GERARDI

STD / StdFLEX / OK Series
MORSE - VISES

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VALIGETTA DI CAMPIONATURA STD (Art.1)
SAMPLE KIT CASE STD (Art.1)

NEW!

Art. 981

Valigetta di campionatura morsa Art.1 T.1
Sample kit case Art.1 T.1 vise

Cod.	0.98.10000

All'Interno - Inside:

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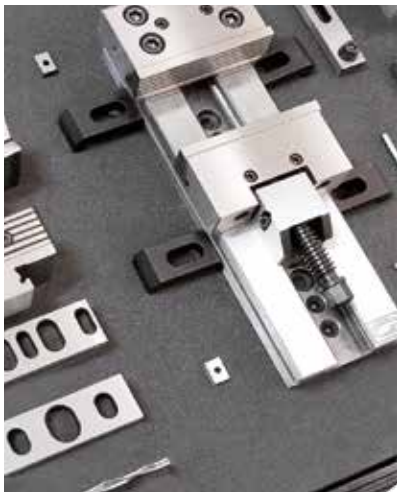


SIMBOLOGIA DATI TECNICI
TECHNICAL DATA ICONS

GANASCE JAWS		Fissa Fixed	Mobile Movable	Intermedia Intermediate	Fissa con piastra singola Fixed with single plate	Fissa con piastra doppia Fixed with double plate	Ganasce sovrapponibili Stack Type Jaws
PIASTRE GANASCE JAW PLATES			Discendente Pull down	Piana Straight	Cambio rapido manuale Quick manual change	GRIP GRIP	Inserti GRIP Inserti GRIP
POSSIBILITÀ DI POSSIBILITY OF	Serraggio di 1 particolare Clamping only 1 piece	Serraggio di 2 particolar1 Clamping 2 pieces	Montaggio sul fianco o in serie Side mounting or gang operation	Posizionamento & cambio rapido Quick change & positioning	Cubi-morsa Vise tower	Divisore Automatico Automatic dividing head	Divisore Meccanico Mechanical dividing head
PAGINE PAGES				Accessori & Ricambi Accessories & Spare Parts	Istruzioni corretto utilizzo Instruction for a proper use	Diagrammi forze di serraggio Clamping force diagrams	Sistema Idraulico Hydraulic System

MORSE e CUBI serie STANDARD
STANDARD series VISES and CUBES

La Morsa più diffusa (ed imitata nel mondo). Il trinomio perfetto: Convenienza, Qualità, Versatilità
The Most popular (and copied) vise in the world. The perfect mix: Price, Quality, Versatility

La morsa componibile ***GERARDI*** è costruita con il concetto di ***intercambiabilità*** di tutti gli elementi componenti l'attrezzatura e con la certezza di poter usare più morse sulla stessa macchina con ***posizionamento ed allineamento perfetto in pochi secondi***. Tutto ciò è possibile per l'elevato grado di precisione della morsa stessa ed in particolare per quanto riguarda: l'altezza della base, l'allineamento con tasselli di cava longitudinale rispetto alla ganascia fissa, la perpendicolarità della ganascia fissa rispetto alla base ed il parallelismo dei piani della base. Tali caratteristiche consentono di risolverei più svariati e complicati problemi di fissaggio in pochi istanti con l'uso di più morse.

All ***GERARDI*** vises and accessories are modular and components of all our vises will ***interchange*** with perfect alignment. The vises can be matched side to side with the ***highest precision and minimum of set up times*** thanks to many fixed reference points. All this is possible thanks to the high precision of the vise particularly as regards: the base high, the alignment with longitudinal key-nuts with respect to the fixed jaw, the perpendicularity of the fixed jaw with respect to the vise base and the parallelism of the base top and bottom surfaces. Those features allows us to solve the most varied and complicated problems of clamping in a few seconds with the use of more vises.

USURA INESISTENTE

Grazie all'accurata scelta dei materiali impiegati ed allo studio dimensionale computerizzato dei componenti. **Costruzione completamente in speciali leghe di acciaio** ad alta resistenza, normalizzato, cementato e temprato con **durezza 60 ±2 HRC**. Tutto ciò al fine di conferire massima rigidità, elevate prestazioni e usura inesistente. A riprova di tutto ciò assicuriamo ***5 ANNI DI GARANZIA*** su tutto il programma morse e organi meccanici in genere.

NO WEAR

Thanks to the manufacturing with only the most suitable materials and to the structure of the vise components (developed using computer customised softwares and the experience gained during many years spent working on the specific field). **High alloyed quality resistance steel, case hardened HRC 60 ±2**, is used in manufacturing all the Gerardi vises and accessories in order to give maximum rigidity, high performances and no wear. As evidence we give ***5 YEARS WARRANTY*** on all the vises and mechanical components.

DESIGN COMPATTO E MANEGGEVOLEZZA

La semplicità nonché la compattezza costruttiva consentono un'**apertura notevole rispetto all'ingombro totale** dell'attrezzatura. Inoltre lo stesso peso (solo 25 kg per una morsa da 150 mm di larghezza ganascia) è tale da consentire un facile trasferimento da una macchina all'altra.

SPACE SAVING DESIGN & HANDY

The space saving design and solid construction allow a maximum blocking ratio to total overall dimension of the vise. Furthermore the weight (only 25 kg for a 150 mm jaw width vise) allows a simple moving from one machine to another.

MODULARITÀ

Tutte le morse ed accessori sono elementi componibili, intercambiabili e perfettamente allineabili fra loro e con i quali è possibile ottenere differenti soluzioni di bloccaggio. Secondo tale principio l'unico elemento che differenzia le attrezzature con identica larghezza di presa è la base (la cui lunghezza determina la massima apertura della morsa), mentre gli altri componenti sono identici. Mediante l'aggiunta o semplice sostituzione di alcuni particolari **si può variare la tipologia di bloccaggio secondo le proprie esigenze** utilizzando la stessa attrezzatura acquistata in un primo momento (bloccaggi singoli, con base girevole, doppi, verticali, di pezzi piani, tondi, piatti e grezzi, manuali, idraulici o pneumatici).

MODULARITY

All vises and accessories are modular and components of all our vises will interchange with perfect alignment to provide different workholding solutions. With this basic principle the only difference between fixtures with the same width of clamping is the base (whose length determines the maximum opening of the vise), while the rest of components have same dimensions. Through the simple addition or substitution of some particulares **You can change the type of clamping as Your needs require** using the same fixture purchased before (single clamping, swivel base, double, vertical, smooth or round or flat or rough workpieces, manual, hydraulic or pneumatic).

RAPIDITA' DEI SERRAGGI

Grazie allo **scorrimento del gruppo di serraggio** nella guida della base (a cremagliera) fino in prossimità del pezzo da lavorare dove si adatterà automaticamente alla nicchia più vicina. L'operazione di serraggio si conclude agendo sulla vite di bloccaggio. Oltre a quello manuale meccanico, sono disponibili **4 ulteriori sistemi di serraggio** intecambiabili e indipendenti:
1 - Idraulici / **2** - Pneumatici / **3** - Idraulici manuali / **4** - Idraulici elettrici.
L'operazione è in termini di secondi.

QUICK CLAMPING

Thanks to the **clamping device sliding in the vise base slide** (compact rack type) till the proximity of the workpiece. The clamping is completed with the main screw. Besides the manual mechanic system, **4 further** interchangeable and independent **clamping systems** are available:
1- Hydraulic / **2**- Pneumatic / **3**- Manual hydraulic / **4**- Electrical hydraulic.
The change needs only few seconds.

1 VERSATILITA'

La **ganascia fissa con gradino posteriore di 5x5 mm** consente, una volta ruotata di 180°, il perfetto accoppiamento al gradino della ganascia prismatica mobile (**Art.217**) ordinabile separatamente: è così possibile il serraggio di pezzi piatti senza parallele e di tondi sia in orizzontale che in verticale. Inoltre è disponibile una **vastissima gamma di ganasce** nonché un sistema di parallele piane e angolari per le più svariate applicazioni e la lavorazione di pezzi di qualsiasi forma e dimensione. **Illimitata gamma di aperture possibili.**

2 PRECISIONI ± 0,02 mm

Slittone base con tutte le superfici di scorrimento ed accoppiamento rettificate.L'allineamento agli assi della macchina avviene grazie alle **chiavette longitudinali e trasversali** (16H7) o fori di posizionamento (Ø16mm F7), a richiesta, previsti sulla base di ciascuna morsa. Naturalmente tutto ciò consente oltre alle precisioni dichiarate **tempi di installazione ristrettissimi**.

1 VERSATILITY

Fixed jaw with 5x5mm step matchable to the prismatic movable jaw (Art.217 to be ordered separately) which allows to clamp plates without parallels and round workpieces vertical & horizontal way. Vertical, sideway and gang operation are possible with the appropriate components (column, narrow width jaws, etc.) **Unlimited calmping range.**

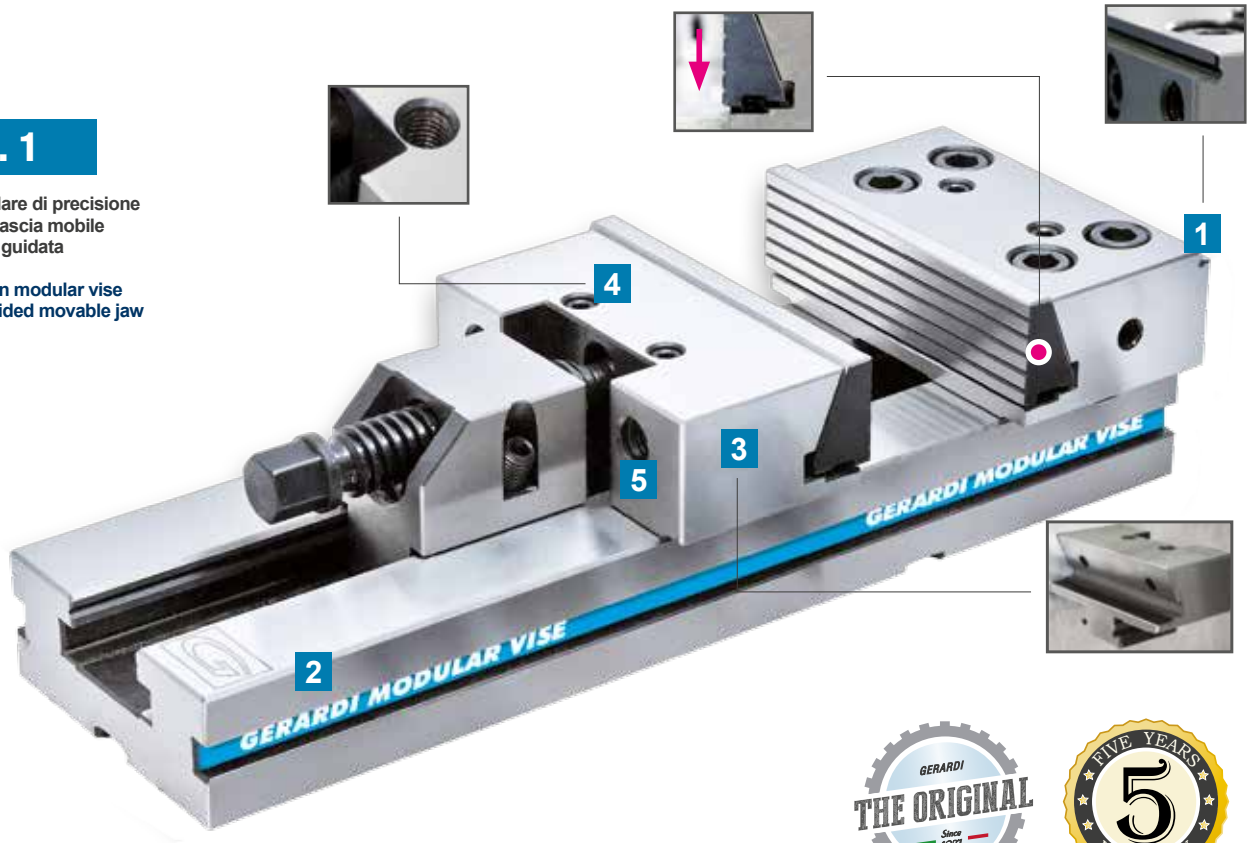
2 HIGHEST ACCURACIES ± 0,02 mm

Solid vise base. Every sliding and coupling surface is ground. **Centesimal tollerances** are guaranteed by checking cycles with CNC measuring machine. The perfect alignment with the machine axis is given by **longitudinal and cross keyways** (16H7) or positioning holes (Ø16 mm F7), upon specific request, on the vise base. Of course this allows **minimum of set up times and gang operations**.

Art. 1

Morsa modulare di precisione STD con ganascia mobile monoblocco guidata

STD precision modular vise with solid guided movable jaw



3 RIGIDITA' e SICUREZZA

Entrambe le ganasce sono costruite in corpo unico (non esistono slitte o tasselli di fissaggio) per garantire una maggiore rigidità e nessuna flessione. Entrambe le piastre ganasce sono costruite con **un angolo di spinta verso il basso**. Ciò assicura, nel momento della chiusura, una trazione del pezzo contro la base della morsa (per trascinamento) e, di conseguenza, un bloccaggio sicuro e preciso.

3 RIGIDITY and SAFETY

Both jaws bodies are built in one solid piece (no slides or key-nuts): in order to guarantee higher rigidity & no bendings. Both jaw plates are manufactured with **a pull down angle**. This ensure, during the clamping operation, a downward run of the workpiece against the vise base (by dragging) and thus a precise and safety clamping.

4 FORI GANASCIA PER APPLICAZIONI SPECIALI

Quattro fori filettati supplementari sopra le ganasce danno la possibilità di installare ganasce sovrapponibili per applicazioni speciali.

4 JAW HOLES FOR SPECIAL APPLICATIONS

4 extra tapped holes over the jaws for special Gerardi stack type jaw application

5 INCREMENTO APERTURA MASSIMA

Quattro fori filettati supplementari e la parte posteriore di ciascuna ganascia rettificata permettono di incrementare la capacità di apertura di circa l'80% tramite il fissaggio di appositi elementi di prolunga (Art.132 e 133 da ordinare separatamente).

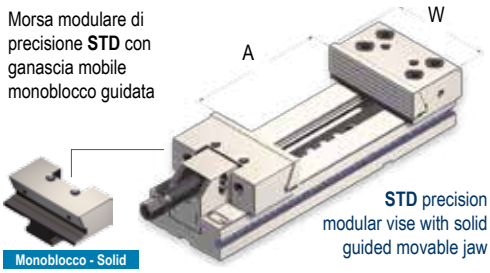
5 MAX OPENING INCREASE

4 extra tapped holes with ground back jaw rear face increase maximum opening capacity of about 80% with the addition of jaw extensions (Art.132 and 133 to be ordered separately).

Tipo (grandezza) morsa / Vise type (size)		1	2	3		4			
	kN	16 kN	25 kN	30 kN		30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	100	125	150		175			
	B	30	40	50		60			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	6.8	12.9	25.5	29	37	42	47	52
	Cod.	3.01.00000	3.02.10000	3.03.20000	3.03.30000	3.04.20000	3.04.30000	3.04.40000	3.04.50000

Art. 1

Morsa modulare di precisione **STD** con ganascia mobile monoblocco guidata

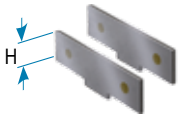


STD precision modular vise with solid guided movable jaw

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313

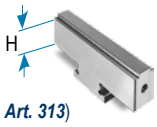
Piastre magnetiche parallele piane
Magnetic parallel plates



Cod.	4.31.31000	4.31.32000	4.31.33000		4.31.34000
H	23	33	43		53

Art. 212

Ganascia mobile intermedia (*da usare con* ***Art. 313***)
Intermediate movable jaw (*to be used with* ***Art. 313***)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 217

Ganascia mobile prismatica
Prismatic movable jaw

Cod.	2.21.71000	2.21.72000	2.21.73000	2.21.74000

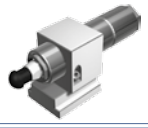
Art. 242G NEW!

Piastra ganascia con inserti GRIP
Jaw plate with GRIP inserts

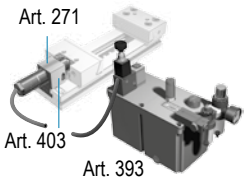
Cod.	1.24.2G100	1.24.2G200	1.24.2G300	1.24.2G400

Art. 271

Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder



Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Art. 392

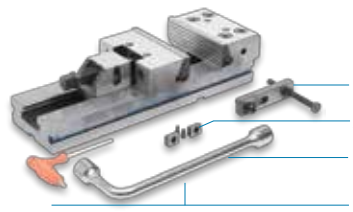
Pneumatico / Air control

Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

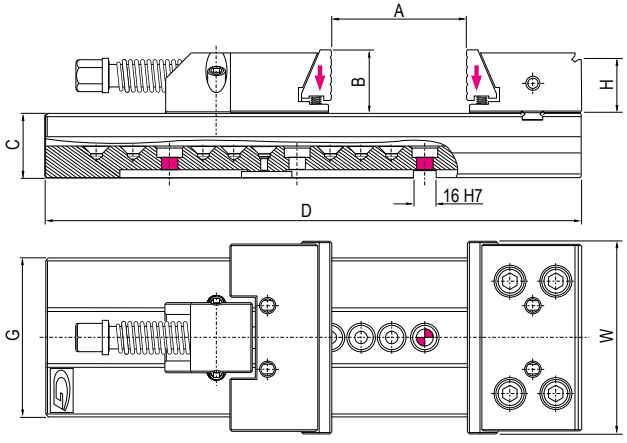
Dotazione standard:

- 1 arresto laterale Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
  (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376



Standard equipment:

- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
  (Standard for 16 mm slot. Other dimensions available on request without price change)
- 1 box wrench Art. 375 ■ 1 T-wrench Art. 376



Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

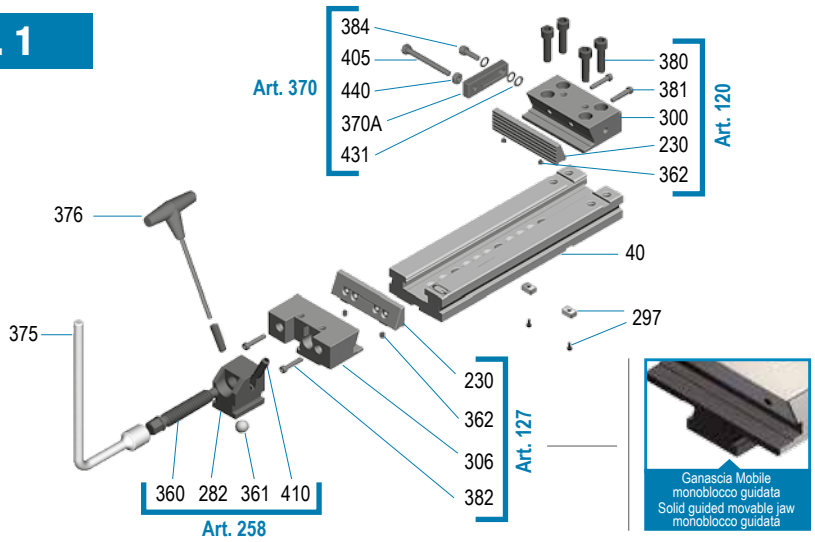
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		200						300			
		65						80			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
64	69	74	79	84	95	105	115	125	135	145	155
3.05.20000	3.05.30000	3.05.40000	3.05.50000	3.05.60000	3.06.20000	3.06.30000	3.06.40000	3.06.50000	3.06.60000	3.06.70000	3.06.80000

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.31.35000	4.31.36000
Art. 313		
	53	68
	1.21.25000	1.21.26000
Art. 212		
	2.21.75000	2.21.76000
Art. 217		
	1.24.2G500	1.24.2G600
Art. 242G		
	2.27.15000	2.27.16000
Art. 271		
	4.39.15000	4.39.16000
Art. 391		
	4.39.25000	4.39.26000
Art. 392		

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 1



Art.	Pag.
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230	4.9
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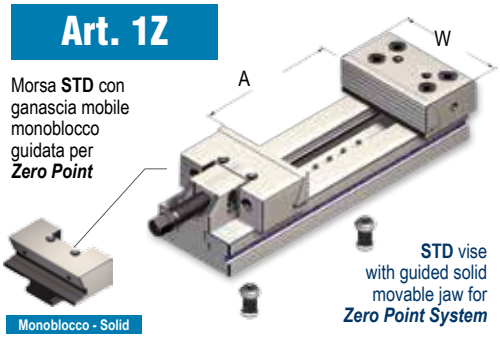
297	4.31
300	4.25
306	4.25
360	4.32
361	4.32
362	4.24
370A	4.31
375	4.35

Art.	Pag.
376	4.31
380	4.24
381	4.24
382	4.24
384	4.24
405	4.31
410	4.32
431	4.24
440	4.24
-	-
-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN	2 25 kN	3 30 kN		4 30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	100	125	150		175			
	B	30	40	50		60			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	7.3	13.2	26.2	29.7	37.9	43	48.1	53.2
Art. 1Z	Cod.	1.1Z.10000	1.1Z.20000	1.1Z.32000	1.1Z.33000	1.1Z.42000	11Z.43000	1.1Z.44000	1.1Z.45000

Morsa **STD** con ganascia mobile monoblocco guidata per ***Zero Point***

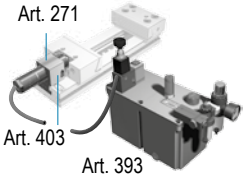


Monoblocco - Solid

STD vise with guided solid movable jaw for ***Zero Point System***

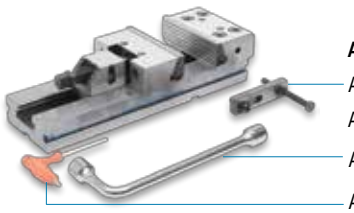
AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313 Piastre magnetiche parallele piane Magnetic parallel plates	Cod.	4.31.31000	4.31.32000	4.31.33000	4.31.34000
	H	23	33	43	53
Art. 212 Ganascia mobile intermedia (*da usare con **Art. 313***) Intermediate movable jaw (*to be used with **Art. 313***)	Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000
Art. 217 Ganascia mobile prismatica Prismatic movable jaw	Cod.	2.21.71000	2.21.72000	2.21.73000	2.21.74000
Art. 242G NEW! Piastra ganascia con inserti GRIP Jaw plate with GRIP inserts	Cod.	1.24.2G100	1.24.2G200	1.24.2G300	1.24.2G400
Art. 271 Supporto di serraggio con cilindro idraulico Clamping support with hydraulic cylinder	Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000
Art. 391 CNC / CNC	Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000
Art. 392 Pneumatico / Air control	Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000



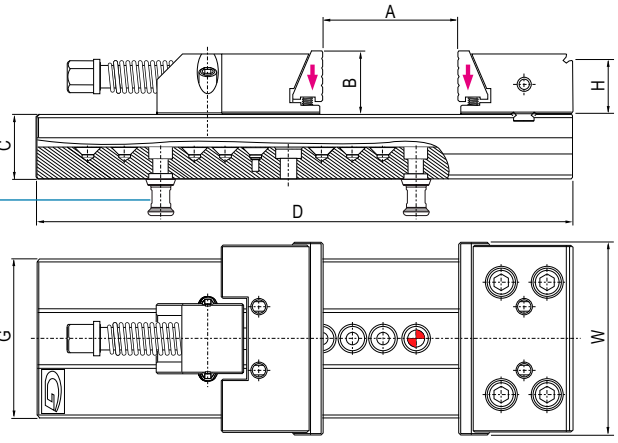
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

Dotazione standard:
- 1 arresto laterale Art. 370
- 2 tiranti Art. 10A
- 1 chiave a pipa Art. 375
- 1 chiave a "T" Art. 376



Art. 1Z
Art. 370
Art. 10A
Art. 375
Art. 376

Art. 10A



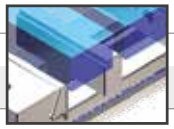
Standard equipment:
- 1 workstop Art. 370
- 2 pullstuds Art. 10A
- 1 box wrench Art. 375
- 1 T-wrench Art. 376

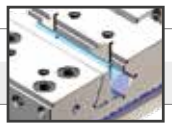
Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		200						300			
		65						80			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
65.3	70.3	75.3	80.3	85.3	97	107	117	127	137	147	157
1.1Z.52000	1.1Z.53000	1.1Z.54000	1.1Z.55000	1.1Z.56000	1.1Z.62000	1.1Z.63000	1.1Z.64000	1.1Z.65000	1.1Z.66000	1.1Z.67000	1.1Z.68000

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

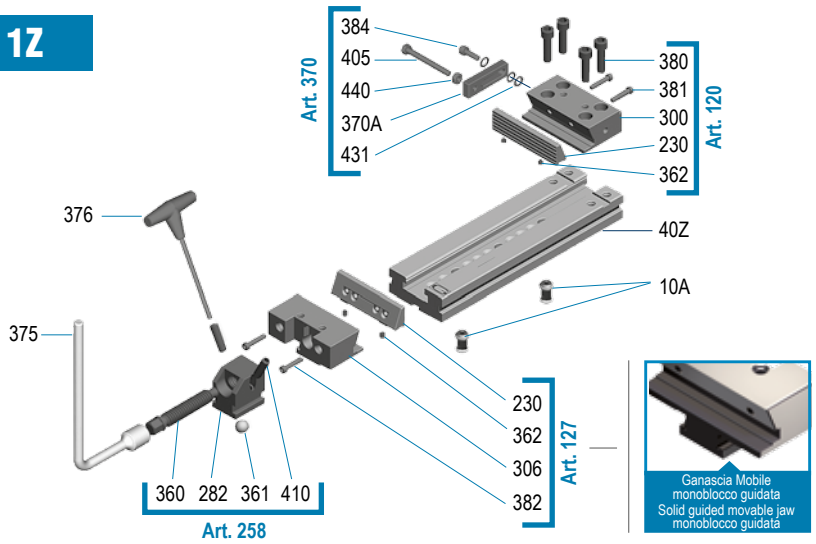
	4.31.35000	4.31.36000
Art. 313		
	53	68
	1.21.25000	1.21.26000
Art. 212		
	2.21.75000	2.21.76000
Art. 217		
	1.24.2G500	1.24.2G600
Art. 242G		
	2.27.15000	2.27.16000
Art. 271		
	4.39.15000	4.39.16000
Art. 391		
	4.39.25000	4.39.26000
Art. 392		





Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

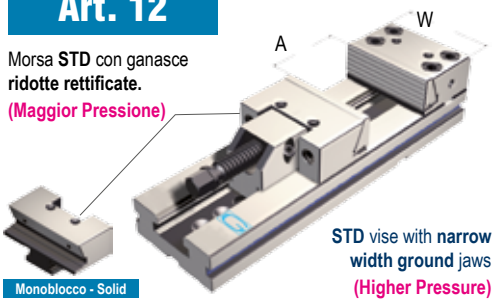
Art. 1Z



Tipo (grandezza) morsa / Vise type (size)		1	2	3		4			
	kN	16 kN	25 kN	30 kN		30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	75	95	125		145			
	B	30	40	50		60			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	6.2	11.9	24.2	27.8	35	39	46	51
	Cod.	3.01.00120	3.02.10120	3.03.20120	3.03.30120	3.04.20120	3.04.30120	3.04.40120	3.04.50120

Art. 12

Morsa **STD** con ganasce **ridotte rettificate.**
(Maggior Pressione)



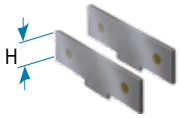
Monoblocco - Solid

STD vise with **narrow width ground** jaws
(Higher Pressure)

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313R

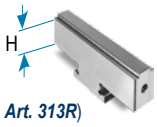
Piastre magnetiche parallele piane
Magnetic parallel plates



Cod.	4.31.3R100	4.31.3R200	4.31.3R300		4.31.3R400
H	23	33	43		53

Art. 213

Ganascia mobile intermedia
(*da usare con* ***Art. 313R***)
Intermediate movable jaw (*to be used with* ***Art. 313R***)



Cod.	1.21.31000	1.21.32000	1.21.33000	1.21.34000

Art. 218

Ganascia mobile prismatica
Prismatic movable jaw

Cod.	2.21.81000	2.21.82000	2.21.83000	2.21.84000

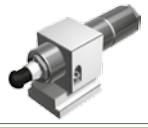
Art. 243G NEW!

