaws compensates for non-parallel clamping surfaces and is required to clamp uneven workpieces
- Short set-up times due to the multiple use of the jaws

# CLAMPING WIDTHS – GRIPP CLAMPING

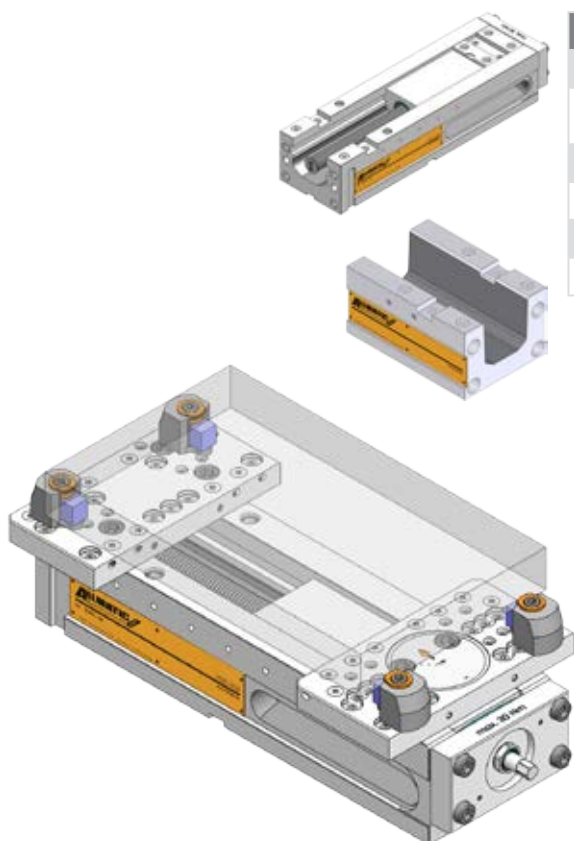
## Support jaws with gripper studs



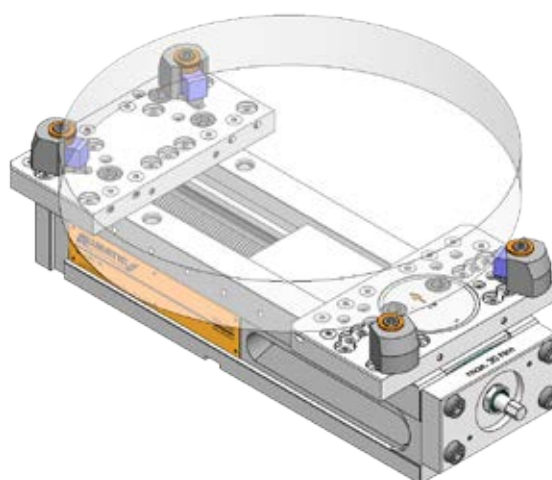
TITAN 2-160 - Support jaws with gripper studs					
Geometry	Rectangular workpiece		Round workpiece		
	Clamping range (in mm)		Clamping width (in mm)	Clamping range (in mm)	
Titan series	min.	max.	min.	min.	max.
TITAN 2-160	33	493	70	Ø 75	Ø 450
TITAN 2-160 with extension	-	735	70	-	Ø 450



## Support jaws with universal gripper set



TITAN 2-160 - Support jaw with universal gripper set					
Geometry	Rectangular workpiece		Round workpiece		
	Clamping range (in mm)		Clamping width (in mm)	Clamping range (in mm)	
Titan series	min.	max.	min.	min.	max.
TITAN 2-160	34	426	122	Ø 120	Ø 450
TITAN 2-160 with extension	-	668	122	-	Ø 450



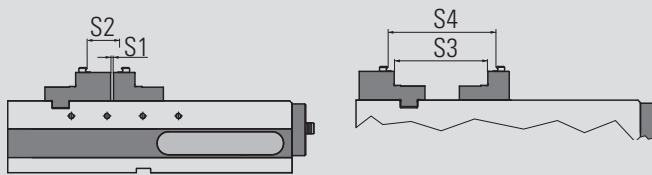
**ALLMATIC GRIPP – mechanical / version TITAN 2-160 (GRIPP clamping accessories)**

**Step jaws for gripper studs**



- Material: Hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws (Typ 160)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side (see conventional clamping)

