



QUALITY CREATES TRUST

CUSTOMER SERVICE – OUR SPECIALISTS AT YOUR DISPOSAL



Mr Guggenmoos, Sales



Mr Orban, Production Control



Ms Guggenmoos, In-house Sales

Telephone enquiries +49(0)8377 929-0

Ordering by fax +49(0)8377 929-380

Ordering by e-mail order@allmatic.de

Our repair service +49(0)8377 929-358

For information about delivery times, prices or technical questions, you can contact us Monday to Thursday 8 am – 5 pm and Friday 8 am – 3.30 pm.

Our Repairs Department is available daily from 8 am to 3.30 pm.

Delivery

We deliver standard products to your premises anywhere in Germany free of charge.

Minimum order value

Our minimum order value is €20.

Allmatic online: www.allmatic.de

On our website, you will find the latest special offers, new products, reduced sale items and service drawings for spare parts ordering.

Complaints

If an incorrect order is placed, we charge a 5% processing fee or a minimum of €25. Items must be returned within three months. Custom-made products cannot be returned or exchanged.

Further information

We also offer 3D data, brochures and operator instructions, which you can download at **www.allmatic.de**.

THE ALLMATIC PICTOGRAPHS AND THEIR MEANING

THE ALLMATIC PICTOGRAPHS



Threaded spindle Spindle without power intensification

Purely mechanical power intensifier



Mechanical power intensification



Gripper spindle Spindle with mechanical power intensification for clamping and machining unmachined workpieces



Hydraulic power intensification Single-acting cylinder



Fully enclosed spindle Scraper provides protection against dirt – enhanced functional reliability, optimal chip protection and minimal cleaning. Nitrated spindle!



Spindle chamber cover Sheet metal cover for dirt protection



Power preset Spindle power can be preset in increments



Horizontal installation Suitable for vertical machining centres



Vertical installation Suitable for horizontal machining centres



Lateral installation Lateral surfaces additionally ground and polished



Click system Quick-change system for false jaws and parallels



Pull-down system

The pull-down guaranteed, that the parallelism of the guideway is transferred to the workpiece

You will encounter various pictographs on our product information pages. They are explained on this fold-out flap, which you should keep open for ready reference when you look through your ALLMATIC catalogue!















About us

Company management	2
Our philosophy	4
Process optimisation	8

ALLMATIC basic – mechanical

Product information, technical data, accessories	10
ALLMATIC HD – mechanical	
Product information, technical data, accessories	20

Product information, technical data, accessories

ALLMATIC NC series – mechanical

LC version Product information, technical data, accessories	28
TC version Product information, technical data, accessories	44
NC 70 version Product information, technical data, accessories	62
DUO 90 version Product information, technical data, accessories	66

ALLMATIC GRIPP series – mechanical

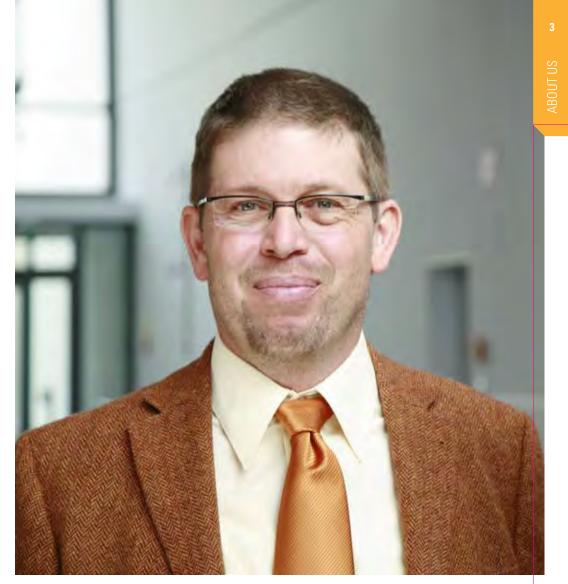
T-REX version Product information, technical data, accessories	72
TITAN SC 125 version Product information, technical data, accessories	90
TITAN 2 version Product information, technical data, accessories	112
DUO Plus 125 version Product information, technical data, accessories	144
CENTRO GRIPP version Product information, technical data, accessories	160

ALLMATIC tombstones

3 x 120° Single Monobloc Product information, technical data	182
4 x 90° Single Monobloc Product information, technical data	184
4 x 90° DUO 90 Monobloc Product information, technical data	186
3 x 120° DUO Plus 125 Monobloc Product information, technical data	188
4 x 90° DUO Plus 125 Monobloc Product information, technical data	190
Back-to-back set-up Product information, technical data	192
Customised solutions Application examples	194
Automatable workholding	
LCH version Product information, technical data, accessories	196
basic – HYDRAULIC Product information, technical data, accessories	214

Zero-point clamping systems – important information 222 Standard terms and conditions 223

"ALLMATIC – DELIVERING QUALITY, PRECISION AND FLEXIBILITY SINCE 1973."



Company director: Bernhard Rösch

We are specialists.

At ALLMATIC, we specialise in workholding systems and offer intelligent, innovative solutions. We develop precision clamping and holding systems that meet the highest quality standards for sophisticated machining in milling and machining centres. We are the market leader for high-pressure vices.

We pursue perfection.

The core features of our brand are innovative strength and a passion for precision. The motivation to achieve top quality and reliability comes from the yardstick of perfection we set ourselves and from our enthusiasm for new technologies.

Reliable products, expert advice, first-class service and the candid and lasting relationships with our customers, business partners and staff are what characterise ALLMATIC.

We motivate.

Our enthusiasm for the service capability of our products, our depth of specialist knowledge, our personal customer service and active contribution to the solutions of the future – these are your guarantees of a long and successful partnership.

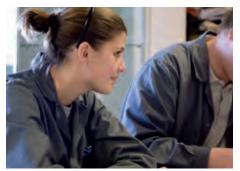
"EXPERIENCE, KNOW-HOW AND TECHNICAL EXPERTISE – TO THE BENEFIT OF OUR CUSTOMERS."













Our philosophy:

Our many years of experience have produced a wealth of technical expertise that we are pleased to devote to the service of our customers. It is our objective to contribute to our customers' productivity and competitiveness through the products we supply. We are dedicated to working for our customers' success via our advice, support and innovation. The key feature of our products is their high quality, which we achieve by always setting the bar high. Perfection, passion and enthusiasm provide the motivating force for us and our team. Fairness towards our workforce is as important to us as excellent relations with our suppliers and customers, achieved through being a reliable and trustworthy partner.

"WE MANUFACTURE TO OUR CUSTOMERS' SPECIFICATIONS."



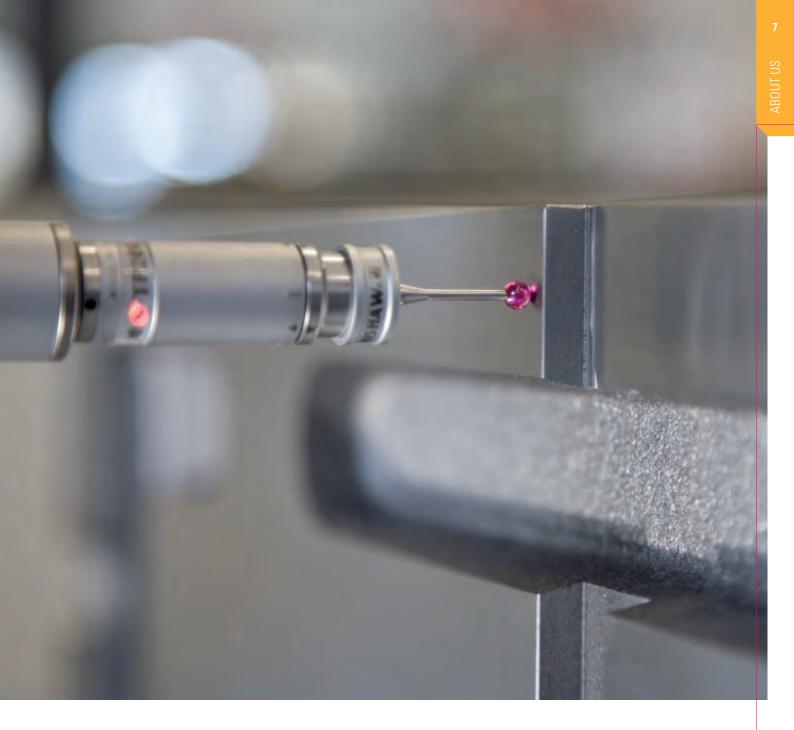


Product range.

Our product range extends from simple high-pressure vices for conventional milling machines through to complex (multiple) workholding solutions for flexible manufacturing centres. These solutions offer an optimal priceperformance ratio because they are mainly made from mass-produced standard components. Of course, we also manufacture to customers' individual specifications. It is important to remember that the interfaces with the machine tool and workpiece are so flexible that they are easily adaptable to specific customer requirements.

Quality.

A major advantage of our products is the purely mechanical power intensifier. Its design features and special lifetime lubrication mean that it is virtually wearfree and extremely reliable in operation. In addition, our vices feature a fully enclosed spindle, which ensures optimal chip protection and minimises cleaning, thus further enhancing their functional reliability.



Fully enclosed spindle









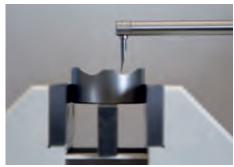
1. After hardening, pre-machined blanks are placed on the magnets for profile grinding and polishing.







4. Finished profile



5. Checking the process

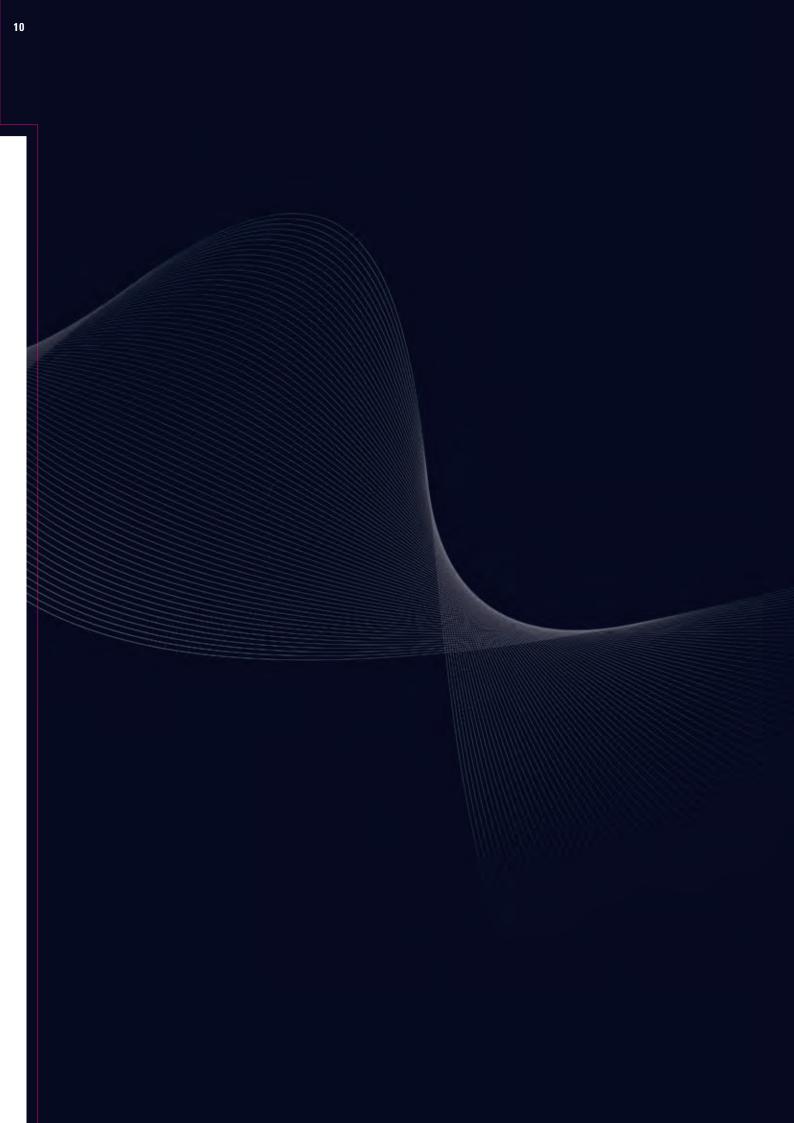
3. Fully automatic process for profile grinding and polishing



6. Finished part with test certificate

Process optimisation

Finish-machining a power transmission housing: the priority in the manufacture of this housing is the durable high quality of the surface finish. Allmatic ensures that this is achieved by means of high process reliability. The profile is produced via profile grinding wheels, and the contour is checked with a profile measuring device. This is the only way to maintain the clamping forces within a specified tolerance range. All the production processes undergo continuous optimisation with regard to costs and quality. "PROCESS OPTIMISATION: FINISH-MACHINING A POWER TRANSMISSION HOUSING."



ALLMATIC basic – SIMPLE AND RELIABLE!

This motto fits the ALLMATIC basic to perfection. Because our "small" model offers big advantages.



ALLMATIC basic – **MECHANICAL**

Scope of application:

- Conventional and CNC-controlled milling machines for efficient, precision machining
- Horizontal installation great variability and flexibility

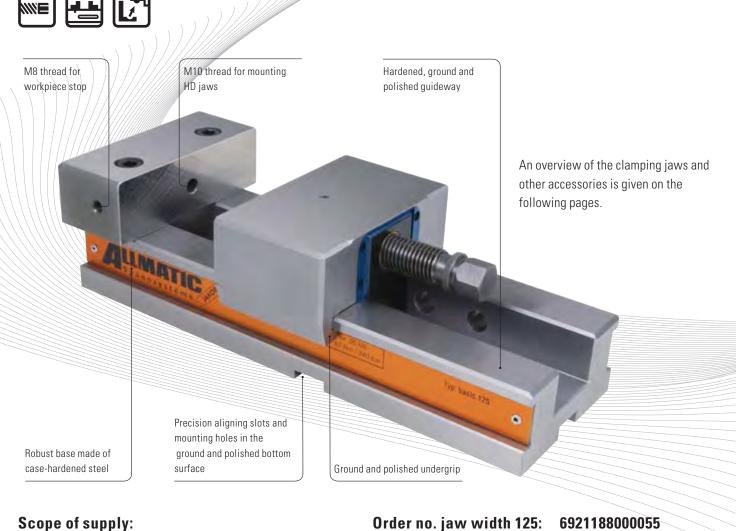
Product features:

- Excellent ease of operation guarantees optimal handling for every application
- · Fast adjustment for clamping range presetting
- Operation with the ring wrench supplied

- · Reproducible clamping forces are achieved using a torque wrench
- Integrated scrapers ensure functional reliability and minimise cleaning
- Fixing on the machine table by means of mounting holes in the vice base. Additional holes can be made in the soft middle section of the vice base
- Optional centre jaw allows two or more workpieces to be clamped

160:

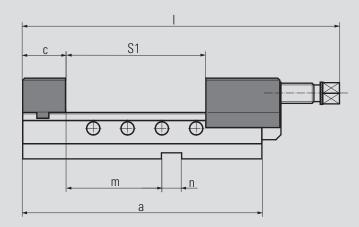
6921208000055

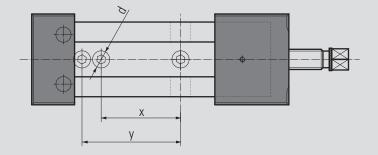


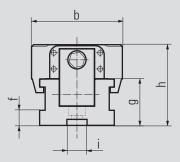
Scope of supply:

- 1 basic vice with clamping jaws
- 1 pair of Click parallels
- 1 socket screw wrench
- 1 ring wrench
- M12 fastening bolts

12



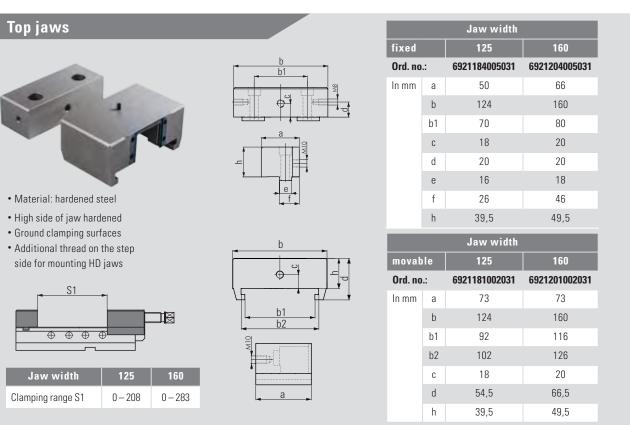




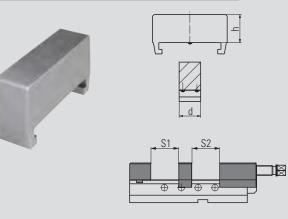
Technical data

	125	160
а	310	405
b	124	160
С	50	66
d	13	13
f	15	15
g	48	56
h	87.5	105.5
i	20	20
l max	426	483
m	120	128
n	20	20
Х	100	100
у	125	125
	b c d f g h h i i l max m n x	a 310 b 124 c 50 d 13 f 15 g 48 h 87.5 i 20 l max 426 m 120 n 20 x 100

Jaw width	125	160
Clamping range S1 in mm	0-208	0-283
Torque in Nm	85	120
Max. clamping force in kN	35	50
Weight in kg	16	26



Intermediate jaw



Order no. jaw width 125: 6921185024040 160:

6921205024040

Jaw width		125	160
Dimensions in mm	h	39.5	49.5
	d	33	41
Clamping range S1		0-87	0-121
Clamping range S2		0-87	0-121
Materials benefationed at a	-1		

Material: hardened steel

• For clamping more than one part

• Installation between fixed and movable jaws of the vice

• Mount for Click system on both sides of the jaw

Order no. jaw width 125: 6921684023042

Jaw width		125
Dimensions in mm	а	125
	b	39.8
	С	22

• Material: case-hardened steel 21MnCr5G, mat. no.: 1.2162

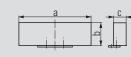
• Jaws can be case-hardened

- · For production of special jaws by the customer
- Only for use with jaws with Click system

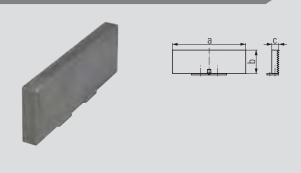
14

Soft jaw





Jaw with cross grooving



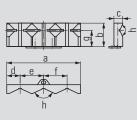
Order no. jaw width 125: 6921684032040

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
- Visual impressions on workpiece
- Only suitable for soft materials
- Only for use with jaws with Click system

Prismatic jaws (pair)





Order no. jaw width 125: 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

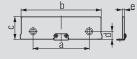
• Jaws for clamping round parts,

vertical dia. 16 – 74 mm, horizontal dia. 12 – 40 mm

• Only for use with jaws with Click system

Click parallels (pair)





Order no. jaw width 125: 6921185035042 160: 6921205044042

Jaw width		125	160
Dimensions in mm	а	88	88
	b	125	160
	c -0.01	35	44
	d	12.25	12.25
	е	3	3

• For parallel raising of workpieces

- Hardened, ground and polished parallels
- Parallels with Click system

Click parallels (pair)



Order no. jaw width 1 1		85020042 05025042	
Jaw width		125	160
Dimensions in mm	а	88	88
	b	125	160
	c -0.01	20	25

d

е

12.25

3

12.25

3

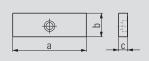
• For parallel raising of workpieces

• Hardened, ground and polished parallels

• Parallels with Click system

Smooth jaws (pair)





Order no. jaw width 125: 6921024022031 160: 6921034022031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

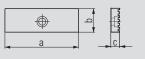
Material: hardened steel

• For parts with delicate clamping surfaces

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

Serrated jaws (pair)





Order no. jaw width 125: 6921021005031 160: 6921031005031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

Material: hardened steel

• Standard jaws with serration

• To increase the specific contact pressure per unit area

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

Soft basic jaws (pair)





Order no. jaw width 125: 6921024023031 160: 6921034023031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	25	30

• Material: 21MnCr5G, mat. no.: 1.2162

• Jaws can be case-hardened

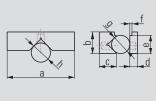
• For production of special jaws by the customer

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

16

Lrior	natio	1011/0	COT
		jaws	SEL
]	





Order no. jaw width	125:	6921024024031
	160:	6921034024031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	35	45
	d	15	20
	е	35	45
	f	3	3
	g	Ø 12 – 28	Ø 15-40
	h	Ø 18 – 55	Ø 22 – 65

• Material: hardened steel

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

Step jaws (pair)

а

Jaw width

Order no. jaw width 125: 6921024025031 160: 6921034025031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20
	d	3	3
	е	35	45

Material: hardened steel

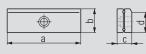
• For horizontal clamping of flat workpieces

• Please order fastening bolts separately

(order no. 6921011023000)

Roller pull-down jaws (pair)





Order no. jaw width 125: 6921024005131 160: 6921034005131

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	26	35.5
	d	35	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)



	•	۹ م	
-	а	·	d
		-	C 🚽

Order no. jaw width		2102400104 2103400104	
low width		125	1

	Jaw width		125	160
	Dimensions in mm	а	125	160
		b	40	50
		С	20	23
		d	12	15
		е	33	43

- Material: hardened steel
- For parts with rough clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are interchangeable, see order no. 6921024002131 and 6921034002131 (see below)
- Please order fastening bolts separately (order no. 6921011023000)

Spring leaves (pair)



Order no. jaw width 125: 6921024002131 160: 6921034002131

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

Jaw fixing bolt



Order no. 6921011023000

- Bolt with shoulder –
- M10 x 23
 - Suitable for all HD jaws, type 125 to 160

Workpiece stop



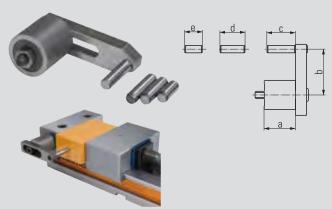


Order no. 6921285650144

Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12-63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: ± 0.01)

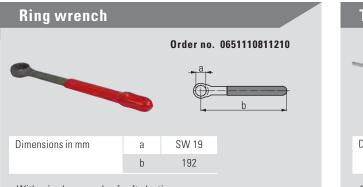
Workpiece stop



Order no. 6921685670042

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

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset



T-wrench Order no. 0651112010536

• With grip sleeve made of soft plastic

Side clamps (pair)



Order no. 6921025000031

- For securing the vice
- on the machine table
- Supplied as a set of 2

Suitable for the Series 125 mm up to 200 mm

Aligning and fixing set



- For securing through the base
- For aligning (positioning) and securing the basic vices on the machine table
- Size according to T-slot in the machine table

T-slot	Order no.
12	6921185620031
14	6921185621031
16	6921185622031
18	6921185623031

Order no. – see table

Aligning and fixing set



Order no. – see table

T-slot	Order no.
12	6921185600031
14	6921185601031
16	6921185602031
18	6921185603031

- For securing with side clamps
- For aligning (positioning) and securing the basic vices on the machine table
- Size according to T-slot in the machine table

ALLMATIC HD – EXTREMELY ROBUST AND RELIABLE

For more than 40 years now, ALLMATIC HD has been a watchword for reliability. Its sturdy design effectively makes it a lifetime investment.



ALLMATIC HD – MECHANICAL

Scope of application:

- Suitable for heavy machining work, single pieces and small batches
- Designed particularly for use on conventional milling machines

Product features:

Robust base made of GGG 60

- Clamping force preselection, 2 to 4 increments, allows accurate repetition (type 100 – 2 increments; types 125, 160 – 4 increments)
- Our tried and tested HD vice enables problem-free working with high clamping force and long-term reliability

Clamping force

presetting

Hardened, ground and polished guideway

Precise aligning slots (longitudinal/transverse) in the bottom surface for optimal alignment on the machine table

LIMATIC

Fixing bolt for presetting the clamping range

Order no. jaw width 100: 6921011000055 125: 6921021000055 160: 6921031000055

Scope of supply:

M8 thread for

workpiece stop

- 1 high-pressure vice
- 4 side clamps
- 1 pair of serrated clamping jaws (1501) 1 hand crank

<u>with swivel base</u>: order no. jaw width 100: 6921011000455 125: 6921021000455

Scope of supply:

• 1 high-pressure vice

• 1 swivel base

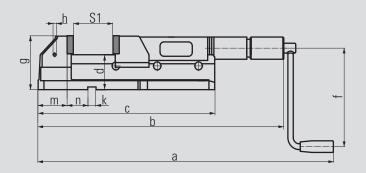
- 1 pair of serrated clamping jaws
- 1 hand crank

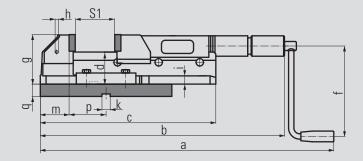


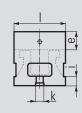
An overview of the clamping jaws and

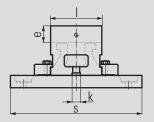
other accessories is given on the

following pages.







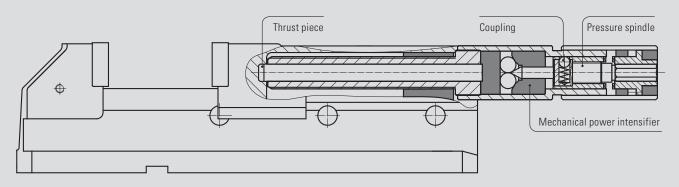


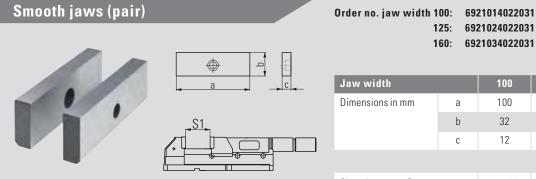
Technical data

Jaw width		100	125	160
Dimensions /	a min.	520	612	717
tolerances in mm	a max.	682	814	1019
	b min.	419	507	613
	b max.	581	709	915
	С	362	427	582
	d	53.5	78	85
	е	32	40	50
	f	147	178	178
	g	87	120	137
	h	M8	M8	M8
	i	15	21	21
	k	20	20	20
	I	100	125	160
	m	52	70	88
	n	47	50	100
	р	73	75	-
	q	26	30	-
	S	Ø 260	Ø 320	-

Jaw width	100	125	160
Clamping range S1 in mm	0 - 82	0-102	0 - 152
Clamping range S2 in mm (can be changed by means of fixing bolt)	78 – 162	98 - 202	147 — 302
Clamping force increments	2	4	4
Max. clamping force in kN	30	40	60
Weight in kg HD	18	30	60
Weight in kg HD with	24	42	-
swivel base			

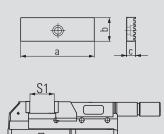
Spindle cross-section





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





- Material: hardened steel
- Standard jaws with serration
- To increase the specific contact pressure per unit area
- Please order fastening bolts separately (order no. 6921011023000)

а 100 32 b С 12

125:

160:

Clamping range S1	0-82	0-102	0-152
Can be changed by means of fixing bolt	78 – 162	98 - 202	147 - 302

6921024022031

6921034022031

100

125

40

15

160

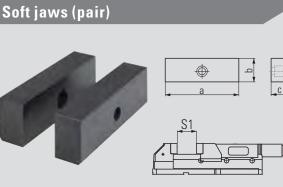
160

50

20

Order no. jaw width 100: 6921011005031 125: 6921021005031 160: 6921031005031

Jaw width		100	125	160
Dimensions in mm	а	100	125	160
	b	32	40	50
	С	12	15	20
Clamping range S1		0 - 82	0-102	0 - 152
Can be changed by means of t	an be changed by means of fixing bolt		98 - 202	147 – 302



- Material: 21MnCr5G, mat. no.: 1.2162
- Jaws can be case-hardened
- For production of special jaws by the customer
- Please order fastening bolts separately (order no. 6921011023000)

Order no. jaw width 100: 6921014023031 125: 6921024023031 160: 6921034023031

Jaw width		100	125	160	
Dimensions in mm a		100	125	160	
	b	32	40	50	
С		20	25	30	
Clamping range S1		0-66	0-84	0-132	
Can be changed by means of fixing bolt		62 - 146	80 - 184	127 – 282	

Prismatic jaws (set)		25: 69	2101402403 2102402403 2103402403	1	
	Jaw width		100	125	160
	Dimensions in mm	а	100	125	160
		b	32	40	50
		С	30	35	45
		d	12	15	20
		е	28	35	45
Material: hardened steel		f	3	3	3

d

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

Order no. jaw width 100:	692
195.	604

100:6921014025031125:6921024025031160:6921034025031

g

h

Ø 10 – 25 Ø 12 – 28 Ø 15 – 40

Ø 22 – 65

Ø 15 – 45 Ø 18 – 55

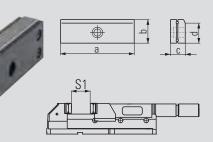
Jaw width		100	125	160
Dimensions in mm	а	100	125	160
	b	32	40	50
	С	12	15	20
	d	3	3	3
	е	28	35	45
Clamping range S1		7 – 88	7 – 108	7 – 158
Can be changed by means of	fixing bolt	84 - 168	104 - 208	153 – 308

• Material: hardened steel

Step jaws (pair)

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

Roller pull-down jaws (pair)



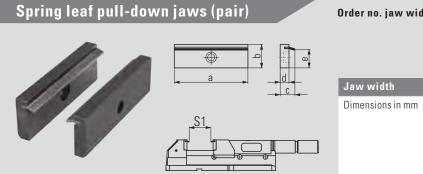
 \oplus

q

- 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)

Order no. jaw width 125: 6921024005131 160: 6921034005131

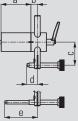
Jaw width		125	160		
Dimensions in mm	а	125	160		
	b	40	50		
c d		26	35.5		
		35	45		
Clamping range S1		0-80	0 - 115		
Can be changed by means of	fixing bolt	76 – 180	110 - 265		



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

Spring leaves (pair)		Jaw fixing bolt	
	Order no. jaw width 100: 6921014002131 125: 6921024002131 160: 6921034002131		Order no. 6921011023000
 Spring leaves (spare) for the spring leaf pull-down jaws, (see above) 		• Bolt with shoulder – M10 x 23	• Suitable for all jaws, jaw width 090 mm to 160 mn
Workpiece stop		Order no. 6921285650144	
		Dimensions in mm a	67 15







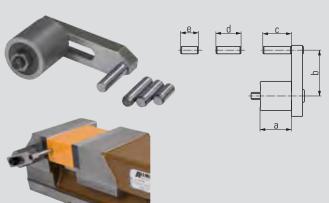
Order no. jaw width 100: 6921014001042 125: 6921024001042 160: 6921034001042

	Jaw width		100	125	160		
	Dimensions in mm	а	100	125	160		
		b	32	40	50		
		С	20	20	23		
		d	12	12	15		
		е	25	33	43		
	Clamping range S1		0-66	0-92	0-146		
	Can be changed by means of	fixing bolt	62 - 146	88 – 192	141 – 296		

Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12-63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: ± 0.01)

Workpiece stop



Order no. 6921685670042

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

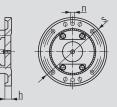
- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset



Order no. jaw width 100: 125 & 160			6923015 : 6923025		
	Jaw width		100	125	160
	Dimensions in mm	а	147	178	178
		SW	12	14	14

Swivel base





- Particularly suitable for single-piece production if you wish to make your vice rotatable
- Can be removed at any time
- Swivel base supporting edge larger than the vice's maximum clamping range

Order no. jaw width 100: 6921013000044 125: 6921023000044

Jaw width		100	125
Dimensions in mm	а	Ø 20	Ø 20
	h	26	30
	n	20	20
	S	Ø 260	Ø 320

• Swivels 360° without indexing

- Alignment on the machine with T-keys in slots in the swivel base
- Clamping slots arranged in the form of a ring for machines with different slot spacings

Side clamps (pair)



Order no. jaw width 100: 6921015000231 125 & 160: 6921025000031

- For securing the HD high-pressure vice on the machine table
- Supplied as a set of 2

Aligning and fixing set



• For aligning (positioning) and securing

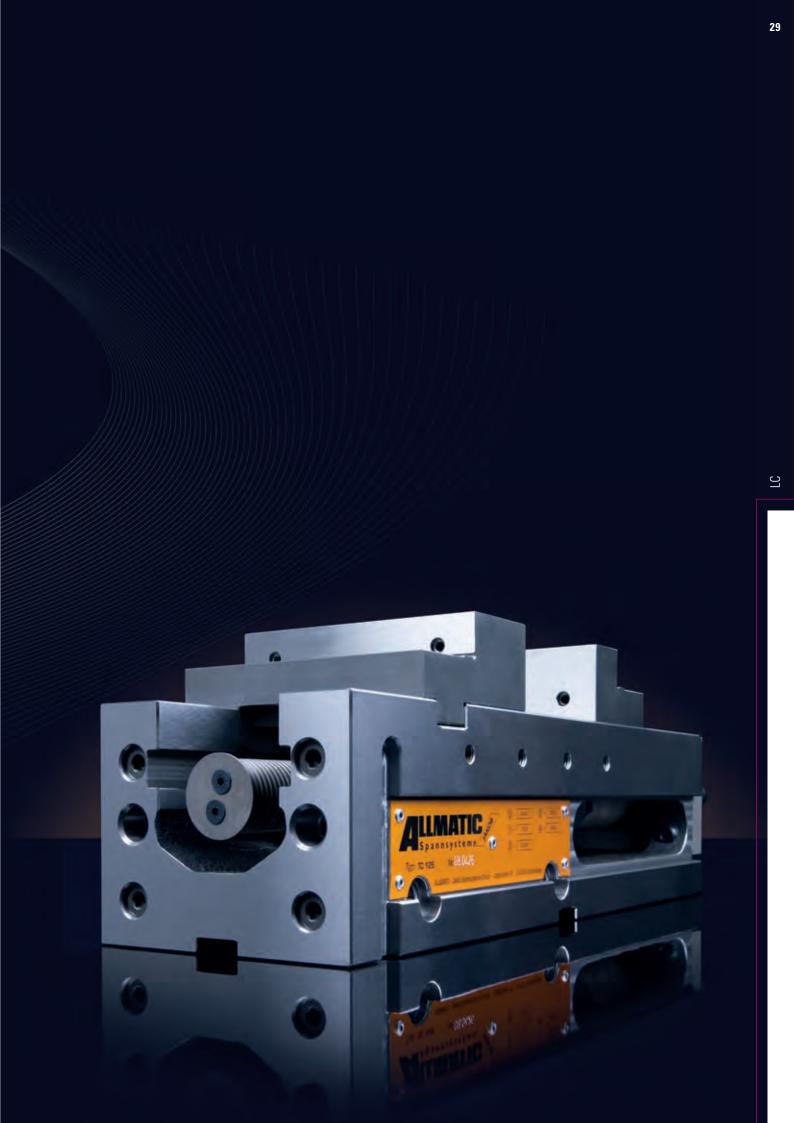
- the vice on pallet and machine table
- Size according to T-slot or thread in the machine table

Order	no –	see	table
Uluci		366	lubic

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

ALLMATIC NC SERIES – HIGH PRECISION AND POWER

The ALLMATIC NC series of vices offers outstanding flexibility.