Piastra ganascia ridotta con inserti GRIP
Narrow width jaw plate with GRIP inserts

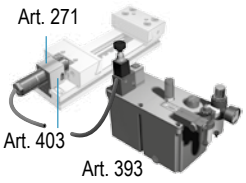
Cod.	1.24.3G100	1.24.3G200	1.24.3G300	1.24.3G400

Art. 271

Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder



Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Art. 392

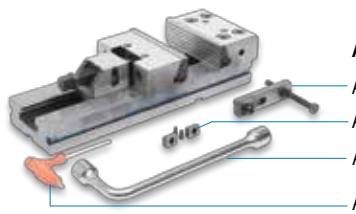
Pneumatico / Air control

Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

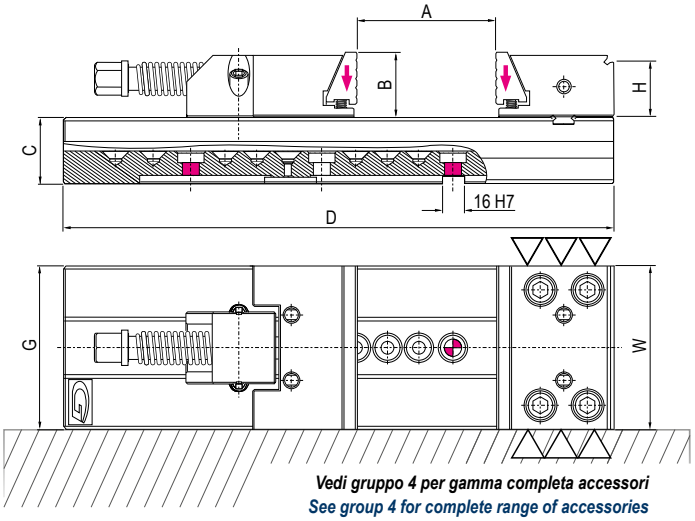
Dotazione standard:

- 1 arresto laterale Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
  (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376



Standard equipment:

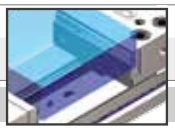
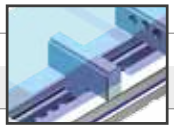
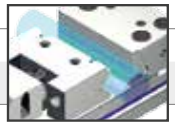
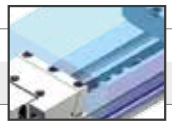
- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
  (Standard for 16 mm slot. Other dimensions available on request without price change)
- 1 box wrench Art. 375 ■ 1 T-wrench Art. 376



Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

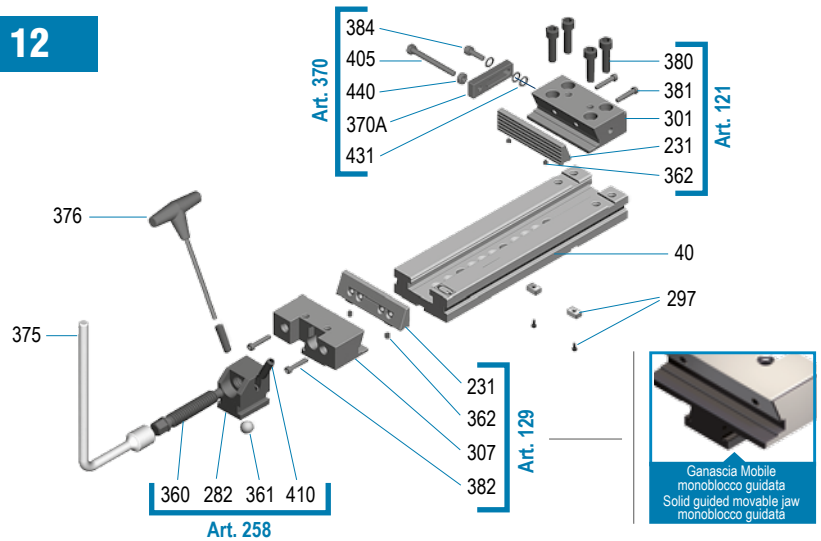
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		170						195			
		65						80			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
62	67	72	77	82	88	98	108	118	128	138	148
3.05.20120	3.05.30120	3.05.40120	3.05.50120	3.05.60120	3.06.20120	3.06.30120	3.06.40120	3.06.50120	3.06.60120	3.06.70120	3.06.80120

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.31.3R500	4.31.3R600
Art. 313R		
	53	68
	1.21.35000	1.21.36000
Art. 213		
	2.21.85000	2.21.86000
Art. 218		
	1.24.3G500	1.24.3G600
Art. 243G		
	2.27.15000	2.27.16000
Art. 271		
	4.39.15000	4.39.16000
Art. 391		
	4.39.25000	4.39.26000
Art. 392		

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 12



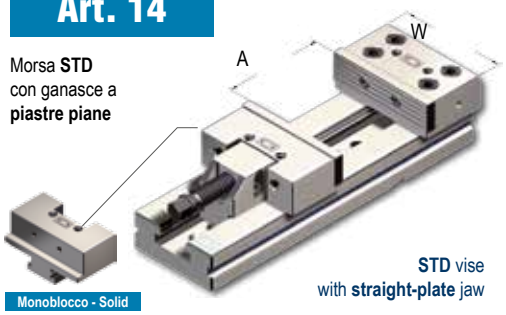
Art.	Pag.
40	1.22
231	4.9
282	4.32
297	4.31
301	4.25
307	4.25
360	4.32
361	4.32
362	4.24
370A	4.31
375	4.31

Art.	Pag.
376	4.31
380	4.24
381	4.24
382	4.24
384	4.41
405	4.46
410	4.32
431	4.24
440	4.24
-	-
-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN	2 25 kN	3 30 kN		4 30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	100	125	150		175			
	B	30	40	50		60			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	6.8	12.9	25.5	29	37	42	47	52
	Cod.	1.14.10000	1.14.20000	1.14.32000	1.14.33000	1.14.42000	1.14.43000	1.14.44000	1.14.45000

Art. 14

Morsa **STD**
con ganasce a
piastre piane



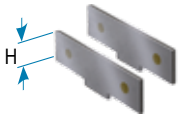
Monoblocco - Solid

STD vise
with **straight-plate** jaw

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313

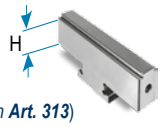
Piastre magnetiche parallele piane
Magnetic parallel plates



Cod.	4.31.31000	4.31.32000	4.31.33000		4.31.34000
H	23	33	43		53

Art. 212

Ganascia mobile intermedia
(*da usare con* ***Art. 313***)
Intermediate movable jaw (*to be used with* ***Art. 313***)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 246

Piastra piana in acciaio lavorabile
Machinable steel straight jaw plate

Cod.	1.65.16200	1.65.26200	1.65.36200	1.65.46200

Art. 246G NEW!

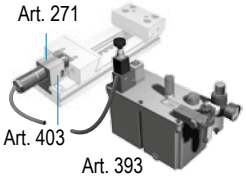
Piastra piana con inserti GRIP
Straight jaw plate with GRIP inserts

Cod.	1.24.6G100	1.24.6G200	1.24.6G300	1.24.6G400

Art. 271

Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder

Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Art. 392

Pneumatico / Air control

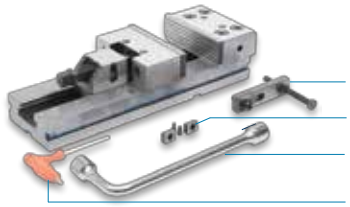
Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

Dotazione standard:

- 1 arresto laterale Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
  (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376

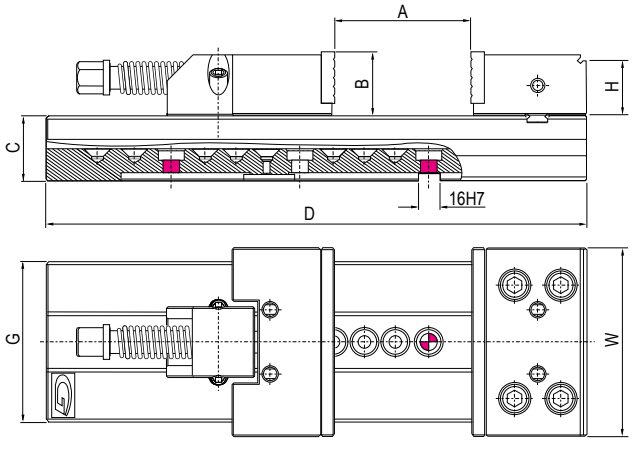
Extra per ogni foro calibrato (tolleranza F7): **€ 85,00**



Standard equipment:

- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
  (Standard for 16 mm slot. Other dimensions available on request without price change)
- 1 box wrench Art. 375 ■ 1 T-wrench Art. 376

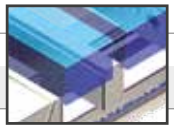
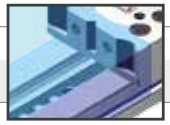
Extra charge for each calibrated hole (F7 tolerance): **€ 85,00**



Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

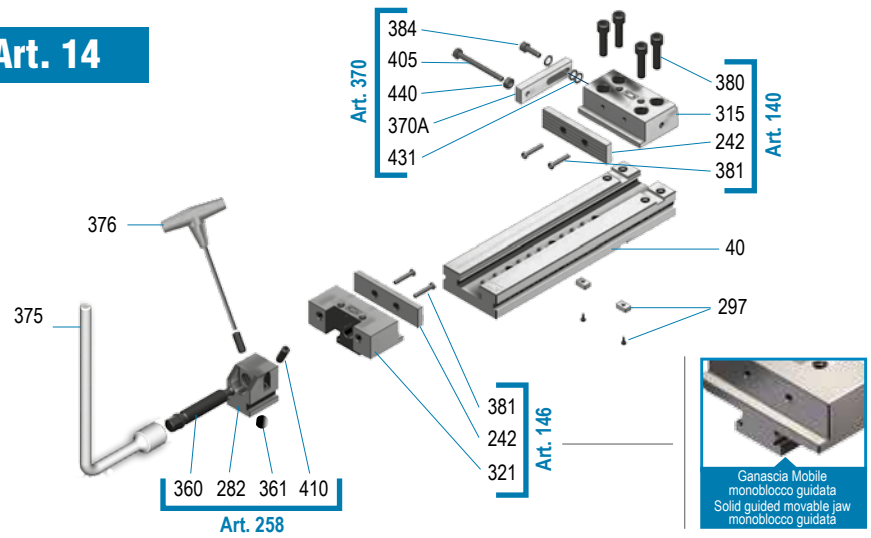
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		200						300			
		65						80			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
64	69	74	79	84	95	105	115	125	135	145	155
1.14.52000	1.14.53000	1.14.54000	1.14.55000	1.14.56000	1.14.62000	1.14.63000	1.14.64000	1.14.65000	1.14.66000	1.14.67000	1.14.68000

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.31.35000		4.31.36000
Art. 313			
	53		68
	1.21.25000		1.21.26000
Art. 212			
	1.65.56200		1.65.66200
Art. 246			
	1.24.6G500		1.24.6G600
Art. 246G			
	2.27.15000		2.27.16000
Art. 271			
	4.39.15000		4.39.16000
Art. 391			
	4.39.25000		4.39.26000
Art. 392			

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 14



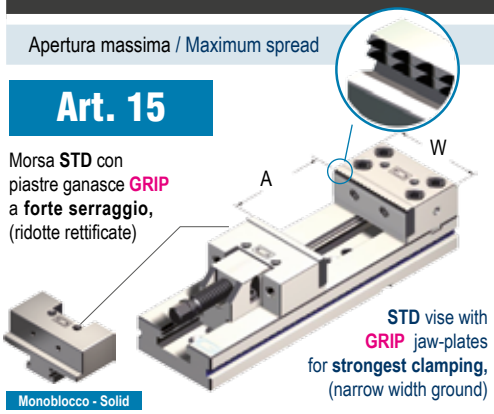
Art.	Pag.
40	1.22
242	4.11
282	4.32
297	4.31
315	4.26
321	4.26
360	4.32
361	4.32
370A	4.31
375	4.31
376	4.31

Art.	Pag.
380	4.24
381	4.24
384	4.24
405	4.46
410	4.32
431	4.24
440	4.24
-	-
-	-
-	-
-	-

Tipo (grandezza) morsa / Vise type (size)		1	2	3		4			
	kN	16 kN	25 kN	30 kN		30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	75	95	125		145			
	B	30	40	50		60			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	6.2	11.9	24.2	27.8	35	39	46	51
	Cod.	1.15.10000	1.15.20000	1.15.32000	1.15.33000	1.15.42000	1.15.43000	1.15.44000	1.15.45000

Art. 15

Morsa **STD** con piastre ganasce **GRIP** a **forte serraggio,** (ridotte rettificate)



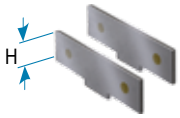
STD vise with **GRIP** jaw-plates for **strongest clamping,** (narrow width ground)

Monoblocco - Solid

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313R

Piastre magnetiche parallele piane
Magnetic parallel plates



Cod.	4.31.3R100	4.31.3R200	4.31.3R300		4.31.3R400
H	23	33	43		53

Art. 247

Piastra piana ridotta in acciaio lavorabile
Machinable steel narrow width straight jaw plate

Cod.	1.65.17200	1.65.27200	1.65.37200		1.65.47200

Art. 218

Ganascia mobile prismatica
Prismatic movable jaw

Cod.	2.21.81000	2.21.82000	2.21.83000		2.21.84000

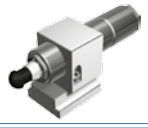
Art. 247G NEW!

Piastra piana ridotta con inserti GRIP
Narrow width straight jaw plate with GRIP inserts

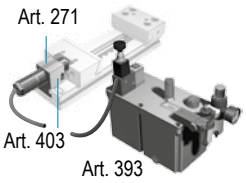
Cod.	1.24.7G100	1.24.7G200	1.24.7G300		1.24.7G400

Art. 271

Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder



Cod.	2.27.11000	2.27.12000	2.27.13000		2.27.14000



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000		4.39.14000

Art. 392

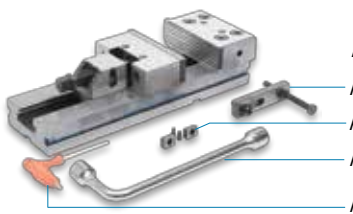
Pneumatico / Air control

Cod.	4.39.21000	4.39.22000	4.39.23000		4.39.24000

Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

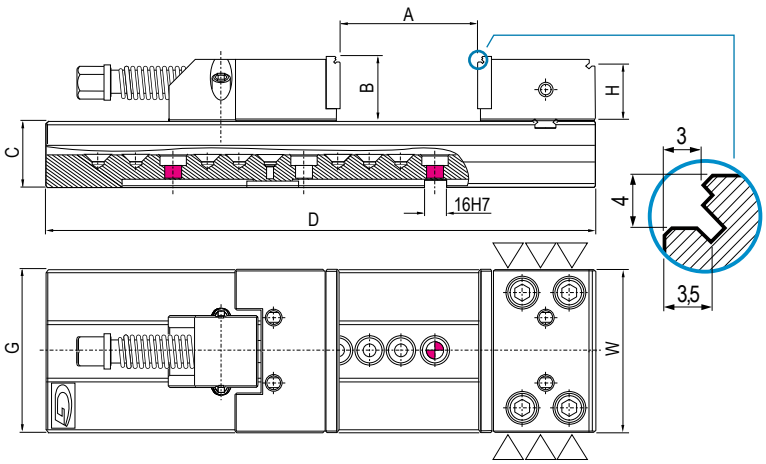
Dotazione standard:

- 1 arresto laterale Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
  (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376



Standard equipment:

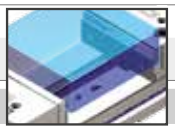
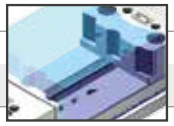
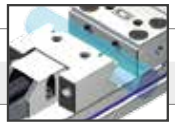
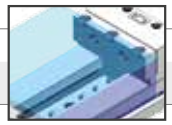
- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
  (Standard for 16 mm slot. Other dimensions available on request without price change)
- 1 box wrench Art. 375 ■ 1 T-wrench Art. 376



Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

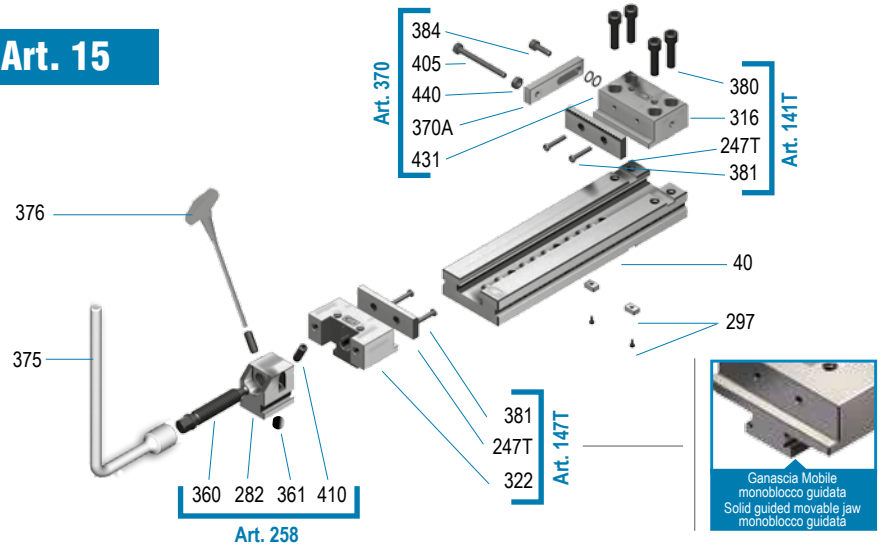
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		170						195			
		65						80			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
62	67	72	77	82	88	98	108	118	128	138	148
1.15.52000	1.15.53000	1.15.54000	1.15.55000	1.15.56000	1.15.62000	1.15.63000	1.15.64000	1.15.65000	1.15.66000	1.15.67000	1.15.68000

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.31.3R500		4.31.3R600
Art. 313R			
	53		68
	1.65.57200		1.65.67200
Art. 247			
	2.21.85000		2.21.86000
Art. 218			
	1.24.7G500		1.24.7G600
Art. 247G			
	2.27.15000		2.27.16000
Art. 271			
	4.39.15000		4.39.16000
Art. 391			
	4.39.25000		4.39.26000
Art. 392			

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 15



Art.	Pag.
40	1.22
247T	4.11
282	4.32
297	4.31
316	4.26
322	4.26
360	4.32
361	4.32
370A	4.31
375	4.31
376	4.31

Art.	Pag.
380	4.24
381	4.24
384	4.24
405	4.46
410	4.32
431	4.24
440	4.24
-	-
-	-
-	-
-	-

MORSE e CUBI serie **StandardFLEX**
StandardFLEX series VISES and CUBES

La Morsa più Evoluta! Dotata del geniale sistema a pettine per la rapida sostituzione delle piastre ganasce discendenti

The Most Recent Vise! Innovative comb system for quick pull-down jaw plate change

Le morse ***GERARDI*** della serie **Standardflex** sono un evoluzione della morsa Standard STD. La loro caratteristica principale è la sostituzione rapida delle piastre ganasce che avviene manualmente e senza l'ausilio di alcun utensile, questo è possibile grazie al sistema Perno-molla, che consente un diverso utilizzo della morsa in tempi ridottissimi. Grazie al sistema a Pettine di rigatura prismatica delle piastre ganascia, risulta migliorato anche l'effetto discendente che durante la fase di serraggio, trascina il pezzo contro lo slittone garantendo anche una notevolissima precisione di riposizionamento.

The ***GERARDI*** vises of the StandardFLEX series are an evolution of the Standard vise series.Their main characteristic is the quickest jaw plate hand substitution without any tool. This is possible thanks to the new design with pin with spring which increases the standard vise versatility while the prismatic grooves allow a perfect repositioning accuracy (within microns!!!).

1 ALTISSIMA RIPETIBILITÀ DI POSIZIONAMENTO

con particolari perfettamente in squadra

1 HIGHEST REPOSITIONING ACCURACY

with perfect square workpieces.

