

# EVARD

PRECISION S.A.  SWISS  
MADE



**Our precision for better productivity**



SWISS  
MADE

GENERAL CATALOGUE



## OUR COMPANY

Founded in 1963, Evard Précision Ltd. is a family-owned company specialized for 3 generations in precision clamping solutions for the machine tool industry and robotization.

The wide range of clamping products, the flexibility and the experience allow us to provide standard or specific products to your needs. Evard Précision Ltd. maintains privileged relations with his customers and business partners, thanks to his proximity and his more than 50 years of experience. A strong link of trust and communication is established with the different business partners who represent the brand throughout the world.



Entirely developed and manufactured in Switzerland, our products are the result of know-how accumulated over three generations.

They are known for their quality, reliability and high precision.

## OUR TEAM

Evard Précision Ltd. has 16 employees, including 6 members of the Evard family. The characteristic of being a family business positively marks the corporate culture.



Evard Precision is green.

Since 1 January 2020, the electricity we consume comes from renewable energy sources.

50% from our 392 solar panels and 50% from swiss hydropower.

A step towards a sustainable industry. A step for the future.

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Subject to change / Edition 2022

# MECHANICAL VICE

## POLYMUT

### The multiple clamping system

Flexible and able to tighten a lot of parts at a time, this product saves machining time and increases productivity! This multiple clamping system is available in several sizes and offers a wide range of jaws and accessories to adapt to all types of requirements. Polyvalent, the Polymut is designed to allow an integration and a commissioning in multiple configurations. It will easily adapt to your installations: machine tables, rotary tables, turrets or pallets.



## CM-TYPE

### Self-centering mechanical vice

The CM-Type is characterised by its precision. With a guaranteed repeat accuracy of 0.01 mm, it is an ideal tool for roughing and finishing. This self-centering mechanical vice allows a varied tightening. Thanks to a wide range of jaws and accessories, it can be adapted to all types of parts. Its compact and unobstructed design is appreciated in different machining, especially on 5-axis machines. The accessories of the Polymut range are compatible.

## EM-TYPE

### Universal mechanical vice

Universal, the EM-Type is intended for conventional machines as well as CNC and grinding machines. Its T-slots allow special jaws, stops and templates to be fitted. Solid, it can be used in various positions and on several bearing surfaces. It distinguishes itself from the competition by its grinded and closed sides, which prevent chips from getting into the vice and makes it easy to maintain.



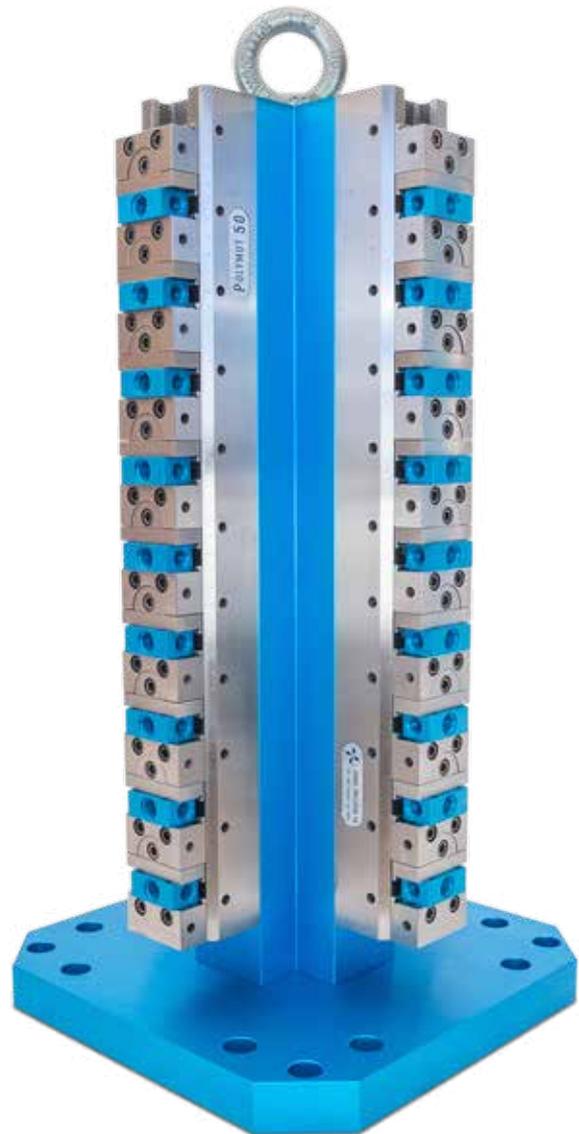
## The multiple clamping system

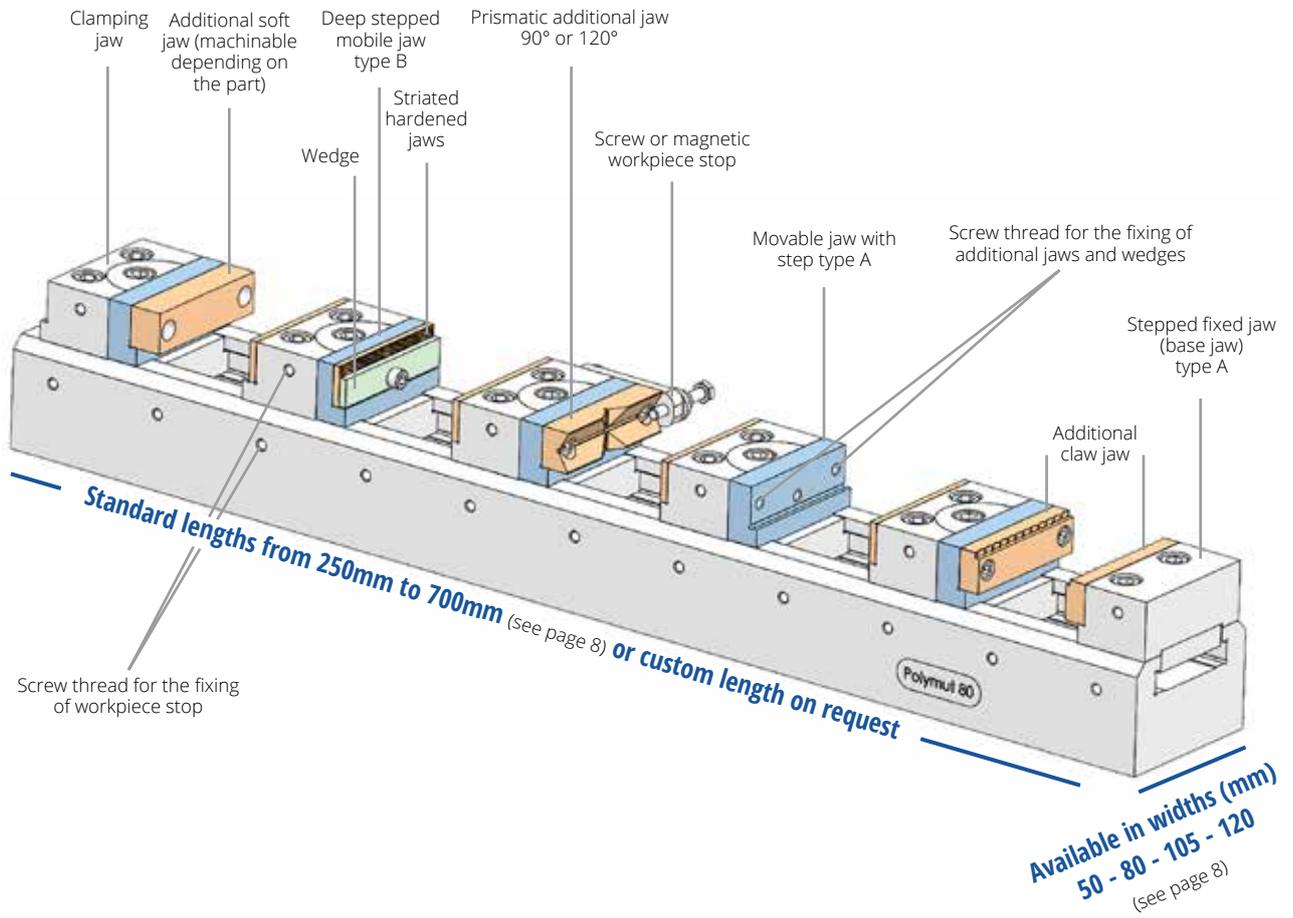
Flexible and able to tighten a lot of parts at a time, this product saves machining time and **increases productivity!**

