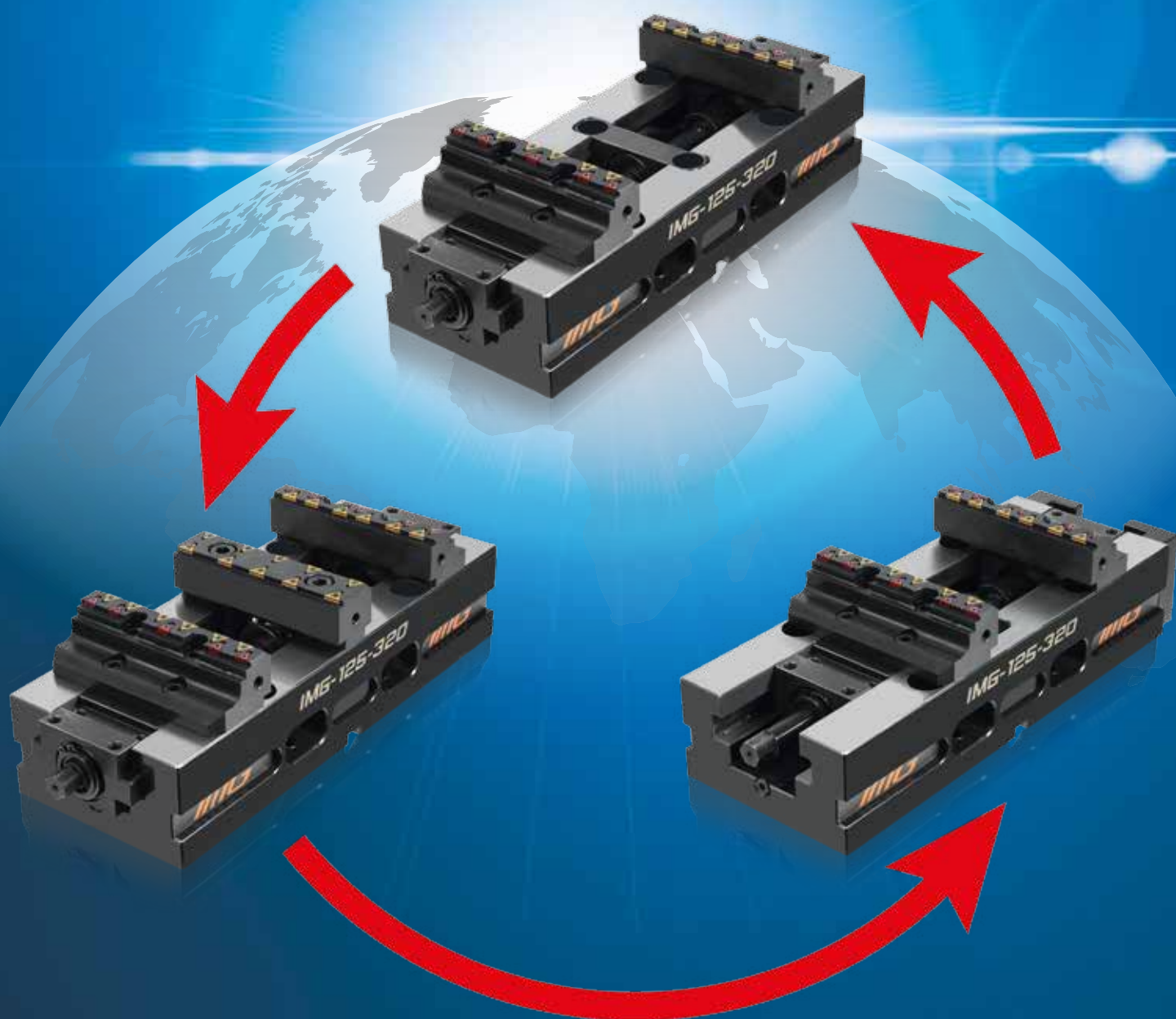


# ING

*IMAGINATION HAS NO LIMIT*





**Vice**

**Self-centering | Double Clamping | Fixed**

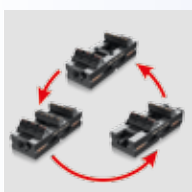


**IMAGINATION HAS NO LIMIT**



**Vice**

**Self-centering | Double Clamping | Fixed**



## IMG

### Vice

- Self-centering
- Double Clamping
- Fixed

Page

4



## IMG

### Accessories

Page

18



## IMG

### Self-centering | Double Clamping | Fixed

- IMG 125 - 220

Page

12



## IMG

### Accessories

- Riser
- Alu Pyramid
- Triangular tombstone
- Tombstone

Page

20



## IMG

### Self-centering | Double Clamping | Fixed

- IMG 125 - 320

Page

14



## Clamping Pins

### Accessories

- For APS 140 and APS 190

Page

26



## IMG

### Self-centering | Double Clamping | Fixed

- IMG 160 - 270

Page

16



## CLAK System

### Accessories

Page

28



## IMG

### Self-centering | Double Clamping | Fixed

- IMG 160 - 420

Page

18



## IMG

- Spare parts

Page

30



# Self-centering vice | Double

## Wide clamping range

Maximum flexibility  
For external and internal clamping

## SinterGrip jaws:

Reversible jaws for minimum clamping depth and without pre-machining



## SinterGrip jaws



## Mechanical clamping

Totally protected with patented telescopic system.  
The large power transmission allows high performance in the manufacturing process



## Interface

For Zero Point clamping systems and mounting holes as standard





# le Clamping | Fixed

- **Totally protected**

- With patented telescopic system

- **Through holes**

- For frontal clamping

- **Ideal**

- For automation and palletizing systems

- **Flexible mounting**

- on machine tool pallet using clamps (optional)

**Double clamping jaw  
(for double clamping)**



**Retainer plate  
(for fixed clamping)**



- **Very large drainage slots**

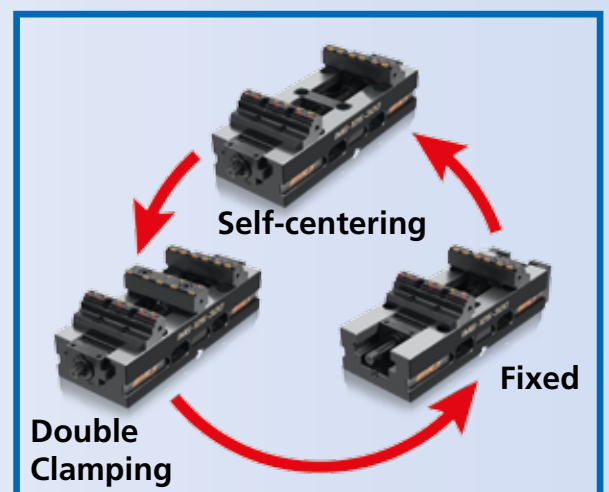
- for coolant and chips

- **Treated and precision ground guides**

- for maximum accuracy and repeatability

- **Parallels**

- with quick change Clak System





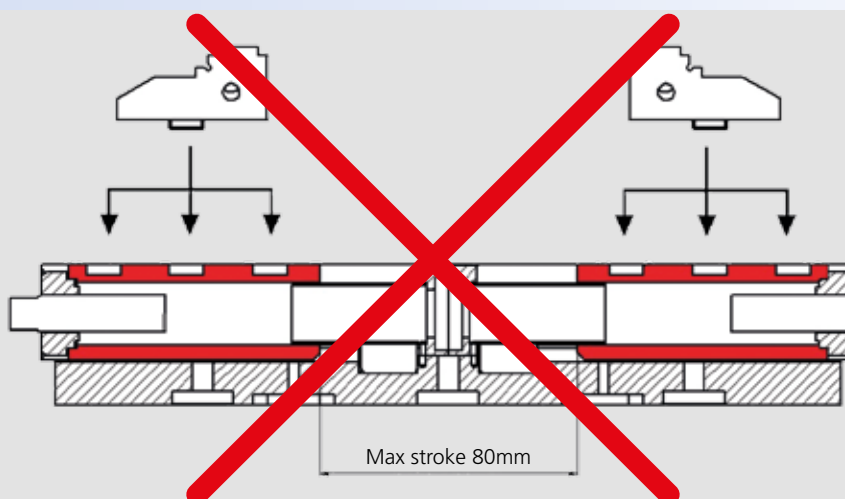
**Vice**  
**Self-centering | Double Clamping | Fixed**

## PATENTED PROTECTED SCREW



**IMG** vices have a fully protected operating screw with a patented telescopic system.

This innovation makes it possible to avoid having to remove the jaws in order to find the clamping position. In fact, normally, vices with protected screws use the slide-way as a protection.



This type of solution forces continuous displacement of the jaws in the appropriate seat.

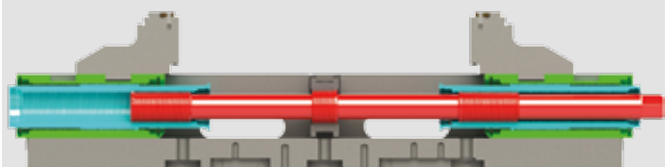
**IMG**, on the contrary, while keeping the screw completely protected, allows the continuous movement of opening and closing of the vice.



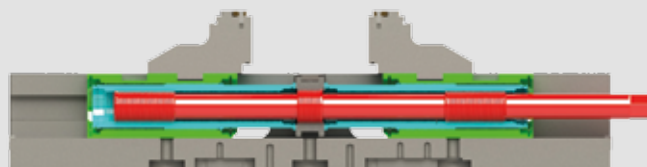
Patented protected screw



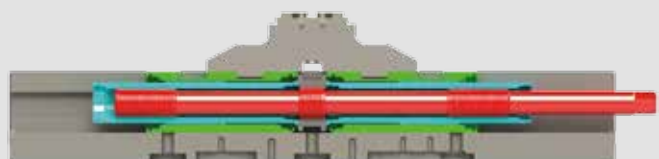
Open



Closing



Close



Opening





## Vice

**Self-centering | Double Clamping | Fixed**

### MODULAR

The IMG self-centering vices can be easily transformed into fixed vices or double clamping vices.

**Self-centering**



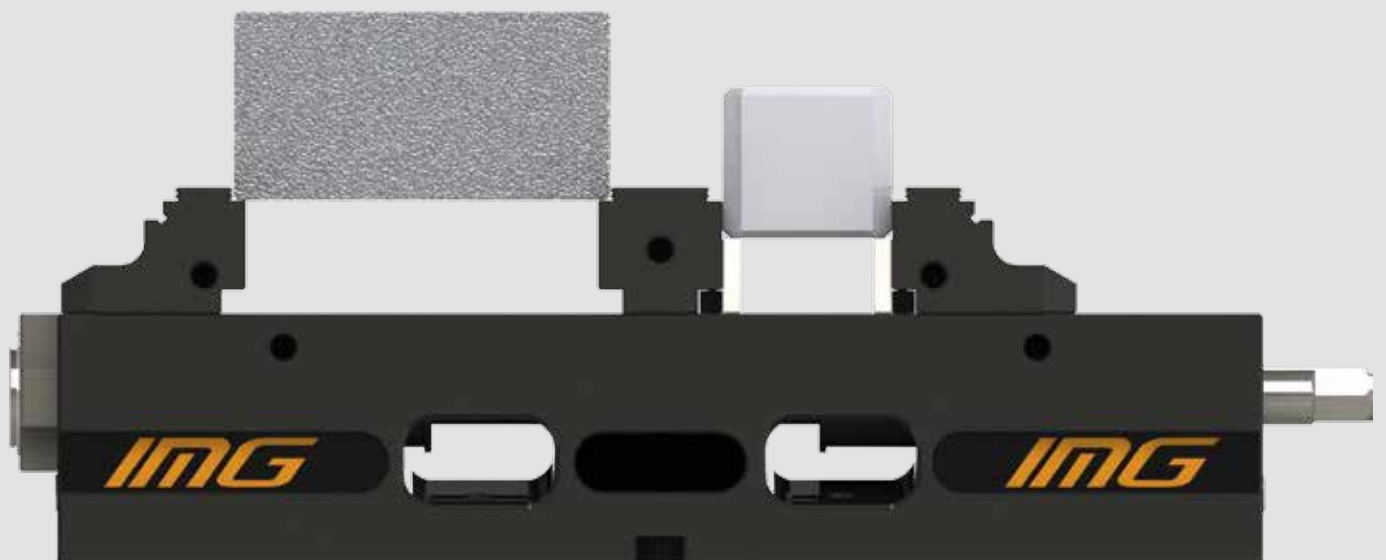
**Double Clamping**



**Fixed**



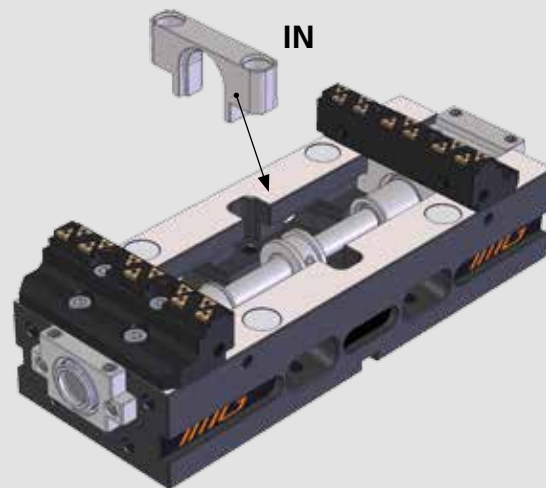
The double clamping vices have a completely compensating mechanism (until zero), therefore it is possible to clamp 2 pieces of different sizes.



