ALLMATIC TITAN SC 125 – SPEED GUARANTEED

The ALLMATIC TITAN SC 125 is designed for quick machining of raw parts to finished product. It can be used equally for the Gripp Clamping in the first operation, as well as for conventional clamping in the second clamping station without conversion.





ALLMATIC GRIPP – MECHANICAL VERSION TITAN SC 125

Scope of application:

- The classical, universal clamp, for vertical 3 axis machining centres
- Conventional clamping and gripp clamping possible
- Clamping of raw parts, burn and saw cuts by penetrating hardened and interchangeable gripp elements into the workpiece

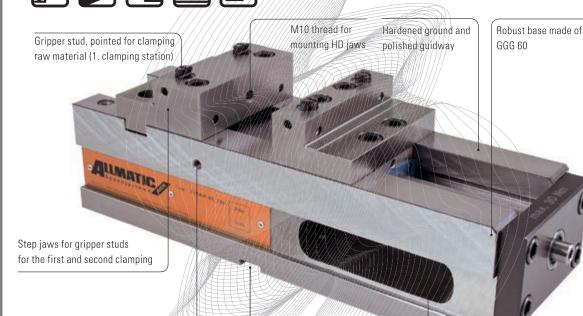
Customer advantages:

- Free of charge introduction to gripp technology in comparison to conventional clamping (LC)
- Existing step jaw systems of product series LC / TC // Titan can be used
- First and second clamping stations without retrofitting the step jaws
- Clamping of raw parts such as burn & saw cuts (materials up to approx. 1000N/mm2) through screwable clamping applications (first clamping station)

- Parallel clamping to machined workpieces with the step jaws
 (2. clamping station)
- Upgrade to full clamping function with optional clamping jaws

Product features:

- With grounded jaws, the TITAN SC 125 has the precision which is necessary for machining workpieces
- Fully enclosed **gripp spindle** for clamping and forming raw material
- The high-pressure spindle allows you to, with a mechanical force amplifier (using the torque wrench), to work and clamp to a table
- Stable GGG60 body, grounded top and bottom
- Double-sided M8 thread for workpiece stoppage
- Precise tracks in the grounded surface of the soles for optimum alignment on the machining table
- Click-quick-change system for attaching jaws and click parallels



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

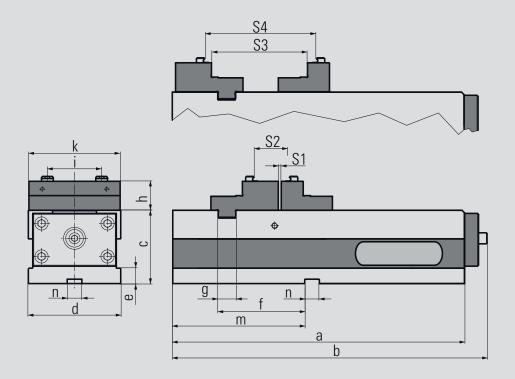
Optional:
Mounting
holes for
zero-point clamping
systems are possible.

Order no. 6921888010755

Scope of supply:

- 1 TITAN SC 125 with step jaws for gripper studs
- 4 Gripper studs
- 1 set of side clamps
- 3 Socket screw wrench

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 O <= 0.5 (roundness less than or equal to 0.5 mm

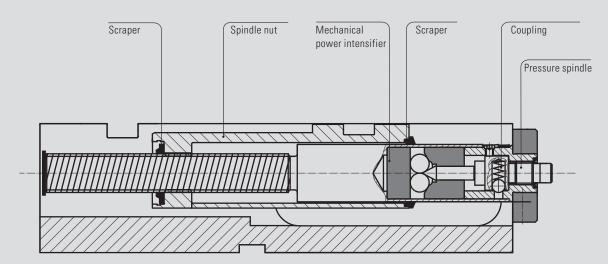


Technical data

Тур		SC 125
Dimensions /	а	398
tolerances in mm	b	429
	С	100
	d	126
	е	21
	f	118
	g	24
	h	39,5
	i	74
	k	124,4
	m	180
	n	20

Тур	SC 125
Clamping range S1 in mm	0 - 182
Clamping range S2 in mm	52 - 224
Clamping range S2 round workpiece in mm	Ø 88 - 220
Clamping range S3 in mm	131 - 313
Clamping range S4 in mm	160 - 332
Max. torque in Nm	30
Max. clamping force in kN	40
Weight in kg	35