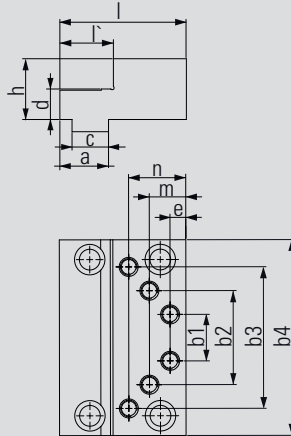
Note: The movable jaw has no pendulum compensation. It is suitable for rectangular workpieces (saw cuts) // <= 0.5 (concurrency less than or equal to 0.5 mm) or cylindrical workpieces  $\varnothing \leq 0.5$  (roundness less than or equal to 0.5 mm)



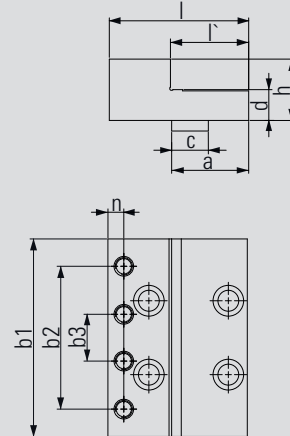
in mm	S1	S2	Round workpiece	S3	S4
Clamping width	0-245	24-264	$\varnothing$ 55-400	179-425	227-468
with enlargement *	0-487	262-506	$\varnothing$ 55-400	421-667	469-710
Clamping range	-	min. 54	-	-	min. 54

\*Clamping range enlargement: **6921705008055**

Order no. fixed:  
**6921844051031**



Order no. movable :  
**6921844050031**



Jaw width	160
Dimensions in mm	
a	40
b1	38
b2	77
b3	116
b4	160,4
c	30
d	25
e	13
h	49,8
l	104
l'	44
m	47
n	30

Jaw width	160
Dimensions in mm	
a	63
b1	160,4
b2	116
b3	38
c	30
d	25
h	49,8
l	114
l'	64
n	13



clamping unmachined parts round



clamping unmachined parts quadratic



clamping pre-machined workpieces



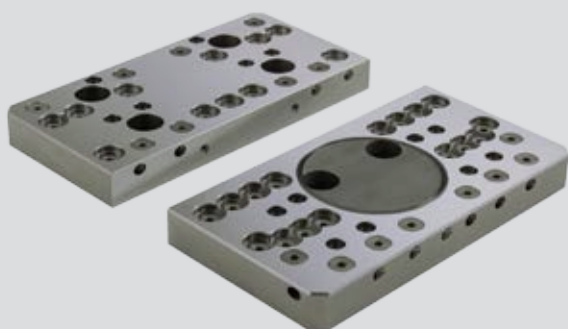
Please order gripper studs separately

No retooling necessary!  
Set-up times will be reduced



## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (GRIPP clamping accessories)

### Support jaws



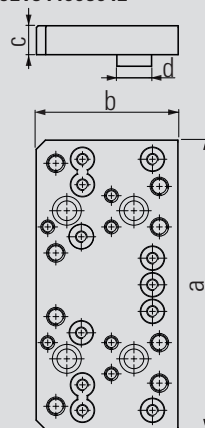
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

#### Pivot jaw:

- For clamping uneven workpieces
- To compensate for non-parallel clamping surfaces
- Supplied **without** wedge elements, gripper set and gripper studs (pointed/smooth)

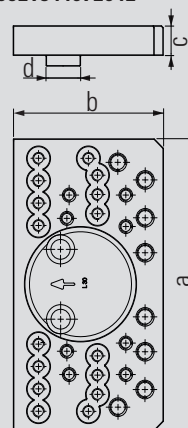
You will find dimensions of the individual gripper items and the gripper studs at [www.allmatic.de](http://www.allmatic.de)

