GERARDI

5

Single, Double
or Self-centering!

FMS

Morse e Cubi / *Vises & Vise Towers*

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VALIGETTA DI CAMPIONATURA FMS (Art.860)
FMS SAMPLE KIT CASE (Art.860)

NEW

Art. 983

Valigetta di campionatura morsa Art.860 T.1x300
Sample kit case Art.860 T.1x300 vise

Cod.	0.98.30000

All'Interno - Inside:

Art.810L	Art. 806B	Art.297 16/18
Art. 807	Art. 806C	Art.850H
Art. 810X	Art.806D	Art.370 T1 Std
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Art. 814	Art.298	- -

SIMBOLOGIA DATI TECNICI
TECHNICAL DATA ICONS

GANASCE JAWS			Piane Straights	A gradino With step	Oscillanti Floating	Oscillanti con inserti regolabili Floating with inserts adjustable	Prismatiche Prismatic
PIASTRE GANASCE JAW PLATES			Discendente Pull down	Piana Straight	Cambio rapido manuale Quick manual change	GRIP GRIP	Inserti GRIP Inserti GRIP
POSSIBILITÀ POSSIBILITY		Serraggio singolo Single clamping	Serraggio doppio Double clamping	Predisposizione Zero Point Zero Point Ready	Cubi-morsa Vise tower	Divisore Automatico Automatic dividing head	Divisore Meccanico Mechanical dividing head
PAGINE PAGES			Lavorazioni a 5 assi 5 axis machining	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 morsa / Vises & vise-towers

FMS SERIES

Precisione / Accuracy
±0,02mm

HRC

Durezza / Hardened
HRC 58±2

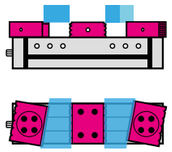
Un sistema modulare flessibile con centinaia di ganasce disponibili

A Flexible modular system with hundreds of jaws available

ESTREMA VERSATILITÀ / EXTREME VERSATILITY

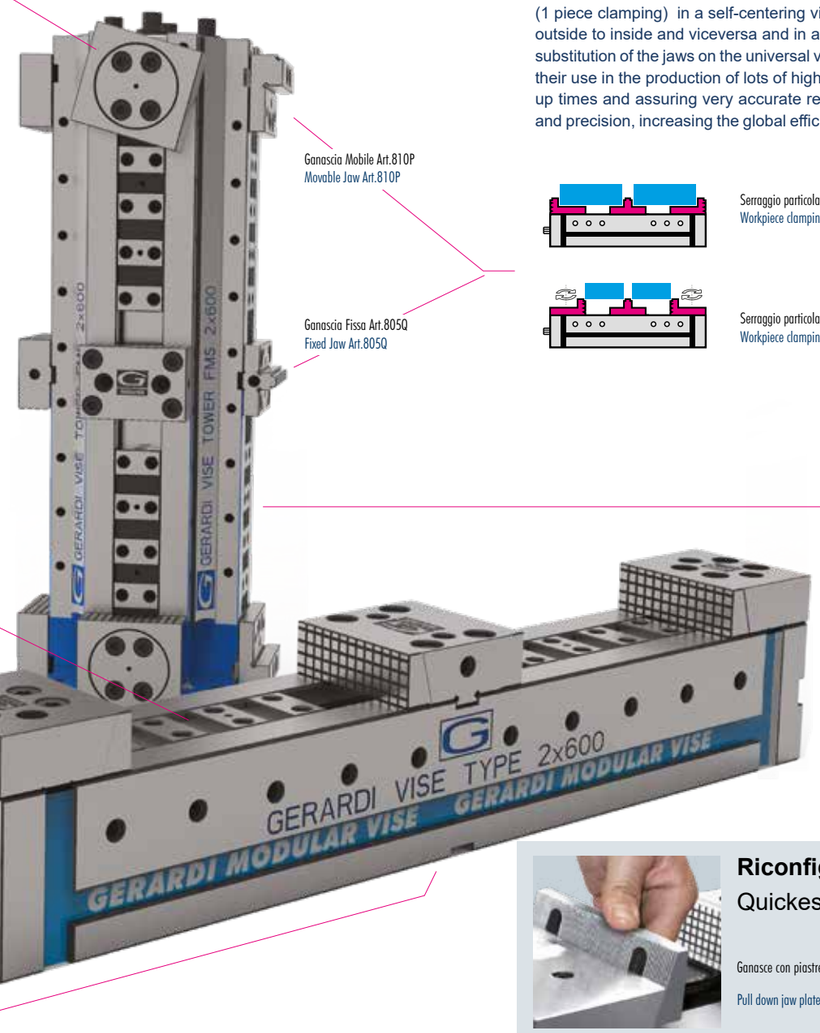
•3 posizioni per la ganascia fissa; •Serraggio dall'esterno all'interno e viceversa; •Posizionamento verticale-orizzontale-laterale; •Collegamento: fianco a fianco, dorso a dorso, fianco a dorso; •Possibilità illimitata per ganasce speciali; •Sostituzione semplice e precisa delle ganasce; •Elemento di prolunga per pezzi fuori misura; •Sistema di serraggio meccanico, idraulico, pneumatico elettrico o con moltiplicatore di potenza, tramite comando manuale, a pedale o mediante pulsante elettrico (vedi pag. 12); •Costruzione solida e compatta e massima apertura rispetto alla sua lunghezza; •Flessioni praticamente ridotte di due volte rispetto alle precedenti morse modulari standard; •Accurata ripetibilità di posizionamento del pezzo da lavorare; •Precisioni geometriche con tolleranze entro 0,02 mm; •Protezione integrale dalla penetrazione di corpi estranei tramite piastre scorrevoli; •Possibilità di trasformazione di ogni morsa singola in morsa autocentrante o in morsa doppia tramite la semplice sostituzione delle ganasce sul corpo base universale. (ESEMPI APPLICATIVI A PAGINA 5.76).

