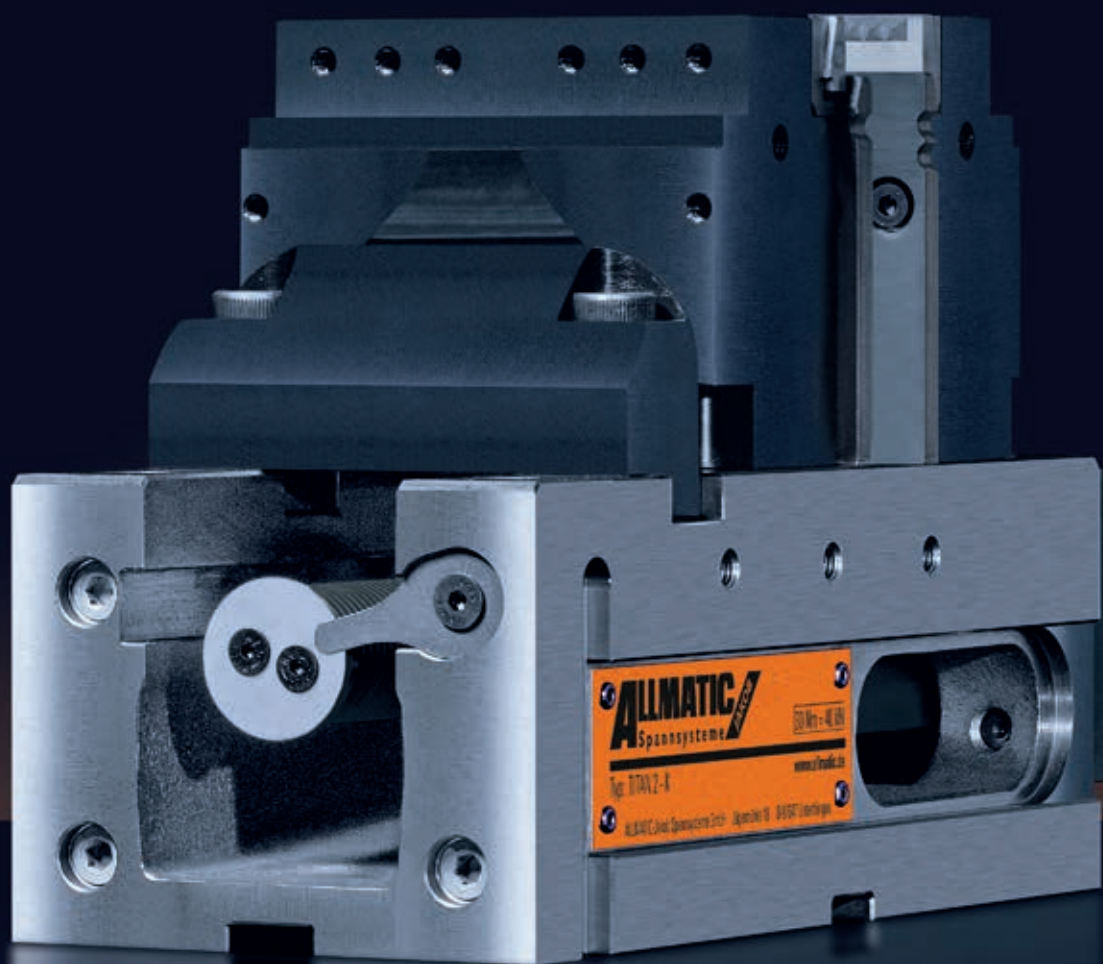


ALLMATIC TITAN 2 – THREE LENGTHS – THE CRUCIAL ADVANTAGE FOR YOUR MACHINING

More universal – more flexible. The ALLMATIC TITAN 2 K/M/L – whether in height or in length, conventional clamping or gripper clamping – it leaves nothing to be desired





ALLMATIC
Spannsysteme
Typ: TITAN 2-K
www.allmatic.de

ALLMATIC GRIPP – MECHANICAL VERSION TITAN 2 K/M/L

Scope of application:

- Can be applied horizontally or vertically – therefore suitable for vertical and horizontal CNC milling machines
- Conventional clamping, gripper clamping or pull-down clamping are all possible
- TITAN 2 K – ideal for use on five-axis 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.

Product features:

- High versatility – the modular clamping system combines practically all the possibilities of our tried-and-tested models
- The TITAN 2 M is ground and polished on all sides
- TITAN 2 K and M can be used vertically
- High-pressure spindle with power intensification. Clamping force does not slacken
- Enlarged clamping span for secure clamping of unmachined parts
- Lost clamping margin 8 mm with pull-down, 3 mm with GRIPPER
- 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. (TITAN2 M & L)


Clamping shoulder for vertical use (TITAN 2 K & M)

M8 thread for workpiece stop

Model K: accurate aligning slot (transverse) and a positioning hole in the bottom surface for optimum alignment on the machine table

Models M & L: 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 125:

TITAN 2 K: 6921738000055

TITAN 2 M: 6921838000755

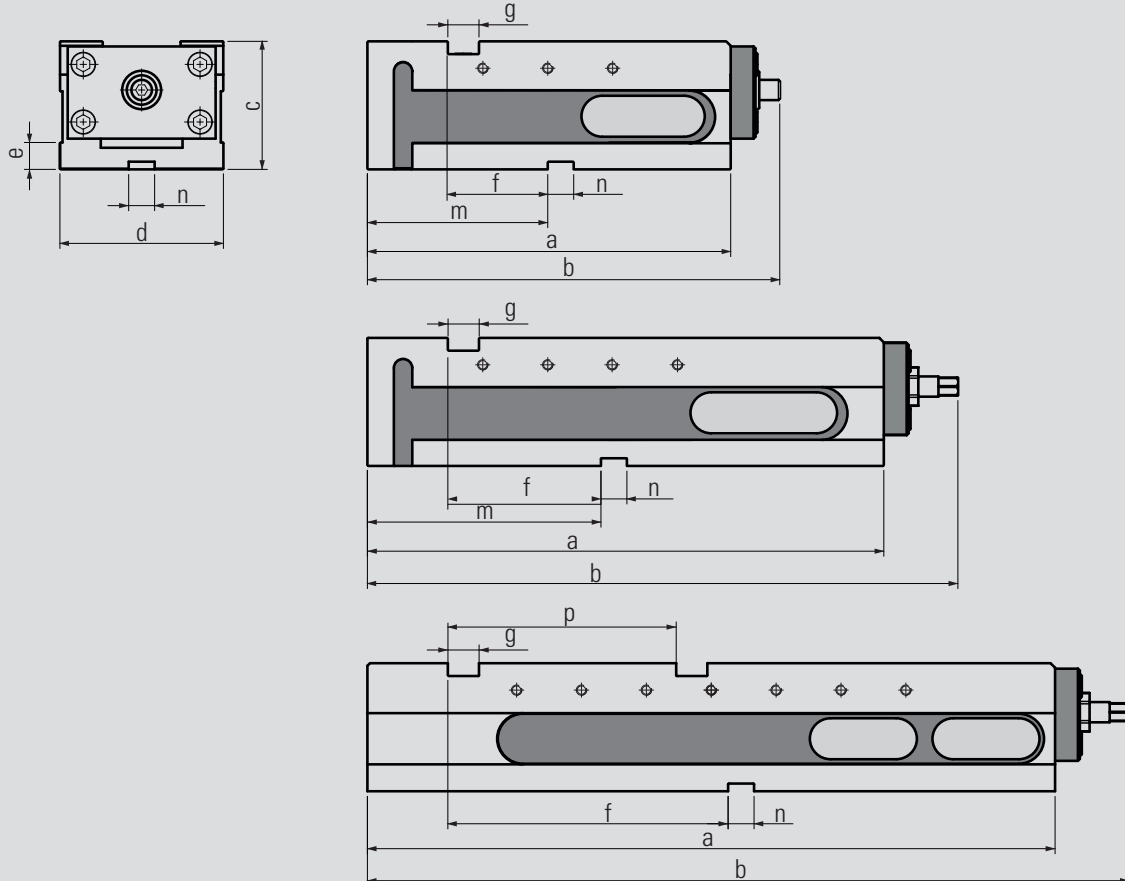
TITAN 2 L: 6921838000055

Scope of supply:

- 1 high-pressure vice without jaws
- 1 set of side clamps
- 3 socket screw wrenches
- Hexagonal insert for torque wrench 3/8"

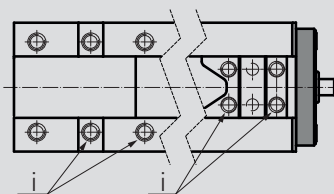
Please order the clamping jaws separately.