Order no. fixed:  
6921844005042



Jaw width	160	
Dimensions in mm	a	250
	b	122,5
	c	25
	d	30

Order no. movable, pivoting:  
6921844072042

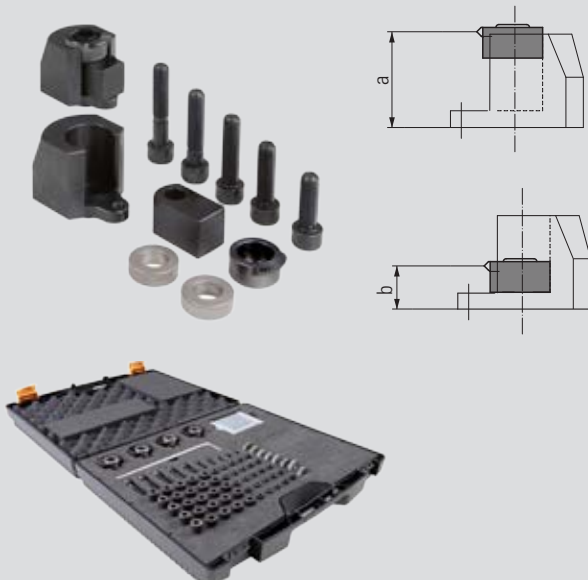


Jaw width	160	
Dimensions in mm	a	250
	b	132
	c	25
	d	30



Please order universal gripper set or gripper studs separately

### Universal gripper set



Order no. 6921884027031

Jaw width	160	
Dimensions in mm	a	40
	b	18

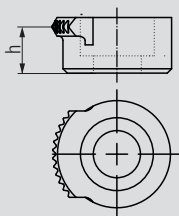
- For clamping complex unmachined parts
- By reworking the individual elements of the universal gripper set, both the gripper height and the support height of the workpiece can be varied

#### Consisting of:

- 4 x gripper studs 6921884026000
- 4 x gripper stud mounting 6921884027000
- 4 x supports 6921884028000
- 8 x shims
- Support bolts
- M10 fastening bolts in various lengths
- M6 threaded rods in various lengths
- Socket screw wrench
- Storage case

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (GRIPP clamping accessories)

### Gripper stud

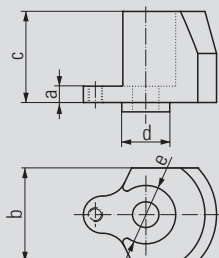


Order no. 6921884026000

Dimensions in mm	h	11
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- Gripper stud for universal gripper set

### Gripper stud mount

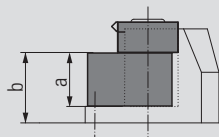
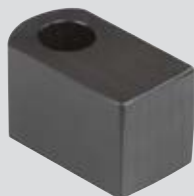


Order no. 6921884027000

Dimensions in mm	a	7
	b	40
	c	39
	d	∅ 20
	e	∅ 25

- Mounting for gripper stud 6921884026000

### Support

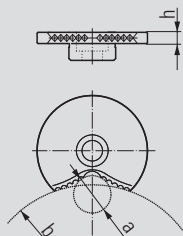


Order no. 6921884028000

Dimensions in mm	a	22
	b	29

- Support for universal gripper set

### Prismatic gripper

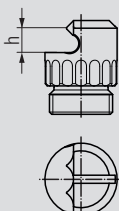


Order no. 6921884029031

Dimensions in mm	a	∅ 20
	b	∅ 120
	h	6

- Replaces gripper stud 6921884026000 in the universal gripper set
- Special shape distributes the applied clamping force – particularly advantageous for clamping workpieces that require fits to be made

### Gripper stud, pointed



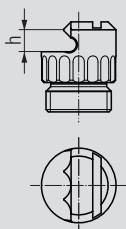
Order no. 6921884036000

Dimensions in mm	h	5,5
------------------	---	-----

- For clamping unmachined parts
- Least possible lost clamping margin
- Clamping height: adjustable from 4.5 to 6.0 mm

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (GRIPP clamping accessories)

### Gripper stud, low

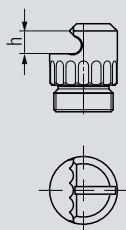


Order no. 6921884036100

Dimensions in mm	h	5
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- For clamping unmachined parts
- Least possible lost clamping margin
- Clamping height: adjustable from 3.0 to 4.5 mm

### Clamping insert, four-point

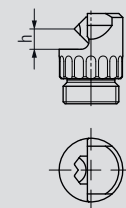


Order no. 6921884036500

Dimensions in mm	h	5.4
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- For clamping unmachined parts
- For soft materials such as aluminium
- Least possible lost clamping margin
- Clamping height approx. 4.5 mm to 6.0 mm