•3 positions for the fixed jaw; •Outside to inside clamping and viceversa; •Vertically, horizontally and sideway vise positioning; •Side to side, back to back and back to side vise positioning; •Unlimited special jaws; •Simple and precise exchange of jaws; •Extension element for extra-long pieces; •Mechanic, hydraulic or pneumatic or electrical clamping system or with pressure multiplier, through manual, pedal or push botton board control (see page 12); •Space saving design, solid construction and maximum blocking ratio to total lenght; •Deflection reduced two times with respect to the STANDARD modular vises; •Very accurate repetability of workpiece position; •Geometrical accuracy with tollerances within 0,02 mm; •Integral protection from chips and dirty through sliding protection; •Possibility to trasform each single vise in a self-centering vise with possibility to block from outside to inside and vice versa and in a double vise through the simple substitution of the jaws on the universal vise body base. (APPLICATION EXAMPLES ON PAGE 5.76)



Ganasce Mobili Oscillanti
per serraggio di pezzi irregolari

Floating Movable Jaws
for irregular workpieces



Ganascia Mobile Art.810P
Movable Jaw Art.810P

Ganascia Fissa Art.805Q
Fixed Jaw Art.805Q

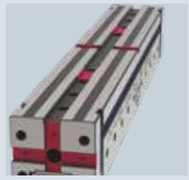
Serraggio particolare su gradino grande
Workpiece clamping on the large step

Serraggio particolare su gradino piccolo
Workpiece clamping on the small step

Vite a doppio filetto e slitte guidate
Double thread spindle & guided slides

Vite principale (completamente protetta) con filetto destro e sinistro e slitte lunghe quanto il corpo base con più chiavette per ganasce mobili

Completely protected main spindle with left and right thread and slides long as the vise base with multiple movable jaw positions



Chiavette di Posizionamento
Positioning Keyways

Chiavette longitudinali e trasversali sia sulla base per posizionamento orizzontale, che in testa per posizionamento verticale

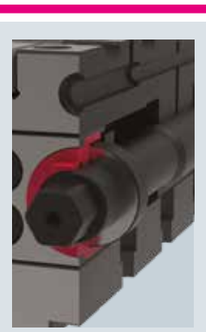
Longitudinal and cross keyways both on the base bottom surface for horizontal positioning and on the side for vertical positioning

Nata espressamente per i centri di lavoro, la gamma FMS permette ottimizzazioni di serraggio con riferimenti precisi in spazi contenuti, usure inesistenti e rigidità impensabile (spessore della base raddoppiato), possibilità di bloccare più pezzi contemporaneamente con l'ausilio di sistemi meccanici, pneumatici, elettrici o idraulici. Tutte sono disponibili/predisposte sia per piazzamenti verticali che orizzontali. Serraggi di qualsiasi lunghezza. La caratteristica (Brevettata) che meglio contraddistingue questa serie di morse consiste nella possibilità di trasformare ogni morsa singola (cioè adibita al serraggio di un singolo pezzo) in una morsa autocentrante con bloccaggio concentrico dall'esterno all'interno e viceversa e in morsa doppia tramite la semplice sostituzione delle ganasce sul corpo base universale. Tutto ciò ne suggerisce l'impiego in situazioni produttive caratterizzate da lotti di pezzi estremamente diversi fra loro riducendo tempi di set-up e garantendo un'accurata ripetibilità di posizionamento e quindi di precisione migliorando l'efficienza globale del sistema produttivo.

