

**XL Series
MORSE - VISES**

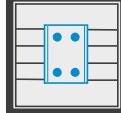
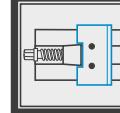
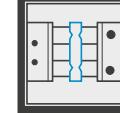
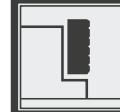
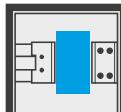
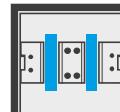
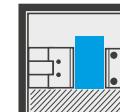
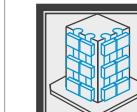
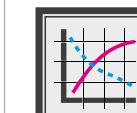


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SIMBOLOGIA DATI TECNICI TECHNICAL DATA ICONS

GANASCE JAWS					
PIASTRE GANASCE JAW PLATES					
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MORSE series XL

XL VISES series

La Morse XL prendono il nome dalle dimensioni Extra Large delle loro basi, molto più lunghe delle morse STD !
XL vises derive their name from the Extra Large vise base dimension that is much longer than STD vises !

Le morse **GERARDI** sono ormai considerate sinonimo di produzione ad alto livello tecnologico per l'accurata scelta dei materiali impiegati e per la precisione raggiunta anche nei minimi particolari. Accuratamente rettificate in ogni loro particolare ed ampiamente collaudate, consentono:

- una capacità di massimo rendimento della macchina / un forte carico di pressione / una maggior potenza di taglio,
- esclusione totale di vibrazioni / minor usura dell'utensile / una più precisa lavorazione

La costruzione con un sistema di elementi componibili consente le più svariate possibilità di impiego e combinazioni in caso di necessità.

Lo spazio sulla tavola della macchina a volte è limitato: le morse **XL** sono la risposta che vi permette di avere **due morse in una** perché si possono trasformare rapidamente da **morsa doppia a morsa singola di grande apertura**. La versione **XL doppia** permette la lavorazione di un numero maggiore di pezzi sfruttando al massimo la lunghezza della tavola della macchina utensile, ciò significa aumentare la produttività delle fasi attive del ciclo e di macchina stessa in quanto abbiamo:

- riduzione del numero dei carichi e conseguente risparmio dei tempi morti di fermo macchina / una minore incidenza (50%) dei tempi di cambio utensile / minori tempi di spostamento da una serie di pezzi a quella successiva / minore usura della macchina / operatore più libero dati i più lunghi tempi di ciclo complessivi.

In definitiva tutto ciò permette di ridurre al minimo i tempi morti di lavoro e quindi un più rapido ammortamento degli impianti e delle stesse attrezzature. La versione **XL singola** permette il serraggio di pezzi di dimensioni insolite e di piastre (con le appropriate ganasce). La notevole gamma di dimensioni e le lunghezze delle basi garantisce il soddisfacimento delle più svariate necessità nonché una rigidità notevole dell'attrezzatura. Esiste la possibilità comunque di connettere due basi singole tramite un'apposita ganascia **Àssa doppia** di collegamento per ottenere una morsa **XL doppia** da due basi standard (gr. 1) singole. A richiesta tutte le morse sono fornibili con tasselli di riferimento di varie grandezze o con fori calibrati.

GERARDI vises are manufactured under rigid quality control. Only the most suitable materials are used, and the accuracy of even the smallest components is assured. As a result of the high standard construction Gerardi vises can maintain their accuracy under the most severe operating conditions. Hardened and Ground steel construction throughout allowing you maximum machine performance with:

- bigger clamping power / bigger cutting performances / total exclusion of vibrations / lower tool wear
- higher precision during machinework

The modular design and the concept of interchangeability makes possible a wide variety of set up combination and solutions.

Space on the machine table is sometimes limited: **XL vises** enable to have **2 vises in 1** because they can quickly change from **double vise to single vise with very large opening**. Double XL vise allows to machine more workpieces using the total length of the machine tool, this means to increase productivity of the workcycle and of the machine itself because:

- reduction of total number of loading and unloading with consequence **save of dead times/interruptions** if machine is not working,
- reduction (50%) of total tool changing time,
- lower moving time from a series of pieces to another,
- lower machine wear,
- more time the operator can walk away to do other work because of longer total cycle times.

In conclusion all this allows to reduce to a minimum dead times/interruptions and consequently faster payback period of machines and fixtures.

Single XL vise allows to clamp **pieces of unusual dimensions and plates** (with the right jaws). The very wide range of widths and lengths of bases guarantees the satisfaction of the widest variety of works and a big rigidity of the fixture too. There is anyway the possibility to connect 2 single vises through a dedicated double fixed connection jaw to get one XL vise starting from 2 standard single bases. On request all vises can be supplied with key-nuts of different sizes or with ground holes.



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.

1-2 RAPIDITA' DEI SERRAGGI

Grazie allo scorrimento del gruppo di serraggio nella guida della base (a cremagliera) \approx 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 intercambiabili e indipendenti:

1 - Idraulici / 2 - Pneumatici / 3 - Idraulici manuali / 4 - Idraulici elettrici.
L'operazione è in termini di secondi.

1-2 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.

Art. 30

Morsa XL doppia apertura con ganascia mobile guidata monoblocco

Double opening XL vise with solid movable guided jaws



Art. 20

5 SERRAGGI INDEPENDENTI

Due Gruppi di serraggio indipendenti

5 INDEPENDENT CLAMPINGS

Two independent clamping devices

7-8 GANASCIA FISSA DOPPIA

Ganasce fisse doppie posizionabili sia al centro (per serraggi doppi), sia all'estremità della base (per serraggi singoli di particolari di grosse dimensioni).

7-8 DOUBLE FIXED JAWS

Double fixed jaw position both in the center of the vise base (for double clamping) and at the end (for single big workpieces Clamping).

3-4 PRECISIONI $\pm 0,02$ 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 ($\varnothing 16$ mm F7), a richiesta, previsti nella parte inferiore della base di ciascuna morsa. Naturalmente tutto ciò consente oltre alle precisioni dichiarate tempi di installazione ristrettissimi.

3-4 HIGHEST ACCURACIES $\pm 0,02$ mm

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



6 FORI FILETTATI SOPRA LE GANASCE PER APPLICAZIONI SPECIALI

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

6 THREADED HOLES ON THE TOP OF THE JAWS FOR SPECIAL APPLICATIONS

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

9-10 DUE SERIE DI CHIAVETTE

Due serie di chiavette per due posizioni alternative delle ganasce fisse doppie.

9-10 TWO DIFFERENT KEYWAYS

Two different keyways for two alternative positions of the double fixed jaw.

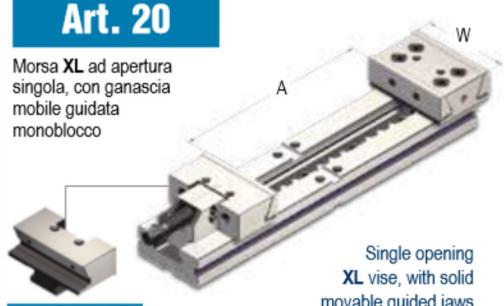


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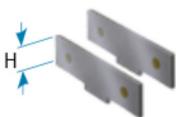
Tipo (grandezza) morsa / Vise (type) size	kN	1	2	3	4				
		16 kN	25 kN	30 kN					
Apertura massima / Maximum spread	A	290	320	360	460	400	500	600	700
	W	100	125	150			175		
	B	30	40	50			60		
	C	35	40	50			58		
	D	460	520	580	680	666	766	866	966
	G	75	95	125			145		
	kg	10	17	32	35	47	52	56	61
	Cod.	3.21.0000	3.22.1000	3.23.2000	3.23.3000	3.24.2000	3.24.3000	3.24.4000	3.24.5000

Art. 20

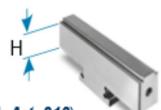
Morsa XL ad apertura singola, con ganascia mobile guidata monoblocco

Single opening
XL vise, with solid
movable guided jaws

Monoblocco - Solid

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. 212Ganascia 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
H				

Art. 217Ganascia mobile prismatica
Prismatic movable jaw

Cod.	2.21.71000	2.21.72000	2.21.73000	2.21.74000
H				

Art. 242G

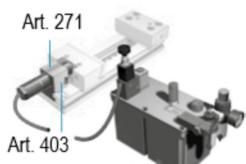
NEW!

Piastra ganascia con inserti GRIP
Jaw plate with GRIP inserts

Cod.	1.24.2G100	1.24.2G200	1.24.2G300	1.24.2G400
H				

Art. 271Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder

Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000
H				

**Art. 391**

CNC / CNC

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000
H				

Art. 392

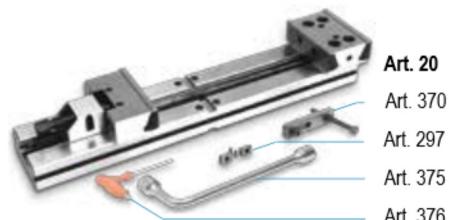
Pneumatico / Air control

Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000
H				

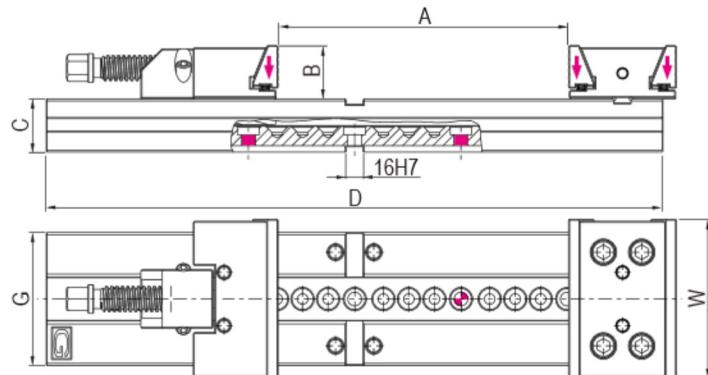
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli contemporanei o indipendenti, da 2 a 6 morsa. Vedi da pag. 4.36 a 4.47

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



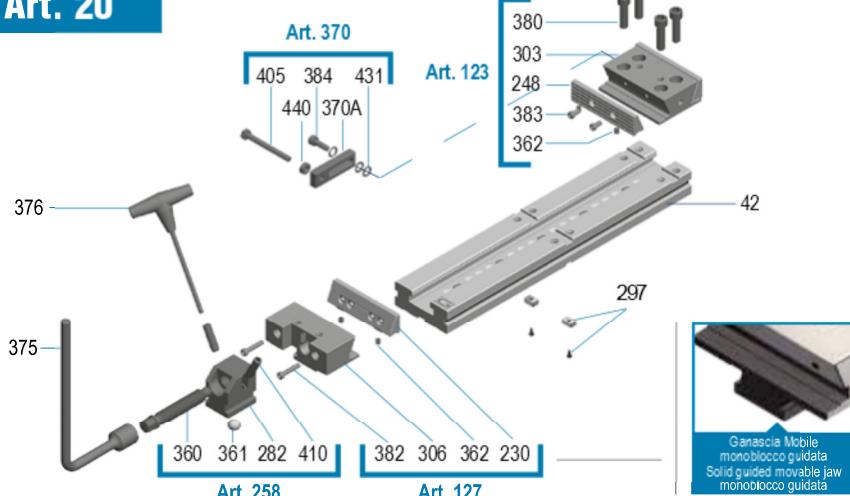
5 40 kN					6 40 kN							
500	600	700	800	900	500	600	700	800	900	1000	1100	
200								300				
65								80				
70								78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
64	69	74	79	84	95	105	115	125	135	145	155	
3.25.20000	3.25.30000	3.25.40000	3.25.50000	3.25.60000	3.26.20000	3.26.30000	3.26.40000	3.26.50000	3.26.60000	3.26.70000	3.26.80000	