### Gripper stud, carbide coated

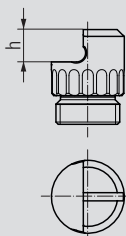


Order no. 6921884036841

Dimensions in mm	h	5.1
------------------	---	-----

- For clamping unmachined parts
- For quenched and tempered materials and flame-cut materials
- Least possible lost clamping margin, clamping height approx. 4.2 mm to 5.7 mm

### Clamping insert, smooth

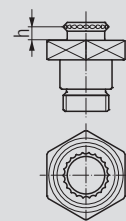


Order no. 6921884037000

Dimensions in mm	h	7
------------------	---	---

- With carbide coating for clamping pre-machined or hardened workpieces

### Gripper stud, round



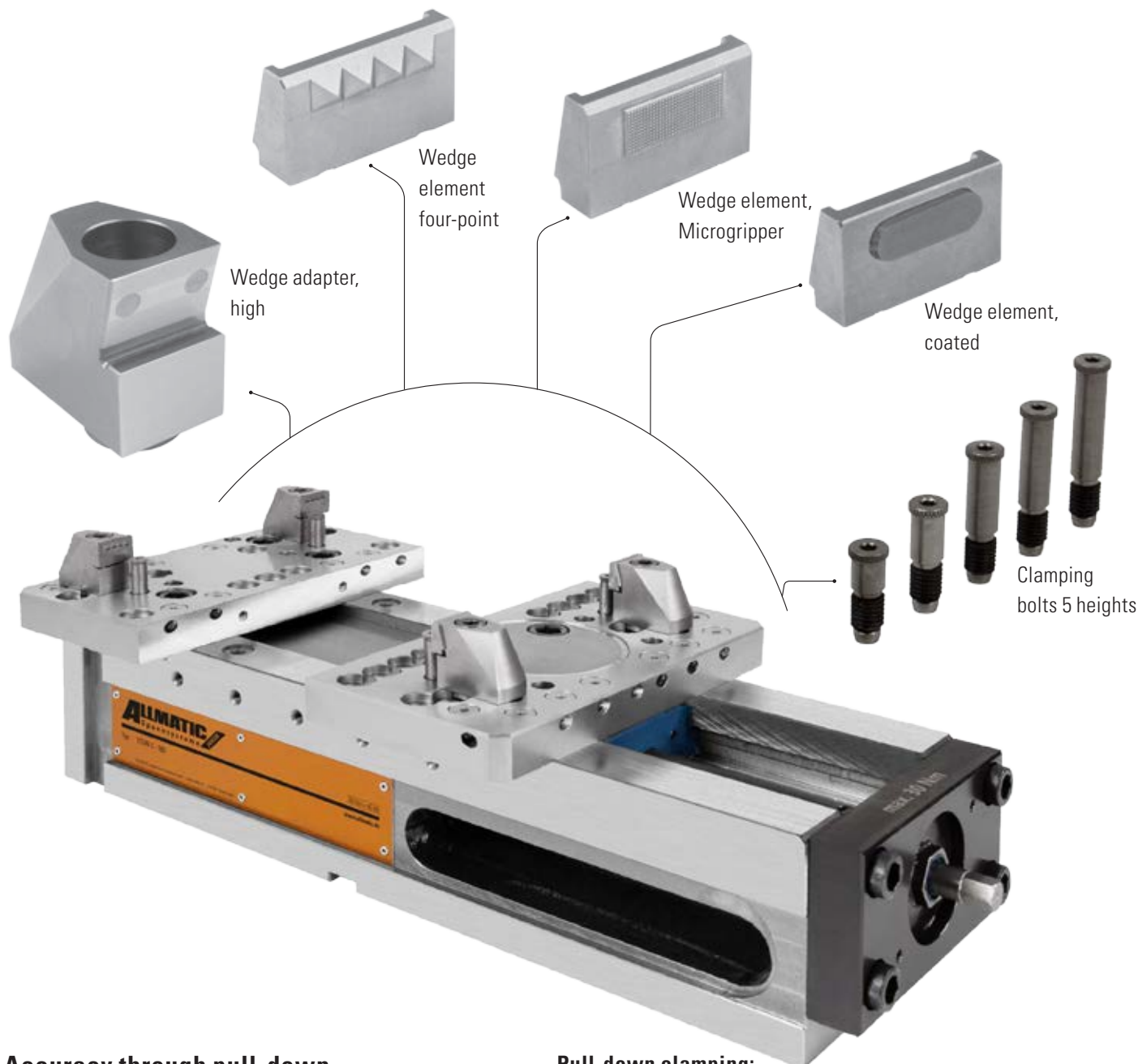
Order no. 6921884038000

Dimensions in mm	h	4
------------------	---	---

- For clamping unmachined parts
- For drilling through close to the edge
- Offers 6 mm clear space under the workpiece