This **multiple clamping system** is available in **several sizes** and offers a **wide range of jaws and accessories** to adapt to all types of requirements.

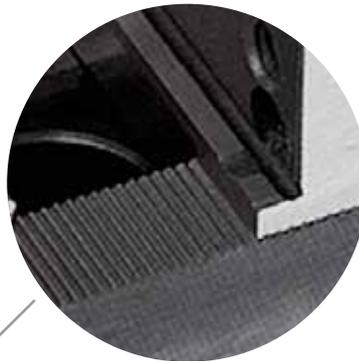
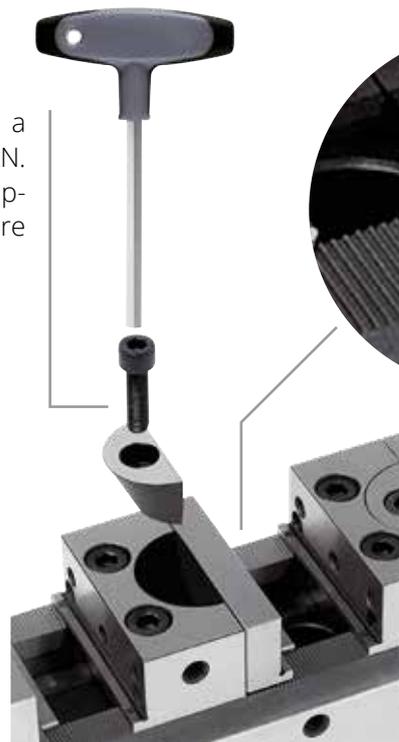
**Polyvalent, the Polymut** is designed to allow an integration and a commissioning **in multiple configurations**. It will easily adapt to your installations : machine tables, rotary tables, turrets or pallets.

- ↳ **Quick and precise adjustment +/- 0.01 mm**
- ↳ **Usable on all supports**
- ↳ **Adaptation to all types of parts**
- ↳ **Linear clamping with a single crew**
- ↳ **Dimensions adapted to your requirements**
- ↳ **Flexible to tighten one or more parts**
- ↳ **All components are case-hardened, hardened to 60 HRC and grinded**

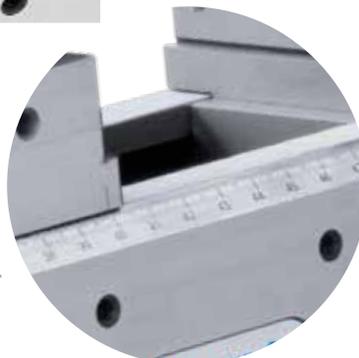




Linear clamping with a single screw up to 16 kN. The conical shape applies an even pressure on the moving part



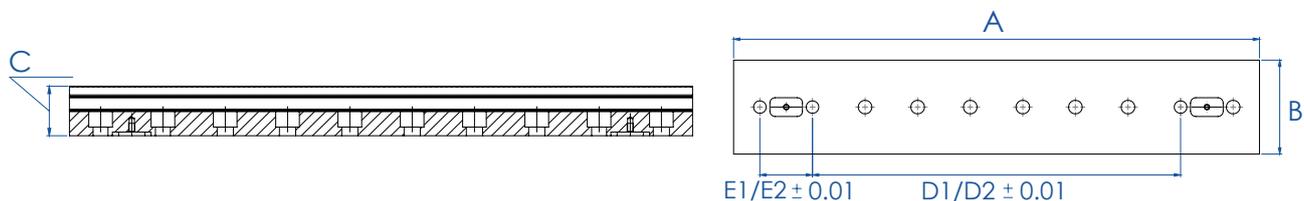
Simple positioning of the jaws on the 1 mm toothed sides



Scaling of the vice base for integration of the clamping positions in the work plan

## Polymut standard dimensions and features

Article	Sales reference	A	B	C	E1	D1	E2	D2	Weight in Kg	Maximum clamping force
Polymut 50	80002/**	250	60	40	40	120	50	100	3.3	13 kN at 20 Nm
Polymut 50	80003/**	320	60	40	40	200	50	100	4.2	
Polymut 50	80001/**	500	60	40	40	360	50	350	6.6	
Polymut 50	80004/**	600	60	40	40	400	50	400	8.0	
Polymut 50	80015/**	650	60	40	40	400	50	400	8.4	
Polymut 50	80016/**	700	60	40	40	400	50	400	9.3	
Polymut 80	800036/**	350	90	40	40	200	50	250	6.3	16 kN at 30 Nm
Polymut 80	800037/**	500	90	40	40	360	50	350	9.0	
Polymut 80	800038/**	600	90	40	40	400	50	400	10.8	
Polymut 80	800039/**	650	90	40	40	400	50	400	11.5	
Polymut 80	800040/**	700	90	40	40	400	50	400	12.8	
Polymut 80	80006/**	350	90	60	40	200	50	250	11.1	
Polymut 80	80005/**	500	90	60	40	360	50	350	15.8	
Polymut 80	80017/**	600	90	60	40	400	50	400	17.8	
Polymut 80	80018/**	650	90	60	40	400	50	400	19.9	
Polymut 80	80019/**	700	90	60	40	400	50	400	22.1	
Polymut 105	105508/**	500	105	45	40	360	50	360	13.0	
Polymut 105	105608/**	600	105	45	40	400	50	400	15.9	
Polymut 105	105708/**	700	105	45	40	400	50	400	18.5	