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 independent, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 20



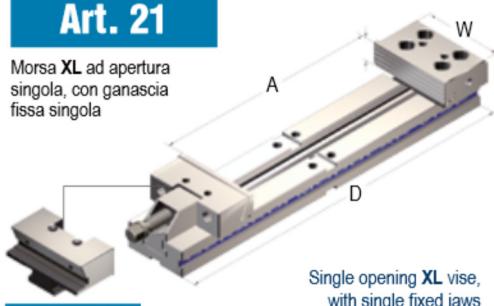
Art.	Pag.	Art.	Pag.
42	2.30	375	4.31
230	4.9	376	4.31
248	4.9	380	4.24
282	4.32	382	4.24
297	4.31	383	4.24
303	4.25	384	4.24
306	4.25	405	4.31
360	4.32	410	4.32
361	4.32	431	4.24
362	4.24	440	4.24
370A	4.31	-	-



Tipo (grandezza) morsa / Vise (type) size	kN	1	2	3	4				
		16 kN	25 kN	30 kN	30 kN				
Apertura massima / Maximum spread	A	290	320	360	460	400	500	600	700
	W	100	125	150			175		
	B	30	40	50			60		
	C	35	40	50			58		
	D	460	520	580	680	666	766	866	966
	G	75	95	125			145		
	kg	10	17	32	35	47	52	56	61
	Cod.	2.21.00000	2.21.23200	2.21.33600	2.21.34600	2.21.44000	2.21.45000	2.21.46000	2.21.47000

Art. 21

Morsa XL ad apertura singola, con ganascia fissa singola

Single opening XL vise,
with single fixed jaws

Monoblocco - Solid

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313Piastre 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. 212Ganascia 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. 217Ganascia mobile prismatica
Prismatic movable jaw

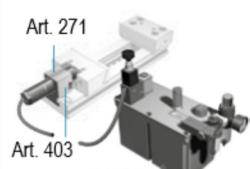
Cod. 2.21.71000 2.21.72000 2.21.73000 2.21.74000

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. 271Supporto 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

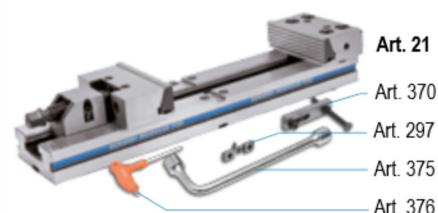
Art. 392
Pneumatico / Air control

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 morsa. Vedi da pag. 4.36 a 4.47

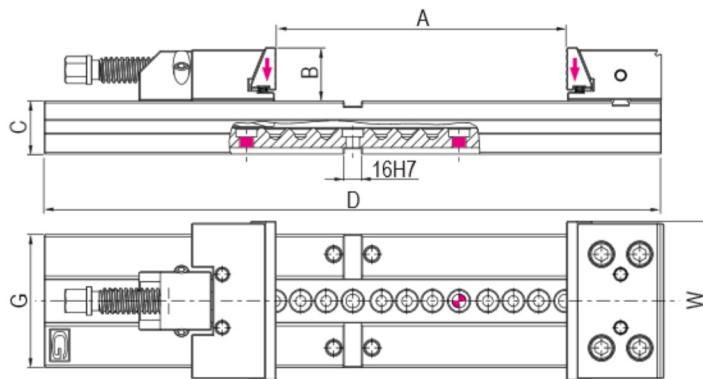
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Standard equipment:

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(Standard for 16 mm slot. Other dimensions available on request without price change)
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Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories



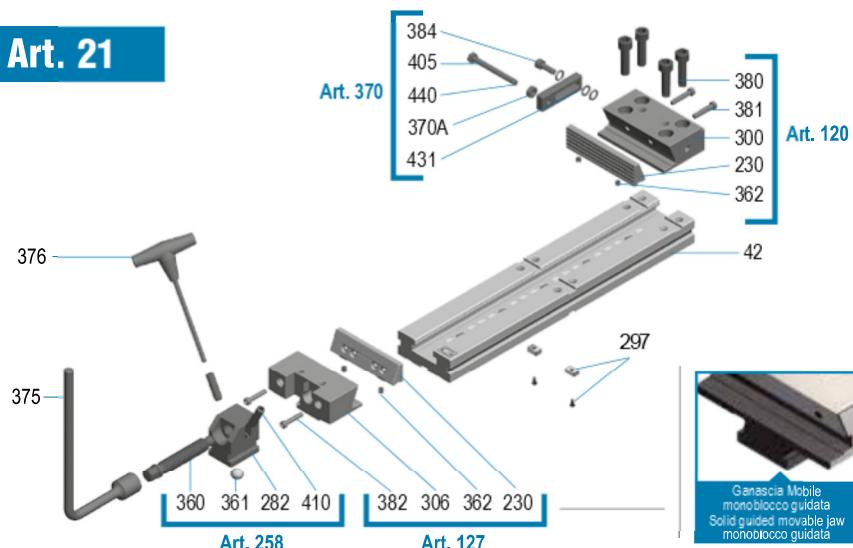
5 40 kN					6 40 kN							
500	600	700	800	900	500	600	700	800	900	1000	1100	
200								300				
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70								78				
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2.21.55000	2.21.56000	2.21.57000	2.21.58000	2.21.59000	2.21.65000	2.21.66000	2.21.67000	2.21.68000	2.21.69000	2.21.61000	2.21.61100	

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 independent, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 21



Genascia Mobile
monoblocco guidata
Solid guided movable jaw
monoblocco guidata

Art.	Pag.	Art.	Pag.
42	2.30	375	4.31
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362	4.24	440	4.24
370A	4.31	-	-



Tipo (grandezza) morsa / Vise (type) size	kN	1	2	3	4				
		16 kN	25 kN	30 kN					
Apertura massima / Maximum spread	A	290	320	360	460	400	500	600	700
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	C	35	40	50			58		
	D	460	520	580	680	666	766	866	966
	G	75	95	125			145		
	kg	9.4	15.8	29.8	32.8	44.8	49.8	54.8	59.8
	Cod.	3.21.00220	3.22.10220	3.23.20220	3.23.30220	3.24.20220	3.24.30220	3.24.40220	3.24.50220

Art. 22

Morsa XL ad apertura singola con ganasce ridotte rettificate.
(Maggior Pressione)



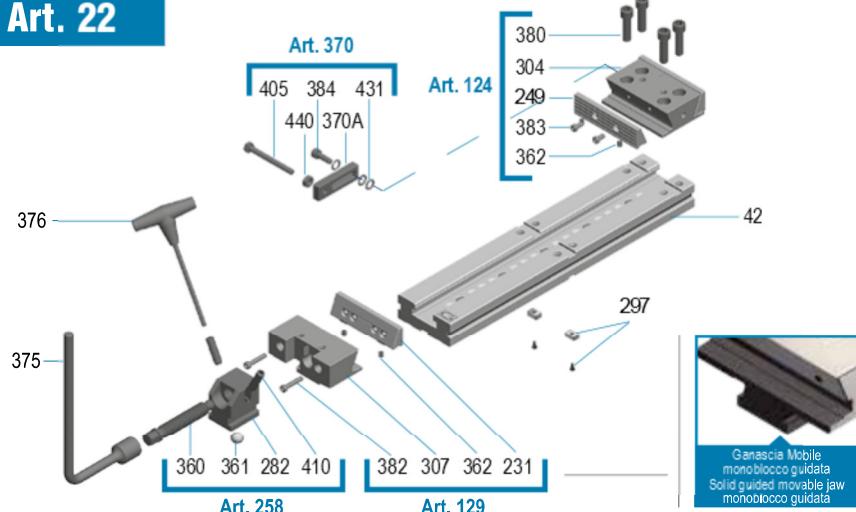
5 40 kN					6 40 kN							
500	600	700	800	900	500	600	700	800	900	1000	1100	
170								195				
	65							80				
	70							78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
82.5	88.5	96.5	103.5	110.5	116	129	139	149	159	169	179	
3.25.20220	3.25.30220	3.25.40220	3.25.50220	3.25.60220	3.26.20220	3.26.30220	3.26.40220	3.26.50220	3.26.60220	3.26.70220	3.26.80220	

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

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

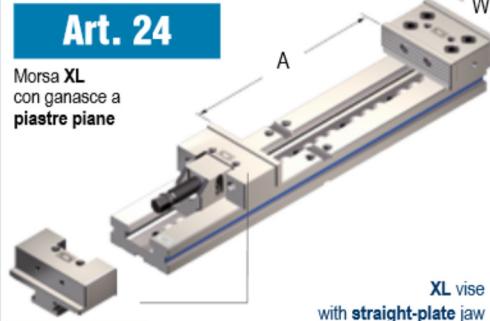
Pneumo-hydraulic servo units (complete of hydraulic cylinder + support) for multiple clamping simultaneous or independent, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 22



Art.	Pag.	Art.	Pag.
42	2.30	375	4.31
231	4.9	376	4.31
249	4.9	380	4.24
282	4.32	382	4.24
297	4.31	383	4.24
304	4.25	384	4.24
307	4.25	405	4.31
360	4.32	410	4.32
361	4.32	431	4.24
362	4.24	440	4.24
370A	4.31	-	-

Tipo (grandezza) morsa / Vise (type) size	kN	1		2		3		4			
		16 kN	25 kN	30 kN							
Apertura massima / Maximum spread	A	290	320	360	460	400	500	600	700		
	W	100	125	150				175			
Art. 24	A	30	40	50				60			
Morsa XL con ganasce a piastre piane	C	35	40	50				58			
	D	460	520	580	680	666	766	866	966		
	G	75	95	125				145			
	kg	9.4	15.8	29.8	32.8	44.8	49.8	54.8	59.8		
	Cod.	2.24.12900	2.24.23200	2.24.33600	2.24.34600	2.24.44000	2.24.45000	2.24.46000	2.24.47000		
Monoblocco - Solid											