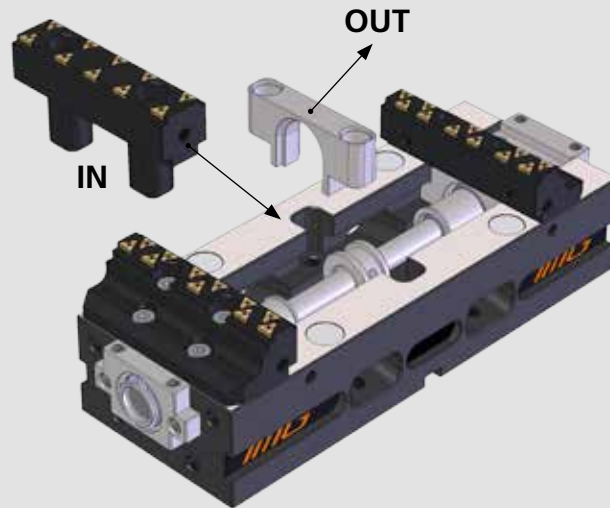




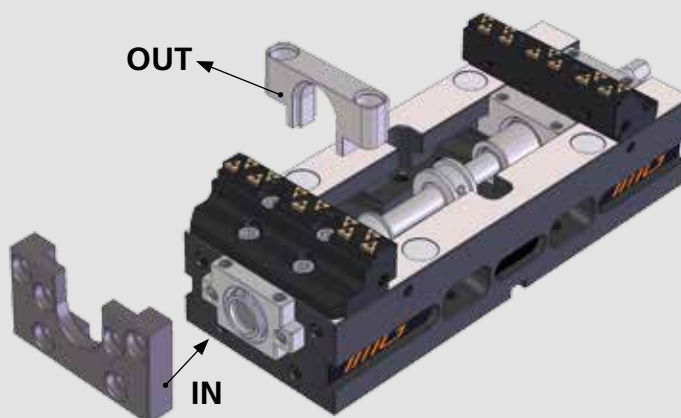
**Modular**



**Self-centering**



**Double Clamping**



**Fixed**

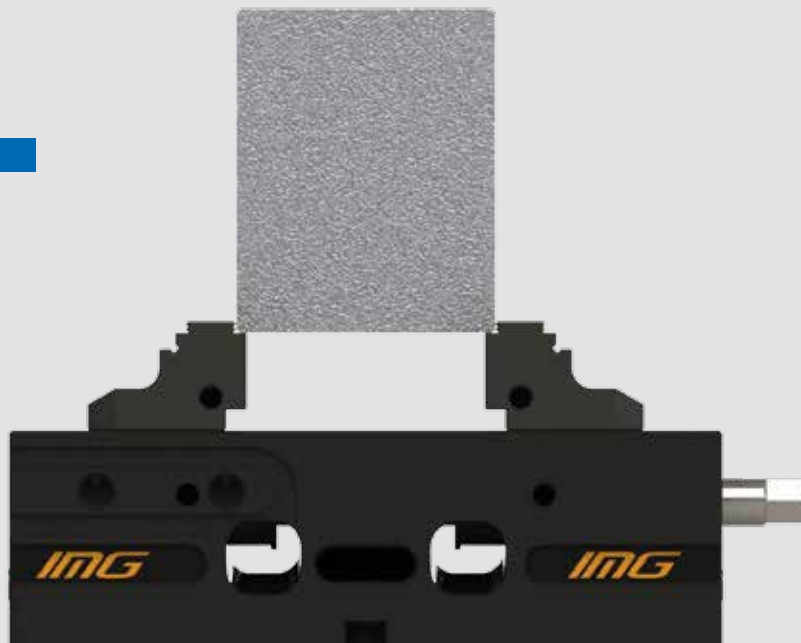


**Vice**  
**Self-centering | Double Clamping | Fixed**

## HIGH CLAMPING PERFORMANCE

IMG vices clamp up to 55 kN.  
The clamping force combined with the patented SinterGrip system guarantees high performance.

1 OP.



2 OP.





# SinterGrip

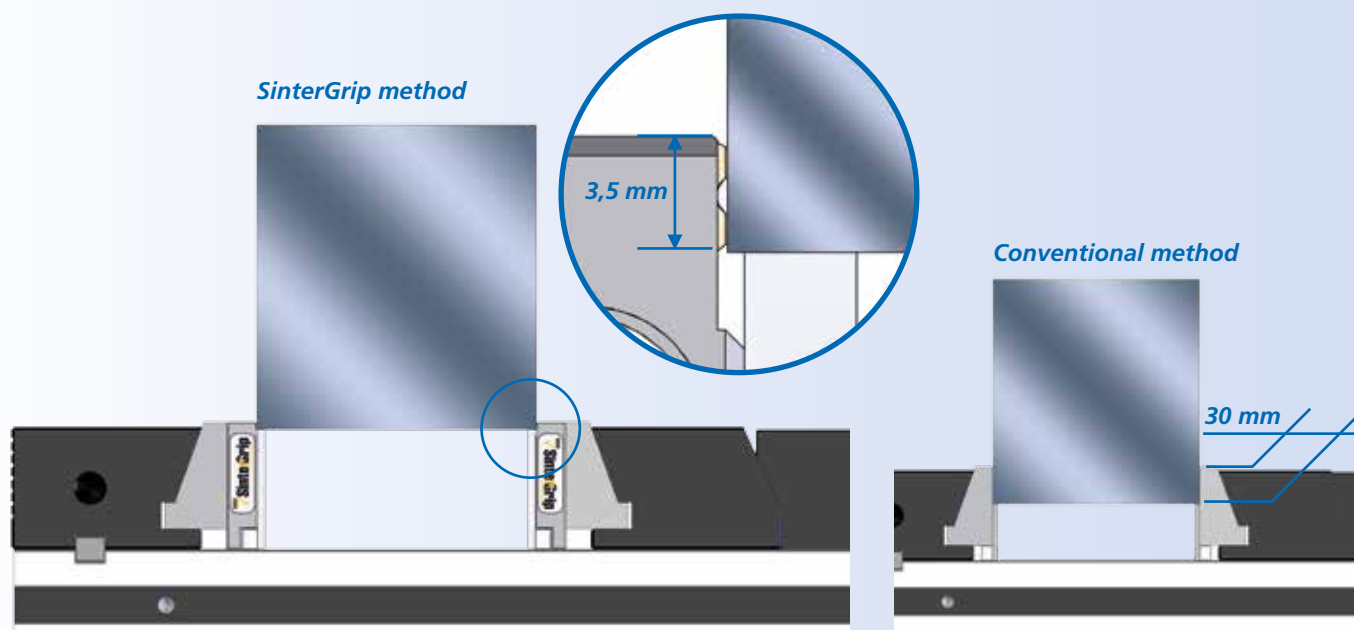
Our new patented product **SinterGrip** is born to satisfy the current need to clamp a workpiece for very few millimeters (with SinterGrip 3,5 mm clamping surface), and this for the following reasons:

- 1) In order to machine the workpiece completely in a single operation (especially for 5 axis machines);
- 2) In order to save money for the raw materials, especially when they have a big impact on the price (aluminum, titanium, etc.)

Indirectly to these reasons, and in order to improve the performance of the machine tool and the tools

**higher cutting speed +  
higher feed rate =  
bigger volume of metal removed =  
less time to machine the workpiece**

the market requires safe clamping, which could at the same time possibly avoid the deformations of the piece itself.



**Only 3,5 mm clamping surface**, no need of pre-machining the workpiece, clamping stability, higher cutting rate: **SinterGrip** brings only advantages compared to the traditional systems.

On the contrary, traditional systems need, for the clamping of the workpiece, a bigger clamping surface, with the result of waste of raw materials and greater possibility of deformation of the workpiece.

### ■ Patented protected screw

### Applications / Customer Benefits

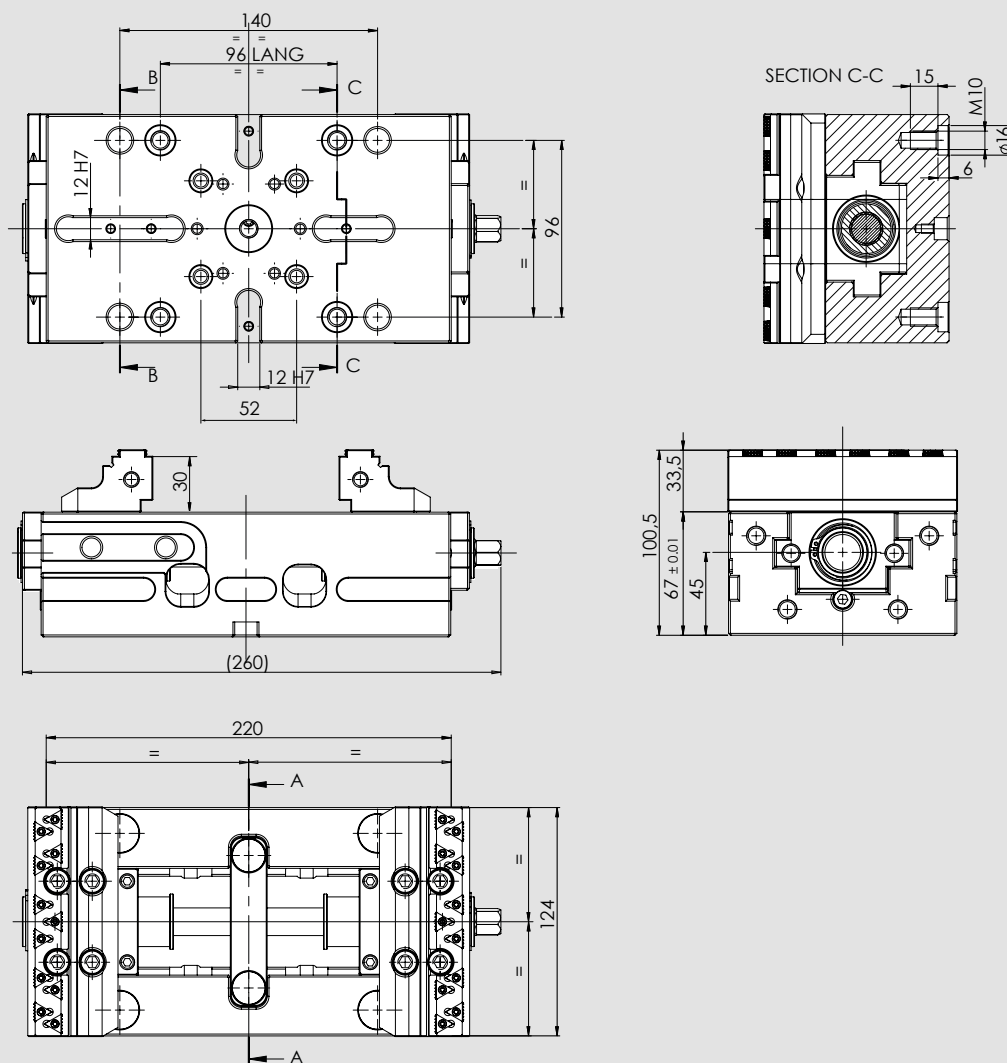
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

### Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

### Standard equipment

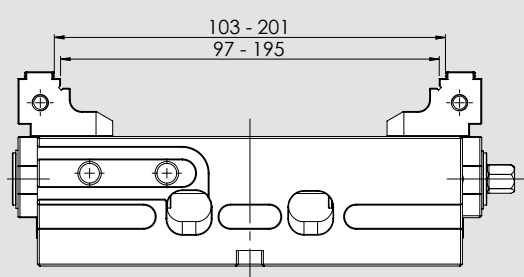
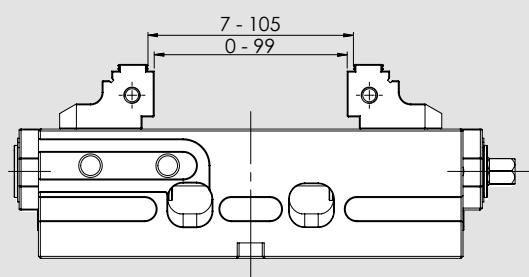
Wrench, jaws, Sintergrip inserts.