## Clamping capacity depending on workpiece size

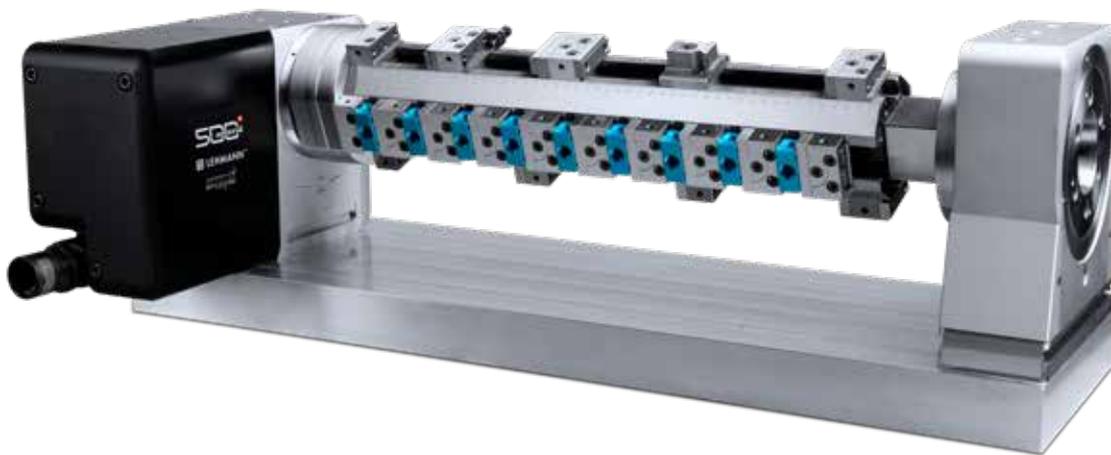
Width of the jew mm	Length of the Polymut mm	Number of Workpieces															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
50	250	188	77	40	21	10											
	320	258	112	63	39	24	14	7									
	500	438	202	123	84	60	44	33	25	18	13	8					
	600	538	252	156	109	80	61	47	37	29	23	18	13	10			
	650	588	277	173	121	90	69	54	43	35	28	22	17	13	10	7	
	700	638	302	190	134	100	78	62	50	40	33	27	22	17	14	10	8
80	350	225	101	49	24	8											
	500	405	176	99	61	38	23	12									
	600	505	226	133	86	58	40	26	16	9							
	650	555	251	149	99	68	48	33	23	14							
	700	605	276	166	111	78	56	41	29	20	12						
105/120	500	381	158	83	46	24	9										
	600	481	208	117	71	44	26	13									
	700	581	258	150	96	64	42	27	15								



## Polymut 4 sides

We now offer our **Polymut system** as a **monobloc solution**. Adaptable to all pallets and rotary tables, we inspire our customers with our incomparable precision in a **compact design**.

Do you also want to **optimise your production in the smallest possible space**? Do not hesitate and benefit from our know-how. **The Polymut modular system** will meet all your expectations.



- ↳ **Cores for rotary tables or monobloc tombstone**
- ↳ **Adaptable to all types of zero points and palletising systems**
- ↳ **Compatible with all Polymut accessories**
- ↳ **Modular clamping**
- ↳ **Quick and easy to adjust**
- ↳ **Special lengths (maximum 500 mm) available on request**
- ↳ **All components are case-hardened, hardened to 60 HRC and grinded**



## Self-centering mechanical vice

### CM 50 - 80 - 105

The **CM-Type** is characterised by its precision. With a **guaranteed repeat accuracy of 0.01 mm**, it is an ideal tool for roughing and finishing. **This self-centring mechanical vice** allows a **varied tightening**. Thanks to a wide range of jaws and accessories, it can be adapted to all types of parts.

**Its compact and unobstructed design** is appreciated in different machining, especially on **5-axis machines**. The accessories of the Polymut range are compatible.

### CM 20

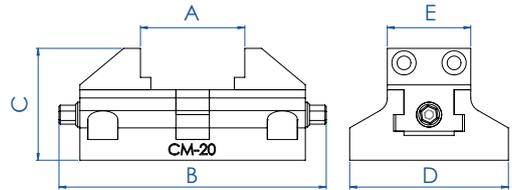
Designed for the **microtechnical, watch-making and the measuring technology fields**, the **CM 20 is compact, precise and robust**. Its light weight of 0.215 kg makes it the ideal partner for machining centres accepting low loads on their table.



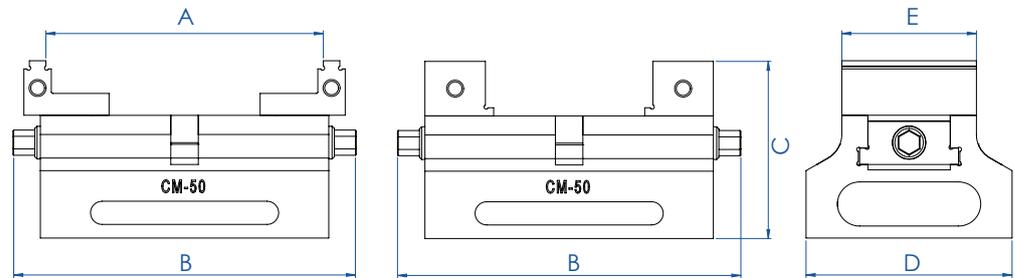
- ↳ **Self-centering**
- ↳ **Quick and precise adjustment +/- 0.01 mm**
- ↳ **No preclamping**
- ↳ **Roughing and finishing**
- ↳ **Adaptation to all types of parts and supports**
- ↳ **Customised solutions for all zero points**
- ↳ **The accessories of the Polymut range are compatible**
- ↳ **All components are case-hardened, hardened to 60 HRC and grinded**

## CM-TYPE standard dimensions and features

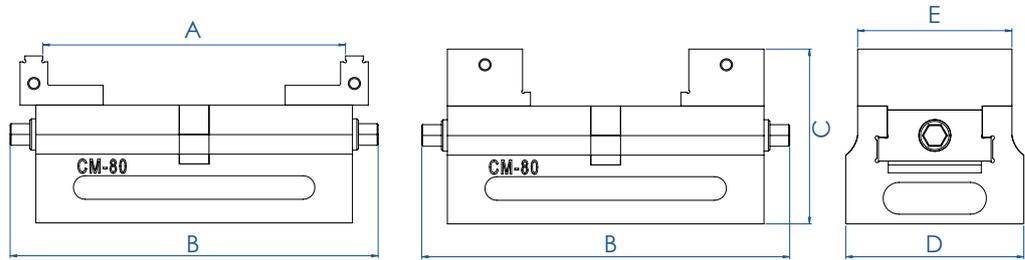
Designation	Reference	CM 20	CM 50	CM 80	CM 105
Maximum tightening torque in Nm		7	40	80	110
Maximum clamping force in Kg		200	1000	1700	2150
Weight in Kg		0.215	2.3	6.45	15.5
Maximum opening in mm	A	25	89	135	178
Total length in mm	B	64	125	186	255
Total height in mm	C	27	75	90	105
Total width in mm	D	38	65	89	122
Jaw width in mm	E	20	49	78	105