# TITAN 2-160

## PULL-DOWN CLAMPING



### Accuracy through pull-down

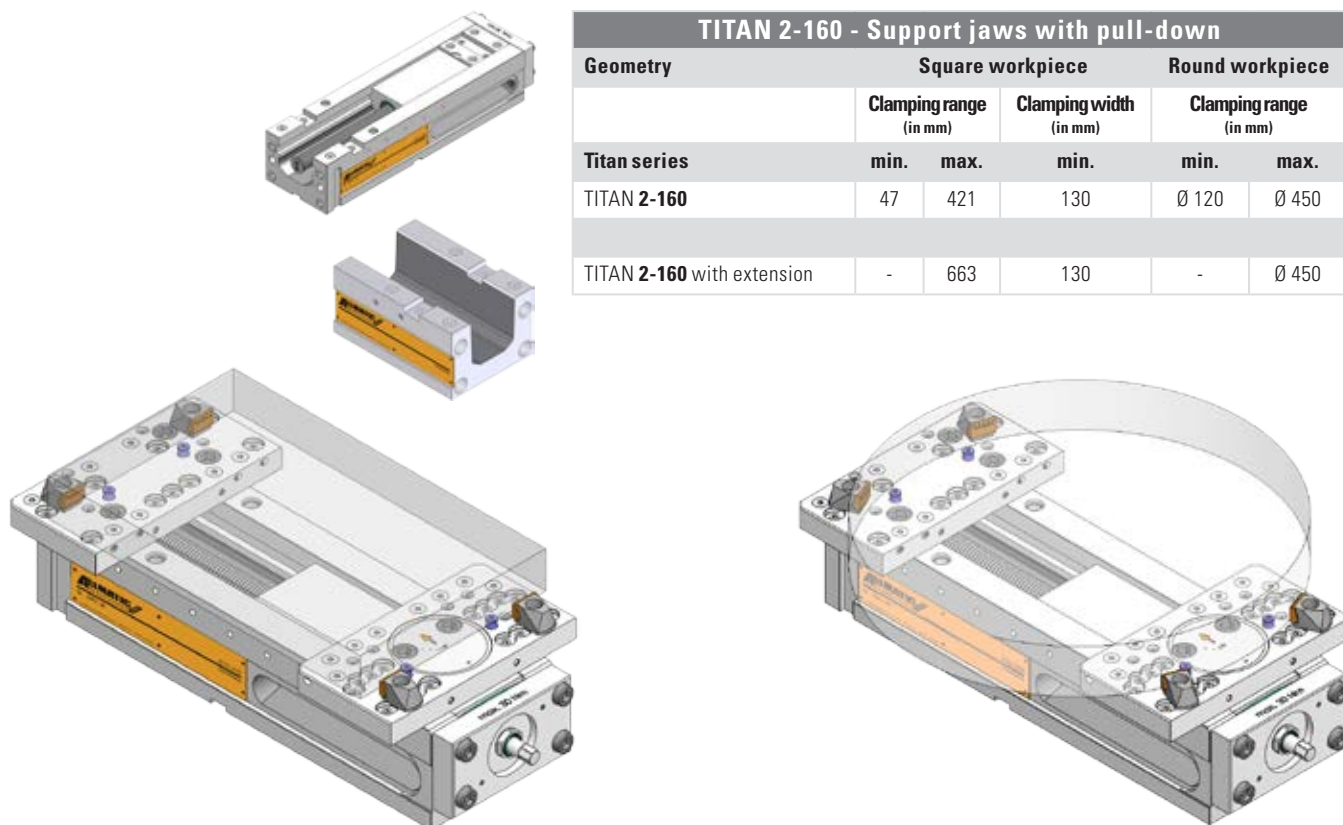
The support jaws and the pull-down system ensure accurate, versatile and secure clamping of the unmachined parts. The workpiece is positioned on ground clamping bolts which make the connection to the guideway. In this way, the parallelism of the guideway or of the machine table is transferred to the workpiece, thus achieving even greater clamping accuracy. Vibrations in the workpiece during machining are to a large extent avoided. The pull-down system can be found on the following pages.