Born to be dedicated to machining centres, FMS series of vises allow workholdings with perfect alignment in a space saving design, extremenly high wear resistence, with deflection reduced 2 times in respect to the STD modular vises (base thickness doubled), possibility to clamp more pieces simultaneously with mechanic, hydraulic pneumatic or electric devices. You can use them both for vertical and horizontal clamping without any price charge. Grip any work lenght. The feature (Pathented) which identifies this line of vises consists in the possibility to trasform each single vise (1 piece clamping) in a self-centering vise with possibility to block from outside to inside and viceversa and in a double vise through the simple substitution of the jaws on the universal vise body base. All that suggests their use in the production of lots of highly different pieces reducing set-up times and assuring very accurate repetability of workpiece position and precision, increasing the global efficiency of the production process.

Singole, Doppie o Autocentranti !

Single, Double or Self-centering !



3 Morse in Una
3 Vises in One

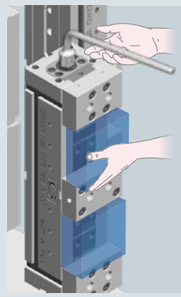
Possibilità di trasformare ogni morsa singola in una morsa autocentrante con bloccaggio concentrico dall'esterno all'interno e viceversa e in morsa doppia tramite la semplice sostituzione delle ganasce sul corpo base universale.

Possibility to trasform each single vise in a self-centering vise with possibility to block from outside to inside and viceversa and in a double vise through the simple substitution of the jaws on the universal vise body base

Altissima Rigidità
Highest Rigidity

Base della morsa con una sezione doppia per garantire una maggiore rigidità. Flessioni ridotte di due volte rispetto alle normali morse modulari standard. Disponibili cubi monoblocco.

Higher vise base in order to guarantee a better rigidity. Bending reduced two times with respect to the Standard modular vises. Available solid vise towers.



Sistema a terza mano
Third Hand service

Consente il carico e serraggio lieve del primo pezzo mentre le frattempo viene caricato il secondo di dimensione maggiore. Molto utile con l'utilizzo verticale della morsa

It allows the first workpiece loaded to be clamped lightly while the second workpiece is being loaded. Such device is useful especially with the vise vertically positioned.

Riconfigurazione Rapidissima
Quickest Vise Resetting

Ganasce con piastre discendenti a cambio rapido manuale

Pull down jaw plates with comb system (quick hand change)

Staffe di ancoraggio / Vise holding clamps

NEW 2023

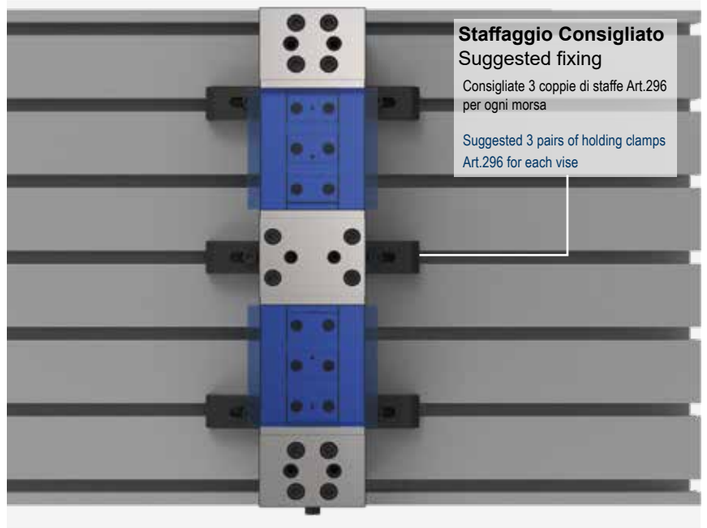
FMS

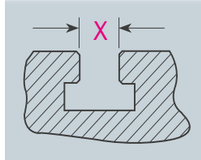
Coppia staffe di fissaggio Art.296, complete di vite e dado a "T"

Pair of vise holding clamps Art.296 complete of screw and "T" nuts

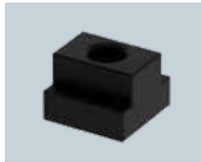
Esempio d'ordine per morsa tipo 3 su macchina con cave a T da 18mm: Art.296 T.3 X=18mm
Oppure con codice: 2.29.6300 X=18mm

Order example for Type 3 vise on machine with 18mm T-slots: Art.296 T.3 X=18mm
Also with code: 2.29.6300 X=18mm

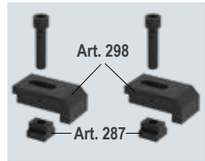




Cava a T
T Slot
Specificare sempre la cava della vostra macchina
Always specify the machine T-slot dimension