2 RICONFIGUARAZIONE RAPIDISSIMA

grazie alla piastra ganascia intercambiabile manualmente

2 GREAT SAWINGS IN VISE RESETTING TIMES

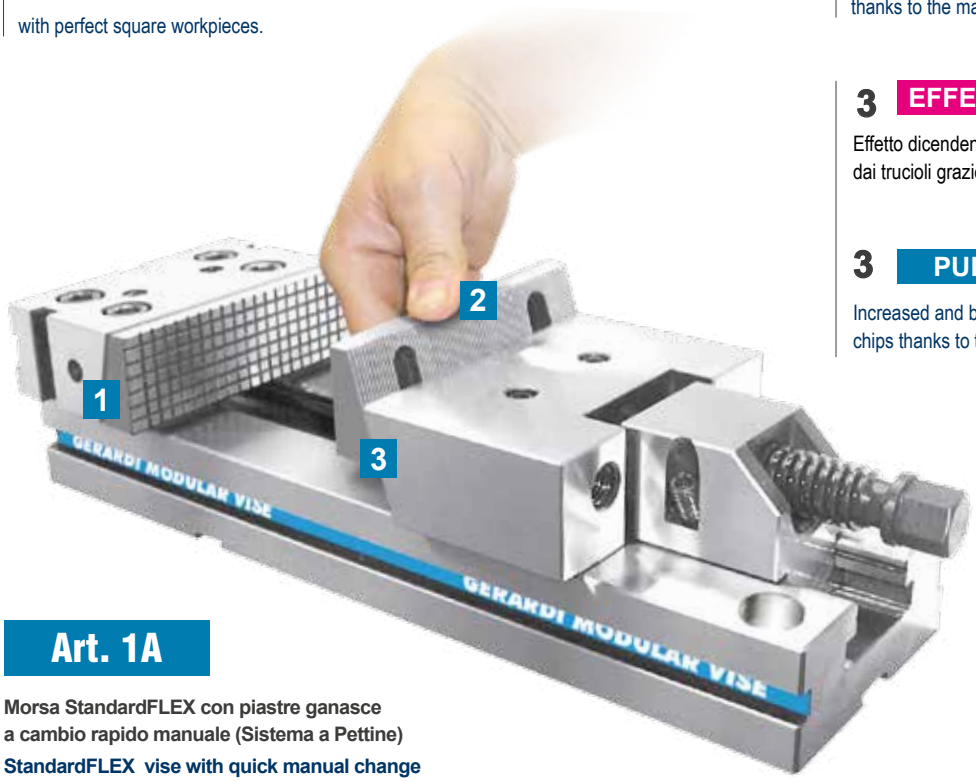
thanks to the manual interchangeable quick jaw plate

3 EFFETTO DISCENDENTE

Effetto dicendente amplificato e migliorato e migliore protezione dai trucioli grazie al sistema a pettine

3 PULL DOWN ACTION

Increased and better pull down action and better protection from chips thanks to the comb system



Art. 1A

Morsa StandardFLEX con piastre ganasce a cambio rapido manuale (Sistema a Pettine)

StandardFLEX vise with quick manual change jaw plates (Comb system)

CARATTERISTICHE E VANTAGGI

- USURA INESISTENTE
- RAPIDITA' DEI SERRAGGI
- MODULARITA' & VERSATILITA'
- PRECISIONI ± 0,02 mm
- RIGIDITA' & SICUREZZA
- DESIGN COMPATTO E MANEGGEVOLEZZA

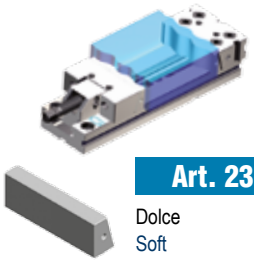
Si rimanda a quanto esposto a pag. 1.4 e 1.5 (morse serie STANDARD)

TECHNICAL FEATURES and ADVANTAGES

- NO WEAR
- QUICK CLAMPING
- MODULARITY & VERSATILITY
- HIGHEST ACCURACIES ± 0,02 mm
- RIGIDITY & SAFETY
- SPACE SAVING DESIGN & HANDY

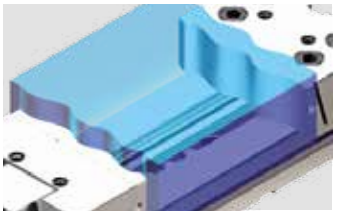
See pag. 1.4 and 1.5 (STANDARD series vises)

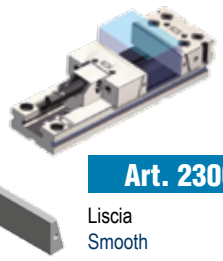
PIASTRE GANASCE DISCENDENTI INTERCAMBIABILI MANUALMENTE
PULL DOWN JAW PLATES INTERCHANGEABLE by HAND



Art. 230B

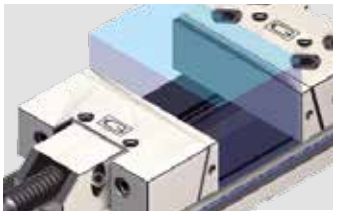
Dolce
Soft

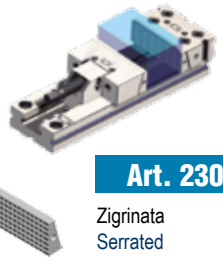




Art. 230C

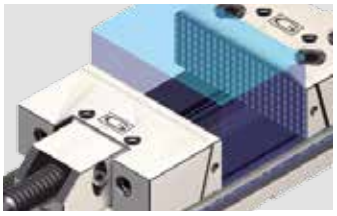
Liscia
Smooth

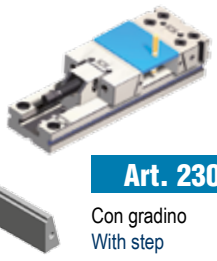




Art. 230D

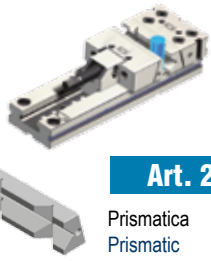
Zigrinata
Serrated





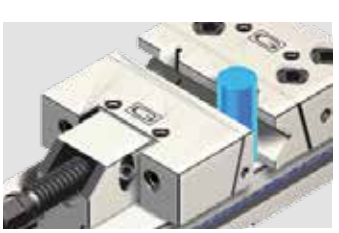
Art. 230E

Con gradino
With step



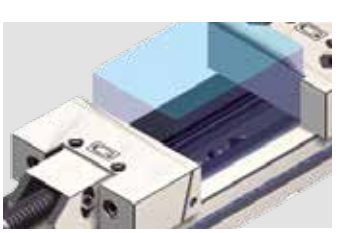
Art. 230F

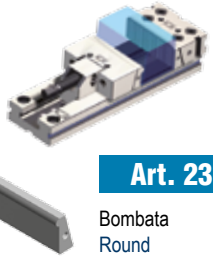
Prismatica
Prismatic



Art. 230G

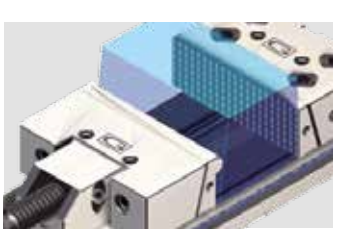
Con arresto a 90°
With 90° stop





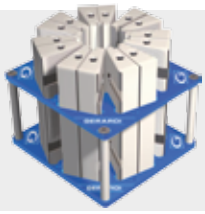
Art. 230H

Bombata
Round



Art. 230M

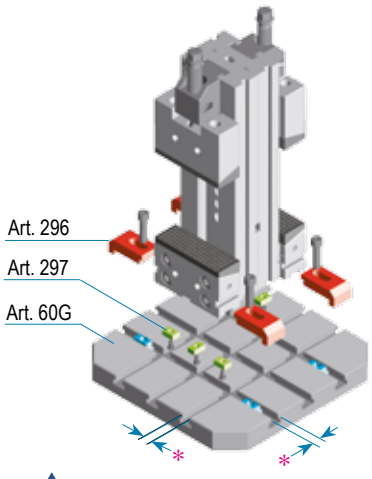
Angolo di 30° o 45°
30° or 45° angle



PORTAPIASTRE / THE RACK

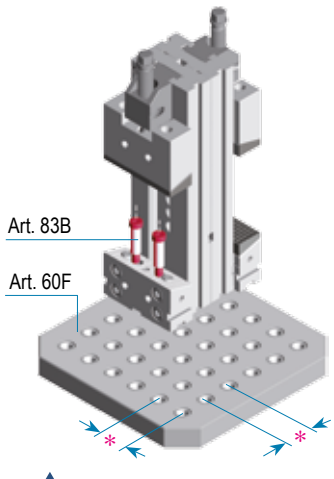
Completo di piastre ganasce a cambio rapido a gradino Art.230E
Complete of quick change step jaw plates Art.230E

Vedi Pag. 4.18 - See Page.4.18



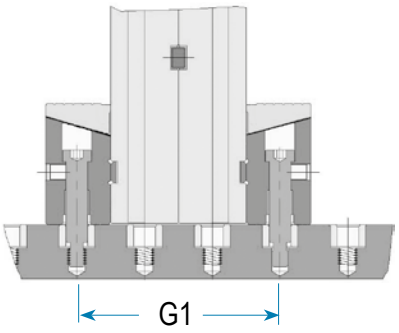
* Cava / T slot = 16 mm

Ancoraggio e posizionamento con staffe e chiavette
Positioning and clamping through vise clamps



* Passo / Pitch = 50 mm

Ancoraggio e posizionamento a reticolo
Grid clamping and positioning



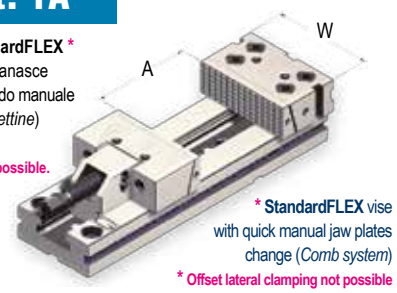
Tipo morsa / Vise type	3	4	5	6
G1 mm	150	200	250	

Esempio di montaggio in verticale di 2 morse StandardFLEX contrapposte su piani a reticolo Ø 16 mm. Passo 50 mm
Example of version mounting of 2 StandardFLEX vises back to back on grid base Ø 16 mm. 50 mm Pitch

Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN	2 25 kN	3 30 kN		4 30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	96	121	146		171			
	B	28	38	48		58			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	6.8	12.9	25.5	29	37	42	47	52
	Cod.	1.1A.10000	1.1A.20000	1.1A.32000	1.1A.33000	1.1A.42000	1.1A.43000	1.1A.44000	1.1A.45000

Art. 1A

Morsa **StandardFLEX** * con piastre ganasce a cambio rapido manuale (*Sistema a pettine*)
* Offset lateral clamping not possible.

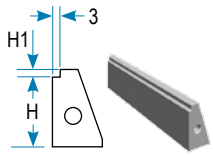


* **StandardFLEX** vise with quick manual jaw plates change (*Comb system*)
* Offset lateral clamping not possible

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 230E

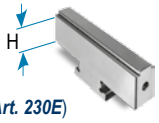
Piastra ganascia intercambiabile
Interchangeable jaw plate



Cod.	4.23.0E101	4.23.0E201	4.23.0E301		4.23.0E401
H	23	33	43		53
H1	5	5	5		5

Art. 212

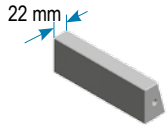
Ganascia mobile intermedia (*da usare con **Art. 230E***)
Intermediate movable jaw (*to be used with **Art. 230E***)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 230B

Piastra ganascia intercambiabile dolce
Soft interchangeable jaw plate

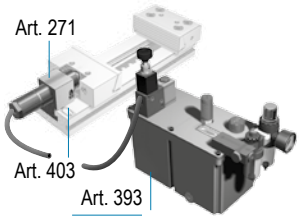


Cod.	4.23.0B101	4.23.0B201	4.23.0B301	4.23.0B401

Art. 230F

Piastra ganascia intercambiabile prismatica
Prismatic interchangeable jaw plate

Cod.	4.23.0F101	4.23.0F201	4.23.0F301	4.23.0F401



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Art. 392

Pneumatico / Air control

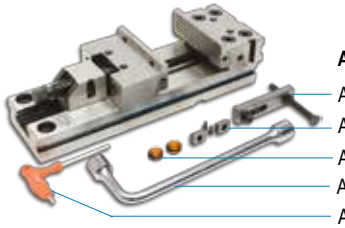
Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

Dotazione standard:

- 1 arresto laterale Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
  (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 2 tappi Art. 291 ■ 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376

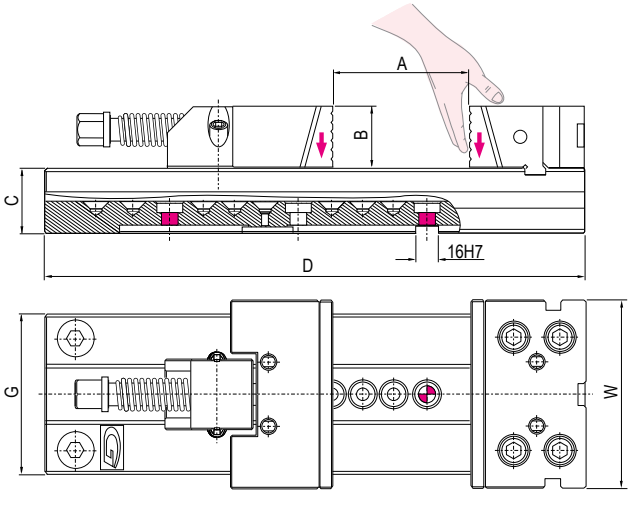
Fori rettificati e calibrati con tolleranza F7 già inclusi nel prezzo



Standard equipment:

- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
  (Standard for 16 mm slot. Other dimensions available on request without price change)
- 2 inserts Art. 291 ■ 1 box wrench Art. 375 ■ 1 T-wrench Art. 376

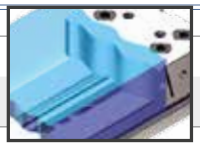
Ground calibrated holes F7 tolerance already included in the price



Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

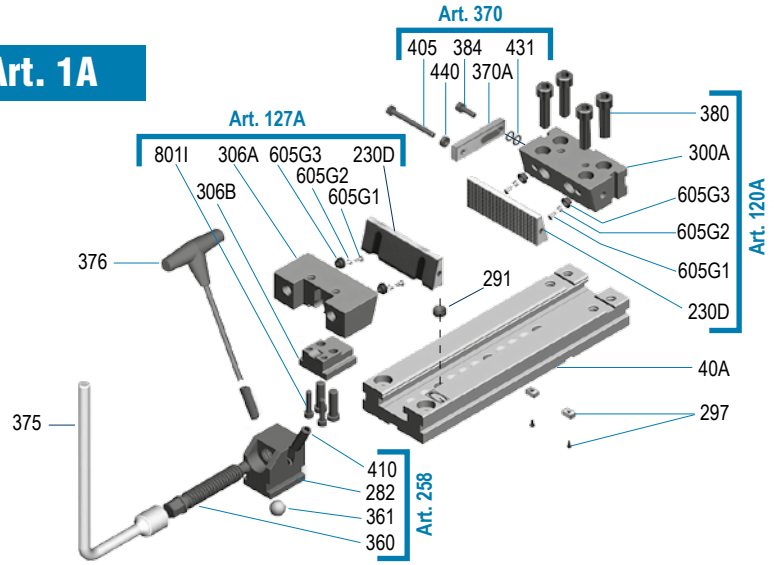
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		196						296			
		63						78			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
64	69	74	79	84	95	105	115	125	135	145	155
1.1A.52000	1.1A.53000	1.1A.54000	1.1A.55000	1.1A.56000	1.1A.62000	1.1A.63000	1.1A.64000	1.1A.65000	1.1A.66000	1.1A.67000	1.1A.68000

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.23.0E501		4.23.0E601
Art. 230E			
H	53		68
H1	10		10
	1.21.25000		1.21.26000
Art. 212			
	4.23.0B501		4.23.0B601
Art. 230B			
	4.23.0F501		4.23.0F601
Art. 230F			
	4.39.15000		4.39.16000
Art. 391			
	4.39.25000		4.39.26000
Art. 392			

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 1A



Art.	Pag.
40A	1.22
230D	4.17
282	4.32
291	4.31
297	4.31
300A	4.26
306A	4.26
306B	4.26
360	4.32
361	4.32
370A	4.31
375	4.31

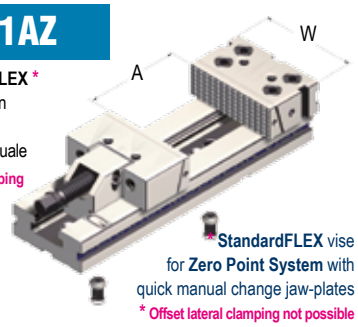
Art.	Pag.
376	4.31
380	4.24
384	4.24
405	4.46
410	4.32
431	4.24
440	4.24
605G1	6.33
605G2	6.33
605G3	6.33
801I	5.61
-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN	2 25 kN	3 30 kN		4 30 kN			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	96	121	146		171			
	B	28	38	48		58			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	7.3	13.2	26.2	29.7	37.9	43	48.1	53.2
	Cod.	1.1A.Z1000	1.1A.Z2000	1.1A.Z3200	1.1A.Z3300	1.1A.Z4200	1.1A.Z4300	1.1A.Z4400	1.1A.Z4500

Art. 1AZ

Morsa **StandardFLEX** * per **Zero Point** con piastre ganasce a cambio rapido manuale

* Offset lateral clamping not possible.



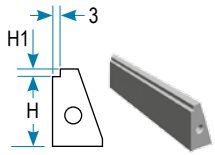
*StandardFLEX vise for Zero Point System with quick manual change jaw-plates

* Offset lateral clamping not possible

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 230E

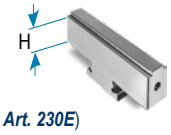
Piastra ganascia intercambiabile
Interchangeable jaw plate



Cod.	4.23.0E101	4.23.0E201	4.23.0E301		4.23.0E401
H	23	33	43		53
H1	5	5	5		5

Art. 212

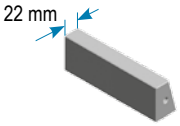
Ganascia mobile intermedia
(*da usare con **Art. 230E***)
Intermediate movable jaw (*to be used with **Art. 230E***)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 230B

Piastra ganascia intercambiabile dolce
Soft interchangeable jaw plate

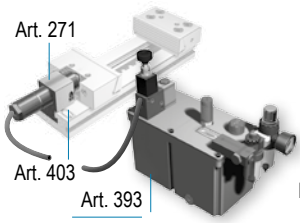


Cod.	4.23.0B101	4.23.0B201	4.23.0B301	4.23.0B401

Art. 230F

Piastra ganascia intercambiabile prismatica
Prismatic interchangeable jaw plate

Cod.	4.23.0F101	4.23.0F201	4.23.0F301	4.23.0F401



Art. 391

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Art. 392

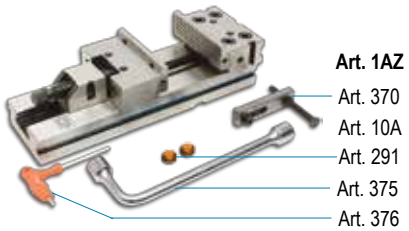
Pneumatico / Air control

Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

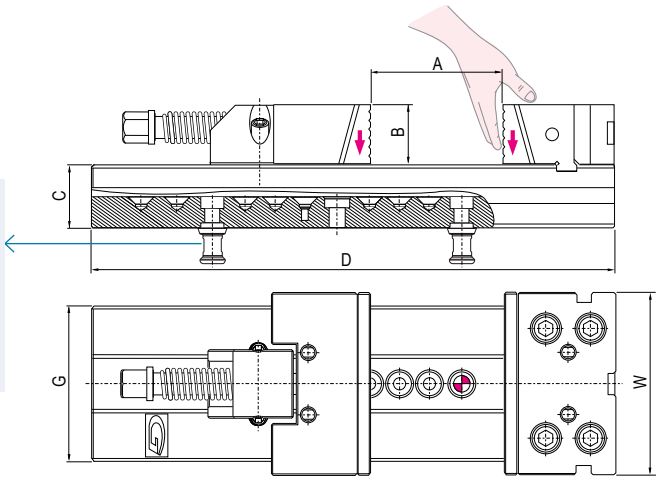
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli ***contemporanei*** o ***indipendenti***, da 2 a 6 morse. *Vedi da pag. 4.36 a 4.47*

Dotazione standard:

- 1 arresto laterale Art. 370
- 2 tiranti Art. 10A
- 2 tappi Art. 291
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376



Art. 10A



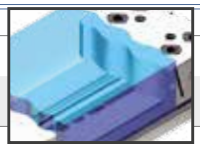
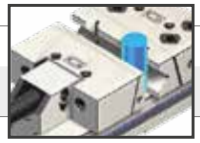
Standard equipment:

- 1 workstop Art. 370
- 2 pullstuds Art. 10A
- 2 inserts Art. 291
- 1 box wrench Art. 375 ■ 1 T-wrench Art. 376

Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

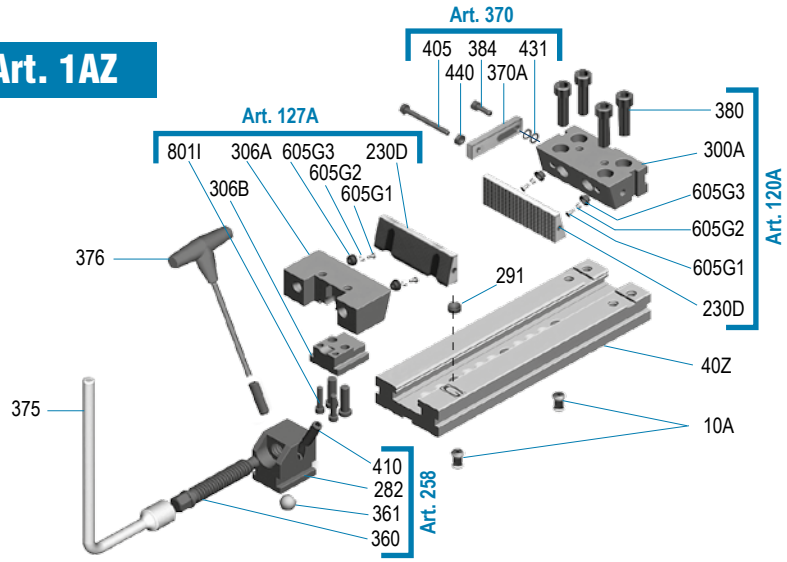
5 40 kN					6 40 kN						
200	300	400	500	600	200	300	400	500	600	700	800
		196						296			
		63						78			
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		200						300			
65.3	70.3	75.3	80.3	85.3	97	107	117	127	137	147	157
1.1A.Z5200	1.1A.Z5300	1.1A.Z5400	1.1A.Z5500	1.1A.Z5600	1.1A.Z6200	1.1A.Z6300	1.1A.Z6400	1.1A.Z6500	1.1A.Z6600	1.1A.Z6700	1.1A.Z6800

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

	4.23.0E501		4.23.0E601
Art. 230E			
H	53		68
H1	10		10
	1.21.25000		1.21.26000
Art. 212			
	4.23.0B501		4.23.0B601
Art. 230B			
	4.23.0F501		4.23.0F601
Art. 230F			
	4.39.15000		4.39.16000
Art. 391			
	4.39.25000		4.39.26000
Art. 392			

Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping ***simultaneous*** or ***indipendent***, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 1AZ

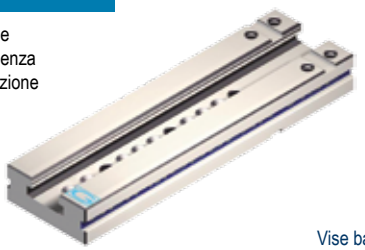


Art.	Pag.
10A	9.31
40Z	1.22
230D	4.17
282	4.32
291	4.31
300A	4.26
306A	4.26
306B	4.26
360	4.32
361	4.32
370A	4.31
375	4.31

Art.	Pag.
376	4.31
380	4.24
384	4.24
405	4.46
410	4.32
431	4.24
440	4.24
605G1	6.33
605G2	6.33
605G3	6.33
801I	5.61
-	-

Art. 40

Slittone base serie **STD** senza alcuna dotazione

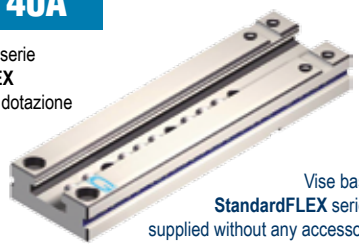


Vise base **STD** series supplied without any accessory

Tipo (grandezza) morsa / Vise type (size)	1	2	3		4			
C	35	40	50		58			
D	270	345	420	520	455	555	655	755
G	75	95	125		145			
K	-	-	100		100			
N	2	3	3	4	3	4	5	6
U	111	111	122,5		129			
Z	100	100	100		100			
kg	3,8	7,3	15,1	18,7	20,6	25,2	29,7	34,5
Cod.	1.80.10270	1.80.20345	1.80.30420	1.80.30520	1.80.40455	1.80.40555	1.80.40655	1.80.40755

Art. 40A

Slittone base serie **StandardFLEX** senza alcuna dotazione



Vise base **StandardFLEX** series supplied without any accessory

kg	3,8	7,3	15,1	18,7	20,6	25,2	29,7	34,5
Cod.	1.40.A1000	1.40.A2000	1.40.A3200	1.40.A3300	1.40.A4200	1.40.A4300	1.40.A4400	1.40.A4500

Art. 40Z

Slittone base serie **Zero Point** senza alcuna dotazione

Vise base **Zero Point** series supplied without any accessory

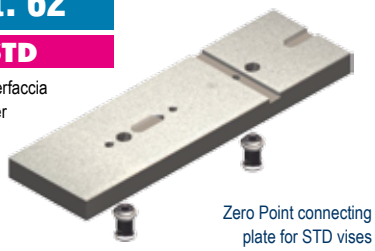
ZZ	200	200	200	200	200	200	300	300
kg	4	8	15,5	19	21	25,5	30	35
Cod.	1.40.Z1000	1.40.Z2000	1.40.Z3200	1.40.Z3300	1.40.Z4200	1.40.Z4300	1.40.Z4400	1.40.Z4500

PIASTRE D'INTERFACCIA Art.62 per morse STD
CONNECTING PLATES Art.62 for STD vises

Art. 62

STD

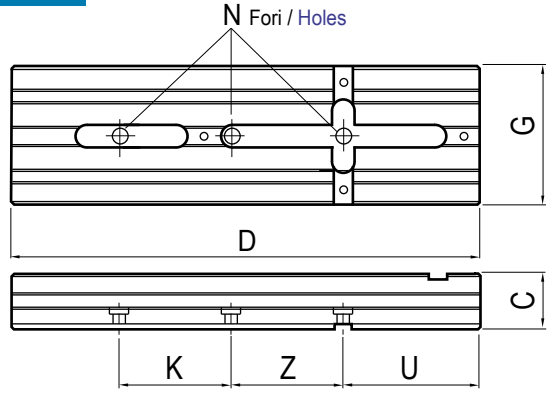
Piastra di interfaccia Zero Point per morse STD



Zero Point connecting plate for STD vises

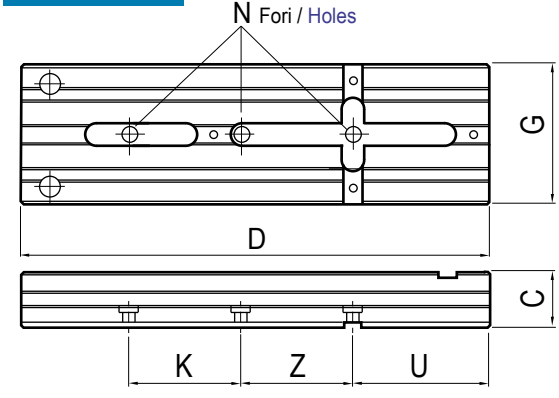
C1	28	28	33		33			
UU	86	86	97,5	97,5	104	104	104	104
ZZ	200	200	200	200/250	200	200/250	250/300	250/300
kg	4,5	7,2	13,5	16,7	17	20,8	24,4	28,2
Cod.	1.62.11000	1.62.21500	1.62.32000	1.62.33000	1.62.42000	1.62.43000	1.62.44000	1.62.45000

Art. 40



Versione normale: Cave da 16 mm (**H7**)
Normal version: 16 mm slots (**H7**)

Art. 40A



Versione normale: Cave da 16H7 e fori calibrati Ø8F7 (t.1) - Ø16F7 (t. 2 - 3 - 4 - 5 - 6)
Normal version: 16H7 slot and calibrated holes Ø8F7 (t.1) - Ø16F7 (t. 2 - 3 - 4 - 5 - 6)

5					6						
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		170						195			
		100						100			
2	3	4	5	6	4	5	6	7	8	9	10
		145						152			
		100						100			
32,6	39,2	45,8	52,5	59	47	56	65	74	83	61	100
1.80.50495	1.80.50595	1.80.50695	1.80.50795	1.80.50895	1.80.60535	1.80.60635	1.80.60735	1.80.60835	1.80.60935	1.80.60035	1.80.60135

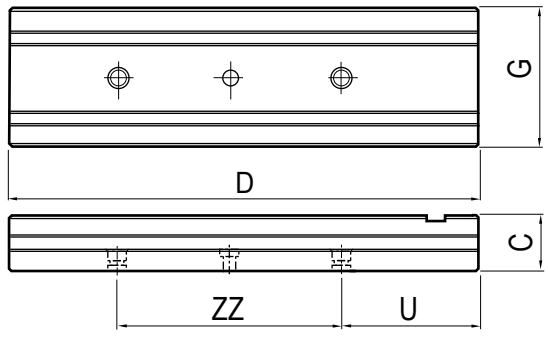
32,6	39,2	45,8	52,5	59	47	56	65	74	83	91	100
1.40.A5200	1.40.A5300	1.40.A5400	1.40.A5500	1.40.A5600	1.40.A6200	1.40.A6300	1.40.A6400	1.40.A6500	1.40.A6600	1.40.A6700	1.40.A6800