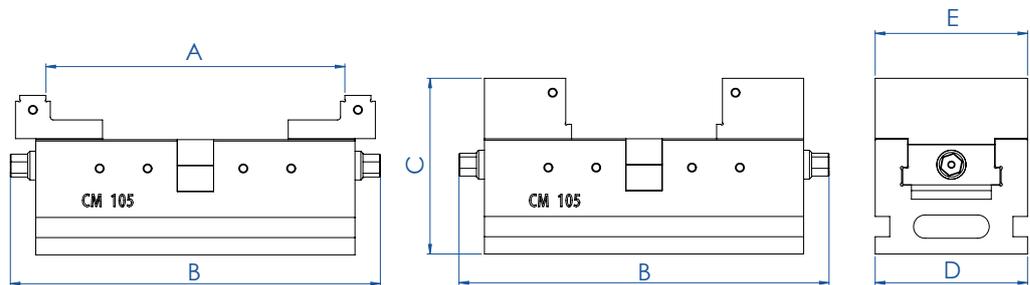
### CM 20



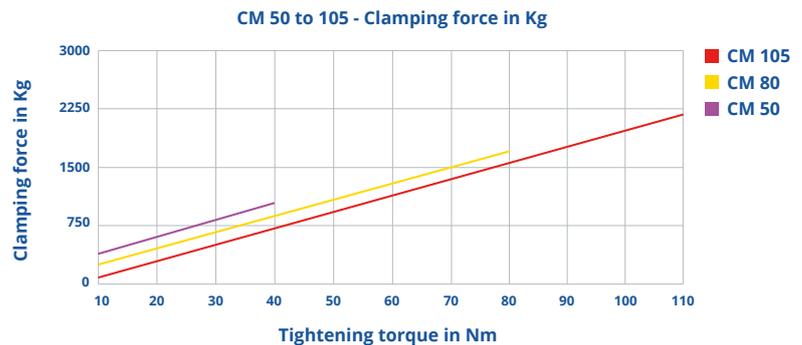
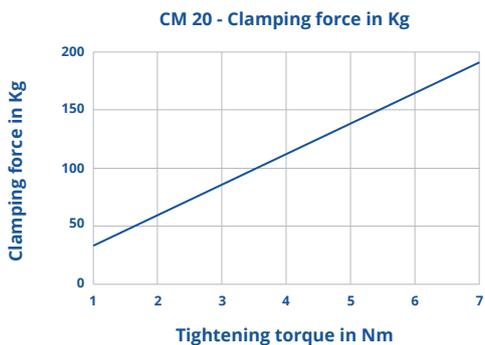
### CM 50



### CM 80



### CM 105

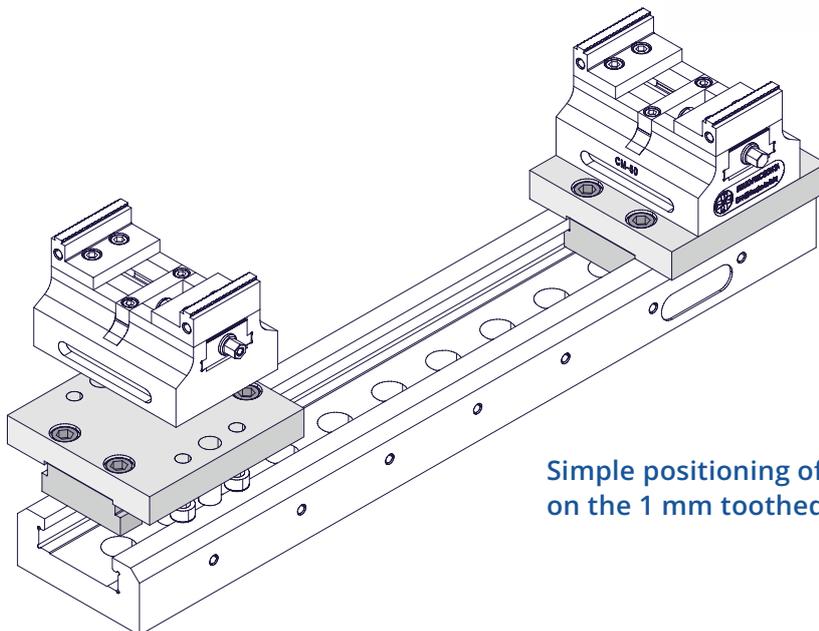


## A new clamping dimension

Designed to improve the flexibility of our Polymut multiple clamping system, the adaption plate allows **the integration of a mechanical self-centering vice CM -Type on the base of a Polymut 50, 80 or 105.**

This new combination makes it possible **to clamp long parts** and adds the advantages of both products: **precision, rigidity and excellent repeatability.**

- ↳ Quick and precise adjustment +/- 0.01 mm
- ↳ Clamping of long parts
- ↳ High rigidity
- ↳ Flexible
- ↳ All components are case hardened, hardened to 60 HRC and grinded



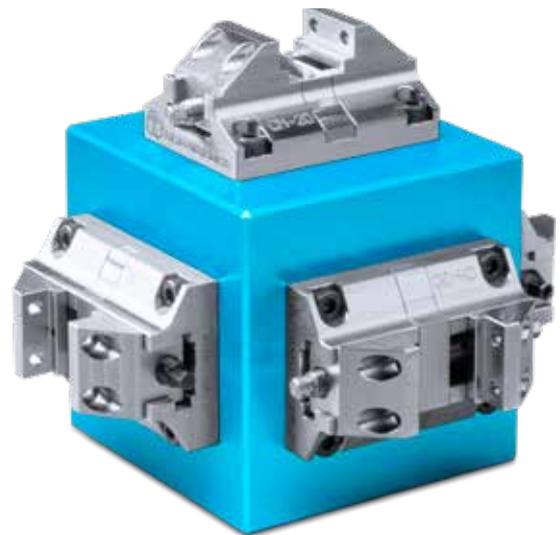
Simple positioning of the jaws on the 1 mm toothed sides

## Challenge us, let's optimise your production !

A large number of workpiece clamping applications are covered by our standard products.

**Our R&D department** will guide you in the realisation of **special and customised products**.

Whether you need to adapt a **zero-point** system, design and manufacture **special jaws** or develop a **complete clamping system**, we will guide you to the ideal solution based on **generations of know-how**.



## Universal mechanical vice

**Universal**, the **EM-Type** is intended for **conventional machines** as well as **CNC** and **grinding machines**. His T-slots allow special jaws, stops and templates to be fitted.

**Solid**, it can be used in **various positions** and on **several bearing surfaces**. It distinguishes itself from the competition by its **ground and closed sides**, which prevent chips from getting into the vice and makes it **easy to maintain**.