ALLMATIC NC – MECHANICAL LC VERSION

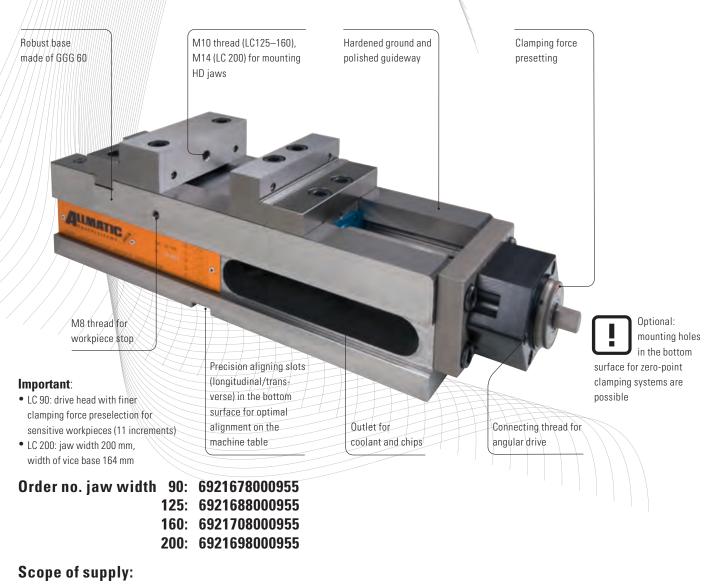
Scope of application:

 Horizontal installation – suitable for vertical CNC-controlled milling machines

E @ C ≟

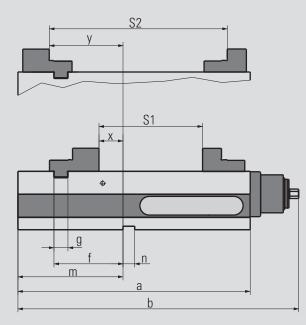
Product features:

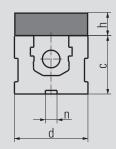
- Extreme accuracy for your machining
- Clamping force can be preset in 4 to 11 increments. At most, 2 revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm



- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 2 socket screw wrenches
- 1 compensation jaw for clamping range from 0 mm only LC 160 and 200

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



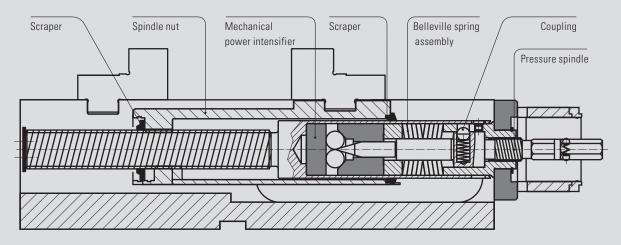


Technical data

Jaw width		90	125	160	200
Dimensions in mm	а	283	398	530	530
	b	339	483	616	616
	С	80	100	115	115
	d	90	126	164	164
	f	73	118	164	164
	g	20	24	30	30
	h	34	39.5	49.8	60
	m	112	180	234	234
	n	20	20	20	20
	Х	15	36	70	70
	у	75	127	178	178
	У	/5	127	178	178

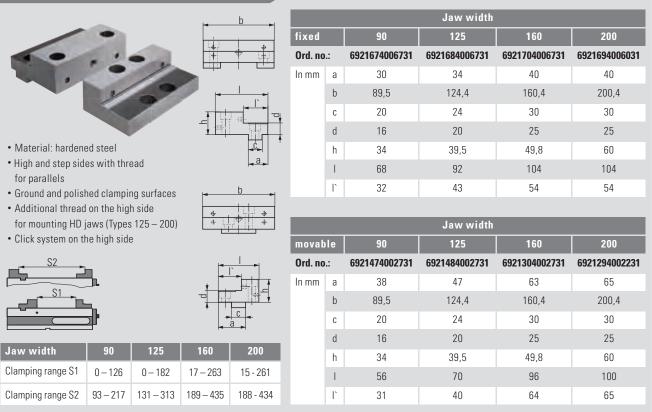
Jaw width	90	125	160	200
Clamping range S1 in mm	0-126	0-182	(0) 17 – 263	(0) 15 - 261
Clamping range S2 in mm	93-217	131 – 313	189 - 435	188 - 434
Clamping force increments	11	4	4	4
Max. clamping force in kN	28	40	60	60
Weight in kg	16	36	67,2	71

Spindle cross-section



ALLMATIC NC - mechanical / LC version (accessories)

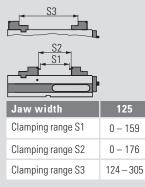
Step jaws

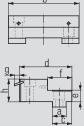


Pull-down jaws



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





	In mm	а	24
		b	124,4
		С	34
		d	92
		е	20
		f	43
		g	8,8
		h	39,5

fixed

Ord. no.:

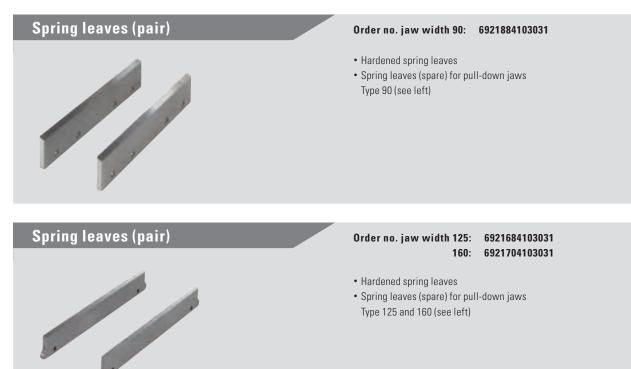
Jaw width

125

6921684106031

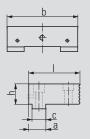
Jaw width				
movable		125		
Ord. no.:		6921684102031		
In mm	а	24		
	b	124,4		
	С	46,5		
	d	75		
	е	20		
	f	32		
	g	8,8		
	h	39,5		

ALLMATIC NC - mechanical / LC version (accessories)



Hard basic jaws





Jaw width				
fixed		90	125	160
Ord. no.:		6921674005731	6921684005731	6921704005731
In mm	а	26	30	40
	b	89,5	124,4	160,4
	С	20	24	30
	h	34	39,5	49,8
	Ι	63	88	104

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

	÷	۵
_		

b

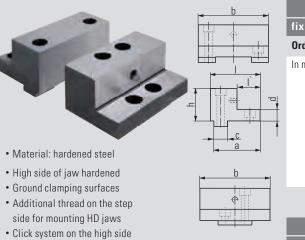


		Jaw		
movable		90	125	160
Ord. no.:		6921674004731	6921684004731	6921704004731
In mm	а	40	50	65
	b	89,5	124,4	160,4
	С	20	24	30
	h	34	39,5	49,8
	1	60	76	100



Clamping range S1	0-125	0-179	15 - 261
Clamping range S2	30-156	49 - 231	69 - 315





Jaw width								
fixed 90 125 160 200								
Ord. no.:		6921674012231	6921684012231	6921704012231	6921694012231			
In mm	а	56	77	89	89			
	b	90	126	164	202			
	С	20	24	30	30			
	d	16	20	24	24			
	h	46	58	73	85			
	I	66	85	100	100			
	T.	30	32	34	34			

	S2	
	S1	
· ·		

Jaw width

Clamping range S1

Clamping range S2

Jaw width						
movable		90	125	160	200	
Ord. no.:		6921274011231	6921284011231	6921304011231	6921294011231	
In mm	а	40	52	65	45	
	b	90	126	164	202	
	С	20	24	30	30	
	d	16	20	24	24	
	h	46	58	73	85	
	Ι	60	80	100	100	
	ſ	30	32	34	38	

Soft jaws



62-186

26-152

64-246

45-227

88 - 334

68 - 314



200

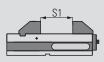
92 - 338

68 - 314

- Material: GGG40
- For production of special jaws by the customer
- Chamfer provides very good accessibility to the workpiece

Ľ	+ <u>+</u> 	<u> -</u>	





Order no. fixed: 6921684088031

Jaw width	125	
Dimensions	а	95
in mm	b	124
	С	24
	h	58
	I	101.5

Order no. movable: 6921484087031

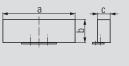
Jaw width		125
Dimensions	а	42
in mm	b	124
	С	24
	h	58
	I	94.5

```
Clamping range S1
```

0 - 150

Pivot jaw, movable		Order no. jaw	widtl		167402014	
-	b b				2168402004 2170402004	
		Jaw width		90	125	160
		Dimensions	а	49.5	62	86
		in mm	b	90	124.4	160.4
			С	20	24	30
			h	34	39.5	49.8
			1	68	84	118
	S2					
Material: hardened steel		Clamping range S1		0 - 115	0-167	0-240
 With Click-System on both sides One side smooth, ground and polished; 		Clamping range S2		21-146	37 – 219	48 - 294
 one side serrated Rotatable through 360° Picture with hard basic jaw (see page 71) 						

Soft jaw



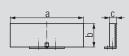
Order	no.	6921684023042
0.001		0021001020012

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



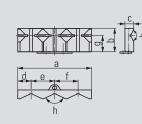


Order no. 6921684032040

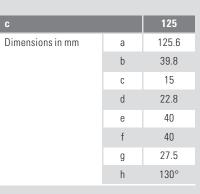
Jaw width	125	
Dimensions in mm	а	125.6
	b	40.1
	С	12

- 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





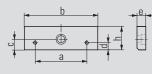
Order no. 6921684024042



- 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

Compensation jaw





Order no. jaw width 160: 6921704022031 200: 6921694022031

Jaw width	160	200	
Dimensions in mm	а	88	110
	b	160.4	200.4
	С	20	25
	d	12.25	18
	е	18	18
	h	49.8	60

- Material: hardened steel
- Ground and polished clamping surfaces
- For clamping range from 0 mm
- With the LC 160 and 200 vices, this jaw is included

Click parallels (pair)

Order no. jaw width	90:	6921175029042
	125:	6921185035042
	160:	6921205044042

Jaw width		90	125	160
Dimensions in mm	а	48	88	88
	b	90	125	160
	c -0.01	29	35	44
	d	8.75	12.25	12.25
	е	3	3	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Click parallels (pair)		25: 692	1175016042 1185020042 1205025042
011	Jaw width Dimensions in mm	a	90 48
1 50		b	90
U IV		c -0.01	16
·		d	8.75
		е	3

48 88 90 125 16 20 8.75 12.25 3 3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

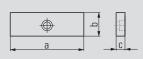
Parallels (pair)		25: 69	21475013031 21485015031 21305019031	
	Jaw width Dimensions in mm	а	90 52	
	Dimensions in him	b	89	
		С	13	
		d	6	
		е	3	
		f	Ø6	

•	For	paralle	el rais	sing of	f workpieces
---	-----	---------	---------	---------	--------------

- Hardened, ground and polished parallels
- Bolt-on parallels
- For the step side of the jaws

Smooth jaws (pair)





Order no. jaw width 125: 6921024022031 160: 6921034022031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

g

• Material: hardened steel

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

88

160

25

12.25

3

160

88

160

19

6

3

Ø 6

Ø9

125

88

124

15

6

3

Ø 6

Ø 9

Ø9

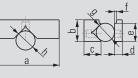
Serrated jaws (pair)	Order no. jaw width 1 1		2102100503 21031005031	
	Jaw width		125	160
•	Dimensions in mm	а	125	160
a		b	40	50
		С	15	20

- Material: hardened steel
- Standard jaws with serration
- To increase the specific contact pressure per unit area
- Please order fastening bolts separately (order no. 6921011023000)

Soft jaws (pair) Order no. jaw width 125: 6921024023031 160: 6921034023031 Jaw width 125 160 \oplus 9 Dimensions in mm 125 160 а а 40 b 50 25 30 С • Material: 21MnCr5G, mat. no.: 1.2162 • Jaws can be case-hardened • For production of special jaws by the customer • Please order fastening bolts separately (order no. 6921011023000)

Prismatic jaws (set)





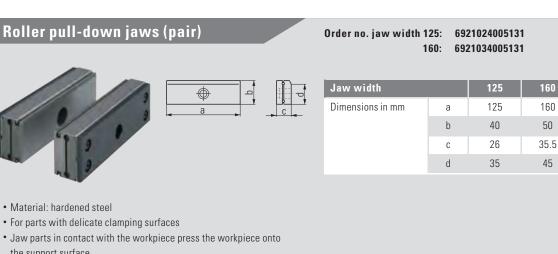
Order no. jaw width 125: 6921024024031 160: 6921034024031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	35	45
	d	15	20
	е	35	45
	f	3	3
	g	Ø 12 – 28	Ø 15-40
	h	Ø 18 – 55	Ø 22 – 65

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

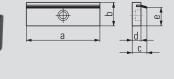
Step jaws (pair)			Order no. jaw width 1			
			1	60: 692	2103402503 ⁻	1
	<u>م</u>	u a	Jaw width		125	160
	a a	C	Dimensions in mm	а	125	160
				b	40	50
				С	15	20
				d	3	3
•				е	35	45

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



- the support surface
- Please order fastening bolts separately (order no. 6921011023000)





160: 6921034001042

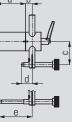
Order no. jaw width 125: 6921024001042

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	20	23
	d	12	15
	е	33	43

- Material: hardened steel
- For parts with unmachined clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are interchangeable, (see the next page)
- Please order fastening bolts separately (order no. 6921011023000)









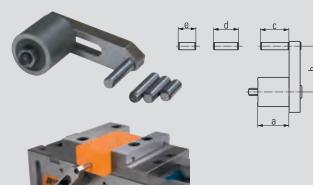
	⊭
	<u>-</u> -
e	

	↓ •
- 1-	

Dimensions in mm 67 а 15 b С 33 - 92 12 - 63.5 d 53.5-113.5 е

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: ± 0.01)

Workpiece stop



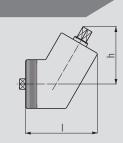
Order no. 6921685670042

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

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset

Angular drive





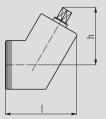
Order no. jaw width 125 to 200: 6921285700143

Jaw width		125	160	200
Dimensions in mm	I	97	97	97
	h	75	75	75

- For jaw width 125 200
- Wrench size 14
- Can be bolted to the end of the spindle if access
- is difficult
- Step-down ratio 2 : 1

Angular drive





Order no. jaw width 90: 6921675700043

Jaw width		90
Dimensions in mm	I	87
	h	75

- For jaw width 90
- Wrench size 12
- Can be bolted to the end of the spindle if access is difficult
- Step-down ratio 2 : 1



Jaw width		90	125
Dimensions in mm	I	150	180
	SW	12	14

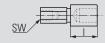
125 - 200: 6921685508031

Order no. jaw width 90: 6921675508031

• Suitable for jaw width 125 – 200 mm

Hexagonal extension





Order no. 6921685512040

Jaw width		125
Dimensions in mm	I	30
	SW	14

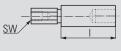
• Improves access for the hand crank

• Is secured to the hand crank with a bolt

• Suitable for jaw width 125 – 200 mm







 Jaw width	
Dimensions in mm	

Order no. 6921685512140

- Improves access for the hand crank
- Is secured to the hand crank with a bolt

• Suitable for jaw width 125 - 200 mm

60

14

125

126

100

Ø 30

400

20

b

С

k

L

n

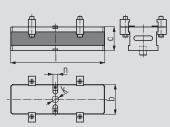
l SW





Jaw width

Dimensions in mm



- Material: GG30
- For raising the vice
- Improved access for 5-sided machining
- Optional preparation for zero-point clamping systems
- Scope of supply: console incl. fixing bolt for positioning the vice, 4 pairs of DUO side clamps, 2 socket screw wrenches

Side clamps (pair)



Order no. jaw width 90: 6921015000231 125 - 200: 6921025000031

- For securing the vice
- on the machine table
- Supplied as a set of 2

DUO side clamps



Order no. jaw width 90: 6921675000031 125 - 200: 6921285000031

- For securing the vice on a console or machine table
- 1 set consists of 2 pairs of side clamps incl. screw connections

T-slot/ thread 12/M10	Order no. 6921285600031
	6921285600031
14/1410	
14/M12	6921285601031
16/M14	6921285602031
18/M16	6921285603031
20/M16	6921285606031
22/M16	6921285607031
	18/M16 20/M16

• For aligning (positioning) and fastening the vice on pallet and machine table

• Size according to T-slot or thread in the machine table

ں ا

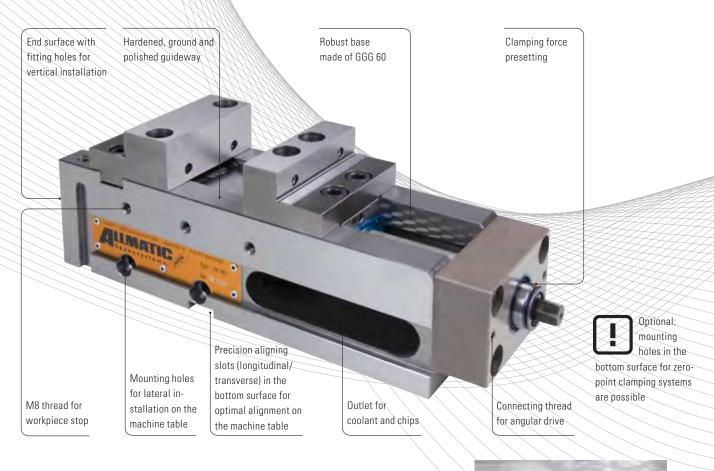
Scope of application:

Horizontal and vertical installation – suitable for both vertical and horizontal CNC-controlled milling machines

• Lateral installation is also possible

Product features:

- Extreme accuracy for your machining
- The TC vice is ground and polished on all sides
- Clamping force can be preset in 11 increments fine gradations for delicate workpieces. At most, one revolution is required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm



Order no. jaw width 90: 6921678000055

Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 1 socket screw wrench

Vice in lateral clamping position An overview of the clamping jaws and

other accessories is given on the following pages.

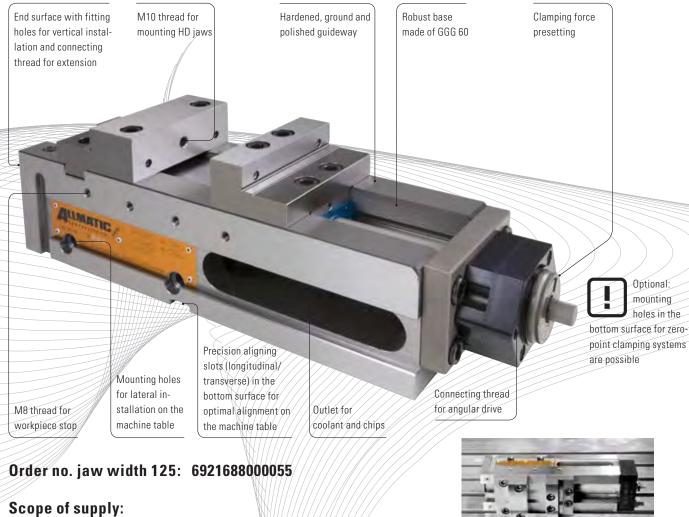
Scope of application:

- Horizontal and vertical installation suitable for both vertical and horizontal CNC-controlled milling machines
- · Lateral installation is also possible

Product features:

- Extreme accuracy for your machining
- The TC vice is ground and polished on all sides
- Clamping force can be preset in 4 increments. At most, 2 revolutions are required to reach the max. clamping force
- · Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm





- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 2 socket screw wrenches



Vice in lateral clamping position

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

Scope of application:

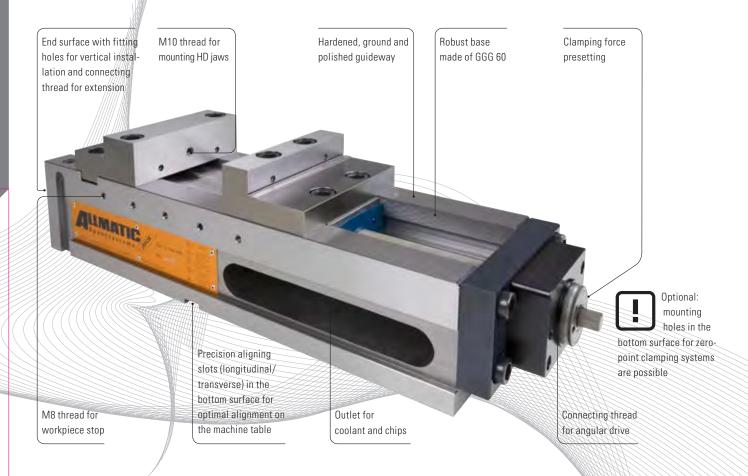
• Horizontal and vertical installation – suitable for both vertical and horizontal CNC-controlled milling machines

🕞 🛅 🛃 🗗 📇 🖬 📾

• Lateral installation is also possible

Product features:

- The TC vice is ground and polished on all sides
- Extreme accuracy for your machining
- Clamping force can be preset in 4 increments At most, 2 revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm

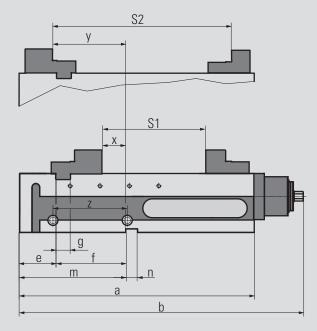


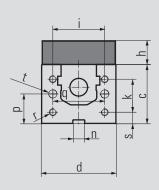
Order no. jaw width 160: 6921708000055

Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 3 socket screw wrenches
- 1 compensation jaw for clamping range from 0 mm

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





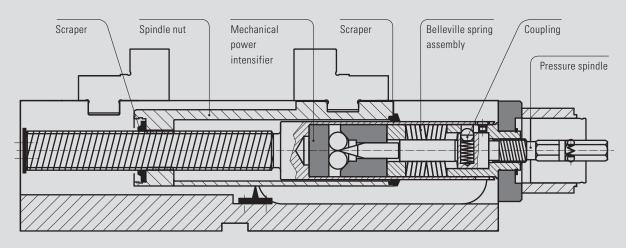
Technical Data

Jaw width		90	125	160
Dimensions /	а	283	398	530
tolerances in mm	b	339	483	616
	С	80	100	115
	d	90	126	164
	е	39	62	70
	f	73	118	164
	g	20	24	30
	h	34	39.5	49.8
	i	65	88	128
	k	-	56	67
	m	112	180	234
	n	20	20	20
	р	12	50	55
	q	63	88	128
	r	M12	M12	M16
	S	40	19	17
	t	dia. 14	dia. 14	dia. 14
	х	15	36	70
	у	75	127	178
	Z	63	126	-

Jaw width	90	125	160
Clamping width S1 in mm	0-126	0-182	(0) 17 – 263
Clamping width S2 in mm	93-217	131 – 313	189 - 435
Clamping force increments	11	4	4
Max. clamping force in kN	28	40	60
Weight in kg	16	36	67,2

• Clamping width 0 can be reached using the compensation jaw

Spindle cross-section



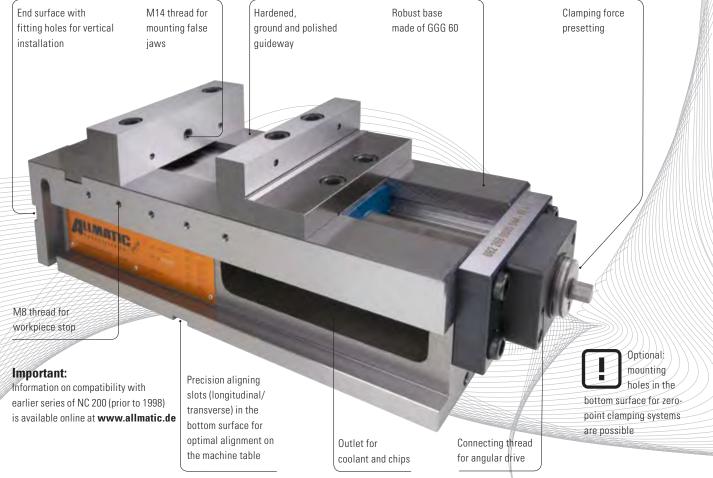
Scope of application:

- Horizontal and vertical installation suitable for both vertical and horizontal CNC-controlled milling machines
- Lateral installation is also possible

Product features:

- Extreme accuracy for your machining
- The TC vice is ground and polished on all sides
- Clamping force can be preset in 4 increments. At most, 2 revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm



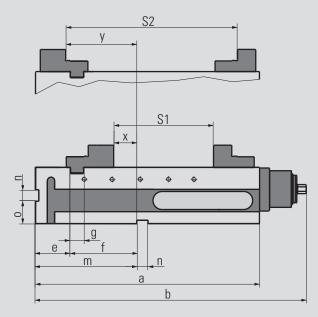


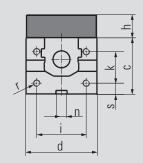
Order no. jaw width 200: 6921698000155

Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 3 socket screw wrenches
- 1 compensation jaw for clamping range from 0 mm

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





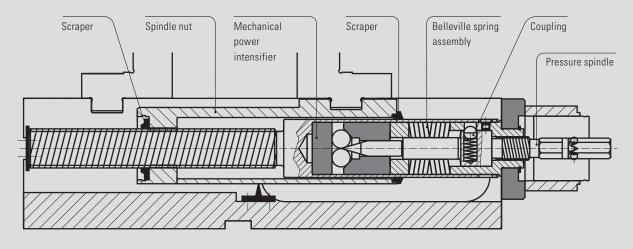
Technical data

Jaw width		200
Dimensons /	а	530
tolerances in mm	b	620
	С	140
	d	202
	е	70
	f	164
	g	30
	h	60
	i	140
	k	85
	m	234
	n	20
	0	60
	r	M16
	S	22
	х	70
	У	178

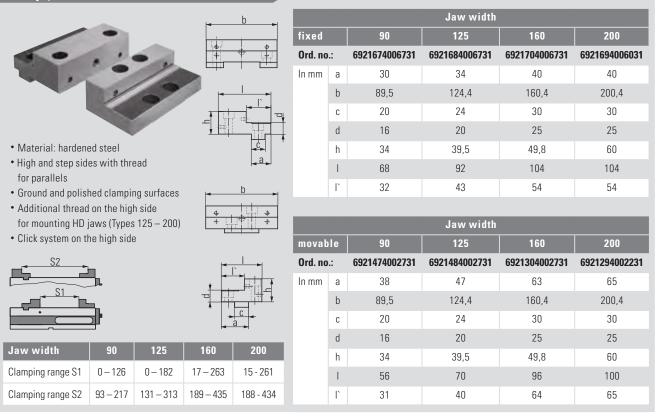
Jaw width	200
Clamping range S1 in mm	(0) 15 - 261
Clamping range S2 in mm	188 - 434
Clamping force increments	4
Max. clamping force in kN	80
Weight in kg	87,4

• Clamping width 0 can be reached using the compensation jaw

Spindle cross-section



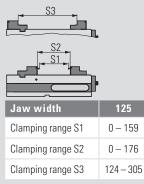
Step jaws

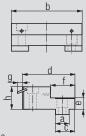


Pull-down jaws



- Pull-down with ground and polished spring leaves for machined and unmachined clamping surfaces
- Ground and polished clamping surfaces
- High clamping accuracy for parallel and accurate angle machining
- Click system on the high side



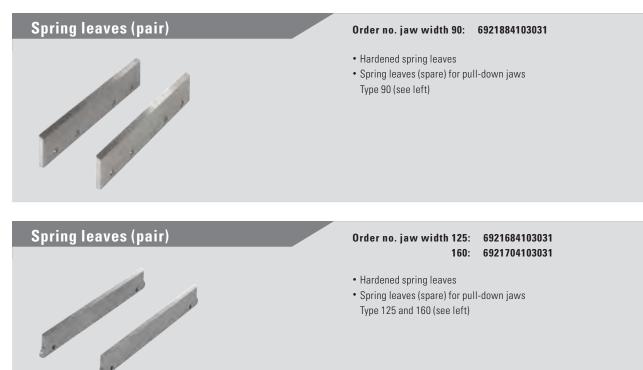






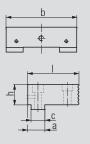
	Jaw	width
fixed		125
Ord. no.:		6921684106031
In mm	а	24
	b	124,4
	С	34
	d	92
	е	20
	f	43
	g	8,8
	h	39,5

Jaw width		
movable		125
Ord. no.:		6921684102031
In mm	а	24
	b	124,4
	С	46,5
	d	75
	е	20
	f	32
	g	8,8
	h	39,5



Hard basic jaws





Jaw width						
fixed		90	125	160		
Ord. no.:		6921674005731	6921684005731	6921704005731		
In mm	а	26	30	40		
	b	89,5	124,4	160,4		
	С	20	24	30		
	h	34	39,5	49,8		
	I	63	88	104		

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

-	<u>u</u>	
•	¢	¢

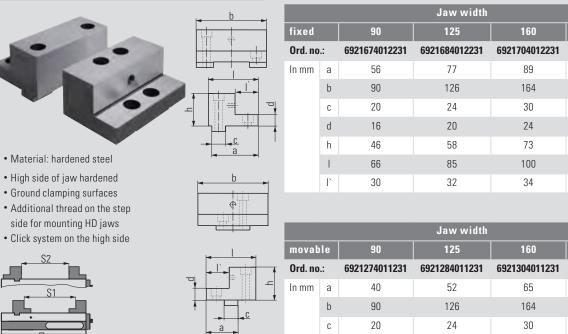


Jaw width							
movable		90	125	160			
Ord. no.:		6921674004731	6921684004731	6921704004731			
In mm	а	40	50	65			
	b	89,5	124,4	160,4			
	С	20	24	30			
	h	34	39,5	49,8			
		60	76	100			



Clamping range S1	0-125	0-179	15 - 261
Clamping range S2	30 - 156	49 - 231	69 - 315





OTTOK	5 y 5 t 6 m	011	the	mgn
	S2	•	L	
		-	-	

Jaw width	90	125	160	200
Clamping range S1	62-186	64-246	88 - 334	92 - 338
Clamping range S2	26-152	45-227	68 - 314	68 - 314

	Jaw width								
movable		90	125	160	200				
Ord. no.:		6921274011231	6921284011231	6921304011231	6921294011231				
ln mm	а	40	52	65	45				
	b	90	126	164	202				
	С	20	24	30	30				
	d	16	20	24	24				
	h	46	58	73	85				
	1	60	80	100	100				
	ſ	30	32	34	38				

200

6921694012231

89

202

30

24

85

100

34

Soft jaws



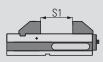
C

• Material: GGG40

- For production of special jaws by the customer
- Chamfer provides very good accessibility to the workpiece

			Г
 11	111	Ч.	
	_	-	
- F	'n		





Order no. fixed: 6921684088031

Jaw width		125
Dimensions in mm	а	95
	b	124
	С	24
	h	58
	I	101.5

Order no. movable: 6921484087031

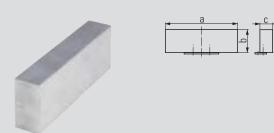
	125
а	42
b	124
С	24
h	58
Ι	94.5
	b

0-150 Clamping range S1

52

Pivot jaw, movable		Order no. jaw			167402014		
		125: 6921684020042 160: 6921704020042					
		Jaw width		90	125	160	
		Dimensions	а	49.5	62	86	
		in mm	b	90	124.4	160.4	
			С	20	24	30	
			h	34	39.5	49.8	
			Ι	68	84	118	
Material: hardened steel	S2						
• With Click-System on both sides		Clamping range	e S1	0 - 115	0 - 167	0-240	
 One side smooth, ground and polished; one side serrated 	S1	Clamping range S2		21 – 146	37 – 219	48 - 294	
• Rotatable through 360°							
Picture with hard basic jaw							
0							

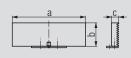
Soft jaw



- 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





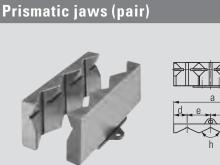
Order no. 6921684032040

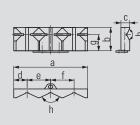
Jaw width		125
Dimensions in mm	а	125.6
	b	40.1
	С	12

- 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

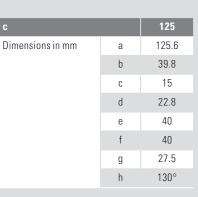
Order no. 6921684023042

Jaw width		125
Dimensions in mm	а	125
	b	39.8
	С	22



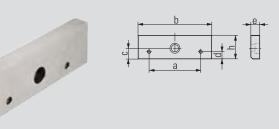


Order no. 6921684024042



- 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

Compensation jaw



Order no. jaw width 160: 6921704022031 200: 6921694022031

Jaw width		160	200	
Dimensions in mm	а	88	110	
	b	160.4	200.4	
	С	20	25	
	d	12.25	18	
	е	18	18	
	h	49.8	60	

- Material: hardened steel
- Ground and polished clamping surfaces
- For clamping range from 0 mm
- With the LC 160 and 200 vices, this jaw is included

Click parallels (pair) .