200	200	300	300	300	300	300	300	300	300	300x2	300x2
33	40	46	53	59	47	56	65	74	83	91	100
1.40.Z5200	1.40.Z5300	1.40.Z5400	1.40.Z5500	1.40.Z5600	1.40.Z6200	1.40.Z6300	1.40.Z6400	1.40.Z6500	1.40.Z6600	1.40.Z6700	1.40.Z6800

PIASTRE D'INTERFACCIA Art.62 per morse STD
CONNECTING PLATES Art.62 for STD vises

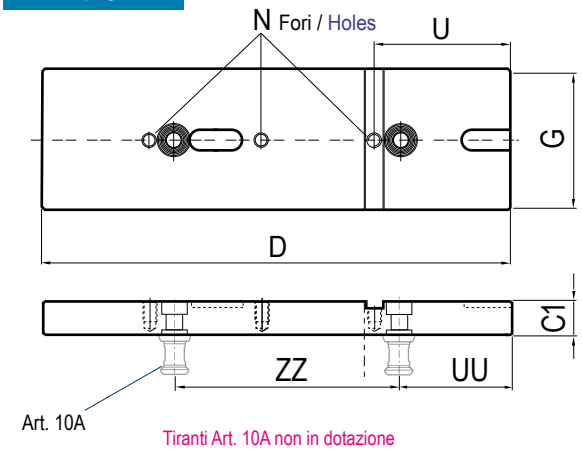
		38						38			
		120						127			
200	200/250	250/300	250/300	300	250/300	250/300	300	300	300	300	300
25	30	35	40	45	31	36,7	42,5	48,3	54	59,8	65,6
1.62.52000	1.62.53000	1.62.54000	1.62.55000	1.62.56000	1.62.62000	1.62.63000	1.62.64000	1.62.65000	1.62.66000	1.62.67000	1.62.68000

Art. 40Z



Versione normale: 2 o 3 fori filettati per tiranti Art. 10A
Normal version: 2-3 holes threated for pull studs Art. 10A

Art. 62

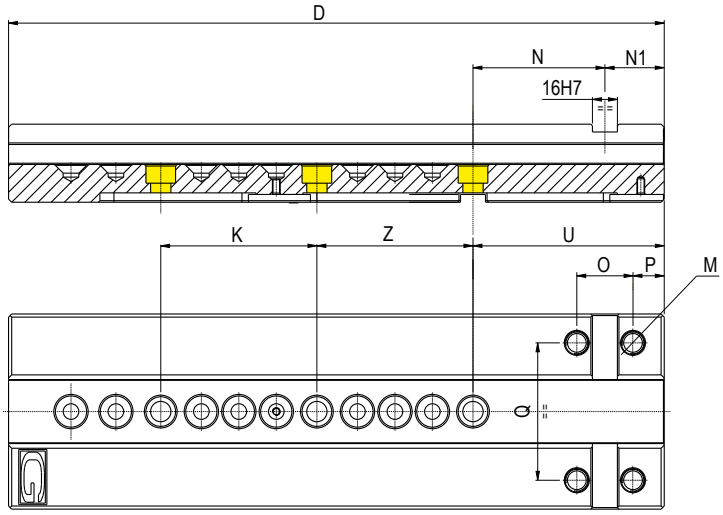


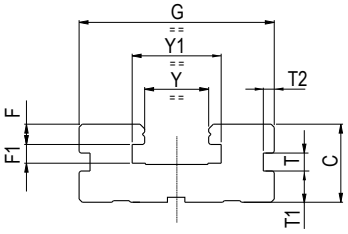
Tiranti Art. 10A non in dotazione
Pull studs Art. 10A not inclided in the standard equipment

Tipo (grandezza) morsa / Vise type (size)		1	2	3		4			
Tolleranza / Tolerance									
- 0,02	C	35	40	50		58			
-	D	270	345	420	520	455	555	655	755
- 0,02	F	10	12	13		15			
+ 0,02	F1	10	10	12		18			
-0,02	G	75	95	125		145			
+0,02	Y	21	28	41		51			
-	Y1	31	41	57		70			
-	M	M10	M12	M14		M16			
-	N	76	76	84,5		89			
-	N1	35	35	38		40			
-	O	32	32	36		36			
-	P	19	19	20		22			
-	Q	50	62	88		100			
-	T	9,5	9,5	11,5		11,5			
-	T1	15	15	20		20			
-	T2	5	5	7		7			
-	U	111	111	122,5		129			
-	K	-	-	100		100			
-	Z	100	100	100		100			

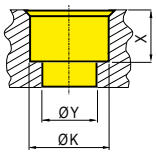
Art. 40

Slittone base serie **STD** / Vise base **STD** series





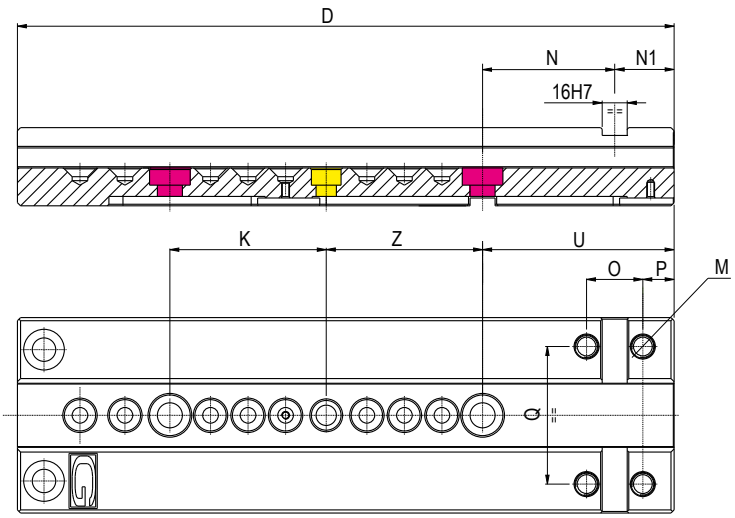
Dettaglio foro per vite TCEI / TCEI screw hole details

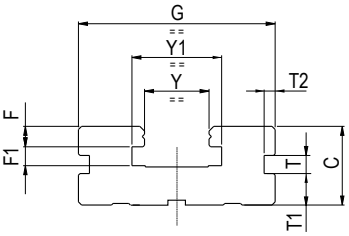


Type	1	2	3	4	5	6
X	4,5	5,5	8	8	17	17
Ø Y	6,5	8,5	13	13	17	17
Ø K	10,5	13,5	19	19	26	26

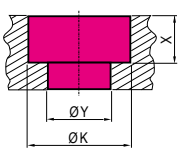
Art. 40A

Slittone base serie **StandardFLEX** / Vise base **StandardFLEX** series





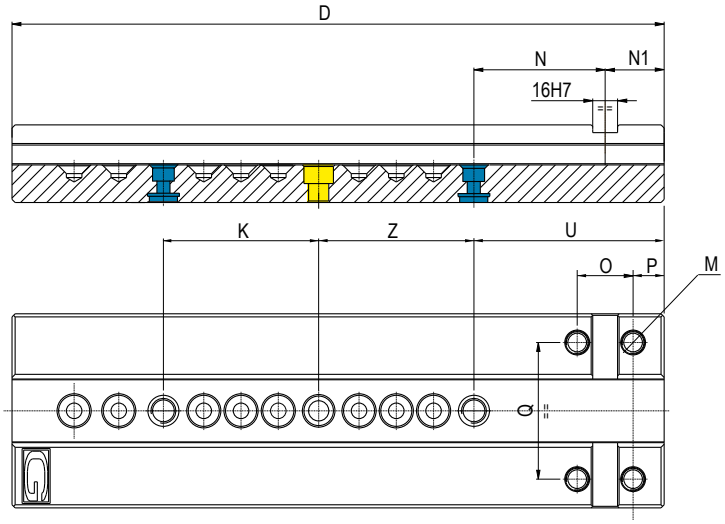
Dettaglio foro per vite calibrata / Calibrated screw hole details

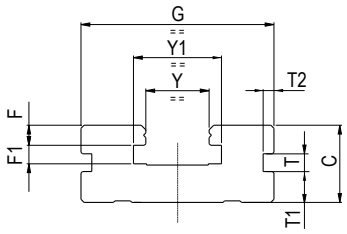


Type	1	2	3	4	5	6
X	8		11			
Ø Y	16F7		16F7			
Ø K	21		25			

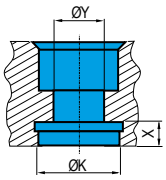
5					6						
		70						78			
495	595	695	795	895	535	635	735	835	935	1035	1135
		20						20			
		18						18			
		170						195			
		61						71			
		80						90			
		M20						M20			
		100						107			
		45						45			
		44						44			
		23						23			
		120						133			
		17,5						17,5			
		26						26			
		10						10			
		145						152			
		100						100			
		100						100			

Art. 40Z Slittone base serie **ZERO POINT** / Vise base **ZERO POINT** series



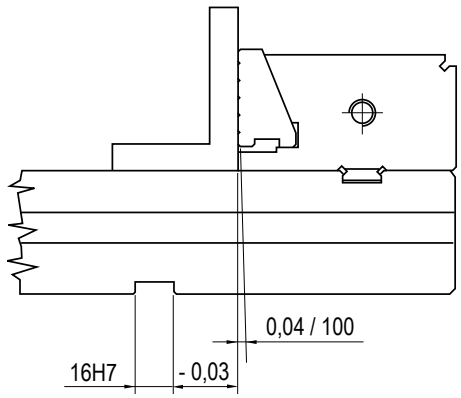


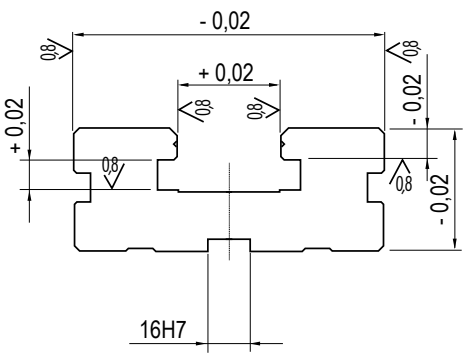
Dettaglio foro per Zero Point / Zero Point hole details



Type	1	2	3	4	5	6
X			6			
Ø Y			13			
Ø K			20			

Tolleranze generiche per morse **XL** / **XL** vise generic tolerances

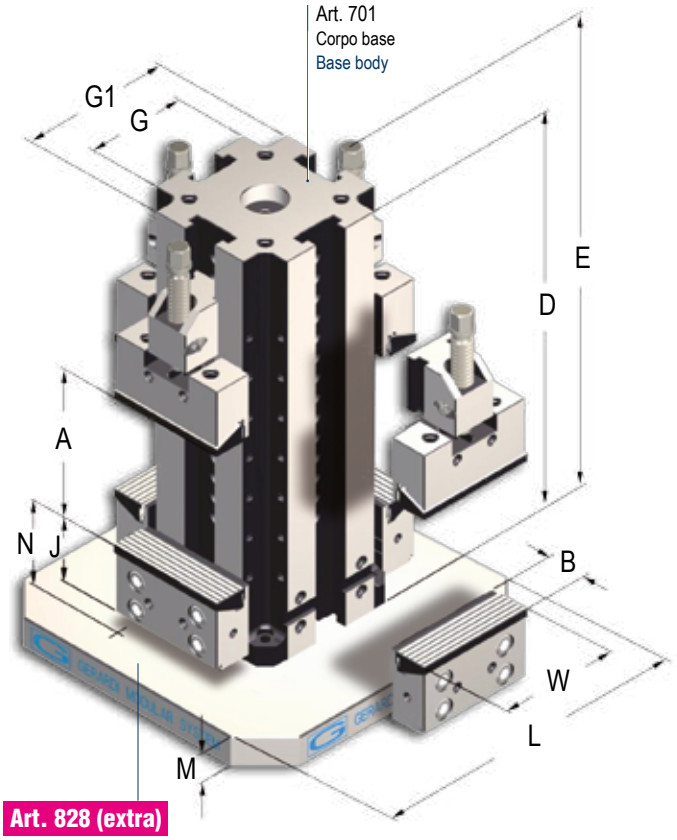




Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN	
	A	80	130
	W	100	
	B	30	
	D	250	300
	E	300	350
	G	75	
	G1	120	
	J	77,9	
	L	300	
	M	33	
	N	85	
	kg	37	42
	Cod.	3.70.00801	3.70.01301

Art. 700

Cubomorsa modulare standard in **monoblocco**
Standard modular vise tower in **solid body**



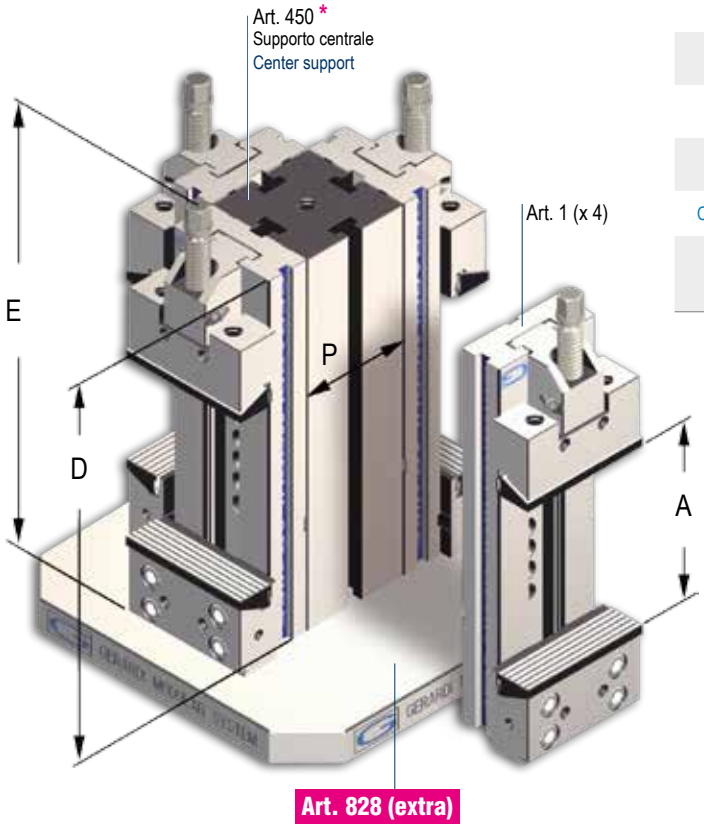
Dotazione standard:
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento Art. 297 (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375
- 1 chiave a "T" Art. 376

Standard equipment:
- 4 workstops Art. 370
- 2 pairs of positioning key-nuts Art. 297 (Standard for 16 mm slot; other widths available on request without price change)
- 1 box wrench Art. 375
- 1 "T"- wrench Art. 376

Tipo (grandezza) morsa / Vise type (size)	kN	1 16 kN
Apertura massima / Maximum spread	A	100
	D	270 *
	E	320
	P	75 *
	kg	10
	Cod.	1.75.01000

Art. 750

Morse standard montate verticalmente
N° 4 morse STD **Art. 1**+ N° 1 **Art. 450**
Standard vises vertically mounted
N° 4 vises STD **Art. 1**+ N° 1 **Art. 450**



Dotazione standard:
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento Art. 297 (Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375
- 1 chiave a "T" Art. 376

Standard equipment:
- 4 workstops Art. 370
- 2 pairs of positioning key-nuts Art. 297 (Standard for 16 mm slot; other widths available on request without price change)
- 1 box wrench Art. 375
- 1 "T"- wrench Art. 376

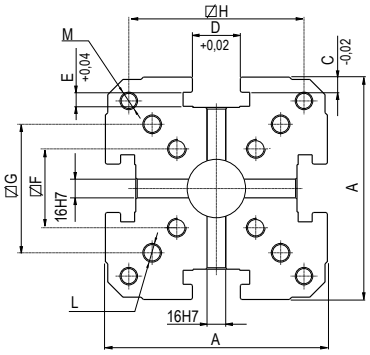
2 25 kN		3 30 kN			4 30 kN				5 40 kN	6 40 kN
155	205	170	270	370	145	245	345	445	-	-
125		150			175				200	300
40		50			60				-	-
350	400	400	500	600	400	500	600	700	-	-
430	480	470	570	670	475	575	675	775	-	-
95		125			145				170	195
160		190			230				*	*
77,9		89,4			96,9				*	*
350		400			450				*	*
33		38			38				-	-
85		102			111				-	-
83	96	137	160	183	197	230	263	296	-	-
3.70.01552	3.70.02052	3.70.01803	3.70.02803	3.70.03803	3.70.01454	3.70.02454	3.70.034 54	3.70.04454	-	-

* Altre dimensioni a richiesta / Other dimensions on request

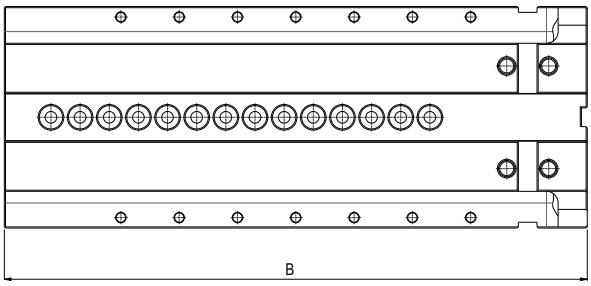
2 25 kN	3 30 kN		4 30 kN				5 40 kN			6 40 kN		
150	200	300	200	300	400	500	200	300	400	300	400	500
345 *	420	520	455	555	655	755	495	595	695	635	735	835
345	450	550	455				-			-		
95 *	125		145				170			195		
19	46		68				98			145		
1.75.02000	1.75.03200	1.75.03300	1.75.04200	1.75.04300	1.75.04400	1.75.04500	1.75.05200	1.75.05300	1.75.05400	1.75.06300	1.75.06400	1.75.06500

* Altre dimensioni a richiesta / Other dimensions on request

Tipo (grandezza) morsa / Vise type (size)



Art. 701

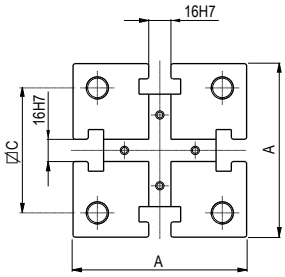


Senza alcuna dotazione
Without accessory equipment

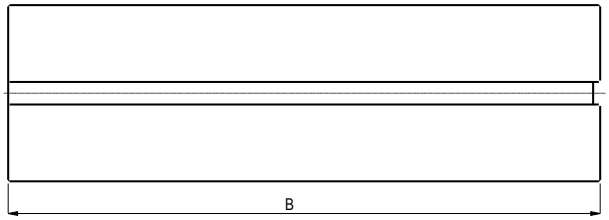
Art. 701

Corpo slittone standard
Body for standard vise tower

Tipo (grandezza) morsa / Vise type (size)



Art. 450

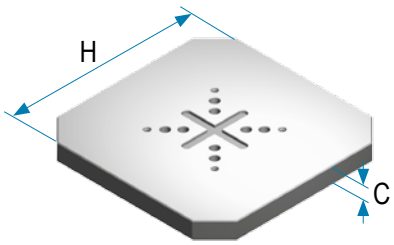


Senza alcuna dotazione
Without accessory equipment

Art. 450

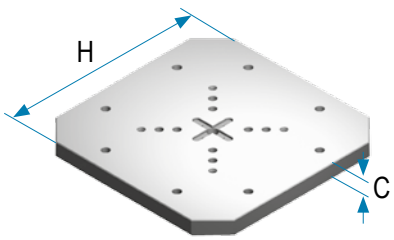
Supporto centraleper montaggio morse modulari standard in verticale. Dolce o temprato.
Center support for vertical arrangement of standard modular vises. Soft or hardened

Tipo (grandezza) morsa / Vise type (size)



Art. 828

Piastra base per cubo-morsa
Head plate for vise-tower



Art. 828A

Piastra base per cubo-morsa personalizzata
(Bussola di centraggio Art. 852 compresa)
Head plate for vise-tower tailor made
(Centering bushing Art. 852 included)

	1		2		3			4				5	6
A	120		160		190			200				*	*
B	250	300	350	400	400	500	600	400	500	600	700	*	*
C	10		12		13			15				20	20
D	21		28		41			51				61	71
E	10		10		12			18				18	18
F	40		54		70			80				80	
G	70		84		110			134				134	
H	-		120		150			200				210	
L	M12		M16		M16			M20				M20	*
M	-		Ø 13		Ø 13			Ø 13				Ø 13	
kg	25	30	64	73	92	115	138	135	168	200	232	*	
Cod.	1.70.10801	1.70.11301	1.70.11552	1.70.12052	1.70.11803	1.70.12803	1.70.10803	1.70.11454	1.70.12454	1.70.13454	1.70.14454	*	

*A richiesta / On request

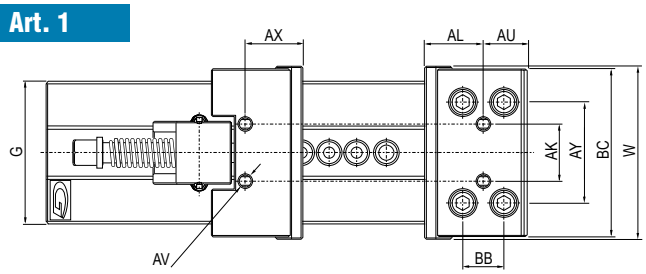
	1	2	3		4				5			6		
A	75	95	125		145				170			195		
B	270	345	420	520	455	555	655	755	495	595	695	635	735	835
C	50	60	90		110				110			*		
D	M12	M16	M16		M16				M20			*		
kg	10	19	46		68				98			145		
Cod.	1.45.01000	1.45.02000	1.45.03420	1.45.03520	1.45.04455	1.45.04555	1.45.04655	1.45.04755	1.45.05495	1.45.05595	1.45.05695	1.45.06635	1.45.06735	1.45.06835

*A richiesta / On request

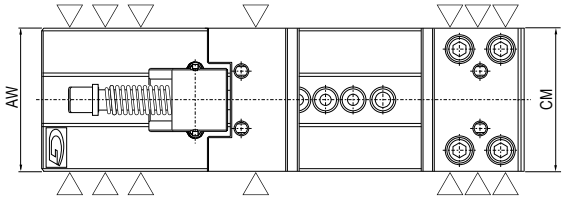
	1	2	3	4	5	6	7
C	33	33	38	38	38	38	38
H	300	350	400	450	500	630	800
kg	22,5	30,5	45	57	72	114	183
Cod.	1.82.81000	1.82.82000	1.82.83000	1.82.84000	1.82.85000	1.82.86000	1.82.87000

C	33	33	38	38	38	38	38
H	300	350	400	450	500	630	800
kg	22	30	44,5	56,5	71	113	182
Cod.	1.82.8A100	1.82.8A200	1.82.8A300	1.82.8A400	1.82.8A500	1.82.8A600	1.82.8A700

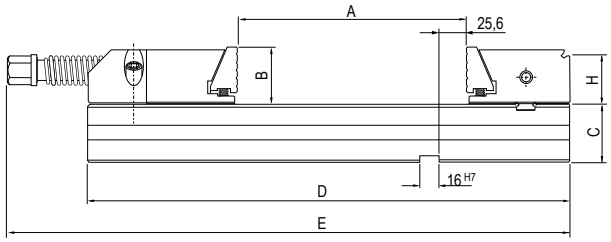
Art. 1



Art. 12



Art. 1+12



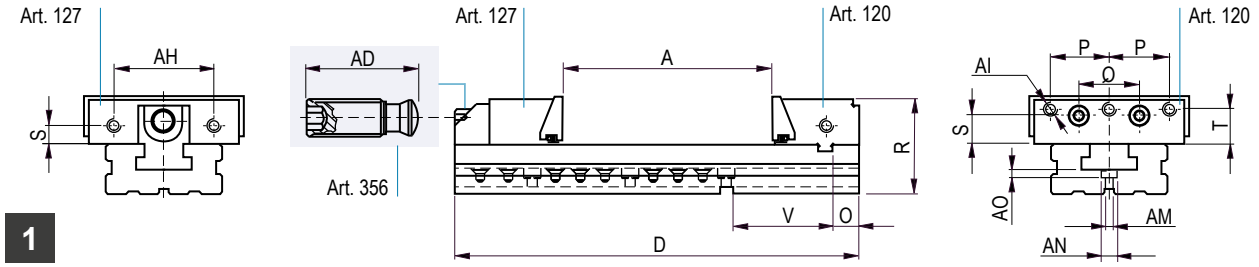
Tipo (grandezza) morsa / Vise type (size)