### Pull-down clamping:

- Support jaws are used to mount various wedge adapters and clamping bolts
- Wedge adapters can be bolted in various positions on the grid plate
- The various wedge elements can be changed quickly on the wedge adapters
- Additional pivot function of the support jaws compensates for non-parallel clamping surfaces and is required to clamp uneven workpieces
- Accuracy through pull-down
- Clamping in the neutral filament can be optimised using the 5 different heights of the clamping bolts

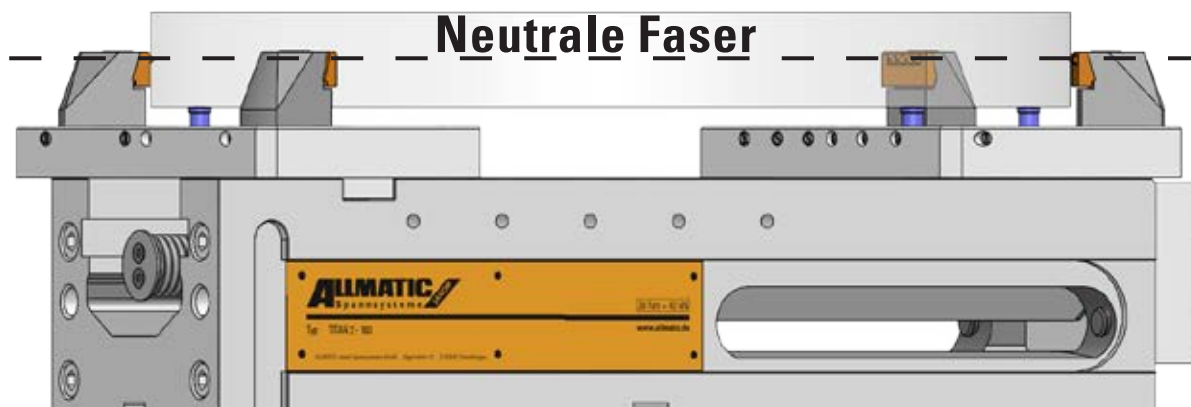
# CLAMPING WIDTHS – PULL-DOWN CLAMPING

Support jaws with pull-down



TITAN 2-160 - Support jaws with pull-down					
Geometry	Square workpiece		Round workpiece		
	Clamping range (in mm)		Clamping width (in mm)	Clamping range (in mm)	
Titan series	min.	max.	min.	min.	max.
TITAN 2-160	47	421	130	Ø 120	Ø 450
TITAN 2-160 with extension	-	663	130	-	Ø 450

Clamping in the neutral filament





**ALLMATIC GRIPP – mechanical / version TITAN 2-160 (pull-down clamping accessories)**

**Support jaws**



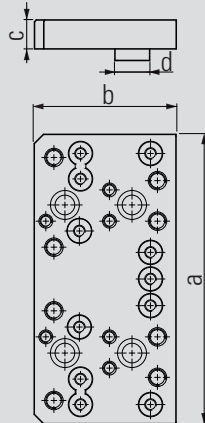
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs with thread (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

**Pivot jaw:**

- For clamping uneven workpieces
- To compensate for non-parallel clamping surfaces
- Supplied **without** clamping elements

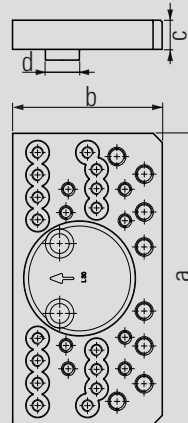
**You will find dimensions of the individual gripper items and the gripper studs at [www.allmatic.de](http://www.allmatic.de)**