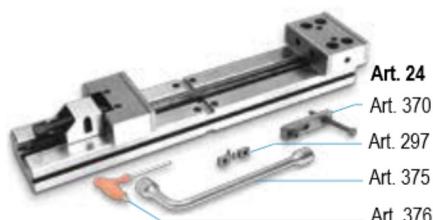
AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313		Cod. 4.31.31000	4.31.32000	4.31.33000	4.31.34000
Piastra magnetica parallela piana Magnetic parallel plates	H	23	33	43	53
Art. 212		Cod. 1.21.21000	1.21.22000	1.21.23000	1.21.24000
Ganascia mobile intermedia (da usare con Art. 313) Intermediate movable jaw (to be used with Art. 313)	H				
Art. 246		Cod. 1.24.61000	1.24.62000	1.24.63000	1.24.64000
Piastra piana in acciaio lavorabile Machinable steel straight jaw plate					
Art. 246G NEW!		Cod. 1.24.6G100	1.24.6G200	1.24.6G300	1.24.6G400
Piastra piana con inserti GRIP Straight jaw plate with GRIP inserts					
Art. 271		Cod. 2.27.11000	2.27.12000	2.27.13000	2.27.14000
Supporto di serraggio con cilindro idraulico Clamping support with hydraulic cylinder					
Art. 271		Cod. 4.39.11000	4.39.12000	4.39.13000	4.39.14000
Art. 403	Art. 391 CNC / CNC				
Art. 393					
Art. 392		Cod. 4.39.21000	4.39.22000	4.39.23000	4.39.24000
	Pneumatico / Air control				

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

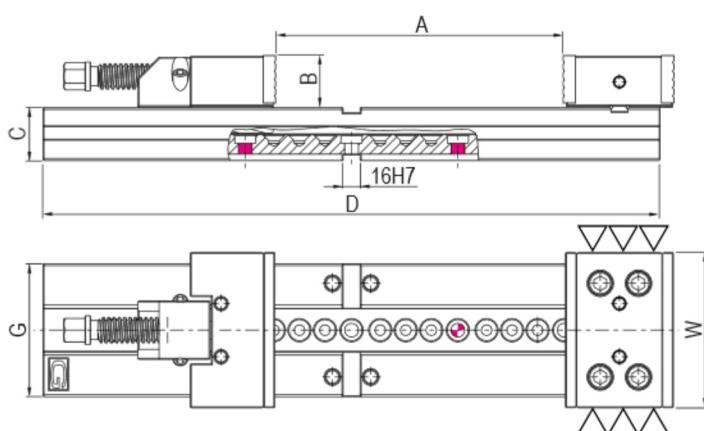
Dotazione standard:

- 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



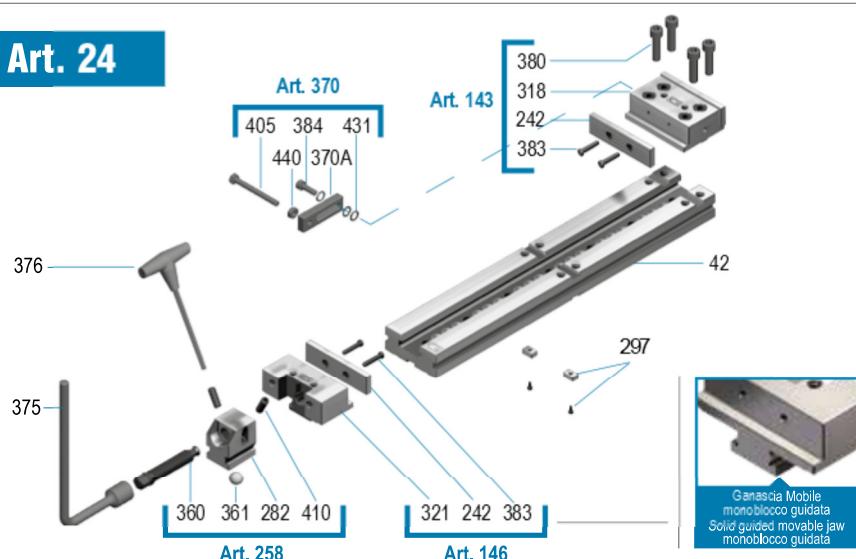
5 40 kN					6 40 kN							
500	600	700	800	900	500	600	700	800	900	1000	1100	
200								300				
65								80				
70								78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
82.5	88.5	96.5	103.5	110.5	116	129	139	149	159	169	179	
2.24.55000	2.24.56000	2.24.57000	2.24.58000	2.24.59000	2.24.65000	2.24.66000	2.24.67000	2.24.68000	2.24.69000	2.24.61000	2.24.61100	

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		
1.24.65000		1.24.66000
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 independent, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 24



Art.	Pag.	Art.	Pag.
42	2.30	380	4.24
242	4.11	383	4.24
282	4.32	384	4.24
297	4.31	405	4.31
318	4.26	410	4.32
321	4.26	431	4.24
360	4.32	440	4.24
361	4.32	-	-
370A	4.31	-	-
375	4.31	-	-
376	4.31	-	-

Tipo (grandezza) morsa / Vise (type) size	kN	1		2		3		4			
		16 kN	25 kN	30 kN							
Apertura massima / Maximum spread		A	290	320	360	460	400	500	600	700	
Art. 25		W	75	95	125			145			
Morsa XL con ganasce a piastre GRIP a forte serraggio (ridotte rettificate)		B	30	40	50			60			
		C	35	40	50			58			
		D	460	520	580	680	666	766	866	966	
		G	75	95	125			145			
		kg	9.4	15.8	29.8	32.8	44.8	49.8	54.8	59.8	
		Cod.	2.25.12900	2.25.23200	2.25.33600	2.25.34600	2.25.44000	2.25.45000	2.25.46000	2.25.47000	
Monoblocco - Solid											

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313R

Piastra magnetica parallela piana
Magnetic parallel plates



Cod. 4.31.3R100 4.31.3R200 4.31.3R300

4.11.3R400

H 23 33 43

53

Art. 218

Ganascia mobile prismatica
Prismatic movable jaw



Cod. 2.21.81000 2.21.82000 2.21.83000

2.21.84000

Art. 247

Piastra piana in acciaio lavorabile
Machinable steel straight jaw plate



Cod. 1.24.71000 1.24.72000 1.24.73000

1.24.74000

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

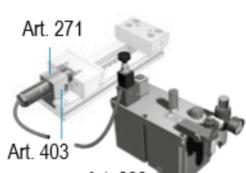
Art. 271

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

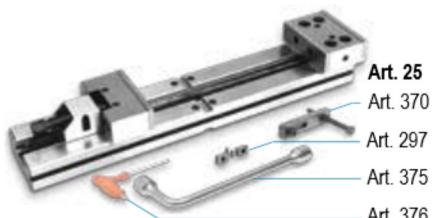
Cod. 4.39.21000 4.39.22000 4.39.23000

4.39.24000

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

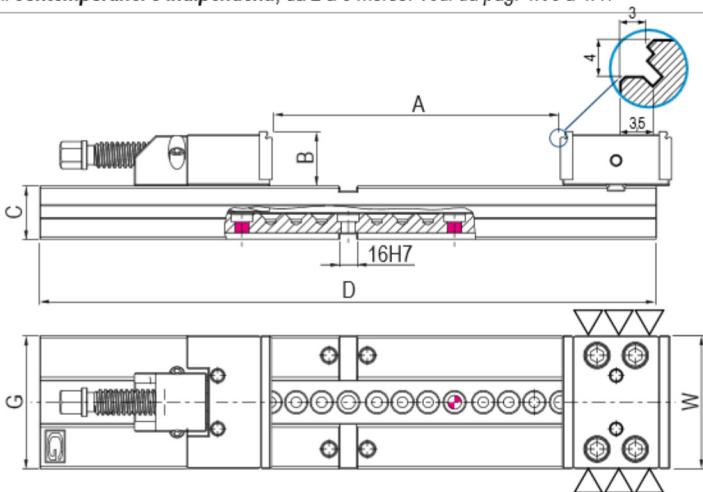
Dotazione standard:

- 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



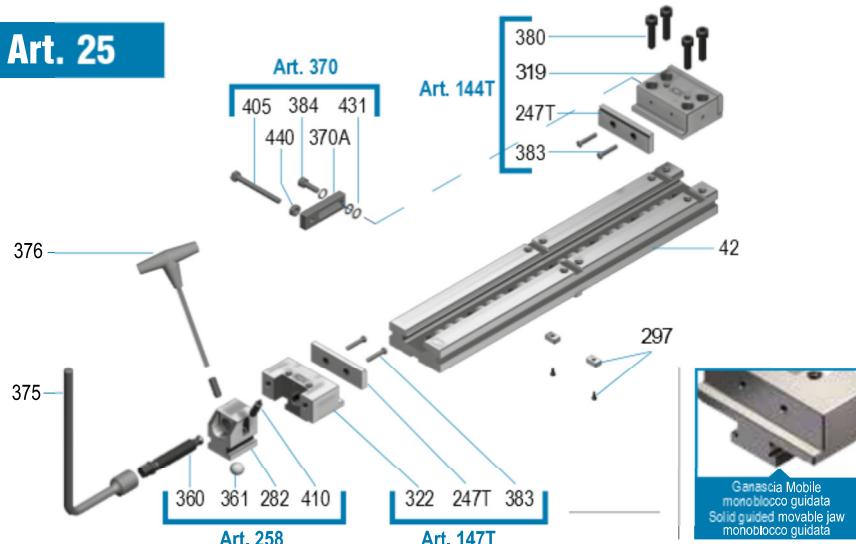
5 40 kN					6 40 kN							
500	600	700	800	900	500	600	700	800	900	1000	1100	
170								195				
	65							80				
	70							78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
82.5	88.5	96.5	103.5	110.5	116	129	139	149	159	169	179	
2.25.55000	2.25.56000	2.25.57000	2.25.58000	2.25.59000	2.25.65000	2.25.66000	2.25.67000	2.25.68000	2.25.69000	2.25.61000	2.25.61100	

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

4.31.3R500 Art. 313 53		4.31.3R600 68
2.21.85000 Art. 218		2.21.86000
1.24.75000 Art. 247		1.24.76000
1.24.7G500 Art. 247G		1.24.7G600
2.27.15000 Art. 271		2.27.16000
4.39.15000 Art. 391		4.39.16000
4.39.25000 Art. 392		4.39.26000

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

Art. 25



Art.	Pag.	Art.	Pag.
42	2.30	380	4.24
247T	4.11	383	4.24
282	4.32	384	4.24
297	4.31	405	4.31
319	4.26	410	4.32
322	4.26	431	4.24
360	4.32	440	4.24
361	4.32	-	-
370A	4.31	-	-
375	4.31	-	-
376	4.31	-	-



Tipo (grandezza) morsa / Vise (type) size	kN	1		2		3		4			
		16 kN	25 kN	30 kN	30 kN						
Apertura massima / Maximum spread	A1	2 x 90	2 x 100	2 x 110	2 x 160	2 x 120	2 x 170	2 x 220	2 x 270		
	W	100	125		150			175			
Morsa XL a doppia apertura con ganascia mobile guidata monoblocco	B	30	40		50			60			
	C	35	40		50			58			
	D	460	520	580	680	666	766	866	966		
	G	75	95		125			145			
	kg	14.5	21	39	43	59	64	69	74		
	Cod.	3.31.00600	3.32.10600	3.33.20600	3.33.30600	3.34.20600	3.34.30600	3.34.40600	3.34.50600		
Monoblocco - Solid											

Art. 30

Morsa XL a doppia apertura con ganascia mobile guidata monoblocco



Monoblocco - Solid

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
H				

Art. 217

Ganascia mobile prismatica
Prismatic movable jaw



Cod.	2.21.71000	2.21.72000	2.21.73000	2.21.74000
H				

Art. 242G

NEW!