Spindle cross-section



TITAN SC 125 CONVENTIONAL CLAMPING



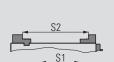
For conventional clamping of workpieces

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

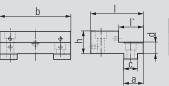
Step jaws



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



Order no. fixed: 6921684006731 Order no. movable: 6921484002731



b b	
+ + +	C

Jaw widt	h	125
Dimen-	а	34
sions in mm	b	124,4
	С	24
	d	20
	h	39,5
	- 1	92
	Γ	43

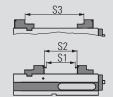
Jaw widt	h	125
Dimen-	а	47
sions in mm	b	124,4
	С	24
	d	20
	h	39,5
	- 1	70
	Γ	40

Clamping width S1	0 – 182
Clamping width S2	131 – 313

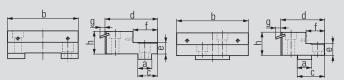
Pull-down jaws



- Material: hardened steel
- Pull-down with ground spring leaves for unmachined and machined clamping surfaces
- Ground clamping surfaces
- High clamping precision for parallel or precise-angle machining
- Click system on the high side



Order no. fixed: 6921684106031 Order no. movable: 6921684102031



Jaw Widt	n	125
Dimen- sions in mm	а	24
	b	124,4
	С	34
	d	92
	е	20
	f	43
	g	8,8
	h	39,5

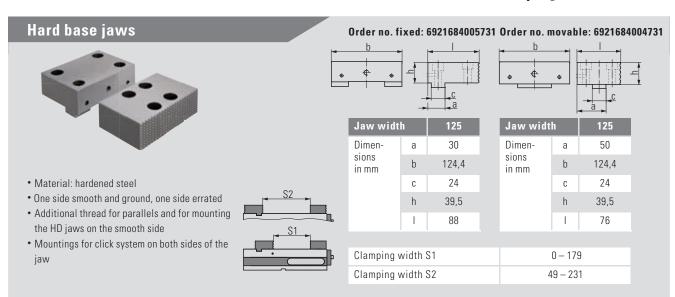
Jaw widt	h	125
Dimen- sions in mm	а	24
	b	124,4
	С	46,5
	d	75
	е	20
	f	32
	g	8,8
	h	39,5

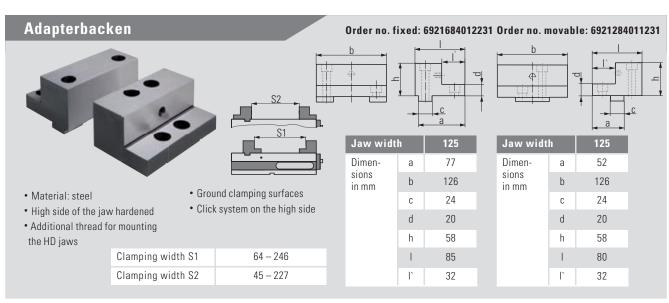
Clamping width S1	0 – 159
Clamping width S2	0 – 176
Clamping width S3	124 – 305

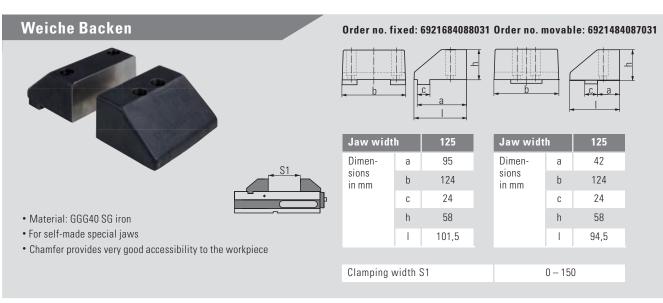
Spring leaves (pair)



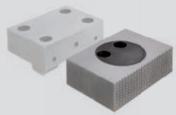
- Hardened spring leaves
- Spring leaves (replacement) for the pull-down jaws Order no.: 6921684106031 and 6921684102031



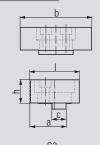


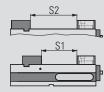


Pivot jaw, movable



- Material: Hardened steel
- With click system
- One side smooth and ground, one side serrated
- 360° rotatable
- Picture with hard base jaw (see order no.: 6921684005731)