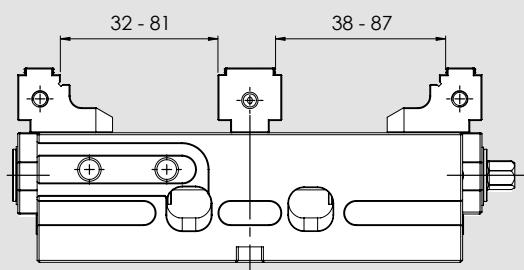
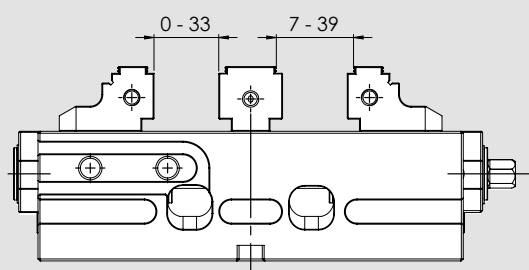
Type	Id. No.	Weight
IMG 125 - 220 with SinterGrip jaws <b>STD</b>	77583511	15 Kg
IMG 125 - 220 with SinterGrip jaws <b>ALU</b>	77583512	15 Kg
IMG 125 - 220 with SinterGrip jaws <b>HRC</b>	77583513	15 Kg

■ Patented protected screw

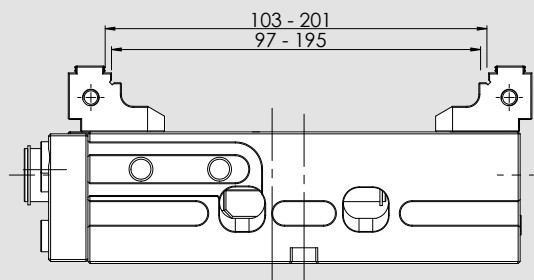
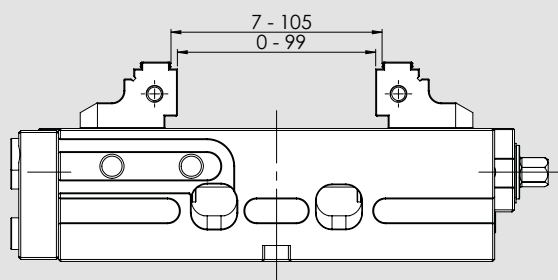
### Self-centering



### Double Clamping



### Fixed





■ Patented protected screw

### Applications / Customer Benefits

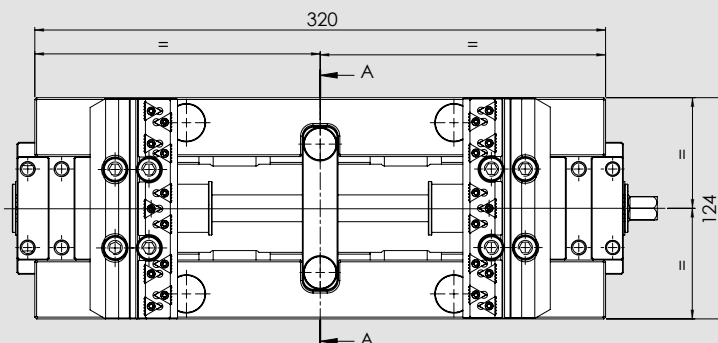
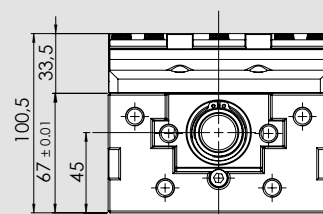
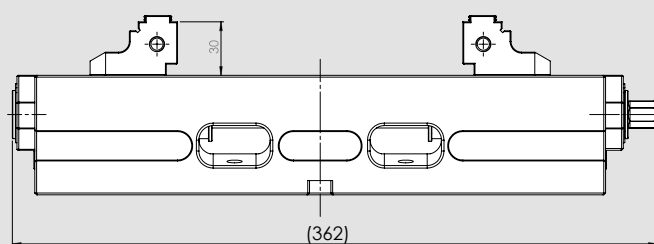
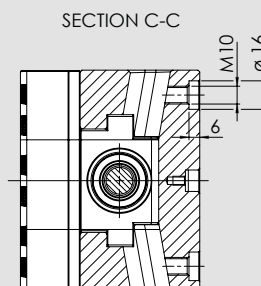
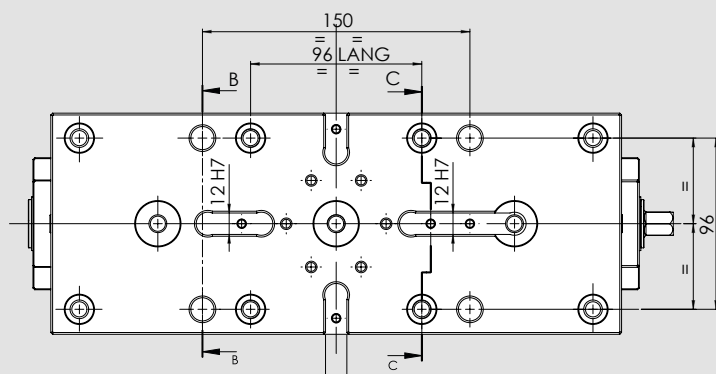
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

### Technical features

- Self-centering clamping
- Clamping force up to 40 kN (80 Nm)
- Jaw width 125 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

### Standard equipment

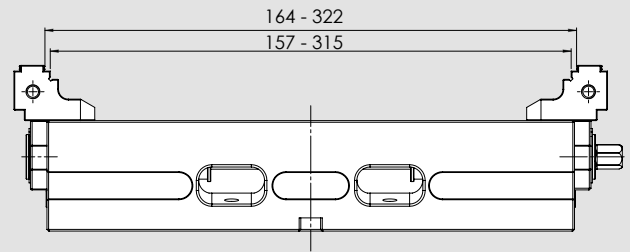
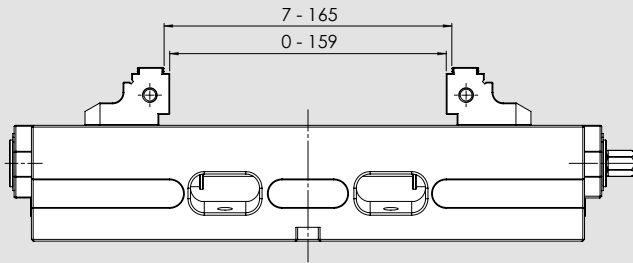
Wrench, jaws, Sintergrip inserts.



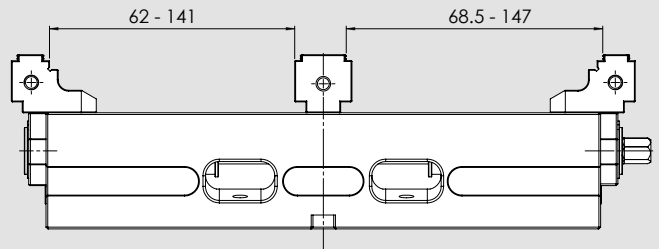
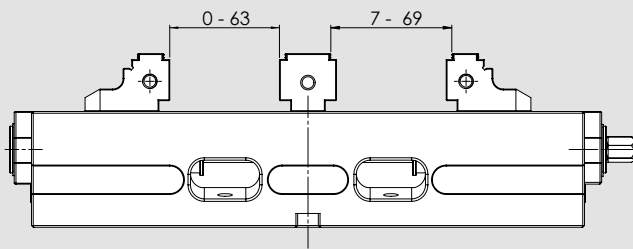
Type	Id. No.	Weight
IMG 125 - 320 with SinterGrip jaws <b>STD</b>	77583521	20 Kg
IMG 125 - 320 with SinterGrip jaws <b>ALU</b>	77583522	20 Kg
IMG 125 - 320 with SinterGrip jaws <b>HRC</b>	77583523	20 Kg

■ Patented protected screw

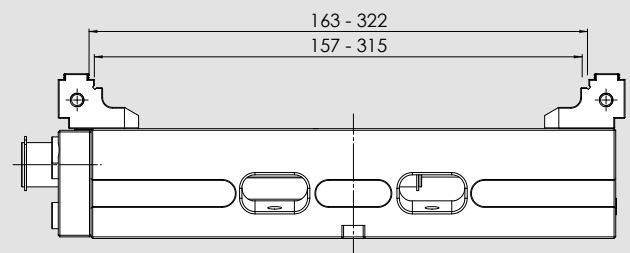
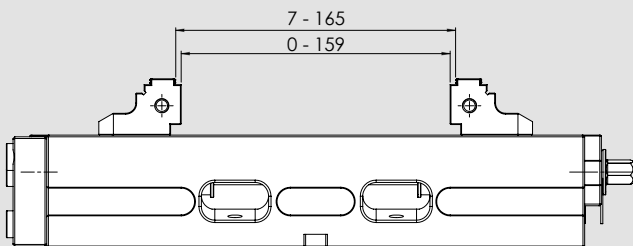
### Self-centering



### Double Clamping



### Fixed



### ■ Patented protected screw

### Applications / Customer Benefits

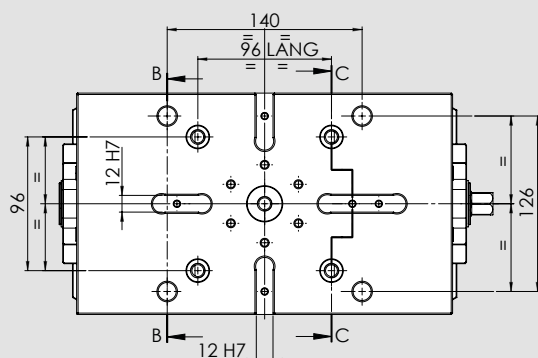
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

### Technical features

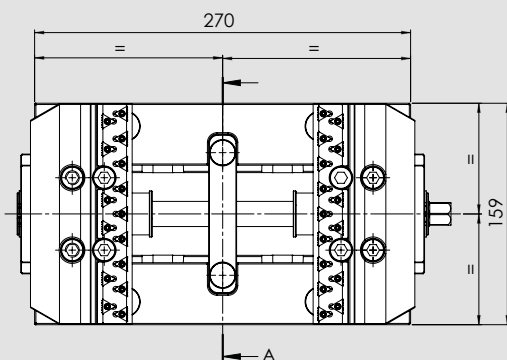
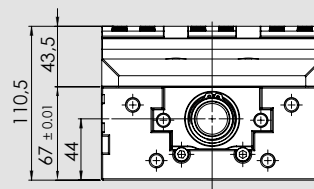
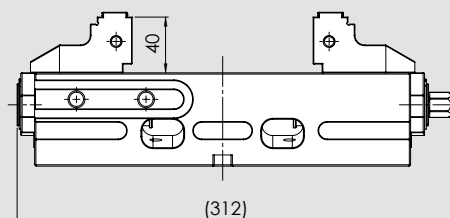
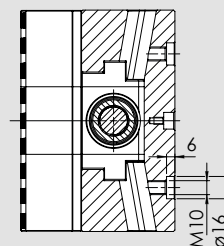
- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

### Standard equipment

Wrench, jaws, Sintergrip inserts.



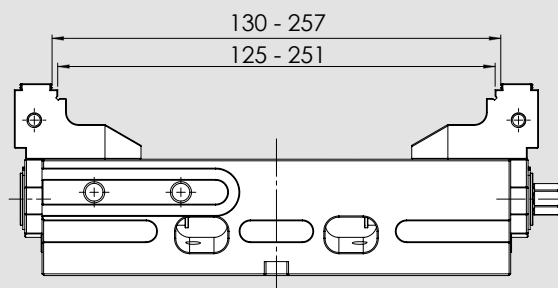
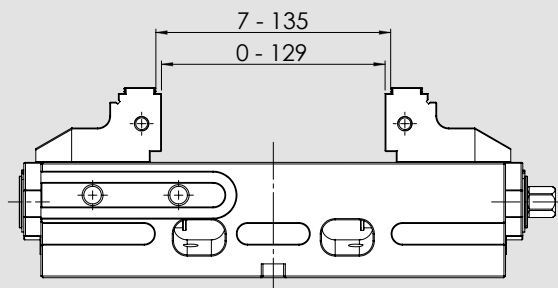
SECTION C-C



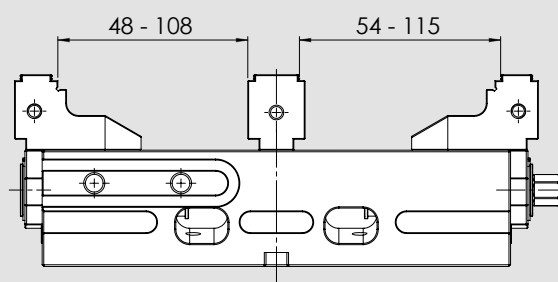
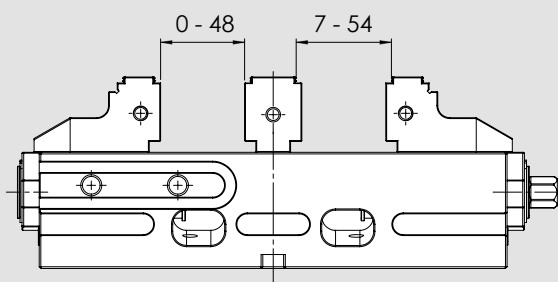
Type	Id. No.	Weight
IMG 160 - 270 with SinterGrip jaws <b>STD</b>	77583611	22 Kg
IMG 160 - 270 with SinterGrip jaws <b>ALU</b>	77583612	22 Kg
IMG 160 - 270 with SinterGrip jaws <b>HRC</b>	77583613	22 Kg