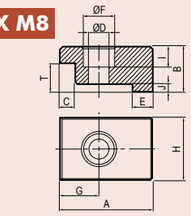


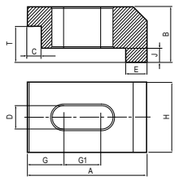
Art.287 (Pag.4.34)
Dadi a T - T Nuts
Per fissaggio morse alle cave a T della macchina
For vise clamping on the machine T-slots



Art.296
(Art.298 + Art.287)
Consigliate 3 coppie di staffe Art.296 per ogni morsa
Suggested 3 pairs of holding clamps Art.296 for each vise

Tipo (grandezza) Type (size)		1				1								2 - 3							4 - 5 - 6						
Art. 296 Coppia di staffe Holding clamps pair	Cava a T slot X	12	14	16	18	12*	14	16	16	18	20	18*	20	22	16	18	20	22	18*	20	22	16	18	20	22	18*	20	22
	T-nuts Ref. N°	8	9	10	11	12	13	14	20	21	22	32	39	40	20	21	22	23	32	39	40	20	21	22	23	32	39	40
	Filetto vite Screw thread	M8				M10			M12 *			M16			M12 *				M16			M12				M16 *		
1 X M8	A	50				50			50			50			76				76			86				86		
	B	24				24			24			24			30				30			40				40		
	C	6				6			6			6			6				6			10				10		
	Ø D	8,5				11			13			17			13				17			13				17		
	E	10				10			10			10			13				13			15				15		
	Ø F	14				-			-			-			-				-			-				-		
	G / G1	14				16/15			17,5/13			19/9			17/22				16/15			26/27				26/27		
	H	34				34			34			34			42				42			50				50		
	I	8				10			10			10			-				-			-				-		
	J	4				4			4			4			10				10			10				10		
	T ± 0,1	15				15			15			15			20				20			26				26		
	Cod.	2.29.61000 / M8				2.29.61000 / M10			2.29.61000 / M12			2.29.61000 / M16			2.29.63000 / M12				2.29.63000 / M12			2.29.65000 / M12				2.29.65000 / M16		





*Scelta consigliata - Suggested choice

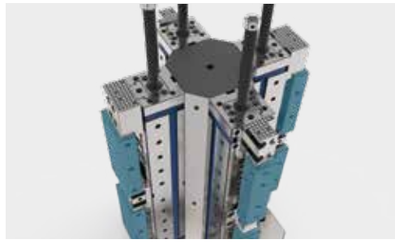
*Scelta NON consigliata - NO Suggested choice

Soluzioni personalizzate / Customized solutions

FMS

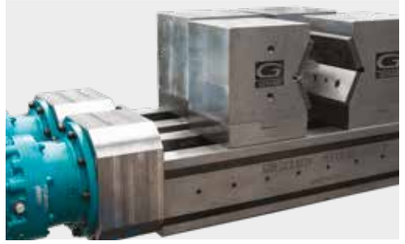
Soluzioni personalizzate a tutti i vostri problemi di serraggio

Customized solutions for all your clamping problems



Morse FMS automatizzate in verticale
FMS vises automated vertically mounted

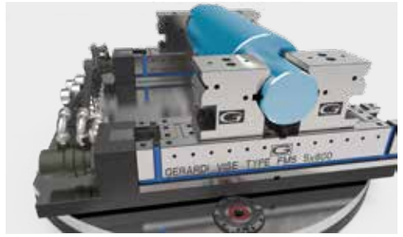
Gestione automatica di morse meccaniche grazie alla predisposizione per connessione con il robot. Lavorazioni del particolare su 3 lati con un unico serraggio evitando il riposizionamento ed una seconda ripresa del particolare da lavorare.
Automated machine setting thanks to the pre-fitting with robot connection. Workpiece machining on 3 sides with one clamping and so avoiding re-positioning and a second machining of the workpiece.



Morsa FMS con riduttore epicicloidale
FMS vise with epicyclic force reducer

Riduttore epicicloidale il quale consente di moltiplicare notevolmente la coppia sviluppata dal motore idraulico consentendo di arrivare a elevate forze di serraggio , fino a 480 kN

Epicyclic force reducer able to multiply greatly the torque generated by the hydraulic engine reaching a very high clamping force, maximum 480kN.



Serraggio automatico di grandi particolari tondi
Round workpieces automatic clamping

Sistema di serraggio meccanico con morse FMS per il serraggio di particolari tondi di grandi dimensioni controllato tramite centralina idraulica da CNC
Quick positioning and clamping with FMS vises of whole equipment on round Zero Point plate through pull-studs and centering pin.

Non solo per centri a 5 assi
Not only for 5th axis machines

Morsa autocentrante FMS su centro di lavoro verticale con ganasce personalizzate in alluminio.