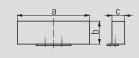
Order no. 6921684020042

Jaw width		125
Dimensions in mm	а	62
	b	124,4
	С	24
	h	39,5
	I	84

Clamping width S1	0 – 167
Clamping width S2	37 – 219

Soft jaw





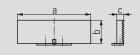
Order no. 6921684023042

Jaw width		125
Dimensions in mm	а	125
	b	39,8
	С	22

- Material: case-hardened steel 21MnCr5G, mat. no.: 1.2162
- Jaws can be case-hardened
- For production of special jaws by the customer
- Only for use with jaws with Click system

Jaw with cross grooving



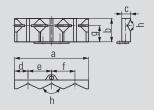


Jaw width		125
Dimensions in mm	а	125,6
	b	40,1
	С	12

- Material: hardened steel
- Jaws with sharp serrations to increase the specific contact pressure per unit area
- Visible impressions on workpiece
- Only suitable for soft materials
- Only for use with jaws with Click system

Prismatic jaws (pair)





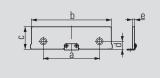
Order no. 6921684024042

Jaw width		125
Dimensions in mm	а	125,6
	b	39,8
	С	15
	d	22,8
	е	40
	f	40
	g	27,5
	h	130°

- Material: hardened steel
- Jaws for clamping round parts, vertical dia. 16-74 mm, horizontal dia. 12-40 mm
- Only for use with jaws with Click system

Click parallels (pair)





Order no. 6921185035042

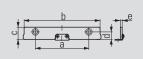
Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0,01	35
	d	12,25
	е	3

- 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. 6921185020042

Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0,01	20
	d	12,25
	е	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)



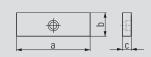


- For parallel raising of workpieces • Hardened and ground parallels
- Parallels for screwing on
- For the stepped side of the jaws

Jaw width		125
Dimensions in mm	а	88
	b	124
	С	15
	d	6
	е	3
	f	Ø6
	g	Ø 9

Smooth jaws (pair)



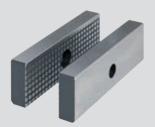


Order no. 6921024022031

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	15

- Material: hardened steel
- For parts with delicate clamping surfaces
- Please order fastening bolts separately (order no. 6921011023000)

Serrated jaws (pair)





Order no. 6921021005031

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	15

- 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)



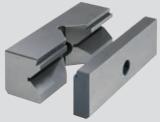


Order no. 6921024023031

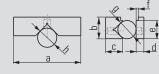
Jaw width		125
Dimensions in mm	а	125
	b	40
	С	25

- 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)



• Material: hardened steel



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

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	35
	d	15
	е	35
	f	3
	g	Ø 12 – 28
	h	Ø 18 – 55

Step jaws (pair)

Order no. 6921024025031

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	15
	d	3
	е	35

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

Roller pull-down jaws (pair)





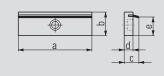
Order no. 6921024005131

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	26
	d	35

- 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. 6921024001042

Jaw width		125
Dimensions in mm	а	125
	b	40
	С	20
	d	12
	е	33

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

Spring leaves (pair)



Order no. 6921024002131

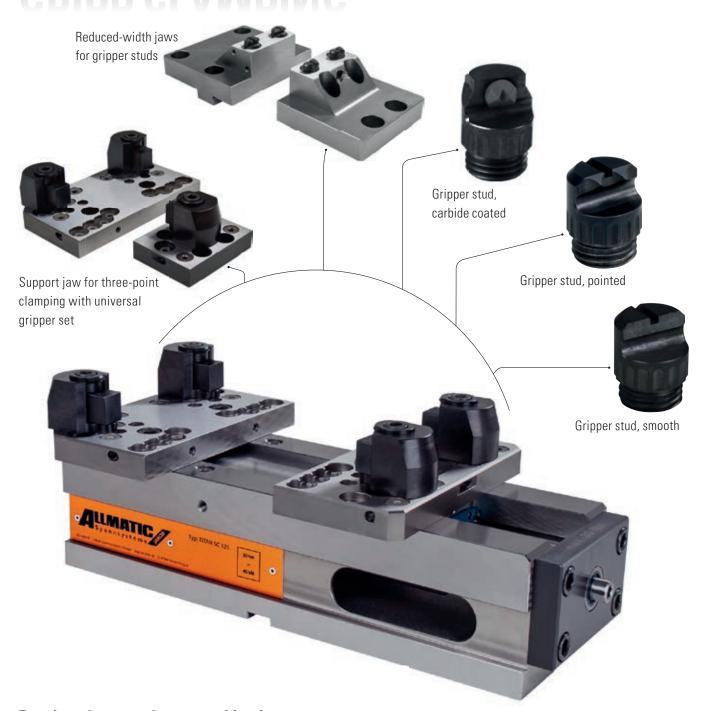
• Spring leaves (replacement) for the spring leaf pull-down jaws (see above)