■ Patented protected screw

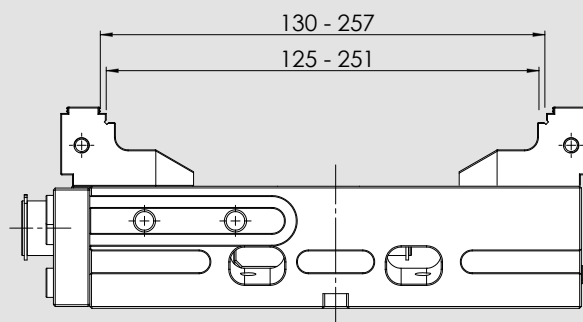
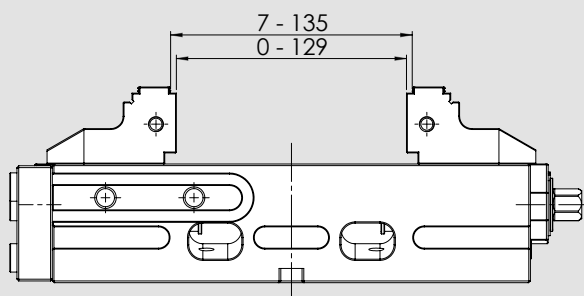
### Self-centering



### Double Clamping



### Fixed



■ Patented protected screw



### Applications / Customer Benefits

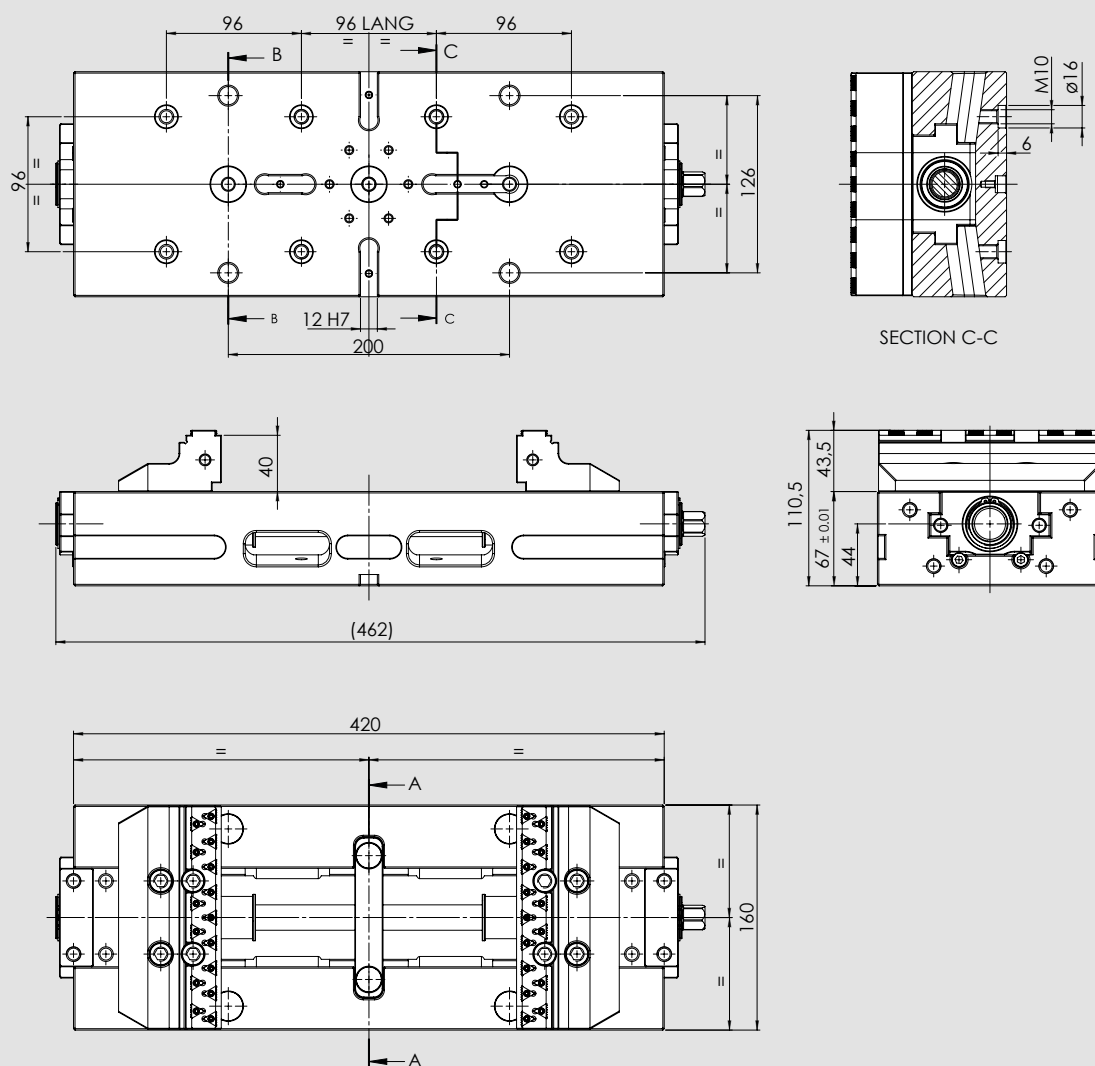
- Highly precise self-centering clamping with maximum repeatability
- Totally protected
- Compact design for better accessibility and very large drainage slots
- Jaws with SinterGrip clamping inserts for minimum workpiece clamping depth without pre-machining
- Wide clamping range
- Ideal for OP 10 and OP 20

### Technical features

- Self-centering clamping
- Clamping force up to 55 kN (120 Nm)
- Jaw width 160 mm
- Interface for zero point systems APS / WPS and Lang 96 mm as standard

### Standard equipment

Wrench, jaws, Sintergrip inserts.

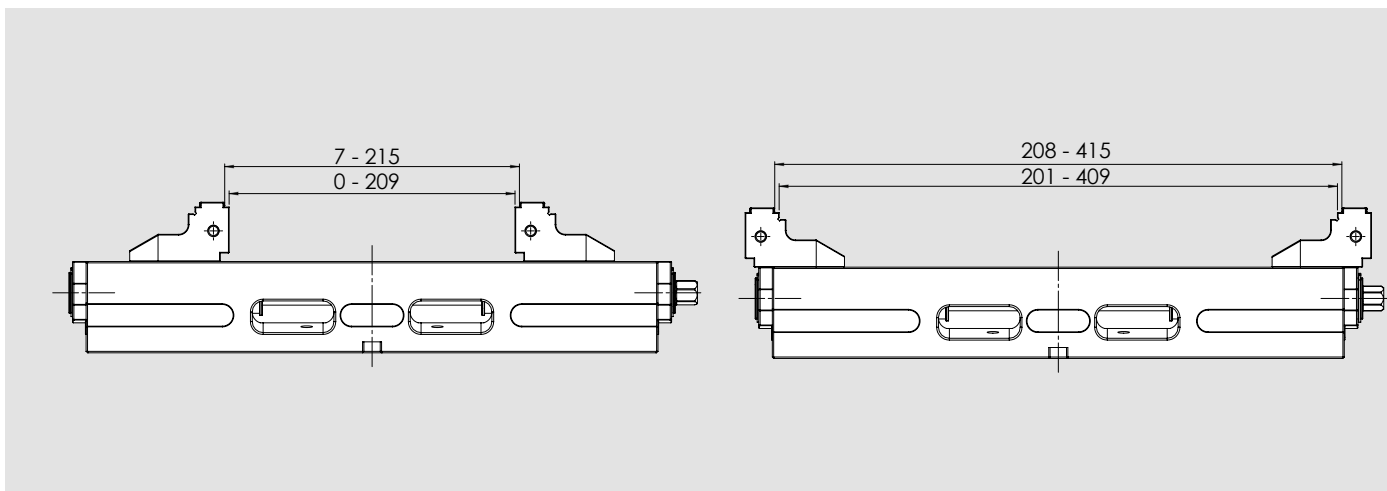


Type	Id. No.	Weight
IMG 160 - 420 with SinterGrip jaws <b>STD</b>	77583621	32 Kg
IMG 160 - 420 with SinterGrip jaws <b>ALU</b>	77583622	32 Kg
IMG 160 - 420 with SinterGrip jaws <b>HRC</b>	77583623	32 Kg

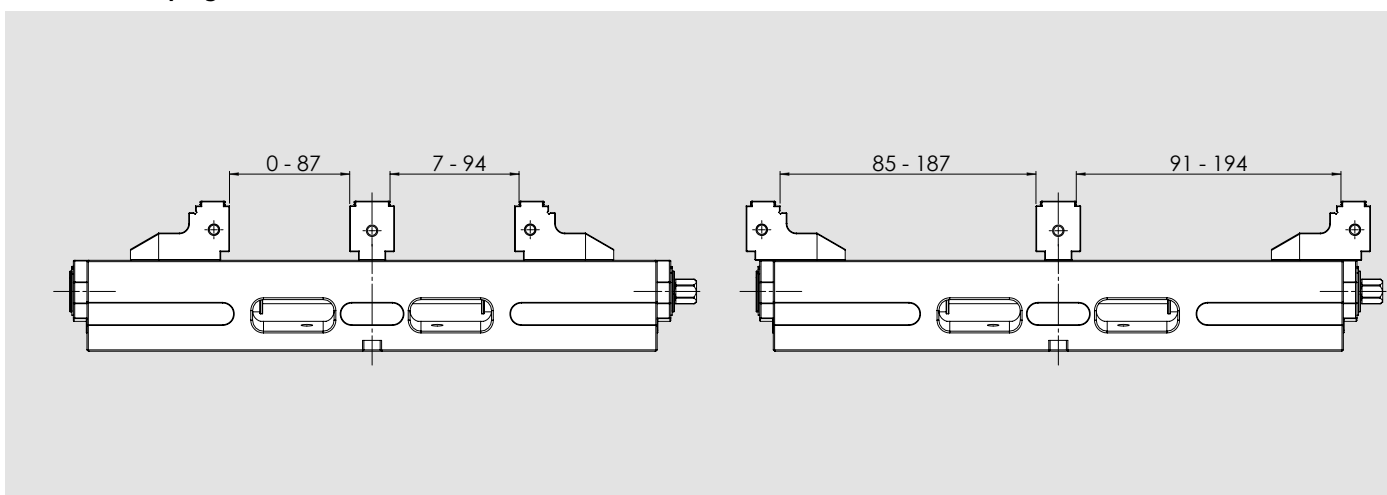


■ Patented protected screw

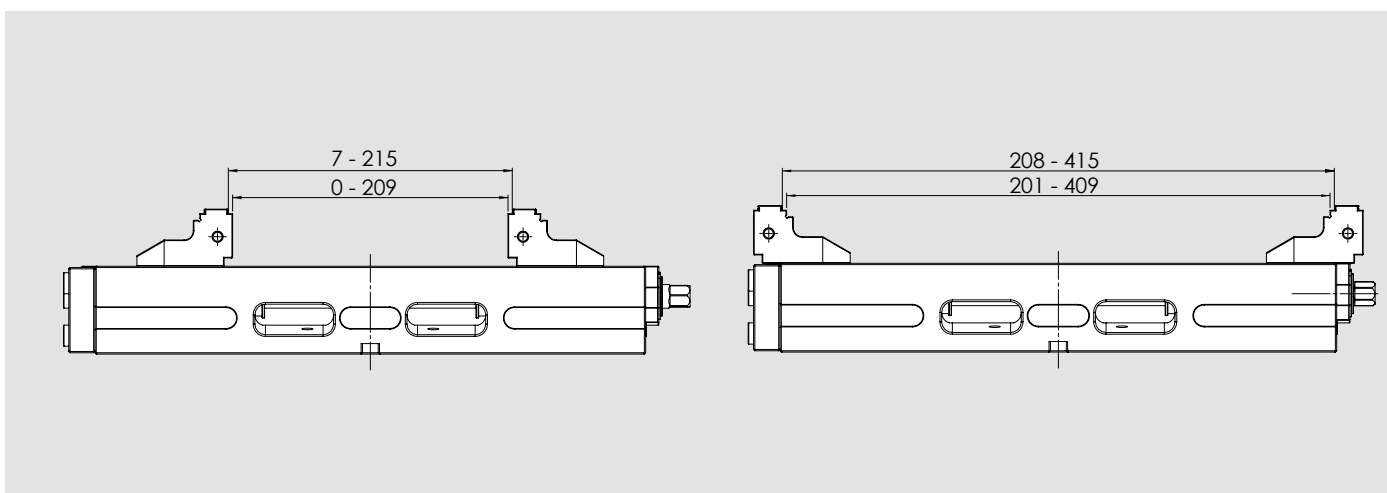
### Self-centering



### Double Clamping



### Fixed



**Double clamping jaw - SinterGrip not included, to be specified at the moment of the order**



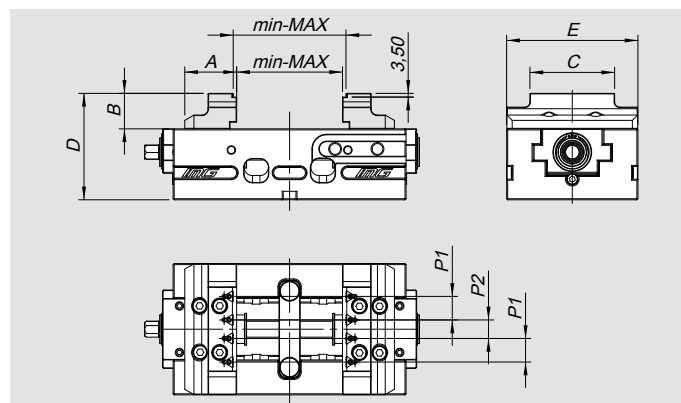
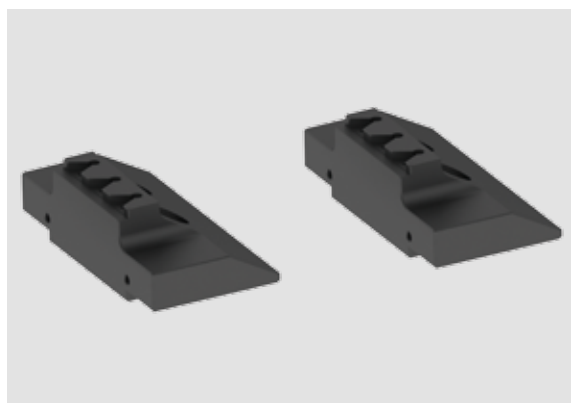
Type	Id. No.
IMG 125	58351719
IMG 160	58361719