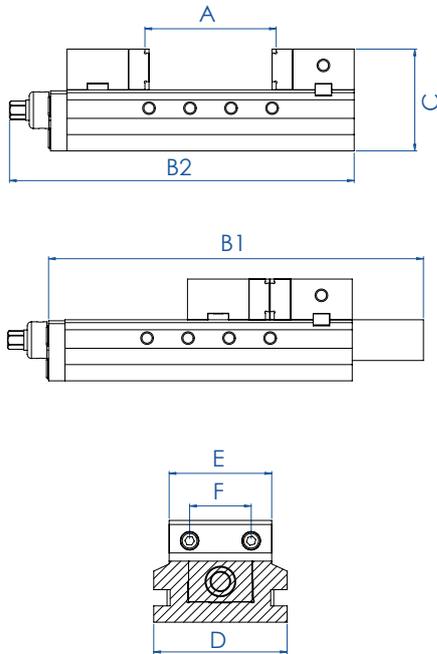
- ↳ **Universal**
- ↳ **Quick and precise adjustment +/- 0.01 mm**
- ↳ **Easy to use**
- ↳ **Easy maintenance**
- ↳ **Proven solidity**
- ↳ **All components are case hardened, hardened to 60 HRC and ground**



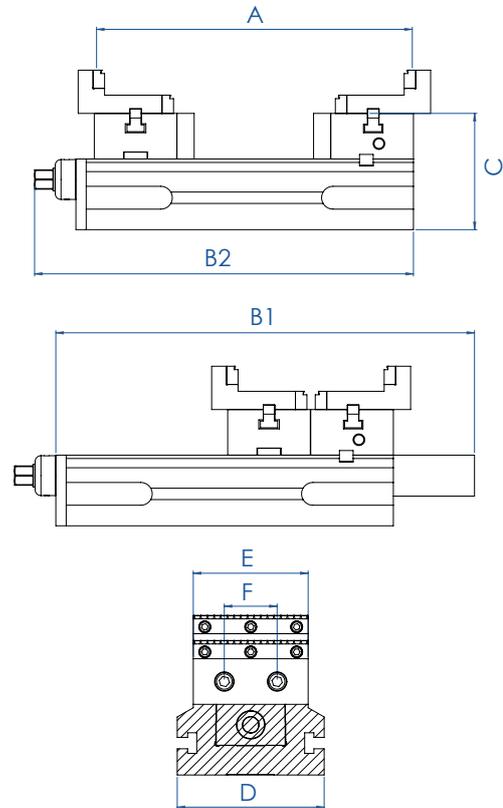
## EM-TYPE standard dimensions and features

Designation	Reference	EM 50	EM 90	EM 100	EM 130	EM 160
Maximum tightening torque in Nm		30	80	80	100	100
Maximum clamping force in Kg		1100	1550	2000	4500	5000
Weight in Kg		2	12	19	32	45
Maximum opening in mm	A	60	257	274	307	332
Total length closed in mm	B1	183	320	335	415	507
Total length in mm	B2	168	296	331	378	440
Total height in mm	C	50	91	102	115	115
Total width in mm	D	65	112	128	160	196
Jaw width in mm	E	50	90	100	130	160
Distance between the jaws in mm	F	30	50	45	65	80

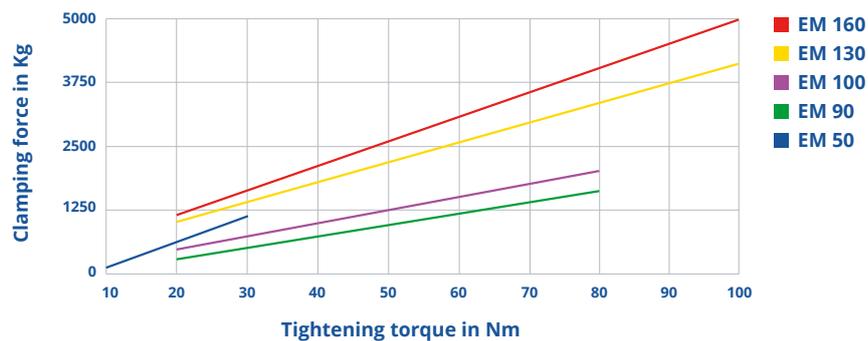
### EM 50



### EM 90 - 160



EM 50 to 160 - Clamping force in Kg





We participate in many national and international mechanical engineering fairs such as SIAMS, EMO, DST, Intec, Metav, Nortec, Siane, etc.

**Come and discover our products on our booths.**

# PNEUMATIC VICE

## E-TYPE

### Precision pneumatic vice

This pneumatic vice has been specially designed for fast, precise and powerful clamping. The hardened and grinded bearing surfaces and guides make it to a robust tool protected against chip intrusion. The E-Type meets all the varied requirements of the mechanical industry thanks to its wide range of accessories and excellent repeatability.



## EV-TYPE

### Multi-tightening pneumatic vice

The EV-Type is characterised by a large clamping range and an excellent T-guiding. Its construction prevents the lifting of the movable jaw. The fixed jaw is oriented towards the operator for optimum working ergonomics. Ideal for serial production, its design prevents chip intrusion.

## CP-TYPE

### Pneumatic self-centering vice

First of a new range of increasingly high-performance vices, the CP 130 impresses with its modular character, its self-centering pneumatic clamping inwards and outwards, offering the possibility of an off-centre positioning for optimal accessibility. Developed to increase the machining possibilities, in particular to 5 axes machines, the CP 130 combines power and precision. Its large clamping range, excellent accuracy and intelligent design make it a reliable tool from roughing to finishing.



## AZIMUT

### Self-centering pneumatic vice with machinable jaws

The Azimut is characterized by a self-centering pneumatic internal or external clamping. Thanks to its machinable jaws made of different materials, it adapts to the shapes of the parts. Due to its excellent repeatability, it is ideal for robot loading and serial production. Intended for the microtechnology, watch-making and medtech sectors, the Azimut 50 incorporates the features of its big brothers.



## Precision pneumatic vice

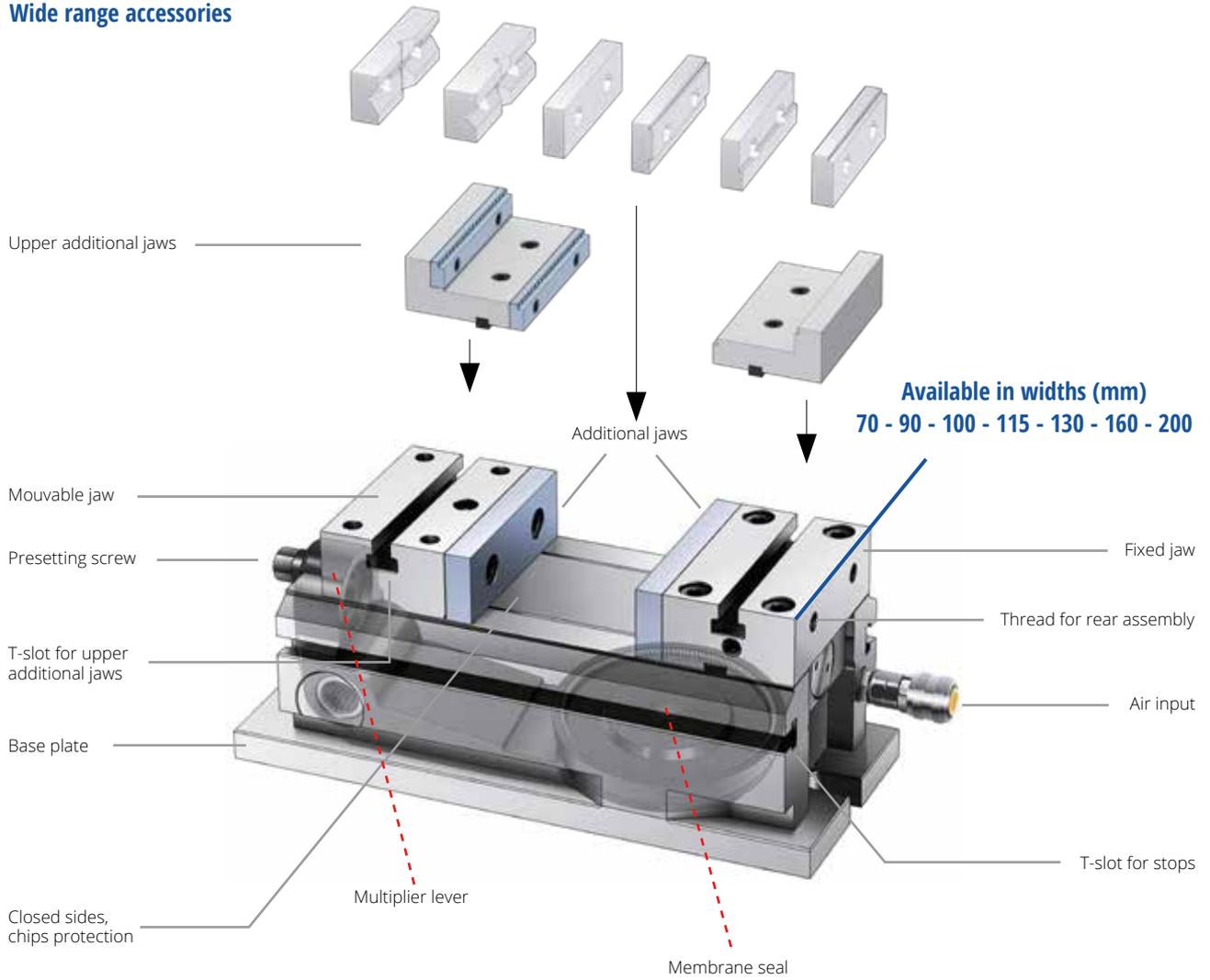
This **pneumatic vice** has been specially designed for **fast, precise and powerful clamping**. The hardened and grinded bearing surfaces and guides make it to a robust tool protected against chip intrusion.