Tabella dimensionale / Table dimension

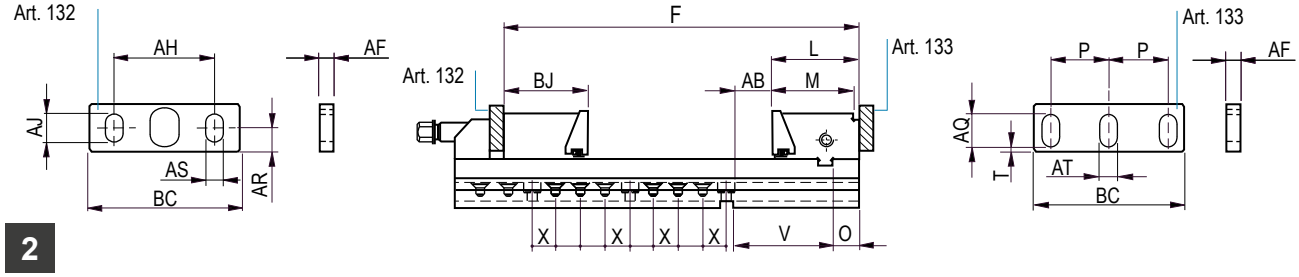
mm	1	2	3		4				5					6						
W	100	125	150		175				200					300						
A	100	150	200	300	200	300	400	500	200	300	400	500	600	200	300	400	500	600	700	800
B	30	40	50		60				65					80						
C	35	40	50		58				70					78						
D	270	345	420	520	455	555	655	755	495	595	695	795	895	535	635	735	835	935	1035	1135
E	320	425	500	600	530	630	730	830	580	680	780	880	980	630	730	830	930	1030	1130	1230
F	225	285	370	470	385	485	585	685	410	510	610	710	810	440	540	640	740	840	940	1040
G	75	95	125		145				170					195						
H	23	33	43		53				53					68						
I	55	70	110	160	110	160	210	260	105	165	205	265	305	115	165	215	265	315	365	415
J	34	50	70	104	70	104	137	170	67	107	134	174	200	74	107	140	174	207	240	274
K	124	174	226	326	226	326	426	526	236	336	436	536	636	236	336	436	536	636	736	836

mm	1	2	3	4	5	6	Tolleranza Tolerance
L	54	77.9	89.4	96.9	113.4	120.4	- 0.04
M	72.9	72.9	84.4	91.9	108.4	115.4	- 0.04
N	10	10	12	18	18	18	+ 0.02
O	27	27	30	32	37	37	± 0.02
P	38	50	62	72.5	83	120	
R	65	80	100	118	135	158	
S	18	23	29	37.5	37.5	47.5	
T	16	20.5	27.5	36.5	34	46	
U	111	111	122.5	129	145	152	
V	76	76	84.5	89	100	107	± 0.02
W	-	-	100	100	100	100	
X	20	25	25	25	33.33	33.33	
Y	21	28	41	51	61	71	+ 0.02
Z	100	100	100	100	100	100	
AA	10	12	13	15	20	20	- 0.02
AB	25.6	25.6	25.6	25.6	25.6	25.6	+ 0.02
AC	31	41	57	70	80	90	
AD	53	73	81	101	113	135	
AF	13	18	18	18	18	18	
AG	M10	M16	M16	M16	M20	M20	
AH	62	80	90	116	138	184	
AI	M10	M10	M12	M12	M12	M12	
AJ	14	19	24	29	31.5	39	
AK	38	38	50	50	76	240	
AX	25,6	42,4	50,1	55,4	66,4	73,4	
AL	42.4	42.4	50.9	55.4	66.4	73.4	
AM	4.5	5.5	12.5	12.5	17	17	
AN	10	13	19	19	25	25	

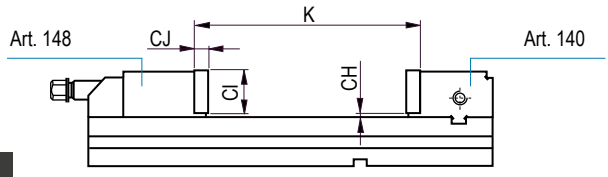
mm	1	2	3	4	5	6	Tolleranza Tolerance
AO	4.5	5.5	12.5	12.5	17	17	
AP	15	15	20	20	26	26	
AQ	16	18	26	26	29	30	
AR	18	24	26	34	31	38	
AS	11	17	17	17	21	21	
AT	11	11	13	13	13	17	
AU	35.5	35.5	38.5	41.5	47	47	
AV	M8	M10	M12	M12	M16	M16	
AX	20	23	28	28	34	38	
AY	50	62	88	100	120	133	
AZ	M10	M12	M14	M16	M20	M20	
BB	32	32	36	36	44	44	
BC	96	121	146	171	196	296	
BG	28	38	48	58	63	78	
BJ	50	60	80	90	100	120	
BL	180	225	290	320	370	400	
BM	9.5	9.5	11.5	11.5	17.5	17.5	
CC	77	77	88.5	96	112	117	
CD	48	58	78	88	98	117	
CE	5	5	5	5	5	5	
CF	-	-	64	64	71	-	
CG	-	-	100	100	128	-	
CH	5.5	8	11	17	17	24	
CI	24.5	32	39	43	48	56	
CJ	12	12	13	13	18	18	
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-



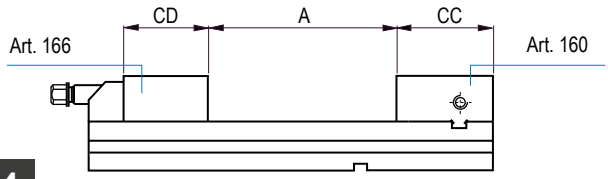
1



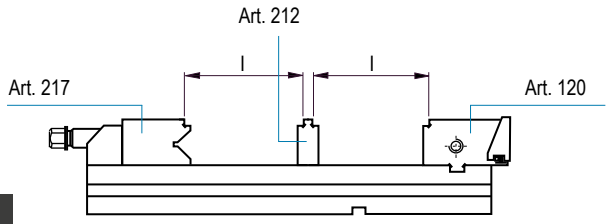
2



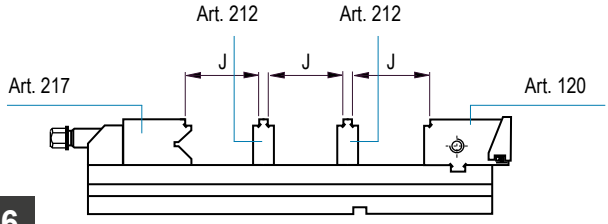
3



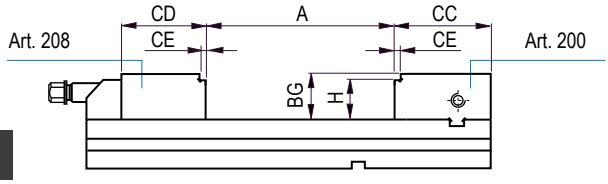
4



5



6



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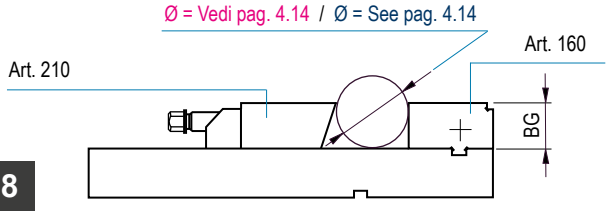
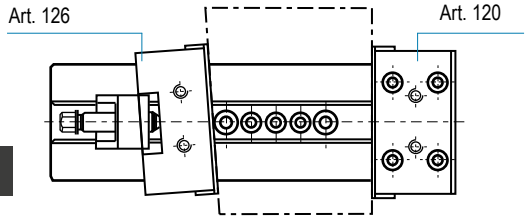
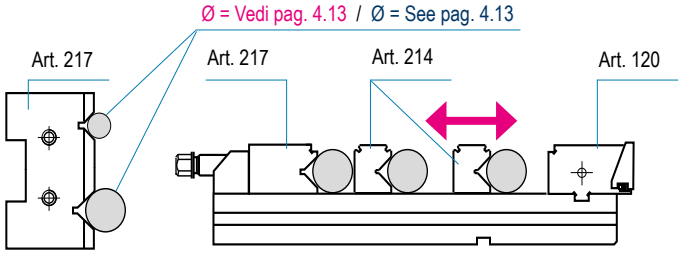


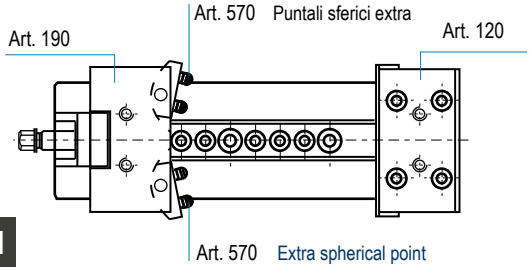
8



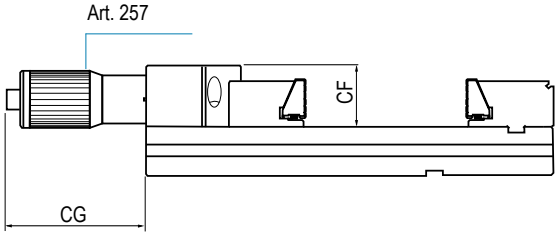
9



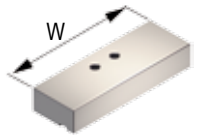
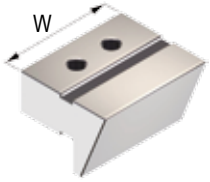
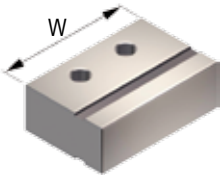
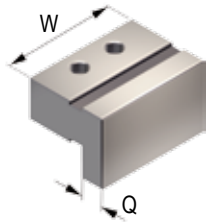
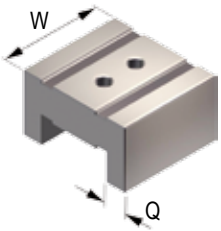
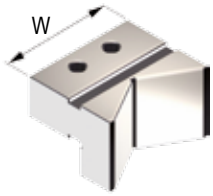
10



11

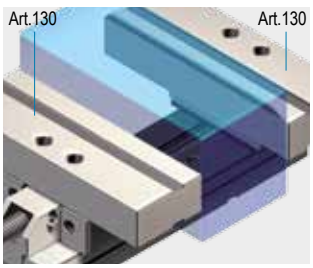


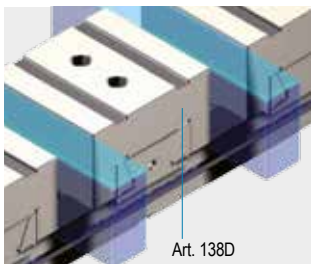
12

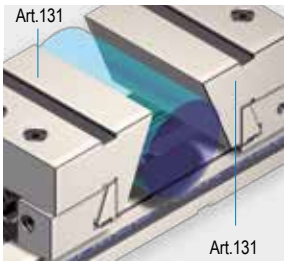
Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Ganascia piana sovrapponibile fissa o mobile Straight stack-type jaw fixed or movable **Art. 130** **Art. 130S** *Extra large / Extra width*		Cod. Art. 130 Cod. Art. 130S	2.13.01000 2.13.0S100	2.13.02000 2.13.0S200	2.13.03000 2.13.0S300	2.13.04000 2.13.0S400	2.13.05000 2.13.0S500	2.13.06000 2.13.0S600
Ganascia sovrapponibile per pezzi tondi fissa o mobile Stack-type jaw round parts fixed or movable **Art. 131** **Art. 131S** *Larghezza normale / Normal width* **Art. 131A** **Art. 131AS** *Larghezza super ridotta / Super narrow width*		Cod. Art. 131 Cod. Art. 131A Cod. Art. 131S Cod. Art. 131AS	2.13.11000 2.13.1A100 2.13.1S100 2.13.1AS10	2.13.12000 2.13.1A200 2.13.1S200 2.13.1AS20	2.13.13000 2.13.1A300 2.13.1S300 2.13.1AS30	2.13.14000 2.13.1A400 2.13.1S400 2.13.1AS40	2.13.15000 2.13.1A500 2.13.1S500 2.13.1AS50	2.13.16000 2.13.1A600 2.13.1S600 2.13.1AS60
Ganascia piana sovrapponibile fissa o mobile Straight stack-type jaw fixed or movable **Art. 136** **Art. 136S** *Larghezza normale / Normal width* **Art. 137** **Art. 137S** *Larghezza super ridotta / Super narrow width*		Cod. Art. 136 Cod. Art. 137 Cod. Art. 136S Cod. Art. 137S	2.13.61000 2.13.71000 2.13.6S100 2.13.7S100	2.13.62000 2.13.72000 2.13.6S200 2.13.7S200	2.13.63000 2.13.73000 2.13.6S300 2.13.7S300	2.13.64000 2.13.74000 2.13.6S400 2.13.7S400	2.13.65000 2.13.75000 2.13.6S500 2.13.7S500	2.13.66000 2.13.76000 2.13.6S600 2.13.7S600
Ganascia a squadra sovrapponibile fissa o mobile Square stack-type jaw fixed or movable **Art. 138** **Art. 138S** *Larghezza normale / Normal width* **Art. 139** **Art. 139S** *Larghezza super ridotta / Super narrow width*		Cod. Art. 138 Cod. Art. 139 Cod. Art. 138S Cod. Art. 139S	2.13.81000 2.13.91000 2.13.8S100 2.13.9S100	2.13.82000 2.13.92000 2.13.8S200 2.13.9S200	2.13.83000 2.13.93000 2.13.8S300 2.13.9S300	2.13.84000 2.13.94000 2.13.8S400 2.13.9S400	2.13.85000 2.13.95000 2.13.8S500 2.13.9S500	2.13.86000 2.13.96000 2.13.8S600 2.13.9S600
Ganascia a squadra sovrapponibile doppia Double square jaw stack-type **Art. 138D** **Art. 138DS** *Larghezza normale / Normal width* **Art. 139D** **Art. 139DS** *Larghezza super ridotta / Super narrow width*		Cod. Art. 138D Cod. Art. 139D Cod. Art. 138DS Cod. Art. 139DS	2.13.8D100 2.13.9D100 2.13.8DS10 2.13.9DS10	2.13.8D200 2.13.9D200 2.13.8DS20 2.13.9DS20	2.13.8D300 2.13.9D300 2.13.8DS30 2.13.9DS30	2.13.8D400 2.13.9D400 2.13.8DS40 2.13.9DS40	2.13.8D500 2.13.9D500 2.13.8DS50 2.13.9DS50	2.13.8D600 2.13.9D600 2.13.8DS60 2.13.9DS60
Ganascia prismatica sovrapponibile fissa o mobile Stack-type prismatic jaw fixed or movable **Art. 150** **Art. 150S** *Larghezza normale / Normal width* **Art. 150A** **Art. 150AS** *Larghezza super ridotta / Super narrow width*		Cod. Art. 150 Cod. Art. 150A Cod. Art. 150S Cod. Art. 150AS	1.15.01000 1.15.0A100 1.15.0S100 1.15.0AS10	1.15.02000 1.15.0A200 1.15.0S200 1.15.0AS20	1.15.03000 1.15.0A300 1.15.0S300 1.15.0AS30	1.15.04000 1.15.0A400 1.15.0S400 1.15.0AS40	1.15.05000 1.15.0A500 1.15.0S500 1.15.0AS50	1.15.06000 1.15.0A600 1.15.0S600 1.15.0AS60

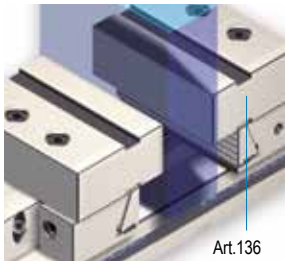
Versione "S" in acciaio lavorabile / "S" type in soft steel

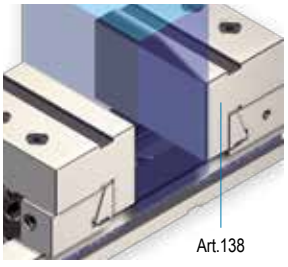
Esempi applicativi - Application examples:

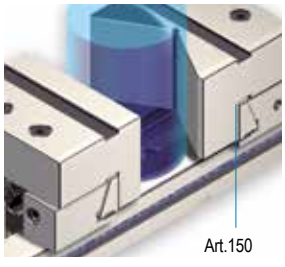




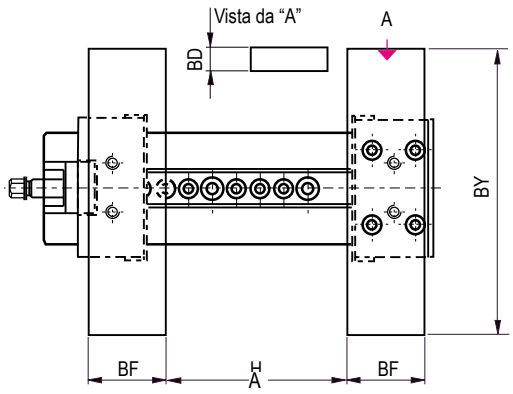


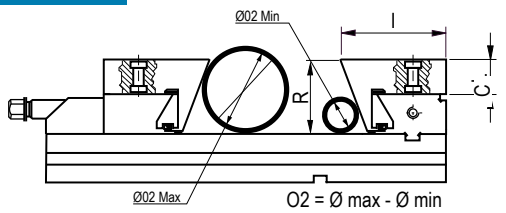


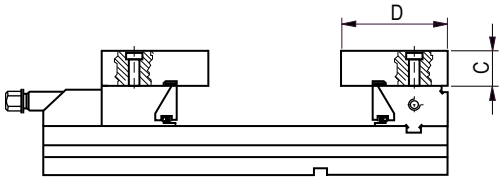


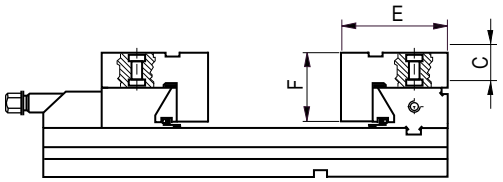


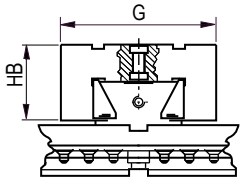
Tipo (grandezza) morsa / Vise type (size)	mm	1	2	3	4	5	6
Art. 130 Temprate o in acciaio lavorabile / Hardened or soft	C	32	42	52	62	67	82
	D	84	84	105	130	130	150
	E	80	88	105	110	130	135
	F	57	70	90	110	128	150
	G	110	110	162	171	192,8	190
	I	95	95	123	136	170	206
Art. 131/131A Temprate o in acciaio lavorabile / Hardened or soft	BD	32	42	52	62	72	82
	BF	80	84	105	120	128	135
	BY	200	250	300	350	400	600
	P	84	120	120	140	175	206
	R	60	78	90	110	128	150
Art. 136/137 Temprate o in acciaio lavorabile / Hardened or soft	O1 min	26	32	38	45	55	75
	O1 max	160	200	240	280	360	500
	W	96	121	146	171	196	296
	Q	30	30	30	30	30	30
Art. 138/139 Temprate o in acciaio lavorabile Hardened or soft	O2 min	33	43	49	60	70	
	O2 max	75	100	130	160	180	220
Art. 138D/139D Temprate o in acciaio lavorabile Hardened or soft							
Art. 150/150A Temprate o in acciaio lavorabile Hardened or soft							

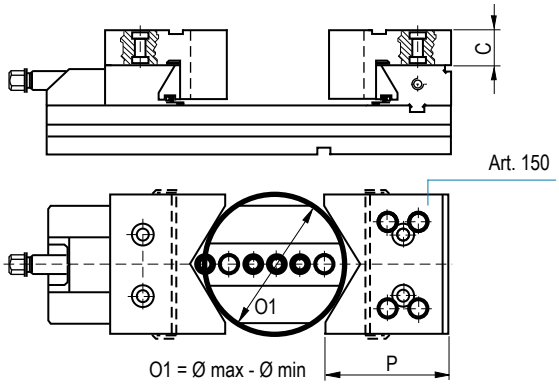








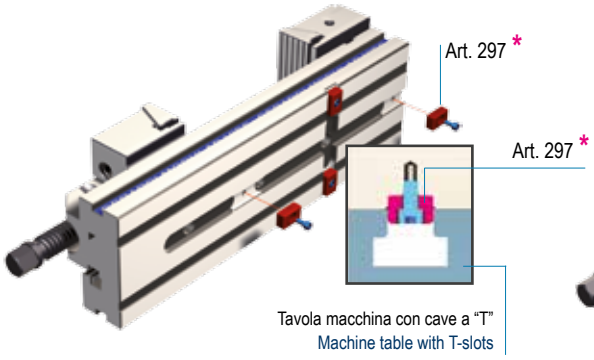




ISTRUZIONI PER UN CORRETTO UTILIZZO
ISTRUCTIONS FOR A PROPER USE

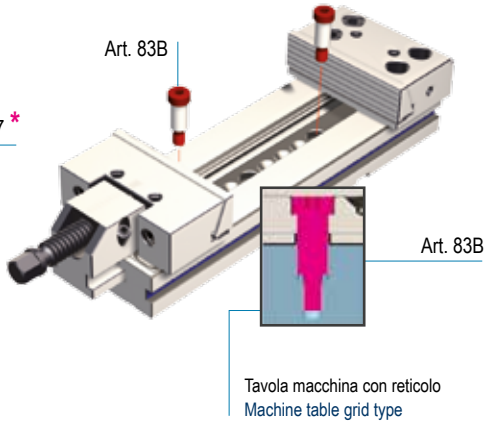
POSIZIONAMENTO

Le morse della serie **STANDARD** e **StandardFLEX** possono essere posizionate orizzontalmente oppure in verticale sulla tavola della macchina o su sovratavola.
Il posizionamento e **l'allineamento** avviene tramite chiavette a 16 H7.
Si può anche allineare la morsa tramite viti calibrate, garantendo tolleranze centesimali. *(No per tipo 1e2).*



POSITIONING

STANDARD and **StandardFLEX** series vises can be aligned on the machine table horizontally or vertically mounted.
Accurate **positioning** and **alignement** within centesimal tollerances is made through 16 H7 longitudinal or crossway keys. It is also possible to align the vise through calibrated ground screws *(Not for types 1 and 2).*



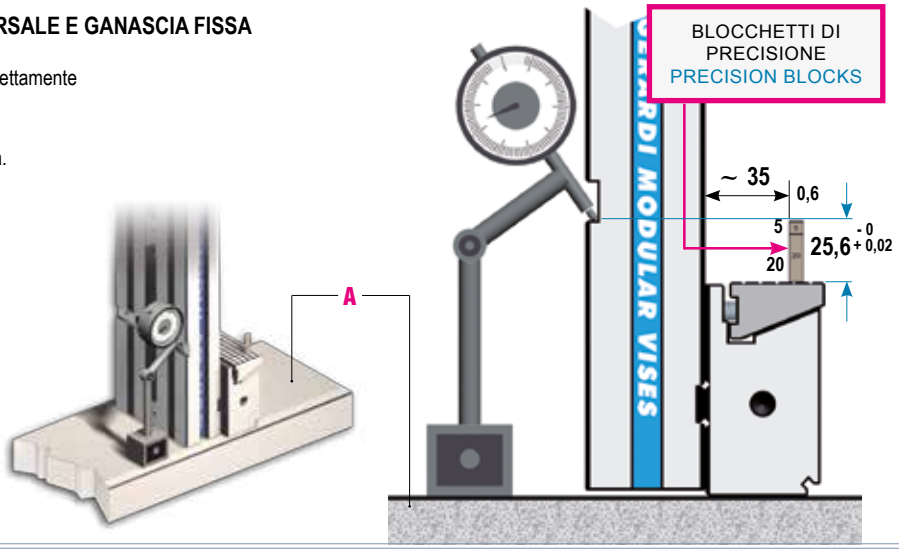
* *La dotazione standard comprende 1 sola coppia di tasselli di posizionamento Art. 297*
* *Standard equipment includes only 1 pair of positioning key nuts Art. 297*

CONTROLLO ALLINEAMENTO TRA CAVA TRASVERSALE E GANASCIA FISSA

Posizionare la morsa verticalmente assicurandosi che sia perfettamente parallela al piano di appoggio **A** nei due sensi.
Successivamente, con un comparatore centesimale, controllare il parallelismo del piano cava e della ganascia fissa.

ALIGNMENT BETWEEN THE CROSS KEYWAY AND THE FIXED JAW PLATE

Set the vise vertically ensuring that it is perfectly at parallel to the table **A** in both sides.
Then with an indicator check the parallelism of the keyway and its alignment with the fixed jaw plate.



ANCORAGGIO

L'ancoraggio può avvenire tramite viti centrali o staffe laterali.
La scelta più valida rimane comunque il fissaggio tramite staffe laterali (**Art. 296**). Due morse parallele allineate tramite chiavetta centrale, viti calibrate o riferimenti laterali, mantengono lo stesso riferimento sulle ganasce fisse con tolleranza pari a **0,02 mm**.

VISE CLAMPING ON THE MACHINE TABLE

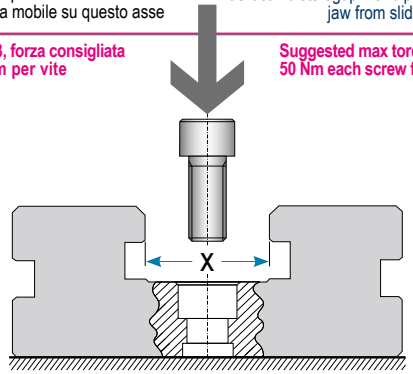
The clamping on the machine table can be made through screws from the central groove or through side clamps.
The best clamping choice is through side clamps (**Art. 296**).
Two vises aligned through central cross keys or ground screws or side lateral reference points guarantee the same reference and alignement on the fixed jaw section with accuracy within **0,02 mm**.