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



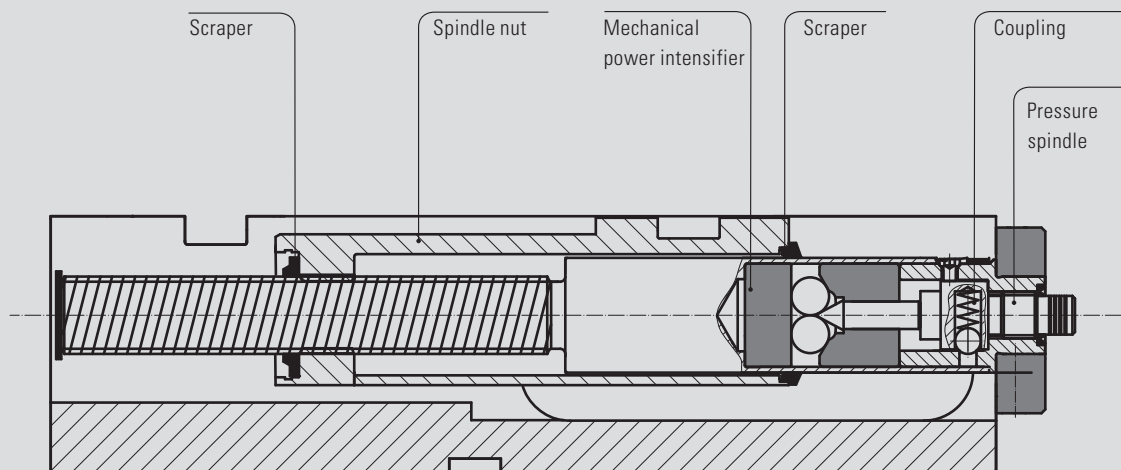
Technical data

TITAN 2	K	M	L	
Jaw width	125			
Dimensions / tolerances in mm	a	280	398	530
	b	318	455	587
	c	100	100	100
	d	126	126	126
	e	21	21	21
	f	77	118	216
	g	24	24	24
	m	139	180	-
	i	M 12	M12	M12
	n	20	20	20
	p	-	-	176



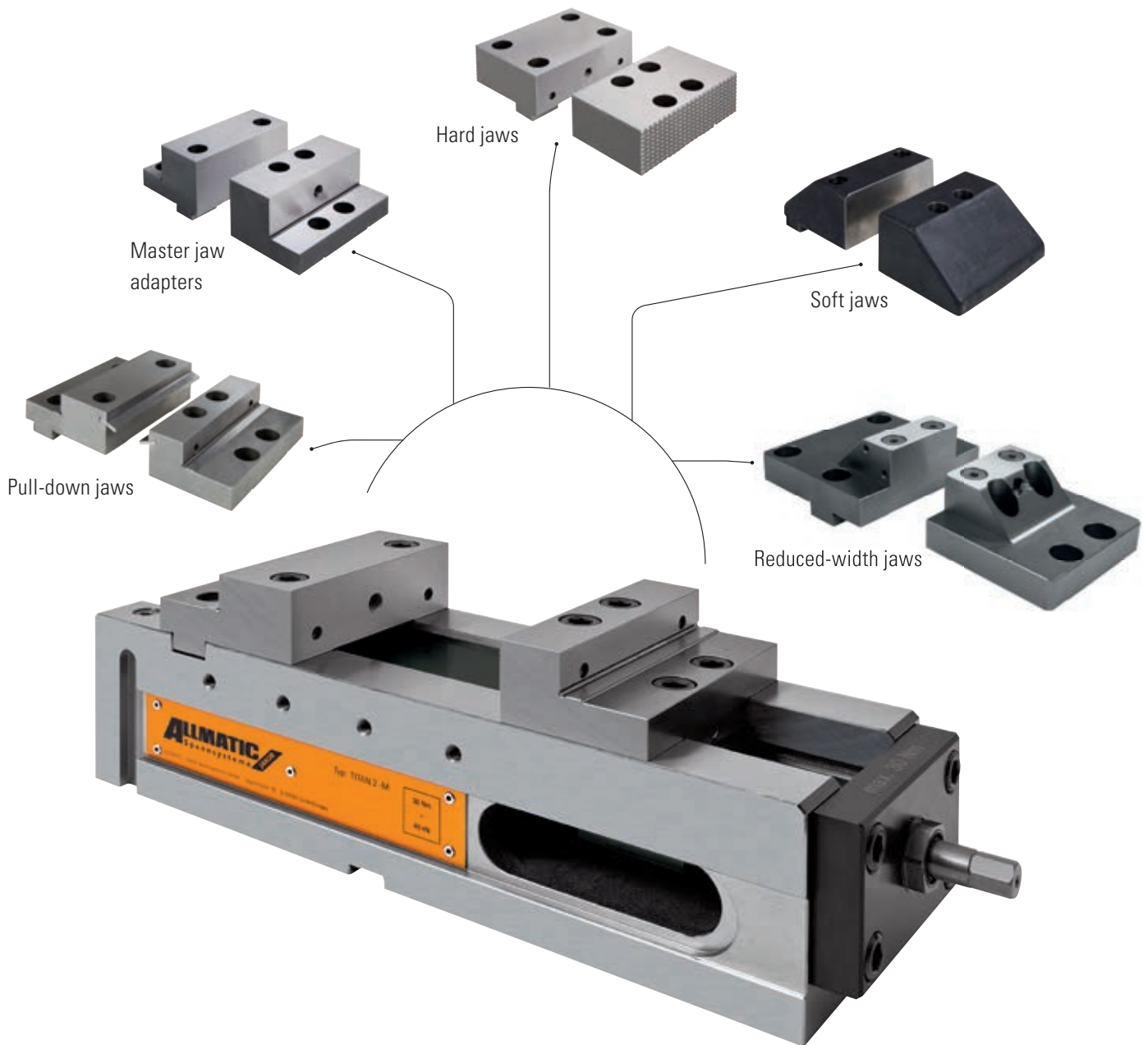
Jaw width	125
Max. torque in Nm	30
Max. clamping force in kN	40
Weight in kg TITAN 2 K	22
Weight in kg TITAN 2 M	30
Weight in kg TITAN 2 L	38

Spindle cross-section



TITAN 2 K/M/L

CONVENTIONAL CLAMPING



For conventional clamping of workpieces

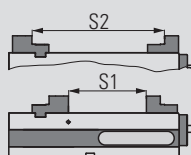
On the following pages you will find a wide range of jaws suitable for clamping pre-machined workpieces.

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

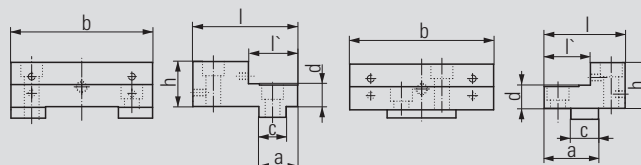
Step jaws



- 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



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



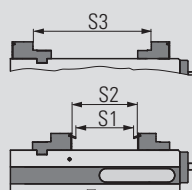
Jaw width		125	Jaw width		125
Dimen- sions in mm	a	34	Dimen- sions in mm	a	47
	b	124,4		b	124,4
	c	24		c	24
	d	20		d	20
	h	39,5		h	39,5
	l	92		l	70
	l'	43		l'	40

	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 64	0 – 182	0 – 314
Clamping width S2	83 – 195	131 – 313	87 – 445

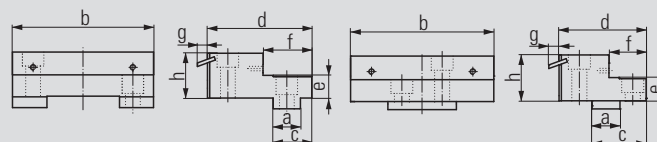
Pull-down jaws



- 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 width		125	Jaw width		125
Dimen- sions in mm	a	24	Dimen- sions in mm	a	24
	b	124,4		b	124,4
	c	34		c	46,5
	d	92		d	75
	e	20		e	20
	f	43		f	32
	g	8,8		g	8,8
	h	39,5		h	39,5

	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 41	0 – 159	0 – 291
Clamping width S2	0 – 58	0 – 176	0 – 308
Clamping width S3	75 – 187	124 – 305	80 – 437

Spring leaves (pair)

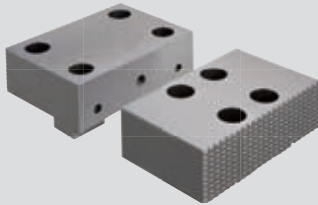


Order no. 6921684103031

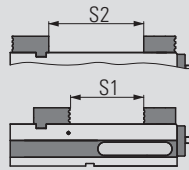
- Hardened spring leaves
- Spring leaves (replacement) for the pull-down jaws
Order no.: 6921684106031 and 6921684102031

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

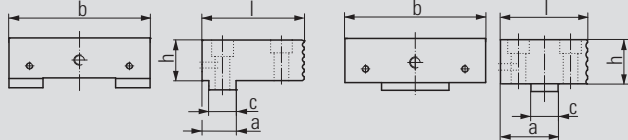
Hard base jaws



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



Order no. fixed: 6921684005731 Order no. movable: 6921684004731



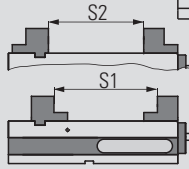
Jaw width		125	Jaw width		125
Dimen- sions in mm	a	30	Dimen- sions in mm	a	50
	b	124.4		b	124.4
	c	24		c	24
	h	39.5		h	39.5
	l	88		l	76

	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 61	0 – 179	0 – 311
Clamping width S2	0 – 113	49 – 231	5 – 363

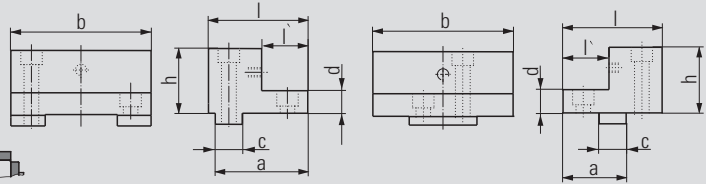
Master jaw adapters



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



Order no. fixed: 6921684012231 Order no. movable: 6921284011231



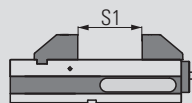
Jaw width		125	Jaw width		125
Dimen- sions in mm	a	77	Dimen- sions in mm	a	52
	b	126		b	126
	c	24		c	24
	d	20		d	20
	h	58		h	58
	l	85		l	80
	l'	32		l'	32

	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	64 – 128	64 – 246	64 – 378
Clamping width S2	0 – 109	45 – 227	0 – 359