	-	b	<u>→</u>	
		@®		

Order no. jaw width	90:	6921175029042
	125:	6921185035042
	160:	6921205044042

Jaw width		90	125	160
Dimensions in mm	а	48	88	88
	b	90	125	160
	c -0.01	29	35	44
	d	8.75	12.25	12.25
	е	3	3	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Click parallels (pair)	Order no. jaw width	90: 692 125: 692
1	Jaw width	160: 692
1 10 20	Dimensions in mm	a b
U V		c -0.01
v		d

Order no. jaw width	90:	6921175016042
	125:	6921185020042
	160:	6921205025042

Jaw width		90	125	160
Dimensions in mm	а	48	88	88
	b	90	125	160
	c -0.01	16	20	25
	d	8.75	12.25	12.25
	е	3	3	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Parallels (pair)	Order no. jaw width	125:	692147501303 ⁻ 692148501503 ⁻ 692130501903 ⁻
	Jaw width		90
	Dimensions in mm	а	52
		b	89
		С	13
		d	6
		е	3
		f	Ø 6

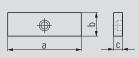
Order no. jaw width	90:	6921475013031
	125:	6921485015031
	160:	6921305019031

Jaw width		90	125	160
Dimensions in mm	а	52	88	88
	b	89	124	160
	С	13	15	19
	d	6	6	6
	е	3	3	3
	f	Ø6	Ø 6	Ø 6
	g	Ø9	Ø9	Ø 9

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels
- For the step side of the jaws

Smooth jaws (pair)





Order no. jaw width 125: 6921024022031 160: 6921034022031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

• Material: hardened steel

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

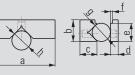
Serrated jaws (pair)	Order no. jaw width '		2102100503 2103100503	
	Jaw width		125	160
	Dimensions in mm	а	125	160
		b	40	50
		С	15	20
-				

- Material: hardened steel
- Standard jaws with serration
- To increase the specific contact pressure per unit area
- Please order fastening bolts separately (order no. 6921011023000)

Soft jaws (pair)	Order no. jaw width 12		2102402303	
	Jaw width	50: 692	125	160
	Dimensions in mm	а	125	160
		b	40	50
		С	25	30
 Material: 21MnCr5G, mat. no.: 1.2162 Jaws can be case-hardened For production of special jaws by the customer 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)

	160:	6921034024031	
Jaw width		125	

Order no. jaw width 125: 6921024024031

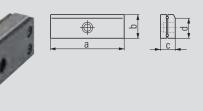
Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	35	45
	d	15	20
	е	35	45
	f	3	3
	g	Ø 12 – 28	Ø 15-40
	h	Ø 18 – 55	Ø 22 – 65

Step jaws (pair)			Order no. jaw width 1			
<i>A</i>	·	- d	1	60: 692	21034025031	
	<u>٩</u>		Jaw width		125	160
	a	C	Dimensions in mm	а	125	160
				b	40	50
				С	15	20
				d	3	3
•				е	35	45

0

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

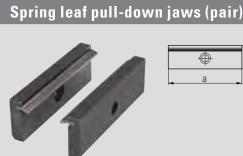


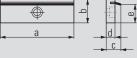


rder	no.	jaw	width	125:	6921024005131
				160:	6921034005131

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	26	35.5
	d	35	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)





Order no. jaw width 125: 6921024001042 160: 6921034001042

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	20	23
	d	12	15
	е	33	43

- Material: hardened steel
- For parts with unmachined clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are interchangeable, (see the next page)
- Please order fastening bolts separately (order no. 6921011023000)



Workpiece stop





-	
1000	V /n

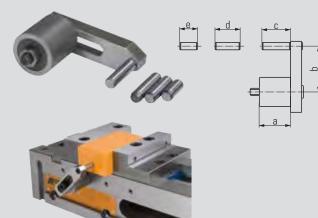
<u> </u>	

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 on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: ± 0.01)

Workpiece stop



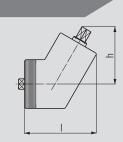
Order no. 6921685670042

а	34
b	27 – 59
С	31
d	27
е	19
	b c d

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset

Angular drive





Order no. jaw width 125 to 200: 6921285700143

Order no. 6921675700043

Jaw width

Dimensions in mm

Jaw width		125	160	200
Dimensions in mm	I	97	97	97
	h	75	75	75

90

87

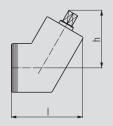
75

h

- For jaw width 125 200
- Wrench size 14
- Can be bolted to the end of the spindle if access
- is difficult
- Step-down ratio 2 : 1

Angular drive

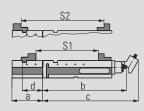




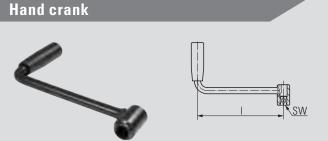
- For type 90
- Wrench size 12
- Can be bolted to the end of the spindle if access is difficult
- Step-down ratio 2 : 1

Clamping range enlargement





- For increasing the clamping range of the NC vice TC version
- Is attached to the end of the TC vice
- No transmission of clamping forces to the machine table
- Scope of supply: 1 pair side clamps



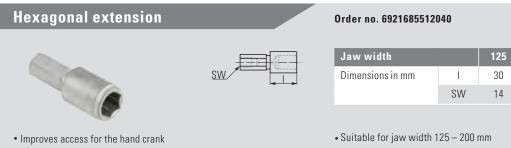
		-
	125	160
а	176	237
b	483	620
С	552	683
d	117	172
	179 - 361	259 - 505
	310 - 492	431 – 677
	60: 692 a b c	60: 6921705008055 125 125 a 176 b 483 c 552 d 117

Order no. jaw width 90: 6921675508031 125 - 200: 6921685508031 Jaw width 90 125

Jaw width		90	125
Dimensions in mm	I	150	180
	SW	12	14

• Suitable for jaw width 125 – 200 mm

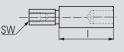
Ĕ



• Is secured to the hand crank with a bolt

Hexagonal extension





Order no. 6921685512140

Jaw width		125
Dimensions in mm	I	60
	SW	14

30

14

• Improves access for the hand crank

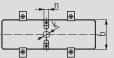
• Is secured to the hand crank with a bolt

• Suitable for jaw width 125 – 200 mm

XL console

• Improvement of access for 5-sided machining • Optional preparation for zero-point clamping systems • 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
	С	100
	k	Ø 30
	1	400
	n	20

Side clamps (pair)

• Material: GG30 • For raising the vice

Order no. jaw width 90: 6921015000231 125 - 200: 6921025000031

- For securing the vice on the machine table
- Supplied as a set of 2



Order no. jaw width 90: 6921675000031 125 - 200: 6921285000031

- For securing the vice on a console or machine table
- 1 set consists of 2 pairs of side clamps incl. screw connections

Aligning and fixing set



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

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

Order no. – see table

ALLMATIC NC – MECHANICAL NC 70 VERSION

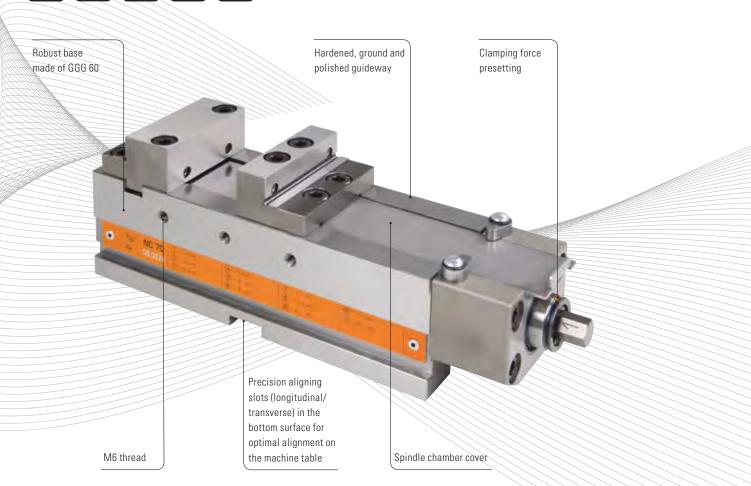
Scope of application:

- Horizontal installation suitable for vertical CNC-controlled milling machines
- Lateral installation is also possible

Product features:

- Extreme accuracy for your machining
- Clamping force can be preset in 11 increments; fine gradations for delicate workpieces. At most, 1 revolution is required max. to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm



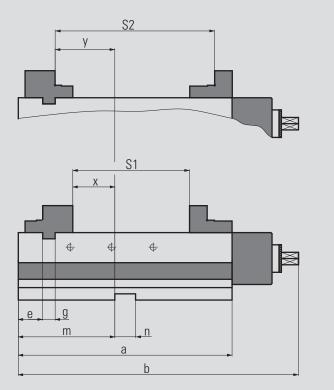


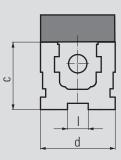
Order no. jaw width 70: 6921268000055

Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 1 socket screw wrench

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



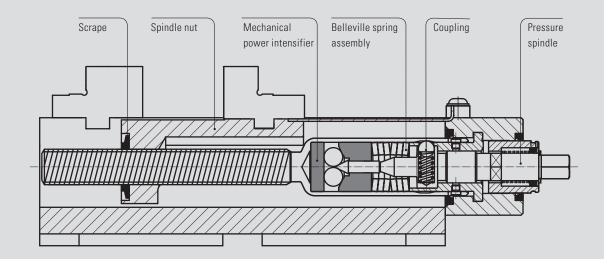


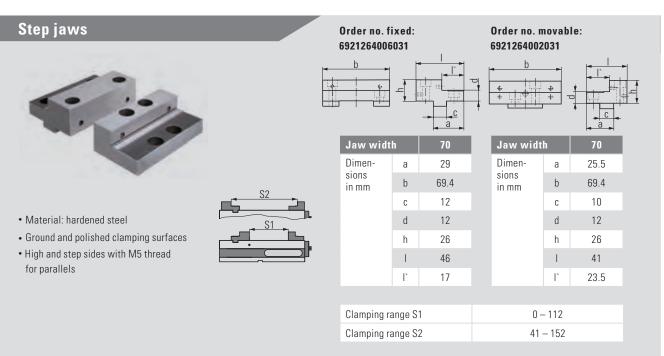
Technical data

Jaw width		70
Dimensions /	а	206
tolerances in mm	b	270
	С	65
	d	72
	е	23.5
	g	12
	I	20
	m	93
	n	20
	х	40.5
	У	57.5

Jaw width	70
Clamping range S1 in mm	0-112
Clamping range S2 in mm	41 – 152
Clamping force increments	11
Max. clamping force in kN	20
Weight in kg	10

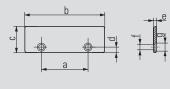
Spindle cross-section





Parallels (pair)



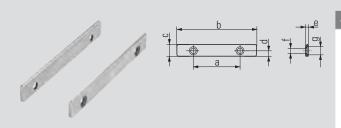


- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels
- For the high side of the jaws

Order no. 6921265022031

Jaw width		70
Dimensions in mm	а	37
	b	69.6
	С	22
	d	6
	е	2.5
	f	Ø 6
	g	Ø9

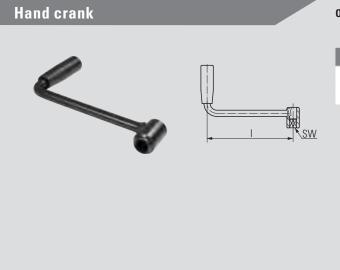
Parallels (pair)



- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels
- For the step side of the jaws

Order no. 6921265010031

Jaw width		70
Dimensions in mm	а	52
	b	69.6
	С	10
Dimensions in mm	d	4.5
	е	2.5
	f	Ø 6
	g	Ø 9



Aligning and fixing set



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

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

Order no. 6921675508031

Jaw width		70
Dimensions in mm	I	150
	SW	12

ALLMATIC NC – MECHANICAL DUO 90 VERSION

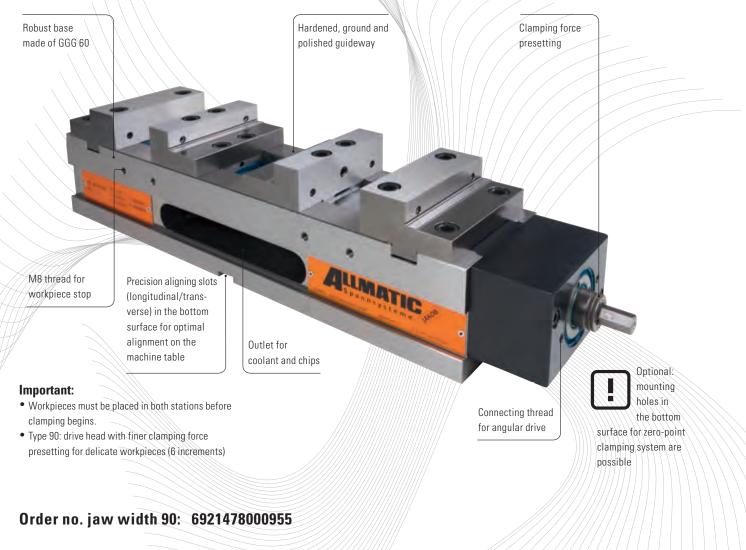
Scope of application:

- Horizontal installation suitable for vertical CNC-controlled milling machines
- Lateral installation is also possible



Product features:

- Extreme accuracy for your machining
- Clamping force can be preset in four to six increments. At most, one revolutions are required to reach the max. clamping force
- For clamping two identical parts (dimensional differences of up to ± 3 mm are compensated for)
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm

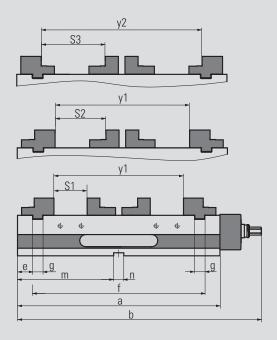


Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 2 socket screw wrenches

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

66



Technical data

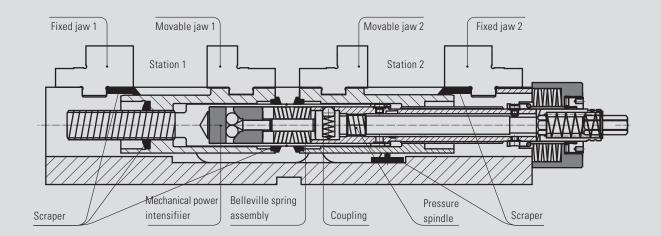
Jaw width		90
Dimensions / tolerances in mm	а	400
	b	482
	С	80
	d	90
	е	30
	f	340
	g	20
	m	190
	n	20
	y1	256
	у2	306
Jaw width		90
Clamping range S1 in mm		0-64
Clamping range S2 in mm		31 - 95

Clamping range S1 in mm0 – 64Clamping range S2 in mm31 – 95Clamping range S3 in mm56 – 120Clamping force increments6Max. clamping force in kN28Weight in kg24

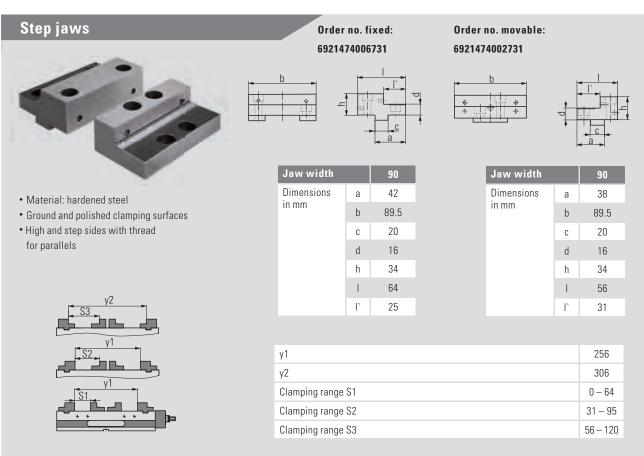
Turn the hand crank clockwise to bring movable jaw one up against the workpiece in station one. The workpiece is fixed with a force of approx. 1000 N. Turn the hand crank further to bring movable jaw two up against the workpiece in station two and fix it there. If you continue turning beyond the "locking point", the coupling will disengage. The pressure spindle activates the mechanical power intensifier. Turning as far as the limit stop produces a controlled clamping force build-up.

Workpieces must be placed in both stations before clamping begins. Dimensional differences between workpiece one and workpiece two are compensated for: *NC DUO 90 ± 3 mm*

Spindle cross-section



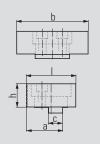
ALLMATIC NC - mechnical / DUO 90 version (accessories)



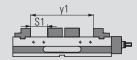
Pivot jaw, movable



- Material: hardened steel
- With Click-System
- One side smooth, ground and polished; one side serrated
- \bullet Rotatable through 360°
- Picture with step jaw (see above)







Order no. movable: 6921674020142

Jaw width		90
Dimensions in mm	а	49.5
	b	90
	С	20
	h	34
	I	68
y1		256
у2		306
Clamping range S1		0 - 52

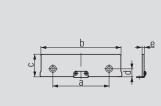
34 - 77

Clamping range S2

ALLMATIC NC - mechnical / DUO 90 version (accessories)

Click parallels (pair)



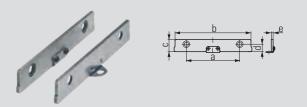


Order no. 6921175029042

Jaw width		90
Dimensions in mm	а	48
	b	90
	c -0.01	29
	d	8.75
	е	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Click parallels (pair)



Order no. 6921175016042

Jaw width		90
Dimensions in mm	а	48
	b	90
	c -0.01	16
	d	8.75
	е	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Parallels (pair)

Order no. 6921475013031

5

Jaw width		90
Dimensions in mm	а	52
	b	89
	С	13
	d	6
	е	3
	f	Ø6
	g	Ø 9

• For parallel raising of workpieces

- Hardened, ground and polished parallels
- Bolt-on parallels
- For the step side of the jaws

ALLMATIC NC - mechnical / DUO 90 version (accessories)

Workpiece stop



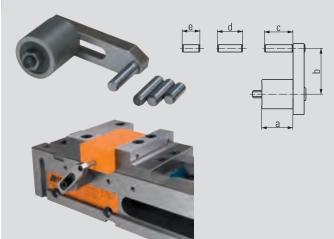


Order no. 6921285650144

Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12-63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: \pm 0.01)

Workpiece stop



Order no. 6921685670042

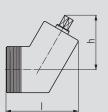
Dimensions in mm	а	34
	b	27 – 59
	С	31
	d	27
	е	19

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset

Angular drive

DUO 90

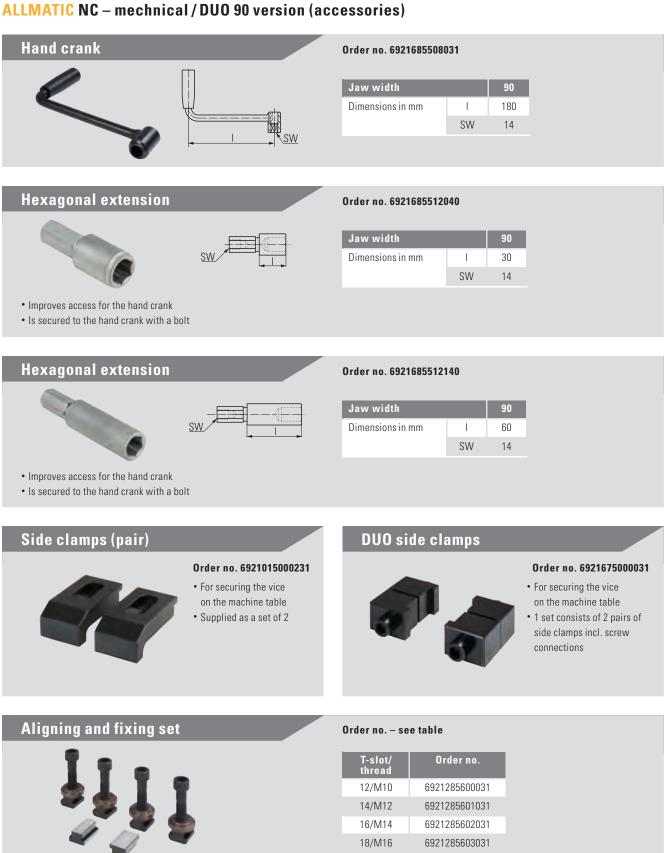




- Wrench size 14
- Can be bolted to the end of the spindle if access is difficult
- Step-down ratio 2 : 1

Order no. 6921485700043

Jaw width		90
Dimensions in mm	h	75
	I.	102





• For aligning (positioning) and fastening the vice on pallet and machine table

• Size according to T-slot or thread in the machine table

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



ALLMATIC T-REX – MIND THE JAWS!

This compact vice sinks the sharp "teeth" of its gripper into your workpiece. The ALLMATIC T-REX is indispensable for clamping unmachined parts for 5-sided machining.



ALLMATIC GRIPP – MECHANICAL T-REX VERSION

Scope of application:

- Horizontal installation suitable for vertical CNC-controlled milling machines
- Ideal for use on 5-axis machining centres
- Reliable and fast clamping of unmachined parts, flame-cut and sawn materials with gripper jaws
- Clamping of parallel pre-machined workpieces with optional step jaws
- Gripper studs suitable for materials with a strength of up to approx. 1000N/mm²



Product features:

- Optimum accessibility for 5-sided machining thanks to the combination of compact base and large clamping width
- Stamping and clamping in a single process, in the working area itself, without any additional accessories
- The movable/pivot support jaw allows different workpiece contours to be clamped
- Gripper studs can be changed without tools and are easy to adjust by hand
- Operation with a torque wrench max. 30 Nm
- · High-pressure spindle with power intensification

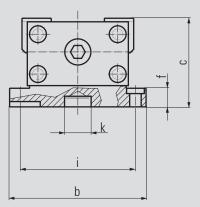


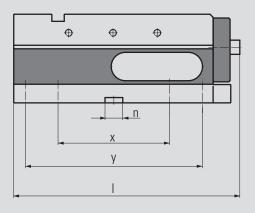
Order no. jaw width 125: 6921888000155

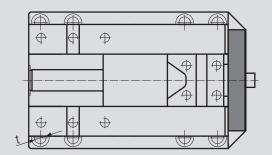
Scope of supply:

- 1 high-pressure vice without jaws
- 4 fastening bolts M12 x 35 mm
- 3 socket screw wrenches (Please order clamping jaws separately)

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





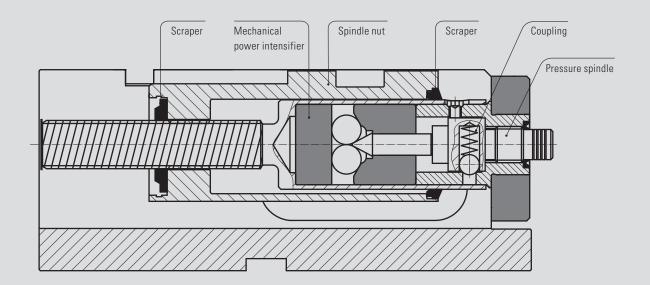


Technical data

Jaw width		125
Dimensions /	b	154
tolerances in mm	С	100
	f	21
	i	130
	k	Ø 30 H8
	I.	256
	n	20 H7
	t	Ø 13
	х	127
	у	200

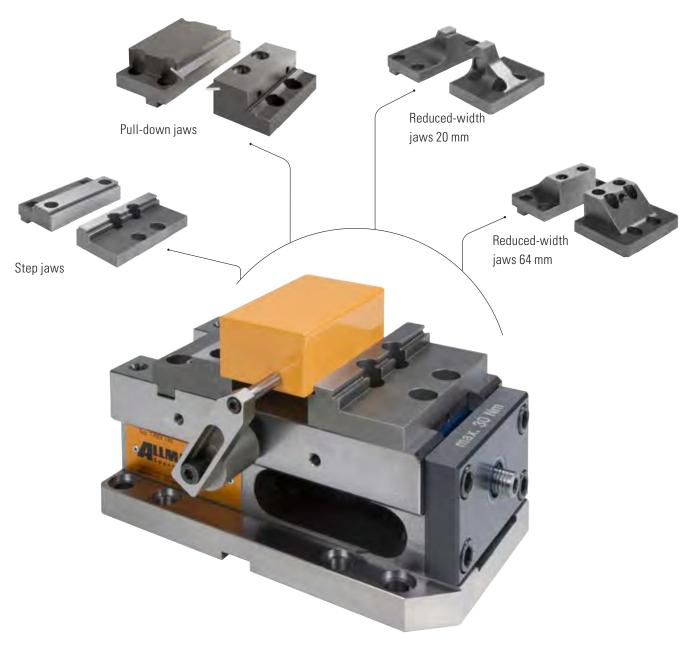
Jaw width	125
Max. torque in Nm	30
Max. clamping force in kN	40
Weight in kg	18

Spindle cross-section



T-RFX

ALLMATIC GRIPP – MECHANICAL/T-REX



For conventional clamping of workpieces

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



For clamping complex unmachined parts

Varying types of unmachined parts can be clamped quickly and securely using the support jaws and the reduced-width jaws. Jaws for gripper clamping can be found on the following pages.

Gripper clamping:

- Support jaws are used to mount different gripper studs (threaded gripper studs or universal gripper set)
- Gripper studs can be screwed onto grid plates in variable positions to securely clamp a wide variety of workpiece geometries
- Additional pivot function of the movable clamping jaw compensates for non-parallel clamping surfaces and is necessary for clamping uneven workpieces

CLAMPING RANGES – T-REX

Support jaws with gripper studs



min. clamping range	26 mm
min. clamping width	73 mm



min. clamping range

Ø 80 mm

Support jaws with universal gripper set



min. clamping range	0 mm
min. clamping width	88 mm



min. clamping range

Ø 100 mm

You can find the clamping ranges of the other T-REX jaws for conventional clamping on the following pages of accessories







max. clamping range max. clamping width

152 mm at least 165 mm or larger



max. clamping range

Ø 160 mm

APPLICATION EXAMPLES – T-REX

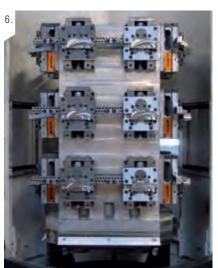


1.









Application examples

- 1. The T-REX support jaws and the universal gripper set permit clamping and machining of very complex unmachined parts.
- 2. The T-REX vice with console and support jaws for gripper studs permits extremely adaptable clamping possibilities.
- 3. Perfect clamping solutions for use in mould making.
- 4. The T-REX vice guarantees secure clamping in difficult situations and for horizontal machining.
- 5. Efficient clamping of unmachined parts with the T-REX vice on horizontal machining centres opens up new possibilities.
- 6. Fully integrated into the machines working area, the T-REX is an absolutely reliable clamping device for unmachined and pre-machined workpieces.

Support jaws for gripper studs



For mounting various studs (pointed/smooth)Front surface can be used as clamping surface

• To compensate for non-parallel clamping surfaces

Material: hardened steel

Pivot jaw:

(hardened, ground and polished)

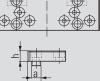
• For clamping uneven workpieces

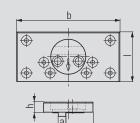
be found at www.allmatic.de

• Studs (pointed/smooth) not included

6921884005042

Order no. fixed:





Order no. movable, pivot:

6921884072042

Jaw width		125
Dimensions	а	14
in mm	b	165
	С	20
	h	16
	1	59

Jaw width		125
Dimensions	а	12
in mm	b	165
	С	43.5
	h	16
	I	79



Please order gripper studs separately.

Support jaws for universal gripper set

Dimensions of the individual items of the gripper set can

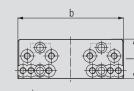


- Material: hardened steel
- For mounting various studs (pointed/smooth
- Front surface can be used as clamping surface (hardened, ground and polished)

Pivot jaw:

- For clamping uneven workpieces
- To compensate for non-parallel clamping surfaces
- Gripper set **not** included

Dimensions of the individual items of the gripper set can be found at www.allmatic.de



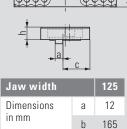
Order no. fixed:

6921884005242





125



c 35.5

h 20

I 79

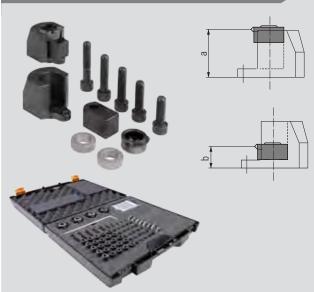
Order no. movable, pivot:

6921884072242



Please order universal gripper set separately.

Universal gripper set



Order no. 6921884027031

Jaw width		125
Dimensions in mm	а	40
	b	18

- For clamping complex unmachined parts
- The individual elements of the universal gripper set can be reworked in order to vary both gripper height and support height of the workpiece

Comprising:

- 4 x gripper studs 6921884026000
- 4 x gripper stud mounts 6921884072000
- 4 x supports 6921884028000
- 8 x shims
- Support bolts
- M10 fastening bolts in various lengths
- M6 theaded pins in various lengths
- Socket screw wrench
- Storage case

Gripper stud



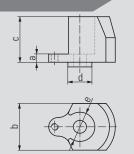
Order no. 6921884026000

Dimensions in mm	h	11

• Gripper stud for universal gripper set

Gripper stud mount





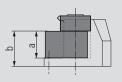
Order no. 6921884072000

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

• Mount for gripper stud 2306/001

Support

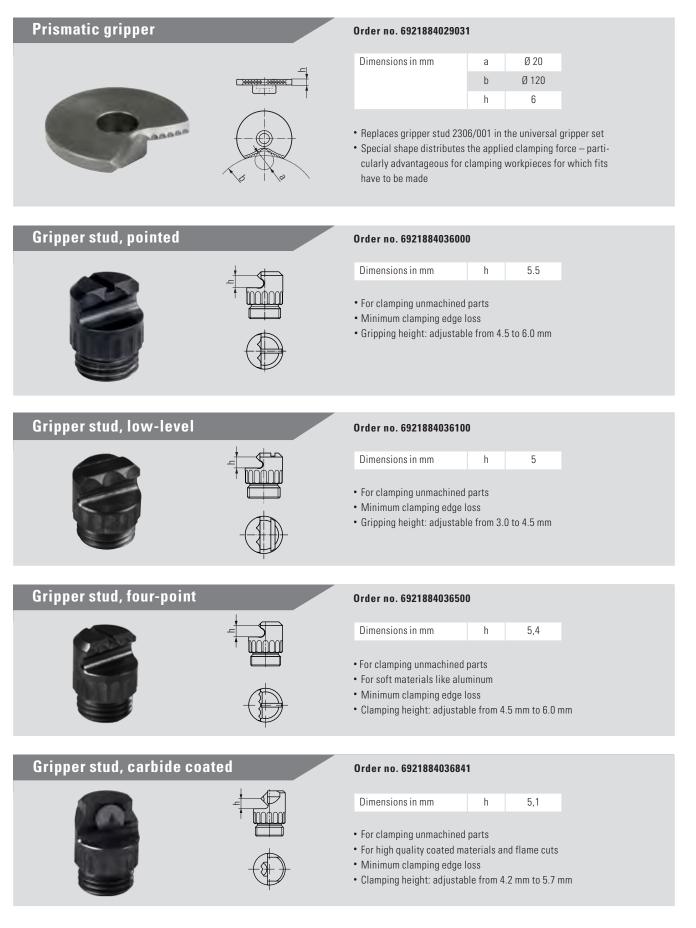




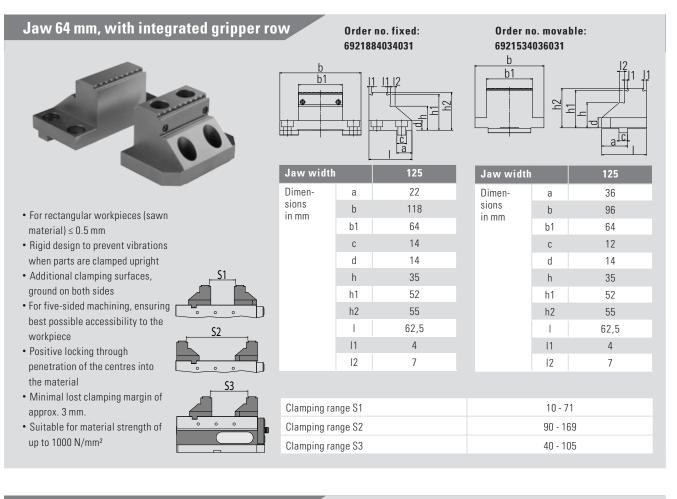
Order no. 6921884028000

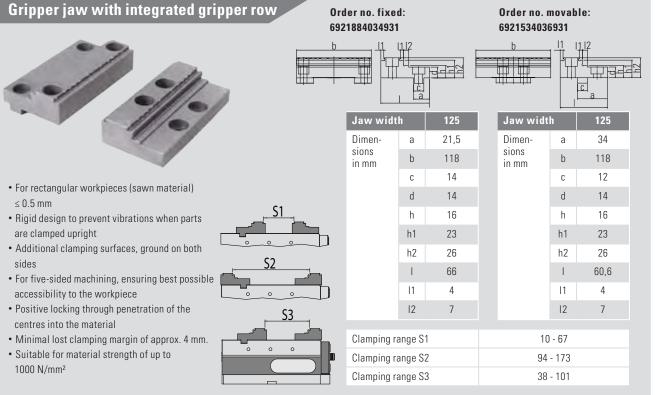
Dimensions in mm	а	22
	b	29

• Support for universal gripper set

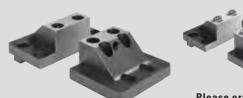


Clamping insert, smooth	Order no. 6921884037000	D		
	 Dimensions in mm With carbide coating for c pre-machined or hardened 		7 Ces	
Gripper stud, round	Order no. 692188403800	D		
	Dimensions in mm	h	4	





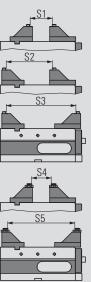
Reduced-width jaws, 64 mm



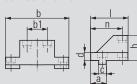


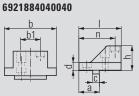
Please order gripper studs separately.

- Material: hardened steel
- Allows unhindered access to the workpiece, even with short tools
- For clamping small to mediumsized workpieces
- The clamping of unmachined parts (incl. round material) is supported via 2 adjustable gripper studs in each case (gripper studs not supplied with the jaws)
- Jaws with Click system for parallels
- Front surface can be used as clamping surface (hardened, ground and polished)
- Studs (pointed/smooth) **not** included



Order	no.	fixed	
69218	8404	40140	





Order no. movable:

	Jaw width		125		Jaw w
	Dimen-	а	28		Dimen-
1	sions in mm	b	116		sions in mm
		b1	37		
1		С	14		
		d	14		
		h	45		
þ		I	67		
]		n	56		
	Clamping range S1				
l	Clamping range S2				
1	Clamping range S3				
L	Clamping range S4				
			-		

w widt	h	125
men- ons mm	а	37.5
	b	96
	b1	37
	С	12
	d	14
	h	45
	I	79
	n	67

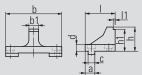
Clamping range S1	21 - 68
Clamping range S2	66 - 138
Clamping range S3	131 - 209
Clamping range S4	21 - 68
Clamping range S5	131 - 209

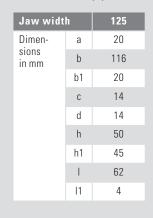
Reduced-width jaws, 20 mm



- Material: Hardened steel
- For clamping parallel pre-machined small workpieces
- Further enhanced accessibility to the workpiece thanks to slim, tall shape - also optimal for short tools
- Front surface (step) additionally carbide-coated to ensure secure clamping - holding force increased by at least a factor of 2 compared to smooth clamping surfaces

Order no. fixed: 6921884041141

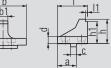




Clamping range S1

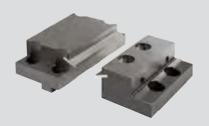


Order no. movable:



Jaw widt	h	125
Dimen-	а	39
sions in mm	b	96
	b1	20
	С	12
	d	14
	h	50
	h1	45
	Ι	62
	11	4
9		

Universal pull-down jaws



- Material: hardened steel
- Reduced-width jaws 90 mm
- Ground and polished clamping surfaces
- Pull-down with ground and polished spring leaves for machined and unmachined clamping surfaces
- 1-Click spring leaves
- High clamping accuracy for parallel and accurate angle machining

S4
S3
S2

Order no. fixed: 6921884106031 Order no. movable: 6921884102031

Jaw width		125
Dimen-	а	14
sions in mm	b	90
	С	19
	d	59
	g	8,8
	h	34

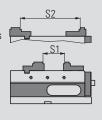
Jaw widt	h	125			
Dimen- sions in mm	а	12			
	b	90			
	С	34			
	d	61			
	е	16			
	f	21			
	g	8,8			
	h	34			

Clamping range S1	0-82
Clamping range S2	18-100
Clamping range S3	44-126
Clamping range S4	0-65
Clamping range S5	23-88

Step jaws HM - coated



- Material: hardened steel
- For clamping parallel pre-machined workpieces
- Clamping surfaces (step) additionally carbide - coated to ensure secure clamping - this increases the holding force by a factor of at least 2 compared to smooth clamping surface



 b	- <u></u>		
Jaw widt	h	125	Jaw
Abmes-	а	19	Abme
sungen in mm	b	124,4	sunge in mm
	С	14	
	d	14	
	h	26	
	h1	21	
	I	64	
	11	33	
	m	27	
Clamping ra	ange S	1	
Clamping ra	ange St	2	

Order no. fixed: 6921884006041 Order no. movable: 6921884002041

width	125

а b

С

d

h

h1

Ι

11

m

32,5

124,4

12

14

26

21

60,5

43,5 13

9	Abmes-
4,4	sungen in mm
4	
4	
26	
21	
64	
33	
27	

mping range S1	9-67
mping range S2	100 - 183

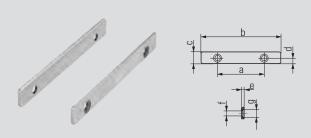
Spring leaves (pair)



Order no. 6921884103031

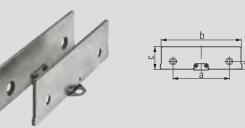
- Hardened spring leaves
- Spring leaves (spare) for the pull-down jaws (see left)

Parallels (pair)



- Suittable only for the universal pull-down jaws
- For parallel raising of workpieces
- Hardened, ground and polished parallels

Click parallels (pair)



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

Click parallels (pair)



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

Order no. 6921175029042

Jaw width		90
Dimensions in mm	а	48
	b	90
	С	29
	d	8.75
	е	3

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

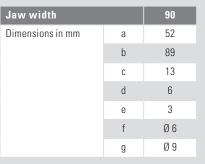
Order no. 6921175016042

Jaw width		90
Dimensions in mm	а	48
	b	90
	С	16
	d	8.75
	е	3

• Parallels with Click system

 \bullet For the high side of the jaws

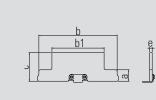
Order no. 6921475013031



- Bolt-on parallels
- For the high side of the jaws

Click parallels (pair)





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

Workpiece stop



Order no. 6921535035042

Jaw width		90
Dimensions in mm	а	14
	b	96
	b1	64
	С	35
	е	3

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

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 on either side of the vice in the designated positions
 M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: \pm 0.01)

Workpiece stop



Order no. 6921685670042

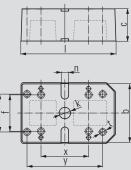
Dimensions in mm	а	34
	b	27 – 59
	С	31
	d	27
	е	19