**Retainer plate**



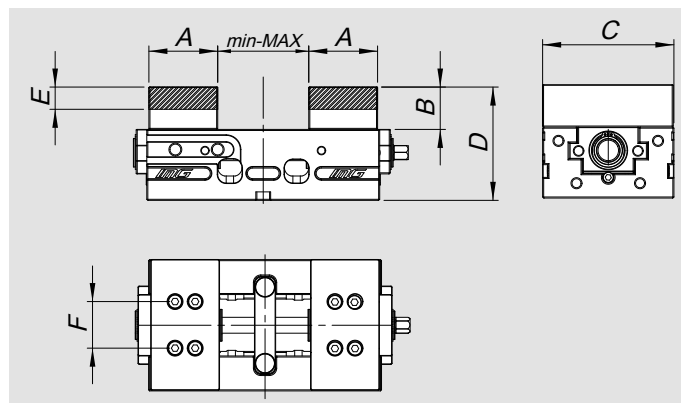
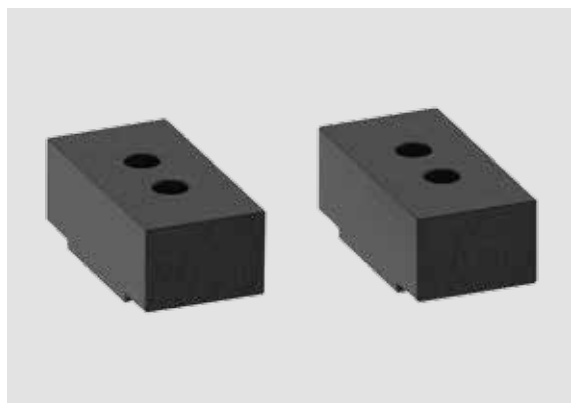
Type	Id. No.
IMG 125	58351019
IMG 160	58361019

**Pair of reduced jaws - SinterGrip not included, to be specified at the moment of the order**



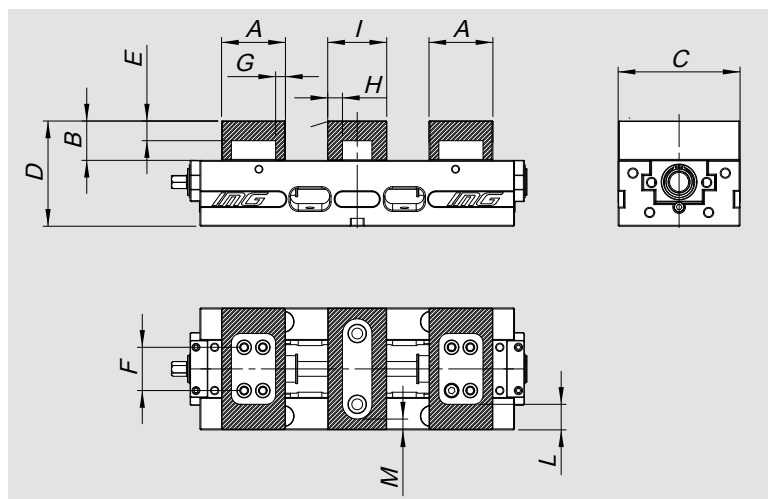
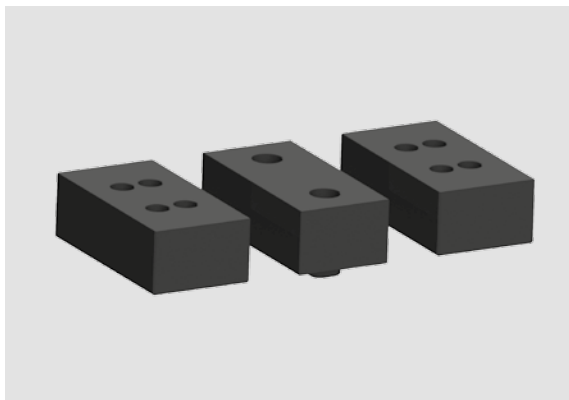
Type	Id. No.	A	B	C	E	D	p1	p2	min.	max.
IMG 125x220	58351519	49	33.5	80	100.5	123.5	22.25	17.5	0-7	99-105
IMG 125x320		49	33.5	80	100.5	123.5	22.25	17.5	0-7	159-165
IMG 160x270	58361519	73	43.5	90	110.5	158.5	18	18	0-7	129-135
IMG 160x420		73	43.5	90	110.5	158.5	18	18	0-7	209-215

**Pair of soft jaws (soft steel – ALU)**



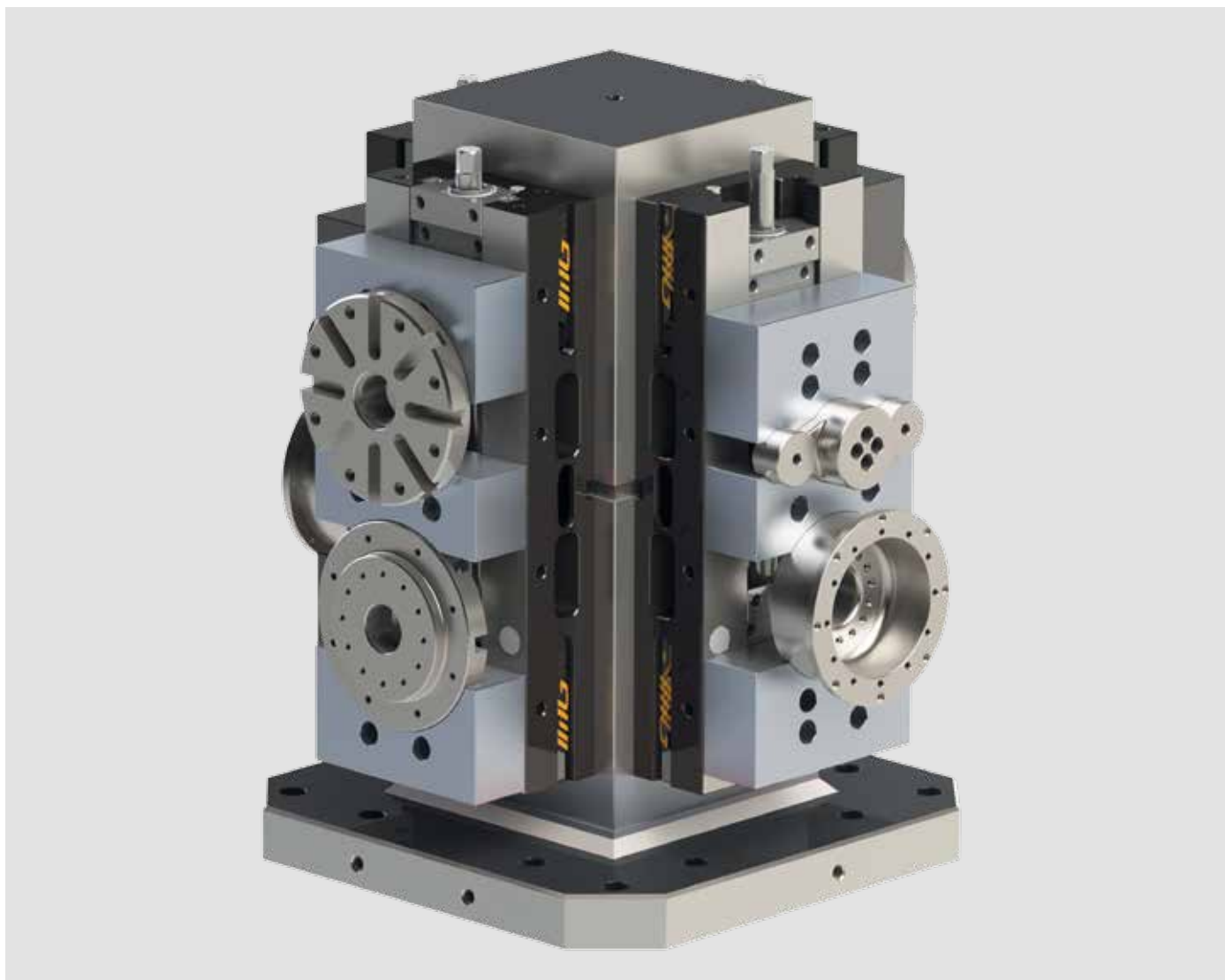
Type		Id. No.	A	B	C	D	E	F	min.	max.
IMG 125	ALU	58351619	65	40	123,5	107	20	44	0	86 (125x220) / 186 (125x320)
IMG 125	Fe	58351629	65	40	123,5	107	20	44	0	86 (125x220) / 186 (125x320)
IMG 160	ALU	58361619	85	50	158.5	117	25	52	0	141-147 (160x270) / 221-227 (160x420)
IMG 160	Fe	58361629	85	50	158.5	117	25	52	0	141-147 (160x270) / 221-227 (160x420)

## Set of soft jaws for double clamping



Type		Id. No.	A	B	C	D	E	F	G	H	I	L	M
IMG 125	ALU	58359519	65	40	123,5	107	20	44	10	15	60	25	11
IMG 125	Fe	58359619	65	40	123,5	107	20	44	10	15	60	25	11
IMG 160	ALU	58369519	85	50	158.5	117	25	52	16.5	15	60	35	28
IMG 160	Fe	58369619	85	50	158.5	117	25	52	16.5	15	60	35	28

## Application example





### Applications / Customer Benefits

- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with T slots
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

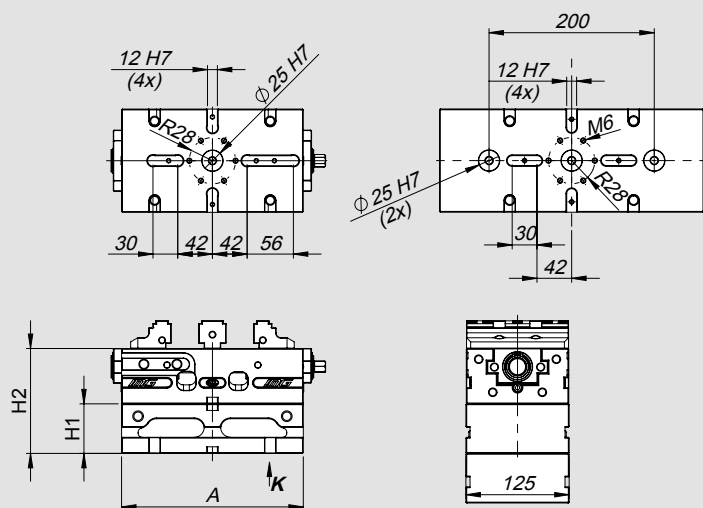
### Technical features

- Material: steel

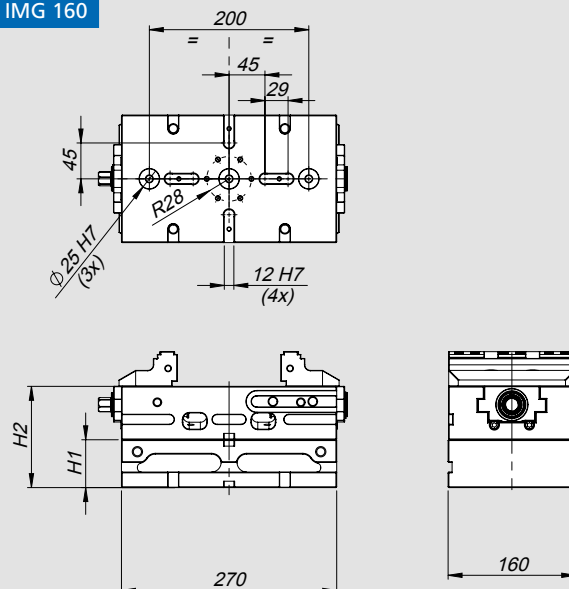
### Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool

For IMG 125



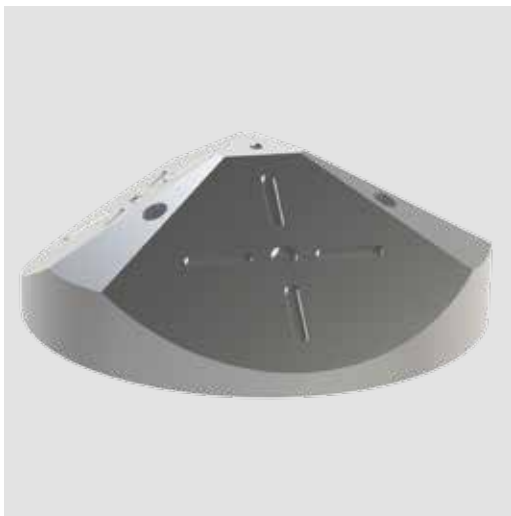
For IMG 160



Type	Id. No.	H1	H2	A	Weight
For IMG 125	58352018	60	127	220	10 Kg
For IMG 125	58352028	100	147	220	15 Kg
For IMG 125	58352019	60	127	320	15 Kg
For IMG 125	58352029	100	147	320	21 Kg
For IMG 160	58362018	60	127	-	17 Kg
For IMG 160	58362028	100	167	-	25 Kg

Application example





### Applications / Customer Benefits

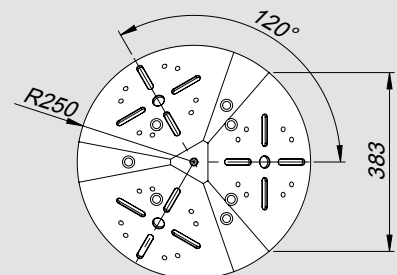
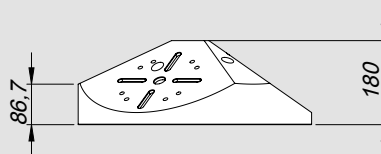
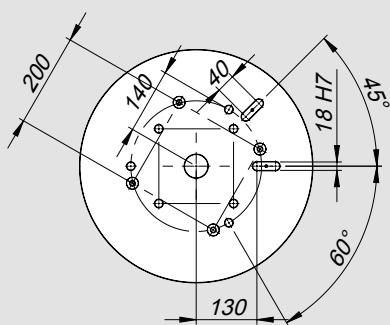
- Ideal for 5 axis machines
- Compact design
- Possibility to be mounted directly on machine tools with radial slots at 45 / 60 degrees
- Possibility to be mounted directly on single plate or DUO APS (pitch 200)

### Technical features

- Material: ALU

### Standard equipment

On request: Positioning keys for IMG / APS pins / Positioning keys for machine tool



Type	Id. No.	Weight
Alu Pyramid for IMG 125-220	58353210	55 Kg

### Application example







### Applications / Customer Benefits

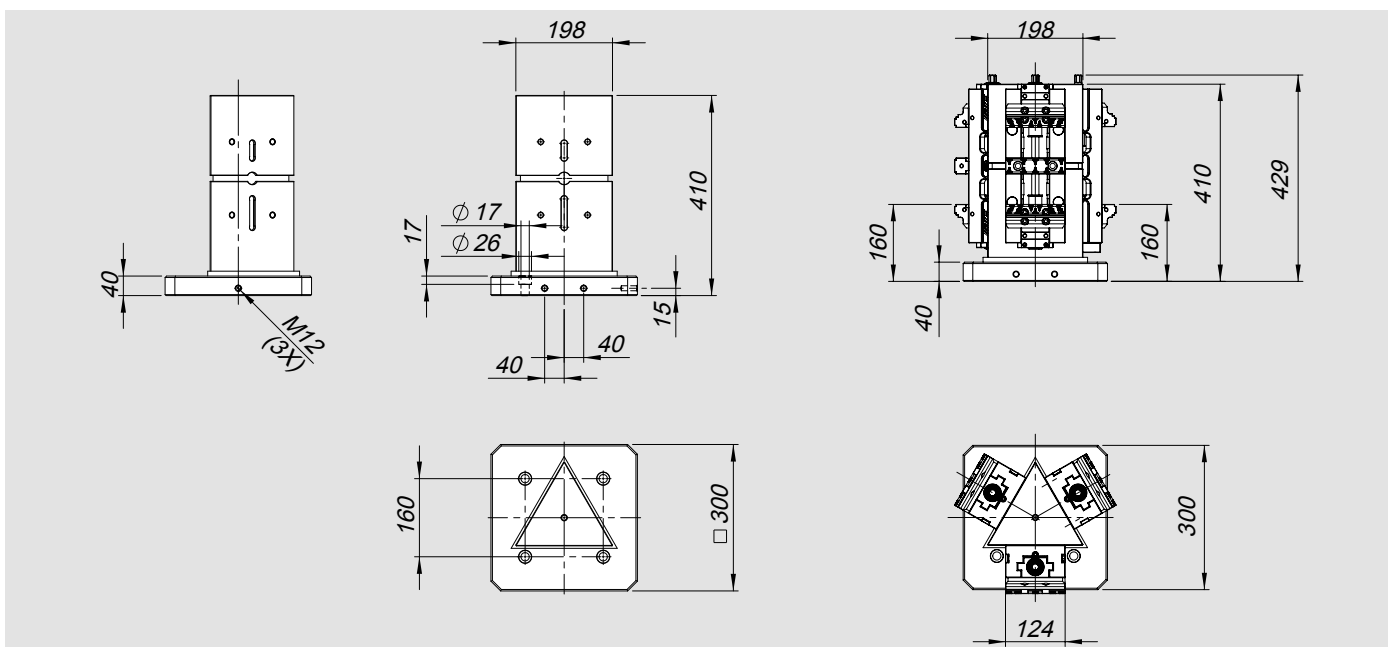
- Ideal for 5 axis machines
- Ideal for horizontal machines
- Compact design
- Wide clamping range

### Technical features

- Material: steel

### Standard equipment

Steel tombstone



Type	Id. No.	Weight
Triangular tombstone for IMG 125-320	58353010	74 Kg

### Application example





### Applications / Customer Benefits

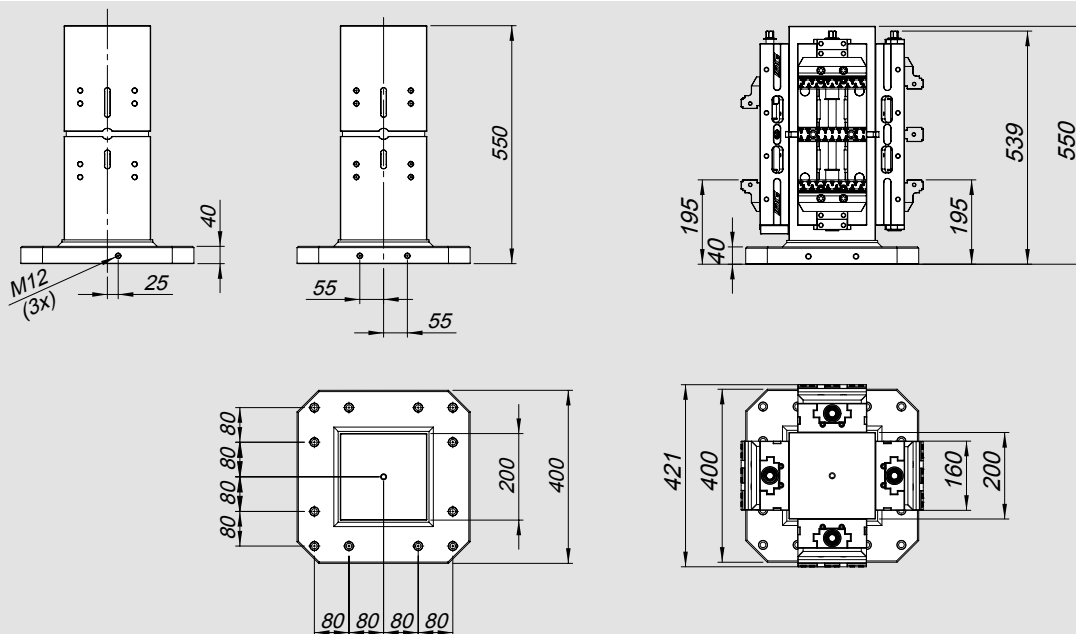
- Ideal for horizontal machines
- Compact design
- Wide clamping range

### Technical features

- Material: steel

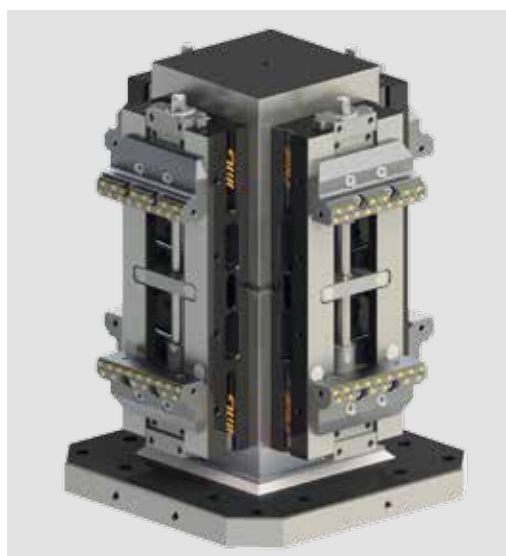
### Standard equipment

Steel tombstone



Type	Id. No.	Weight
Tombstone for IMG 160-420	58363120	140 Kg

### Application example



### Clamping pins APS 140



**Typo A**  
centering pin



**Typo B**  
reference pin

#### Application/customer benefits

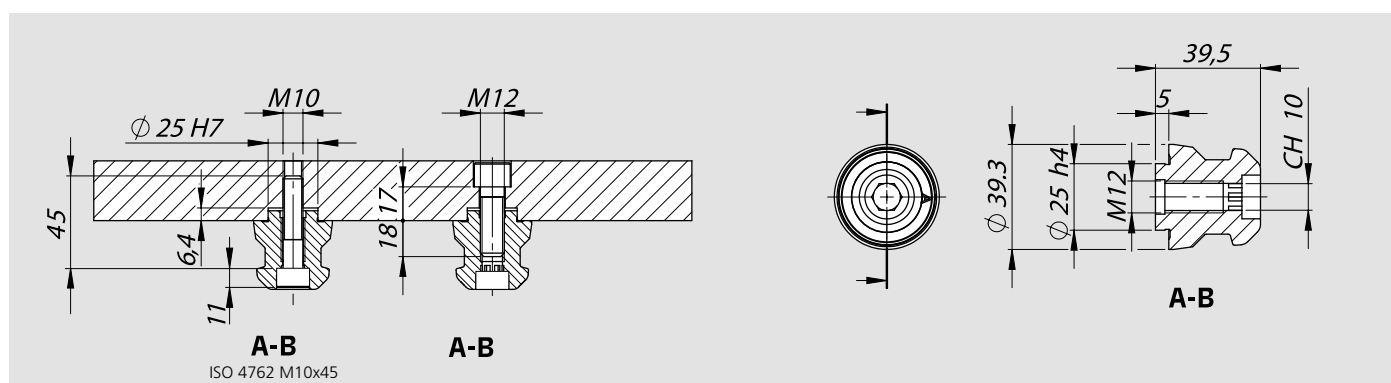
- Fixation and positioning on the clamping systems APS 140
- Wear-resistant due to an extra hard protective coating
- Large entry radii of the clamping pins for easy and safe loading

#### Technical features

- Centering pin Type A (Standard)
- Sword pin Type B (Positioning pin)

#### Standard equipment

Clamping pin with mounting screw M10x45



	Thread	Type A	Type B	Weight
Clamping pins APS 140	M12	46162355	46162356	0.3 Kg

### Clamping pins APS 190



#### Application/customer benefits

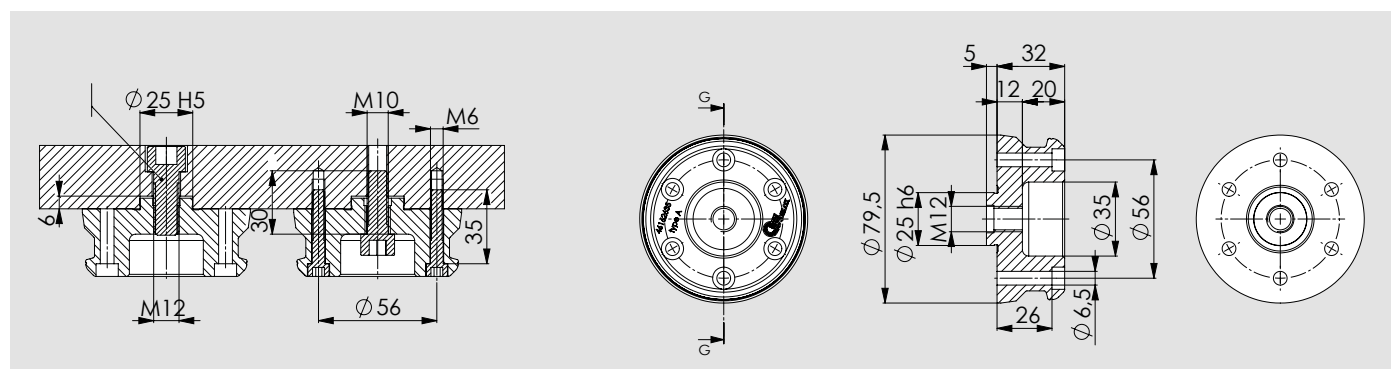
- Fixation and positioning on the clamping systems APS 190
- Large entry radii of the clamping pins for easy and safe loading