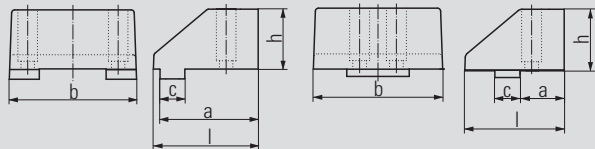
Soft jaws



- Material: GGG40 SG iron
- For self-made special jaws
- Chamfer provides very good accessibility to the workpiece



Order no. fixed: 6921684088031 Order no. movable: 6921484087031

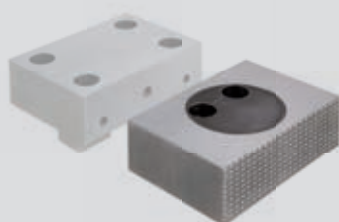


Jaw width		125	Jaw width		125
Dimen- sions in mm	a	95	Dimen- sions in mm	a	42
	b	124		b	124
	c	24		c	24
	h	58		h	58
	l	101.5		l	94.5

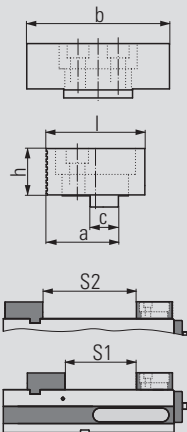
	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 32	0 – 150	0 – 282

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

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	a	62
	b	124,4
	c	24
	h	39,5
	l	84

	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 49	0 – 167	0 – 299
Clamping width S2	0 – 101	37 – 219	0 – 351

Soft jaw

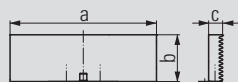


Order no. 6921684023042

Jaw width		125
Dimensions in mm	a	125
	b	39,8
	c	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



Order no. 6921684032040

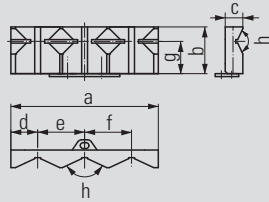
Jaw width		125
Dimensions in mm	a	125,6
	b	40,1
	c	12

- 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

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

Prismatic jaws (pair)

Order no. 6921684024042

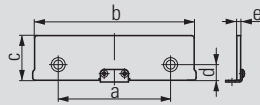


- Material: hardened steel
- Jaws for clamping round parts, vertical dia. 16-74 mm, horizontal dia. 12-40 mm
- Only for use with jaws with Click system

Jaw width		125
Dimensions in mm	a	125,6
	b	39,8
	c	15
	d	22,8
	e	40
	f	40
	g	27,5
	h	130°

Click parallels (pair)

Order no. 6921185035042



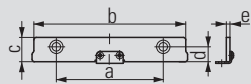
- For parallel raising of workpieces
- Hardened and ground parallels

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

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

Click parallels (pair)

Order no. 6921185020042



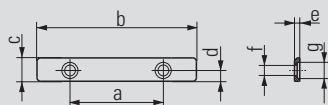
- For parallel raising of workpieces
- Hardened and ground parallels

Jaw width		125
Dimensions in mm	a	88
	b	125
	c -0,01	20
	d	12,25
	e	3

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

Parallels (pair)

Order no. 6921485015031



- 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	a	88
	b	124
	c	15
	d	6
	e	3
	f	∅ 6
	g	∅ 9

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

Smooth jaws (pair)

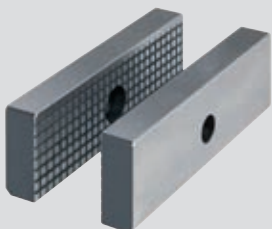


Order no. 6921024022031

Jaw width	125	
Dimensions in mm	a	125
	b	40
	c	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	a	125
	b	40
	c	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)

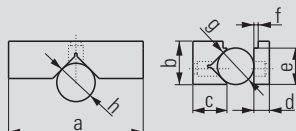
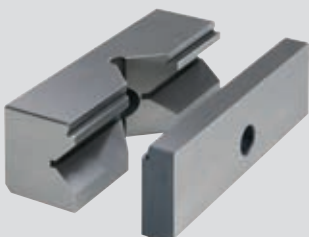


Order no. 6921024023031

Jaw width	125	
Dimensions in mm	a	125
	b	40
	c	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)



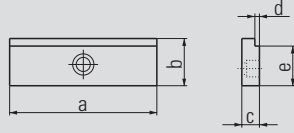
Order no. 6921024024031

Jaw width	125	
Dimensions in mm	a	125
	b	40
	c	35
	d	15
	e	35
	f	3
	g	Ø 12 – 28
	h	Ø 18 – 55

- 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 (conventional clamping accessories)

Step jaws (pair)

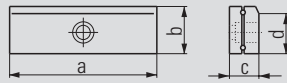


Order no. 6921024025031

Jaw width		125
Dimensions in mm	a	125
	b	40
	c	15
	d	3
	e	35

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

Roller pull-down jaws (pair)

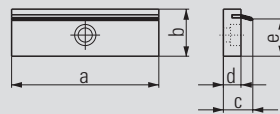


Order no. 6921024005131

Jaw width		125
Dimensions in mm	a	125
	b	40
	c	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	a	125
	b	40
	c	20
	d	12
	e	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



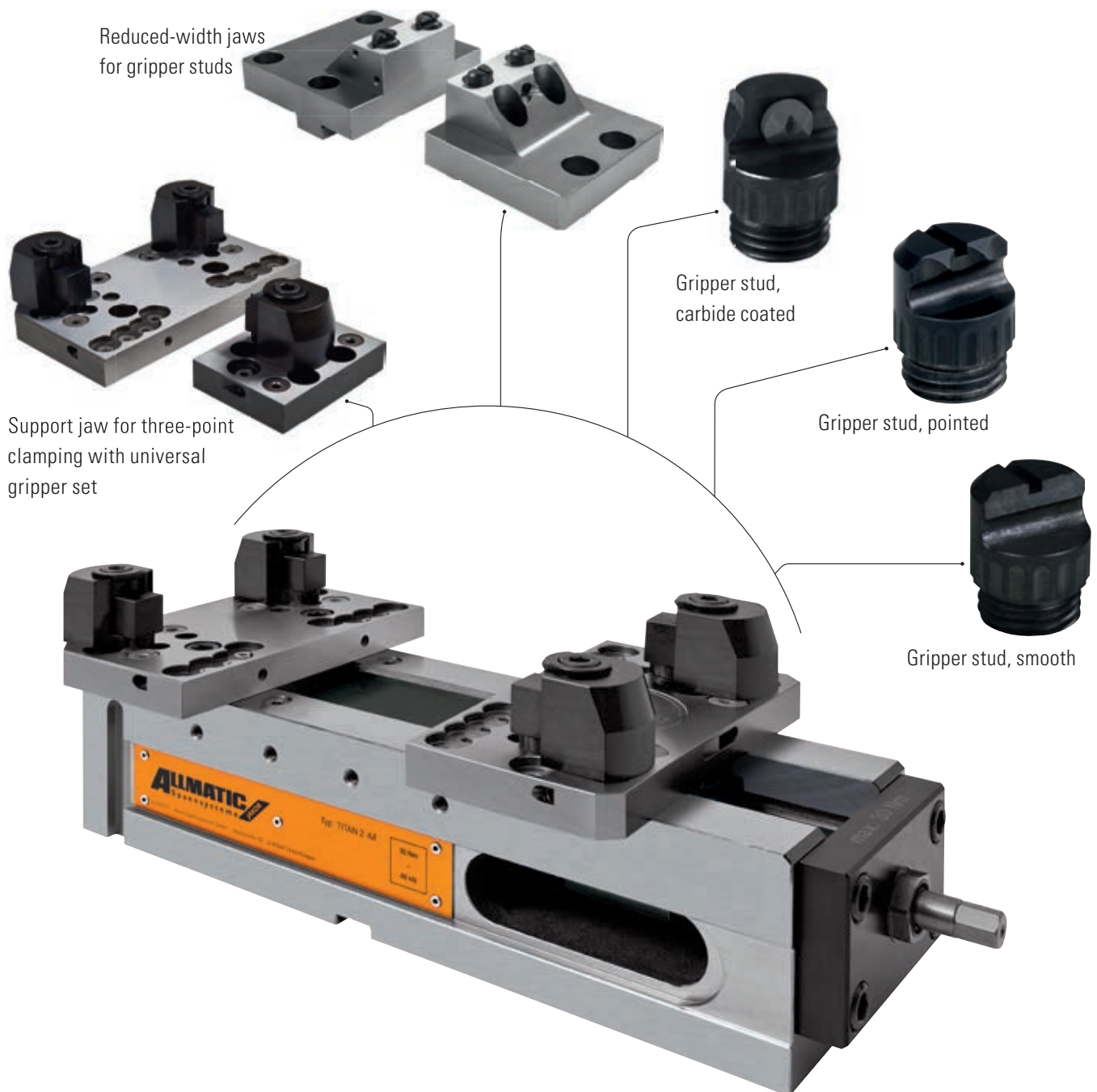
Order no. 6921011023000

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

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

TITAN 2 K/M/L

GRIPP CLAMPING



Reduced-width jaws
for gripper studs

Support jaw for three-point
clamping with universal
gripper set

Gripper stud,
carbide coated

Gripper stud, pointed

Gripper stud, smooth

For clamping complex unmachined parts

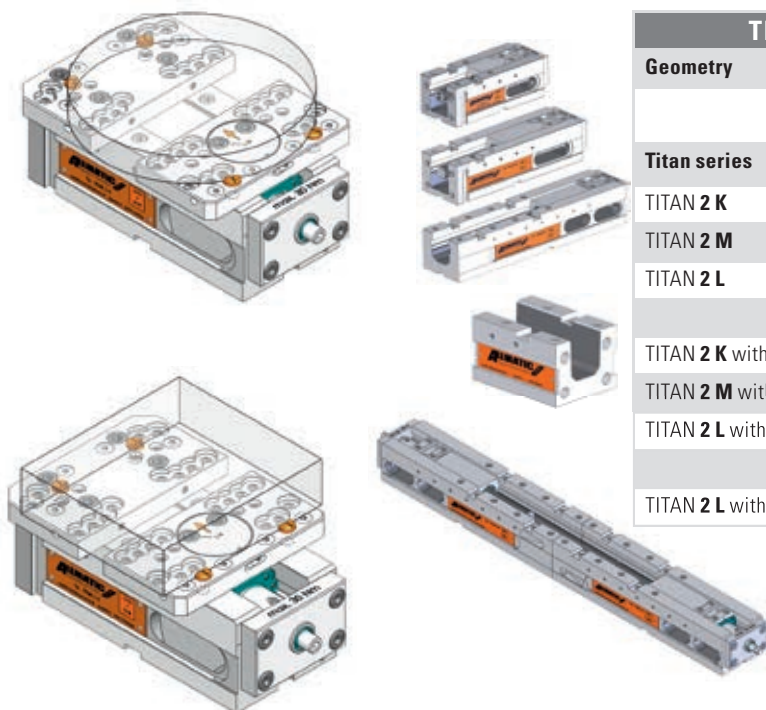
The support jaws enable you to clamp different unmachined parts quickly and securely. You will find jaws for gripper clamping on the following pages.