Jaw fixing screw



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

TITAN SC 125 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
- Three-point clamping is possible due to the rigid support jaw

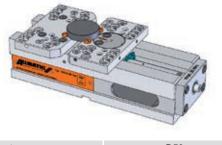
CLAMPING WIDTHS – GRIPP CLAMPING

Support jaws with gripper studs





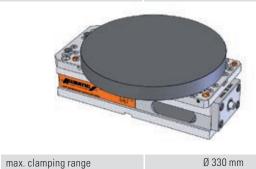
min. clamping range	29 mm
min. clamping width	70 mm



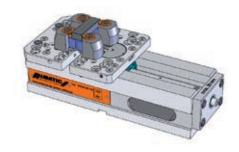
min. clamping range	Ø 70 mm	



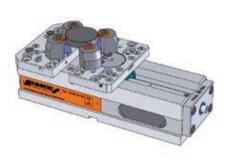
max. clamping range	322 mm
max. clamping width	at least 160 mm or larger



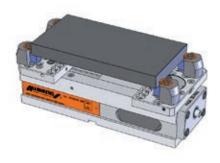
Support jaws with universal gripper set



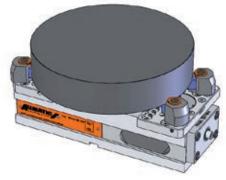
min. clamping range	25 mm
min. clamping width	88 mm



min, clamping range	Ø 70 mm



max. clamping range	312 mm
max. clamping width	at least 165 mm or larger



max. clamping range	Ø 330 mm
IIIax. Ciaiiibiiiu lailue	ווווו טכנ ע

Support jaws



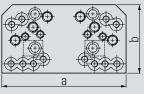
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

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

Order no. fixed: 6921734005842



u	 14
<u>d</u>	U

Jaw width		125	
Dimensions in mm	а	189	
	b	104	
	С	20	
	d	24	

Jaw width		125
Dimensions in mm	а	189
	b	97
	С	20
	d	24

Order no. movable, pivoting:

6921734072842



Please order universal gripper set or gripper studs separately

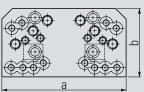
Support jaws



- Material: hardened steel
- For mounting various studs (pointed/smooth) or a universal gripper set
- For three-point clamping
- Front surface can be used as clamping surface (hardened and ground)
- Supplied without studs (pointed/smooth) or gripper set

You will find dimensions of the individual gripper items and the gripper studs at www.allmatic.de $\label{eq:continuous} % \begin{center} \end{center} \begin{center} \end{center} % \be$

Order no. fixed: 6921734005842





6921884004842

Order no. movable, rigid:



Jaw width		125
Dimensions in mm	а	189
	b	104
	С	20
	d	24



Jaw width		125
Dimensions in mm	а	97
	b	73
	С	20
	d	24



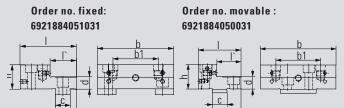
Please order universal gripper set or gripper studs separately

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 125 200)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side

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 O <= 0.5 (roundness less than or equal to 0.5 mm)

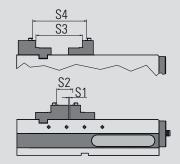


Jaw width		125
Dimensions in mm	а	34
	b	124,4
	b1	74
	С	24
	d	20
	h	39,5
	- 1	92
	Γ	43

Jaw width		125
Dimen-	а	47
sions in mm	b	124,4
	b1	74
	С	24
	d	20
	h	39,5
	1	70
	ľ	40



Please order gripper studs separately



Clamping width S1	0 – 182
Clamping width S2	49-226
Clamping width S2 round workpiece	Ø 88-220
Clamping width S3	131 - 313
Clamping width S4	157-334



clamping unmachined parts round

No
retooling necessary!
Set-up times will be
reduced



clamping unmachined parts quadratic



clamping pre-machined workpieces

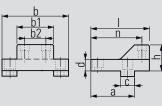
Reduced-width jaws for gripper studs



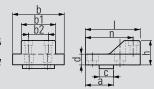
- Material: hardened steel
- Allows unhindered access to the workpiece, even with short tools
- For clamping small to medium-sized workpieces
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side

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 O <= 0.5 (roundness less than or equal to 0.5 mm)