#### Technical features

- Centering pin Type A (Standard)

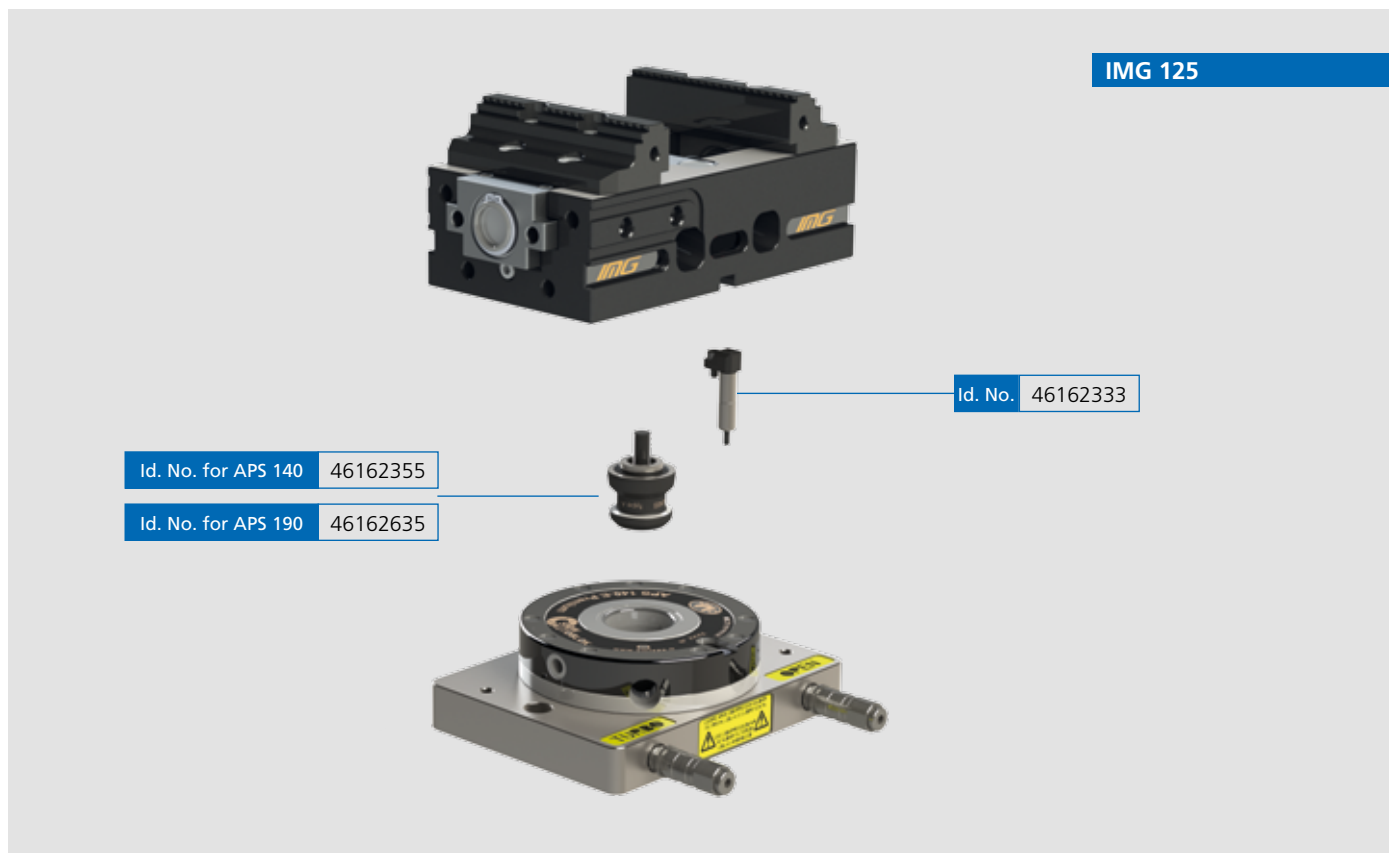
#### Standard equipment

Clamping pin with mounting screw M8x40 (6 pieces)

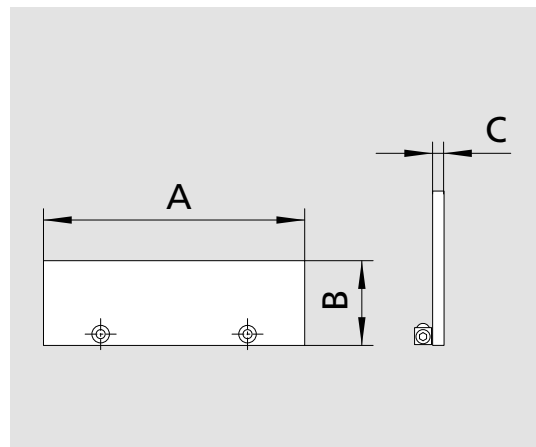
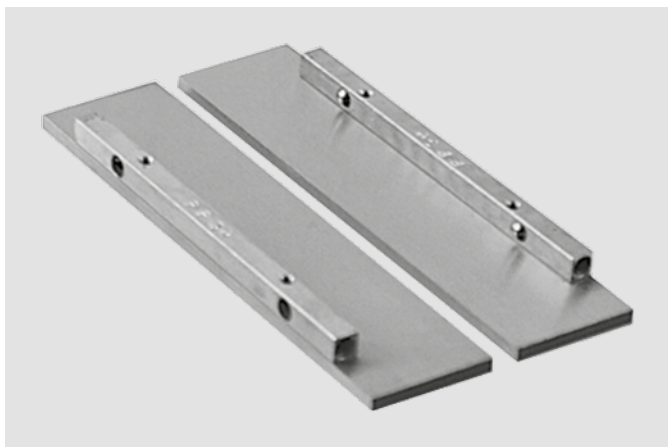


Id. No.	Type	Weight
46 16 26 35	A Ø 25 = at pin APS-140 M12	0,85Kg

### Application examples

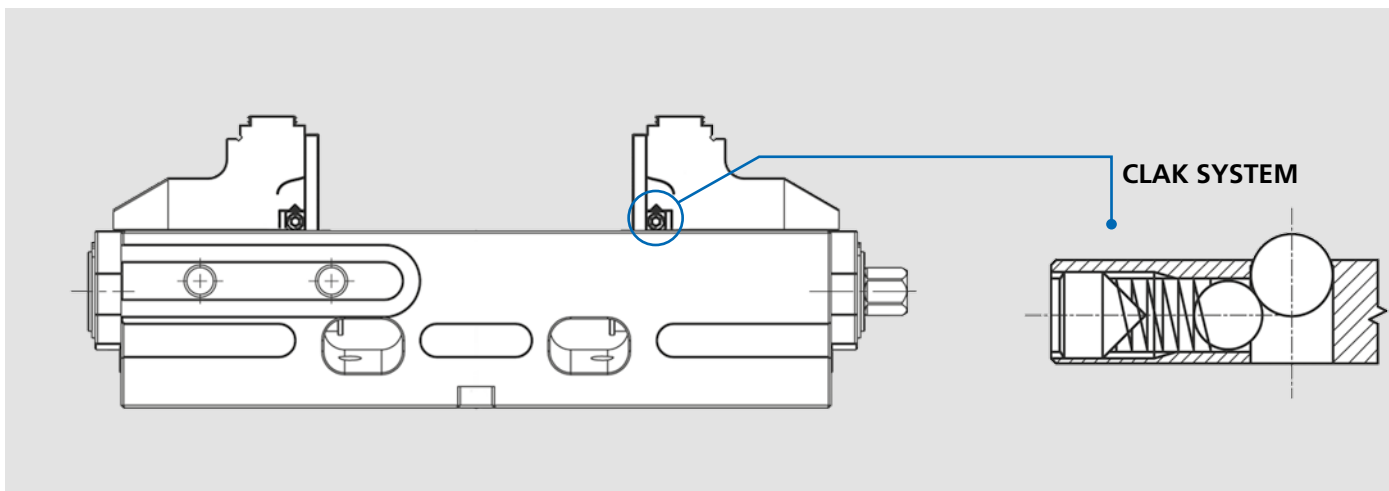


### Quick change modular parallels



Type	Id. No.	B	A	C
For IMG 125	58455115	15	124	4
For IMG 125	58455120	20	124	4
For IMG 125	58455125	25	124	4
For IMG 160	58455315	15	159	4
For IMG 160	58455325	25	159	4
For IMG 160	58455335	35	159	4

### Application example



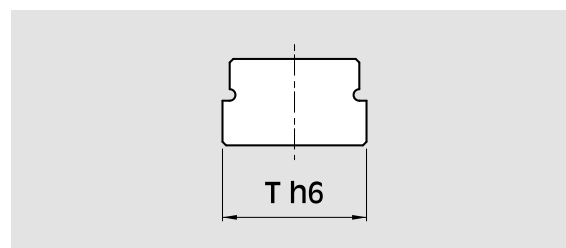
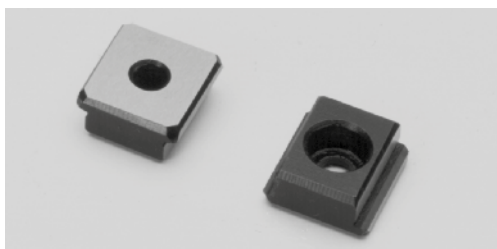


## Key for APS for single use



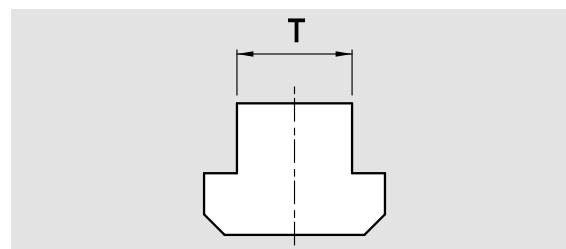
Type	Id. No.
APS 140 / 190	46162333

## Pair of positioning keys for T Slot



	mm 12 - h6	mm 14 - h6	mm 16 - h6	mm 18 - h6	mm 20 - h6	mm 22 - h6
Id. No.	58351392	58351393	58351394	58351395	58351396	58351397

## Pair of Clamps



	mm 12	mm 14	mm 16	mm 18	mm 20	mm 22
Id. No.	58022792	58022793	58022794	58022795	58022796	58022797

## Torque Wrench



Type	Id. No.
IMG 125	51501021
IMG 160	51501022

## Workstop



Type	Id. No.
Codice	58315020

## SinterGrip

	Id. No.	Description
	58 45 01 19	Set of 10 SinterGrip inserts <b>STD</b> for steel
	58 45 01 29	set of 10 SinterGrip inserts <b>HRC</b> for hardened steel / titanium until 50-54 HRC
	58 45 01 39	Set of 10 SinterGrip inserts for <b>ALU</b>
	58 45 02 19	Kit 10VTX30 for inserts SINTERGRIP
	58 45 05 19	Kit 10 protection inserts in aluminum



## Pair of SINTERGRIP jaws



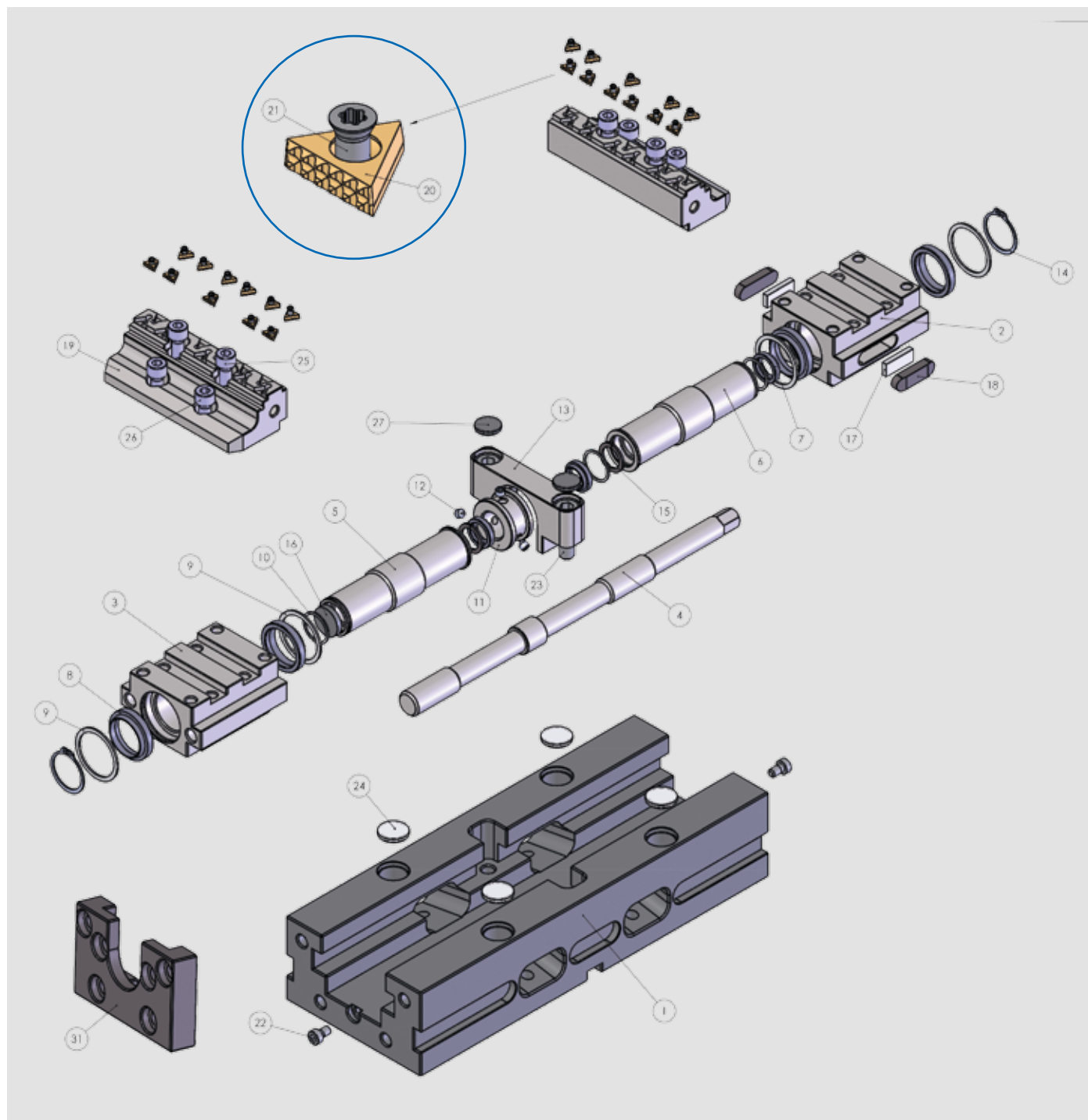
Type	Id. No.
IMG 125	58351219
IMG 160	58361219