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

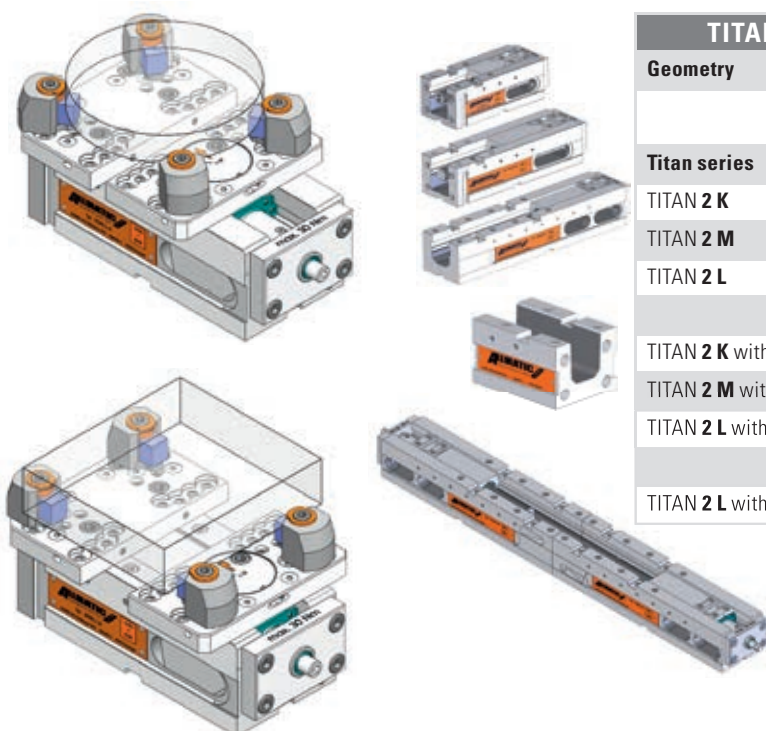
CLAMPING WIDTHS – GRIPP CLAMPING

Support jaws with gripper studs



TITAN 2 – 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 K	29	204	70	dia. 70	dia. 240
TITAN 2 M	29	322	70	dia. 70	dia. 330
TITAN 2 L	29	454	70	dia. 70	dia. 330
TITAN 2 K with extension	-	419	70	-	dia. 330
TITAN 2 M with extension	-	501	70	-	dia. 330
TITAN 2 L with extension	-	633	70	-	dia. 330
TITAN 2 L with 2 nd vice base	-	1039	70	-	-

Support jaws with universal gripper set



TITAN 2 – Support jaw with universal gripper set					
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 K	25	194	88	dia. 70	dia. 230
TITAN 2 M	25	312	88	dia. 70	dia. 330
TITAN 2 L	25	444	88	dia. 70	dia. 330
TITAN 2 K with extension	-	373	88	-	dia. 330
TITAN 2 M with extension	-	491	88	-	dia. 330
TITAN 2 L with extension	-	623	88	-	dia. 330
TITAN 2 L with 2 nd vice base	-	978	88	-	-

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

Support jaws



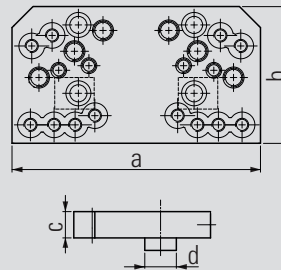
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

Pivot jaw:

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

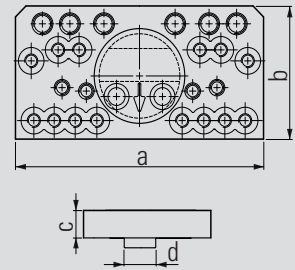
You will find dimensions of the individual gripper items and the gripper studs at www.allmatic.de

Order no. fixed:
6921734005842



Jaw width		125
Dimensions in mm	a	189
	b	104
	c	20
	d	24

Order no. movable, pivoting:
6921734072842



Jaw width		125
Dimensions in mm	a	189
	b	97
	c	20
	d	24



Please order universal gripper set or gripper studs separately

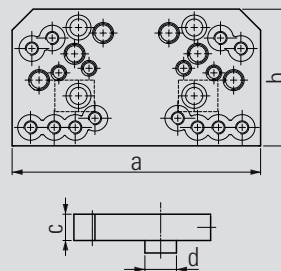
Support jaws



- 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

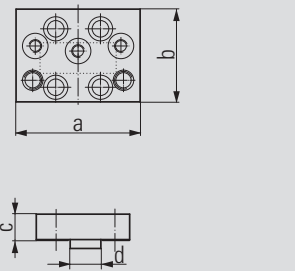
You will find dimensions of the individual gripper items and the gripper studs at www.allmatic.de

Order no. fixed:
6921734005842



Jaw width		125
Dimensions in mm	a	189
	b	104
	c	20
	d	24

Order no. movable, rigid:
6921884004842



Jaw width		125
Dimensions in mm	a	97
	b	73
	c	20
	d	24



Please order universal gripper set or gripper studs separately

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

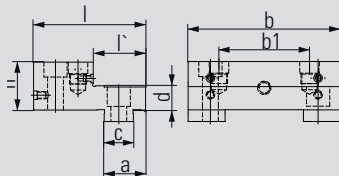
Step jaws for gripper studs



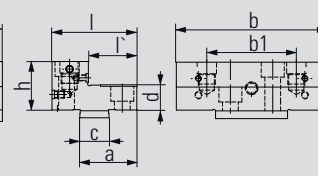
- Material: Hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws (Typ 125 – 200)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side

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

Order no. fixed:
6921884051031



Order no. movable :
6921884050031

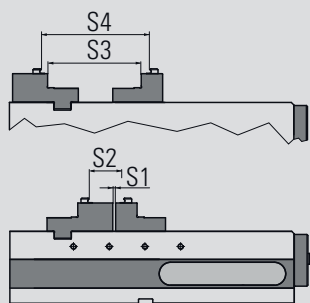


Jaw width	125
Dimensions in mm	
a	34
b	124,4
b1	74
c	24
d	20
h	39,5
l	92
l'	43

Jaw width	125
Dimensions in mm	
a	47
b	124,4
b1	74
c	24
d	20
h	39,5
l	70
l'	40



Please order gripper studs separately



	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	0 – 64	0 – 182	0 – 314
Clamping width S2	49 - 108,5	49 - 226	49 - 358
Clamping width S2 round workpiece	Ø 88-220	Ø 88-220	Ø 88-220
Clamping width S3	83 - 195	131 - 313	87 - 445
Clamping width S3 * with enlargement	174 - 287	228 - 405	360 - 537
Clamping width S4	108,5 - 216	157 - 334	113 - 466
Clamping width S4 * with enlargement	282 - 395	336 - 513	442 - 624

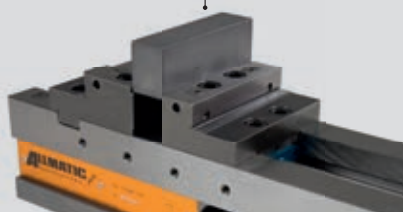
* Clamping width enlargement: 6921685008055



clamping unmachined parts round



clamping unmachined parts quadratic



clamping pre-machined workpieces

No retooling necessary!
Set-up times will be reduced

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

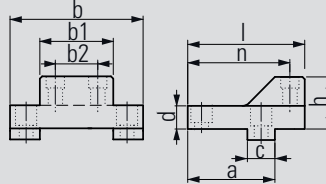
Reduced-width jaws for gripper studs



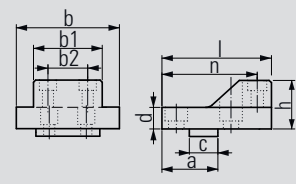
- Material: hardened steel
- Allows unhindered access to the workpiece, even with short tools
- For clamping small to medium-sized workpieces
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side

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

Order no. fixed:
6921834040140



Order no. movable:
6921834040040



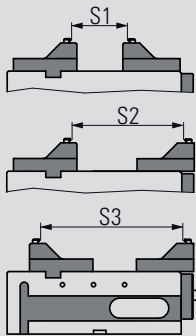
Jaw width	125	
Dimensions in mm	a	76
	b	116
	b1	64
	b2	37
	c	24
	d	20
	h	45
	l	102
n	89	

Jaw width	125	
Dimensions in mm	a	47
	b	96
	b1	64
	b2	37
	c	24
	d	20
	h	45
	l	92
n	80	