• Can be mounted on either side of the vice in the designated positions

- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset

Console







	4	>	<u>n</u>		-	
† †	•			\$ ∉		
	¢ 9		₽ 		X	
			X Y			

Order no. 6921885009042

Dimensions in mm b 154 C 85 e 100 f 96 1 250 n 20 H7 k 0/30 H7	Jaw width		125
e 100 f 96 I 250 n 20 H7	Dimensions in mm	b	154
f 96 I 250 n 20 H7		С	85
I 250 n 20 H7		е	100
n 20 H7		f	96
		l	250
k Ø 30 H7		n	20 H7
K 0.50117		k	Ø 30 H7
t 13		t	13
x 125.5		Х	125.5
у 200		у	200

- Material: GG30
- For raising the T-REX 125 vice
- Improvement of accessibility for five-sided machining
- The mounting hole pattern of T-REX and console are not in alignment

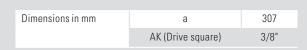
Scope of supply:

- Console incl. fixing bolt
- 2 socket screw wrenches
- 4 bolts

Torque wrench



Order no. 0651114113188



- Can be preset to 10 60 Nm
- For use on the high-pressure gripper spindles T-REX, TITAN and DUO Plus 125

Aligning and fixing set



Order no. – see table

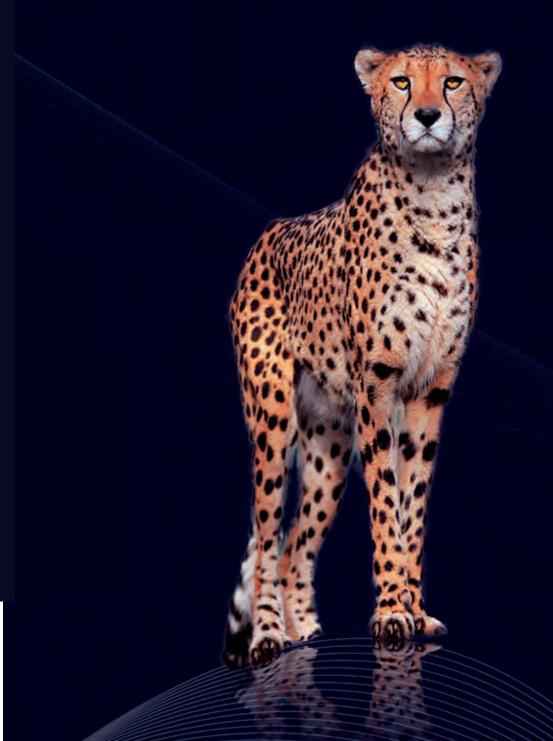
T-slot/ thread	Order no.
12/M10	6921285600031
14/M12	6921285601031
16/M14	6921285602031
18/M16	6921285603031
20/M16	6921285606031
22/M16	6921285607031

• For aligning (positioning) and fastening the vice on pallet and machine table

• Size according to T-slot or thread in the machine table

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 torgue 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

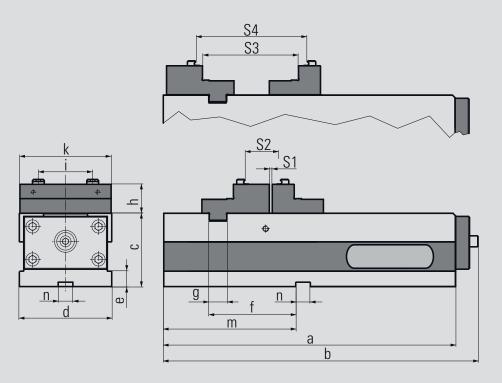
Optional:

Mounting

holes for

M10 thread for Robust base made of Hardened ground and Gripper stud, pointed for clamping, mounting HD jaws GGG 60 polished guidway raw material (1. clamping station) ALLMATAC Step jaws for gripper studs for the first and second clamping Accurate aligning slots (longitudinal/transverse) in the ground bottom surface M8 thread for for optimum alignment on the **Øutlet** for zero-point clamping workpiece stop machine table coolant and chips systems are possible. Order no. 6921888010755 Note: The movable jaw has no pendulum compensation. It is sui-Scope of supply: table for rectangular workpieces (saw cuts) / / <= 0.5 (concurrency • 1 TITAN SC 125 with step jaws for gripper studs less than or equal to 0.5 mm) or cylindrical workpieces O <= 0.5 • 4 Gripper studs (roundness less than or equal to 0.5 mm 1 set of side clamps 3 Socket screw wrench

92

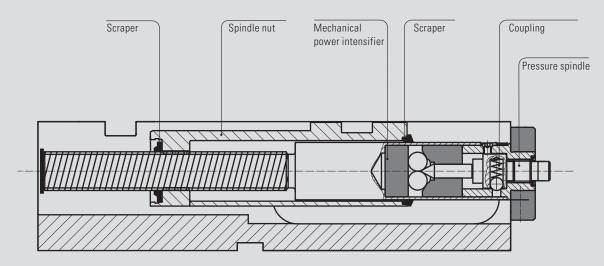


Technical data

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

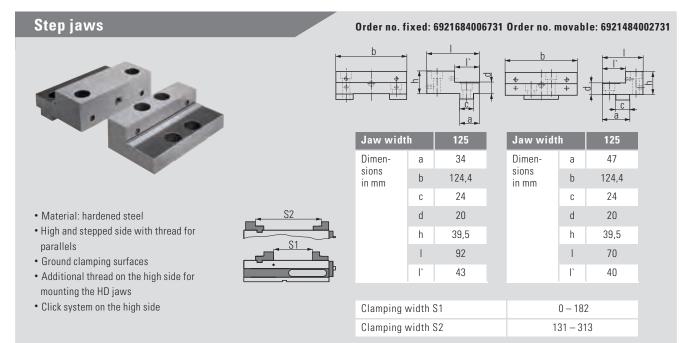


TITAN SC 125 CONVENTIONAL CLAMPING



For conventional clamping of workpieces

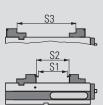
On the following pages you will find a wide range of jaws suitable for clamping pre-machined workpieces.



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



	<u> </u>		Ð			a
Jaw widt	h	125		Jaw widt	h	125
Dimen-	а	24		Dimen-	а	24
sions in mm	b	124,4		sions in mm	b	124,4
	С	34			С	46,5
	d	92			d	75
	е	20			е	20
	f	43			f	32
	g	8,8			g	8,8
	h	39,5			h	39,5
Clamping	width	C 1			0 15	n

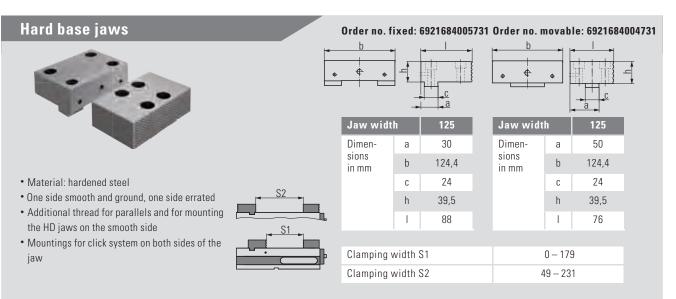
Clamping width S1	0 - 159
Clamping width S2	0 - 176
Clamping width S3	124 - 305

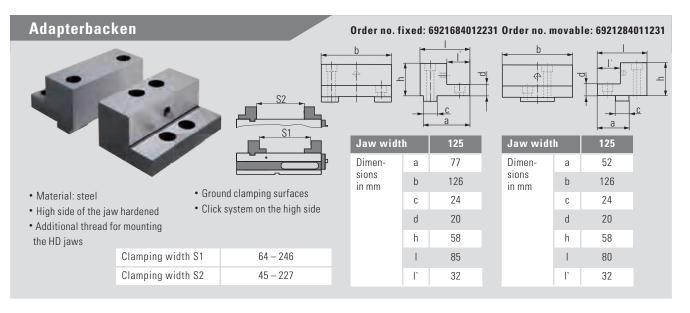
Spring leaves (pair)

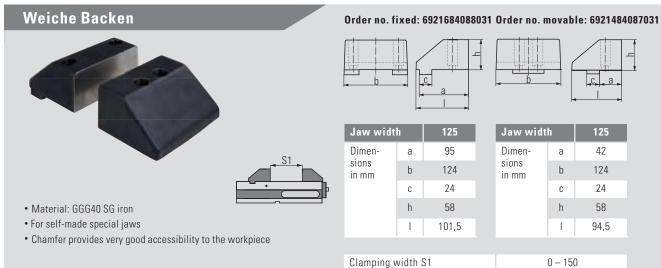
Order no. 6921684103031

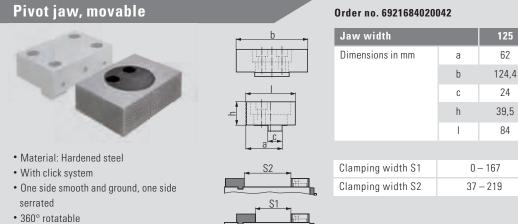
- Hardened spring leaves
- Spring leaves (replacement) for the pull-down jaws Order no.: 6921684106031 and 6921684102031

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





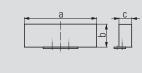




- Picture with hard base jaw (see order no.: 6921684005731)

Soft jaw

Order no. 6921684023042

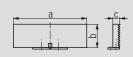


Jaw width		125
Dimensions in mm	а	125
	b	39,8
	С	22

- 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





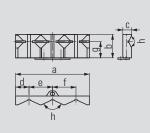
Order no. 6921684032040

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)





- 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 s

Click parallels (pair)

Order no. 6921185035	042	
Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0,01	35
	d	12,25
	е	3

• Parallels with click system or screw-on

• For the high side of the jaws

Click parallels (pair)

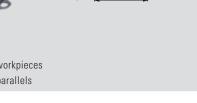
• For parallel raising of workpieces

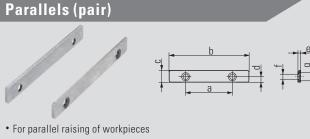
• Hardened and ground parallels



• For parallel raising of workpieces

• Hardened and ground parallels





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

Order no. 6921185020042

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

• Parallels with click system or screw-on

• For the high side of the jaws

Order no. 6921485015031

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



125,6

39,8

15

22,8

40

40 27,5

130°

е f

g

h

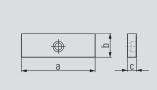
Order no. 6921684024042

Jaw width

system	
	Orde
	low

Smooth jaws (pair)





Order no. 6921024022031

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

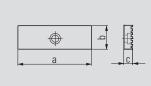
Material: hardened steel

• 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

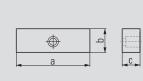
• Standard jaws with small surface area

• 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

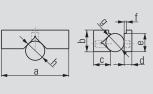
• Jaws of case-hardening steel

• For self-made special jaws

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

Prismatic jaws (set)





Order no. 6921024024031

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

• Material: hardened steel

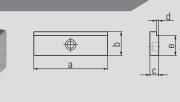
• For horizontal and vertical clamping of round and flat workpieces

• Please order fastening bolts separately (Order no.: 6921011023000)

99







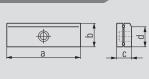
Order no. 6921024025031			
Jaw width		125	
Dimensions in mm	а	125	
	b	40	
	С	15	
	d	3	

35

е

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





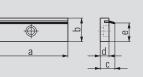
Order no. 6921024005131

01001110.0321024003131		
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 a 125 b 40 20 c 20 d 12 e 33 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

TITAN SC 125 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

ALLMATIC/

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**

You can find the clamping ranges of the other TITAN SC 125 jaws for conventional clamping on the following pages of accessories

Support jaws with gripper studs



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





max. clamping range max. clamping width

322 mm at least 160 mm or larger



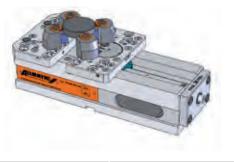
max. clamping range

Ø 330 mm



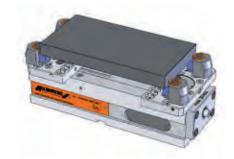


min. clamping range	25 mm
min. clamping width	88 mm



min. clamping range

Ø 70 mm



max. clamping range max. clamping width

312 mm at least 165 mm or larger





ALLMATIC GRIPP – mechanical / version TITAN SC 125 (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)

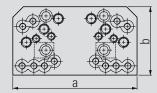
Pivot jaw:

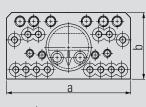
- For clamping uneven workpieces
- To compensate for non-parallel clamping surfaces
- Supplied **without** wedge elements, gripper set and gripper studs (pointed/smooth)

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



Order no. movable, pivoting: 6921734072842

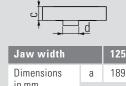








d 24



in mm	b	97
	С	20
	d	24



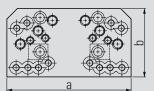
Please order universal gripper set or gripper studs separately

Support jaws



Order no. fixed: 6921734005842

Order no. movable, rigid: 6921884004842







Jaw wi Dimensi

in mm

<u>d</u>			
idth		125	
ons	а	189	

b 104

С

d 24

20

law width		125
Dimensions	а	97
n mm	b	73
	С	20
	d	24

- 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



Please order universal gripper set or gripper studs separately

Γ

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

Order no. fixed:

6921884051031

a Jaw width

Dimen-

sions

in mm

Step jaws for gripper studs

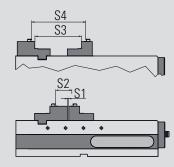


- Material: Hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws (Typ 125 200)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system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



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

Order no. movable :

6921884050031

Jaw width

а

b

b1

С

d

h

l

ľ

Dimen-

sions

in mm

125

47

124.4

74

24

20

39,5

70

40

125

34

124.4

74

24

20

39,5

92

43

а

b

b1

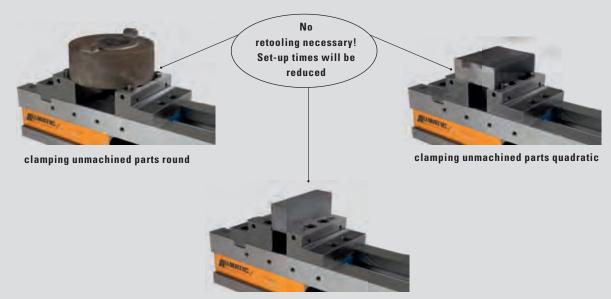
С

d

h

Ι

ľ



clamping pre-machined workpieces

Order no. fixed:

Jaw width

а

b

b1

b2

С

d

h

L

n

Dimen-

sions

in mm

6921834040140

Reduced-width jaws for gripper studs

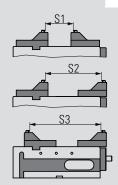


- Material: hardened steel
- Allows unhindered access to the workpiece, even with short tools
- For clamping small to medium-sized workpieces
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on the high side

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)



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

125

76

116

64

37

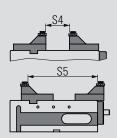
24

20

45

102

89



Order no. movable:

6921834040040

Jaw width

а

b

b1

b2

С

d

h

1

n

47

96

64

37

24

20

45

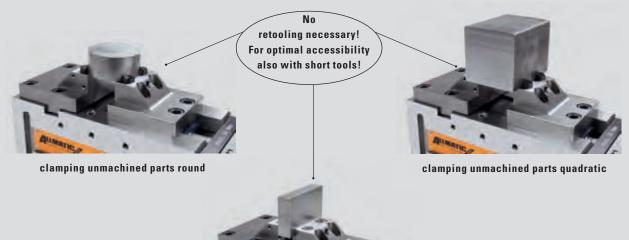
92

80

Dimen-

sions

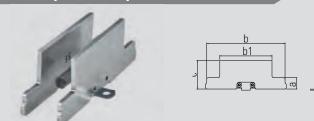
in mm





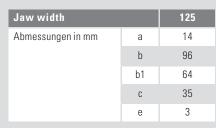
clamping pre-machined workpieces

Click parallels (pair)



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

Order no. 6921535035042



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

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

h

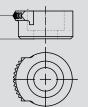
11

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





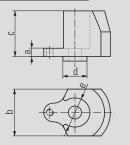
Order no. 6921884026000

Dimensions in mm

• 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 22 а b 29 • Support for universal gripper set **Prismatic gripper** Order no. 6921884029031 Dimensions in mm а Ø 20 Ø 120 b 6 h • 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 5,5 h • 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 h • 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 h • 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

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

TITAN SC 125

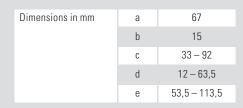
Gripper stud, carbide coated	Order no. 6921884036841
	Dimensions in mmh5,1• For clamping unmachined parts• For quenched and tempered materials and flame-cut materials• Least possible lost clamping margin, clamping height approx. 4.2 mm to 5.7 mm
Clamping insert, smooth	Order no. 6921884037000
	Dimensions in mmh7• With carbide coating for clamping pre-machined or hardened workpieces
Gripper stud, round	Order no. 6921884038000
	Dimensions in mmh4• 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)

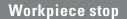
Workpiece stop

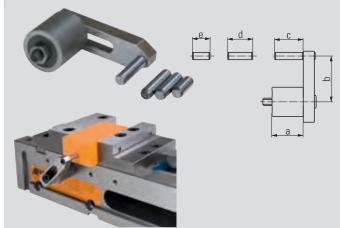






- Can be mounted at the positions provided on both sides of the vice
- Fastening thread M8
- Position of the third workpiece access can be preset and clamped. Workpiece stop can be swivelled away once the workpiece has been clamped.
- This allows the stop side of workpiece to be machined as well (repeating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





Order no. 6921685670042

а	34
b	27 – 59
С	31
d	27
е	19
	b c d

- 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

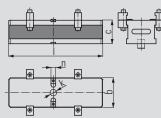
Console XL





- 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

Order no. 6921885010042



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

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

Torque wrench

Order no. 0651114113188

Dimensions in mm	а	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
- Size according to T-slot or thread in the machine table

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

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 GRIPP – MECHANICAL VERSION TITAN 2 K/M/L

Scope of application:

Accurate slots for fastening

the range of clamping jaws

- 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.

Inductively hardened

and polished guideway

Product features:

Rigid spindle nut

- High versatility the modular clamping system combines practically all the possibilities of our tried-and-tested models
- The TITAN 2 M is ground an polisched 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 unfavour able clamping arrangement on the tool

Robust base made of GGG 60

Accurate spindle nut quidance

> 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.

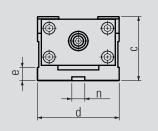
Order no. jaw width 125: TITAN 2 K: 6921738000055 TITAN 2 M: 6921838000755 TITAN 2 L: 6921838000055

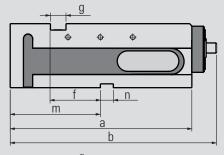
Scope of supply:

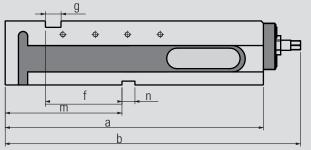
- 1 high-pressure vice without jaws
- 1 set of side clamps
- 3 socket screw wrenches
- Hexagonal insert for torque wrench 3/8"

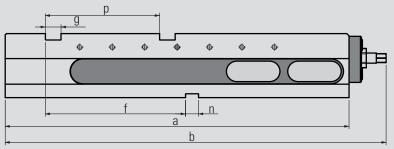
Please order the clamping jaws separately.

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



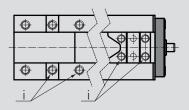






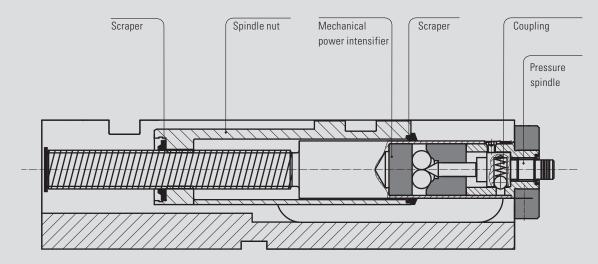
Technical data

TITAN 2		К	М	L
Jaw width			125	
Dimensions /	а	280	398	530
tolerances in mm	b	318	455	587
	С	100	100	100
	d	126	126	126
	е	21	21	21
	f	77	118	216
	g	24	24	24
	m	139	180	-
	i	M 12	M12	M12
	n	20	20	20
	р	-	-	176

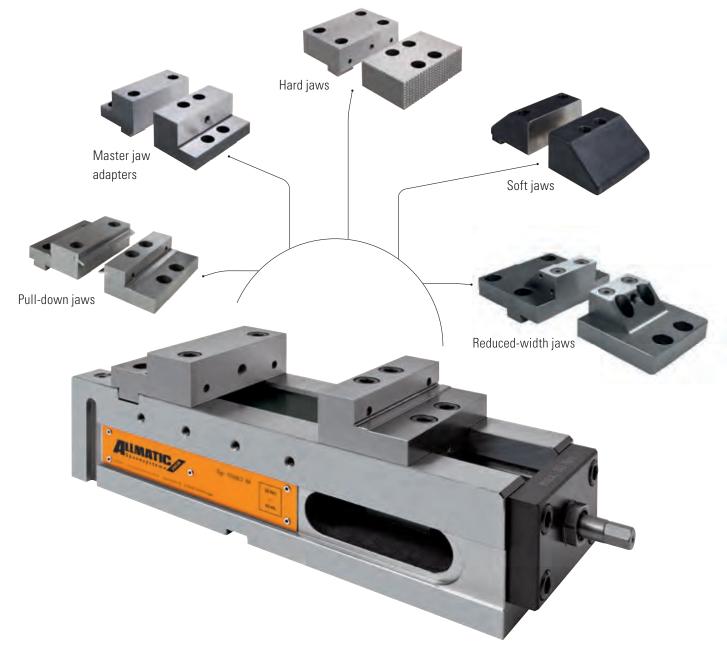


Jaw width	125
Max. torque in Nm	30
Max. clamping force in kN	40
Weight in kg TITAN 2 K	22
Weight in kg TITAN 2 M	30
Weight in kg TITAN 2 L	38

Spindle cross-section

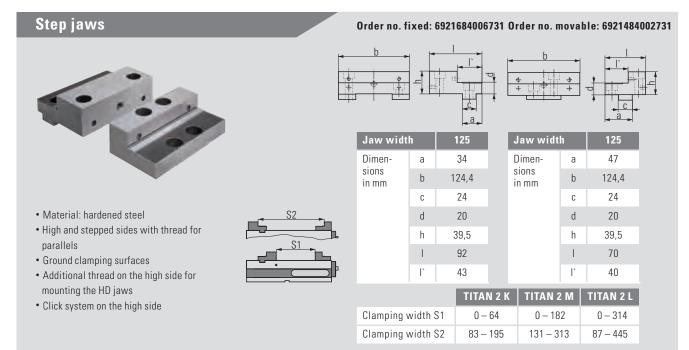


TITAN 2 K/M/L CONVENTIONAL CLAMPING



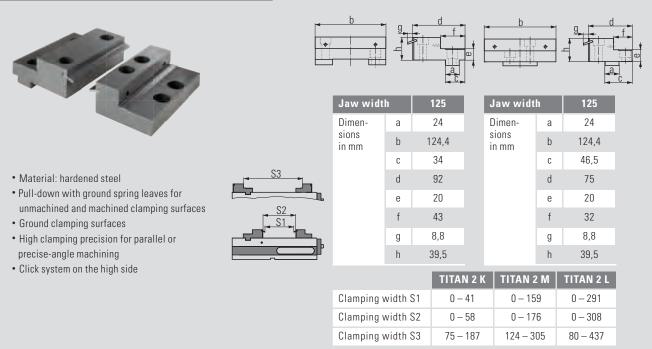
For conventional clamping of workpieces

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



Pull-down jaws





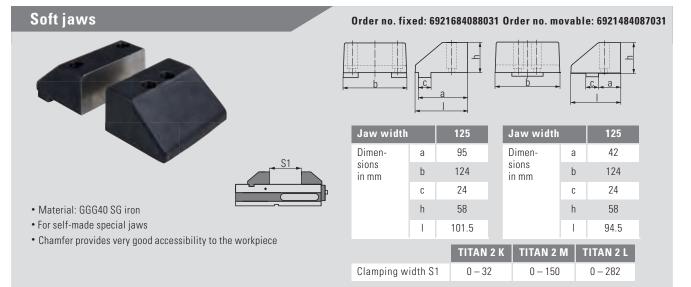
Spring leaves (pair)

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



Hard base jaws Order no. fixed: 6921684005731 Order no. movable: 6921684004731 а Jaw width 125 Jaw width 125 Dimen-30 Dimen-50 а а sions sions b 124.4 b 124.4 in mm in mm Material: hardened steel 24 24 С С • One side smooth and ground, one side serrated h 39.5 h 39.5 • Additional thread for parallels and for mounting Ι 88 76 the HD jaws on the smooth side · Mountings for click system on both sides of the TITAN 2 K TITAN 2 M TITAN 2 L jaw Clamping width S1 0 - 610 - 1790 - 311Clamping width S2 0-113 49-231 5 - 363

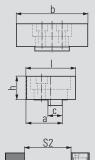
Master jaw adapters Order no. fixed: 6921684012231 Order no. movable: 6921284011231 C а Jaw width 125 Jaw width 125 Dimen-77 Dimen-52 а а sions sions b 126 b 126 in mm in mm • Material: steel • Ground clamping surfaces 24 24 С С • High side of the jaw hardened • Click system on the high side d 20 d 20 · Additional thread for mounting the HD jaws TITAN 2 K h TITAN 2 M TITAN 2 L 58 h 58 85 80 Clamping width S1 64 - 128 64 - 246 64 - 378 T I Clamping width S2 0-359 ľ 0 - 10945 - 227 32 Ľ 32



Pivot jaw, movable



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





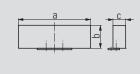
Order no. 6921684020042

Jaw width		125
Dimensions in mm	а	62
	b	124.4
	С	24
	h	39.5
	I	84

	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

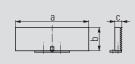


Jaw width	125	
Dimensions in mm	а	125
	b	39,8
	С	22

- 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



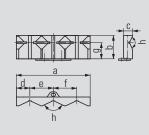


Jaw width		125
Dimensions in mm	а	125,6
	b	40,1
	С	12

- 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)





- 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

Order no. 6921185035042

Order no. 6921684024042

125,6

39,8

15

22,8

40

40 27,5

130°

а

b

С

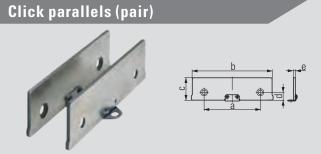
d

е f

g

h

Jaw width Dimensions in mm



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

• Parallels with click system or screw-on

• For the high side of the jaws

Click parallels (pair)

• For parallel raising of workpieces • Hardened and ground parallels



• For parallel raising of workpieces

• Hardened and ground parallels

Parallels (pair) • For parallel raising of workpieces

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

Order no. 6921185020042

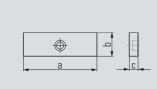
Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0,01	20
	d	12,25
	е	3

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

Jaw width		125
Dimensions in mm	а	88
	b	124
	С	15
	d	6
	е	3
	f	Ø6
	g	Ø9

Smooth jaws (pair)





Order no. 6921024022031

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

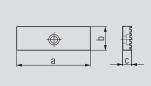
Material: hardened steel

• 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

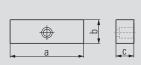
• To increase the specific contact pressure

Please order fastening bolts separately

(order no. 6921011023000)

Soft jaws (pair)





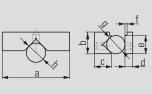
Order no. 6921024023031

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)



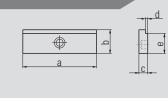


Jaw width		125
Dimensions in mm	а	125
	b	40
	С	35
	d	15
	е	35
	f	3
	g	Ø 12 – 28
	h	Ø 18 – 55

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



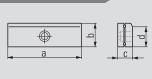




Order no. 6921024025031					
	Jaw width		125		
	Dimensions in mm	а	125		
		b	40		
		С	15		
		d	3		
		е	35		

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





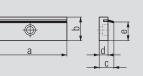
Order no. 6921024005131

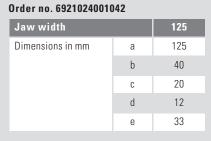
01001110.0321024003101			
Jaw width		125	
Dimensions in mm	а	125	
	b	40	
	С	26	
	d	35	

- 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)







• 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 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

UMATIC

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

1 million		TITAN 2 – S	uppor	t jaws	with grippe	r studs	
10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Carino .	Geometry	Rec	tangula	r workpiece	Round w	orkpiece
				ng range mm)	Clamping width (in mm)		ng range ^{mm)}
	5 Contraction	Titan series	min.	max.	min.	min.	max.
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TITAN 2 K	29	204	70	dia. 70	dia. 240
000	C -	TITAN 2 M	29	322	70	dia. 70	dia. 330
0	1	TITAN 2 L	29	454	70	dia. 70	dia. 330
	Alana (TITAN 2 K with extension	-	419	70	-	dia. 330
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TITAN 2 M with extension	-	501	70	-	dia. 330
	1 miles	TITAN 2 L with extension	-	633	70	-	dia. 330
	and the						
		TITAN 2 L with 2 nd vice base	-	1039	70	-	-
C C C C C C C C C C C C C C C C C C C		A A A A A A A A A A A A A A A A A A A					

Support jaws with universal gripper set

	TITAN 2 – Supp	ort jav	w with	n universal g	jripper s	et
	Geometry	S	quare w	vorkpiece	Round w	orkpiece
			n g range mm)	Clamping width (in mm)	Clampir (in r	ig range nm)
	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
000	TITAN 2 L	25	444	88	dia. 70	dia. 330
0						
and the second se	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	-	-
	a a fai					

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)

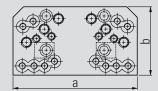
Pivot jaw:

- · 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. movable, pivoting: 6921734072842



а

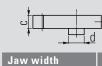
b 104

С

d

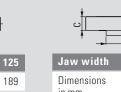
20

24



Dimensions

in mm



ΘÐ





Please order universal gripper set or gripper studs separately

Support jaws



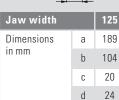
- Material: hardened steel
- For mounting various studs (pointed/smooth) or a universal gripper set
- For three-point clamping
- Front surface can be used as clamping surface (hardened and ground)
- · Supplied without studs (pointed/smooth) or gripper set

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

Order no. fixed: 6921734005842

а





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

Order no. movable, rigid:

6921884004842

((((\odot

00



Please order universal gripper set or gripper studs separately

Step jaws for gripper studs

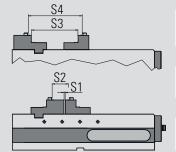


- Material: Hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws (Typ 125 200)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system 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 $0 \le 0.5$ (roundness less than or equal to 0.5 mm)



Please order gripper studs separately



Order no. fixed:	Order no. movable :
6921884051031	6921884050031

47 124,4

74

24

20

39,5

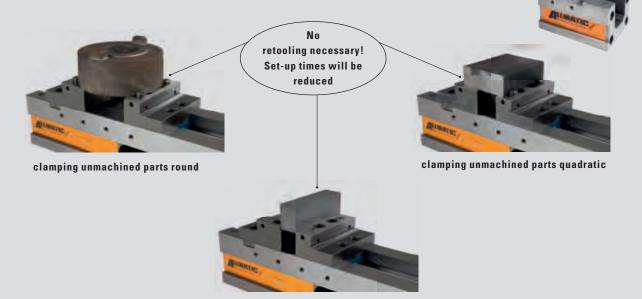
70

40

Jaw widt	h	125	Jaw widt	h
Dimen-	а	34	Dimen-	а
sions in mm	b	124,4	sions in mm	b
	b1	74		b1
	С	24		С
	d	20		d
	h	39,5		h
	I	92		I
	Ľ	43		ſ

	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 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 $0 \le 0.5$ (roundness less than or equal to 0.5 mm)

Jaw width

Please order gripper studs separately

Order no. fixed:

6921834040140

692183404004	0

Order no. movable:

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

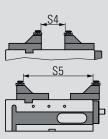
Jaw widt	h	125
Dimen-	а	47
sions in mm	b	96
	b1	64
	b2	37
	С	24
	d	20
	h	45
	I	92
	n	80

S1	
È	Clamping width S1
	S1 with enlargeme
S2	Clamping width S2
	Clamping width S3
S3	S3 with enlargem
	Clamping width S4
	Clamping width S5

	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









clamping pre-machined workpieces

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

11

h

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

• Gripper stud for universal gripper set

• Socket screw wrench

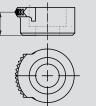
Order no. 6921884026000

Dimensions in mm

• Storage case

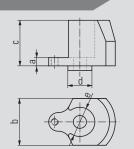
Gripper stud





Gripper stud mount





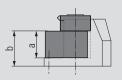
Order no. 6921884027000

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

• Mounting for gripper stud 6921884026000

Support

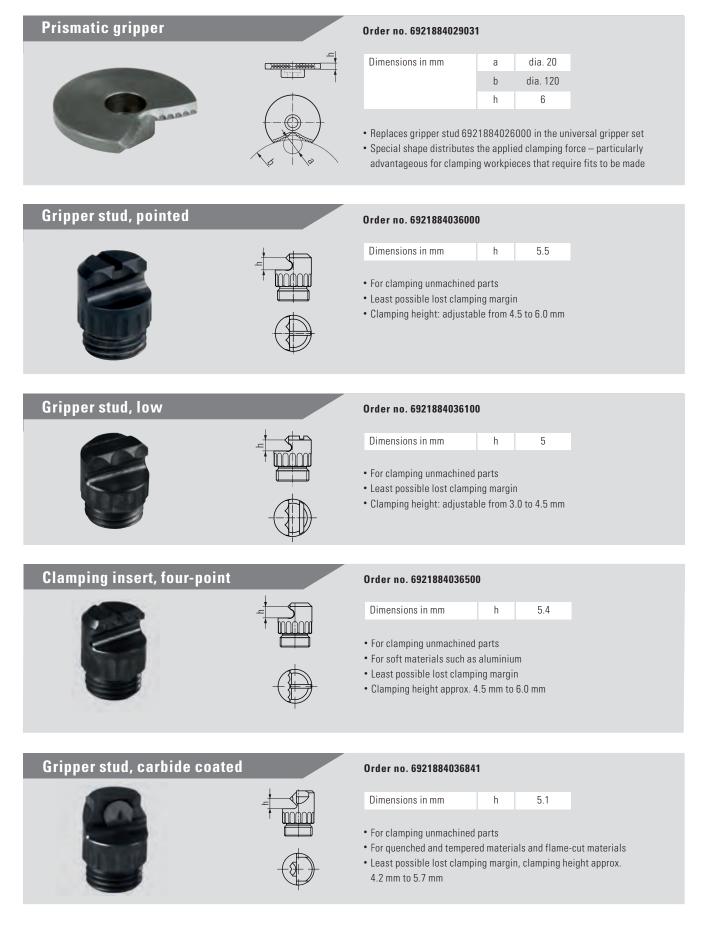




Order no. 6921884028000

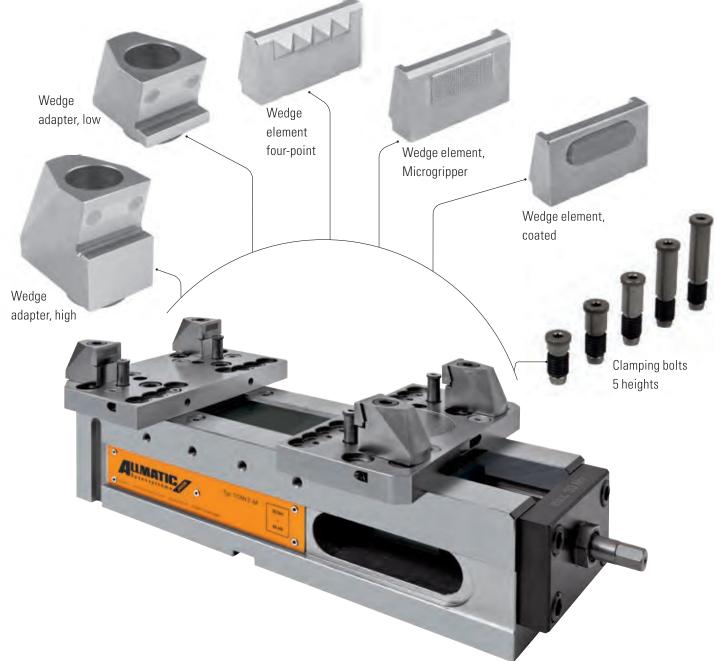
Dimensions in mm	а	22
	b	29

• Support for universal gripper set



Clamping insert, smooth	Order no. 6921884037000
	Dimensions in mmh7• 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:

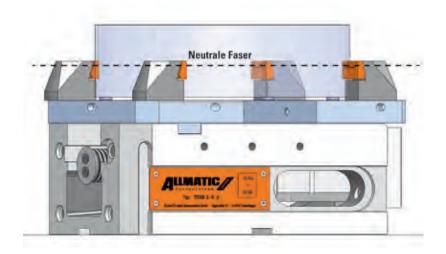
- Support jaws are used to mount various wedge adapters and clamping bolts
- Wedge adapters can be bolted in various positions on the grid plate
- The various wedge elements can be changed quickly on the wedge adapters
- Additional pivot function of the support jaws compensates for non-parallel clamping 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 - S	Suppo	rt jaw	s with pull-o	lown	
	Geometry Square w		orkpiece	Round w	orkpiece	
	Clamping range (in mm)		Clamping range (in mm)	Clampir (in r	n g range nm)	
	Titan series	min.	max.	min.	min.	max.
	TITAN 2 K	19	188	96	Ø 65	Ø 226
1 5° 4° 8	TITAN 2 M	19	306	96	Ø 65	Ø 330
0 60	TITAN 2 L	19	438	96	Ø 65	Ø 330
0						
	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
1200 × 1200						
	TITAN 2 L with 2nd vice base	-	972	96	-	-
	Ska.					
	10					
and the second s	da.					