Lo staffaggio della morsa con questo metodo **NON è consigliabile** perchè la sua quota X può flettere e compromettere lo scorrimento della ganascia mobile su questo asse

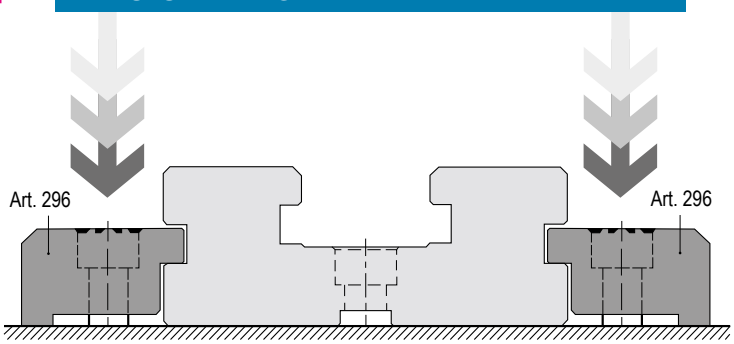
Hard tightening down of the vise to the machine table by this method is **NOT recommended** as it can distort gap X and prevent the moving jaw from sliding

Per morsa tipo 3, forza consigliata massima 50 Nm per vite

Suggested max torque 50 Nm each screw for type 3 vise



IL METODO CORRETTO È QUESTO
THIS IS THE RIGHT WAY



ISTRUZIONE PER UN CORRETTO UTILIZZO
ISTRUCTIONS FOR A PROPER USE

OPERAZIONI PER UN CORRETTO SERRAGGIO DEI PEZZI

*Le illustrazioni si riferiscono all' **Art. 1 "STANDARD"***

1- Assicurarsi che la morsa sia correttamente posizionata e ancorata alla tavola della macchina e che la ganascia fissa **Art. 120 / 120A** sia correttamente fissata. (**Fig. 1**)

ACTIONS FOR THE BEST WORK-PIECE CLAMPING

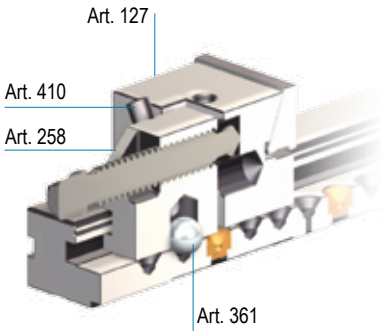
*Pictures refer to **Art. 1 "STANDARD"** vise*

1- Ensure that the vise is properly positioned and clamped to the machine table and that the fixed jaw **Art.120 / 120A** is properly assembled. (**Pic.1**)

Fig.1 | **Pic.1**

2- Posizionare la ganascia mobile **Art. 127 / 127A** allentando i due grani **Art. 410** per consentire il sollevamento della sfera calibrata **Art. 361** e quindi lo spostamento di tutto il gruppo di serraggio **Art. 258** in una posizione più idonea sullo slittone di base, lasciando circa 5 mm di aria rispetto al pezzo da serrare. (**Fig. 2**)

2- Position the movable jaw **Art120 / 120A** loosing the 2 set screws **Art.410** in order to allow the ground ball **Art.361** lift and then move the **Art.258** blocking group in the most proper position on the vise base leaving roughly 5 mm space with respect to the workpiece to clamp. (**Pic.2**)



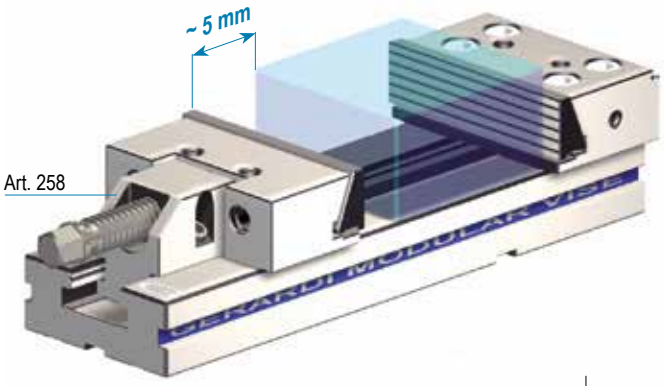


Fig.2 | **Pic.2**

3- Nello stringere i due grani **Art. 410** mediante la chiave **Art. 376**, (agendo in senso orario) per assicurarsi che la sfera di posizionamento **Art. 361**, sia correttamente posizionata in una sede sferica.

Fare attenzione che tale sfera non venga posizionata in una incassatura delle viti di ancoraggio. E' possibile posizionare l'apposito inserto **Art. 291** con sede sferica per prevenire incastri. (**Fig. 3**)

3- Tightening the 2 set screws **Art.410** through the T-wrench **Art.376** to ensure that the positioning ball **Art.361** is properly positioned in a spherical recess.

Be careful that the positioning ball is not pushed in the hole used for the vise clamping screws. It is also possible to use a proper insert **Art. 291** with spherical recess in order to prevent bad blocking of the ball. (**Pic. 3**)

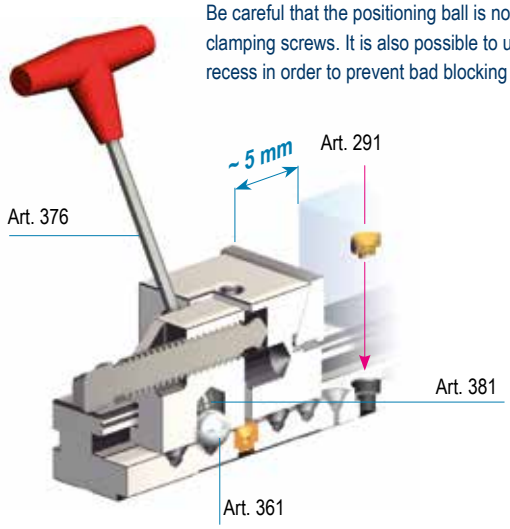
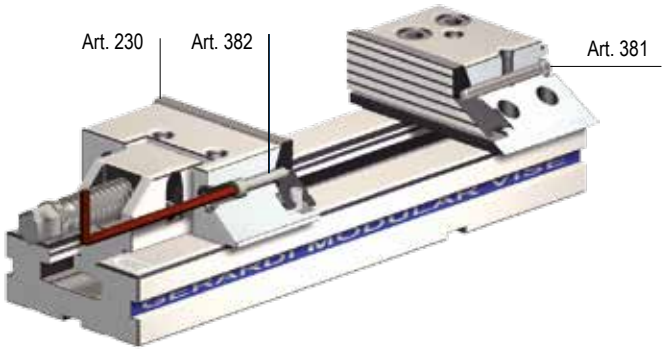


Fig.3 | **Pic.3**

UTILIZZO E MANUTENZIONE DELLE MORSE STD
USE AND MAINTENANCE OF STD VISES

UTILIZZO DELL' OPZIONE "EFFETTO DISCENDENTE"

4- Nel caso di morse **Art.1** volendo avvalersi della opzione piastre ganasce discendenti, allentare di 1/4 di giro le viti **Art. 381 / 382** (**Fig. 4**) per permettere alle piastre ganasce discendenti **Art. 230** di scorrere dall' alto verso il basso, ottenendo così un serraggio del pezzo verso la base morsa.
L' azzeramento e l'allineamento degli assi saranno da eseguire con il particolare da lavorare già serrato.



SOLO PER MORSE STANDARD - ONLY FOR STANDARD VISES

Allentando le viti di 1/4 di giro si ha un sollevamento della piastra della ganascia **Art. 230** grazie alla spinta della molla **Art. 362**.
Eseguire l'azzeramento mentre con il pezzo serrato

Loosing the screws of 1/4 of a turn you get a jaw plate **Art.230** lift because of the spring **Art.362** action.
Check alignement with workpiece clamped.

"PULL DOWN" ACTION OPTION

4- Using Art.1 vises, if the pull down option is required, loose of 1/4 of a turn the screws Art.381 / 382 **(Pic.4)** in order to allow the jaw plates Art.230 to run downward getting a perfect clamping of the workpiece against the vise base. The axis zero setting and the alignement must be done when the workpiece already clamped

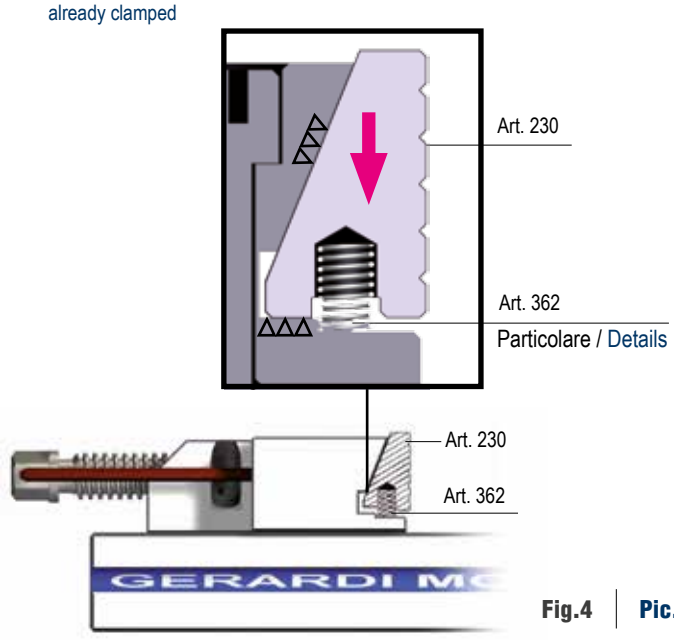


Fig.4 | **Pic.4**

5- Posizionare il pezzo da serrare sullo slittone **Art. 40** o **40A** e tenerlo contro la ganascia fissa **Art. 120** o **120A**. Per un corretto posizionamento del pezzo ci si può avvalere dei riferimenti laterali **Art. 370**. (**Fig. 5**)

5- Position the workpiece on the vise base **Art.40** or **40A** and push it against the fixed jaw **Art.120** or **120A**. For a proper workpiece positioning you can use the work-stop **Art.370**. (**Pic.5**)

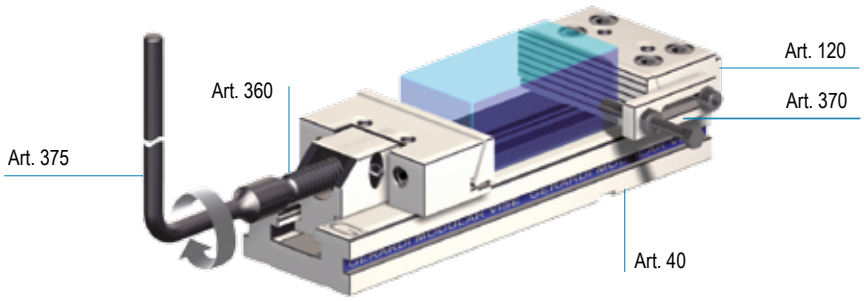


Fig.5 | **Pic.5**

6- Serrare il pezzo agendo in senso orario sulla vite di spinta **Art. 360** (**Fig. 5**) mediante la chiave in dotazione **Art. 375** senza utilizzare tubi o martelli. Attenzione: nel serraggio basta 1/4 di giro della chiave dal momentoin cui la ganascia tocca il particolare (valori indicativi in tabella). (**Fig. 6**)

6- Clamp the workpiece turning clockwise the main spindle Art.360 through the box wrench **Art.375** without using tubes or hammers. Attention: for the right clamping operation 1/4 of a turn of the box wrench is enough (see table below). (**Pic.6**)

Valori indicativi delle forze di serraggio raggiunte a 90°
Clamping force indicative values at 90°

Type (Size)	1	2	3	4	5	6
Kn	12	26	36	46	50	50

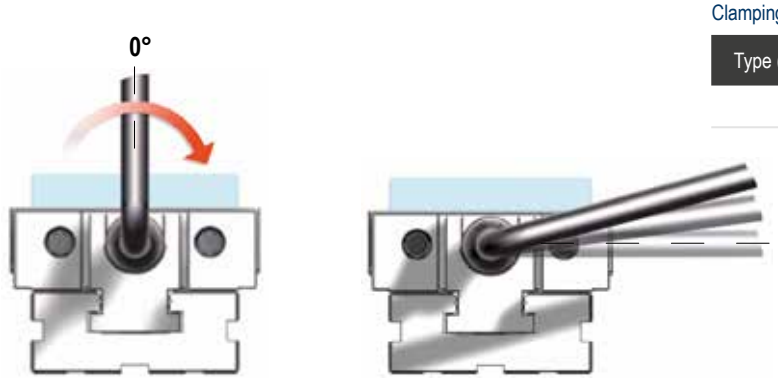


Fig.6 | **Pic.6**

COME SERRARE IL PEZZO
HOW TO CLAMP A WORKPIECE

Per serrare correttamente il pezzo è consigliabile utilizzare una chiave dinamometrica da regolare in base al tipo di morsa e alla forza che si vuole ottenere.

AVVERTENZA

Per una maggior precisione e ripetibilità delle lavorazioni, attenersi alle seguenti disposizioni:

1. *Serrare il particolare con una chiave dinamometrica, regolata secondo la tabella "**PROVE DI SERRAGGIO**".*
2. *Individuare il momento ideale tramite comparatore posizionato sul pezzo, quindi procedere nelle lavorazioni richieste.*
3. *Serrare eventuali particolari simili con la medesima forza di serraggio.*

In order to clamp the work-piece in the most proper way it is recommended the use of a torque wrench to be adjusted according to the vise type and the clamping power desired or needed.

WARNING

For an increased machining accuracy and repetability use the following instructions:

1. *Clamp the workpiece with a torque wrench set according to the "**CLAMPING TEST**" table.*
2. *Set the right torque through a clock indicator positioned on the workpiece, then proceed with the machining operations.*
3. *Clamp next similar workpieces with the same clamping power.*

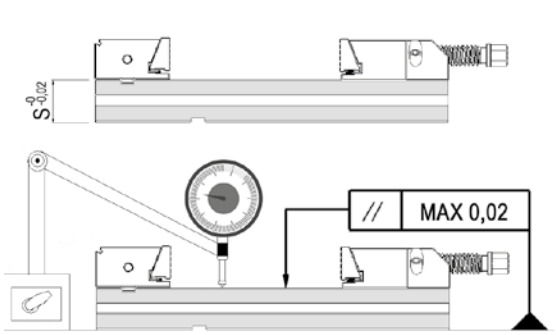
PROVE DI SERRAGGIO / CLAMPING TEST Art.1 & Art1A

Eseguite a temperatura ambiente (20°) con chiave dinamometrica
Test made with 20° temperature with torque wrench

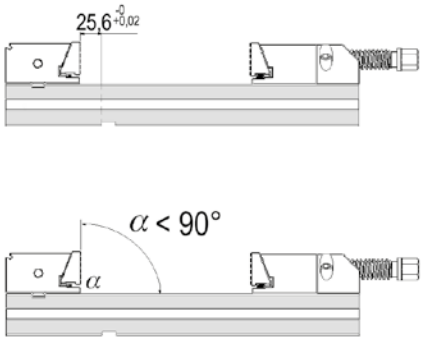
Esempio**: con una morsa **TIPO 3**, applicando con chiave dinamometrica un momento di **60 Nm**, si ottiene una forza di serraggio di **25 Kn
Example**: with a vise TYPE 3 (jaw width 150 mm), using torque wrench set at **60 Nm**, you can get a clamping power of **25 Kn

	Momento applicato Wrench power	Forza di serraggio Clamping Force **Nm**
1	30	10
	50	16 MAX
2	20	8
	40	16
	60	25 MAX
3 / 4	40	16
	60	25
	80	30 MAX
5 / 6	80	30
	120	40 MAX

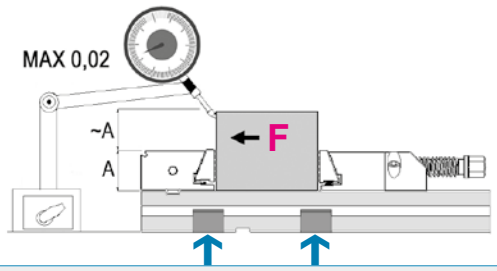
TOLLERANZE GEOMETRICHE



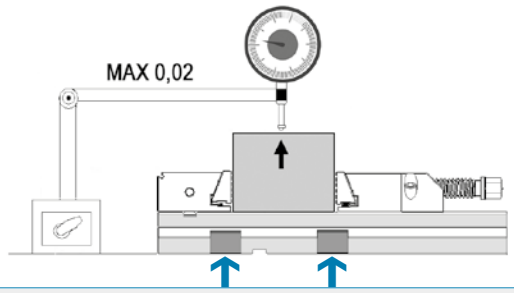
GEOMETRIC ACCURACIES



TOLLERANZE GEOMETRICHE

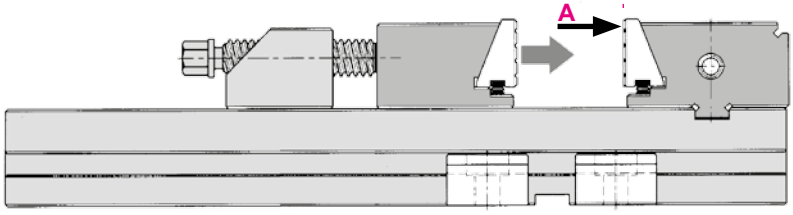


GEOMETRIC ACCURACIES



Morsa ancorata con 2 coppie di staffe Art.296 / Vise clamped with n. 2 pairs of Art.296

Valori di flessione nel punto "A" in relazione alle forze di serraggio **PER MORSE TIPO 3**
Deflection values at "A" in relation to clamping powers **FOR TYPE 3 VISES**



Kn	mm
60	0.1
50	0.07
40	0.05
30	0.03
20	0.02
10	0.01
5	0.004
2	0.002

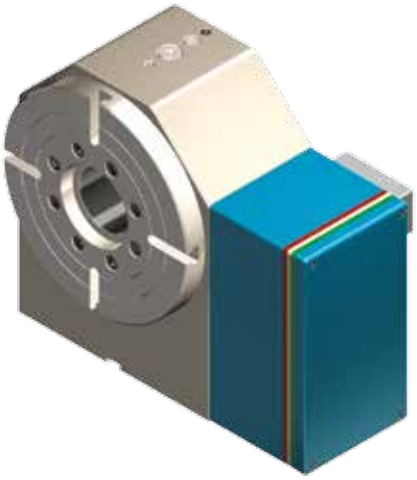
1 kgf . m = 9.806 Nm

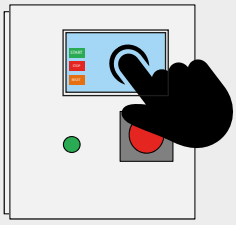
DIVISORE AUTOMATICO DPG 250
AUTOMATIC DIVIDING HEAD DPG 250

NEW!

Divisore automatico
Automatic dividing head

DPG 250





PROGRAMMAZIONE **TOUCH SCREEN**
FACILE ED INTUITIVA O TRAMITE COLLEGAMENTO DIRETTO AL CNC

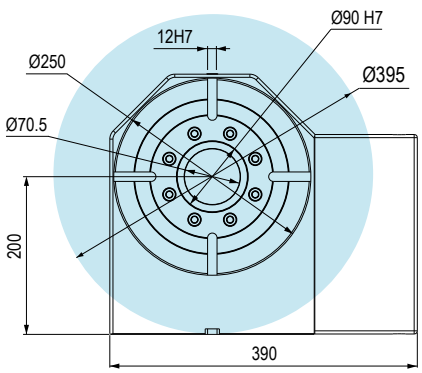
EASY AND INTUITIVE **TOUCH SCREEN**
PROGRAMMING OR THROUGH DIRECT CONNECTION TO THE CNC

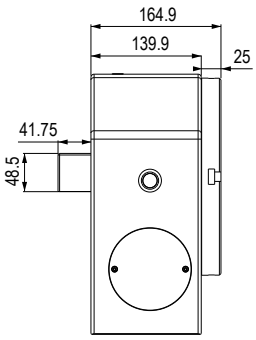
- Installazione semplice (alimentazione 220V)
- Corona in bronzo speciale
- Controsupporto semplice
- Vite senza fine in acciaio temprato e rettificato
- Vite e corona in bagno d'olio
- Cuscinetti a vite precaricati
- Cuscinetto anteriore a rulli incrociati sovradimensionato
- Recupero gioco con avvicinamento assiale
- Completa tenuta stagna ai liquidi con possibilità di pressurizzazione
- Possibilità di montare motori di tutte le marche
- Dimensioni esterne contenute
- Finestra di controlli liquidi e condensa
- Lavorazione in posizionamento a 360°

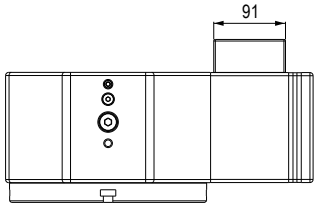
- Easy installation (220V)
- Special bronze crown
- Simple tailstock
- Worm screw in hardened ground steel
- Bath lubrication Screw and Crown
- Pre-loaded screw bearings
- Over-dimensioned crossed-roller front bearing
- Play recover with axial approach
- Watertight seal with possibility of pressurization
- Possibility to mount motors of all brands
- Reduced external dimensions
- Condensation and liquid control window
- 360° work positioning

DATI TECNICI TECHNICAL DATA		
Diametro del divisore Dividing head diameter		250 mm
Diametro del foro passante Clearance hole diameter		70,5 mm
Altezza punte Center height		200 mm
Dimensione della scanalatura a T T-Slot width		12 mm
Sistema di bloccaggio Clamping system		Idraulico Hydraulic
Forza frenante Clamping torque		3000 Nm
Motore Servo motor		3000 Max.g/min
Minimo incremento Minimum increment		0,002
Velocità di rotazione Rotation speed		33,3 Giri/min
Rapporti vite/corona Speed reduction ratio (screw/gear)		1/90
Rapporti vite/motore Speed reduction ratio (screw/motor)		1/180
Precisione Indexing accuracy		±10 Sec.
Ripetibilità Repeatability		4 Sec.
Max. carico di lavoro sul divisore Max. allowable work weight on the dividing head	Verticale Vertical	Kg.550
	Orizzontale Horizontal	Kg.1500
Max. carico di spinta applicabile sul divisore Max. allowable tool load on the dividing head		N 25000
		FxL Nm 1000
		FxL Nm 2200
Rapporti vite/corona Speed reduction ratio (screw/gear)	Verticale Vertical	10,5 Kg. m²
Coppia in lavoro Driving torque	Corona dentata Worm gear	698 Nm
Kg		110
Cod.		8.DP.G2500

DPG 250

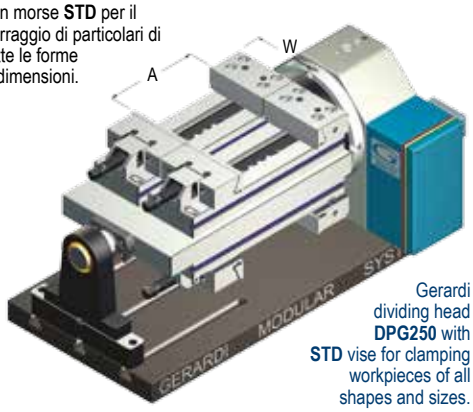






Tipo (grandezza) morsa / Vise (type) size Montaggio / Mounting		1 Doppio / Double	2 Doppio / Double	3 Doppio / Double		4 Singolo / Single			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	96	121	146		171			
	W1								
	B	28	38	48		58			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	7.3	13.2	26.2	29.7	37.9	43	48.1	53.2
	Cod.	1.DP.G25000	1.DP.G25010	1.DP.G25020	1.DP.G25030	1.DP.G25040	1.DP.G25050	1.DP.G25060	1.DP.G25070

Divisore Gerardi **DPG250** con morse **STD** per il serraggio di particolari di tutte le forme e dimensioni.



Gerardi dividing head **DPG250** with **STD** vise for clamping workpieces of all shapes and sizes.

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI ! - UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

Art. 99A

Supporto
Support

Cod.	7.99.A1000

Art. 99B

Perno di centraggio orizzontale
Horizontal centering pin

Cod.	1.99.B1000

Art. 99H

Distanziale
Spacer

Cod.	1.99.H1000

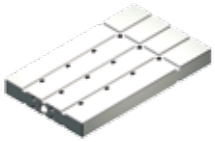
Art. 62
DPG 250

Piastra di interfaccia DPG 250 per STD
DPG 250 connecting plate for STD

Cod.	1.62.DPG25

Art. 99T

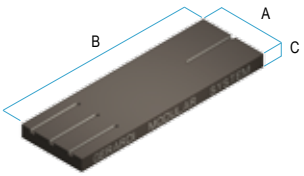
Sovratavola per divisore
Head-plate for dividing head



Cod.	1.99.T1000	1.99.T2000	1.99.T3200	1.99.T3300	1.99.T4200	1.99.T4300	1.99.T4400	1.99.T4500

Art. 99S

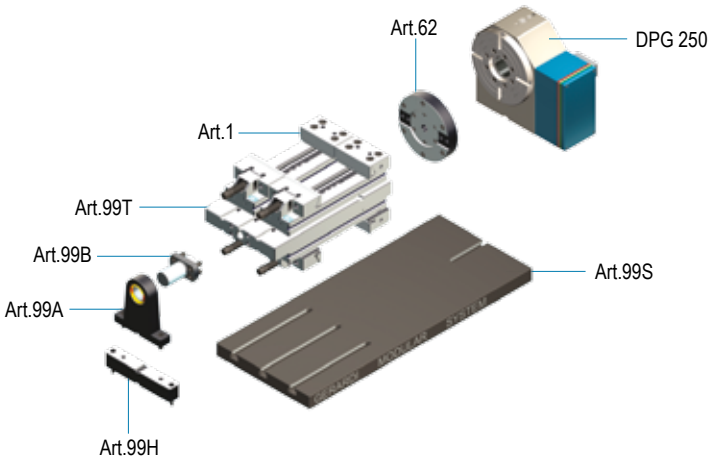
Piastra base con cave
Piani rettificati
Base plate with slot
Faces ground

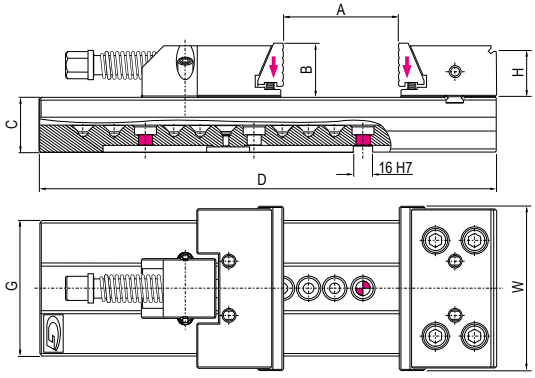


Cave o fori calibrati su richiesta
Slot or calibrated holes on request

Dimensioni B mm / Dimension B mm	A	C	Kg	Cod.	€
600	400	50	94	7.99.S060S	
750	400	50	117	7.99.S075S	
900	400	50	141	7.99.S090S	
1100	400	50	172	7.99.S110S	

Disponibili quote "**B**" a step di 50mm - Available dimension "**B**" in steps of 50mm





Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

DIVISORE MECCANICO DIVIGER 205
MECHANICAL DIVIDING HEAD DIVIGER 205

NEW!