Piastra piana con inserti GRIP
Straight jaw plate with GRIP inserts



Cod.	1.24.2G100	1.24.2G200	1.24.2G300	1.24.2G400
H				

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
H				

Art. 271

**Art. 391**

CNC / CNC

Art. 392

Pneumatico / Air control

Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000
H				

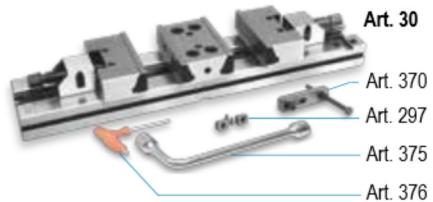
Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000
H				

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

Dotazione standard:

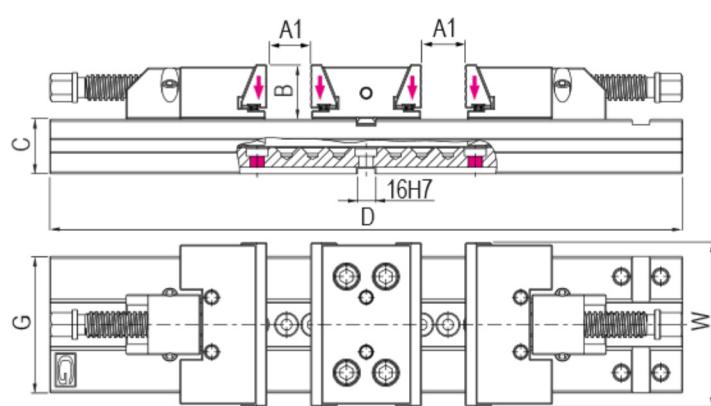
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
(Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376

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



Standard equipment:

- 2 workstamps 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



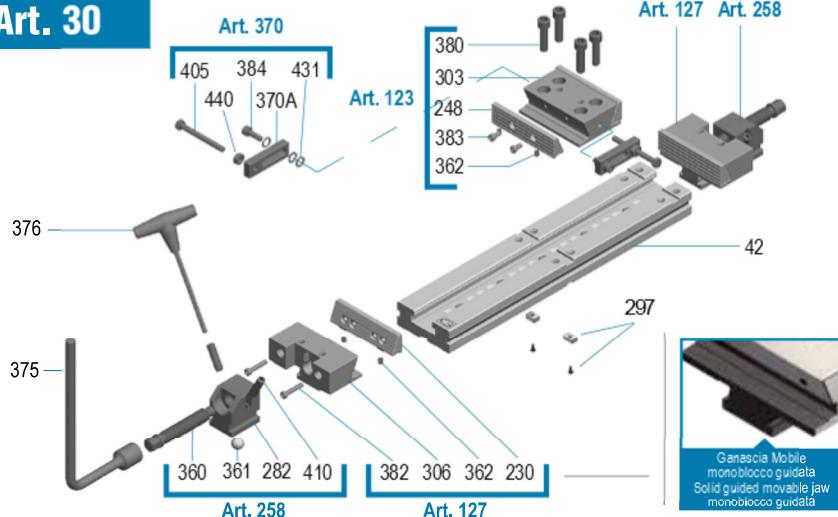
5 40 kN					6 40 kN							
2 x 150	2 x 200	2 x 250	2 x 300	2 x 350	2 x 160	2 x 210	2 x 260	2 x 310	2 x 360	2 x 410	2 x 460	
200								300				
65								80				
70								78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
96	102	108	114	120	155	163	171	179	187	195	213	
3.35.20600	3.35.30600	3.35.40600	3.35.50600	3.35.60600	3.36.20600	3.36.30600	3.36.40600	3.36.50600	3.36.60600	3.36.70600	3.36.80600	

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

4.31.35000 Art. 313	A blue modular vise component with a central clamping mechanism.	4.31.36000
53		68
1.21.25000 Art. 212	A blue modular vise component with a central clamping mechanism.	1.21.26000
2.21.75000 Art. 217	A blue modular vise component with a central clamping mechanism.	2.21.76000
1.24.2G500 Art. 242G	A blue modular vise component with a central clamping mechanism.	1.24.2G600
2.27.15000 Art. 271	A blue modular vise component with a central clamping mechanism.	2.27.16000
4.39.15000 Art. 391		4.39.16000
4.39.25000 Art. 392		4.39.26000

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

Art. 30



Art. | Pag.

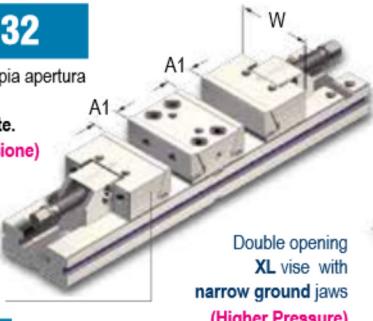
42	2.30
230	4.9
248	4.9
282	4.32
297	4.31
303	4.25
306	4.25
360	4.32
361	4.32
362	4.24
370A	4.31

Art. | Pag.

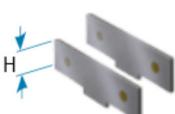
375	4.31
376	4.31
380	4.24
382	4.24
383	4.24
384	4.24
405	4.31
410	4.32
431	4.24
440	4.24
-	-



2

Tipo (grandezza) morsa / Vise (type) size	kN	1		2		3		4			
		16 kN	25 kN	30 kN							
Apertura massima / Maximum spread	A1	2 x 90	2 x 100	2 x 110	2 x 160	2 x 120	2 x 170	2 x 220	2 x 270		
Art. 32											
Morsa XL a doppia apertura con ganasce ridotte rettificate. (Maggior Pressione)											
											
Double opening XL vise with narrow ground jaws (Higher Pressure)											
Monoblocco - Solid											

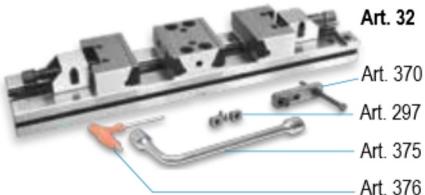
AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313R		Cod. 4.31.3R100	4.31.3R200	4.31.3R300	4.31.3R400
Piastre magnetiche parallele piane Magnetic parallel plates					
H	23	33	43		53
Art. 213		Cod. 1.21.31000	1.21.32000	1.21.33000	1.21.34000
Ganasca mobile intermedia (da usare con Art. 313R) Intermediate movable jaw (to be used with Art. 313R)					
H					
Art. 218		Cod. 2.21.81000	2.21.82000	2.21.83000	2.21.84000
Ganasca mobile prismatica Prismatic movable jaw					
H					
Art. 243G NEW!		Cod. 1.24.3G100	1.24.3G200	1.24.3G300	1.24.3G400
Piastra ganascia ridotta con inserti GRIP Narrow width jaw plate with GRIP inserts					
H					
Art. 271		Cod. 2.27.11000	2.27.12000	2.27.13000	2.27.14000
Supporto di serraggio con cilindro idraulico Clamping support with hydraulic cylinder					
H					
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 morsse. Vedi da pag. 4.36 a 4.47

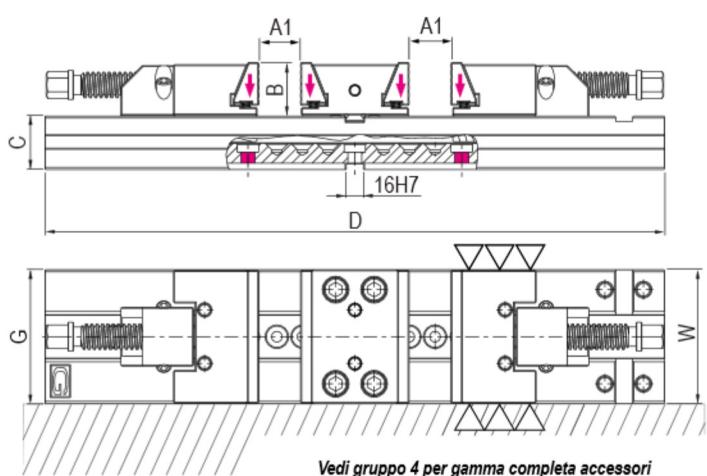
Dotazione standard:

- 2 arresti laterali 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:

- 2 workstops 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



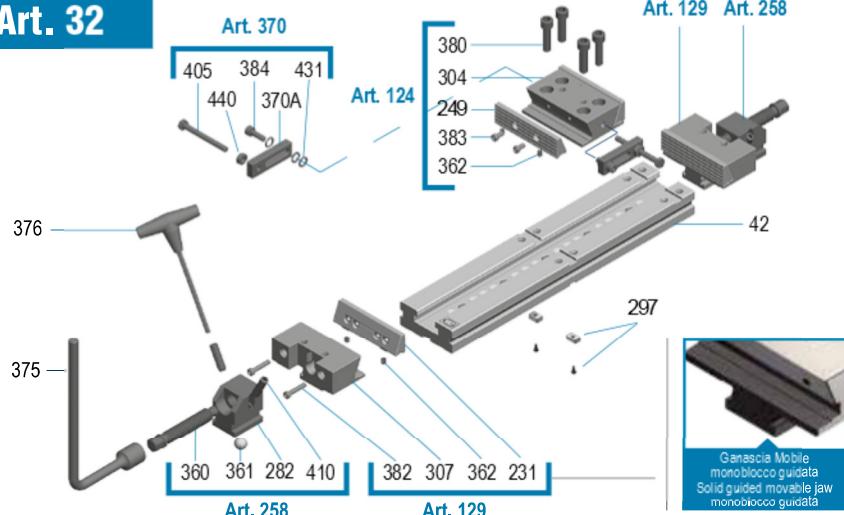
5 40 kN					6 40 kN							
2 x 150	2 x 200	2 x 250	2 x 300	2 x 350	2 x 160	2 x 210	2 x 260	2 x 310	2 x 360	2 x 410	2 x 460	
170								195				
	65							80				
	70							78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
93	99	105	108	117	144	152	160	168	176	184	202	
3.35.20720	3.35.30720	3.35.40720	3.35.50720	3.35.60720	3.36.20720	3.36.30720	3.36.40720	3.36.50720	3.36.60720	3.36.70720	3.36.80720	

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 independent, from 2 to 6 vises. See from page 4.36 to 4.47

Art. 32



Art. | Pag.