Clamping in the neutral filament



Support jaws



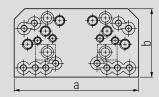
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs with thread (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

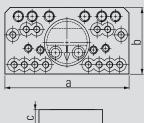
Pivot jaw:

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

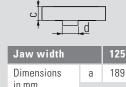
You will find dimensions of the individual gripper items and the gripper studs at www.allmatic.de

Order no. fixed: 6921734005842 Order no. movable, pivoting: 6921734072842





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



111 11111	b	97	
	С	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	а	4
	b	24
	С	21.7
	d	dia. 20
	е	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

Pull-down set case, high



Order no. 6921734027131

Jaw width		125
Dimensions in mm	а	18
	b	24
	С	35.7
	d	dia. 20
	е	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

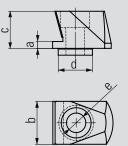
 The direct contact to the clamping bolts largely avoids vibrations in the workpiece

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



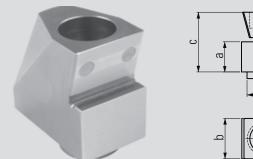


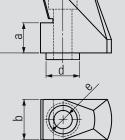
Order no. 6921834027041

Dimensions in mm	а	4
	b	24
	С	21.7
	d	dia. 20
	е	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	а	18
	b	24
	С	35.7
	d	dia.20
	е	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)

uor 110. 032103402/041

Fastening bolt, low



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

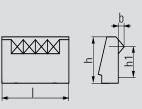
Fastening bolt, high

Order no. 8006101045050

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

Wedge element, four-point



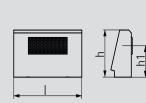


Order no. 6921834025040				
Dimensions in mm	b	2.4		
	h	16.5		
	h1	13		
		27.8		

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

Wedge element, Microgripper





Order no. 6921834025140

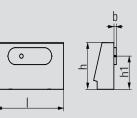
Dimensions in mm	h	16.5		
	h1	11		
	I	27.8		
 Wedge elements for various shapes, surface conditions and materials 				

• Quick to exchange

• Minimum clamping depth 8 mm

Wedge element, coated



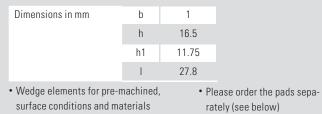


Blister-pads, diamond-coated





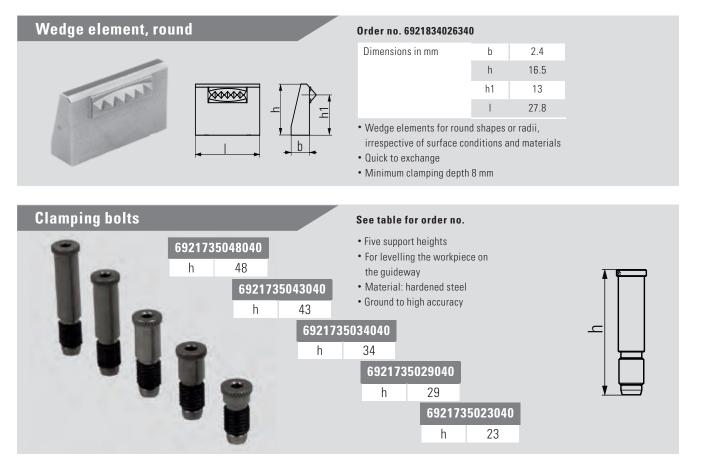
Order no. 6921834025240



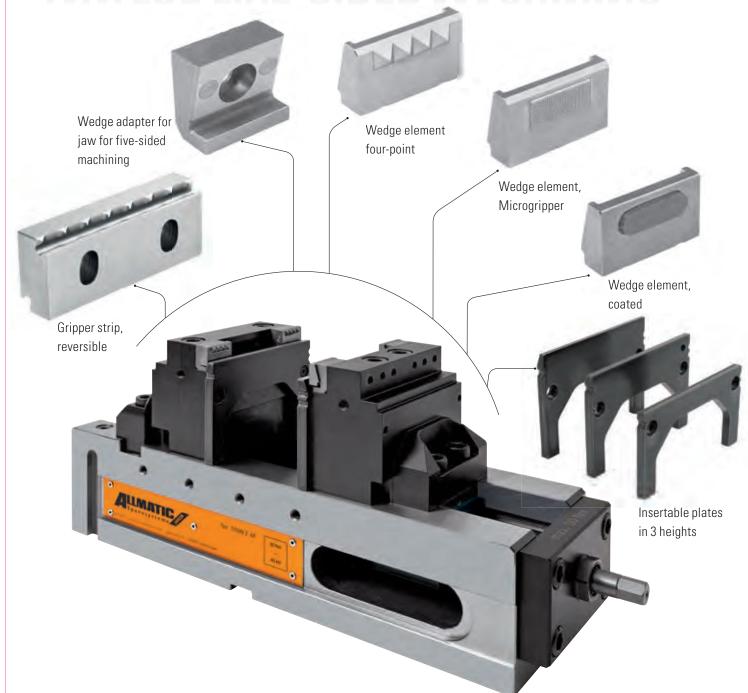
• Quick to exchange

• Minimum clamping depth 8 mm

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



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



Five-sided machining plus pull-down

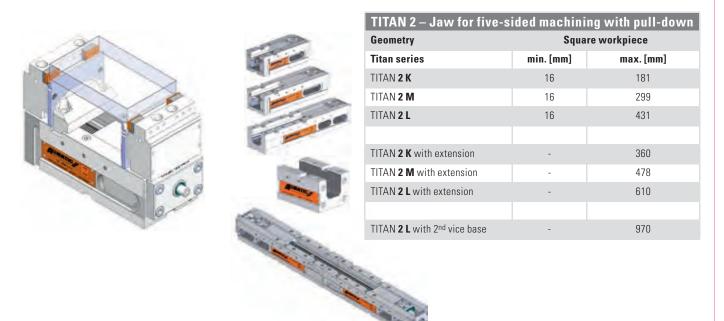
The five-sided machining jaw with pull-down can clamp workpieces up to a height of 90 mm onto the guideway of the TITAN 2. The insertable plates are pressed onto the guideway using the pull-down effect, thus establishing an accurate parallel workpiece position. This largely avoids any vibration of the 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:

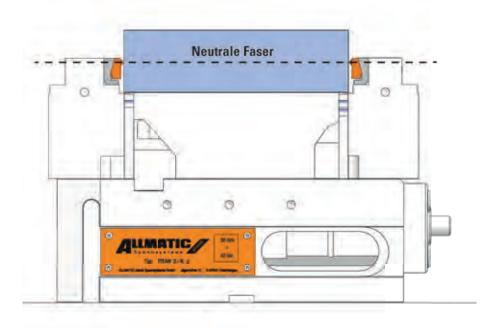
- Five-sided machining jaws are used to mount the wedge adapters and the insertable plates
- Wedge adapters can be bolted in various positions on the grid plate
- The various wedge elements can be quickly changed on the wedge adapters
- Suitable for five-sided machining with short tools
- Accuracy through 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

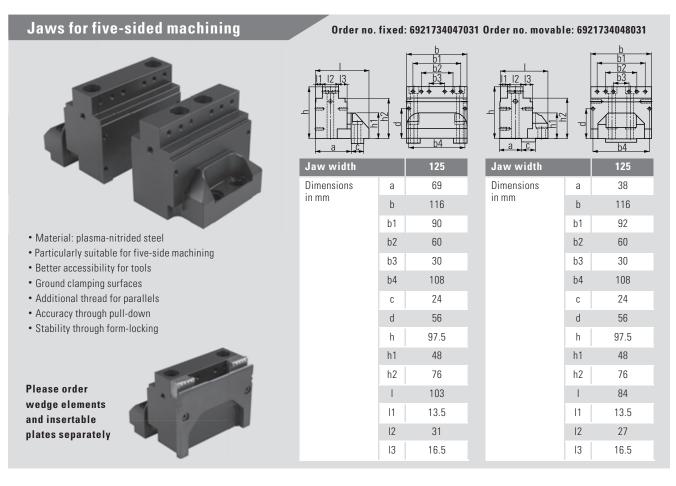
90-mm jaw for five-sided machining with pull-down



Clamping in the neutral filament

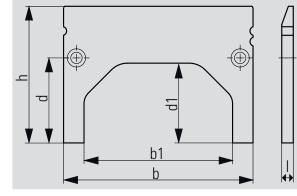


ALLMATIC GRIPP - mechanical / version TITAN 2 (five-sided machining jaws)



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
	I	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

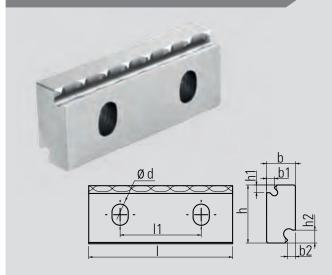
Pull-down set consisting of:

- 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

140

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

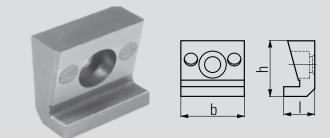
Gripper strip, reversible



Dimensions in mm b 11 b1 3 b2 3 d 6.2 h 22.5 h1 3 5 h2 55 1 11 311

- 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

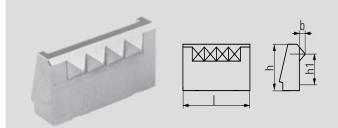


Order no. 6921834027540

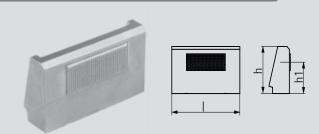
Dimensions in mm	b	24.15
	h	21.45
	I	11.8

- 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



Wedge element, Microgripper



Order no. 6921834025040

Dimensions in mm	b	2.4
	h	16.5
	h1	13
	1	27.8

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

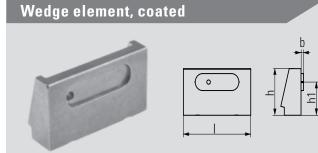
Order no. 6921834025140

П	16.5
h1	11
Ι	27.8
	h1 I

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

142 T-IN-3 K-M-T

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



Order no. 6921834025240

Dimensions in mm	b	1
	h	16.5
	h1	11.75
	I	27.8

• Wedge elements for pre-machined, surface conditions and materials

- Please order the pads separately (see below)
- Quick to exchange

• Minimum clamping depth 8 mm

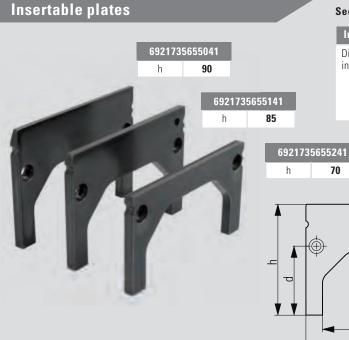
Pads, diamond-coated, in blister pack





Order no. 6921834028141

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



See table for order nos.

Insertable plat	e height	90	85	70
Dimensions	b		125	
in mm	b1		98	
	d		56	
	d1		53	
	I		7.6	

 \oplus

- 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

È

b1

b

• 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



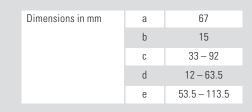
ALLMATIC GRIPP – mechanical / version TITAN 2 (accessories)

Workpiece stop





Order no. 6921285650144



- $\ensuremath{\,^\circ}$ Can be mounted at the positions provided on both sides of the vice
- Fastening thread M8

Order no. 6921685670042

- 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





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

Order no. 6921685008055

Jaw width		125
Dimensions	а	176
in mm	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

Clamping width enlargement





ALLMATIC GRIPP – mechanical / version TITAN 2 (accessories)

Console TITAN 2 K	{
-------------------	---

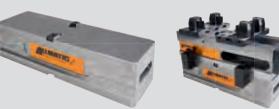
Order no. 692173501	1042
	∙∣ r• ^
↓↓↓	

		- 1	
Jaw width			125
Dimensions in mm	t)	126
	C	;	100
	e	;	100
	f	:	96
	ł	ı	21
	I		280
	n	n	139
	r	ı	20 H7
)	(126,2
	У	/	200

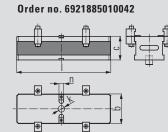
• Material: GG30

- 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

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



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

Torque wrench



Order no. 0651114113188

Dimensions in mm	а	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

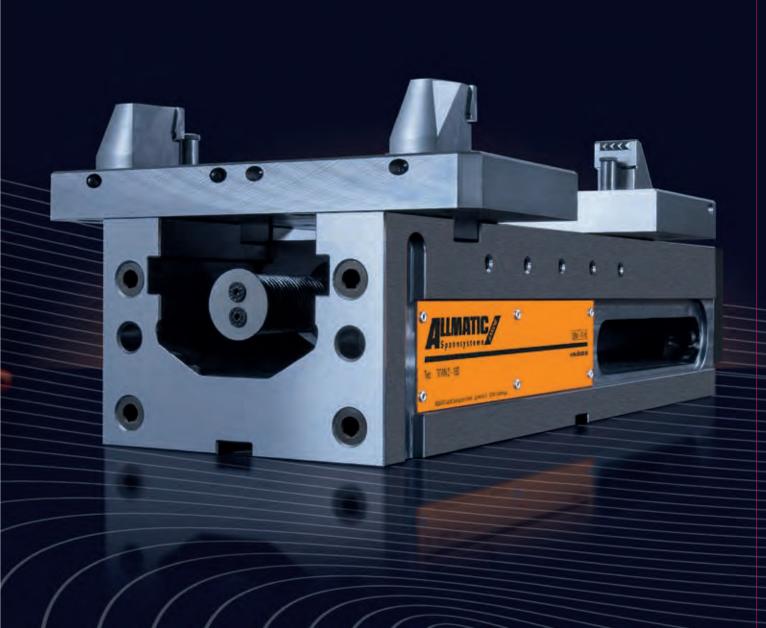
• For aligning (positioning) and fastening the vice on the pallet and machine table

• Size according to T-slot or thread in the machine table

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.

CALIFORNIA CONTRACTOR



ALLMATIC GRIPP – MECHANICAL VERSION TITAN 2-160

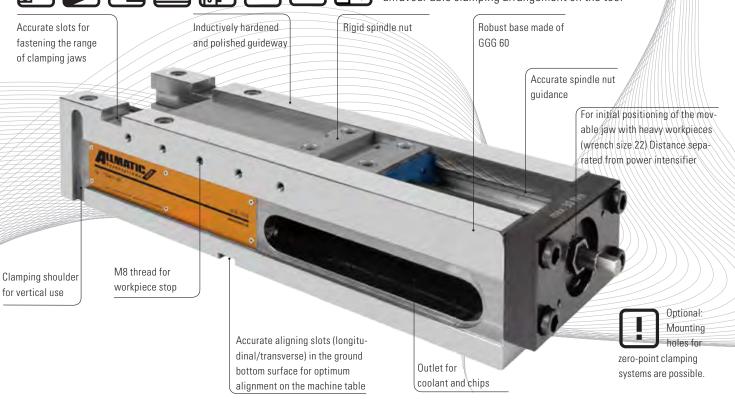
Scope of application:

- 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/mm²

. .

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 unfavour able clamping arrangement on the tool



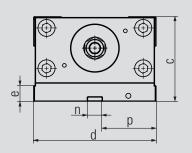
Order no. jaw width 160: 6921848000055

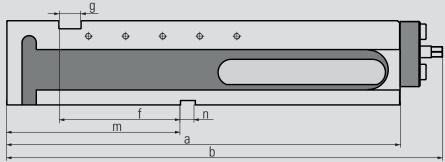
Scope of supply:

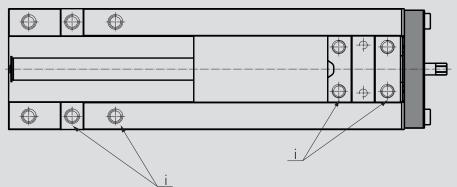
- 1 high-pressure vice without jaws
- 4 side clamps
- 5 socket screw wrenches

Please order the clamping jaws separately.

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





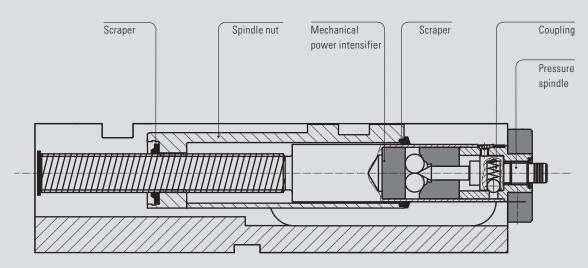


Technical data

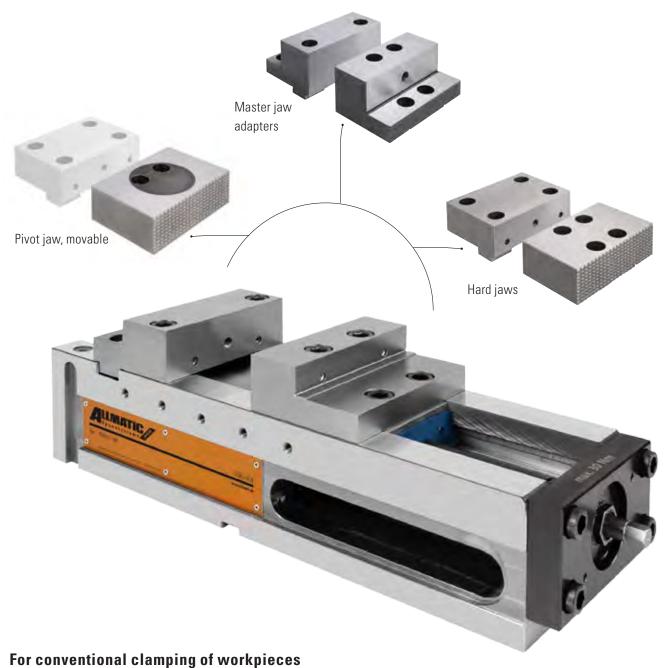
Jaw width		160
Dimensions /	а	530
tolerances in mm	b	587
	С	115
	d	164
	е	21
	f	164
	g	30
	m	234
	i	M 16
	n	20
	р	72

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

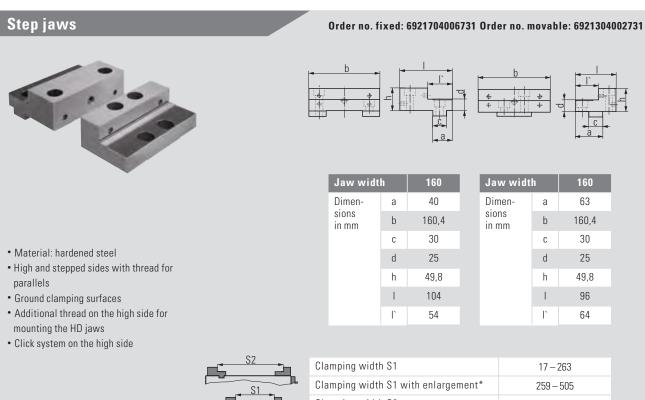
Spindle cross-section



TITAN 2-160 CONVENTIONAL CLAMPING



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



S2	
S1 _	

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

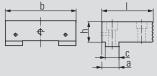
Order no. fixed: 6921704005731 Order no. movable: 6921704004731

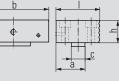
*Clamping range enlargement: 6921705008055

Hard base jaws



- 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 widt	h	160
Dimen-	а	40
sions in mm	b	160,4
	С	30
	h	49,8
	I	104

Jaw widt	h	160
Dimen- sions in mm	а	65
	b	160,4
	С	30
	h	49,8
	Ι	100

S2
S1
• • • • • • • • • • • • • • • • • • •

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

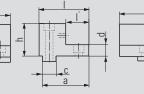
151

Master jaw adapters

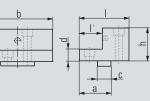


- Material: steel
- High side of the jaw hardened
- Additional thread for mounting the HD jaws
- Ground clamping surfaces
- Click system on the high side

b		
	-	

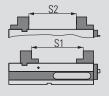


Order no. fixed: 6921704012231 Order no. movable: 6921304011231



Jaw widt	h	160
Dimen-	а	89
sions in mm	b	164
	С	30
	d	24
	h	73
	Ι	100
	ľ	34

Jaw widt	h	160
Dimen-	а	65
sions in mm	b	164
	С	30
	d	24
	h	73
	I	100
	ſ	34
	00	224



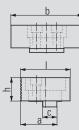
Clamping width S1	88-334	
Clamping width S1 with enlargement*	330 - 576	
Clamping width S2	68-314	
Clamping width S2 with enlargement*	210-556	
*Clamping range enlargement: 6921705008055		

ny

Pivot jaw, movable

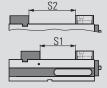


Order no. 6921704020042



- 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)

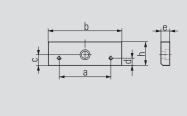
Jaw width		160
Dimensions in mm	а	86
	b	160,4
	С	30
	h	49,8
	I	118



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	

Compensation jaw





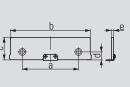
Order no. 6921704022031

Jaw width		160
Dimensions in mm	а	88
	b	160,4
	С	20
	d	12,25
	е	18
	h	49,8

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

Click parallels (pair)





0	rd	er	no.	6921	2050	44042
v		•••		0021	2000	11012

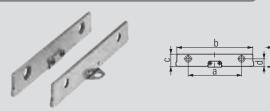
Jaw width		160
Dimensions in mm	а	88
	b	160
	c -0,01	44
	d	12,25
	е	3

• Parallels with click system or screw-on

• For the high side of the jaws

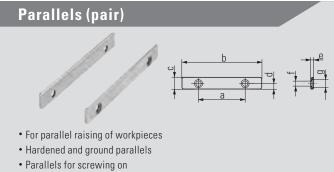
• For parallel raising of workpieces • Hardened and ground parallels

Click parallels (pair)



• For parallel raising of workpieces

• Hardened and ground parallels



• For the stepped side of the jaws

Order no. 6921205025042

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

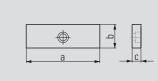
- Parallels with click system or screw-on
- For the high side of the jaws

Order no. 6921305019031

	160
а	88
b	160
С	19
d	6
е	3
f	Ø 6
g	Ø 9
	b c d e f

Smooth jaws (pair)





• For parts with delicate clamping surfaces

Serrated jaws (pair) \oplus

Order no. 6921034022031

Jaw width		160
Dimensions in mm	а	160
	b	50
	С	20

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

Order no. 6921031005031

Jaw width		160
Dimensions in mm	а	160
	b	50
	С	20

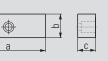
• To increase the specific contact pressure

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

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

Soft jaws (pair)





Order no. 6921034023031

Jaw width		160
Dimensions in mm	а	160
	b	50
	С	30

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

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

Prismatic jaws (set)



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

Order no. 6921034024031

Jaw width	160	
Dimensions in mm	а	160
	b	50
	С	45
	d	20
	е	45
	f	3
	g	Ø 15 – 40
	h	Ø 22 – 65



154

[•] Material: hardened steel

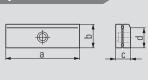


p.	
a 🔒	C

Order no. 6921034025031			
Jaw width		160	
Dimensions in mm	а	160	
	b	50	
	С	20	
	d	3	
	е	45	

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





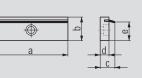
Order no. 6921034005131

01001 110. 0021004000101		
Jaw width		160
Dimensions in mm	а	160
	b	50
	С	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	а	160
	b	50
	С	23
	d	15
	е	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

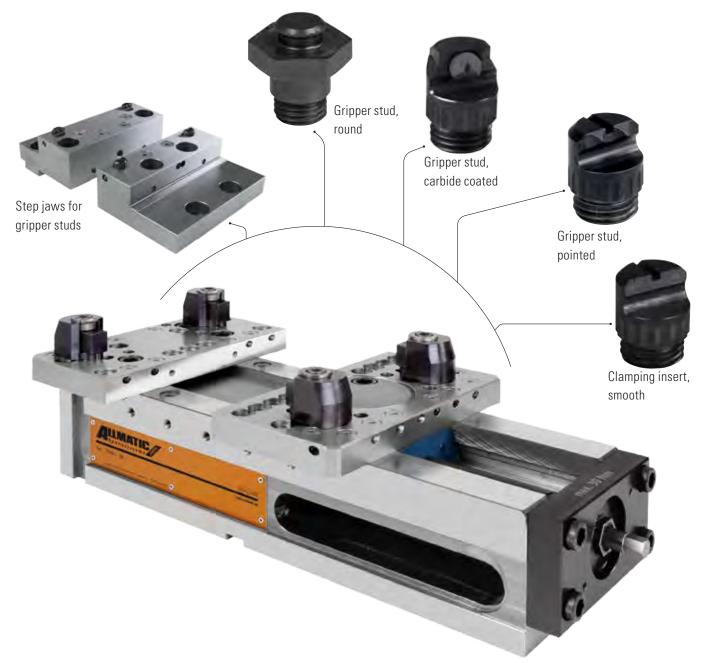
• Spring leaves (replacement) for the spring leaf pull-down jaws (see above)

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

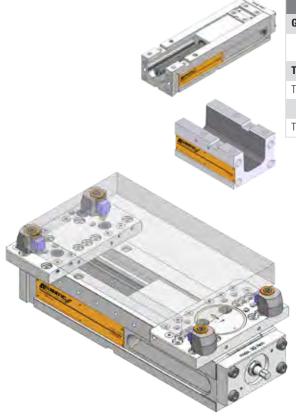
- Support jaws are used to mount different gripper studs (threaded gripper studs or universal gripper set)
- Gripper studs can be screwed in various positions on the grid plate in order to clamp various workpiece geometries securely
- Additional pivot function of the support jaws compensates for non-parallel 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

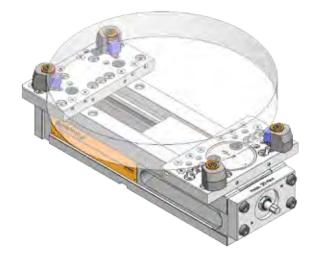
Support jaws with gripper studs

AL.	TITAN 2-160 -	Supp	ort jaw	s with grippe	er studs	
Total Action of the second sec	Geometry	Rectangular workpiece			Round workpiece	
SH.			ing range 1 mm)	Clamping width (in mm)		ng range mm)
10 cm	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
		Contraction of the second	100 00 00 00 00 00 00 00 00 00 00 00 00			•

Support jaws with universal gripper set



TITAN 2-160 - Support jaw with universal gripper set					
Geometry	Rectangular workpiece Round workpiece				orkpiece
	Clamping range (in mm) (in mm)				n g range nm)
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



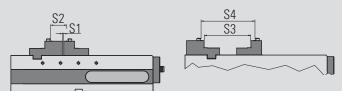
ALLMATIC GRIPP – mechanical / version TITAN 2-160 (GRIPP clamping accessories)

Step jaws for gripper studs



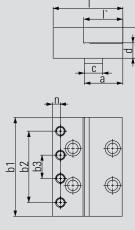
- Material: Hardened steel
- High and stepped sides with thread for parallels
- Ground clamping surfaces
- Additional thread on the high side for mounting the HD jaws (Typ 160)
- Suitable for screw-in gripper studs
- First and second clamping steps are possible without changing jaws
- Click system on 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 0 <= 0.5 (roundness less than or equal to 0.5 mm)



			Round		
in mm	S1	S 2	workpiece	S 3	S4
Clamping width	0-245	24-264	Ø 55-400	179-425	227-468
with enlargement *	0-487	262-506	Ø 55-400	421-667	469-710
Clamping range	-	min. 54	-	-	min. 54

Order no. fixed: 6921844051031 а \bigcirc 33 24



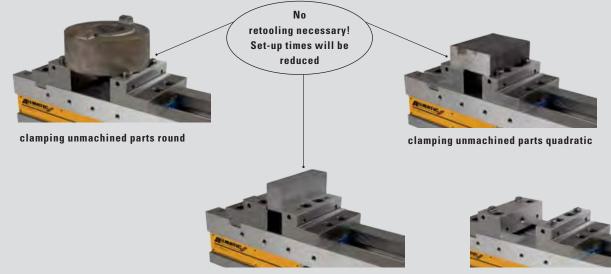
Order no. movable :

6921844050031

Jaw widt	h	160
Dimen-	а	40
sions in mm	b1	38
	b2	77
	b3	116
	b4	160,4
	С	30
	d	25
	е	13
	h	49,8
	I	104
	ſ	44
	m	47
	n	30

Jaw widt	160	
Dimen-	а	63
sions in mm	b1	160,4
	b2	116
	b3	38
	С	30
	d	25
	h	49,8
	Ι	114
	ľ	64
	n	13

*Clamping range enlargement: 6921705008055



clamping pre-machined workpieces

Please order gripper studs separately

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

Support jaws

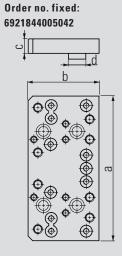


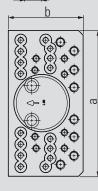
- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

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





Order no. movable, pivoting:

6921844072042

dŀ

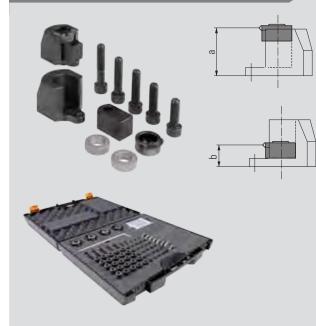
Jaw width		160
Dimensions in mm	а	250
	b	122,5
	С	25
	d	30

Jaw width		160
Dimensions in mm	а	250
	b	132
	С	25
	d	30



Please order universal gripper set or gripper studs separately

Universal gripper set



Order no. 6921884027031

Jaw width		160
Dimensions in mm	а	40
	b	18

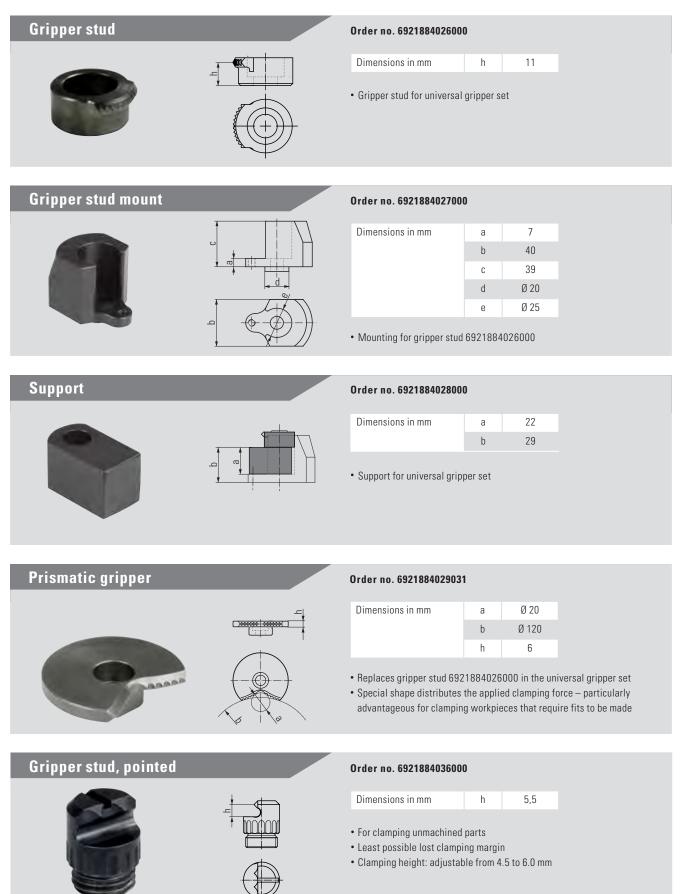
• For clamping complex unmachined parts

• 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

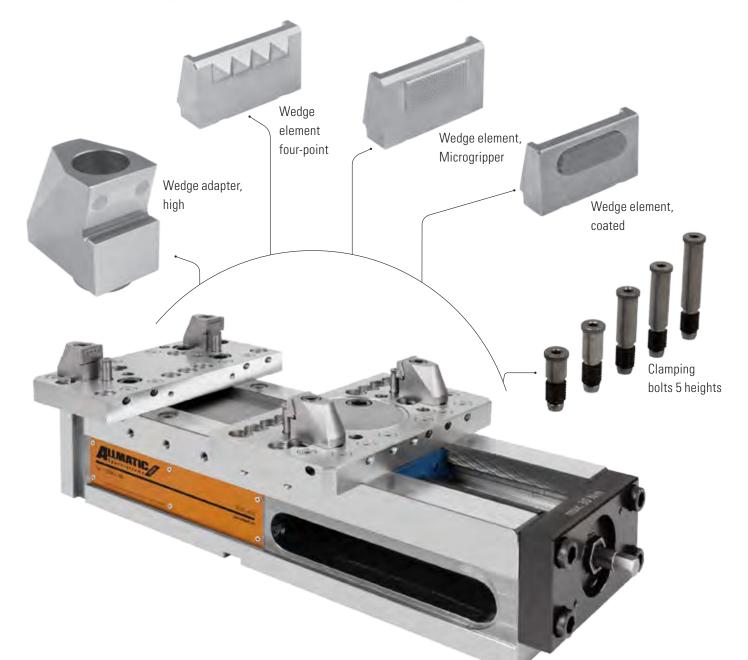
ALLMATIC GRIPP - mechanical / version TITAN 2-160 (GRIPP clamping accessories)



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



TITAN 2-160 PULL-DOWN CLAMPING



Accuracy through pull-down

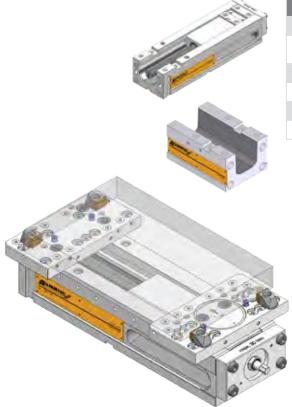
The support jaws and the pull-down system ensure accurate, versatile and secure clamping of the unmachined parts. The workpiece is positioned on ground clamping bolts which make the connection to the guideway. In this way, the parallelism of the guideway or of the machine table is transferred to the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

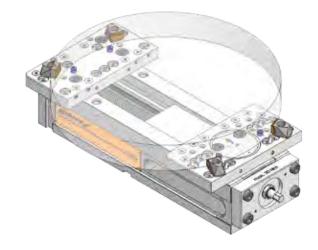
- Support jaws are used to mount various wedge adapters and clamping bolts
- Wedge adapters can be bolted in various positions on the grid plate
- The various wedge elements can be changed quickly on the wedge adapters
- Additional pivot function of the support jaws compensates for non-parallel clamping 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

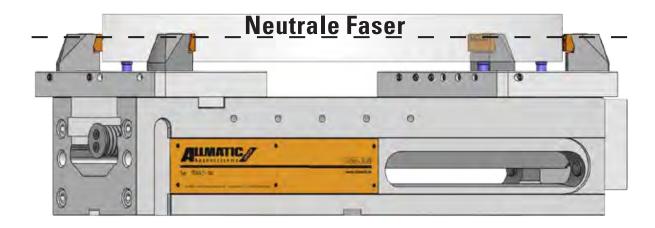
Support jaws with pull-down



TITAN 2-160 - Support jaws with pull-down					
Geometry	:	Square workpiece Round workpiece			
	Clamping range (in mm) (in mm)			Clampir (in r	n g range nm)
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

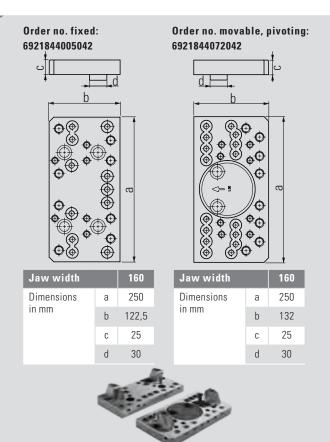


- Material: hardened steel
- For mounting various pull-down wedge elements, universal gripper set and gripper studs with thread (pointed/smooth)
- Front surface can be used as clamping surface (hardened and ground)

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



Please order pull-down studs separately

Pull-down set case, 160



Order no. 6921734027231

Jaw width		160
Dimensions in mm	а	18
	b	24
	С	35,7
	d	Ø 20
	е	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:

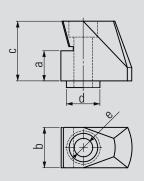
- 1 x foamed case
- 4 x wedge adapter, high
- 4 x bolts, M10 x 45 mm
- 4 x wedge element, 4 point
- 4 x wedge element Microgripper
- 4 x clamping bolts 53 mm
- 4 x clamping bolts 34 mm

164

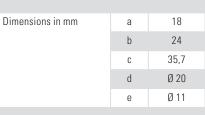
ALLMATIC GRIPP – mechanical / version TITAN 2-160 (pull-down clamping accessories)

Wedge adapter, high





Order no. 6921834027141



• 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

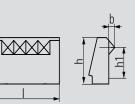


Order no. 8006101045050

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

Wedge element, four-point



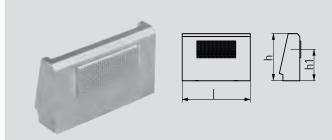


Order no. 6921834025040

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

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

Wedge element, Microgripper

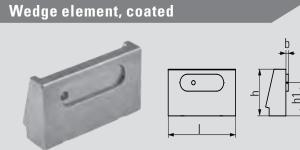


Order no. 6921834025140

Dimensions in mm	h	16,5
	h1	11
	I	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)



Blister-pads, diamond-coated



Wedge element, round

Clamping bolts

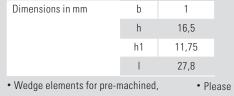


6921735053040

53

h

Order no. 6921834025240



- surface conditions and materials
- Quick to exchange

• Minimum clamping depth 8 mm

- Please order the pads separately (see below)
- 1 0 1

Order no. 6921834028141

Diamond-coated pads for secure clamping of machined surfaces without a visible impression

• Blister contents: 20 pads

Order no. 6921834026340

Dimensions in mm	b	2,4
	h	16,5
	h1	13
	1	27,8

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

See table for order no.