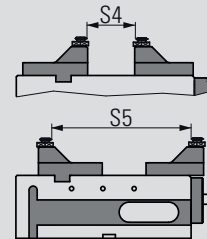


Please order gripper studs separately

* Clamping width enlargement:
6921685008055



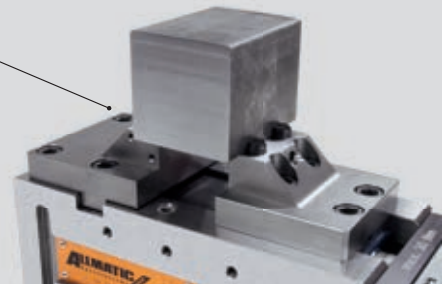
	TITAN 2 K	TITAN 2 M	TITAN 2 L
Clamping width S1	23 - 92	31 - 210	23 - 342
S1 with enlargement*	158 - 271	212 - 389	344 - 521
Clamping width S2	91 - 182	123 - 300	91 - 432
Clamping width S3	167 - 232	173 - 350	167 - 482
S3 with enlargement*	298 - 411	352 - 529	484 - 661
Clamping width S4	15 - 85	25 - 203	15 - 335
Clamping width S5	159 - 225	165 - 343	159 - 475



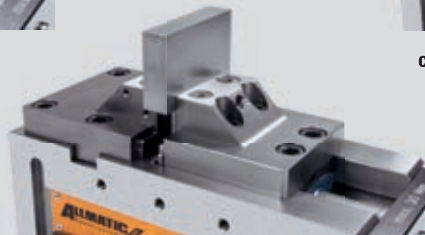
No retooling necessary!
For optimal accessibility also with short tools!



clamping unmachined parts round



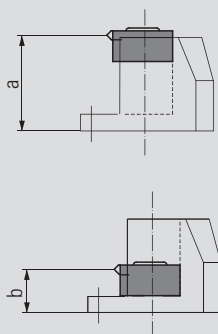
clamping unmachined parts quadric



clamping pre-machined workpieces

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

Universal gripper set



Order no. 6921884027031

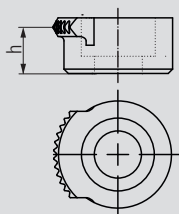
Jaw width		125
Dimensions in mm	a	40
	b	18

- 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

Gripper stud

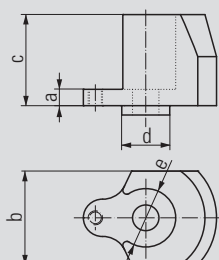


Order no. 6921884026000

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

Gripper stud mount

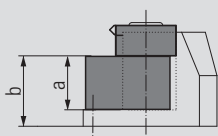
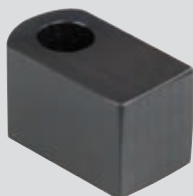


Order no. 6921884027000

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

- Mounting for gripper stud 6921884026000

Support



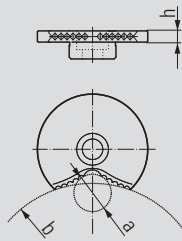
Order no. 6921884028000

Dimensions in mm	a	22
	b	29

- Support for universal gripper set

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

Prismatic gripper

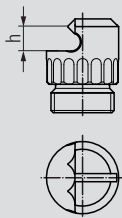


Order no. 6921884029031

Dimensions in mm	a	dia. 20
	b	dia. 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

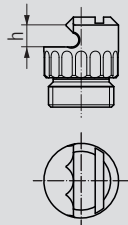


Order no. 6921884036000

Dimensions in mm	h	5.5
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- For clamping unmachined parts
- Least possible lost clamping margin
- Clamping height: adjustable from 4.5 to 6.0 mm

Gripper stud, low

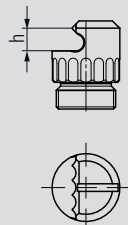


Order no. 6921884036100

Dimensions in mm	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

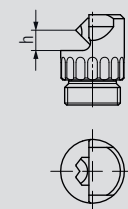


Order no. 6921884036500

Dimensions in mm	h	5.4
------------------	---	-----

- 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

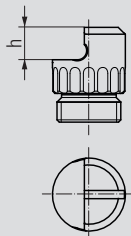
Gripper stud, carbide coated



Order no. 6921884036841

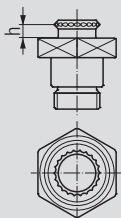
Dimensions in mm	h	5.1
------------------	---	-----

- 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

ALLMATIC GRIPP – mechanical / version TITAN 2 (GRIPP clamping accessories)**Clamping insert, smooth****Order no. 6921884037000**

Dimensions in mm	h	7
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- With carbide coating for clamping pre-machined or hardened workpieces

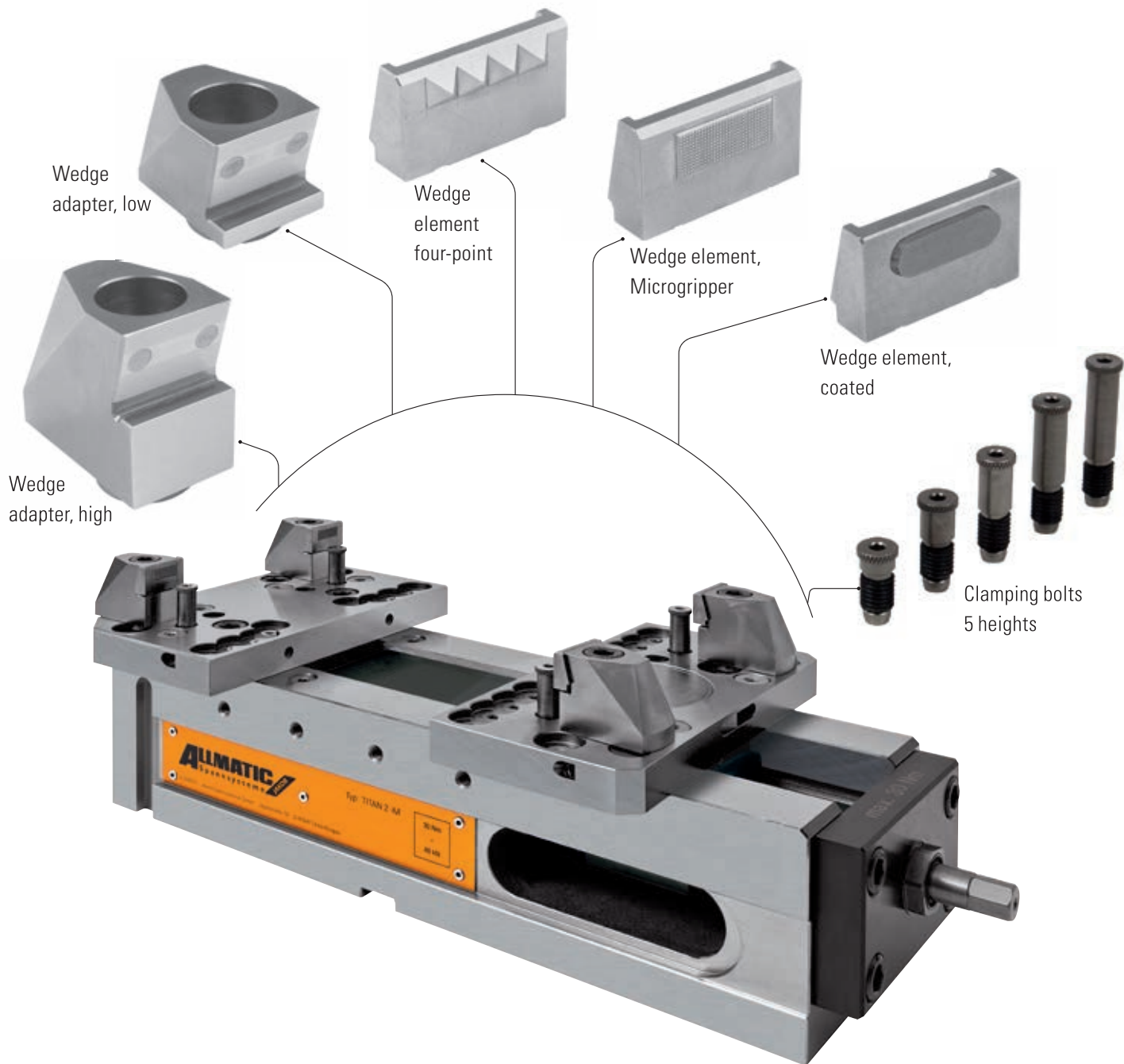
Gripper stud, round**Order no. 6921884038000**

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 K/M/L

PULL-DOWN CLAMPING



Accuracy through pull-down

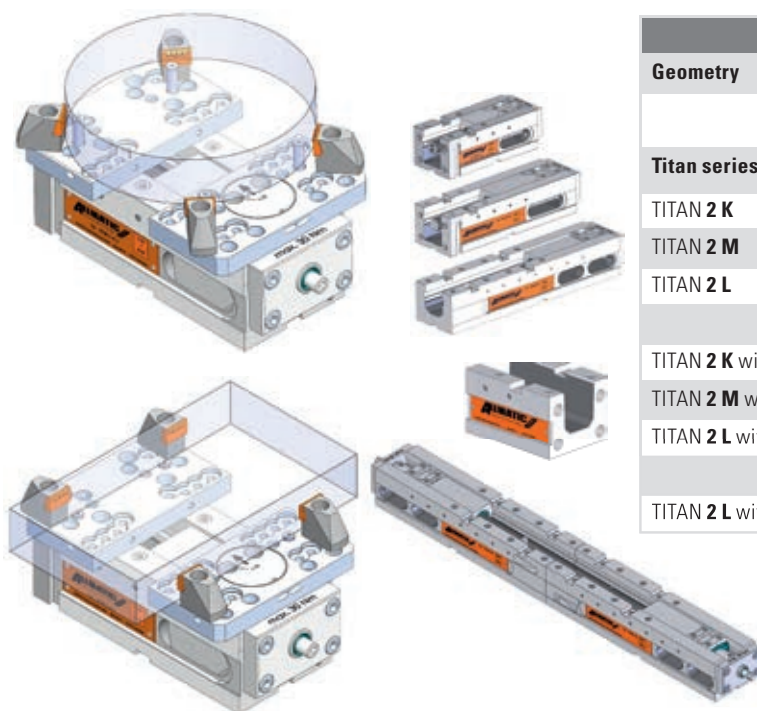
The support jaws and the pull-down system ensure accurate, versatile and secure clamping of the unmachined parts. The workpiece is positioned on ground clamping bolts which make the connection to the guideway. In this way, the parallelism of the guideway or of the machine table is transferred to the 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