42 2.30

231 4.9

249 4.9

282 4.32

297 4.31

304 4.25

307 4.25

360 4.32

361 4.32

362 4.24

370A 4.31

Art. | Pag.

375 4.31

376 4.31

380 4.24

382 4.24

383 4.24

384 4.24

405 4.31

410 4.32

431 4.24

440 4.24

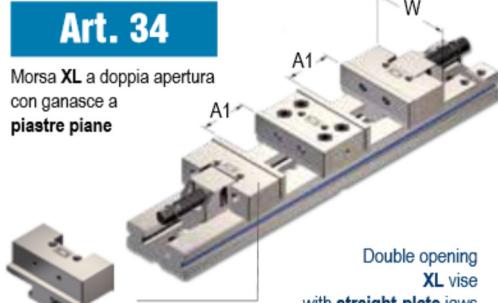
- -



Tipo (grandezza) morsa / Vise (type) size	kN	1 16 kN		2 25 kN		3 30 kN		4 30 kN			
		16 kN	25 kN	30 kN	30 kN						
Apertura massima / Maximum spread	A1	2 x 90	2 x 100	2 x 110	2 x 160	2 x 120	2 x 170	2 x 220	2 x 270		
	W	100	125	150				175			
	B	30	40	50				60			
	C	35	40	50				58			
	D	460	520	580	680	666	766	866	966		
	G	75	95	125				145			
	kg	9.4	15.8	29.8	32.8	44.8	49.8	54.8	59.8		
	Cod.	2.34.19000	2.34.21000	2.34.31100	2.34.31600	2.34.41200	2.34.41700	2.34.42200	2.34.42700		

Art. 34

Morsa XL a doppia apertura con ganasce a piastre piane



Double opening
XL vise
with **straight-plate** jaws

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

Ganasca 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. 2.24.61000 2.24.62000 2.24.63000

2.24.64000

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

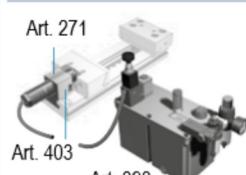
Art. 271

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

Art. 392

Pneumatico / Air control

Cod. 4.39.11000 4.39.12000 4.39.13000

4.39.14000

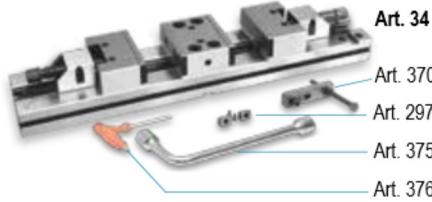
Cod. 4.39.21000 4.39.22000 4.39.23000

4.39.24000

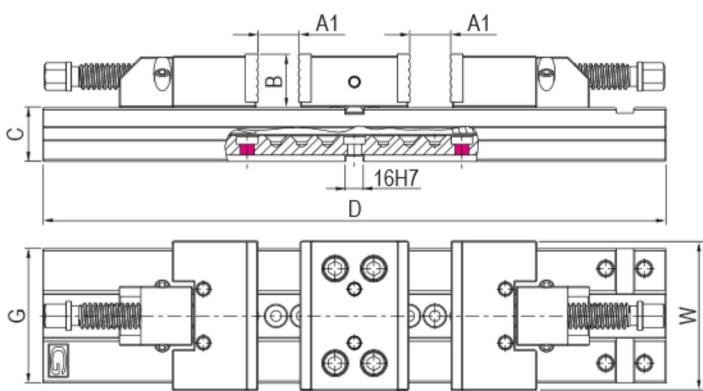
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli **contemporanei o indipendenti**, da 2 a 6 morsi. Vedi da pag. 4.36 a 4.47

Dotazione standard:

- 2 arresti laterali 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:**

- 2 workstops 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



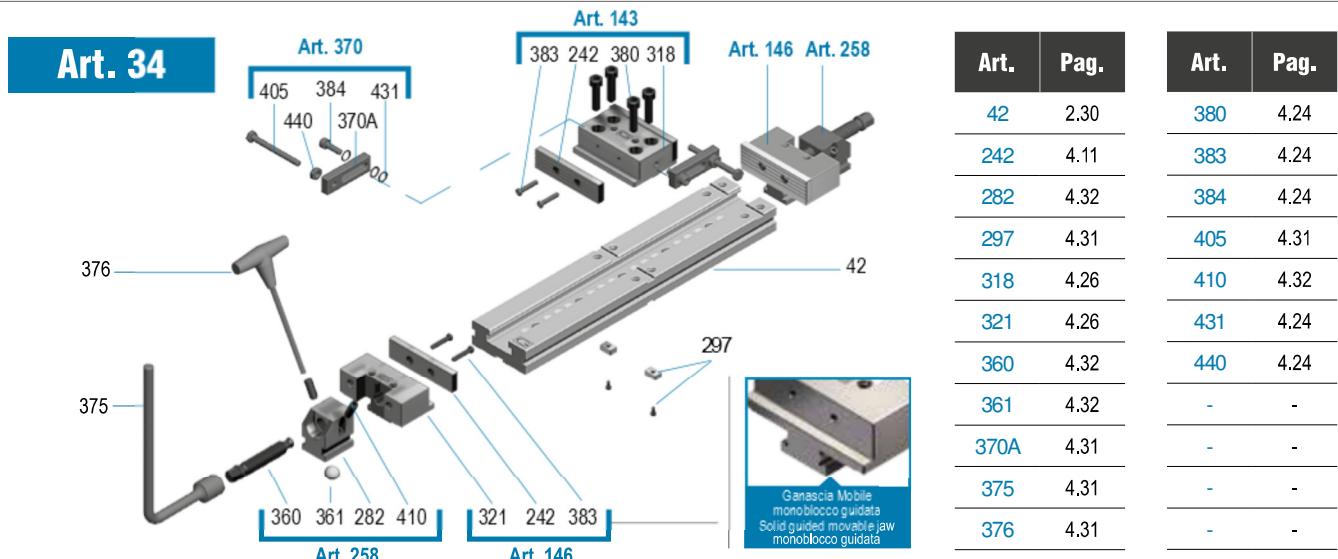
Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

5 40 kN					6 40 kN							
2 x 150	2 x 200	2 x 250	2 x 300	2 x 350	2 x 160	2 x 210	2 x 260	2 x 310	2 x 360	2 x 410	2 x 460	
200								300				
65								80				
70								78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
82.5	88.5	96.5	103.5	110.5	116	129	139	149	159	169	179	
2.34.51500	2.34.52000	2.34.52500	2.34.53000	2.34.53500	2.34.61600	2.34.62100	2.34.62600	2.34.63100	2.34.63600	2.34.64100	2.34.64600	

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

4.31.35000 Art. 313 53		4.31.36000
1.21.25000 Art. 212		1.21.26000
2.24.65000 Art. 246		2.24.66000
1.24.6G500 Art. 246G		1.24.6G600
2.27.15000 Art. 271		2.27.16000
4.39.15000 Art. 391		4.39.16000
4.39.25000 Art. 392		4.39.26000

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

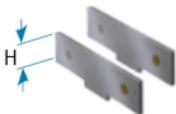




2

Tipo (grandezza) morsa / Vise (type) size	(kN)	1	2	3	4					
		16 kN	25 kN	30 kN	30 kN					
Apertura massima / Maximum spread		A1	2 x 90	2 x 100	2 x 110	2 x 160	2 x 120	2 x 170	2 x 220	2 x 270
Art. 35		W	75	95	125			145		
Morsa XL a doppia apertura con piastre ganasce GRIP a forte serraggio (ridotte rettificate)		B	30	40	50			60		
		C	35	40	50			58		
		D	460	520	580	680	666	766	866	966
		G	75	95	125			145		
		kg	9.4	15.8	29.8	32.8	44.8	49.8	54.8	59.8
		Cod.	2.35.19000	2.35.21000	2.35.31100	2.35.31600	2.35.41200	2.35.41700	2.35.42200	2.35.42700
Monoblocco - Solid										

AMPLIA LE TUE APPLICAZIONI TRAMITE GLI ACCESSORI MODULARI !

Art. 313RPiastre magnetiche parallele piane
Magnetic parallel plates

Cod.	4.31.3R100	4.31.3R200	4.31.3R300	4.11.3R400
H	23	33	43	53

Art. 218Ganasca mobile prismatica
Prismatic movable jaw

Cod.	2.21.81000	2.21.82000	2.21.83000	2.21.84000

Art. 247Piastra piana in acciaio lavorabile
Machinable steel straight jaw plate

Cod.	1.24.71000	1.24.72000	1.24.73000	1.24.74000

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. 271Supporto di serraggio con cilindro idraulico
Clamping support with hydraulic cylinder

Cod.	2.27.11000	2.27.12000	2.27.13000	2.27.14000

Art. 271

Art. 403
Art. 393
Art. 393**Art. 391**

CNC / CNC

Art. 392

Pneumatico / Air control

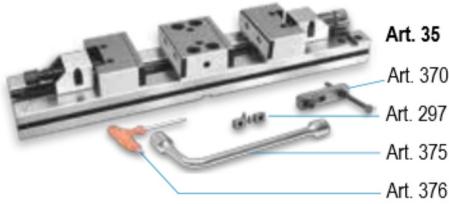
Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

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 morsi. Vedi da pag. 4.36 a 4.47

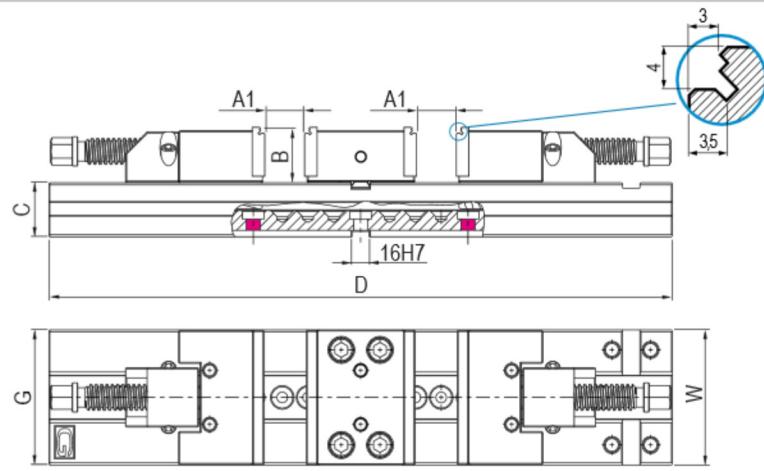
Dotazione standard:

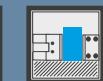
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
(Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376



Standard equipment:

- 2 workshops 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

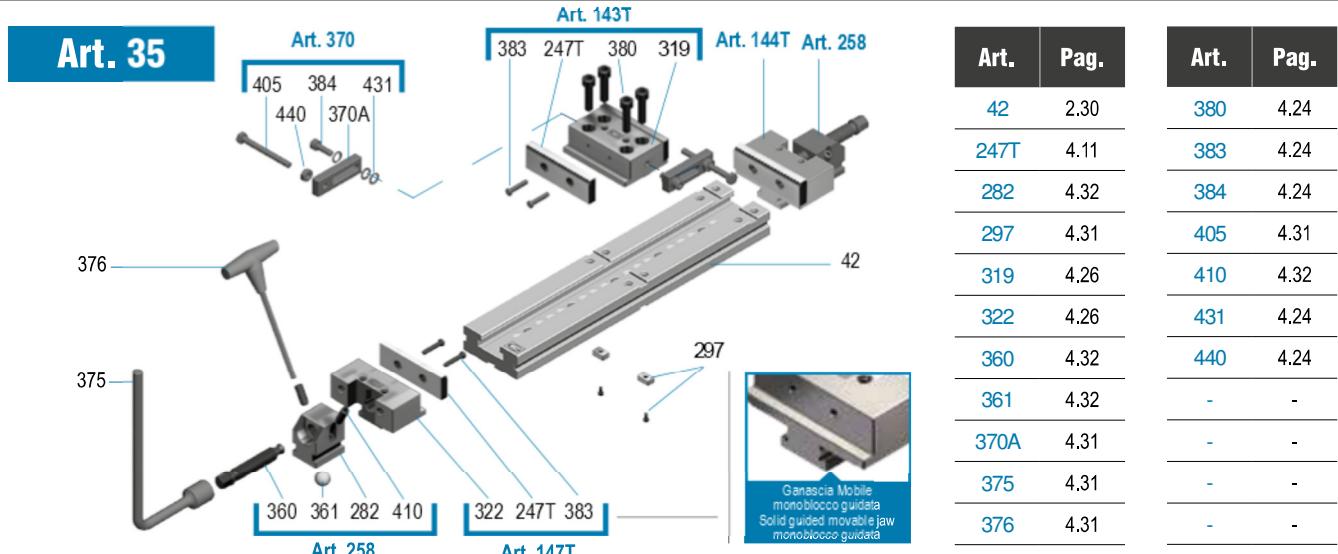


5 40 kN					6 40 kN							
2 x 150	2 x 200	2 x 250	2 x 300	2 x 350	2 x 160	2 x 210	2 x 260	2 x 310	2 x 360	2 x 410	2 x 460	
170								195				
	65							80				
	70							78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
170								195				
82.5	88.5	96.5	103.5	110.5	116	129	139	149	159	169	179	
2.35.51500	2.35.52000	2.35.52500	2.35.53000	2.35.53500	2.35.61600	2.35.62100	2.35.62600	2.35.63100	2.35.63600	2.35.64100	2.35.64600	

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

4.31.3R500 Art. 313		4.31.3R600
53		68
2.21.85000 Art. 218		2.21.86000
1.24.75000 Art. 247		1.24.76000
1.24.7G500 Art. 247G		1.24.7G600
2.27.15000 Art. 271		2.27.16000
4.39.15000 Art. 391		4.39.16000
4.39.25000 Art. 392		4.39.26000

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



MORSE XL CON PIASTRE GANASCE A CAMBIO RAPIDO XL VISES WITH QUICK MANUAL CHANGE JAW PLATES

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

1 ALTISSIMA RIPETIBILITÀ DI POSIZIONAMENTO

con particolari perfettamente in squadra

1 HIGHEST REPOSITIONING ACCURACY

with perfect square workpieces.

2 RICONFIGURAZIONE RAPIDISSIMA

grazie alla piastra ganascia intercambiabile manualmente

2 GREAT SAVINGS IN VISE RESETTING TIMES

thanks to the manual interchangeable quick jaw plate

3 EFFETTO DISCENDENTE

Effetto discendente ampliato 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

Morsa con piastre ganasce a cambio rapido manuale (Sistema a pettine)

Vise with quick manual change jaw plates (Comb system)

Art. 30A



1

2

3

CARATTERISTICHE E VANTAGGI

- USURA INESISTENTE
- RAPIDITÀ DEI SERRAGGI
- MODULARITÀ & VERSATILITÀ
- PRECISIONI $\pm 0,02$ mm
- RIGIDITÀ & SICUREZZA
- DESIGN COMPATTO E MANEGGEVOLEZZA

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

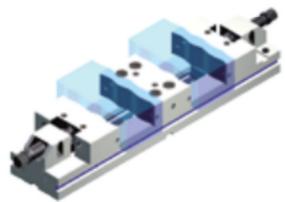
TECHNICAL FEATURES and ADVANTAGES

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

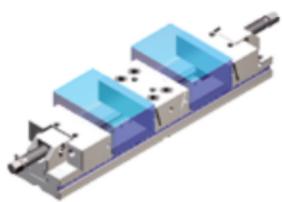
See pag. 1.4 and 1.5 (STANDARD series vises)

PIASTRE GANASCE DISCENDENTI INTERCAMBIABILI MANUALMENTE

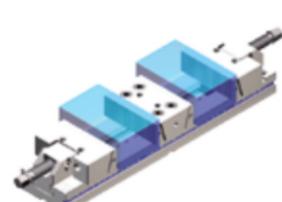
PULL DOWN JAW PLATES INTERCHANGEABLE by HAND



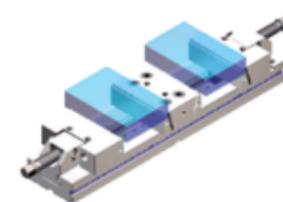
Art. 230B

Dolce
Soft

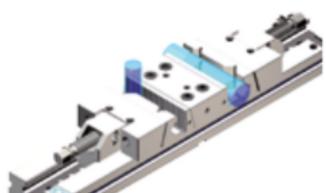
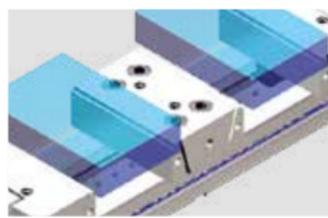
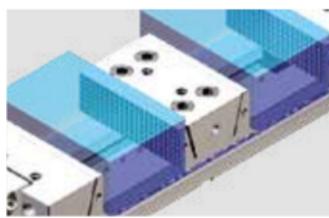
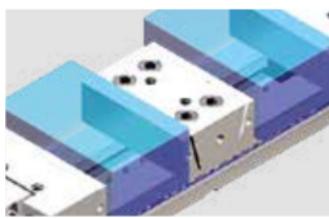
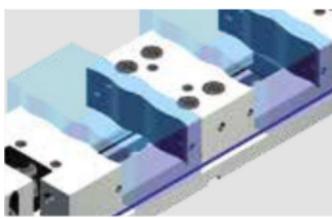
Art. 230C

Liscia
Smooth

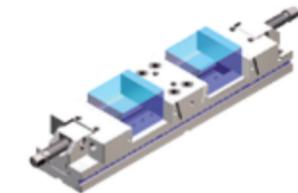
Art. 230D

Zigrinata
Serrated

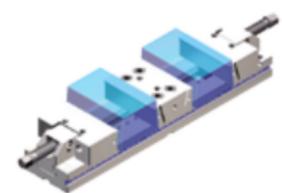
Art. 230E

Con gradino
With step

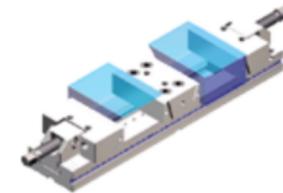
Art. 230F

Prismatica
Prismatic

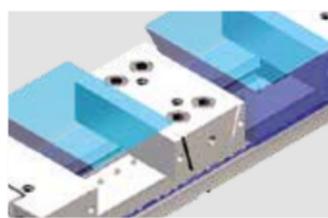
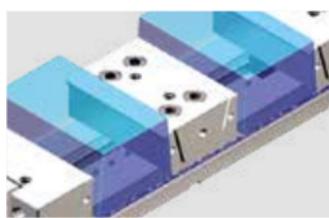
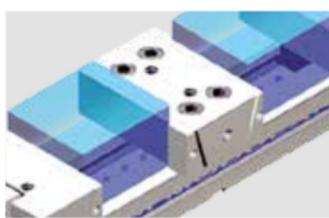
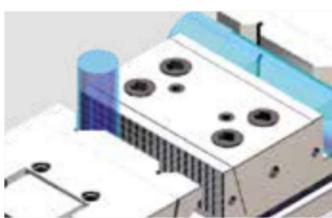
Art. 230G

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

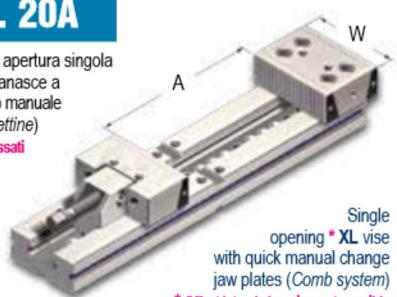
Vedi Pag. 4.18 - See Page.4.18



Tipo (grandezza) morsa / Vise (type) size	kN	1	2	3	4			
		16 kN	25 kN	30 kN				
Apertura massima / Maximum spread	A	290	320	360	460	400	500	600
	W	96	121	146			171	
	B	28	38	48			58	
	C	35	40	50			58	
	D	460	520	580	680	666	766	866
	G	75	95	125			145	
	kg	6.8	12.9	25.5	29	37	42	52
	Cod.	2.20.A1290	2.20.A2320	2.20.A3360	2.20.A3460	2.20.A4400	2.20.A4500	2.20.A4600
								2.20.A4700

Art. 20A

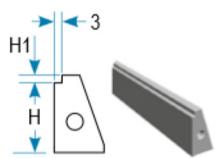
Morsa *XL a apertura singola con piastre ganasce a cambio rapido manuale (Sistema a pettine)
* Serraggi disassati lateralmente non possibili



Single opening *XL vise with quick manual change jaw plates (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

Ganasca mobile intermedia
(da usare con Art. 230E)

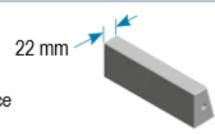
Intermediate movable jaw (to be used with Art. 230E)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 230B

Piastra ganascia intercambiabile dolce
Soft interchangeable jaw plate



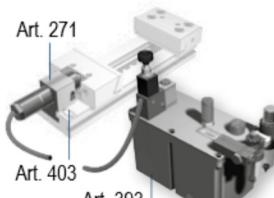
Cod.	4.23.0B101	4.23.0B201	4.23.0B301	4.23.0B401