**Order no. fixed:**  
6921844005042



Jaw width		160
Dimensions in mm	a	250
	b	122,5
	c	25
	d	30

**Order no. movable, pivoting:**  
6921844072042

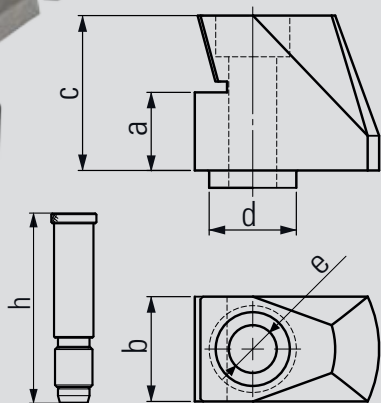


Jaw width		160
Dimensions in mm	a	250
	b	132
	c	25
	d	30



**Please order pull-down studs separately**

**Pull-down set case, 160**



**Order no. 6921734027231**

Jaw width		160
Dimensions in mm	a	18
	b	24
	c	35,7
	d	Ø 20
	e	Ø 11
	h	34 / 53

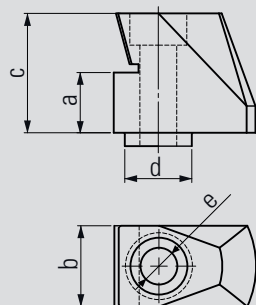
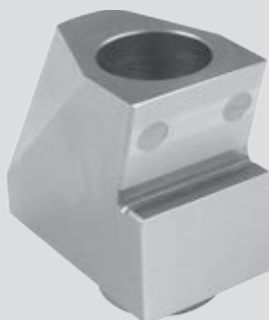
- Pull-down elements suitable for clamping and pulling down clamping surfaces that are unmachined or pre-machined onto the guideway or onto the supplied clamping bolts
- In this way workpieces can be clamped almost exactly parallel to the guideway for machining
- The direct contact to the clamping bolts largely avoids vibrations in the workpiece

**Pull-down set consisting of:**

- 1 x foamed case
- 4 x wedge adapter, high
- 4 x bolts, M10 x 45 mm
- 4 x wedge element, 4 point
- 4 x wedge element Microgripper
- 4 x clamping bolts 53 mm
- 4 x clamping bolts 34 mm

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (pull-down clamping accessories)

### Wedge adapter, high



Order no. 6921834027141

Dimensions in mm	
a	18
b	24
c	35,7
d	Ø 20
e	Ø 11

- Wedge adapter, high, for use on support jaws. For mounting the four-point, Microgripper, round and coated wedge elements supplied **without** M10 x 45 mm fastening bolt (see next page)

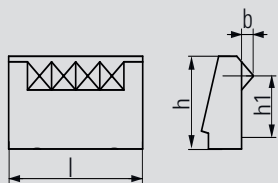
### Fastening bolt, high



Order no. 8006101045050

- For fastening the wedge adapter, high, on the support jaws
- M 10 X 45 mm

### Wedge element, four-point

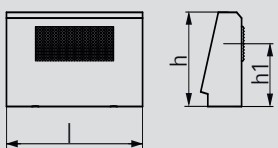


Order no. 6921834025040

Dimensions in mm	
b	2,4
h	16,5
h1	13
l	27,8

- Wedge elements for various shapes, surface conditions and materials
- Quick to exchange
- Minimum clamping depth 8 mm

### Wedge element, Microgripper



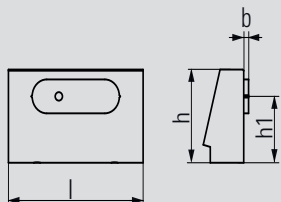
Order no. 6921834025140

Dimensions in mm	
h	16,5
h1	11
l	27,8

- Wedge elements for various shapes, surface conditions and materials
- Quick to exchange
- Minimum clamping depth 8 mm

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (pull-down clamping accessories)

### Wedge element, coated

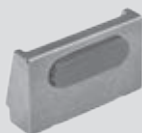
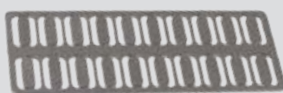


#### Order no. 6921834025240

Dimensions in mm	b	1
	h	16,5
	h1	11,75
	l	27,8

- Wedge elements for pre-machined, surface conditions and materials
- Quick to exchange
- Minimum clamping depth 8 mm
- Please order the pads separately (see below)

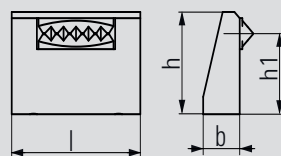
### Blister-pads, diamond-coated



#### Order no. 6921834028141

- Diamond-coated pads for secure clamping of machined surfaces without a visible impression
- Blister contents: 20 pads