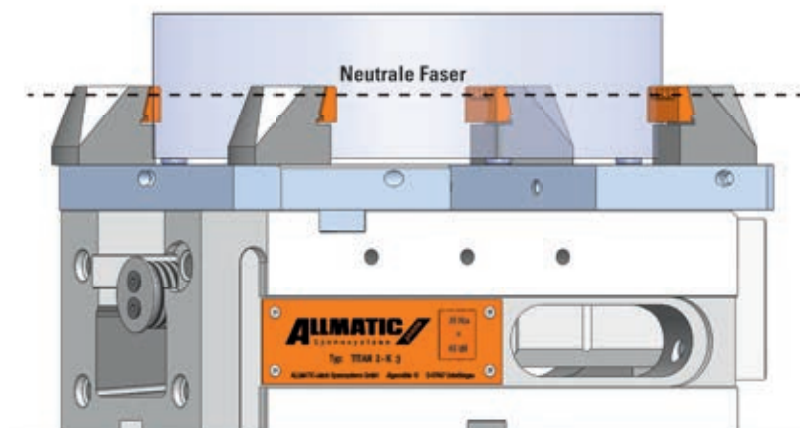
CLAMPING WIDTHS – PULL-DOWN CLAMPING

Support jaws with pull-down



TITAN 2 - Support jaws with pull-down					
Geometry	Square workpiece		Round workpiece		
	Clamping range (in mm)		Clamping range (in mm)	Clamping range (in mm)	
Titan series	min.	max.	min.	min.	max.
TITAN 2 K	19	188	96	Ø 65	Ø 226
TITAN 2 M	19	306	96	Ø 65	Ø 330
TITAN 2 L	19	438	96	Ø 65	Ø 330
TITAN 2 K with extension	-	367	96	-	Ø 330
TITAN 2 M with extension	-	485	96	-	Ø 330
TITAN 2 L with extension	-	617	96	-	Ø 330
TITAN 2 L with 2nd vice base	-	972	96	-	-

Clamping in the neutral filament



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

Support jaws



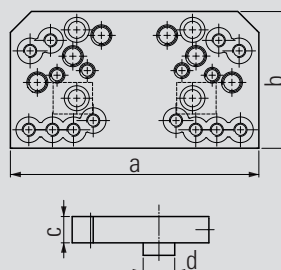
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs with thread (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

Pivot jaw:

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

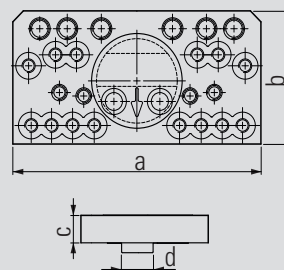
You will find dimensions of the individual gripper items and the gripper studs at www.allmatic.de

Order no. fixed:
6921734005842



Jaw width	125	
Dimensions in mm	a	189
	b	104
	c	20
	d	24

Order no. movable, pivoting:
6921734072842

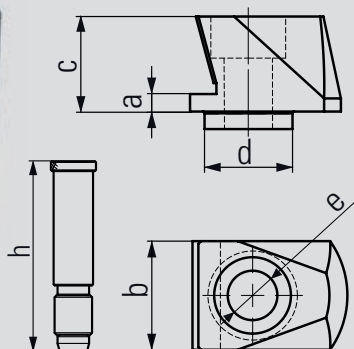


Jaw width	125	
Dimensions in mm	a	189
	b	97
	c	20
	d	24



Please order universal gripper set, pull-down studs, or gripper studs separately

Pull-down set case, low



Order no. 6921734027031

Jaw width	125	
Dimensions in mm	a	4
	b	24
	c	21.7
	d	dia. 20
	e	dia. 11
	h	23 / 34

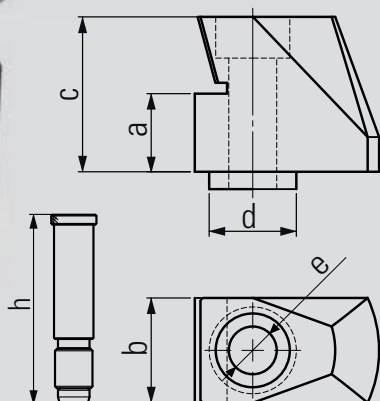
- Pull-down elements suitable for clamping and pulling down clamping surfaces that are unmachined or pre-machined onto the guideway or onto the supplied clamping bolts
- In this way, workpieces can be clamped almost exactly parallel to the guideway for machining
- The direct contact to the clamping bolts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

Pull-down set consisting of:

- 1 x foamed case
- 4 x wedge adapter, low
- 4 x bolts, M10 x 30 mm
- 4 x wedge element, 4 point
- 4 x wedge element Microgripper
- 4 x clamping bolts 23 mm
- 4 x clamping bolts 34 mm

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

Pull-down set case, high



Order no. 6921734027131

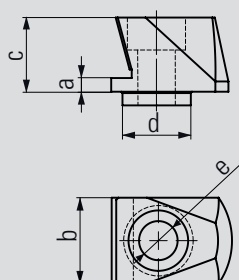
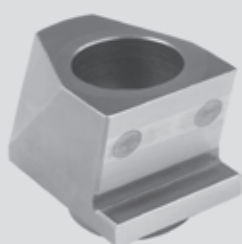
Jaw width		125
Dimensions in mm	a	18
	b	24
	c	35.7
	d	dia. 20
	e	dia. 11
	h	34 / 48

- 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 48 mm
- 4 x clamping bolts 34 mm

Wedge adapter, low

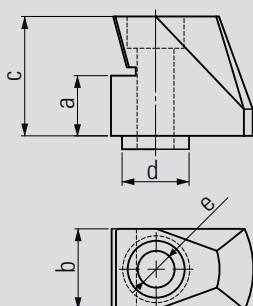
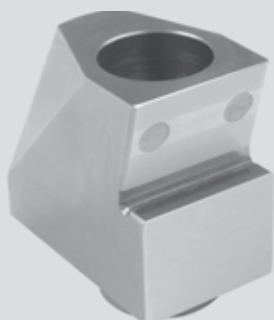


Order no. 6921834027041

Dimensions in mm	a	4
	b	24
	c	21.7
	d	dia. 20
	e	dia. 11

- Wedge adapter, low, for use on support jaws. For mounting the four-point, Microgripper, round and coated wedge elements supplied **without** M10 x 30 mm fastening bolt (see next page)

Wedge adapter, high



Order no. 6921834027141

Dimensions in mm	a	18
	b	24
	c	35.7
	d	dia. 20
	e	dia. 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)

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

Fastening bolt, low



Order no. 8006101030050

- For fastening the wedge adapter, low, on the support jaws
- M 10 X 30 mm

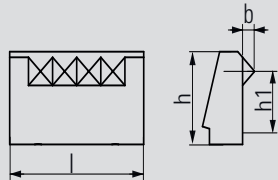
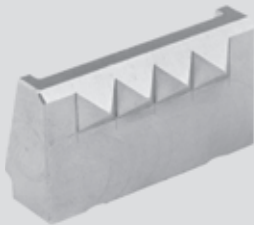
Fastening bolt, high



Order no. 8006101045050

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

Wedge element, four-point

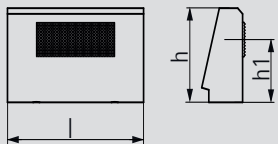
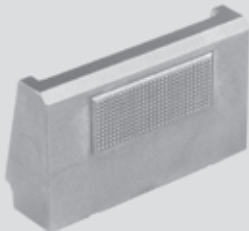


Order no. 6921834025040

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

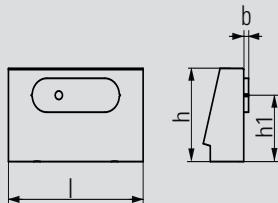


Order no. 6921834025140

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

Wedge element, coated

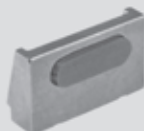


Order no. 6921834025240

Dimensions in mm		
b	1	
h	16.5	
h1	11.75	
l	27.8	

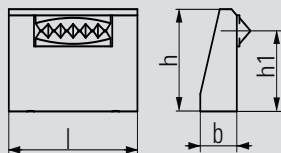
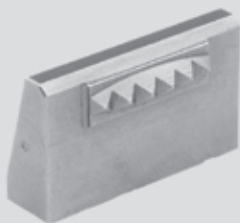
- Wedge elements for pre-machined, surface conditions and materials
- Quick to exchange
- Minimum clamping depth 8 mm
- Please order the pads separately (see below)