Self Centering FMS vise with taylor made jaws aluminum mounted on Vertical CNC

Morse FMS in verticale con robot
FMS vises vertically mounted + robot

Assieme di morse FMS montate verticalmente su centro orizzontale gestite tramite robot anche per carico e scarico pezzi

FMS vises vertically mounted on horizontal machining center.
Both vise clamping and workpieces turnover are operated through automated robotic system.

TRE MORSE IN UNA
THREE VISES IN ONE

Acquista il modulo base universale. Una soluzione aperta per il lavoro di oggi pensando a quello di domani !

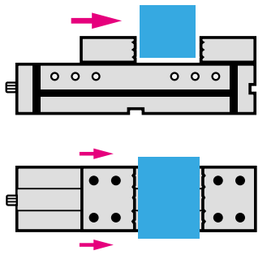
Buy the base body. A Versatile solution for present and future machining !

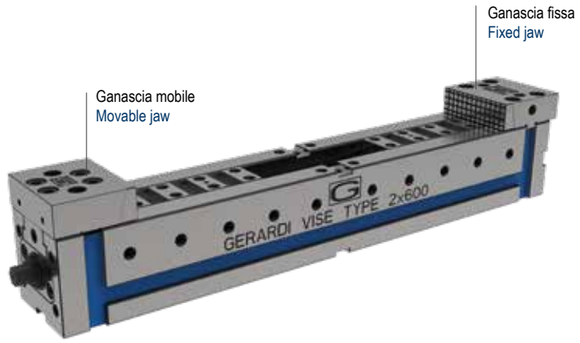
CORPO BASE Art.855
BASE BODY Art.855

Modulo base universale
CENTINAIA DI GANASCE DISPONIBILI !!

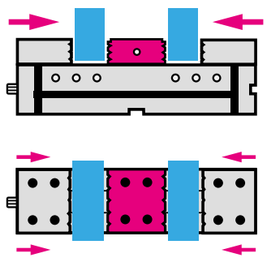
Universal vise body module
HUNDREDS OF JAWS AVAILABLE !!

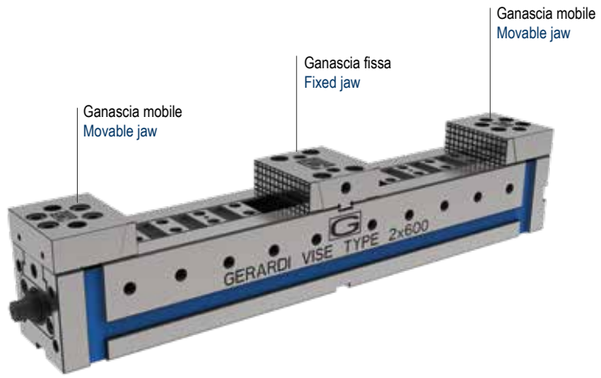
SERRAGGI SINGOLI
SINGLE CLAMPING



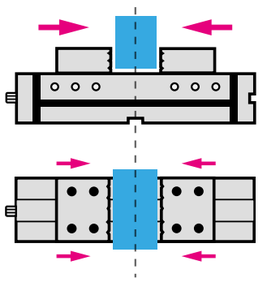


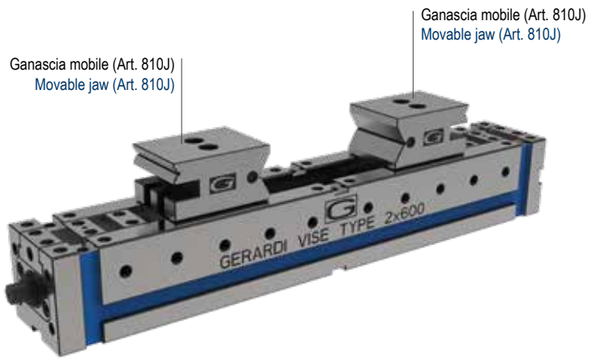
SERRAGGI DOPPI
DOUBLE CLAMPING





AUTOCENTRANTE
SELF-CENTERING

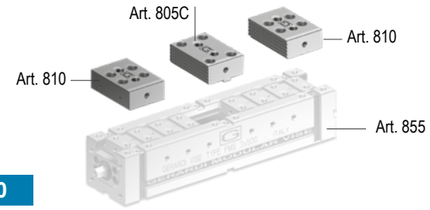


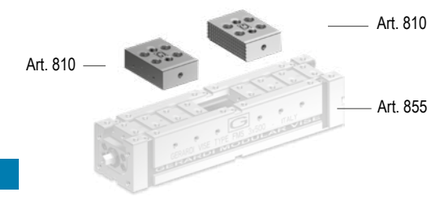


VERSIONI PER SERRAGGI DOPPI
DOUBLE CLAMPING CONFIGURATION

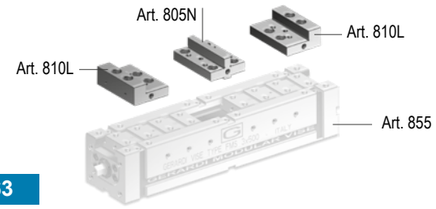
VERSIONI AUTOCENTRANTI
SELF-CENTERING TYPE