The **E-Type** meets all the varied requirements of the mechanical industry thanks to its wide range of accessories and **excellent repeatability**.



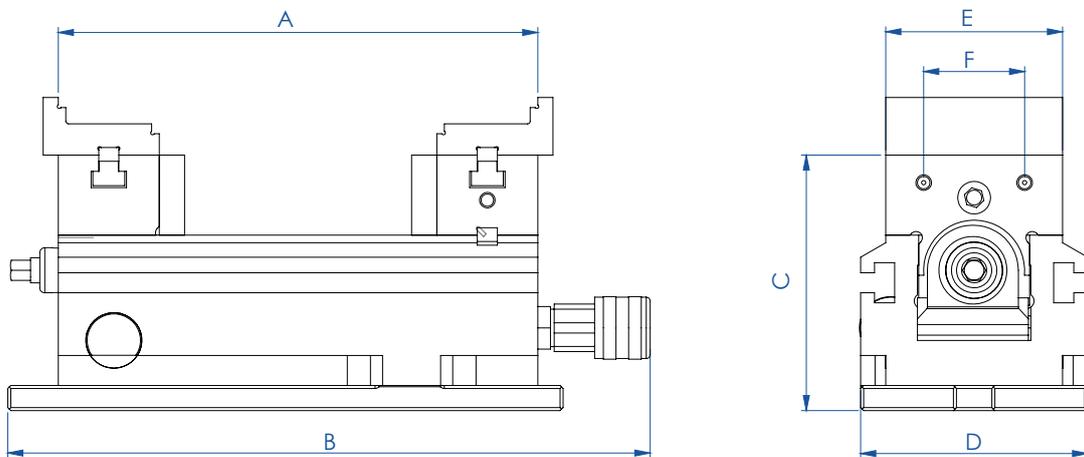
- ↳ **Fast clamping**
- ↳ **Excellent repeatability +/- 0.01 mm**
- ↳ **Adjustable clamping force up to 7 tons**
- ↳ **High rigidity**
- ↳ **Easy maintenance**
- ↳ **Modularity**
- ↳ **Can be used on multiple bearing surfaces.**
- ↳ **All components are case hardened, hardened to 60 HRC and grinded**