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

Art. 392

Pneumatico / Air control

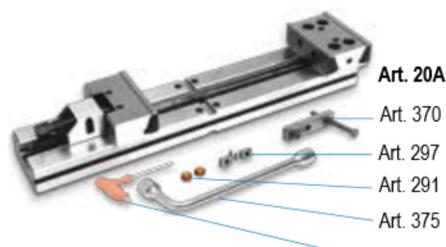
Cod.	4.39.11000	4.39.12000	4.39.13000	4.39.14000

Cod.	4.39.21000	4.39.22000	4.39.23000	4.39.24000

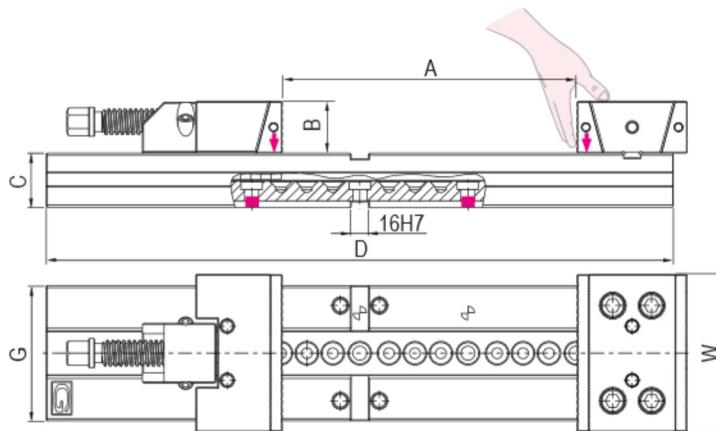
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli contemporanei o indipendenti, da 2 a 6 morsie. Vedi da pag. 4.36 a 4.47

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

**Standard equipment:**

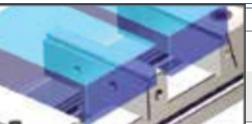
- 1 workstop Art. 370
- 1 pair of positioning key-nuts Art. 297
(Standard for 16 mm slot. Other dimensions available on request without price change)
- 2 inserts Art. 291 ■ 1 box wrench Art. 375 ■ 1 T-wrench Art. 376



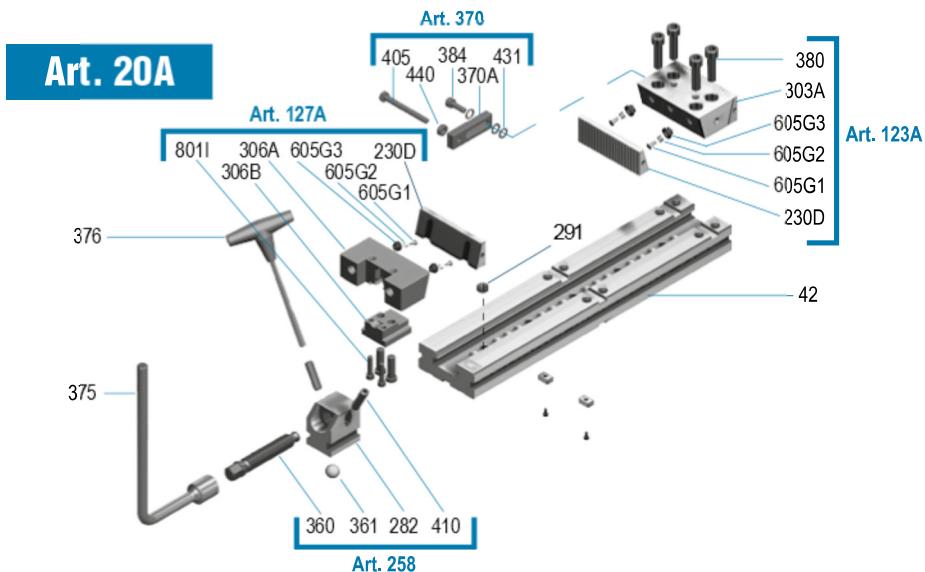
Vedi gruppo 4 per gamma completa accessori
See group 4 for complete range of accessories

2

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

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

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



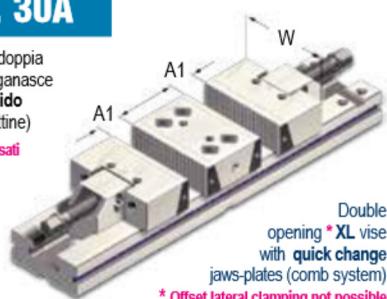
Art.	Pag.	Art.	Pag.
42	2.30	376	4.31
230D	4.17	380	4.24
282	4.32	384	4.24
291	4.31	405	4.31
297	4.31	410	4.32
303A	4.26	431	4.24
306A	4.26	440	4.24
306B	4.26	605G1	4.18
360	4.32	605G2	4.18
361	4.32	605G3	4.18
370A	4.31	801I	5.61
375	4.31	-	-



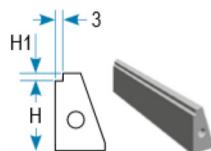
Tipo (grandezza) morsa / Vise (type) size	kN	1	2	3	4
		16 kN	25 kN	30 kN	30 kN
Apertura massima / Maximum spread	A1	2 x 90	2 x 100	2 x 110	2 x 160
	W	96	121	146	171
	B	28	38	48	58
	C	35	40	50	58
	D	460	520	580	680
	G	75	95	125	145
	kg	6.8	12.9	25.5	29
	Cod.	2.30.A190	2.30.A2100	2.30.A3110	2.30.A3160
				2.30.A4120	2.30.A4170
				2.30.A4220	2.30.A4270

Art. 30A

Morsa *XL a doppia apertura con ganasce a cambio rapido (sistema a pettine)
* Serraggi disassati lateralmente non possibili

**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

Ganasca mobile intermedia
(da usare con Art. 230E)

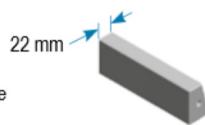
Intermediate movable jaw (to be used with Art. 230E)



Cod.	1.21.21000	1.21.22000	1.21.23000	1.21.24000

Art. 230B

Piastra ganascia intercambiabile dolce
Soft interchangeable jaw plate



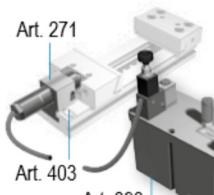
Cod.	4.23.0B101	4.23.0B201	4.23.0B301	4.23.0B401

Art. 230F

Piastra ganascia intercambiabile prismatica
Prismatic interchangeable jaw plate



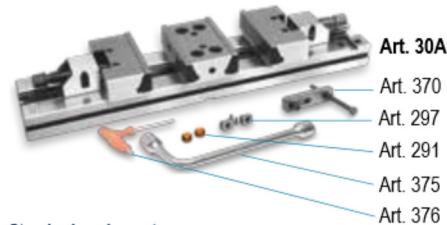
Cod.	4.23.0F101	4.23.0F201	4.23.0F301	4.23.0F401



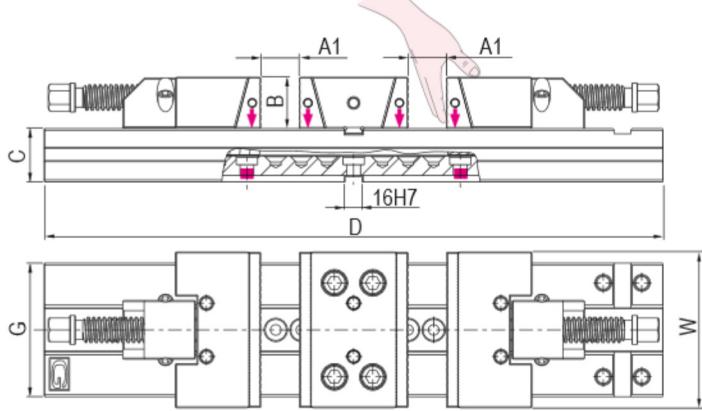
Servocomandi oleopneumatici (completi di 1 cilindro e supporto) per serraggi multipli contemporanei o indipendenti, da 2 a 6 morsa. Vedi da pag. 4.36 a 4.47

Dotazione standard:

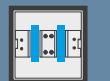
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento Art. 297
(Standard per cava da 16 mm; altre dimensioni a richiesta senza variazione di prezzo)
- 2 tappi Art. 291 ■ 1 chiave a pipa Art. 375 ■ 1 chiave a "T" Art. 376

**Standard equipment:**

- 2 workstops 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



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

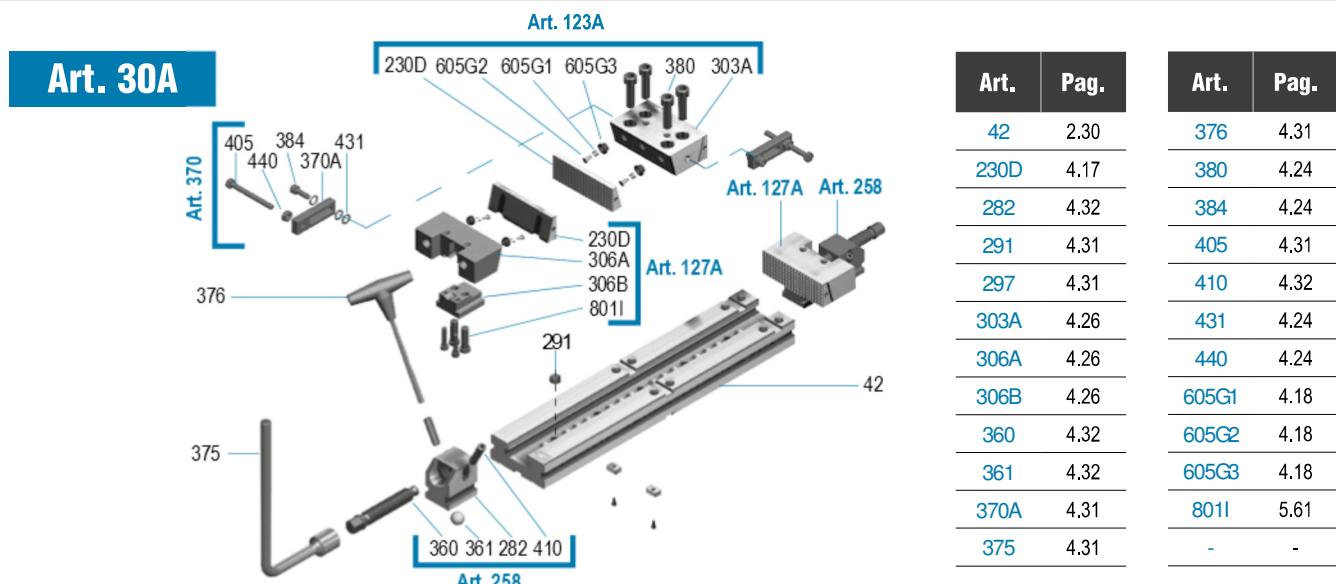


5 40 kN					6 40 kN							
2 x 150	2 x 200	2 x 250	2 x 300	2 x 350	2 x 160	2 x 210	2 x 260	2 x 310	2 x 360	2 x 410	2 x 460	
196								296				
	63							78				
	70							78				
805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500	
			170					195				
64	69	74	79	84	95	105	115	125	135	145	155	
2.30.A5150	2.30.A5200	2.30.A5250	2.30.A5300	2.30.A5350	2.30.A6160	2.30.A6210	2.30.A6260	2.30.A6310	2.30.A6360	2.30.A6410	2.30.A6460	