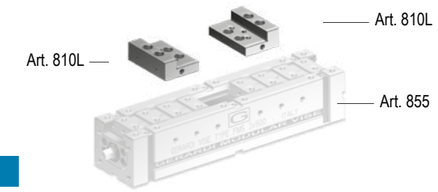
Art. 860



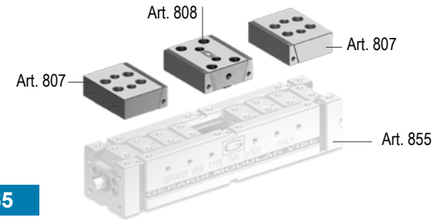


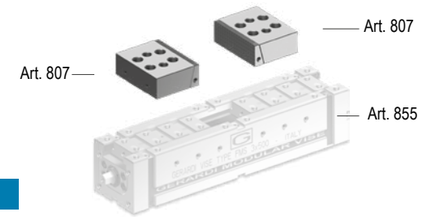
Art. 863



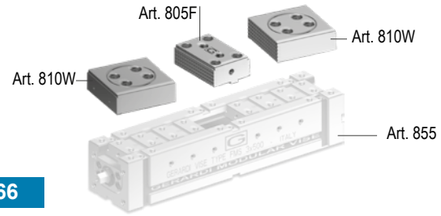


Art. 865

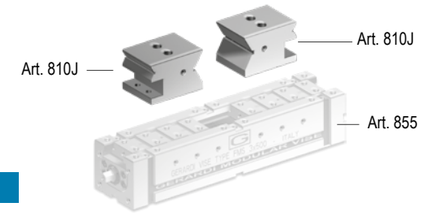




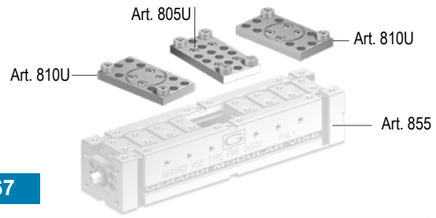
Art. 866



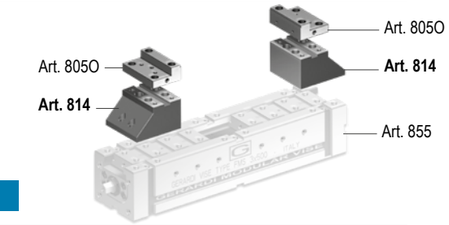
Art. 870



Art. 867

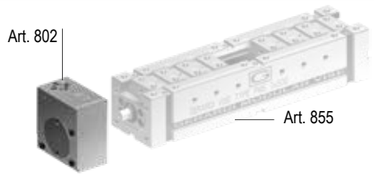


Art. 868



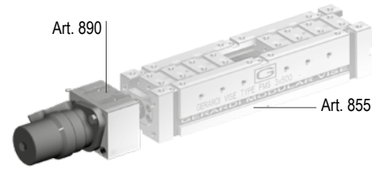
Art. 855D

(Art. 855 + 802)



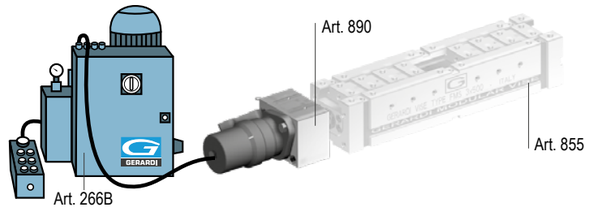
Art. 855E

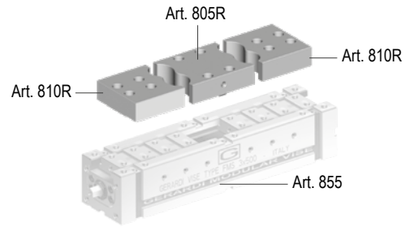
(Art. 855 + 890)



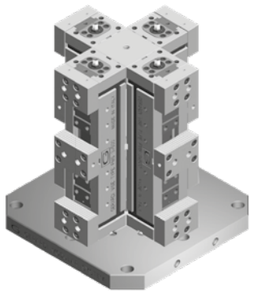
Art. 855F

(Art. 855 + 890 + 266B)