Blister-pads, diamond-coated



Order no. 6921834028141

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

ALLMATIC GRIPP – mechanical /version TITAN 2 (pull-down clamping accessories)**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**6921735048040**

h | 48

6921735043040

h | 43

6921735034040

h | 34

6921735029040

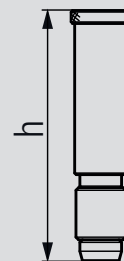
h | 29

6921735023040

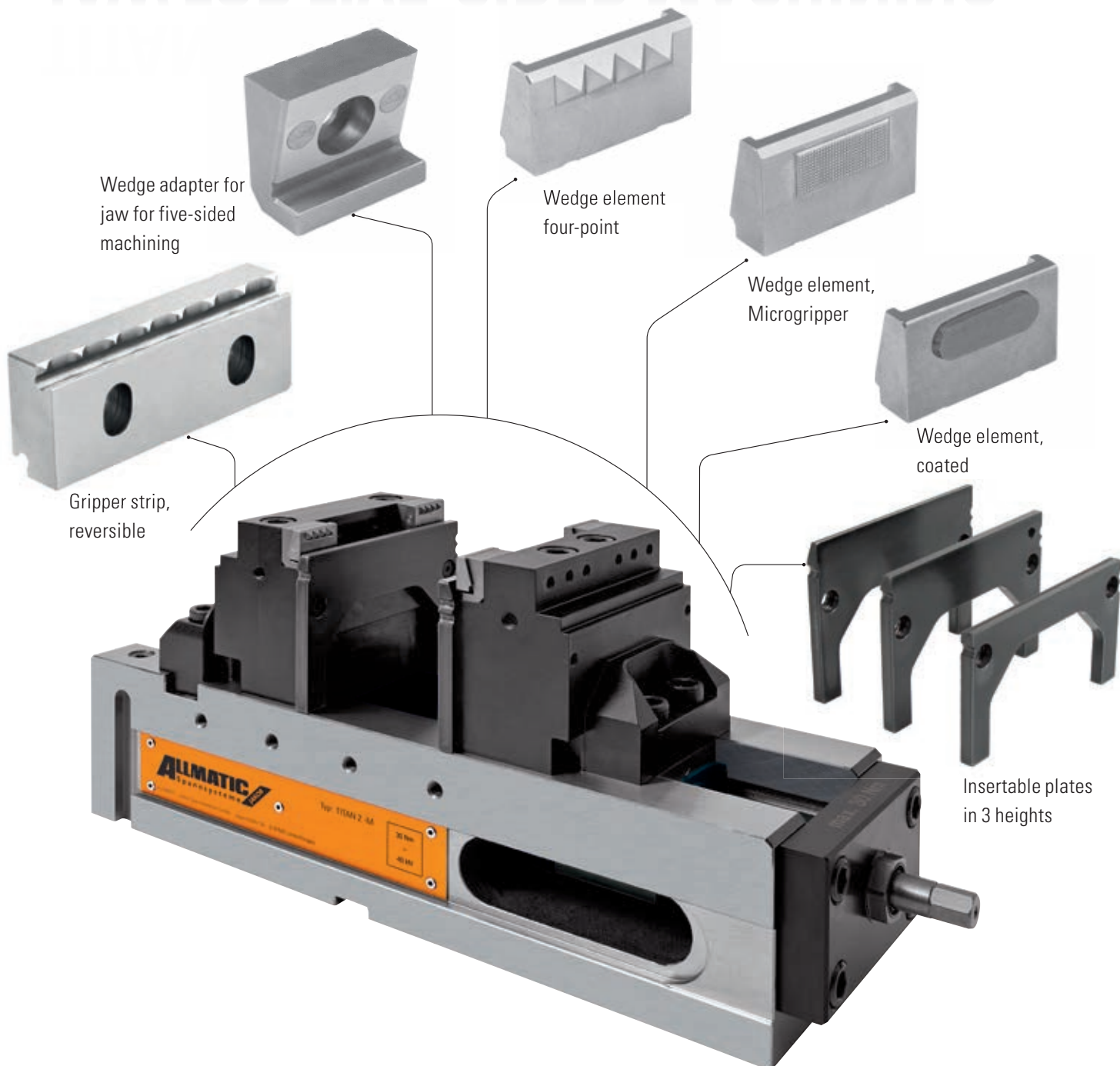
h | 23

See table for order no.

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



TITAN 2 K/M/L JAW FOR FIVE-SIDED MACHINING



Five-sided machining plus pull-down

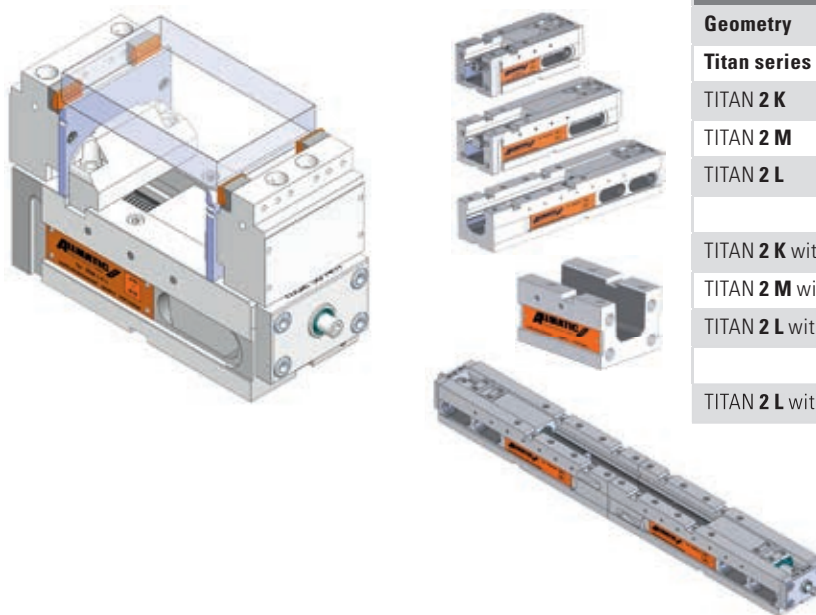
The five-sided machining jaw with pull-down can clamp workpieces up to a height of 90 mm onto the guideway of the TITAN 2. The insertable plates are pressed onto the guideway using the pull-down effect, thus establishing an accurate parallel workpiece position. This largely avoids any vibration of the workpiece during machining. Accessibility with short tools is a particular advantage of the five-sided machining jaw. You will find jaws for five-sided machining on the following pages.

Clamping for five-sided machining:

- Five-sided machining jaws are used to mount the wedge adapters and the insertable plates
- Wedge adapters can be bolted in various positions on the grid plate
- The various wedge elements can be quickly changed on the wedge adapters
- Suitable for five-sided machining with short tools
- Accuracy through pull-down
- Stability through form-locking
- Clamping in the neutral filament can be optimised using the three support heights of the insertable plates

CLAMPING WIDTHS – JAW FOR FIVE-SIDED MACHINING

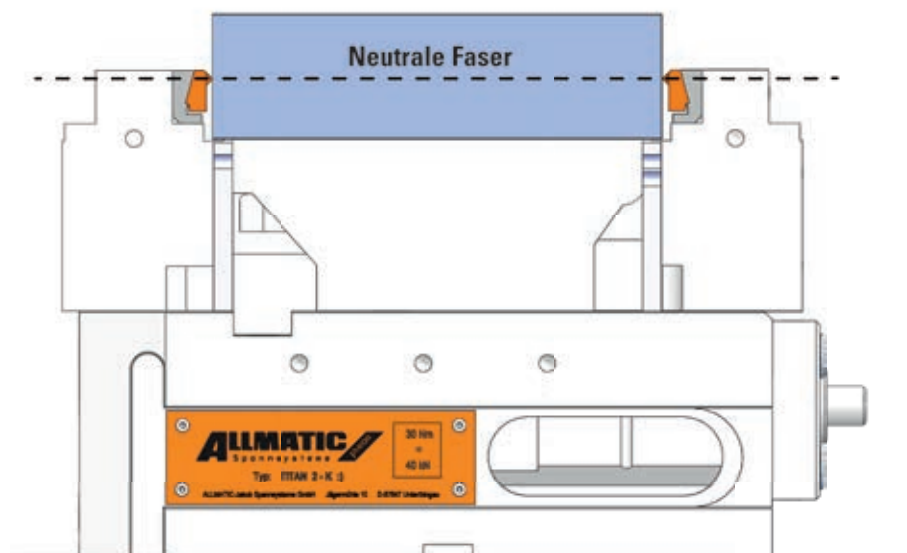
90-mm jaw for five-sided machining with pull-down



TITAN 2 – Jaw for five-sided machining with pull-down

Titan series	Square workpiece	
	min. [mm]	max. [mm]
TITAN 2 K	16	181
TITAN 2 M	16	299
TITAN 2 L	16	431
TITAN 2 K with extension	-	360
TITAN 2 M with extension	-	478
TITAN 2 L with extension	-	610
TITAN 2 L with 2 nd vice base	-	970

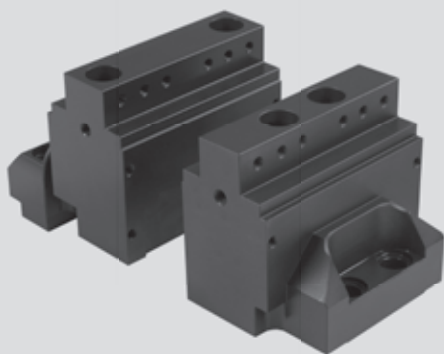
Clamping in the neutral filament



ALLMATIC GRIPP – mechanical / version TITAN 2 (five-sided machining jaws)