Divisore meccanico
Mechanical dividing head

DIVIGER 205

DATI TECNICI TECHNICAL DATA	
Diametro del divisore Dividing head diameter	220 mm
Diametro del foro passante Clearance hole diameter	85 mm
Altezza centrale Center height	200 mm
Dimensione della scanalatura a T T-Slot width	-
Sistema di bloccaggio Clamping system	Meccanico Mechanical
Minimo incremento Minimum increment	1°
Precisione Indexing accuracy	±10 Sec.
Coppia in lavoro Driving torque	3000 Nm
Kg	93
Cod.	7.66.73000

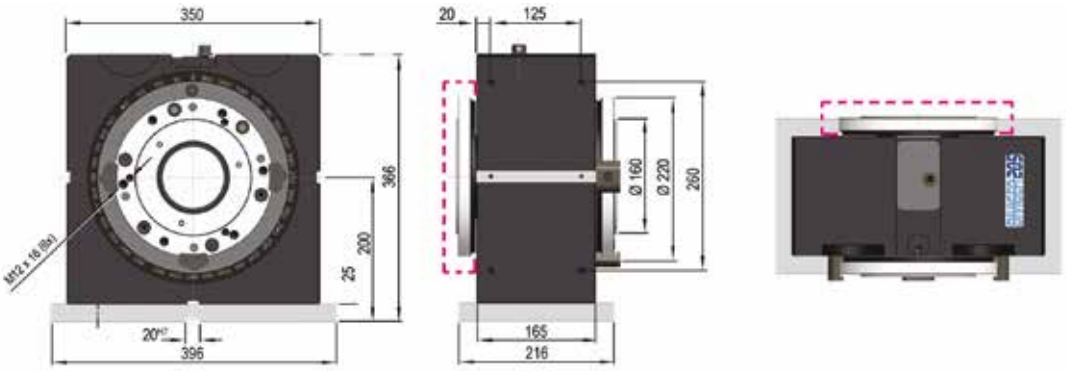
DIVISORE MECCANICO, SENZA CAVI O IDRAULICA, PERMACCHINE A CNC

MECHANICAL DIVIDING HEAD, WITHOUT ELECTRICAL CABLES OR HYDRAULIC, FOR CNC MILLING MACHINE

- Maggiore efficienza nella lavorazione su più lati
- Completamente autonomo dalla macchina
- Elevato momento torcente
- Divisione manuale o automatica tramite mandrino macchina
- 360 posizioni
- Serraggio simultaneo di due particolari grazie alla doppia flangia
- lavorazione su 5 facce senza contropunta
- Lavorazione a barra grazie al mandrino cavo
- Utilizzabile orizzontalmente o verticalmente
- Cambio tramite serraggio a cuneo

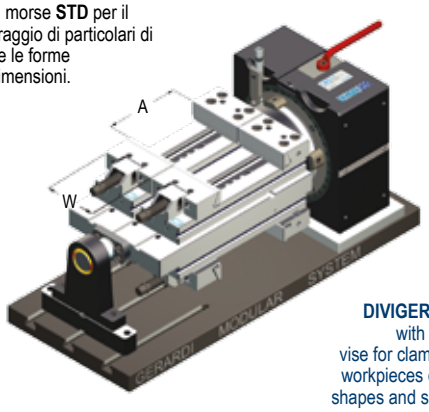
- Cost-effective on multiple-sides machining
- Machine independent
- High holding torque
- Dividing manually or automatically using the machine spindle
- 360 x 1° division
- Simultaneous clamping of 2 workpieces thanks to the dual flange
- 5 faces machining without counter-holder
- Bar machining due to hollow spindle
- To be used horizontaly or vertically
- Quick change through wedge clamping

DIVIGER 205



Tipo (grandezza) morsa / Vise (type) size Montaggio / Mounting		1 Doppio / Double	2 Doppio / Double	3 Doppio / Double		4 Singolo / Single			
Apertura massima / Maximum spread	A	100	150	200	300	200	300	400	500
	W	96	121	146		171			
	W1								
	B	28	38	48		58			
	C	35	40	50		58			
	D	270	345	420	520	455	555	655	755
	G	75	95	125		145			
	kg	7.3	13.2	26.2	29.7	37.9	43	48.1	53.2
	Cod.	1.DI.V20500	1.DI.V20510	1.DI.V20520	1.DI.V20530	1.DI.V20540	1.DI.V20550	1.DI.V20560	1.DI.V20570

DIVIGER 205
con morse **STD** per il serraggio di particolari di tutte le forme e dimensioni.



DIVIGER 205
with **STD** vise for clamping workpieces of all shapes and sizes.

AMPLIA LE TE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI ! - UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

Art. 99A

Supporto
Support

Cod. 7.99.A1000

Art. 99B

Perno di centraggio orizzontale
Horizontal centering pin

Cod. 1.99.B1000

Art. 99H

Distanziale
Spacer

Cod. 1.99.H1000

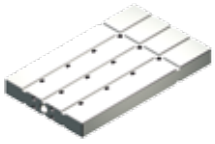
Art. 62
DIVIGER 205

Piastra di interfaccia DIVIGER 205 per STD
DIVIGER 205 connecting plate for STD

Cod. 1.62.DIV205

Art. 99T

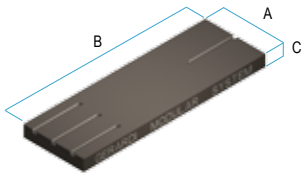
Sovratavola per divisore
Head-plate for dividing head



Cod.	1.99.T1000	1.99.T2000	1.99.T3200	1.99.T3300	1.99.T4200	1.99.T4300	1.99.T4400	1.99.T4500

Art. 99S

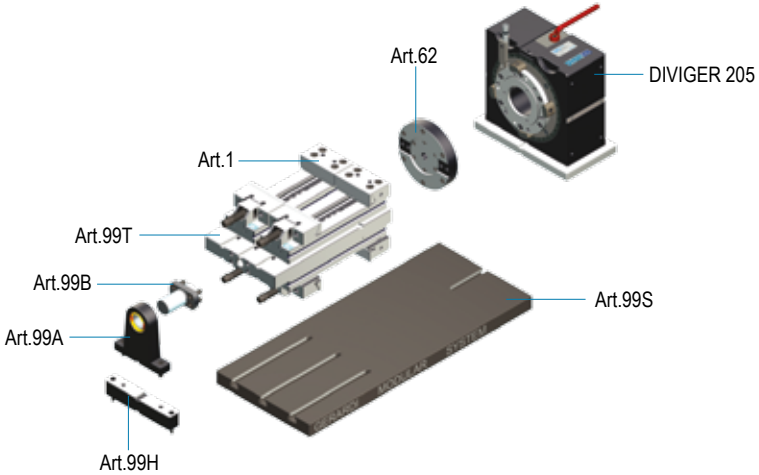
Piastra base con cave
Piani rettificati
Base plate with slot
Faces ground

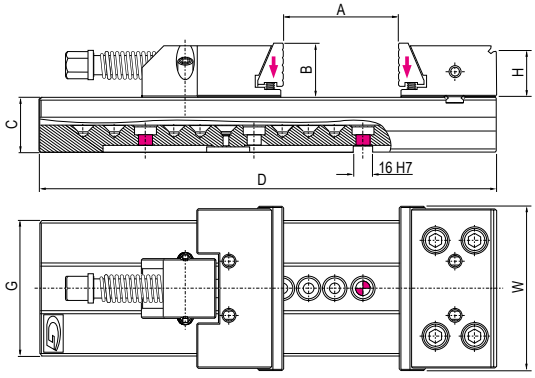


Dimensioni B mm / Dimension B mm	A	C	Kg	Cod.	
600	400	50	94	7.99.S060S	
750	400	50	117	7.99.S075S	
900	400	50	141	7.99.S090S	
1100	400	50	172	7.99.S110S	

Cave o fori calibrati su richiesta
Slot or calibrated holes on request

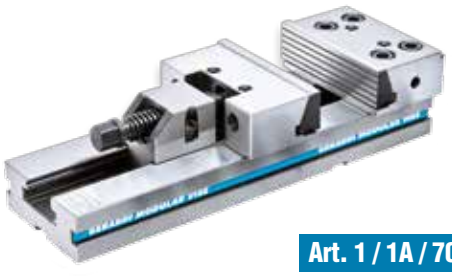
Disponibili quote "**B**" a step di 50mm - Available dimension "**B**" in steps of 50mm





Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

DIAGRAMMI SERRAGGIO MECCANICO CON CHIAVE DINAMOMETRICA
DIAGRAMS MECHANICAL CLAMPING WITH TORQUE WRENCH



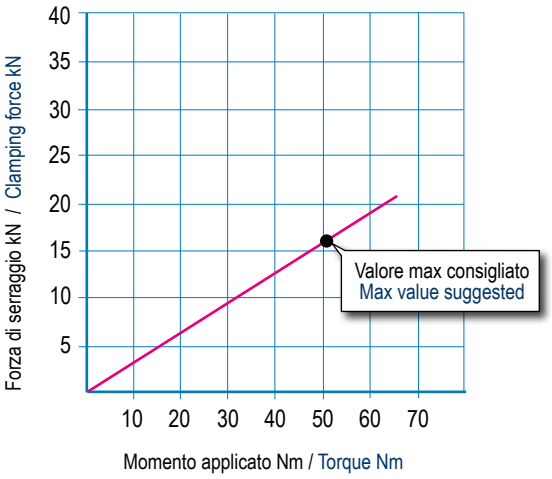
Art. 1 / 1A / 700

GRUPPI DI SERRAGGIO MECCANICI
(**Art. 258** *e similari*)
I diagrammi seguenti consentono di determinare le forze di serraggio ottenibili con le morse di varia grandezza (da 1 a 6), in funzione del momento applicato

MECHANICAL CLAMPING DEVICES
*(**Art. 258** and similar)*
The following diagrams give the clamping force that can be obtained with each vise type (size 1 to 6) depending on the torque

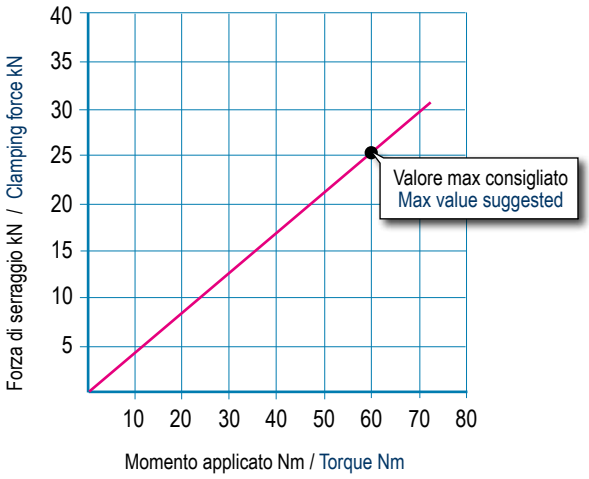
MORSE **STD** e **StandardFLEX** TIPO 1
STD and **StandardFLEX** VISES TYPE 1

Vite M12 - Passo 1,75mm
Screw M12 - Pitch 1,75m



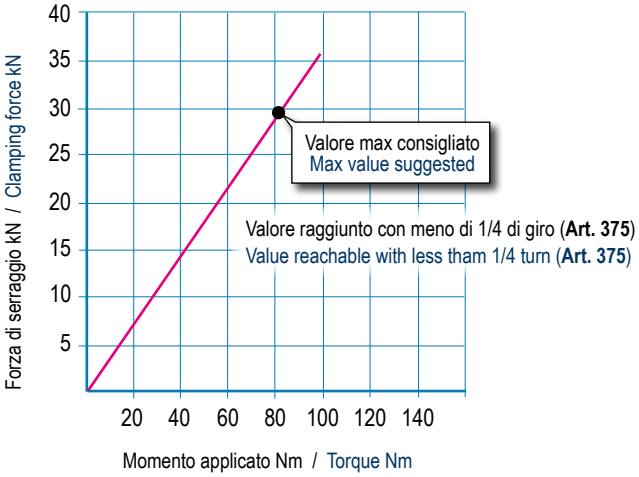
MORSE **STD** e **StandardFLEX** TIPO 2
STD and **StandardFLEX** VISES TYPE 2

Vite TPN18 - Passo 4mm
Screw TPN18 - Pitch 4mm



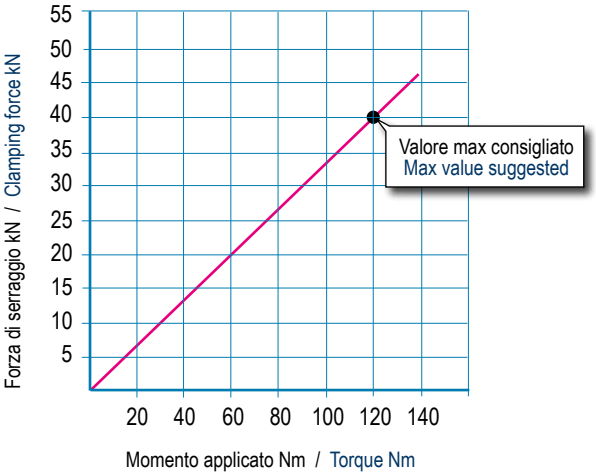
MORSE **STD** e **StandardFLEX** TIPO 3-4
STD and **StandardFLEX** VISES TYPE 3-4

Vite TPN24 - Passo 5mm
Screw TPN24 - Pitch 5mm



MORSE **STD** e **StandardFLEX** TIPO 5-6
STD and **StandardFLEX** VISES TYPE 5-6

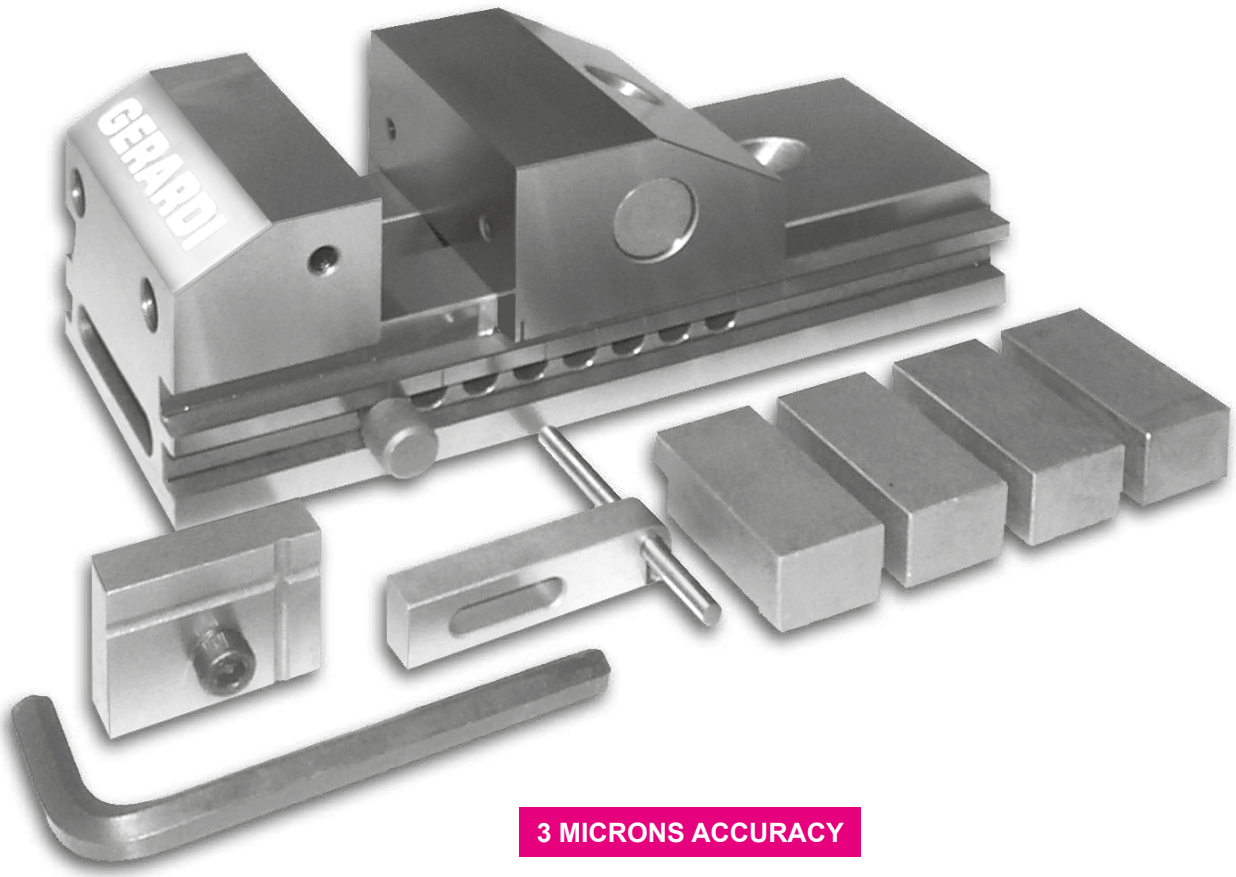
Vite TPN30 - Passo 5mm
Screw TPN30 - Pitch 5mm



NB: Alcuni fattori, come la lubrificazione, lo staffaggio, gli attriti ed altro, possono modificare i valori indicati fino a ± 10%. Per un corretto utilizzo non superare i valori indicati nel grafico

Some factor as lubrication, clamping on the machine table, frictions and more can modify above values within a ± 10% range. For optimum operation do not exceed chart values.

OK Series
MORSE - VISES



3 MICRONS ACCURACY

MORSE serie OK, MORSE DI PRECISIONE PER RETTIFICA
OK series VISES, HIGHEST ACCURACY VISES FOR GRINDING OPERATIONS

Una serie di morse per le esigenze più impegnative nei lavori con le tolleranze più ristrette

A series of vises for the highest accuracy machining operations

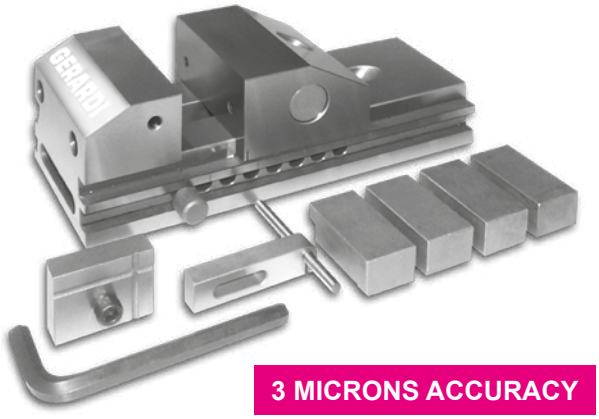
L' ALTISSIMA PRECISIONE è OK
THE HIGHEST ACCURACY VISE is OK

Principali caratteristiche delle morse serie OK

- Superfici rettificate, temperate e lappate
- Ortogonalità e parallelismo: 0,003 mm / 100 mm
- Ideali per operazioni di controllo, rettifica, elettroerosione e fresatura

Main OK vises technical features

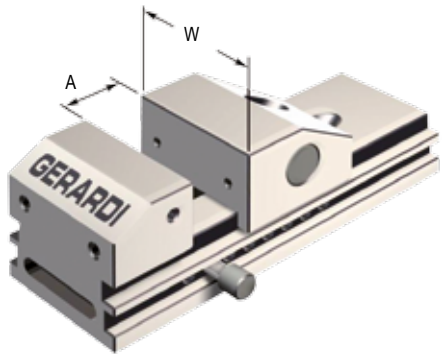
- All case hardened and hardened HRC 60 steel
- Squareness and parallelism: 0,003 mm / 100 mm
- Ideal for grinding E.D.M. machine and for milling operations also for checking and control



3 MICRONS ACCURACY

Art. 666

Morsa serie **OK in acciaio** / Series **OK** vises **in steel**



Tipo (grandezza) morsa / Vise type (size)	kN	0	1	2 16 kN	3 16 kN	4 18 kN	5 18 kN	6 18 kN	7 18 kN	8 20 kN
Apertura massima / Maximum spread	A	27	80	100	120	160	180	200	260	200
	W	30	60	75	100	125	125	125	125	160
	B	15	28	40	45	50	50	50	50	63
	C	15	28	35	42	50	50	50	50	63
	D	75	175	220	260	330	350	370	430	410
	E	15	40	50	55	65	65	65	65	80
	F	33	55	50	85	105	105	105	110	130
	kg	0,28	2,820	5,820	10,740	19,450	20,080	20,720	26,720	38
	Cod.	3.66.60000	3.66.61000	3.66.62000	3.66.63000	3.66.64000	3.66.65000	3.66.66000	3.66.67000	3.66.68000

Art. 666S

Morsa serie **OK** ***in acciaio*** *Tipo* * ***X4 CR14*** per elettroerosione. *Stesse caratteristiche dell'Art. 666*

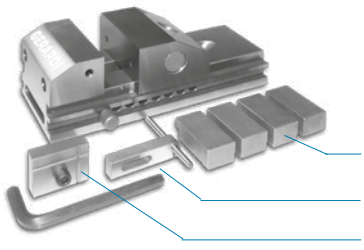
Series **OK** vises ***in steel*** *Type* * ***X4 CR14*** for E.D.M. machines. *Same characteristic and dimension of the Art. 666*

* Acciaio temprato a basso contenuto di ferro (Max resistenza alla corrosione dopo tempra, rinvenimento e rettifica)
Low carbon hardened steel (max resistance against corrosion after hardening process and grinding operations)

Cod.	3.66.6S000	3.66.6S100	3.66.6S200	3.66.6S300	3.66.6S400	3.66.6S500	3.66.6S600	3.66.6S700	3.66.6S800

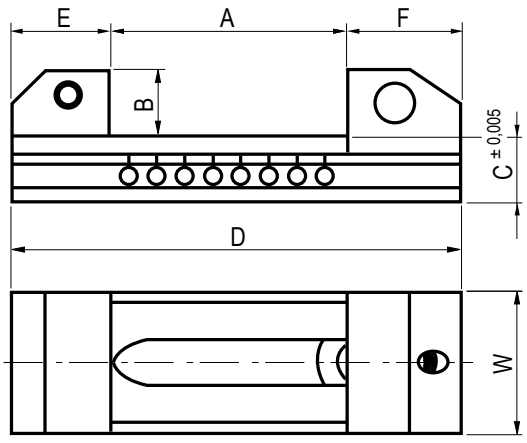
Dotazione standard:

■ 4 staffe di fissaggio Art. 666O
■ 1 arresto laterale fisso Art. 666G ■ 1 arresto laterale mobile Art. 666I



Standard equipment:

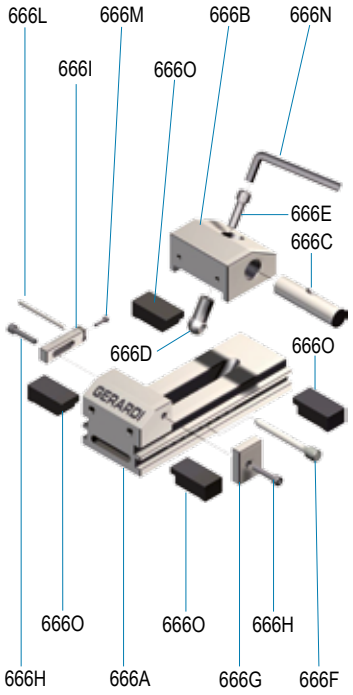
■ 4 clamping jaws Art. 666O
■ 1 fixed work stop Art. 666G ■ 1 movable work stop Art. 666I



Tipo (grandezza) morsa / Vise type (size)	0	1	2 16 kN	3 16 kN	4 18 kN	5 18 kN	6 18 kN	7 18 kN	8 20 kN

Parti di ricambio per **Art. 666** / Spare parts for **Art. 666**

Art. 666

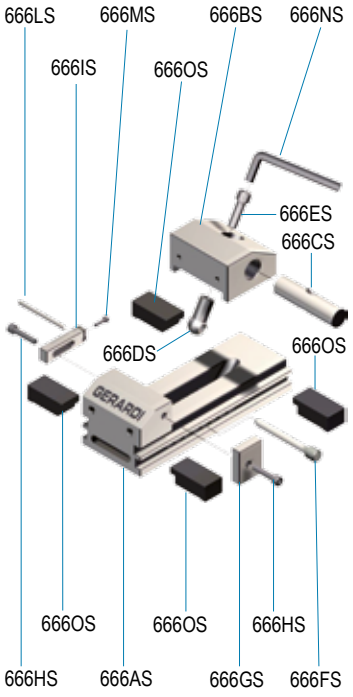


Art. 666A	Cod. 7.66.6A000	7.66.6A100	7.66.6A200	7.66.6A300	7.66.6A400	7.66.6A500	7.66.6A600	7.66.6A700	7.66.6A800
Art. 666B	Cod. 7.66.6B000	7.66.6B100	7.66.6B200	7.66.6B300	7.66.6B400	7.66.6B500	7.66.6B600	7.66.6B700	7.66.6B800
Art. 666C	Cod. 7.66.6C000	7.66.6C100	7.66.6C200	7.66.6C300	7.66.6C400	7.66.6C500	7.66.6C600	7.66.6C700	7.66.6C800
Art. 666D	Cod. 7.66.6D000	7.66.6D100	7.66.6D200	7.66.6D300	7.66.6D400	7.66.6D500	7.66.6D600	7.66.6D700	7.66.6D800
Art. 666E	Cod. 7.66.6E000	7.66.6E100	7.66.6E200	7.66.6E300	7.66.6E400	7.66.6E500	7.66.6E600	7.66.6E700	7.66.6E800
Art. 666F	Cod. 7.66.6F000	7.66.6F100	7.66.6F200	7.66.6F300	7.66.6F400	7.66.6F500	7.66.6F600	7.66.6F700	7.66.6F800
Art. 666G	Cod. 7.66.6G000	7.66.6G100	7.66.6G200	7.66.6G300	7.66.6G400	7.66.6G500	7.66.6G600	7.66.6G700	7.66.6G800
Art. 666H	Cod. 7.66.6H000	7.66.6H100	7.66.6H200	7.66.6H300	7.66.6H400	7.66.6H500	7.66.6H600	7.66.6H700	7.66.6H800
Art. 666I	Cod. 7.66.6I000	7.66.6I100	7.66.6I200	7.66.6I300	7.66.6I400	7.66.6I500	7.66.6I600	7.66.6I700	7.66.6I800
Art. 666L	Cod. 7.66.6L000	7.66.6L100	7.66.6L200	7.66.6L300	7.66.6L400	7.66.6L500	7.66.6L600	7.66.6L700	7.66.6L800
Art. 666M	Cod. 7.66.6M000	7.66.6M100	7.66.6M200	7.66.6M300	7.66.6M400	7.66.6M500	7.66.6M600	7.66.6M700	7.66.6M800
Art. 666N	Cod. 7.66.6N000	7.66.6N100	7.66.6N200	7.66.6N300	7.66.6N400	7.66.6N500	7.66.6N600	7.66.6N700	7.66.6N800
Art. 666O	Cod. 7.66.6O000	7.66.6O100	7.66.6O200	7.66.6O300	7.66.6O400	7.66.6O500	7.66.6O600	7.66.6O700	7.66.6O800