Order no. fixed: 6921834040140



Order no. movable: 6921834040040

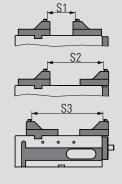


Jaw width		125	
Dimen-	а	76	
sions in mm	b	116	
	b1	64	
	b2	37	
	С	24	
	d	20	
	h	45	
	-1	102	
	n	89	

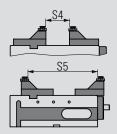
Jaw width		125
Dimen-	а	47
sions in mm	b	96
	b1	64
	b2	37
	С	24
	d	20
	h	45
	I	92
	n	80



Please order gripper studs separately



Clamping range S1	31 - 210
Clamping range S2	123 - 300
Clamping range S3	173 - 350
Clamping range S4	25 - 203
Clamping range S5	165 - 343





clamping unmachined parts round





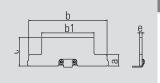
clamping unmachined parts quadratic



clamping pre-machined workpieces

Click parallels (pair)





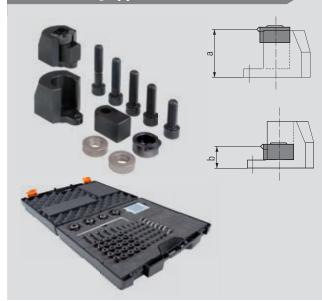
Order no. 6921535035042

Jaw width		125
Abmessungen in mm	а	14
	b	96
	b1	64
	С	35
	е	3

- Parallels with Click system
- For the high side of jaw

- For parallel raising of workpieces
- Hardened, ground and polished parallels

Universal gripper set



Order no. 6921884027031

Jaw width		125
Dimensions in mm	а	40
	b	18

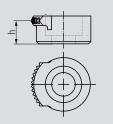
- For clamping complex unmachined parts
- By reworking the individual elements of the universal gripper set, both the gripper height and the support height of the workpiece can be varied

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

Gripper stud





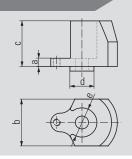
Order no. 6921884026000

Dimensions in mm	h	11

• Gripper stud for universal gripper set

Gripper stud mount





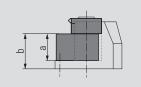
Order no. 6921884027000

Dimensions in mm	а	7
	b	40
	С	39
	d	Ø 20
	е	Ø 25

• Mounting for gripper stud 2306/001

Support





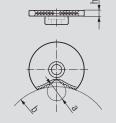
Order no. 6921884028000

Dimensions in mm	а	22
	b	29

• Support for universal gripper set

Prismatic gripper





Order no. 6921884029031

Dimensions in mm	а	Ø 20
	b	Ø 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

Gripper stud, low







Order no. 6921884036100

Dimensions in mm

5

- 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

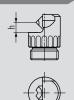
Dimensions in mm

5,4

- 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





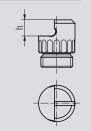
Order no. 6921884036841

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





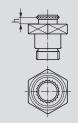
Order no. 6921884037000

Dimensions in mm h 7

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

Gripper stud, round





Order no. 6921884038000

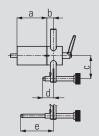
Dimensions in mm h 4

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

ALLMATIC GRIPP – mechanical / version TITAN SC 125 (accessories)

Workpiece stop



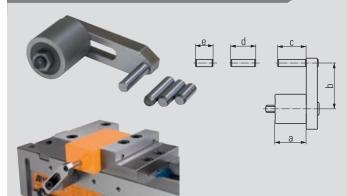


Order no. 6921285650144

Dimensions in mm	а	67
	b	15
	С	33 – 92
	d	12 – 63,5
	е	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: ± 0.01)

Workpiece stop



Order no. 6921685670042

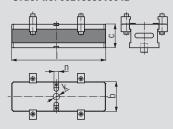
Dimensions in mm	а	34
	b	27 – 59
	С	31
	d	27
	е	19

- 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

Console XL



- Material: GG30
- For raising the TITAN 2 K vice
- Improvement of accessibility with five-sided machining
- Scope of supply: console incl. fixing bolt for positioning the vice, 2 socket screw wrenches, 4 screws



Jaw width		125
Dimensions in mm	b	126
	С	100
	k	Ø 30
	1	400
	n	20

ALLMATIC GRIPP – mechanical / version TITAN SC 125 (accessories)

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

Ausricht- und Fixiersatz



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

Order no. - see table

Order no.
6921285600031
6921285601031
6921285602031
6921285603031
6921285606031
6921285607031