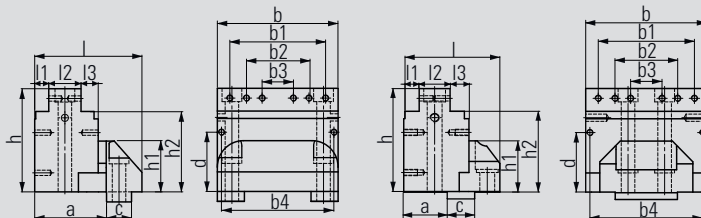
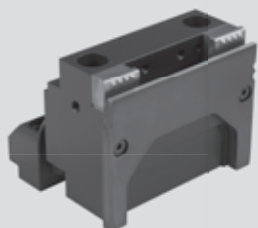
Jaws for five-sided machining

Order no. fixed: 6921734047031 Order no. movable: 6921734048031



- Material: plasma-nitrided steel
- Particularly suitable for five-side machining
- Better accessibility for tools
- Ground clamping surfaces
- Additional thread for parallels
- Accuracy through pull-down
- Stability through form-locking

Please order
wedge elements
and insertable
plates separately



Jaw width		125
Dimensions in mm	a	69
	b	116
	b1	90
	b2	60
	b3	30
	b4	108
	c	24
	d	56
	h	97.5
	h1	48
	h2	76
	l	103
	l1	13.5
l2	31	
l3	16.5	

Jaw width		125
Dimensions in mm	a	38
	b	116
	b1	92
	b2	60
	b3	30
	b4	108
	c	24
	d	56
	h	97.5
	h1	48
	h2	76
	l	84
	l1	13.5
l2	27	
l3	16.5	

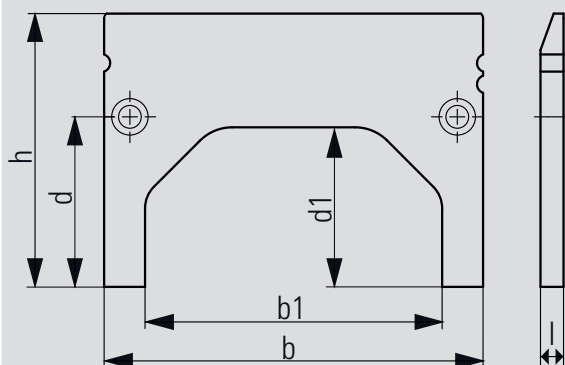
Case set for five-sided machining jaw

Order no. 6921734027531



Jaw width 125	Insertable plate	Wedge adapter	
Dimensions in mm	b	125	24.15
	b1	98	-
	d	56	-
	d1	53	-
	h	90	21.45
	l	7.6	11.8

- Pull-down elements suitable for clamping and pulling unmachined clamping surfaces down onto the guideway or onto the 90-mm support plates supplied
- In this way workpieces can be clamped almost exactly parallel to the guideway for machining
- The direct contact to the support plates largely avoids vibrations in the workpiece

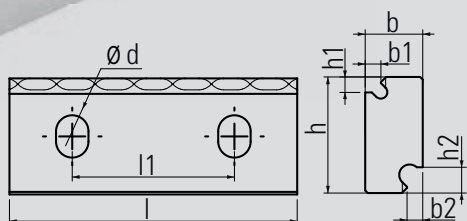


Pull-down set consisting of:

- 1 x foamed case
- 4 x wedge adapters
- 4 x wedge element, four-point
- 4 x wedge element, Microgripper
- 2 x insertable plates (H=90 mm)
- 20 x cheese-head screws M 6 x 8

ALLMATIC GRIPP – mechanical / version TITAN 2 (five-sided machining jaws)

Gripper strip, reversible

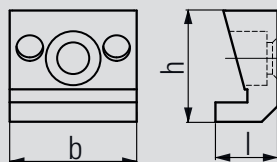
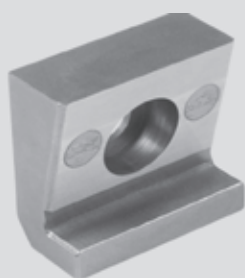


Order no. 6921734036031

Dimensions in mm	b	11
	b1	3
	b2	3
	d	6.2
	h	22.5
	h1	3
	h2	5
	l	55
	l1	311

- Gripper strip can be reversed for mounting on the five-sided machining jaw (4 of them are required)
- For clamping unmachined parts close to the edge, 3 or 5 mm
- Incl. 2 bolts M 6 x 16 each

Wedge adapter for jaw for five-sided machining

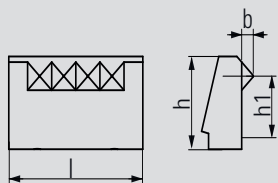
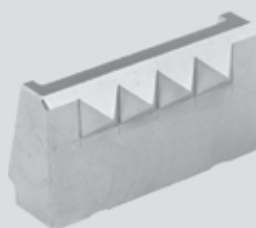


Order no. 6921834027540

Dimensions in mm	b	24.15
	h	21.45
	l	11.8

- Wedge adapter for use five-sided machining jaws. For mounting the 4-point, Microgripper, round and coated wedge elements
- Supplied **without** M6 x 8 mm fastening bolt (see next page)

Wedge element, four-point

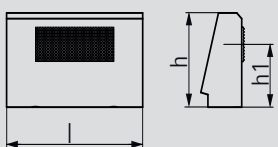
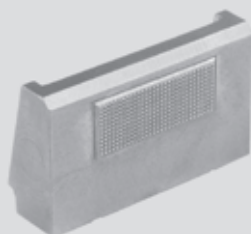


Order no. 6921834025040

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



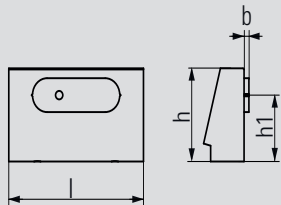
Order no. 6921834025140

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 (five-sided machining jaws)

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)

Pads, diamond-coated, in blister pack



Order no. 6921834028141

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

Insertable plates

6921735655041

h 90

6921735655141

h 85

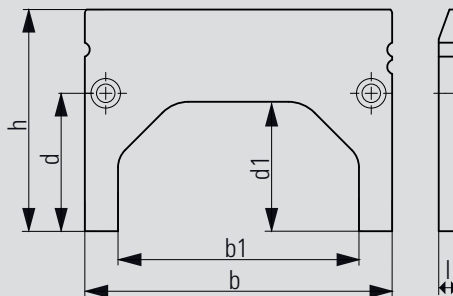
6921735655241

h 70



See table for order nos.

Insertable plate height		90	85	70
Dimensions in mm	b	125		
	b1	98		
	d	56		
	d1	53		
	l	7.6		



- Three support heights
- For levelling the workpiece on the five-sided machining jaws
- Material: hardened steel
- Ground to high accuracy
- Supplied **without** M6 x 8 mm fastening bolt (see next page)

Fastening bolt for five-sided machining

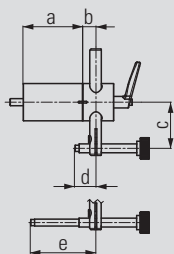


Order no. 8006300068800

- For fastening the wedge adapters on the five-sided machining jaws
- For fastening the insertable plates on the five-sided machining jaws
- M 6 x 8 mm

ALLMATIC GRIPP – mechanical / version TITAN 2 (accessories)

Workpiece stop

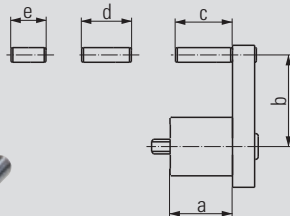
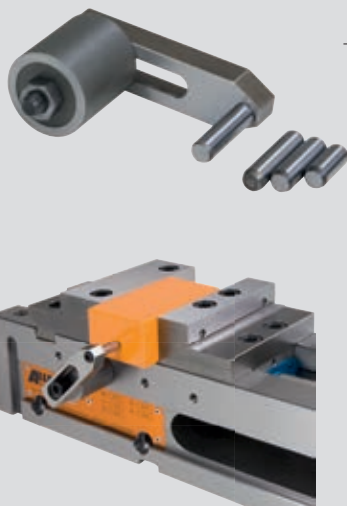


Order no. 6921285650144

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: ± 0.01)

Workpiece stop

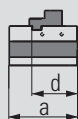


Order no. 6921685670042

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

Clamping width enlargement



Order no. 6921685008055

Jaw width	125	
Dimensions in mm	a	176
	d	117

- For increasing the clamping width of the TITAN 2 K & M (optional L)
- 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

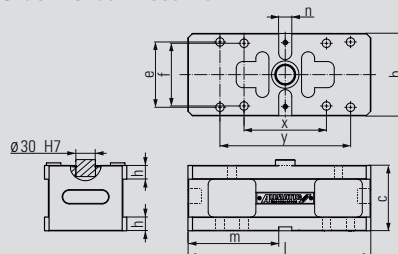
ALLMATIC GRIPP – mechanical / version TITAN 2 (accessories)

Console TITAN 2 K



- 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

Order no. 6921735011042



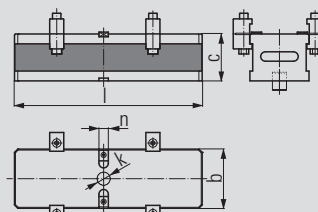
Jaw width	125	
Dimensions in mm	b	126
	c	100
	e	100
	f	96
	h	21
	l	280
	m	139
	n	20 H7
	x	126,2
	y	200

Console TITAN 2 M



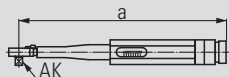
- For TITAN 2 M
- Material: GG30
- For raising the vice
- Improvement of accessibility with five-sided machining
- Optional preparation for zero-point clamping system
- Scope of supply: console incl. fixing bolt for positioning the vice, 4 pairs of Duo side clamps, 2 socket screw wrenches

Order no. 6921885010042



Jaw width	125	
Dimensions in mm	b	126
	c	100
	k	dia. 30
	l	400
	n	20

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

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