- Five support heightsFor 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

Conventional clamping



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

Order no. 6921705008055

Jaw width		160
Dimensions in mm	а	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



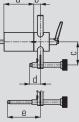


Clamping range at pull-down clamping See chapter TITAN2-160 pull-down clamping

Workpiece stop



^{pull-down} clamping

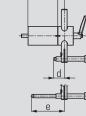


Order no. 6921285650144

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)

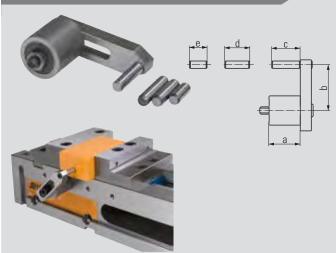




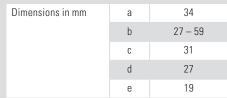


ALLMATIC GRIPP - mechanical / version TITAN 2-160 (accessories)

Workpiece stop



Order no. 6921685670042



- 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	а	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



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

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

ALLMATIC DUO PLUS 125 – TOTAL FLEXIBILITY!

The new DUO Plus 125 from ALLMATIC is robust, durable and opens up completely new possibilities in the field of clamping technology.



ALLMATIC GRIPP – MECHANICAL DUO PLUS 125 VERSION

Scope of application:

- Horizontal installation
- Suitable for conventional clamping and for gripper clamping or a combination of both
- The support jaws enable a wide range of unmachined parts from flame-cut and sawn materials through to complex castings to be clamped securely and economically. Gripper studs suitable for materials with a strength of up to approx. 1,000 N/mm²

Product features:

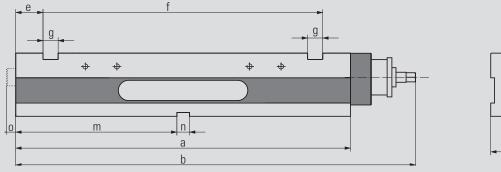
- · Clamping range adjustment for clamping two workpieces of different sizes
- · Reproducible clamping forces enable excellent repeating accuracy of the workpiece position
- Mechanical power-transfer device
- / Fully enclosed and maintenance-free high-pressure spindle high chip protection, minimum cleaning requirements, constant clamping forces up to 40 kN
- Use with a torque wrench max. 40 Nm

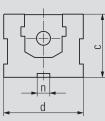


- 4 side clamps
- 3 socket screw wrenches
- 1 wrench socket WS 14
- (Please order clamping jaws separately)

(see accessories).

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





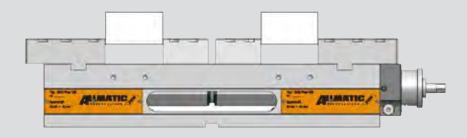
Technical data

Jaw width		125
Dimensions /	а	530
tolerances in mm	b	633
	С	100
	d	126
	е	43.2
	f	443
	g	24
	m	255.2
	n	20
	0	0 - 15

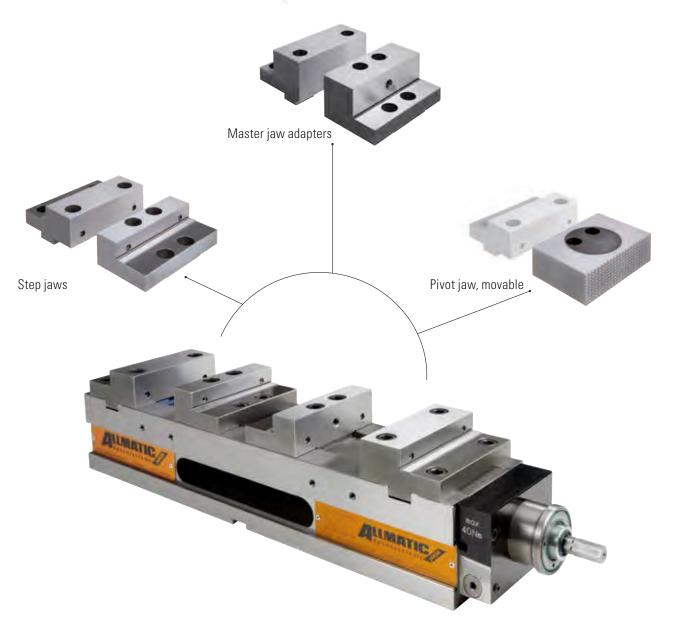
With the spindle in a symmetrical postition, turn the torque wrench clockwise to bring movable jaw 1 up against the workpiece in station 1 (see page 6). The workpiece is fixed with a force of approx. 1000 N. Turn the torque wrench further to bring movable jaw 2 up against the workpiece in station 2 and fix it there. If you continue turning beyond the "locking point", the coupling will disengage. The pressure spindle activates the mechanical power intensifier.

125
40
40
40

Turning as far as the preset torque level (max. 40 Nm) produces a controlled clamping force build-up. Workpieces must be placed in both stations before clamping begins. Tolerances of \pm 2.5 mm between workpiece 1 and workpiece 2 are compensated for. The new function of the clamping range adjustment enables the clamping of two differently sized workpieces.



ALLMATIC GRIPP – MECHANICAL/DUO PLUS 125



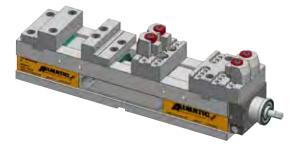
For conventional clamping of workpieces

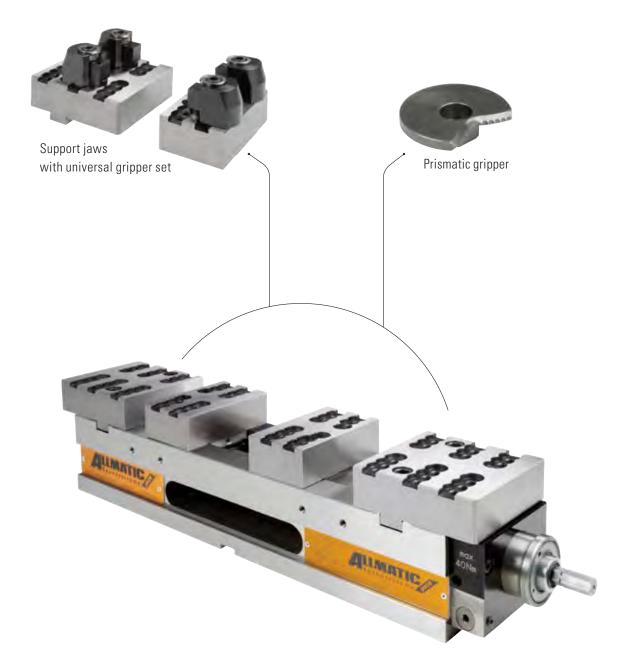
On the following pages, you will find a wide range of jaws, suitable for clamping pre-machined workpieces.



IMPORTANT

A combination of both clamping options is possible!



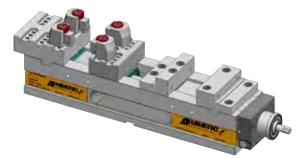


For clamping complex unmachined parts

The support jaws and gripper studs enable you to clamp different unmachined parts quickly and securely.

Gripper clamping

- Support jaws are used to mount the universal gripper set
- Gripper studs can be screwed onto grid plates in variable positions, to clamp unmachined workpieces of different sizes



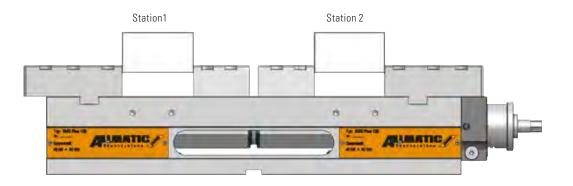


IMPORTANT

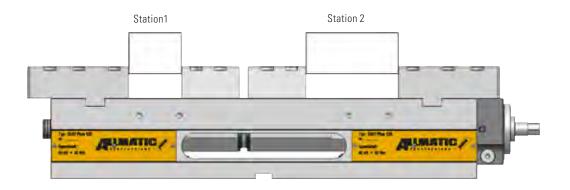
A combination of both clamping options is possible!

CLAMPING RANGES – DUO PLUS 125

With symmetrical spindle position



With loaded spindle position



Clamping range adjustment

For the first time, the new DUO Plus 125 enables you to adjust the clamping range by changing the spindle position. This makes it possible to clamp workpieces of different sizes. The greatest workpiece differences are reached when using the support jaws in combination with the universal gripper set. In view of the endless clamping combination possibilities, we have developed a **clamping width calculator** for you. All you need to do is enter the type and size of the workpiece. The program then suggests a complete range of clamping possibilities. This includes the recommendation for jaws with grippers, the requirement to adjust the spindle, and a detailed description of the clamping set-up. Visit us at:

www.allmatic.de

CLAMPING RANGES – DUO PLUS 125



	Station 1	Station 2
Clamping ranges	0 – 89 mm	0 – 89 mm
Clamping ranges with spindle	0 – 64 mm	50 - 114 mm
adjustment		



	Station 1	Station 2
Clamping ranges	82 – 172 mm	82 – 172 mm
Clamping ranges with spindle	43 – 147 mm	93 – 197 mm
adjustment		



	Station 1	Station 2
Clamping ranges	0 – 89 mm	10 – 202 mm
Clamping ranges with spindle	0 – 64 mm	60 – 225 mm
adjustment		



	Station 1	Station 2
Clamping ranges	10 – 202 mm	0 – 89 mm
Clamping ranges with spindle	10 – 175 mm	93 – 197 mm
adjustment		



Station 1

10 – 202 mm

10 – 175 mm



	Station 1	Station 2
Clamping ranges	Ø 60 – 220 mm	60 – 220 mm
Clamping ranges with spindle	Ø 60 – 190 mm	80 - 240 mm
adjustment		



Clamping ranges

adjustment

Clamping ranges with spindle

IMPORTANT

Combining the clamping ranges at Station one and Station two is not always possible when the spindle is adjusted! Use our clamping range calculator at: **www.allmatic.de**

10 - 202 mm

60 – 225 mm

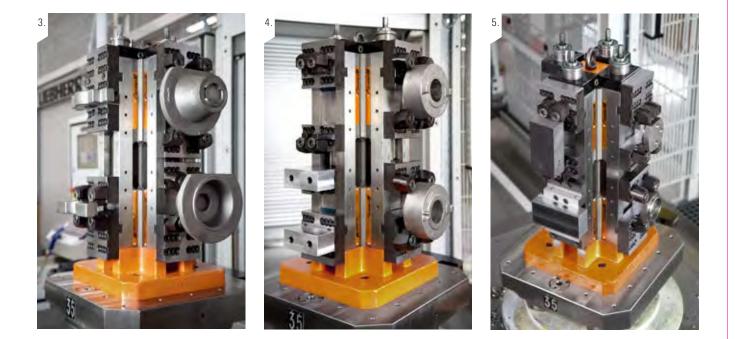
177

APPLICATION EXAMPLES – DUO PLUS 125



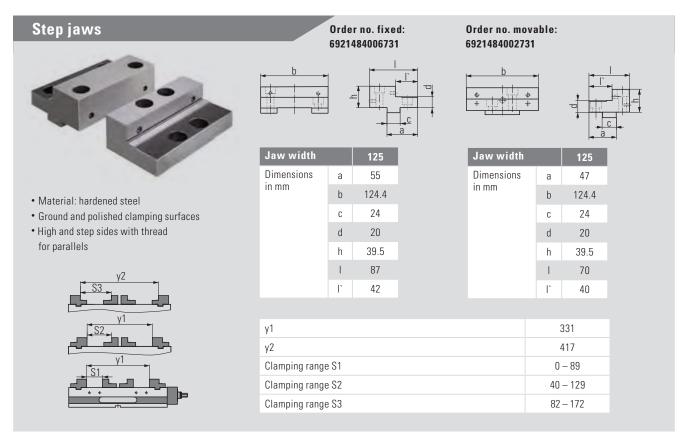


APPLICATION EXAMPLES – DUO PLUS 125



Application examples

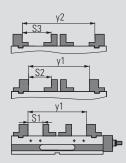
- 1. First and second clamping of a round casting with different diameters on support jaws and using the universal gripper set.
- 2. Complete machining of a workpiece in a second clamping by combining the clamping of unmachined parts and conventional clamping.
- 3.-5. Wide variety of clamping possibilities with the DUO Plus 125 as a monobloc with step jaws, support jaws with the universal gripper set, and soft inserts.

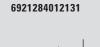


Master jaw adapters



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

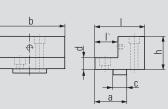




Order no. fixed:



_	
	125
а	77
b	126
С	24
d	20
h	58
T	85
ſ	32
	b c d h



Order no. movable:

6921284011231

J

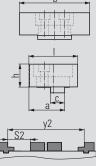
Jaw width		125
Dimensions	а	52
in mm	b	126
	С	24
	d	20
	h	58
	1	80
	ſ	32

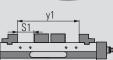
у1	331
у2	401
Clamping range S1	0-84
Clamping range S2	28 – 117
Clamping range S3	66 - 151

Pivot jaw, movable



- Material: hardened steel
- With Click-System
- One side smooth, ground and polished; one side serrated
- Rotatable through 360°
- Picture with step jaw (see order no. 2530)



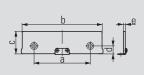


Order no. 6921684020042

Jaw width		125
Dimensions	а	62
in mm	b	124.4
	С	24
	h	39.5
	I	84
y1		331
у2		417
Clamping range S1		0-74
Clamping range S2		42 - 117

Click parallels (pair)



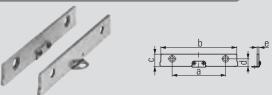


Order no. 6921185035042

Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0.01	35
	d	12.25
	е	3

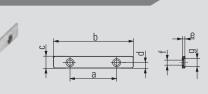
- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Click parallels (pair)



- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws





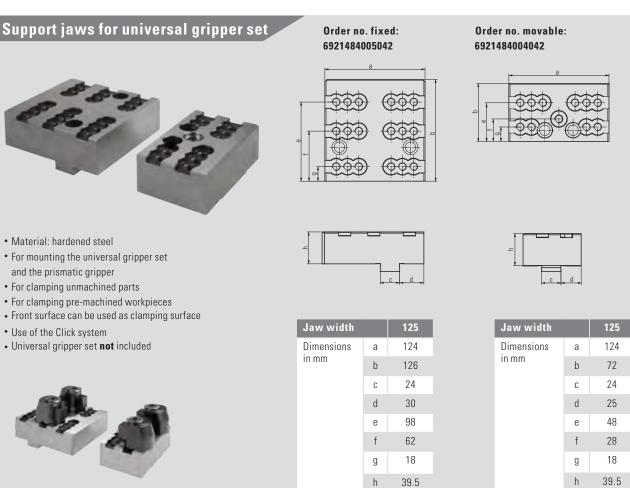
- For parallel raising of workpieces
- Hardened and ground parallels
- Screw-fastened parallels
- For the step side of the jaws

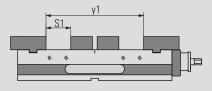
Order no. 6921185020042

Jaw width		125
Dimensions in mm	а	88
	b	125
	c -0.01	20
	d	12.25
	е	3

Order no. 6921485015031

Jaw width		125
Dimensions in mm	а	88
	b	124
	С	15
	d	6
	е	3
	f	Ø6
	g	Ø9





y1	335
Clamping range S1	0-89

The clamping range dimensions change due to spindle adjustment!

Soft jaws

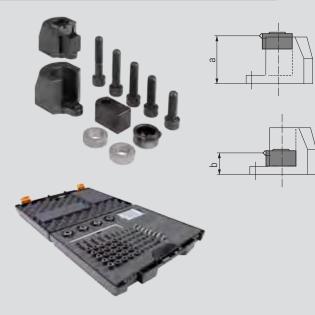


Order no. available on request

• For mounting onto the support jaws



Universal gripper set



Order no. 6921884027031

Jaw width		125
Dimensions in mm	а	40
	b	18

- For clamping complex unmachined parts
- The individual elements of the universal gripper set can be reworked in order to vary both gripper height and support height of the workpiece

Comprising:

- 4 x gripper studs 6921884026000
- 4 x gripper stud mounts 6921884072000
- 4 x supports 6921884028000
- 8 x shims
- Support bolts
- M10 fastening bolts in various lengths
- M6 theaded pins in various lengths
- Socket screw wrench
- Storage case

Gripper stud





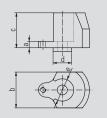
Dimensions in mm

Order no. 6921884026000

• 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

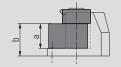
h

11

• Mount for gripper stud 6921884026000

Support





Order no. 6921884028000

Dimensions in mm	а	22
	b	29

• Support for universal gripper set

Prismatic gripper



Order no. 6921884029031

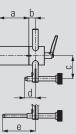


• Replaces gripper stud 6921884026000 in the universal gripper set

• Special shape distributes the applied clamping force – particularly advantageous for clamping workpieces that require fits to be made

Workpiece stop



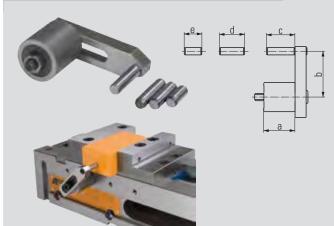


Order no. 6921285650144

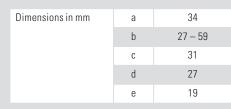
Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12 - 63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: \pm 0.01)

Workpiece stop



Order no. 6921685670042



- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset



Aligning and fixing set



Order no. – see table

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

• For aligning (positioning) and securing the vice on the machine table

• Size according to T-slot or thread in the machine table

ALLMATIC CENTRO GRIPP – FOR CENTRAL GRIPPING

Our "all-rounder" stands out for its superb precision and durability. Central clamping of workpiece – for conventional clamping and clamping of unmachined parts. Ideal for five-sided machining.



ALLMATIC GRIPP – MECHANICAL CENTRO GRIPP VERSION

Scope of application:

- Horizontal installation suitable for vertical CNC milling machines
- Ideal for use on five-axis machining centres due to its compact design
- Depending on the clamping jaws, both pre-machined workpieces and unmachined parts can be clamped
- With support jaws, unmachined parts with varying types of flame-cut and sawn materials and even complex castings can be clamped safely and economically. Gripper studs suitable for materials of mechanical strength of up to approx.
 1000 N/mm².

M8 thread for

workpiece stop

1. 3



AUMATIC

Robust and compact

base made of GGG 60

Product features:

- The centre is adjustable. The position of the workpiece stays within set boundaries.
- Repeating accuracy ± 1/100 mm for angled workpieces
- Guides ground, polished and paired
- Clamping range presetting via adjustment of clamping jaws along transverse slots of spindle nuts
- Moulding and clamping in a single step, directly in the work area no auxiliary aids required

Inductively hardened, ground

and polished guideway

- Use with a torque wrench max. 70 Nm
- Fully enclosed and maintenance-free high-pressure spindle high chip protection, minimum cleaning requirements, constant clamping forces up to 40 kN

Holes in the clamping shoulder for fastening to the machine table itself

Order No. jaw width 125: 6921538000055

Scope of delivery:

- 1 high-pressure vice without jaws
- 2 combination wrenches
- 6 fastening screws, M12 x 35 mm
- 2 socket screw wrenches
- 1 wrench socket
 - (Please order clamping jaws separately)

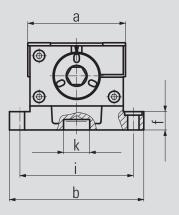
Precision aligning slots and a positioning hole in the bottom surface for optimal alignment on the machine table

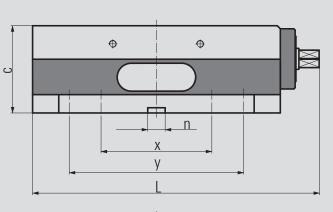
CILMATIC

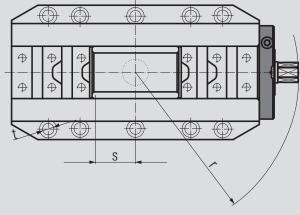
Outlet for coolant and chips

Note:

Delivery does not include a torque wrench (see accessories). An overview of the clamping jaws and other accessories is given on the following pages.







Technical data

Jaw width		125
Dimensions /	а	112
tolerances in mm	b	154
	С	100
	f	21
	i	129/130
	k	Ø 30 H8
	L	329
	n	20 H7
	r	182
	s (traverse)	46
	t	Ø 13
	Х	127
	у	200

Jaw width	125
Max. torque in Nm	70
Max. clamping force in kN	40
Weight in kg	20,7

ALLMATIC GRIPP – MECHANICAL/CENTRO GRIPP



For conventional clamping of workpieces

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



For clamping complex unmachined parts

Varying types of unmachined parts can be clamped quickly and securely using the support jaws and the reduced-width jaws. Jaws for gripper clamping can be found on the following pages.

Gripper clamping:

- Support jaws are used to mount different gripper studs (threaded gripper studs or universal gripper set)
- Gripper studs can be screwed onto grid plates in variable positions to securely clamp a wide variety of workpiece geometries
- Additional pivot function of the support jaws compensates for non-parallel clamping surfaces and is required to clamp uneven workpieces

CLAMPING RANGES – CENTRO GRIPP

Support jaws with gripper studs

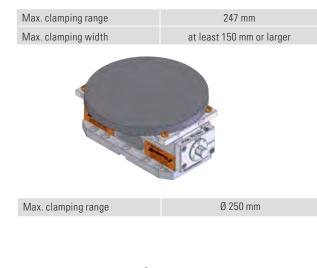


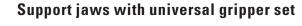
Min. clamping range	25 mm
Min. clamping width	73 mm



You can find the clamping ranges of the other jaws for conventional clamping on the following pages of accessories.







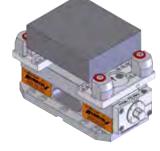


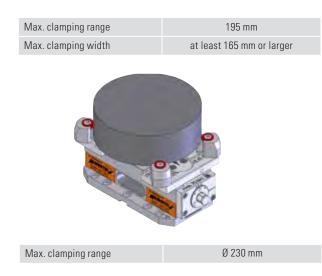
Min. clamping range	0 mm
Min. clamping width	90 mm



Min. clamping range

Ø 100 mm





APPLICATION EXAMPLES – CENTRO GRIPP



















Application examples

- 1. 3. Flexible from the unmachined part through to the finished product
 - Supports complete machining from the reliable positive-locking clamping of unmachined parts by means of our tried and tested gripper technology through to the clamping of the machined part in smooth jaws or studs on modern CNC machines with just a single clamping device. Reliable clamping of large workpieces (even for heavy-duty machining work) thanks to the power spindle
- 4. Flexible gripper studs combined with pivot jaws enable reliable clamping of unmachined parts of very diverse geometries and materials
- 5. The concentric function enables clamping of unmachined parts of small dimensions. The clamping of unmachined parts is fast, simple and, above all, reliable thanks to the use of tried and tested components
- 6. 7. Reliable positive-locking clamping with defined clamping force on clamping edge loss for five-sided machining, irrespective of whether the part is round or angular
- 8. -9. Optimum accessibility to the workpiece from all five sides with standard tools

Support jaws for gripper studs

Material: hardened steel

(hardened, ground and polished)

• For clamping uneven workpieces

manually aligned and blocked • Studs (pointed/smooth) **not** included

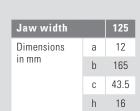
be found at www.allmatic.de

For mounting various studs (pointed/smooth)Front surface can be used as clamping surface

To compensate for non-parallel clamping surfaces
If using 2 pivot jaws, one pivot jaw must be



Order No. movable, pivot (1 piece): 6921884072042



1 79



Please order gripper studs separately.

Support jaws for universal gripper set

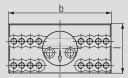
Dimensions of the individual items of the gripper set can



- Material: hardened steel
- For mounting the universal gripper set
- Front surface can be used as clamping surface (hardened, ground and polished)
- For clamping uneven workpieces
- To compensate for non-parallel clamping surfaces
- If using 2 pivot jaws, one pivot jaw must be manually aligned and blocked
- Studs (pointed/smooth) not included

Dimensions of the individual items of the gripper set can be found at www.allmatic.de

Order No. movable, pivot (1 piece): 6921884072242





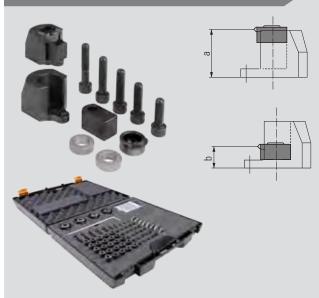
Туре		125
Dimensions	а	12
in mm	b	165
	С	35.5
	h	20
	I	79



Please order universal gripper set separately.

194

Universal gripper set



Order no. 6921884027031

Jaw width		125
Dimensions in mm	а	40
	b	18

- For clamping complex unmachined parts
- The individual elements of the universal gripper set can be reworked in order to vary both gripper height and support height of the workpiece

Comprising:

- 4 x gripper studs 6921884026000
- 4 x gripper stud mounts 6921884072000
- 4 x supports 6921884028000
- 8 x shims
- Support bolts
- M10 fastening bolts in various lengths
- M6 threaded pins in various lengths
- Socket screw wrench
- Storage case

Order no. 6921884026000

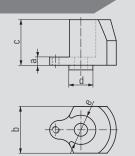
Dimensions in mm	h	11

• Gripper stud for universal gripper set

Gripper stud mount

Gripper stud



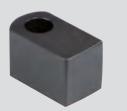


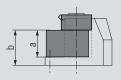
Order no. 6921884027000

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

Mount for gripper stud 6921884026000

Support

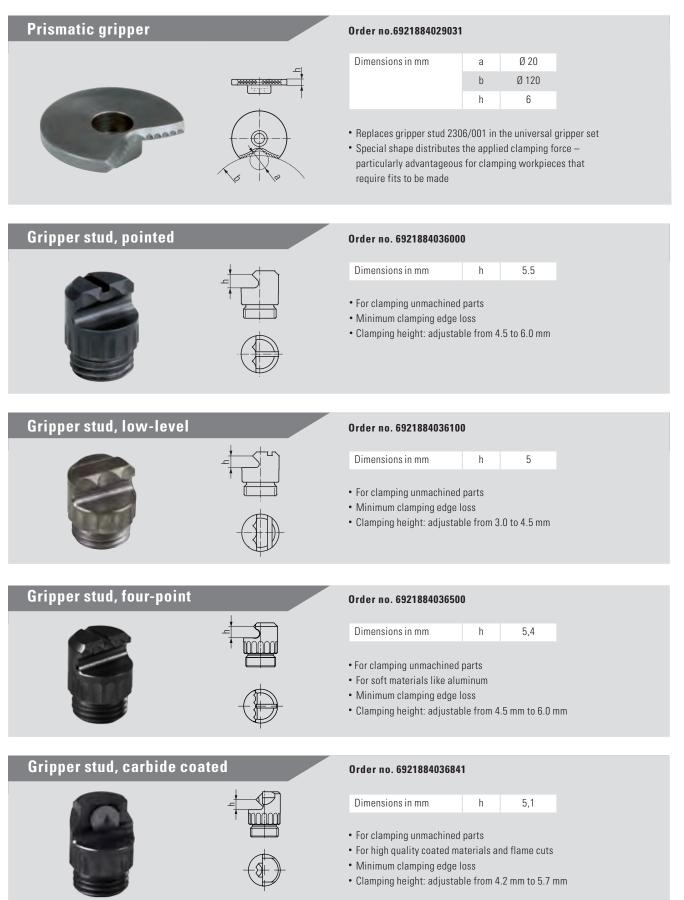




Order no. 6921884028000

Dimensions in mm	а	22
	b	29

• Support for universal gripper set



196

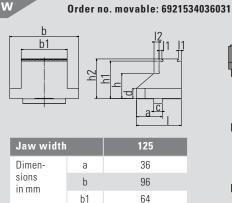
Clamping insert, smooth Order no. 6921884037000 Dimensions in mm h 0

ALLMATIC GRIPP – mechanical / CENTRO Gripp version (accessories)

Jaw 64 mm, with integrated gripper row



- For rectangular workpieces (sawn material) ≤ 0.5 mm • Rigid design to prevent vibrations
- when parts are clamped upright • Additional clamping surfaces,
- ground on both sides • For five-sided machining, ensuring
- best possible accessibility to the workpiece
- Positive locking through penetration of the centres into the material
- Minimal lost clamping margin of approx. 3 mm.
- Suitable for material strength of up to 1000 N/mm²



С

Ь

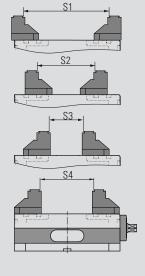
h

h1

h2

T

11



	12	7	
Clamping ra	nge S1		146 - 229
Clamping ra	nge S2		78 - 161
Clamping ra	nge S3		10 - 93
Clamping ra	nge S4		78 - 161

Jaw with integrated gripper row



- For rectangular workpieces (sawn material) $\leq 0.5 \text{ mm}$
- Rigid design to prevent vibrations when parts are clamped upright
- Additional clamping surfaces, ground on both sides
- For five-sided machining, ensuring best possible accessibility to the workpiece
- Positive locking through penetration of the centres into the material
- Minimal lost clamping margin of approx. 4 mm.
- Suitable for material strength of up to 1000 N/mm²

Order no. movable: 6921534036931

12

14

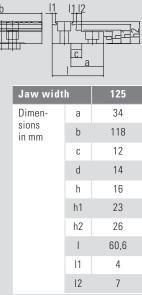
35

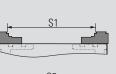
52

55

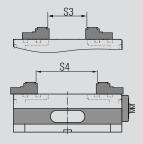
62,5

4









Clamping range S1	146 - 229
Clamping range S2	78 - 161
Clamping range S3	10 - 93
Clamping range S4	78 - 161

Reduced-width jaws 64 mm





Please order gripper

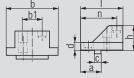
studs separately

- Allows unhindered access to the workpiece, even with short tools
- For clamping small to medium-sized workpieces

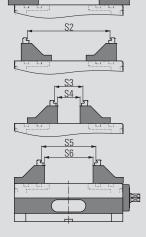
Material: hardened steel

- The clamping of unmachined parts (incl. round material) is supported via 2 adjustable gripper studs in each case
- Front surface can be used as clamping surface (hardened, ground and polished)
- Gripper Studs (pointed/smooth) **not** included





Jaw width		125
Dimen-	а	37.5
sions in mm	b	96
	b1	37
	С	12
	d	14
	h	45
	I	79
	n	67



S1

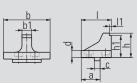
Clamping range S1	196 – 284
Clamping range S2	128 - 216
Clamping range S3	21-74
Clamping range S4	0 - 59
Clamping range S5	54 - 142
Clamping range S6	41 – 127

Reduced-width jaws 20 mm

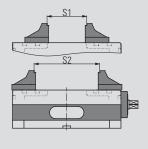


- Material: hardened steel
- For clamping parallel pre-machined small workpieces
- Further enhanced accessibility to the workpiece thanks to slim, tall shape – also optimal for short tools
- Front surface (step) additionally carbide– coated to ensure secure clamping – this increases the holding force by a factor of at least 2 compared to smooth clamping surfaces

Order no. movable: 6921884041041



Jaw width		125		
Dimen-	а	39		
sions in mm	b	96		
	b1	20		
	С	12		
	d	14		
	h	50		
	h1	45		
	I	62		
	1	4		
Clamping range S1				
Clamping range S2				



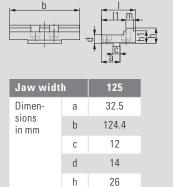
l 62	
11 4	
nping range S1 19 – 104	
nping range S2 86 – 172	

Step jaws, carbide-coated



- Material: hardened steel
- For clamping parallel pre-machined workpieces
- Clamping surfaces (step) additionally carbide – coated to ensure secure clamping – this increases the holding force by a factor of at least 2 compared to smooth clamping surface

Order no. movable: 6921884002041



h1

I

11

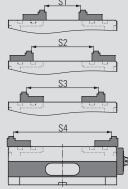
m

21

60.5

43.5

13



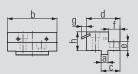
Clamping range S1	9 - 94
Clamping range S2	76 – 162
Clamping range S3	102 - 188
Clamping range S4	170 - 256

Universal pull-down jaws

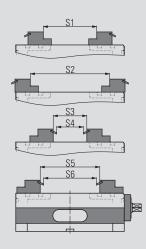


- Material: hardened steel
- Reduced-width jaws 90 mm
- Ground and polished clamping surfaces
- Pull-down with ground and polished spring leaves for machined and unmachined clamping surfaces
- 1-Click spring leaves
- High clamping accuracy for parallel and accurate angle machining

Order no. movable:6921884102031



Jaw width		125
Dimen-	а	12
sions in mm	b	90
	С	34
	d	61
	е	16
	f	21
	g	8.8
	h	34
	g	8.8

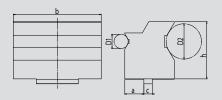


Clamping range S1	54 - 140
Clamping range S2	122 - 208
Clamping range S3	0-88
Clamping range S4	0-72
Clamping range S5	70 – 156
Clamping range S6	54 - 138

Prismatic jaw, horizontal movable



Order no. movable: 6921534001031



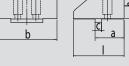
Jaw width		125
Dimensions in mm	а	27
	b	124,4
	С	12
	h	81
	D1	ø 17 - 42
	D2	ø 38 - 104

- Prism angle 120° shaft height 53 mm on both sides
- Hardened and ground
- Jaws open far enough to allow the workpiece to be removed from above even at maximum diameter
- Ideally suited for machining keyways on stepped shafts, for example, using two vices side-by-side

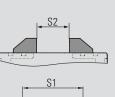
Soft jaw movable



Order no. movable: 6921534087031









Clamping range S1	0 - 58
Clamping range S2	40-126

- Material: GGG40
- For production of special jaws by the customer
- Chamfer provides very good accessibility to the workpiece

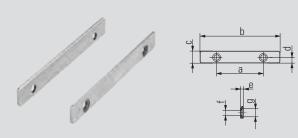
Spring leaves (pair)



Order no. 6921884103031

- Hardened spring leaves
- Spring leaves (spare) for the pull-down jaws (see page 140 below)

Parallels (pair)



- Suittable only for the universal pull-down jaws
- For parallel raising of workpieces
- Hardened, ground and polished parallels

<u>Click</u> parallels (pair)



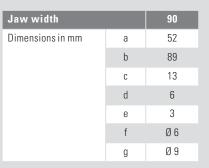
- For parallel raising of workpiecesHardened, ground and polished parallels

Click parallels (pair)



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

Order no. 6921475013031



- Bolt-on parallels
- For the high side of the jaws

Order no. 6921175029042

Jaw width		90
Dimensions in mm	а	48
	b	90
	С	29
	d	8.75
	е	3

• Parallels with Click system

 \bullet For the high side of the jaws

Order no. 6921175016042

Jaw width		90
Dimensions in mm	а	48
	b	90
	С	16
	d	8.75
	е	3

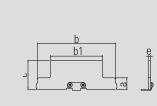
• Parallels with Click system

• For the high side of the jaws

202

Click parallels (pair)





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

Order no. 6921535035042

Jaw width		90
Dimensions in mm	а	14
	b	96
	b1	64
	С	35
	е	3

• Parallels with Click system

• For the high side of jaw

Torque wrench



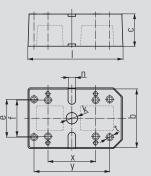
Order no. 0651114113153

Dimens	sions in mm	а	410
		AK (Drive square)	1/2"

- Can be preset to 20 120 Nm
- Only for use on the CENTRO Gripp high-pressure gripper spindle
- Use a smaller torque wrench for more precise presetting of the spindle power

Console







Order no. 6921885009042

Jaw width		125
Dimensions in mm	b	154
	С	85
	е	100
	f	96
	I	250
	n	20 H7
	k	Ø 30 H7
	t	13
	Х	125,5
	у	200

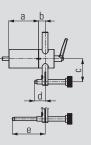
- Material: GG30
- For raising the CENTRO Gripp 125
- Improved access for five-sided machining
- The mounting hole pattern of CENTRO Gripp and console is offset slightly in order to enable mounting in tables with parallel T-slots as well as in tables with cross slots.