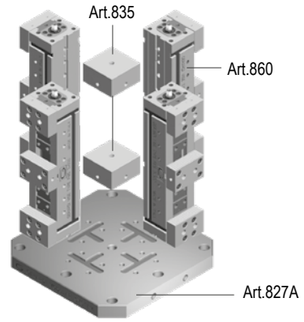


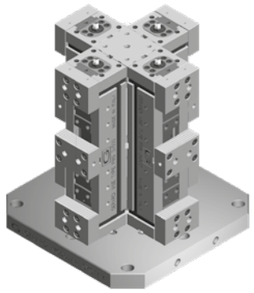
CUBI DI MORSE MONTATI A CROCE O DORSO A DORSO
VISE TOWERS CROSS OR BACK TO BACK MOUNTED



N° 4 MORSE FMS
montate a croce su piastra base (Art. 827A)
con distanziali (Art. 835)

N° 4 FMS VISES
cross-mounted on base plate (Art. 827A)
with spacers (Art. 835)



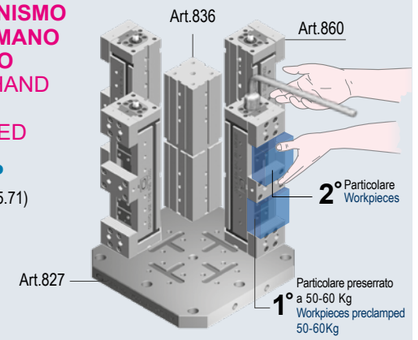


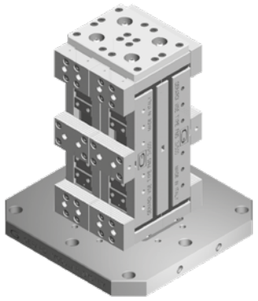
N° 4 MORSE FMS
montate a croce su piastra base (Art. 827A)
con supporto centrale (Art.836)

N° 4 FMS VISES
cross-mounted on base plate (Art.827A)
with center support (Art.836)

MECCANISMO TERZA MANO INCLUSO
THIRD HAND DEVICE INCLUDED

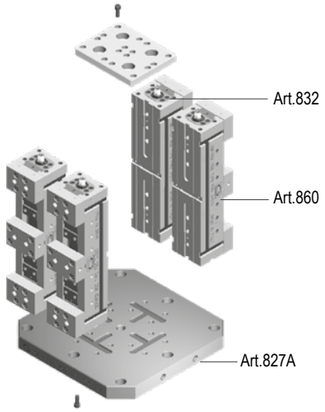
Art.850P
(Pag - Page 5.71)





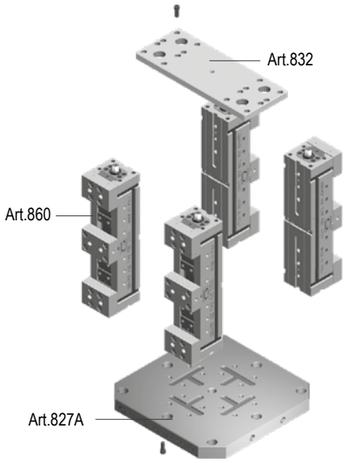
N° 4 MORSE FMS
montate dorso a dorso, fianco a fianco, su piastra base
(Art. 827) con piastra di collegamento (Art. 832)

N° 4 FMS VISES
cross-mounted back-to-back,side by side, on base
plate (Art. 827) with connecting plate (Art. 832)



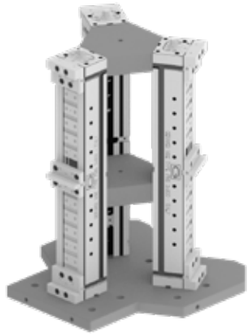
N° 4 MORSE FMS
montate dorso a dorso, su piastra base
(Art. 827A) con piastra di collegamento (Art. 832)

N° 4 FMS VISES
cross-mounted back-to-back,on base plate
(Art. 827A) with connecting plate (Art. 832)



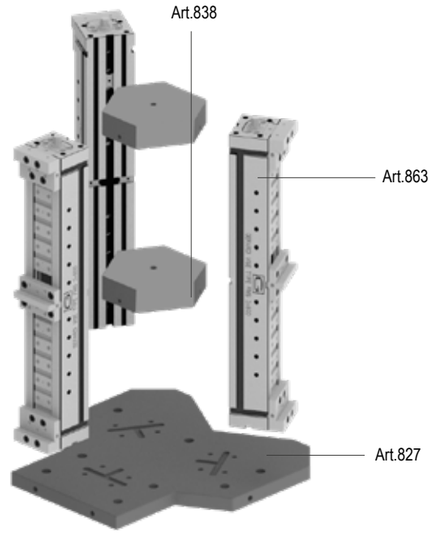
Montaggio ed allineamento morsa con distanziali, supporto centrale o piastra di collegamento
Vise and alignement mounted with spacers, center support or connecting plate