## Wide range accessories

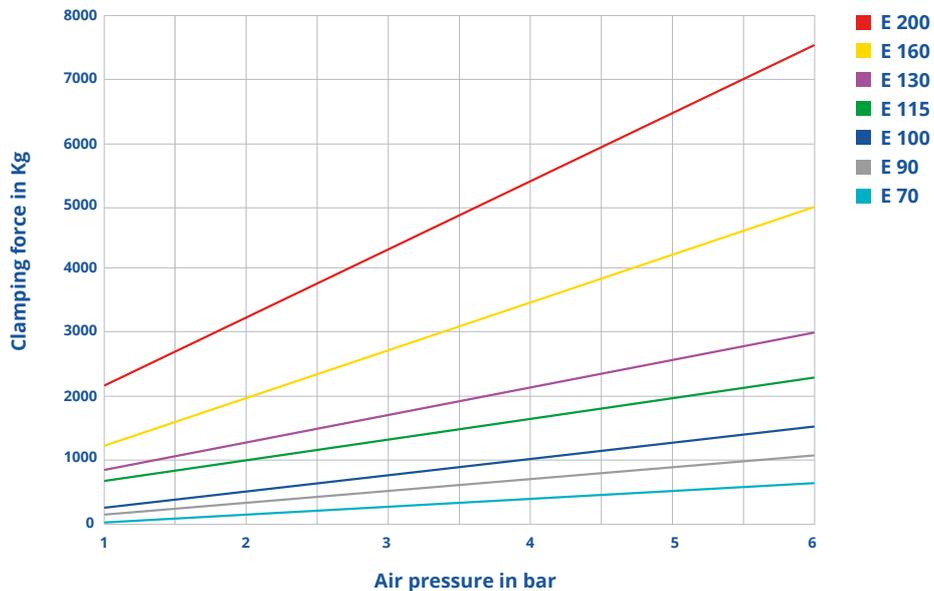


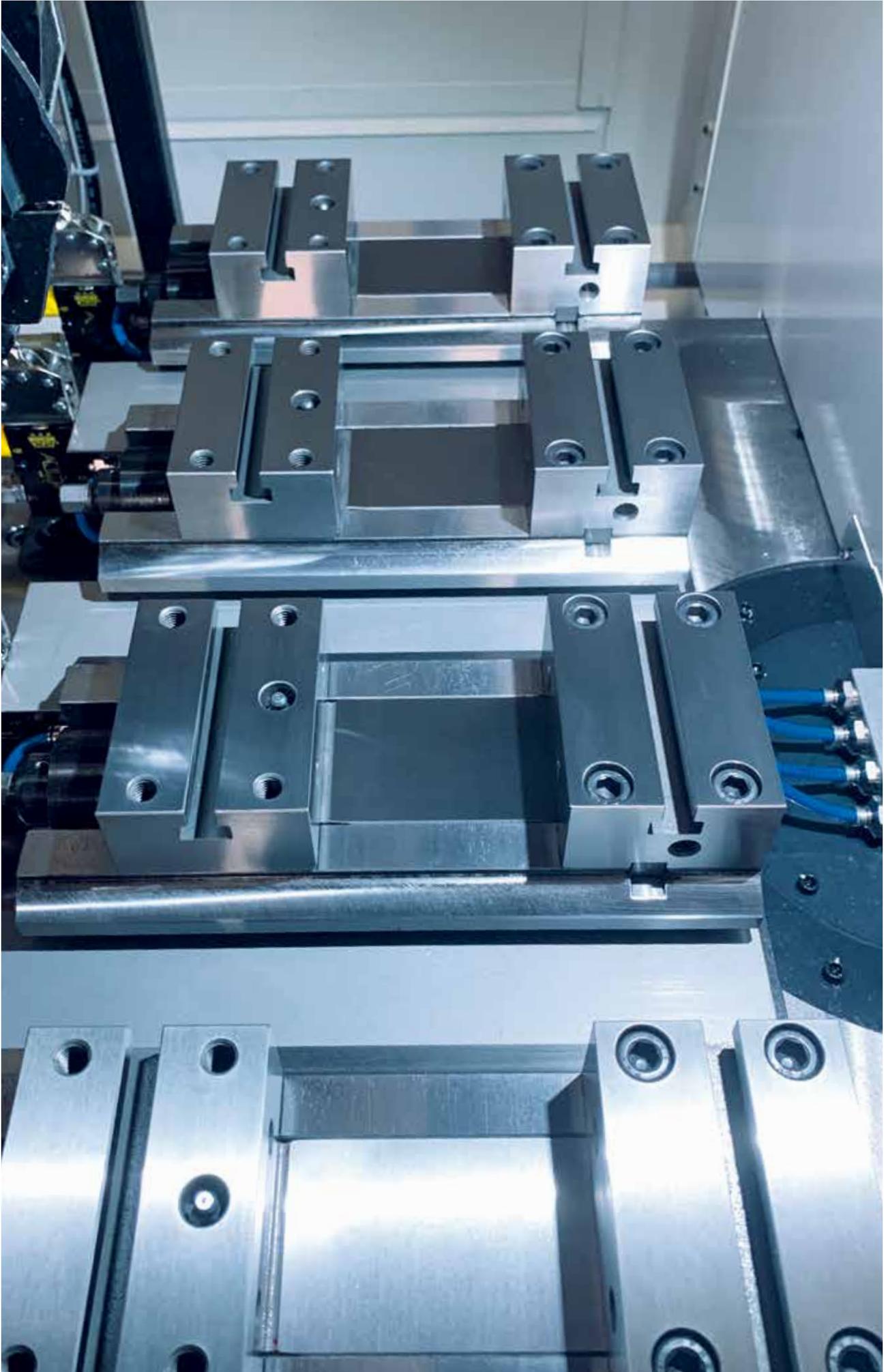
## E-TYPE standard dimensions and features

Designation	Reference	E 70	E 90	E 100	E 115	E 130	E 160	E 200
Maximum clamping force in Kg at 6 bar		600	1050	1550	2200	3000	5000	7500
Weight in Kg		9	18	27	32.5	41	59	113
Clamping stroke in mm		1.8	3.5	4	3.5	3.5	3.5	4
Maximum opening in mm	A	190	257	268	287	308	368	500
Total length in mm	B	270	329	344	414	431	504	710
Total height in mm	C	102	128	145	145	155	160	195
Total width in mm	D	90	112	128	140	160	196	236
Jaw width in mm	E	70	90	100	115	130	160	200
Distance between the jaws in mm	F	40	40	46	60	65	80	100



E-Type 70 to 200 - Clamping force





## Multi-tightening pneumatic vice

The EV-Type is characterised by a **large clamping range** and **an excellent T-guiding**. Its construction **prevents the lifting of the movable jaw**. The fixed jaw is oriented towards the operator for **optimum working ergonomics**.

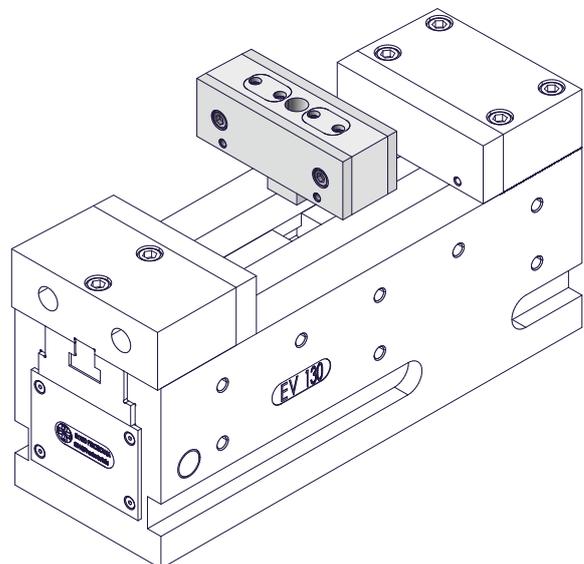
**Ideal for serial production**, its design **prevents chip intrusion**.



- ↳ **Large clamping capacity**
- ↳ **Simple and precise positioning of the jaws**
- ↳ **Adjustable clamping force**
- ↳ **Optimized working ergonomics**
- ↳ **Multi-clamping**
- ↳ **All components are case hardened, hardened to 60 HRC and grinded**

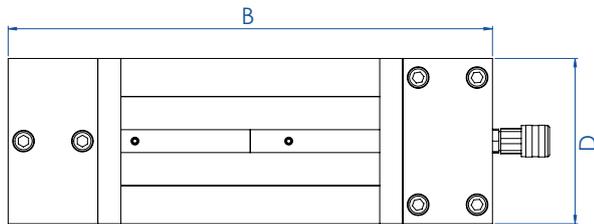
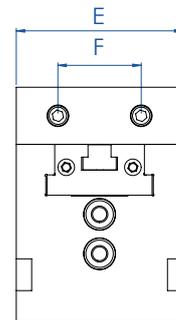
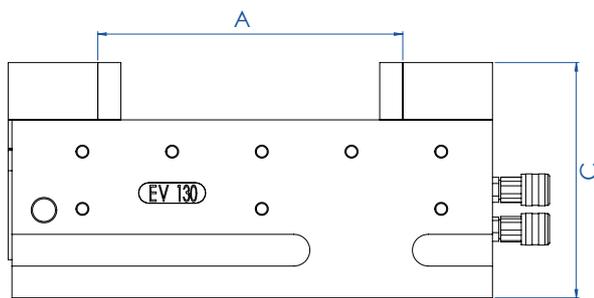
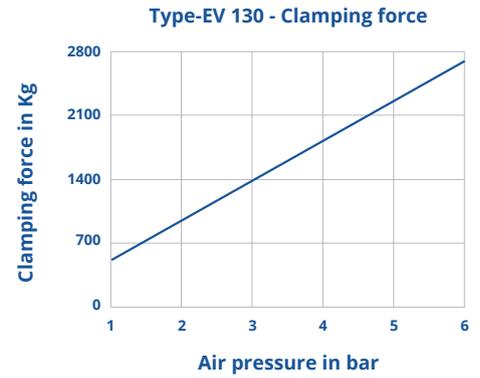
## Optional intermediate jaw

Designed to increase your productivity, the intermediate jaws allow you to clamp several parts at the same time.