Scope of supply:

- Console incl. fixing bolt
- 2 socket screw wrenches
- 4 bolts

Workpiece stop







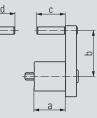
Order no. 6921285650144

Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12 - 63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice at the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to be machined as well. (Repeating accuracy: \pm 0.01)

Workpiece stop





Order no. 6921685670042

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

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset



Aligning and fixing set	Order no. – see	e 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 alignment (positioning) and for mounting the vice on the pallet and the machine table 		

• Size according to T-slot or thread in the machine table

CENTRO



TOMBSTONES FOR HORIZONTAL MACHINING

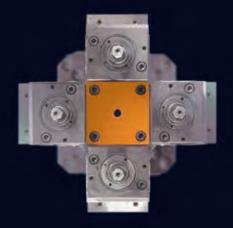
In addition to our standard products, ALLMATIC offers a wide range of customised solutions, each of which can be individually tailored to your machine, workpiece and machining techniques.

The majority of these solutions are monoblocs and set-ups.

- Monoblocs are made from a single piece, are long-time gas nitrated and ground and polished on all sides. This ensures a very high stability and produces optimal machining results.
- Set-ups are tombstones comprising several standard vices.

The base plates are suitably adapted to ensure exact positioning on the machine table or on a pallet. According to your requirements, we can manufacture base plates with an elevation, with a different spacing of the mounting holes, with a centering mechanism (possibly with a second index) or with a JIS stop system. To give you even greater flexibility, we will manufacture special clamping jaws adapted to the geometry of your workpieces. Similarly, in customised solutions, the clamping force of the spindles can be adapted to suit your machining requirements. In addition to the set-ups for conventional clamping, we can also offer you solutions for clamping unmachined parts. For this, we employ the functions of our tried and tested T-REX, TITAN and DUO Plus 125 vices.





The set-ups described on the following pages are just a few examples of already realised clamping solutions. We shall be pleased to provide you with a customised solution — let us know your requirements!

MONOBLOC – 3 x 120° SINGLE TITAN 2 3 X ISO SINGLE

Scope of application:

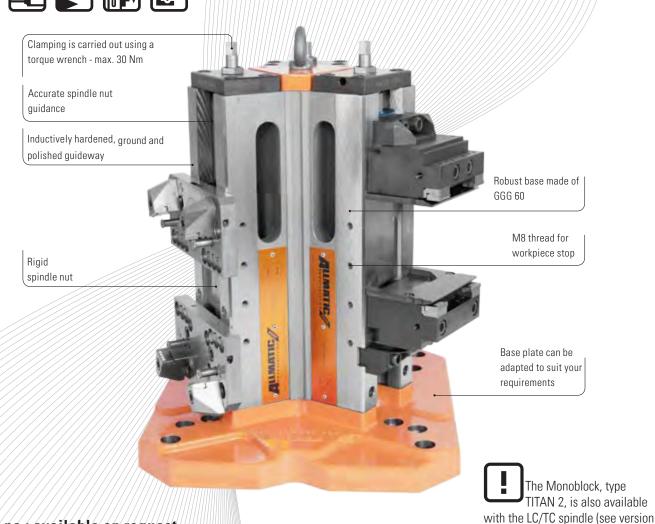
Modular clamping system for horizontal machining centres

Product features:

- High stability from base cast as one piece-maximum precision or workpiece machining
- · Very good accessibility, even with large workpieces
- Conventional clamping, gripper clamping or pull-down clamping are all possible (see TITAN 2)



- High-pressure spindle with mechanical power-transfer device
- Stepless adjustment of the clamping force with torque wrench
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- /Three/clamping points/permit/three-sided/machining



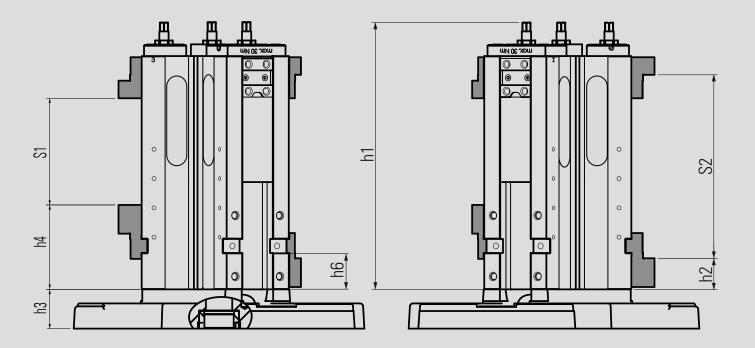


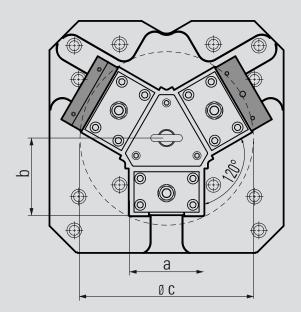
Scope of supply:

- Monobloc without jaws
- 3 socket screw wrench
- Hexagonal insert/for/torque wrench, 3/8"

An overview of the clamping jaws and other accessories is given in the section: Accessories for the ALLMATIC TITAN 2 K-M-L.

LC/TC, photos on page 28)





Technical data

Jaw width TITAN 2 M		125	
Dimensions in mm	а	126	
	b	132	
	c (swing circle)	dia. 300	
	h1	456	
	h2	53	
	h3	67	
	h4	144	
	h5	62	

Jaw width with step jaws	125
Clamping width S1 in mm	0-182
Clamping width S2 in mm	131 – 313
Max. torque in Nm	30
Max. clamping force in kN	40

MONOBLOC – 4 x 90° SINGLE

Scope of application:

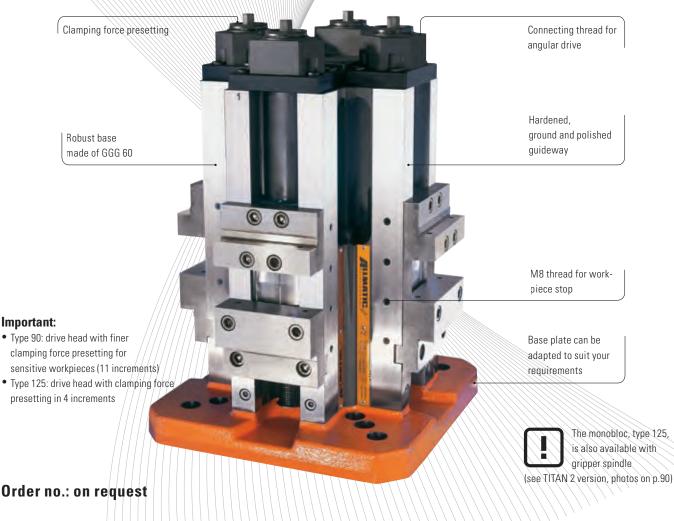
Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping force can be preset in 4 to 11 increments. At most, two revolutions are required to reach the max. clamping force



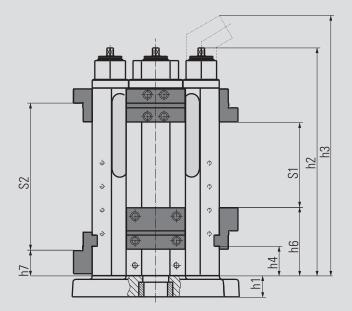
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Four clamping points permit three-sided machining

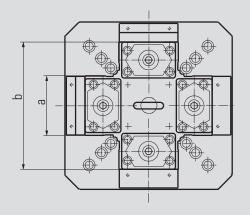


Scope of supply:

- Monobloc with step jaws
- 1 hand crank
- Socket screw wrench

An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / TC.





Technical data

Jaw width		90	125
Dimensions in mm	а	90	126
	b	220	270
	h1	min. 45	min. 45
	h2	340	483
	h3	403	452
	h4	39	62
	h6	97	144
	h7	37	53

Jaw width	90	125
Clamping range S1 in mm	0-126	0-182
Clamping range S2 in mm	91 – 217	131 – 313
Clamping force levels	11	4
Max. clamping force in kN	28	40

MONOBLOC – 4 x 90° DUO 90

Scope of application:

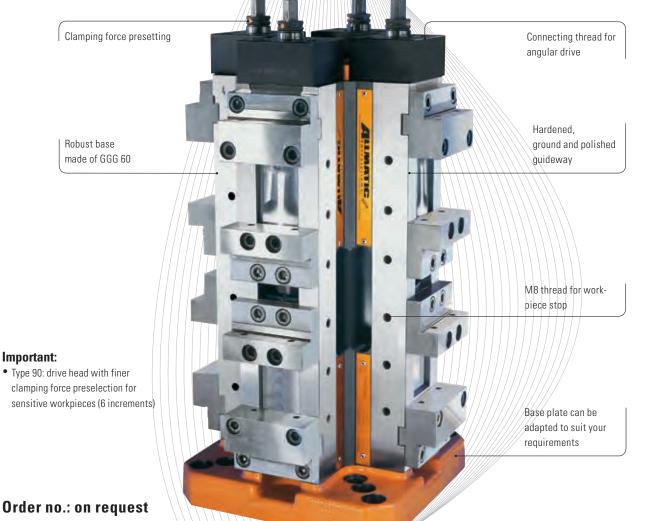
· Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping force can be preset in 4 to 6 increments At most, two revolutions are required to reach the max. clamping force



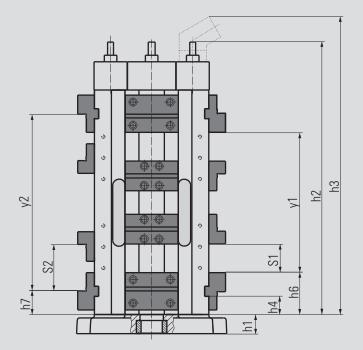
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Eight clamping points permit Three-sided machining

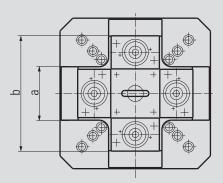


_ _ _

- Scope of supply: • Monobloc with step jaws
- Monobioc with step]
- 1 hand crank
- Socket screw wrench

An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / DUO.





As an alternative to the star set-ups (see customised solutions), we offer the monobloc 4 x 90° DUO with a larger square dimension:

Technical data Jaw width Dimensions in mm а 90 b (square dimension) 220 h1 min. 45 h2 482 547 h3 h4 30 h6 72 47 h7 256 y1 y2 306

Jaw width	90
Clamping range S1 in mm	0-64
Clamping range S2 in mm	56 - 120
Clamping force increments	6
Max. clamping force in kN	28

Jaw width Dimensions in mm а 90 b (square dimension) 326 h1 min. 45 h2 482 547 h3 h4 30 h6 72 h7 47 256 y1 y2 306

Jaw width	90
Clamping range S1 in mm	0-64
Clamping range S2 in mm	56 - 120
Clamping force increments	6
Max. clamping force in kN	28

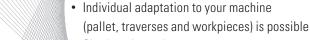
MONOBLOC – 3 x 120° DUO PLUS 125

Scope of application:

· Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping width adjustment for clamping two workpieces of different sizes



accuracy of the workpiece position

Reproducible clamping forces enable excellent repeating

• Six clamping points



Hardened, ground and polished guideway

M8 thread for workpiece stop

Base plate can be adapted to suit your requirements

Note:

Delivery does not include a torque wrench. An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical / DUO Plus.

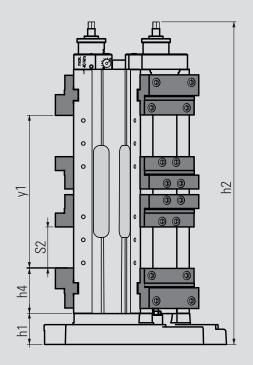
Clamping force presetting

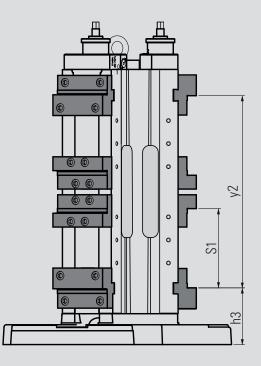
Robust base made of GGG 60

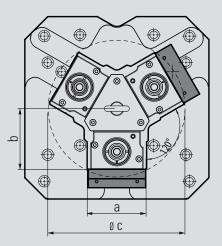
Order no.: on request

Scope of supply:

- Monobloc without jaws
- 1 hand crank
- Socket screw wrench







Technical data

Jaw witdh	125	
Dimensions in mm	а	126
	b	132
	c (swing circle)	dia. 300
	h1	67
	h2	700
	h3	123
	h4	99
	у1	331
	у2	417

Jaw width with step jaws	125
Clamping range S1 in mm	0-89*
Clamping range S2 in mm	43 - 172*
Max. clamping force in kN	28

* When using step jaws without clamping width adjustment

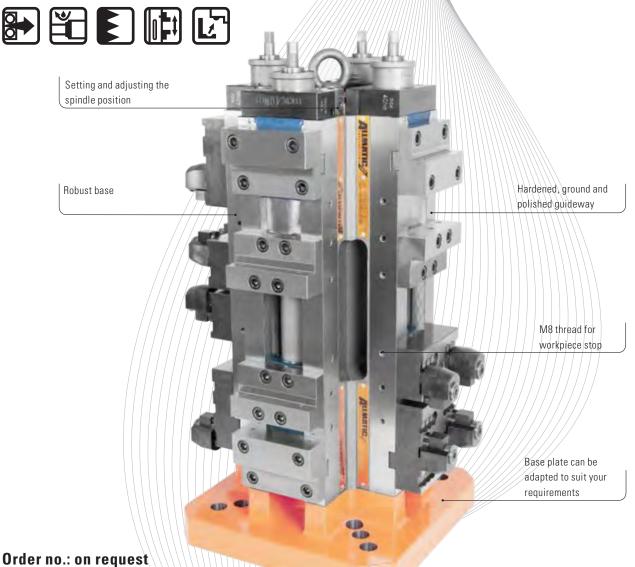
MONOBLOC – 4 x 90° DUO PLUS 125

Scope of application:

• Modular clamping system for horizontal machining centres

Product features:

- Base gives high stability and extreme accuracy for your machining
- Clamping width adjustment for clamping two workpieces of different sizes
- Reproducible clamping forces enable excellent repeating accuracy of the workpiece position
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Eight clamping points



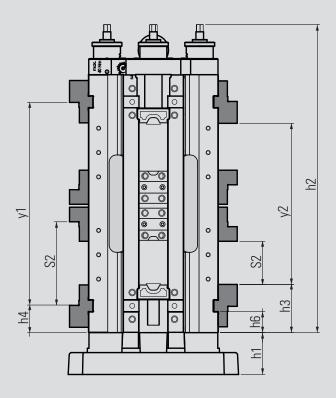
•

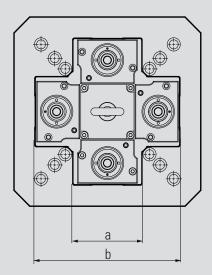
Scope of supply:

- Monobloc without jaws
- 1 wrench socket WS 14
- 3 socket screw wrenches

Note:

Delivery does not include a torque wrench. An overview of the clamping jaws and other accessories is given in the section: Accessories ALLMATIC NC – mechanical /DUO Plus.





As an alternative to the star set-ups (see customised solutions), we offer the monobloc $4 \times 90^{\circ}$ DUO Plus with a larger square dimension:

Jaw width		125
Dimensions in mm	а	126
	b (square dimension)	360
	h1	min. 86
	h2	633
	h3	99
	h4	56
	h6	43
	у1	417
	у2	331
Jaw width with step ja	aws	125
Clamping range S1 in mm	0-89 *	
Clamping range S2 in mm	43-172 *	
Max. clamping force in kN		40

Technical data

Jaw width

Dimensions in mm

Jaw width with step jaws	125
Clamping range S1 in mm	0-89 *
Clamping range S2 in mm	43-172 *
Max. clamping force in kN	40

а

b (square dimension)

h1

h2

h3

h4

h6

y1

y2

* When using step jaws without clamping width adjustment

The DUO Plus 125 monobloc offers a huge number of clamping possibilities (see DUO Plus p. 122). For exact details on the resulting clamping widths, see our clamping width calculator at:

126

270

min. 86

633

99

56

43 417

331

217

www.allmatic.de

BACK-TO-BACK SET-UP

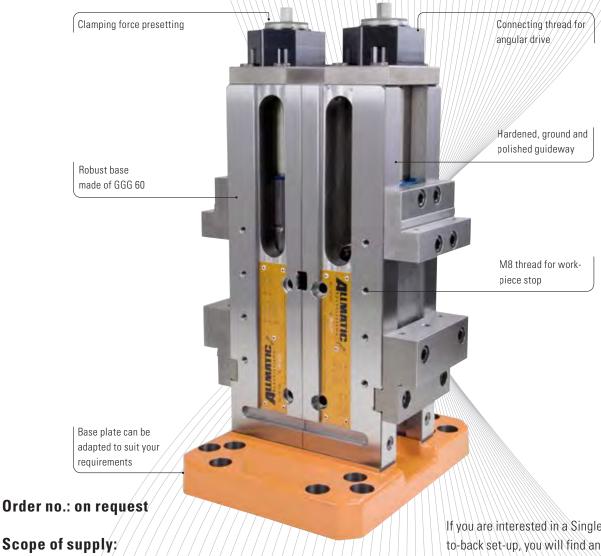
Scope of application:

· Modular clamping system for horizontal machining centres

🕞 🛅 🛃 🖬 🖸

Product features:

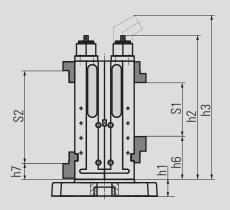
- Comprises standard Single (TC series) or DUO vices
- Clamping force increments can be preset. At most, two revolutions are required to reach the max. clamping force
- Preselectable and reproducible clamping forces enable the workpiece position to be repeated within a tolerance of less than 0.01 mm
- Individual adaptation to your machine (pallet, traverses and workpieces) is possible
- Two or four clamping points permit/3-sided machining.

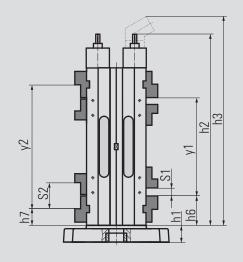


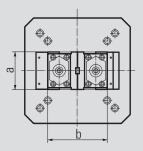
Back-to-back set-up Single / DUO

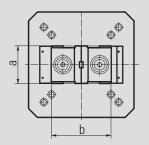
- 1 back-to-back set-up Single / DUO
- 1 hand crank
- · Socket screw wrench

If you are interested in a Single or DUO backto-back set-up, you will find an overview of the clamping jaws and other accessories in the respective section: Accessories ALLMATIC NC – mechanical / TC or DUO.









Technical data

Jaw width S	ingle	90	125	160	200
Dimensions	а	90	125	160	200
in mm	b	160	200	230	280
	h1	min. 45	min. 45	min. 45	min. 74
	h2	340	483	615	615
	h3	403	552	683	683
	h6	97	144	164	164
	h7	37	53	56	56

Jaw width		DUO 90	DUO Plus 125
Dimensions	а	90	125
in mm	b	160	200
	h1	min. 45	min. 86
	h2	482	633
	h3	547	-
	h6	72	99
	h7	47	56
	y1	256	331
	у2	306	417

Туре	90	125	160	200	Туре	DUO 90	DUO Plus 125
Clamping range S1 in mm	0-126	0 - 182	17 – 263	17 – 263	Clamping range S1 in mm	0-64	0-89 *
Clamping range S2 in mm	91 - 217	131 – 313	189 - 435	189 - 435	Clamping range S2 in mm	56 - 120	43-172 *
Clamping force increments	11	4	4	4	Clamping force increments	6	-
Max. clamping force in kN	28	40	60	80	Max. clamping force in kN	28	40

* When using step jaws without clamping width adjustment

The DUO Plus 125 back-to-back set-up offers a huge number of clamping possibilities. For exact details on the resulting clamping ranges, see our clamping range calculator at: Back-toBack Set-up

www.allmatic.de

CUSTOMISED SOLUTIONS – APPLICATION EXAMPLES













Application examples

- 1. Monobloc DUO 125 4 x 90° with reduced-width special jaws and floating centre jaw (sixteenfold clamping)
- 2. Monobloc DUO 125 4 x 90° special version: stacked mounting of 40 workpieces
- 3. Monobloc Single 90 4 x 90° with reduced-width special jaws for manufacturing small workpieces
- 4. Monobloc DUO 125 4 x 90° special version for machining complex castings
- 5. Monobloc DUO 125 4 x 90° with special jaws
- 6. 6-fold set-up DUO 125 on double-angle tower













Application examples

- 7. Monobloc DUO 125 3 x 120° with special clamping jaws for machining valve housings
- 8. 4-fold set-up TC 160 with extension on the double-angle for machining very large workpieces
- 9. Monobloc DUO 125 4 x 90° with reduced-width special jaws for 1st and 2nd clamping
- 10. Star set-up Single 160 4 x 90° on grid body with extended vice base, special jaws with positioning bolt
- 11. Wide variety of clamping possibilities with the DUO Plus 125 as a monobloc with step jaws, support jaws with the universal gripper set and soft inserts.
- 12. Monobloc Single TITAN 2 125 3 x 120° with pull-down jaw system and workpiece (pump case)

AUTOMATABLE WORKHOLDING

Flexible, precise and very easy to operate – hydraulic vices from ALLMATIC. Ideal for batch production.



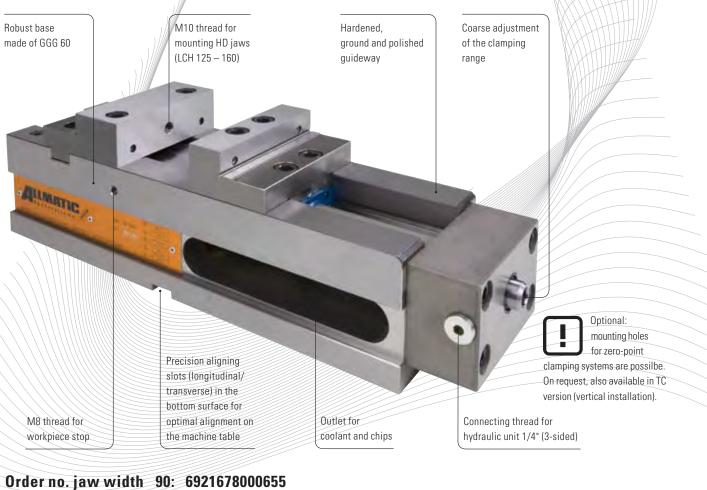
ALLMATIC NC – HYDRAULIC LCH VERSION

Scope of application:

- Horizontal installation suitable for vertical CNC-controlled milling machines
- For automation of machining centres particularly suitable for batch production
- The hydraulic spindle also enables the use of support jaws with which a wide range of unmachined parts, from flame-cut and sawn materials through to complex castings, can be clamped securely and economically. Suitable for materials with a strength of up to approx. 1000 N/mm².

Product features:

- Extreme accuracy for your machining
- The clamping force is generated via the hydraulic pressure of a hydraulic aggregate (this is required as an hydraulic source to press the vise)
- The hydraulic clamping stroke is limited due to safety regulations to a maximum of 4.5 mm
- The variable adjustment of the clamping force is achieved by hydraulic pressure found on the hydraulic power unit. The rough adjustment of the clamping range is via the control tool
- The spindle contains a single-acting hydraulic piston and an additional Belleville spring assembly

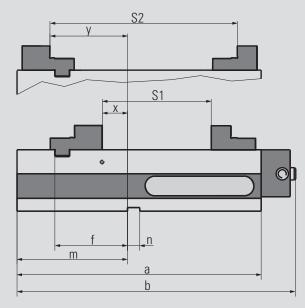


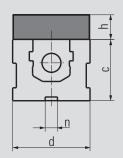
Order no. jaw width 90: 6921678000655 125: 6921688000655 160: 6921708000655

Scope of supply:

- 1 high-pressure vice with step jaws
- 1 hand crank
- 4 side clamps
- 1 socket screw wrench
- 1 compensation jaw for clamping range from 0 mm only LCH 160

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





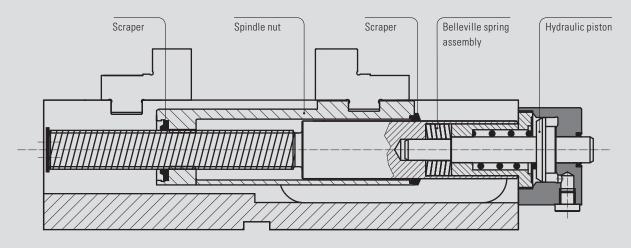
Technical data

Jaw width		90	125	160
Dimensions in mm	а	283	398	530
	b	340	456	596
	С	80	100	115
	d	90	126	164
	f	73	118	164
	h	34	39.5	49.8
	m	112	180	234
	n	20	20	20
	х	15	36	70
	у	75	127	178

Jaw width	90	125	160
Clamping range S1 in mm	0-126	0-182	(0) 17 – 263
Clamping range S2 in mm	93-217	131 – 313	189 - 435
Hydraulic movement in mm	4.5	4.5	4.5
Max. clamping force in kN	24	40	60
At hydr. pressure in bar	240	240	240
Weight in kg	16,4	35,6	65

• Clamping width 0 can be reached using the compensation jaw

Spindle cross-section



Step jaws



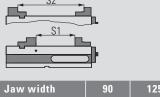
• High and step sides with thread

• Click system on the high side

- for parallels
- Ground and polished clamping surfacesAdditional thread on the high side

for mounting HD jaws (Types 125 - 200)





Jaw width	90	125	160
Clamping range S1	0-126	0-182	17 - 263
Clamping range S2	93 - 217	131 - 313	189 - 435

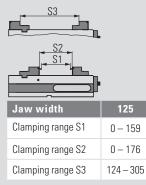
	Jaw width						
fixed	ed 90 125		125	160			
Ord. no.:		6921674006731	6921674006731	6921704006731			
Dimen-	а	30	34	40			
sions in mm	b	89,5	124,4	160,4			
	С	20	24	30			
	d	16	20	25			
	h	34	39,5	49,8			
	I	68	92	104			
	ſ	32	43	54			

Jaw width							
movabl	e	90	125	160			
Ord. no.:		6921474002731	6921484002731	6921304002731			
Dimen-	а	38	47	63			
sions in mm	b	89,5	124,4	160,4			
	С	20	24	30			
	d	16	20	25			
	h	34	39,5	49,8			
	Ι	56	70	96			
	ſ	31	40	64			

Pull-down jaws



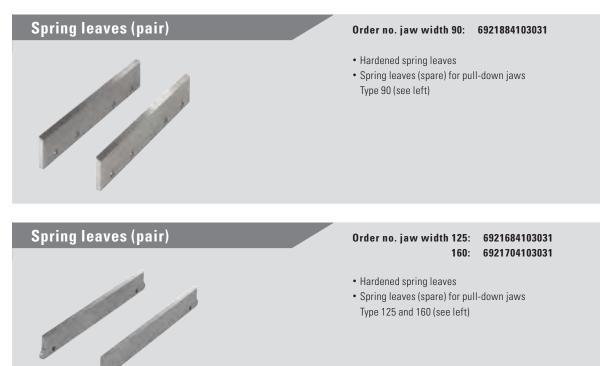
- Material: hardened steel
- Pull-down with ground and polished spring leaves for machined and unmachined clamping surfaces
- Ground and polished clamping surfaces
- High clamping accuracy for parallel and accurate angle machining
- Click system on the high side





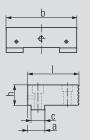
	Jaw width							
fixed		90	125	160				
Ord. no.:		6921674106031	6921684106031	6921704109031				
Dimen-	а	20	24	30				
sions in mm	b	89,5	124,4	160,4				
	С	30	34	40				
	d	69	92	104				
	е	16	20	25				
	f	37	43	54				
	g	8,8	8,8	8,8				
	h	34	39,5	49,8				

Jaw width							
movable		125					
Ord. no.:		6921684102031					
Dimen-	а	24					
sions in mm	b	124,4					
	С	46,5					
	d	75					
	е	20					
	f	32					
	g	8,8					
	h	39,5					



Hard basic jaws





Jaw width						
fixed		90	125	160		
Ord. no.:		6921674005731	6921684005731	6921704005731		
Dimen-	а	26	30	40		
sions in mm	b	89,5	124,4	160,4		
	С	20	24	30		
	h	34	39,5	49,8		
	I	63	88	104		

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

-		-
\$	¢	¢
		_



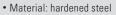
Jaw width							
movable		90	125	160			
Ord. no.:		6921674004731	6921684004731	6921704004731			
Dimen-	а	40	50	65			
sions in mm	b	89,5	124,4	160,4			
	С	20	24	30			
	h	34	39,5	49,8			
		60	76	100			



Clamping range S1	0-125	0-179	15 - 261
Clamping range S2	30 - 156	49 - 231	69 - 315

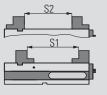
Master jaw adapters





- High side of jaw hardened
- Ground clamping surfaces
- Additional thread on the step
- side for mounting HD jaws

 Click system on the high side



Jaw width	90	125	160
Clamping range S1	62-186	64-246	88 - 334
Clamping range S2	26-152	45-227	68 - 314

Let	b	

fixed

Ord. no.:

а

b

c d

h

T

Ľ

Dimen-

sions

in mm





Jaw width							
movable 90 125 160							
Ord. no.:		6921274011231	6921284011231	6921304011231			
Dimen-	а	40	52	65			
sions in mm	b	90	126	164			
	С	20	24	30			
	d	16	20	24			
	h	46	58	73			
	I	60	80	100			

Jaw width

125

6921684012231

77

126

24

20

58

85

32

32

160

6921704012231

89

164

30

24

73

100

34

34

90

6921674012231

56

90

20

16

46

66

30

30

Soft jaws



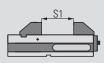


• Material: GGG40

- For production of special jaws by the customer
- Chamfer provides very good accessibility to the workpiece

 -+-	1 +	_	_





Order no. fixed: 6921684088031

ľ

Jaw width		125
Dimensions in mm	а	95
	b	124
	С	24
	h	58
	I	101.5

Order no. movable: 6921484087031

	125
а	42
b	124
С	24
h	58
Ι	94.5
	b

Clamping range S1 0 – 150

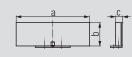
Pivot jaw, movable	b	Order no. jaw		125: 692	167402014 168402004 170402004	2
		Jaw width		90	125	160
	Dimensions	а	49.5	62	86	
		in mm	b	90	124.4	160.4
			С	20	24	30
	a		h	34	39.5	49.8
			I	68	84	118
	S2					
Material: hardened steel		Clamping range	e S1	0-115	0-167	0-240
 With Click-System on both sides One side smooth, ground and polished; 	<u>S1</u>	Clamping range	e S2	21-146	37 – 219	48-294
 one side serrated Rotatable through 360° Picture with hard basic jaw (see page 71) 						

Soft jaw

- 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	а	125.6
	b	40.1
	С	12

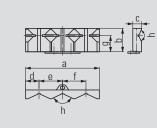
- Material: hardened steel
- · Jaws with sharp serrations to increase the specific contact pressure per unit area
- Visible impressions on workpiece
- Only suitable for soft materials
- Only for use with jaws with Click system

Order no. 6921684023042

Jaw width		125
	а	125
Dimensions in mm	b	39.8
	С	22

Prismatic jaws (pair)





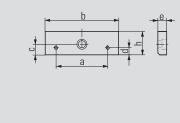
Order no. 6921684024042

C

C		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

Compensation jaw



Order no. jaw width 160: 6921704022031 200: 6921694022031

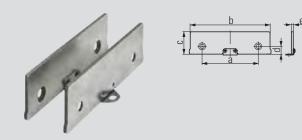
Jaw width		160	200
Dimensions in mm	а	88	110
	b	160.4	200.4
	С	20	25
	d	12.25	18
	е	18	18
	h	49.8	60

- Material: hardened steel
- Ground and polished clamping surfaces

. • .