## Wrench



Type	Id. No.
IMG 125	58351910
IMG 160	58361910

### Exploded



	Description
31	Retainer plate
30	Double clamping jaw
27	ALU plug for support
26	Screw TCEI
25	Screw TCEI
24	ALU plug for base
23	Screw TCEI
22	Screw TCEIBAS
21	SINTERGRIP screw
20	SINTERGRIP insert

	Description
19	SINTERGRIP jaw
18	Key
17	Rubber
16	Plug
15	Stop ring
14	Seeger ring
13	Upper support
12	Screw STEI
11	Screw stop
10	Snap ring

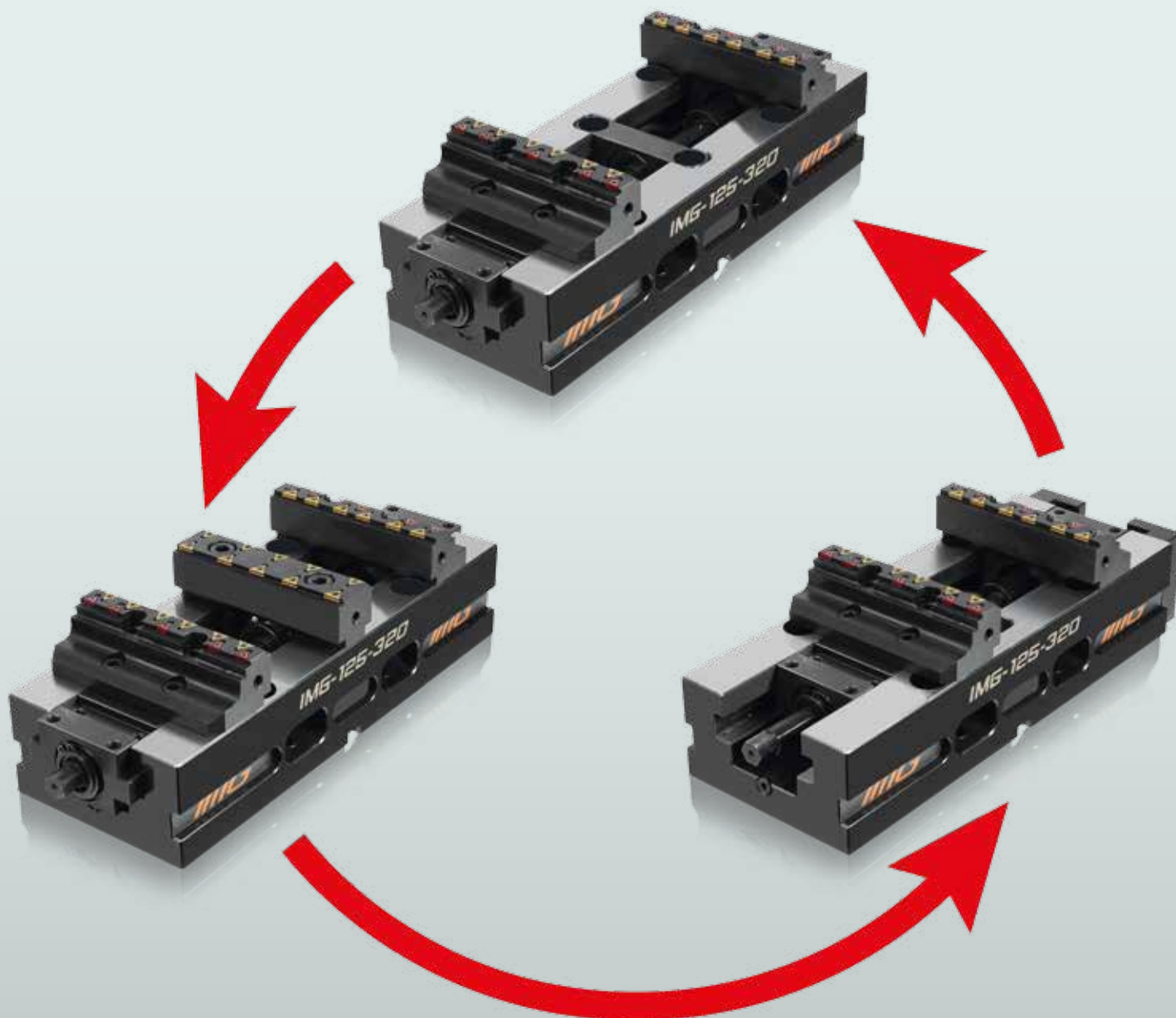
	Description
9	Snap ring
8	o-ring
7	o-ring
6	Right bushing
5	Left bushing
4	Operating screw
3	Right slide way
2	Left slide way
1	IMG base

NOTES

[illegible]

## NOTES

[illegible]



Technical characteristics and dimensions are not obliged. SMW AUTOBLOK may give in every time some modifications



**SMW-AUTOBLOK Spannsysteme GmbH**

Postfach 1151 • D-88070 Meckenbeuren  
 Wiesentalstraße 28 • D-88074 Meckenbeuren  
 Tel. +49 (0) 7542 - 405 - 0  
 Vertrieb Inland: Fax +49 (0) 7542 - 3886  
 E-mail ► [vertrieb@smw-autoblok.de](mailto:vertrieb@smw-autoblok.de)  
 Sales International: Fax: +49 (0) 7542 - 405 - 181  
 E-mail ► [sales@smw-autoblok.de](mailto:sales@smw-autoblok.de)

**U.S.A.**

SMW-AUTOBLOK Corporation  
 285 Egidi Drive - Wheeling, IL 60090  
 Tel. +1 847 - 215 - 0591  
 Fax +1 847 - 215 - 0594  
 E-mail ► [autoblok@smwautoblok.com](mailto:autoblok@smwautoblok.com)

**Japan**

SMW-AUTOBLOK Japan Inc.  
 1-56 Hira, Nishi-Ku  
 461-Nagoya  
 Tel. +81 (0) 52 - 504 - 0203  
 Fax +81 (0) 52 - 504 - 0205  
 E-mail ► [japan@smwautoblok.co.jp](mailto:japan@smwautoblok.co.jp)

**China**

SMW-AUTOBLOK (Shanghai) Work Holding Co., Ltd.  
 Building 6, No.72, JinWen Road, KongGang  
 Industrial Zone, ZhuQiao Town, Pudong District  
 201323, Shanghai P.R. China  
 Tel. +86 21 - 5810 - 6396  
 Fax +86 21 - 5810 - 6395  
 E-mail ► [china@smwautoblok.cn](mailto:china@smwautoblok.cn)

**Mexico**

SMW-AUTOBLOK Mexico, S.A. de C.V.  
 Pirineos No. 515-B, Nave 16  
 Col. Industrial Benito Juarez  
 Micro Parque Industrial Santiago  
 Queretaro, Qro. C.P. 76130  
 Tel. +52 (442) 209 - 5118  
 Fax +52 (442) 209 - 5121  
 E-mail ► [smwmex@smwautoblok.mx](mailto:smwmex@smwautoblok.mx)

**India**

SMW-AUTOBLOK Workholding Pvt. Ltd.,  
 Plot No. 4, Weikfield Industrial Estate,  
 Gat No. 1251, Sanaswadi, Tal - Shirur,  
 Dist - Pune. 412 208  
 Tel. +91 2137 - 616 974  
 Fax +91 2137 - 616 972  
 E-mail ► [info@smwautoblok.in](mailto:info@smwautoblok.in)

**Brazil**

SYSTEC METALÚRGICA LTDA  
 R. Luiz Brisque, 980  
 13280-000 - Vinhedo - SP  
 Tel. +55 (0) 193 886 - 6900  
 Fax +55 (0) 193 886 - 6970  
 E-mail ► [systec@systecmetal.com.br](mailto:systec@systecmetal.com.br)

**Argentina**

SMW-AUTOBLOK Argentina  
 Rio Pilcomay 1121 - Bella Vista  
 RA - 1661 Bella Vista Buenos Aires  
 Tel. +54 (0) 1146 - 660 603  
 Fax +54 (0) 1146 - 660 603  
 E-mail ► [federicolojo@systecmetal.com.ar](mailto:federicolojo@systecmetal.com.ar)

**AUTOBLOK s.p.a.**

Via Duca D'Aosta n.24  
 Fraz.Novaretto  
 I-10040 Caprie - Torino  
 Tel. +39 011 - 9638411  
 Tel. +39 011 - 9632020  
 Fax +39 011 - 9632288  
 E-mail ► [info@smwautoblok.it](mailto:info@smwautoblok.it)

**France**

SMW-AUTOBLOK  
 17, Avenue des Frères Montgolfier - Z.I Mi-Plaine  
 F-69680 Chassieu  
 Tel. +33 (0) 4 - 727 - 918 18  
 Fax +33 (0) 4 - 727 - 918 19  
 E-mail ► [autoblok@smwautoblok.fr](mailto:autoblok@smwautoblok.fr)

**Great Britain**

SMW-AUTOBLOK Telbrook Ltd.  
 7 Wilford Industrial Estate  
 Ruddington Lane, Wilford  
 GB-Nottingham, NG11 7EP  
 Tel. +44 (0) 115 - 982 1133  
 E-mail ► [info@smw-autoblok-telbrook.co.uk](mailto:info@smw-autoblok-telbrook.co.uk)

**Spain**

SMW-AUTOBLOK IBERICA, S.L.  
 Ursalto 10 - Nave 2, Pol. 27 - Mateo Gaina  
 20014 San Sebastián (Guipúzcoa) (Spain)  
 Tel. +34 943 - 225 079  
 Fax +34 943 - 225 074  
 E-mail ► [info@smwautoblok.es](mailto:info@smwautoblok.es)

**Russia**

SMW-AUTOBLOK Russia  
 B.Tulskaya str., 10, bld.3, off. 323,  
 115191 Moscow (Russia)  
 Tel. +7 495 -231-1011  
 Fax +7 495 -231-1011  
 E-mail ► [info@smw-autoblok.ru](mailto:info@smw-autoblok.ru)

**Taiwan**

AUTOBLOK Company Ltd.  
 NO.6, SHUYI RD., SOUTH DIST.,  
 TAICHUNG, TAIWAN  
 Tel. +886 4-226 10826  
 Fax +886 4-226 12109  
 E-mail ► [taiwan@smwautoblok.tw](mailto:taiwan@smwautoblok.tw)

**Czech Republic / Slovakia**

SMW-AUTOBLOK s.r.o.  
 Merhautova 20  
 CZ - 613 00 BRNO  
 Tel. +420 513 034 157  
 Fax +420 513 034 158  
 E-mail ► [info@smw-autoblok.cz](mailto:info@smw-autoblok.cz)

**Sweden / Norway**

SMW-AUTOBLOK Scandinavia AB  
 Kasernvägen 2  
 SE - 281 35 Hässleholm  
 Tel. +46 (0) 761 420 111  
 E-mail ► [info@smw-autoblok.se](mailto:info@smw-autoblok.se)

**Korea**

SMW-AUTOBLOK KOREA CO., LTD.  
 1108 ho, Baeksang Startower 1st,  
 65, Digital-ro 9-gil, Geumcheon-gu  
 Seoul, ROK-08511, Korea  
 Tel. +82 2 6267 9505  
 Fax +82 2 6267 9507  
 E-mail ► [info-korea@smw-autoblok.net](mailto:info-korea@smw-autoblok.net)