Tipo (grandezza) morsa / Vise type (size)	0	1	2 16 kN	3 16 kN	4 18 kN	5 18 kN	6 18 kN	7 18 kN	8 20 kN

Parti di ricambio in acciaio inox per **Art. 666S** / Spare parts in stainless steel for **Art. 666**

Art. 666S



Art. 666AS	Cod. 7.66.6AS00	7.66.6AS10	7.66.6AS20	7.66.6AS30	7.66.6AS40	7.66.6AS50	7.66.6AS60	7.66.6AS70	7.66.6AS80
Art. 666BS	Cod. 7.66.6BS00	7.66.6BS10	7.66.6BS20	7.66.6BS30	7.66.6BS40	7.66.6BS50	7.66.6BS60	7.66.6BS70	7.66.6BS80
Art. 666CS	Cod. 7.66.6CS00	7.66.6CS10	7.66.6CS20	7.66.6CS30	7.66.6CS40	7.66.6CS50	7.66.6CS60	7.66.6S70	7.66.6CS80
Art. 666DS	Cod. 7.66.6DS00	7.66.6DS10	7.66.6DS20	7.66.6DS30	7.66.6DS40	7.66.6DS50	7.66.6DS60	7.66.6DS70	7.66.6DS80
Art. 666ES	Cod. 7.66.6ES00	7.66.6ES10	7.66.6ES20	7.66.6ES30	7.66.6ES40	7.66.6ES50	7.66.6ES60	7.66.6ES70	7.66.6ES80
Art. 666FS	Cod. 7.66.6FS00	7.66.6FS10	7.66.6FS20	7.66.6FS30	7.66.6FS40	7.66.6FS50	7.66.6FS60	7.66.6FS70	7.66.6FS80
Art. 666GS	Cod. 7.66.6GS00	7.66.6GS10	7.66.6GS20	7.66.6GS30	7.66.6GS40	7.66.6GS50	7.66.6GS60	7.66.6GS70	7.66.6GS80
Art. 666HS	Cod. 7.66.6HS00	7.66.6HS10	7.66.6HS20	7.66.6HS30	7.66.6HS40	7.66.6HS50	7.66.6HS60	7.66.6HS70	7.66.6HS80
Art. 666IS	Cod. 7.66.6IS00	7.66.6IS10	7.66.6IS20	7.66.6IS30	7.66.6IS40	7.66.6IS50	7.66.6IS60	7.66.6IS70	7.66.6IS80
Art. 666LS	Cod. 7.66.6LS00	7.66.6LS10	7.66.6LS20	7.66.6LS30	7.66.6LS40	7.66.6LS50	7.66.6LS60	7.66.6LS70	7.66.6LS80
Art. 666MS	Cod. 7.66.6MS00	7.66.6MS10	7.66.6MS20	7.66.6MS30	7.66.6MS40	7.66.6MS50	7.66.6MS60	7.66.6MS70	7.66.6MS80
Art. 666NS	Cod. 7.66.6NS00	7.66.6NS10	7.66.6NS20	7.66.6NS30	7.66.6NS40	7.66.6NS50	7.66.6NS60	7.66.6NS70	7.66.6NS80
Art. 666OS	Cod. 7.66.6OS00	7.66.6OS10	7.66.6OS20	7.66.6OS30	7.66.6OS40	7.66.6OS50	7.66.6OS60	7.66.6OS70	7.66.6OS80

Tipo (grandezza) morsa / Vise type (size)		1	2
Apertura massima / Maximum spread	A	130	130
Forza di serraggio / Clamping force	kN	15	30
	W	105	130
	B	40	45
	C	105	110
	D	317	370
	E	130	160
	kg	29,5	42
	Cod.	1.67.11000	1.67.12000

Art. 671

Morse pneumatiche / Pneumatic vises

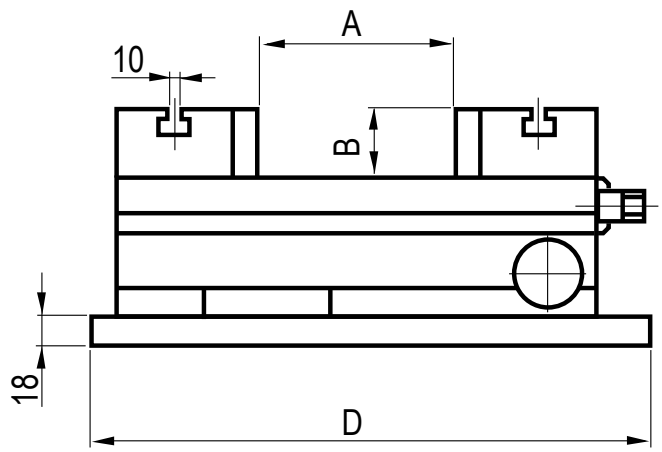
Ingresso aria 3/4" gas - Ø 8 - 7bar
Air inlet 3/4" gas - Ø 8 - 7bar

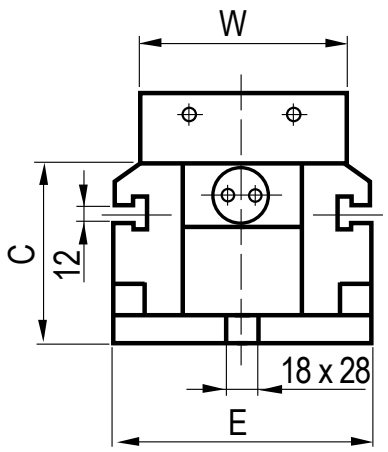
Tipo / Type **1**

Tipo / Type **2**

- Costruita in acciaio di alta qualità, cementato e temprato Durezza HRC58-62
- Ortogonalità e parallelismo: 0,02 mm
- Superfici rettificate, temprate e lappate
- Utilizzabili con pressione aria a 6bar (Connessione 1/4" gas)
- Made in high-quality alloy steel, case harden HRC58-62
- Squareness and parallelism: 0,02 mm
- Ideal for grinding E.D.M. machine and for milling operations also for checking and control
- Rating air pressure is 6bar (Air inlet - 1/4 " gas)

Dotazione standard: 1 arresto laterale Art. 370
Raccordo per aria (1/4" gas - Ø8) Art. PN04
Standard equipment: Workstop Art 370
Air connection (1/4" gas - Ø8) Art. PN04





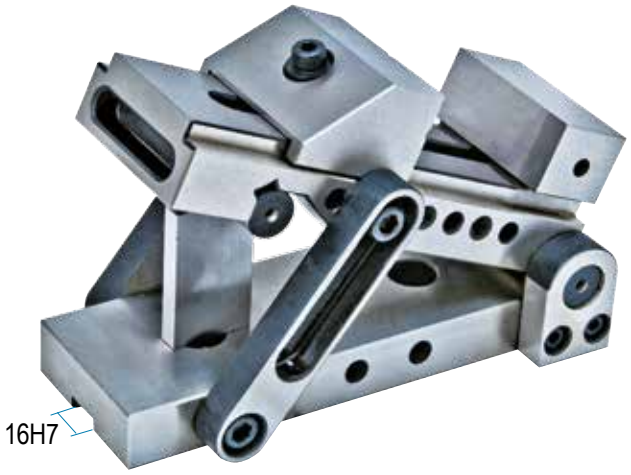
Tipo (grandezza) morsa / Vise type (size)		1	2	3
Apertura massima / Maximum spread	A	100	120	160
	W	75	100	125
	B	32	45	50
	C	95	116	139
	D	214	244	303,5
	E	150	200	240
	kg	9	15	26
	Cod.	1.66.71000	1.66.72000	1.66.73000

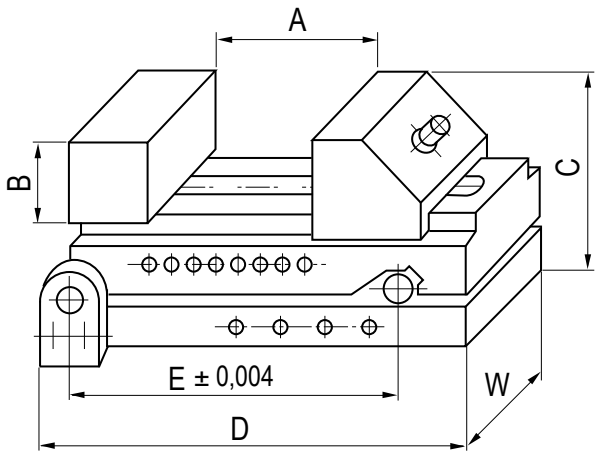
Art. 667

Morse di precisione con barraseno (0 - 90°)
Precision sine vises (0 - 90°)

- Superfici rettificate, temperate e lappate
- Ortogonalità e parallelismo: 0,003 mm / 100 mm
- Ideali per operazioni di controllo, rettifica, elettroerosione e fresatura

- All case hardened and hardened HRC 60 steel
- Squareness and parallelism: 0,003 mm / 100 mm
- Ideal for grinding E.D.M. machine and for milling operations also for checking and control





Dotazione standard: 2 chiavi di servizio Art. 376
Standard equipment: 2 wrenches Art. 376

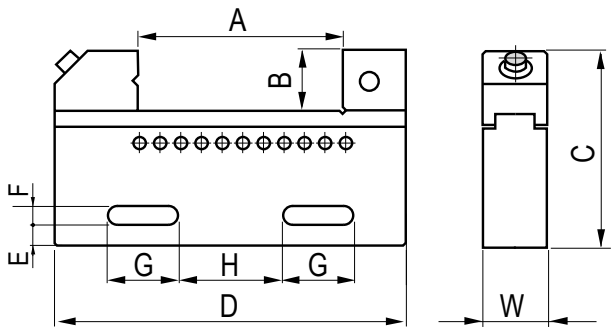
Tipo (grandezza) morsa / Vise type (size)		1	2	3
Apertura massima / Maximum spread	A	100	150	214
	W	32	32	36
	B	30	35	40
	C	95	100	110
	D	170	226	300
	E	11	11	13,5
	F	9	9	9
	G	34	34	34
	H	50	70	70
	kg	4	5	6
	Cod.	1.66.81000	1.66.82000	1.66.83000

Art. 668

Morse di precisione in acciaio inox
Stainless steel precision vises

Costruita in acciaio inox. Durezza HRC50-55
Parallelismo e ortogonalità 0,005-0,008. Alta resistenza alla corrosione.
Ideali per operazioni di controllo e elettroerosione

Made of high quality stainless steel. Hardness HRC50-55.
Parallelism and squareness of 0,005-0,008 mm. High corrosion-resistance.
Best for measurement, inspection, EDM and wire-cutting machining.



Dotazione standard: 1 chiave di servizio Art. 376
Standard equipment: 1 wrench Art. 376

MORSE per RETTIFICA
GRINDING VISES

3 MICRONS ACCURACY

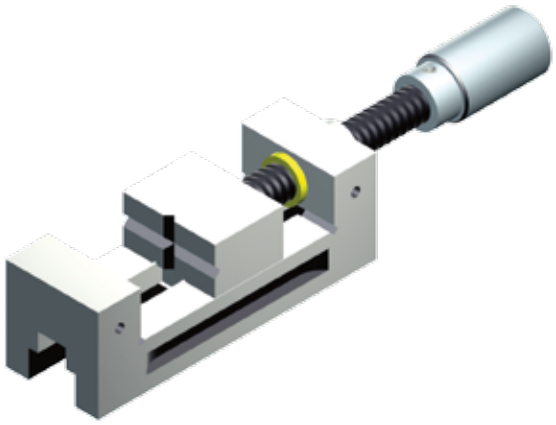
Una morsa estremamente precisa, adatta a lavorazioni di rettifica
High precision vise ideal for grinding operations

· Particolarmente adatta per lavori di alta precisione su rettificatrici e apparecchiature di controllo
· Costruita completamente in acciai temprati a durezza 58/60 HRC
· Perfettamente rettificata su tutti i suoi piani onde per ottenere i 90° in ogni posizione desiderata
· La ganascia mobile ha due **V** ortogonali per bloccare pezzi cilindrici
· Tolleranze millesimali: ± 0.003 mm.

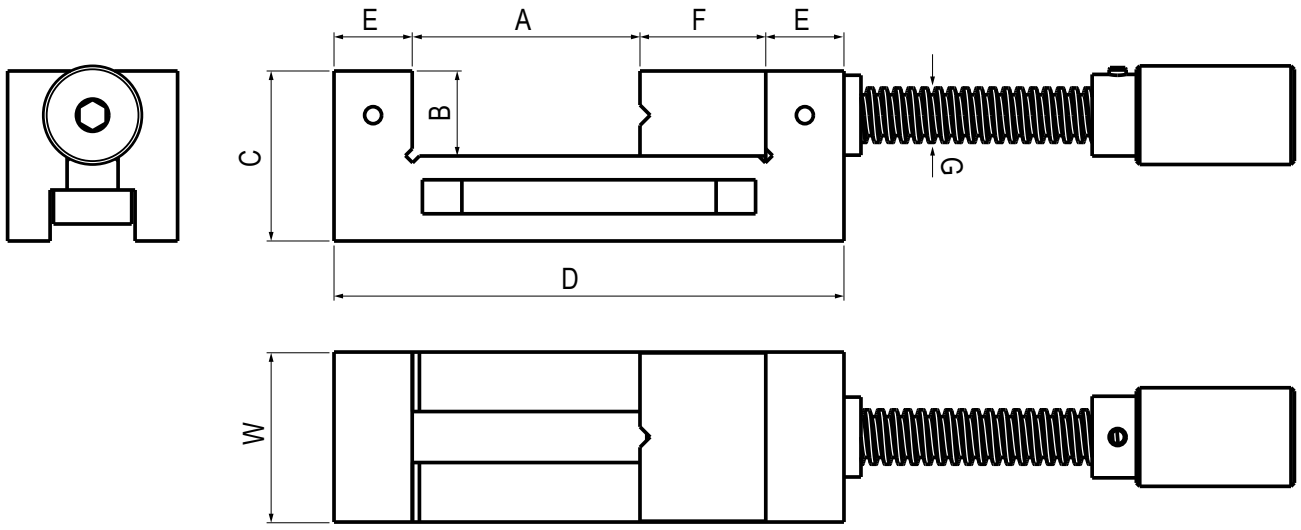
· Ideal for high-precision grinding machines or for inspection work
· Entirely made of non-deformable alloy steel hardened to 58/60 HRC
· Perfectly ground surfaces in order to reach 90° in any position
· The movable jaw has two prismatic surfaces in order to clamp round workpieces
· Accuracy: ± 0.003 mm

Art. 672

Morsa serie **OK in acciaio** / Series **OK** vises **in steel**

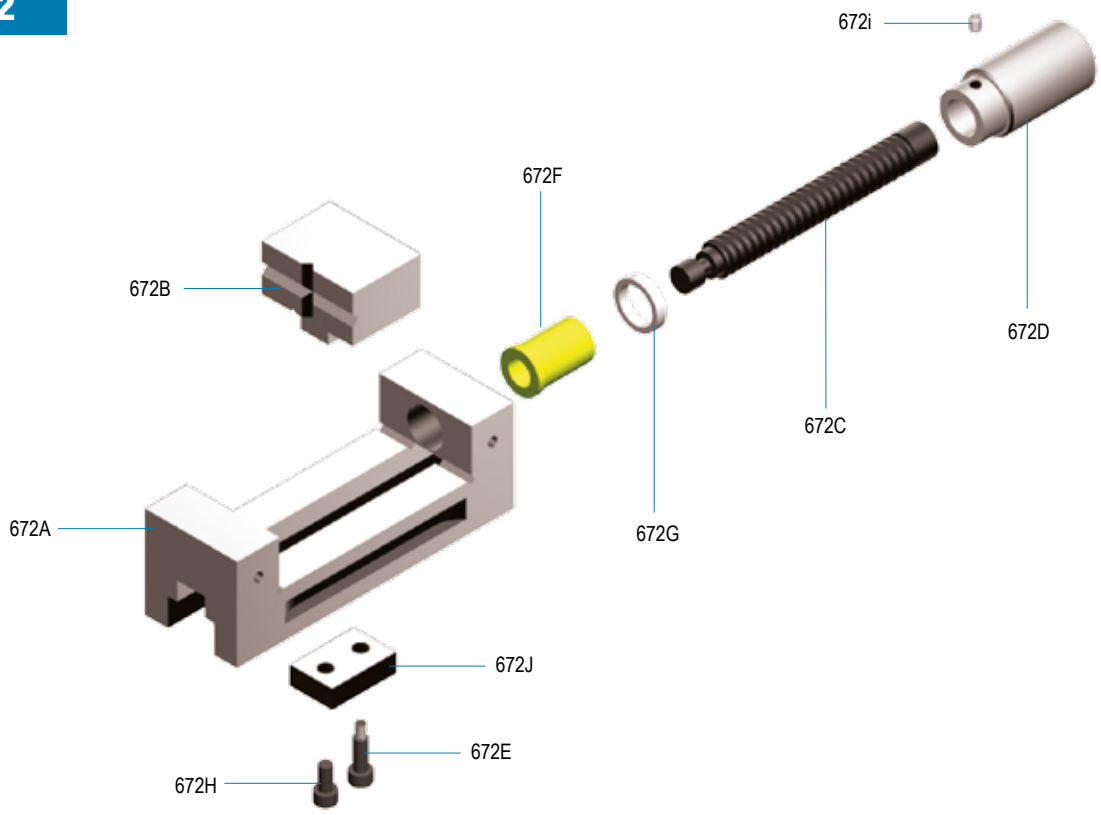


Tipo (grandezza) morsa / Vise type (size)		1	2	3	4	5	6	7
Apertura massima / Maximum spread	A	67	87	102	102	127	160	170
	W	50	63	73	80	100	125	150
	B	25	31	35	40	45	50	50
	C	50	63	70	80	90	100	100
	D	150	185	205	215	255	315	350
	E	23	28	28	33	38	38	40
	F	37	42	47	47	52	79	100
	G							
	H	215	250	280	390	330	364	399
	kg	2,7	3,7	5,3	6,5	11,1	18,5	21
	Cod.	1.67.21000	1.67.22000	1.67.23000	1.67.24000	1.67.25000	1.67.26000	1.67.27000

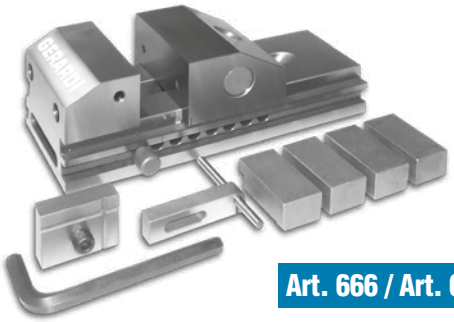


Tipo (grandezza) morsa / Vise type (size) kN		1	2	3	4	5	6	7
Base Morsa Vise Base	**Art. 672A**	Cod. 1.67.2A100	1.67.2A200	1.67.2A300	1.67.2A400	1.67.2A500	1.67.2A600	1.67.2A700
Ganascia Mobile Movable Jaw	**Art. 672B**	Cod. 1.67.2B100	1.67.2B200	1.67.2B300	1.67.2B400	1.67.2B500	1.67.2B600	1.67.2B700
Vite di Spinta Main Screw	**Art. 672C**	Cod. 1.67.2C100	1.67.2C200	1.67.2C300	1.67.2C400	1.67.2C500	1.67.2C600	1.67.2C700
Impugnatura Vite Handle screw	**Art. 672D**	Cod. 1.67.2D100	1.67.2D200	1.67.2D300	1.67.2D400	1.67.2D500	1.67.2D600	1.67.2D700
Vite calibrata ganascia mobile Movable jaw shoulder screw	**Art. 672E**	Cod. 1.67.2E100	1.67.2E200	1.67.2E300	1.67.2E400	1.67.2E500	1.67.2E600	1.67.2E700
Boccola Bushing	**Art. 672F**	Cod. 1.67.2F100	1.67.2F200	1.67.2F300	1.67.2F400	1.67.2F500	1.67.2F600	1.67.2F700
Ghiera Nut	**Art. 672G**	Cod. 1.67.2G100	1.67.2G200	1.67.2G300	1.67.2G400	1.67.2G500	1.67.2G600	1.67.2G700
Vite Screw	**Art. 672H**	Cod. 1.67.2H100	1.67.2H200	1.67.2H300	1.67.2H400	1.67.2H500	1.67.2H600	1.67.2H700
Vite Screw	**Art. 672I**	Cod. 1.67.2I100	1.67.2I200	1.67.2I300	1.67.2I400	1.67.2I500	1.67.2I600	1.67.2I700
Pattino ganascia mobile Sliding plate for movable jaw	**Art. 672J**	Cod. 1.67.2J100	1.67.2J200	1.67.2J300	1.67.2J400	1.67.2J500	1.67.2J600	1.67.2J700

Art. 672



DIAGRAMMI SERRAGGIO MECCANICO CON CHIAVE DINAMOMETRICA
DIAGRAMS MECHANICAL CLAMPING WITH TORQUE WRENCH



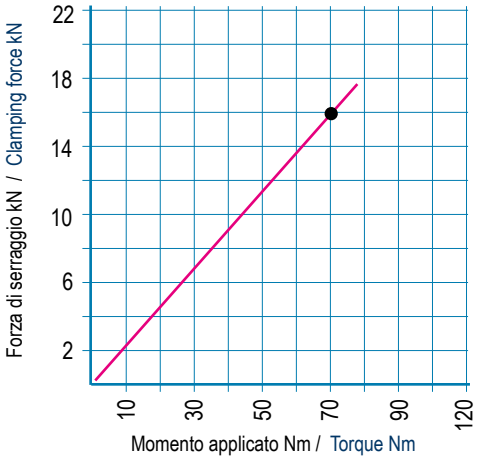
Art. 666 / Art. 666S

I diagrammi seguenti consentono di determinare le forze di serraggio ottenibili con le morse di varia grandezza (da 2 a 8), in funzione del momento applicato

The following diagrams give the clamping force that can be obtained with each vise type (size 2 to 8) depending on the torque

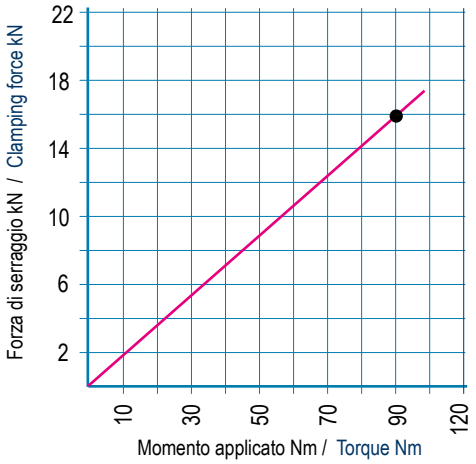
MORSE **OK** TIPO 2
OK VISES TYPE 2

Chiave dinamometrica BETA 610/10X
Torque wrench BETA 610/10X



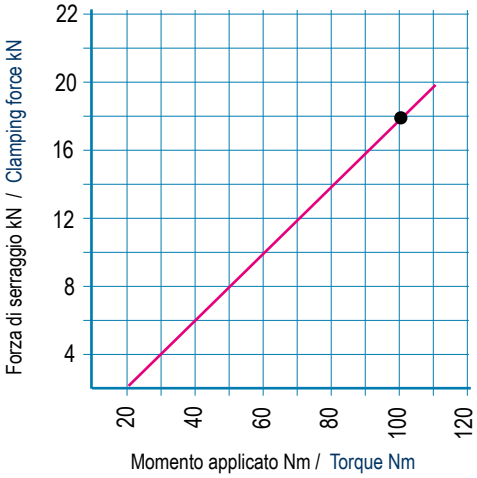
MORSE **OK** TIPO 3
OK VISES TYPE 3

Chiave dinamometrica BETA 610/10X
Torque wrench BETA 610/10X



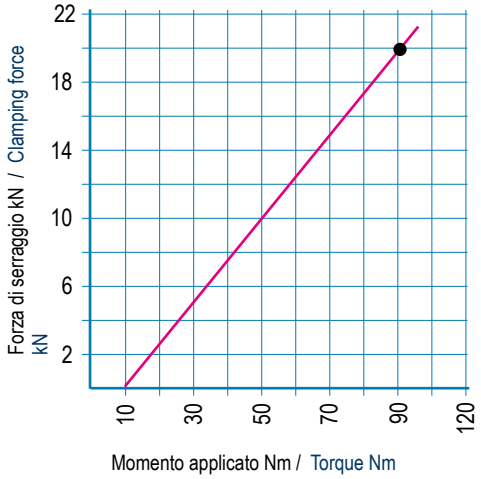
MORSE **OK** TIPO 4-5-6-7
OK VISES TYPE 4-5-6-7

Chiave dinamometrica BETA 610/10X
Torque wrench BETA 610/10X



MORSE **OK** TIPO 8
OK VISES TYPE 8

Chiave dinamometrica BETA 610/10X
Torque wrench BETA 610/10X



NB: Alcuni fattori, come la lubrificazione, lo staffaggio, gli attriti ed altro, possono modificare i valori indicati fino a ± 10%. Per un corretto utilizzo non superare i valori indicati nel grafico

Some factor as lubrication, clamping on the machine table, frictions and more can modify above values within a ± 10% range. For optimum operation do not exceed chart values.