- For clamping range from 0 mm
- With the LC 160 and 200 vices, this jaw is included

Click parallels (pair)



Order no. jaw width	90:	6921175029042
	125:	6921185035042
	160:	6921205044042

Jaw width		90	125	160
Dimensions in mm	а	48	88	88
	b	90	125	160
	c -0.01	29	35	44
	d	8.75	12.25	12.25
	е	3	3	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Click parallels (pair)	t la prime		125: 692	1175016042 1185020042 1205025042
1		Jaw width		90
100 .		Dimensions in mm	а	48
10			b	90
U V			c -0.01	16
•			d	8.75
			е	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels with Click system
- For the high side of the jaws

Parallels (pair)	Order no. jaw width	90: 125: 160:	69 69 69
	Jaw width Dimensions in mm		a b c d

Order no. jaw width	90:	6921475013031
	125:	6921485015031
	160:	6921305019031

Jaw width		90	125	160
Dimensions in mm	а	52	88	88
	b	89	124	160
	С	13	15	19
	d	6	6	6
	е	3	3	3
	f	Ø 6	Ø 6	Ø 6
	g	Ø9	Ø9	Ø9

88

125

20

12.25

3

88

160

25

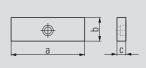
12.25

3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Bolt-on parallels
- For the step side of the jaws

Smooth jaws (pair)





Order no. jaw width	125:	6921024022031
	160:	6921034022031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

• Material: hardened steel

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

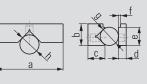
Serrated jaws (pair)		Order no. jaw width '		2102100503 2103100503		
		Jaw width		125	160	
THE REAL PROPERTY OF		Dimensions in mm	а	125	160	
				b	40	50
			С	15	20	
· Materials bandanced start						

- Material: hardened steel
- Standard jaws with serration
- To increase the specific contact pressure per unit area
- Please order fastening bolts separately (order no. 6921011023000)

Soft jaws (pair)	Order no. jaw width 1 1		2102402303 2103402303	
	Jaw width	00. 002	125	160
	Dimensions in mm	а	125	160
		b	40	50
		С	25	30
 Material: 21MnCr5G, mat. no.: 1.2162 Jaws can be case-hardened For production of special jaws by the customer Please order fastening bolts separately (order no. 6921011023000) 				

Prismatic jaws (set)





Order no. jaw width 125: 6921024024031 160: 6921034024031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	35	45
	d	15	20
	е	35	45
	f	3	3
	g	Ø 12 – 28	Ø 15-40
	h	Ø 18 – 55	Ø 22 – 65

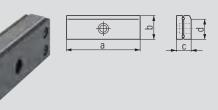
- Material: hardened steel
- For horizontal and vertical clamping of round and flat workpieces
- Please order fastening bolts separately (order no. 6921011023000)

Step jaws (pair)		d	Order no. jaw width 1 1		2102402503 2103402503	
			Jaw width	-	125	160
	a	C	Dimensions in mm	а	125	160
				b	40	50
				С	15	20
				d	3	3
				е	35	45

C

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





Order no.	jaw width	125:	6921024005131
		160:	6921034005131

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	26	35.5
	d	35	45

- Material: hardened steel
- For parts with delicate clamping surfaces
- Jaw parts in contact with the workpiece press the workpiece onto the support surface

Spring leaf pull-down jaws (pair)

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





Order no. jaw width 125: 6921024001042 160: 6921034001042

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	20	23
	d	12	15
	е	33	43

- Material: hardened steel
- For parts with unmachined clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are interchangeable, (see the next page)
- Please order fastening bolts separately (order no. 6921011023000)

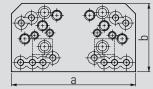


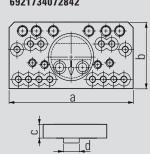
Support jaws



Order no. fixed: 6921734005842

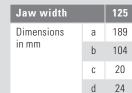
Order no. movable, pivoting: 6921734072842

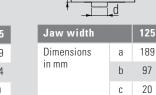




24

d





- 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



Please order universal gripper set or gripper studs separately

Support jaws



Order no. fixed: 6921734005842

Order no. movable, rigid: 6921884004842



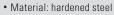








aw width		125
mensions mm	а	97
	b	73
	С	20
	d	24



- 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



Please order universal gripper set or gripper studs separately

Di

in

Universal gripper set



Order no. 6921884027031

Jaw width		125
Dimensions in mm	а	40
	b	18

• For clamping complex unmachined parts

• The individual elements of the universal gripper set can be reworked in order to vary both gripper height and support height of the workpiece

Comprising:

- 4 x gripper studs 6921884026000
- 4 x gripper stud mounts 6921884072000
- 4 x supports 6921884028000
- 8 x shims
- Support bolts
- M10 fastening bolts in various lengths
- M6 theaded pins in various lengths
- Socket screw wrench
- Storage case

Order no. 6921884026000

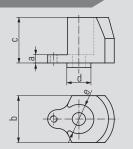
Dimensions in mm	h	11

• Gripper stud for universal gripper set

Gripper stud mount

Gripper stud





Order no. 6921884027000

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

• Mount for gripper stud 2306/001

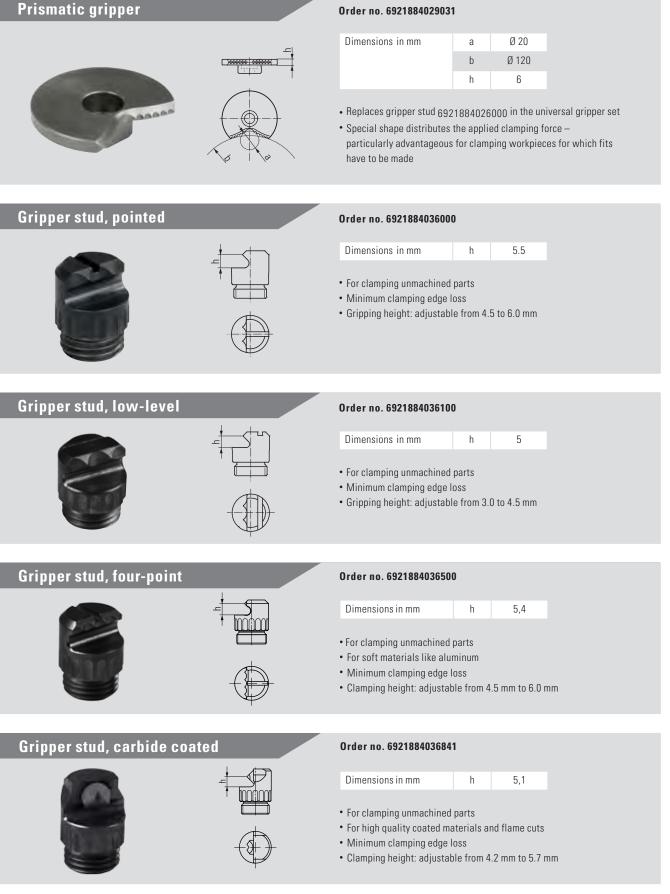
Support



Order no. 6921884028000

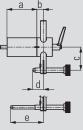
Dimensions in mm	а	22
	b	29

• Support for universal gripper set



Clamping insert, smooth	Order no. 6921884037000
	Dimensions in mmh7• 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 through-drilling close to the edge Offers 6 mm space below workpiece
Workpiece stop	Order no. 6921285650144
	Dimensions in mm a 67 b 15

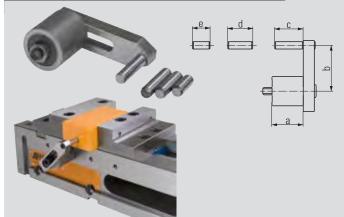




а	67
b	15
С	33 - 92
d	12-63,5
е	53,5 - 113,5
	b c d

- Can be installed on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: \pm 0.01)

Workpiece stop



Order no. 6921685670042

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

- Can be installed on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset

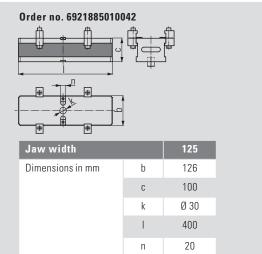
XL console



- Material: GG30
- For raising the vice

Hand crank

- Improvement of access for 5-sided machining
- Optional preparation for zero-point clamping systems
- Scope of supply: console incl. fixing bolt for positioning the vice, 4 pairs of Duo side clamps, 2 socket screw wrenches



Bestell-Nr. 6923015000131

Jaw width		90 - 160
Dimensions in mm	а	147
	SW	12

• Hand crank for the series NC-LCH hydraulic (90mm - 160mm)

Side clamps (pair)



Order no. 6921025000031

- For securing the vice on the machine table
- Supplied as a set of 2 items

DUO side clamps



Order no. – see table

Order no. 6921285000031

- For securing the vice on a console or machine table
- 1 set consists of 2 pairs of side clamps incl. screw connections

Aligning and fixing set



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

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

ALLMATIC basic – HYDRAULIC

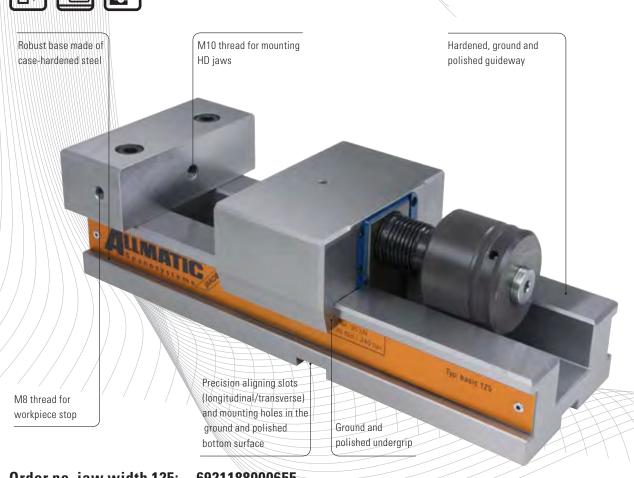
Scope of application:

- Conventional and CNC-controlled milling machines for efficient precision machining
- Horizontal installation great variability and flexibility

Product features :

- Excellent ease of operation guarantees optimal handling in every situation
- Fast adjustment for clamping range preselection
- The clamping force is generated via the hydraulic pressure of a hydraulic aggregate (this is required as an hydraulic source to press the vise)

- The hydraulic clamping stroke is limited due to safety regulations to a maximum of 4.5 mm
- The variable adjustment of the clamping force is achieved by hydraulic pressure found on the hydraulic power unit. The rough adjustment of the clamping range is via the control tool
- Integrated scrapers ensure functional reliability and minimise
 cleaning
- Fixing on the machine table by means of mounting holes in the vice base. Additional holes can be made in the soft middle section of the vice base
- Optional centre jaw allows two or more workpieces to be clamped



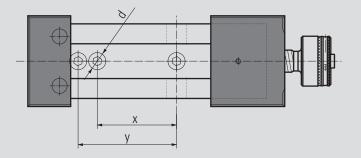
Order no. jaw width 125: 160:

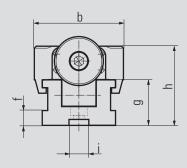
6921188000655 6921208000655

Scope of supply:

- 1 basic vice with clamping jaws
- 1 pair of Click parallels
- 1 socket screw wrench
- M12 fastening bolts

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





Technical Data

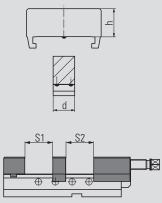
	125	160
а	310	405
b	124	160
С	50	66
d	13	13
f	15	15
g	48	56
h	87.5	105.5
i	20	20
l max	454	510
m	120	128
n	20	20
Х	100	100
у	125	125
	b c d f f g h h i i l max m n x	a 310 b 124 c 50 d 13 f 15 g 48 h 87.5 i 20 l max 454 m 120 n 20 x 100

Jaw width	125	160
Clamping range S1 in mm	0-208	0-283
Hydraulic movement in mm	4.5	4.5
Max. clamping force in kN	35	50
At hydr. pressure in bar	240	220
Weight in kg	15	28

ALLMATIC basic – hydraulic (accessories)

Interm<u>ediate jaw</u>

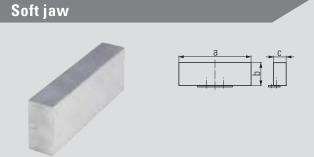




Order no. jaw width 1 1		2118502404 2120502404	
Jaw width		125	160
Dimensions in mm	h	39.5	49.5
	d	33	41
Clamping range S1		0-87	0-121

0-87 0-121

- Material: hardened steel
- For clamping more than one part
- Installation between fixed and movable jaws of the vice
- Mount for Click system on both sides of the jaw



Order no. jaw width 125: 6921684023042

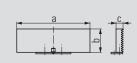
Clamping range S2

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





Order no. jaw width 125: 6921684032040

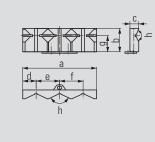
Jaw width		125
Dimensions in mm	а	125.6
	b	40.1
	С	12

- 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

ALLMATIC basic – hydraulic (accessories)

Prismatic jaws (pair)





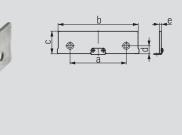
Order no. jaw width 125: 6921684024042

Ja

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. jaw width 125: 6921185035042 160: 6921205044042

Jaw width		125	160
Dimensions in mm	n a	88	88
	b	125	160
	c -0.01	35	44
	d	12.25	12.25
	е	3	3

- For parallel raising of workpieces
- Hardened, ground and polished parallels
- Parallels with Click system

Click parallels (pair) 100/00

Order no. jaw width 125: 6921185020042 160: 6921205025042

Jaw width		125	160
Dimensions in mm	а	88	88
	b	125	160
	c -0.01	20	25
	d	12.25	12.25
	е	3	3

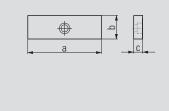
• For parallel raising of workpieces

- Hardened, ground and polished parallels
- Parallels with Click system

ALLMATIC basic -hydraulic (accessories)







Order no. jaw width		2102402203 2103402203	
Jaw width		125	

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

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

Serrated jaws (pair)

•	
а	C

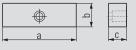
Order no. jaw width	125:	6921021005031
	160:	6921031005031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20

- Material: hardened steel
- Standard jaws with small surface area
- To increase the specific contact pressure per unit area
- Please order fastening bolts separately (order no. 6921011023000)

Soft basic jaws (pair)





Order no. jaw width	125:	6921024023031
	160:	6921034023031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	25	30

- Material: 21MnCr5G, mat. no.: 1.2162
- Jaws can be case-hardened
- For production of special jaws by the customer
- Please order fastening bolts separately (order no. 6921011023000)

ALLMATIC basic – hydraulic (accessories)

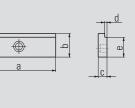
Prismatic jaws (set)		Order no. jaw width 1 1		2102402403 2103402403	
		Jaw width		125	160
	Dimensions in mm	а	125	160	
		b	40	50	
		С	35	45	
		d	15	20	
			е	35	45
			f	3	3
Material: hardened steel For herizental and vertical elemping of round			g	Ø 12 – 28	Ø 15-40

0

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

Step jaws (pair)





rder no. jaw width	125:	6921024025031
	160:	6921034025031

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	15	20
	d	3	3
	е	35	45

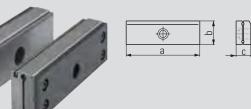
h

Ø 18 – 55 Ø 22 – 65

• Material: hardened steel

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

Roller pull-down jaws (pair)



Order no. jaw width	125:	6921024005131
	160:	6921034005131

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	26	35.5
	d	35	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)

ALLMATIC basic -hydraulic (accessories)





	•	٩	
-	а		d
			C -

Order no. jaw width	125:	6921024001042
	160:	6921034001042

Jaw width		125	160
Dimensions in mm	а	125	160
	b	40	50
	С	20	23
	d	12	15
	е	33	43

- Material: hardened steel
- For parts with rough clamping surfaces
- Spring leaves press the workpiece onto the support surface
- Spring leaves are interchangeable, see order no. 6921024002131 and 6921034002131 (see below)
- Please order fastening bolts separately (order no. 6921011023000)

Spring leaves (pair)



Order no. jaw width 125: 6921024002131 160: 6921034002131

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

Jaw fixing bolt



Order no. 6921011023000

- Bolt with shoulder –
- M10 x 23
 - Suitable for all HD jaws, type 125 to 160

Workpiece stop





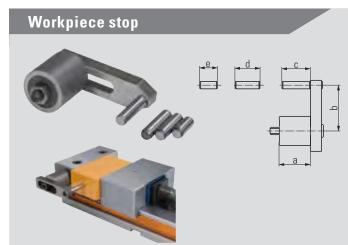
Order no. 6921285650144

Dimensions in mm	а	67
	b	15
	С	33 - 92
	d	12-63.5
	е	53.5 - 113.5

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Position of the third workpiece axis can be preset and clamped
- Workpiece stop can be swivelled away once the workpiece has been clamped
- This allows the stop side of the workpiece to also be machined (repeating accuracy: ± 0.01)

247

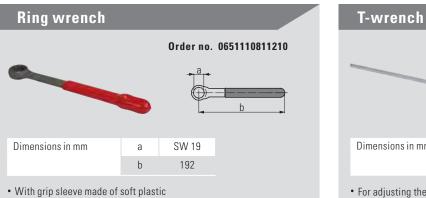
ALLMATIC basic - hydraulic (accessories)



Order no. 6921685670042

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

- Can be mounted on either side of the vice in the designated positions
- M8 fastening thread
- Can be pre-mounted with various fixed dimensions
- Position of the third workpiece axis can be preset





with grip sieeve made of sort plast

Side clamps (pair)



Order no. 6921025000031

- For securing the vice
- on the machine table
- Supplied as a set of 2 items

Suitable for the Series 125 mm up to 200 mm

Aligning and fixing set



- For securing through the base
- For aligning (positioning) and securing the basic vices on the machine table
- Size according to T-slot in the machine table

T-slot	Order no.
12	6921185620031
14	6921185621031
16	6921185622031
18	6921185623031

Order no. – see table

Aligning and fixing set



 T-slot
 Order no.

 12
 6921185600031

 14
 6921185601031

 16
 6921185602031

 18
 6921185603031

Order no. 0651112010536

- For securing with side clamps
- For aligning (positioning) and securing the basic vices on the machine table
- Size according to T-slot in the machine table

Order no. – see table

ZERO-POINT CLAMPING SYSTEMS – IMPORTANT INFORMATION

All our NC-series high-pressure vices can be retrofitted with mounting holes for all standard zero-point clamping systems. Please contact us!







NC vice TC version



NC vice T-REX version



Gripp vice TITAN 2 K-M-L version



NC vice DUO 90 version



NC vice DUO Plus version



NC vice CENTRO Gripp version



GRIPP Vice TITAN 2SC 125 version

STANDARD TERMS AND CONDITIONS OF DELIVERY, ASSEMBLY AND PAYMENT

In these terms and conditions, the term "entrepreneur" shall be defined according to section 14 of the German Civil Code ("BGB") and it shall also include legal entities incorporated under public law special governmental trusts (section 310 (1) sentence,(-1-) of the German Civil Code).

§1 Conclusion of contract (general terms of contract, scope of delivery)

- (1) Our deliveries, which also include services, suggestions, consultation and ancillary services, aremade only on the basis of the Terms and Conditions laid out below. We hereby reject any contradictory or alternative terms and conditions of the Customer; they shall not be accepted even if we fail to reject them again after we have received them. Upon placement of the order, but at the latest upon acceptance of delivery, the Customer accepts these Terms and Conditions.
- (2) Our offers are non-binding. Alterations and additions to the contract must be made in writing. This also applies to a decision to dispense with this requirement for written form.
- (3) The rights of the Customer arising out of this Contract can only be transferred to third parties with our consent.
- (4) The scope of delivery is in accordance with our written acknowledgement. We are only obliged to deliver in so far as it is possible to acquire the required raw materials, supplies and fuel with the relevant currency. Any reference to DIN (German Institute for Standardization) regulations is to be understood as a description of the contractual performance and not a warranty of specific characteristics. Drawings, illustrations, technical data, details of weight, dimensions and performance are meant only as a guide, unless they are expressly stated to be binding in the order acknowledgement. We retain rights of ownership and copyright to this documentation; third parties must not be granted access to it without our express authorisation.

§ 2 Prices

- Unless agreed otherwise, our quoted prices include loading ex works or warehouse, and excluding statutory value-added tax and all other packaging and freight costs, customs duties and transportation insurance premiums, which are to be charged to the Customer.
- (2) Should the costs connected with the order increase substantially after conclusion of the contract, the contracting parties are obliged to agree an appropriate adjustment of the prices. If no agreement is reached, the contracting parties are entitled to withdraw from the contract. Any further claims are excluded.

§ 3 Payment terms

- Unless an alternative written agreement has been reached, payment is to be made without any deduction within 30 days.
- (2) The withholding of payment or set-off against any possible counterclaims of the Customer that are disputed by us is not permissible. We are entitled, even contrary to the stipulation of the Customer, to set off his payments against another claim. Should the Customer default on payment to the sum of at least 10% of our overall claims against him, it shall be deemed agreed that:

All our claims shall become payable immediately. We shall be entitled to make the further processing of all orders from the Customer subject to an advance payment or the furnishing of security, or to refuse further fulfilment after the expiry of a reasonable set additional period.

§ 4 Time limits for delivery, acceptance and call-offs

- (1) If delivery periods are agreed, these are to be calculated from the date on which the goods are made available ex works. Furthermore, they are only approximate. If the Customer does not fulfil his obligations, or if delivery is delayed as a result of unforeseeable or extraordinary events or events over which we have no control in our company or in any of our supplier or transport companies, then an appropriate extension of the delivery date shall be deemed agreed. The same applies in the case of strike or lock-out. Should the hindrance continue for longer than one month, we are entitled to withdraw from the contract. The delivery period begins on the date our order acknowledgement is issued, but not before all technical and commercial details have been settled. Any changes requested by the Customer in the execution of the product ordered have the effect of interrupting and extending the delivery date accordingly. Delays in returning documentation sent for approval also extend the delivery time.
- (2) Should the Customer default on acceptance of goods or services offered to him in accordance with the terms of the contract, he will be required to reimburse our costs at a rate of 25% of the invoice value of the goods, beginning one month after notification that the goods are ready for dispatch, without proof of how such costs have been incurred or the extent of such costs. The Customer is entitled to prove that we have incurred no losses or considerably lower losses.
- (3) We are entitled to otherwise dispose of the delivery goods after the granting and fruitless expiry of a reasonable period of time.

§ 5 Intellectual property rights

In the case of delivery on the basis of drawings, models or details supplied by the Customer, the Customer exempts us from all third-party rights. In the case of breach of contract by the Customer, his intellectual property rights shall not prevent our utilisation of the goods.

§ 6 Transfer of risk

All risk shall pass to the Customer as soon as the goods leave the supplier factory. If goods are taken back for reasons over which we have no control, then the Customer shall bear all risk until the goods are received by us.

§7 Warranty

- (1) Standard trade tolerances with regard to dimensions, amounts, weight, grain size, quality, colour, etc., are not grounds for complaint by the Customer. In case of doubt, the weight established by us is applicable. In case of complaint, the specifications agreed with the Customer are applicable.
- (2) Our technical advice and recommendations are based on appropriate examination, but are given without contractual obligation. In particular, checking whether the goods ordered or those suggested by us are suited to the purpose intended by the Customer is the sole responsibility of the Customer. A warranty of specific characteristics must always be given in writing. This also applies to any decision to dispense with the requirement for written form. The characteristics of the purchased object and the purpose for which it is intended are based solely upon our product description. Any other agreements reached must be confirmed in writing.
- (3) Complaints must be made in writing no later than two weeks after receipt of the goods. Hidden defects must be reported immediately when they are discovered. We have a right to examine goods about which complaints are made. Should the Customer not permit this, his claims shall lapse. In the case of a justified complaint, the Customer's rights are restricted to supply of replacement goods free of charge and free of freight costs, or repair by us.

(4) Should repair or replacement fail, the Customer shall grant a reasonable additional period of time and can, after fruitless expiry of this period, demand either termination of the contract or reduction of the purchase price, at his option.

More far-reaching claims by the Customer, particularly to reimbursement of processing costs, costs of assembly and disassembly and for damage not affecting the object supplied, are excluded as far as legally permissible.

- (5) If a partial delivery is defective, no rights in respect of the remaining partial delivery can be derived. We are entitled to refuse to fulfil claims based on defective performance as long as the Customer does not fulfil his obligations.
- (6) The following circumstances do not constitute defects:
 damage resulting from normal wear and tear to wearing parts
 - damage caused by improper handling, particularly as a result of inadequate maintenance or lack of maintenance
 - damage caused by electrical connections in the building which do not conform to the regulations of the Federation of German Electrical Engineers (VDE)
- damage caused by a failure to observe our operating and maintenance instructions.
 (7) In order that all repairs and replacement deliveries can be made which appear necessary to us in
- (/) In order that all repairs and replacement deliveries can be made which appear necessary to us in our fair judgment, the Customer must, after consultation with us, provide sufficient time and opportunity, otherwise we are released from liability for the defects. Only in the case of an emergency which endangers operational safety and to prevent disproportionately serious damage, in which case we must be informed immediately, or if we are in default regarding the rectification of defects, does the Customer have the right to rectify the fault himself or to have the fault rectified by a third party and demand reimbursement from us for the costs incurred.
- (8) Warranty claims lapse 24 months from the date on which the Customer takes possession of the goods. In the case of deliveries and services that are subject to contracts for work and services, the warranty period is 24 months from acceptance. If acceptance does not take place in our factory, it is deemed to have taken place if a declaration is made to us after delivery or if the goods supplied are utilised for the purpose intended.

§ 8 General limitation of liability

We restrict our liability for negligent breach of obligations by us or by our servants or agents to liability for contractually typical, foreseeable damage.

§ 9 Liability under the German Product Liability Law

- Exclusions of liability under these Standard Terms and Conditions of Delivery, Assembly and Payment do not apply to claims of private consumers and users, irrespective of fault, under German Product Liability Law (Produkthaftungsgesetz).
- (2) We are only liable to the Customer for compensatory and recourse claims if it can be proven that we are responsible for a defect in the goods supplied by us.

§ 10 Retention of title

- (1) All the goods supplied by us remain our property (goods subject to retention of title) until all claims are fulfilled, in particular the balance claims due to us, regardless of the legal basis under which these claims arise. This also applies if payments are made in respect of specifically identified claims. The Customer is obliged to store and label separately the goods subject to retention of title.
- (2) Handling and processing of goods subject to retention of title are done for us as the manufacturer according to § 950 BGB (German Civil Code), without imposing any obligations on us. The processed goods are deemed goods subject to retention of title according to Clause 1 above. If the Customer processes, combines or mixes goods subject to retention of title with other goods, we attain co-ownership of the new object in proportion to the ratio between the invoice value of the goods subject to retention of title according to us as his rights of ownership of the new object to the extent of the invoice value and holds them in safe custody for us free of charge. The rights of co-ownership arising under this clause are deemed goods subject to retention of title according to Clause 1 above.
- The Customer may only sell the goods subject to retention of title in the ordinary course of business under his standard terms and conditions and as long as he is not in default, and only provided that the claims arising out of the resale in accordance with Clauses 4 and 5 are assigned to us. He is not entitled to dispose of the goods subject to retention of title in any other way.
 The Customer's claims arising out of the resale of the goods are herewith assigned to us. They
- (4) The Customer's claims arising out of the resale of the goods are herewith assigned to us. They serve as security to the same extent as the goods subject to retention of title themselves. Any further assignment of these claims is excluded. We accept the claims.
 (5) If the goods in which we have co-ownership under Clause 2 above are sold, the assignment of
- (5) If the goods in which we have co-ownership under Clause 2 above are sold, the assignment of claims applies in the amount of the co-ownership share or the invoice value. At our request, the Customer is obliged to immediately inform his buyer of the assignment to us and to provide us with the information and documentation required to enforce these claims. The Customer is obliged to inform us immediately of any seizure or impairment by third parties.
- (6) If the value of the existing securities exceeds the secured claims by more than 10% in total, we are to this extent obliged to release securities of our choice upon request by the Customer

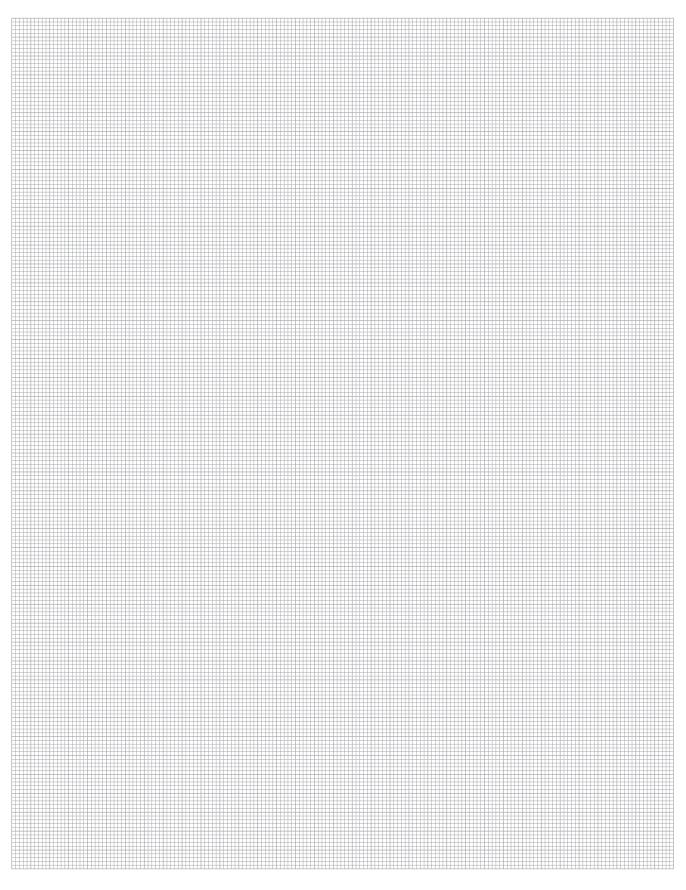
§ 11 Place of fulfilment and jurisdiction

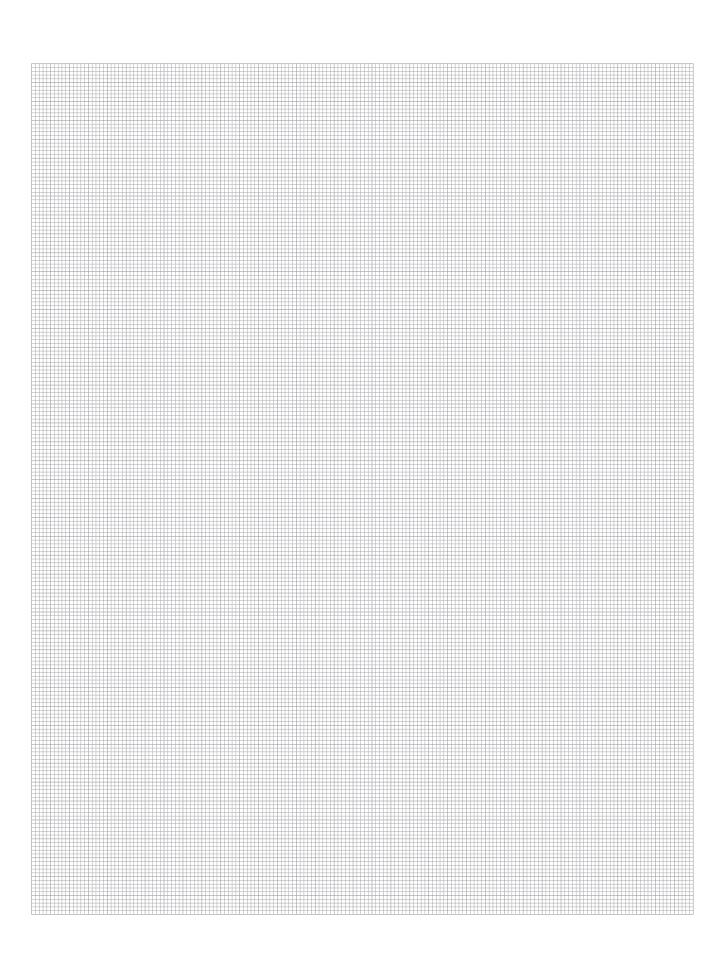
- (1) The place of fulfilment for payments and for all other obligations is our registered office.
- (2) Jurisdiction is that of our registered office, including for actions filed under the special procedure for claims arising from bills of exchange and cheque payments. We are entitled to take action against the Customer at his place of general jurisdiction. This is applicable unless otherwise stipulated in an arbitration agreement in individual cases.
- (3) The law of the Federal Republic of Germany is exclusively applicable to all legal relations between the Customer and ourselves; application of the UN Convention on Contracts for the International Sale of Goods is excluded.

§ 12 Severability

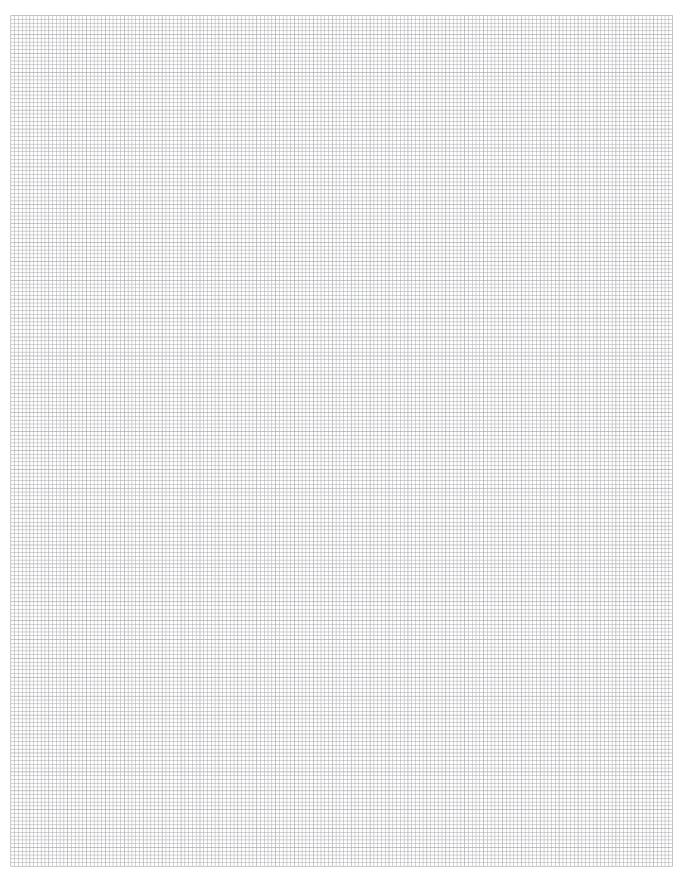
Should individual provisions of these standard delivery and payment terms be completely or partially invalid or void, then the contracting parties are obliged to agree a provision by which the purpose and aim of the invalid or void provision is best achieved. For the rest, the valid contractual agreements are upheld.

SPACE FOR YOUR NOTES AND SKETCHES





SPACE FOR YOUR NOTES AND SKETCHES





ALLMATIC-Jakob Spannsysteme GmbH Jägermühle 10, 87647 Unterthingau, Germany Telefon: +49(0)8377 929-0 +49(0)8377 929-380 Fax: **General Catalogue ALLMATIC 2014**



Distributor's stamp