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 independent, from 2 to 6 vises. See from page 4.36 to 4.47



Tipo (grandezza) morsa / Vise (type) size

1

2

3

4

Art. 42

Slittone base serie XL
senza alcuna dotazioneVise base XL series
supplied without any accessory

kg	6.6	10.7	20.7	24.7	30.2	34.8	39.3	43.8
Cod.	1.80.11460	1.80.21520	1.80.31580	1.80.31680	1.80.41666	1.80.41766	1.80.41866	1.80.41966

Versione normale: Cave da 16 mm (H7)

Versione opzionale: Fori rettificati e calibrati con tolleranza F7

Art. 42Z

Slittone base serie Zero Point
senza alcuna dotazioneVise base Zero Point series
supplied without any accessory

kg	6.4	10.5	20.5	24.5	29.9	34.5	39	43.5
Cod.	2.42.Z1460	2.42.Z2520	2.42.Z3580	2.42.Z3680	2.42.Z4666	2.42.Z4766	2.42.Z4866	2.42.Z4966

Versione normale: Cave da 16 mm (H7)

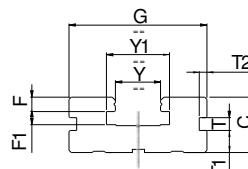
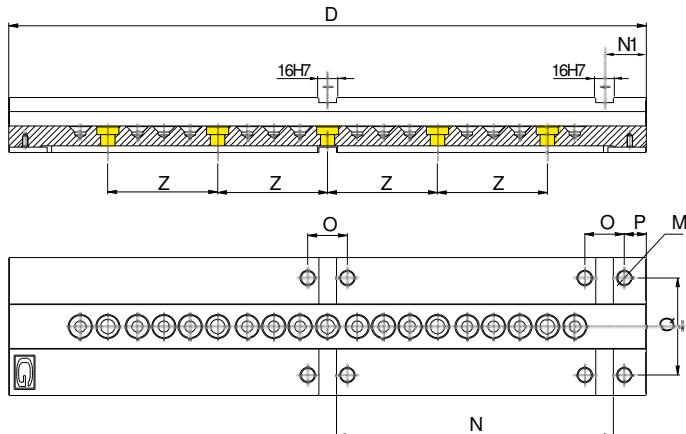
Versione opzionale: Fori rettificati e calibrati con tolleranza F7

Tolleranza / Tolerance

- 0,02	C	35	40	50			38		
	D	450	520	580	680	666	766	866	966
	F	10	12	13				15	
	F1	10	10	12				18	
	G	75	95	125				145	
	Y	21	28	41				51	
	Y1	31	41	57				70	
	M	M10	M12	M14				M16	
	N	195	225	252	302	293	343	393	443
	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	
	Z	100	100	100				100	

Art. 42

Slittone base serie XL / Vise base XL 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
ØY	6,5	8,5	13	13	17	17
ØK	10,5	13,5	19	19	26	26

5

6

2

64	69	74	79	84	95	105	115	125	135	145	155
1.80.51805	1.80.51905	1.80.51005	1.80.51105	1.80.51205	1.80.61900	1.80.61000	1.80.61100	1.80.61200	1.80.61300	1.80.61400	1.80.61500

Normal version: 16 mm slots (H7)

Optional version: Ground calibrated holes F7 tolerance

60	65	70	75	80	91	101	111	121	131	141	151
2.42.Z5805	2.42.Z5905	2.42.Z5005	2.42.Z5105	2.42.Z5205	2.42.Z6900	2.42.Z6100	2.42.Z6110	2.42.Z6120	2.42.Z6130	2.42.Z6140	2.42.Z6150

Normal version: 16 mm slots (H7)

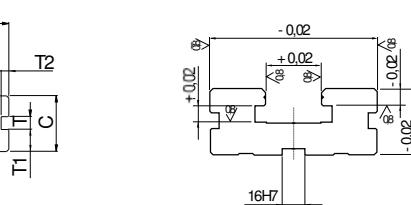
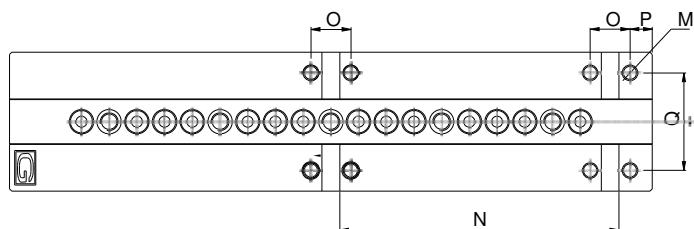
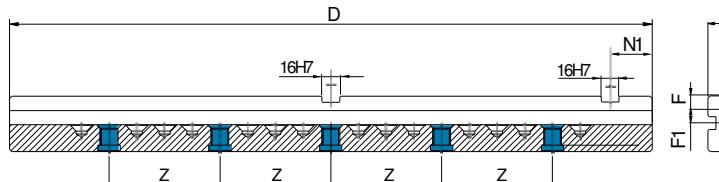
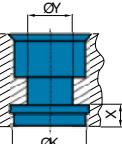
Optional version: Ground calibrated holes F7 tolerance

805	905	1005	1105	1205	900	1000	1100	1200	1300	1400	1500
		20				20					
		18				18					
		170				195					
		61				71					
		80				90					
		M20				M20					
357,5	407,5	457,5	507,5	557,5	405	455	505	555	605	655	707
		45				45					
		44				44					
		23				23					
		120				133					
		17,5				17,5					
		26				26					
		10				10					
		100				100					

Art. 42Z

Slittone base serie Zero Point / Vise base Zero Point series

Tolleranze generiche per morse XL / XL vise generic tolerances

**Dettaglio foro per Zero Point / Zero Point hole details**

Type	1	2	3	4	5	6
X						6
Y	M16	M16	M16	M16	M16	M16
OK				20		

DIAGRAMMI SERRAGGIO MECCANICO CON CHIAVE DINAMOMETRICA

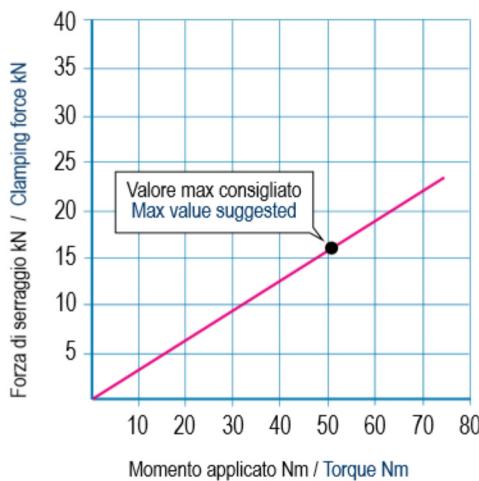
DIAGRAMS MECHANICAL CLAMPING WITH TORQUE WRENCH

2



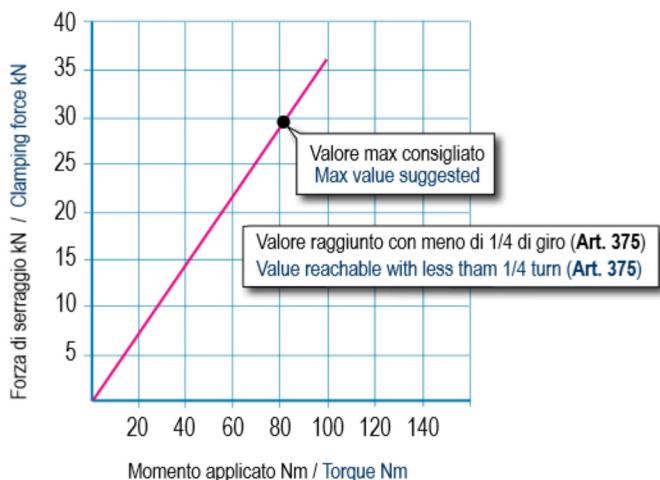
MORSE MODULARI XL TIPO
XL MODULAR VISES TYPE **1**

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



MORSE MODULARI XL TIPO
XL MODULAR VISES TYPE **3-4**

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



NB: Alcuni fattori, come la lubrificazione, lo staffaggio, gli attriti ed altro, possono modificare i valori indicati fino a $\pm 10\%$.

Per un corretto utilizzo non superare i valori indicati nel grafico

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

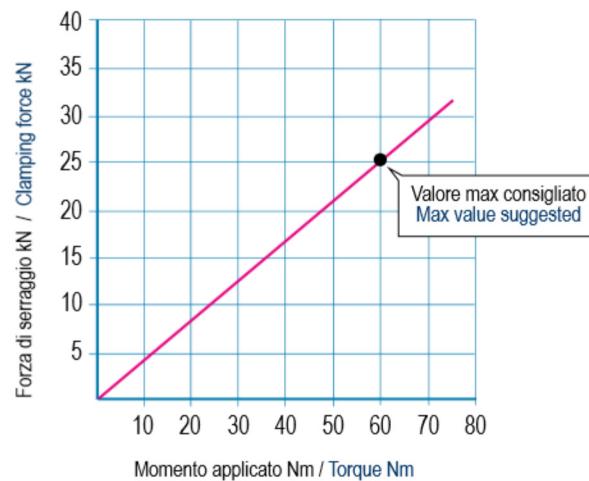
MECHANICAL CLAMPING DEVICES

(**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

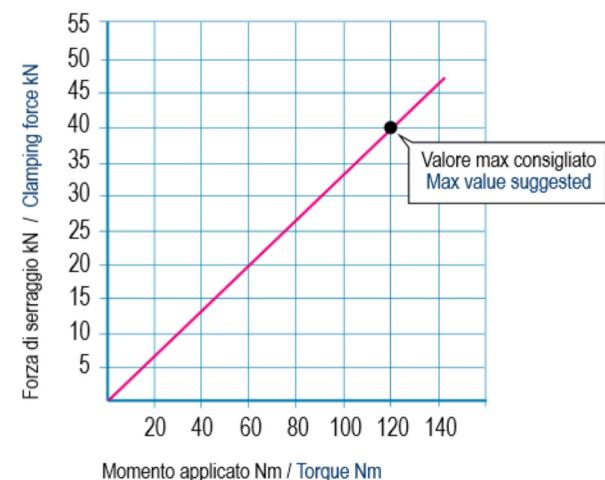
MORSE MODULARI XL TIPO
XL MODULAR VISES TYPE **2**

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



MORSE MODULARI XL TIPO
XL MODULAR VISES TYPE **5-6**

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



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