### Wedge element, round



#### Order no. 6921834026340

Dimensions in mm	b	2,4
	h	16,5
	h1	13
	l	27,8

- Wedge elements for round shapes or radii, irrespective of surface conditions and materials
- Quick to exchange
- Minimum clamping depth 8 mm

### Clamping bolts



6921735053040

h 53

6921735048040

h 48

6921735043040

h 43

6921735034040

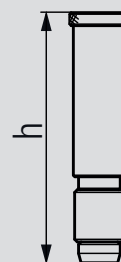
h 34

6921735029040

h 29

#### See table for order no.

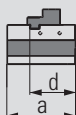
- Five support heights
- For levelling the workpiece on the guideway
- Material: hardened steel
- Ground to high accuracy



**ALLMATIC GRIPP – mechanical / version TITAN 2-160 (pull-down clamping accessories)**

## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (accessories)

### Clamping width enlargement



Order no. 6921705008055

Jaw width		160
Dimensions in mm	a	237
	d	172

- For increasing the clamping width of the TITAN 2-160
- Is attached to the end face of the TITAN 2 vice
- Clamping forces are not transmitted to the machine table
- Included: 1 pair of side clamps



Clamping range at conventional clamping	
Clamping range S1 / S2	+242 mm

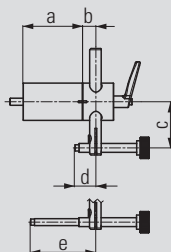
Clamping range at Gripp clamping  
See chapter TITAN2-160 Gripp clamping



Clamping range at pull-down clamping  
See chapter TITAN2-160 pull-down clamping



### Workpiece stop



Order no. 6921285650144

Dimensions in mm		
a	67	
b	15	
c	33 – 92	
d	12 – 63,5	
e	53,5 – 113,5	

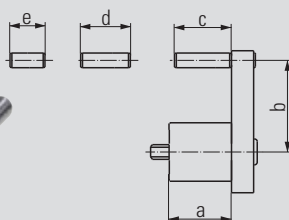
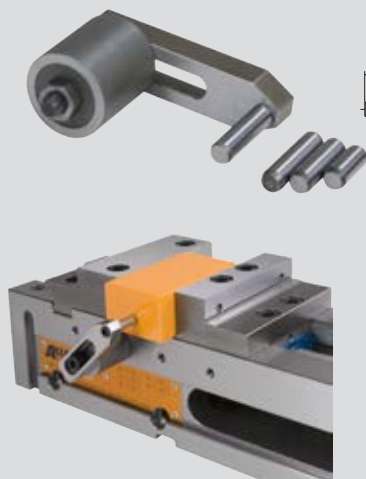
- Can be mounted at the positions provided on both sides of the vice
- Fastening thread M8
- Position of the third workpiece access can be preset and clamped. Workpiece stop can be swivelled away once the workpiece has been clamped.
- This allows the stop side of workpiece to be machined as well (repeating accuracy:  $\pm 0.01$ )





## ALLMATIC GRIPP – mechanical / version TITAN 2-160 (accessories)

### Workpiece stop

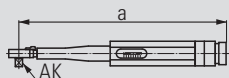


Order no. 6921685670042

Dimensions in mm	a	34
	b	27 – 59
	c	31
	d	27
	e	19

- Can be mounted at the positions provided on both sides of the vice
- Fastening thread M8
- Can be pre-mounted with various fixed dimensions
- Presettable position of the third axis of the workpiece

### Torque wrench



Order no. 0651114113188

Dimensions in mm	a	307
	AK (Drive square)	3/8"

- Adjustable between 10 – 60 Nm
- Only for operating the T-REX, TITAN and DUO Plus 125 high-pressure spindles

### Side clamps (pair)



Order no. 6921025000031

- For fastening the vice to the machine table
- Scope of supply includes 2 items

### DUO side clamps



Order no. 6921285000031

- For fastening device to a bracket or onto a machine table
- 1 set consists of 2 pairs of side clamps, including screw connections

### Aligning and fixing set



Order no. – see table

T-slot/ Thread	Order No.
12/M10	6921285600031
14/M12	6921285601031
16/M14	6921285602031
18/M16	6921285603031
20/M16	6921285606031
22/M16	6921285607031

- For aligning (positioning) and fastening the vice on the pallet and machine table
- Size according to T-slot or thread in the machine table