## EV-TYPE standard dimensions and features

Designation	Reference	EV 130
Maximum clamping force in Kg at 6 bar		2600
Weight in Kg		45
Clamping stroke in mm		3
Maximum opening in mm	A	248
Total length in mm	B	378
Total height in mm	C	185
Total width in mm	D	130
Jaw width in mm	E	130
Distance between the jaws in mm	F	65





## Pneumatic self-centering vice

First of a new range of increasingly high-performance vices, the **CP 130** impresses with its **modular character**, its **self-centering pneumatic clamping inwards and outwards**, offering the possibility of an **off-centre positioning** for **optimal accessibility**.

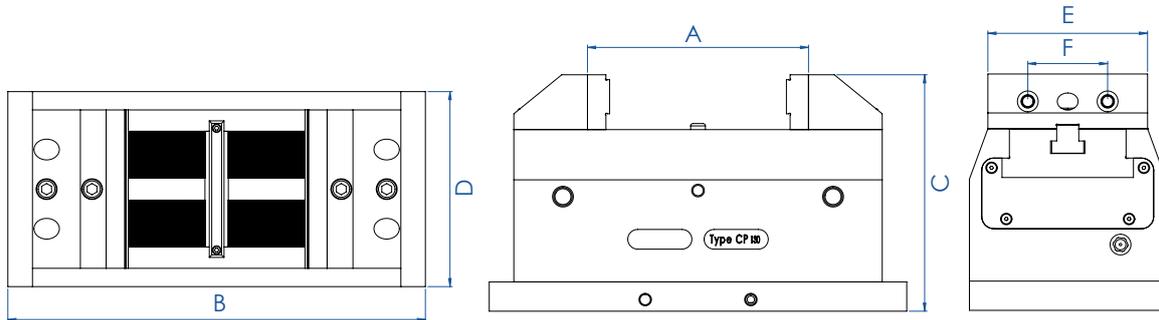
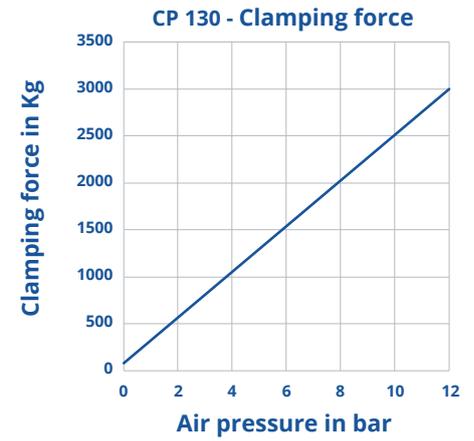
Developed to increase the machining possibilities, in particular to **5 axes** machines, the **CP 130** combines **power** and **precision**. Its **large clamping range**, **excellent accuracy** and **intelligent design** make it a reliable tool from roughing to finishing.



- ↳ **Wide clamping range due to adjustable jaws**
- ↳ **Adaptable to every machine**
- ↳ **Modular clamping**
- ↳ **Fast and easy setup**
- ↳ **High clamping force up to 3 tons**
- ↳ **All components are case hardened, hardened to 60 HRC and grinded**

## CP-TYPE standard dimensions and features

Designation	Reference	CP 130
Maximum clamping force in Kg at 12 bar		3000
Weight in Kg		55
Clamping stroke in mm		3.2
Maximum opening in mm	A	181.8
Total length in mm	B	340
Total height in mm	C	194
Total width in mm	D	160
Jaw width in mm	E	130
Distance between the jaws in mm	F	65



## Self-centering pneumatic vice with machinable jaws

### AZIMUT 70 - 100 - 110 - 160

The **Azimuth** is characterized by a **self-centering pneumatic internal or external clamping**. Thanks to its **machinable jaws** made of different materials, it adapts to the shapes of the parts.

Due to its **excellent repeatability**, it is ideal for **robot loading** and **serial production**.

### AZIMUT 50

Intended for the **microtechnology, watch-making and medtech** sectors, the **Azimuth 50** incorporates the features of its big brothers.

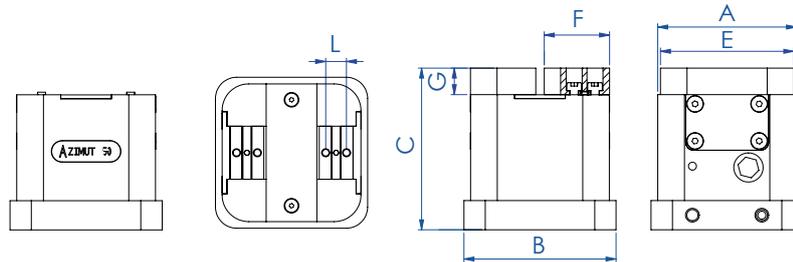


- ↳ Self-centering +/- 0.01 mm
- ↳ Pneumatic internal and external clamping
- ↳ Excellent repeatability
- ↳ Robot loading
- ↳ Fast clamping
- ↳ Jaws adaptable to the shape of the workpiece

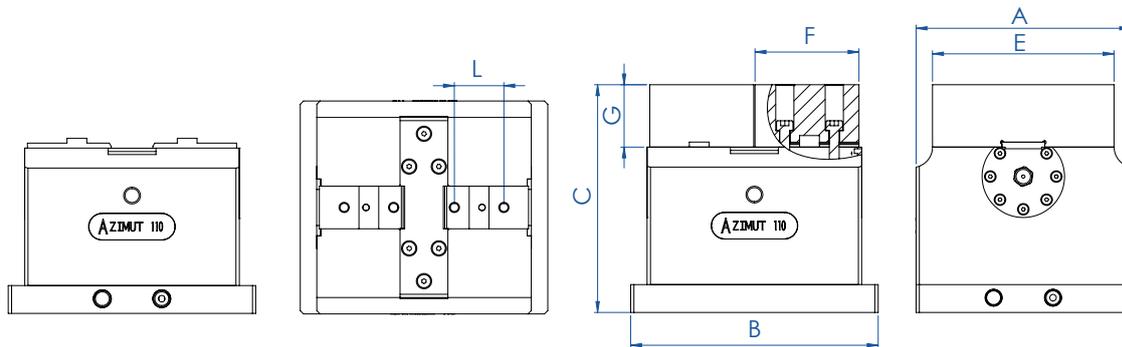
Option "normally closed by springs"

## Azimut standard dimensions and features

Designation	Reference	A 50	A 70	A 100	A 110	A 160
Maximum clamping force in Kg at 6 bar		80	210	500	900	1700
Weight in Kg		1.2	4	12.5	15	43
Clamping stroke in mm		1.7	2	2.5	2.5	4.5
Total width in mm	A	52	80	120	130	180
Total length in mm	B	57	90	140	150	210
Total height in mm	C	61	93	141	141	205
Jaw width in mm	E	50	70	100	110	160
Jaw thickness in mm	F	24.5	38.5	58	63	87
Jaw height in mm	G	10	15	40	40	60
Distance between the jaws in mm	L	7.8	15	20	30	36



### AZIMUT 50



### AZIMUT 70 - 160