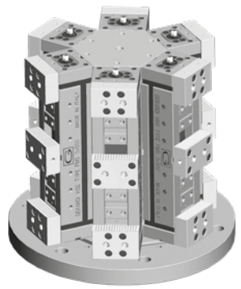
CUBI DI MORSE MONTATI VERTICALMENTE
VISE TOWERS VERTICALLY ASSEMBLED



N° 3 morse FMS
montate verticalmente su piastra base a Y (827)
con supporto centrale (Art. 838)

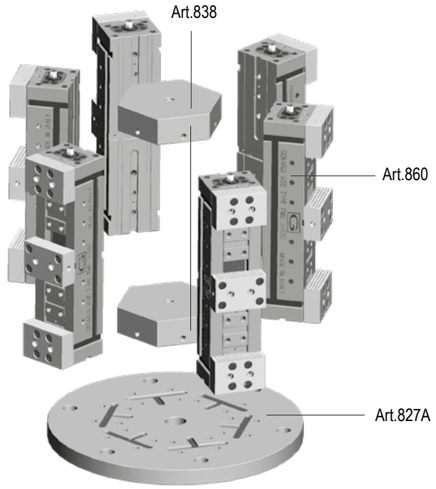
N° 3 FMS vises
vises vertically mounted on Y base plate (827A)
with exagon center support (Art. 838)

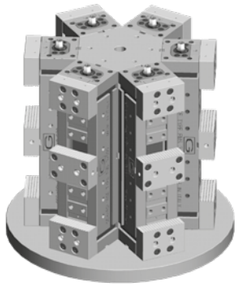




N° 6 morse FMS
montate verticalmente su piastra base (Art. 827A)
con distanziali esagonali (Art. 838)

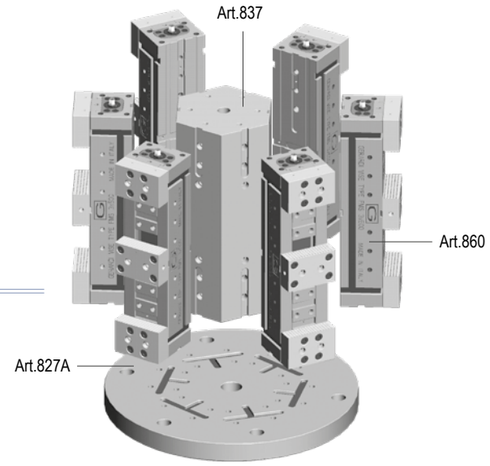
N° 6 FMS vises
vises vertically mounted on base plate (Art. 827A)
with exagon spacer (Art. 838)





N° 6 morse FMS montate verticalmente
su piastra base (Art. 827A)
con supporto centrale (Art. 837)

N° 6 FMS vises vertically mounted
on base plate (Art. 827A) with exagon
center support (Art. 837)



Montaggio ed allineamento morsa con distanziali, supporto centrale o piastra di collegamento
Vise and alignement mounted with spacers, center support or connecting plate

Tipo (grandezza) morsa / Vise type (size)		1		2				3	
	kN	25 kN		25 kN				30 kN	
Apertura massima fra le slitte / Maximum opening between slides	A	56	68	96	116	136	156	136	136
	C	70		90				100	
	D	200 + 32	300 + 32	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75		95				125	
	R	74		94				124	
	S	69		89				99	
	T	72	116	102	142	182	222	132	182
	Y	277	377	360	460	560	660	470	570
	X	407	507	537	637	737	837	637	737
	kg	7	10	18	25	32	39	40	45
	Cod.	5.85.51200	5.85.51300	5.85.52300	5.85.52400	5.85.52500	5.85.52600	5.85.53400	5.85.53500

Art. 855

Modulo base universale
CENTINAIA DI GANASCE DISPONIBILI !!

Universal vise body module
HUNDREDS OF JAWS AVAILABLE !!

Art. 855D

(Art. 855 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.85.5D120	5.85.5D130	5.85.5D230	5.85.5D240	5.85.5D250	5.85.5D260	5.85.5D340	5.85.5D350

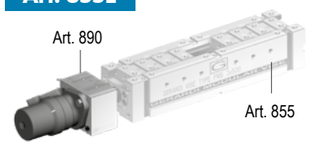
Art. 802

Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 855E

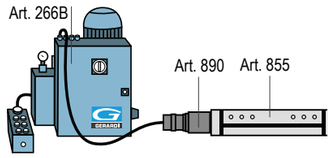


(Art. 855 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.85.5E120	5.85.5E130	5.85.5E230	5.85.5E240	5.85.5E250	5.85.5E260	5.85.5E340	5.85.5E350

Meccanica con predisposizione elettroidraulicacompleta di motore, piastra, boccola e finecorsa

Art. 855F

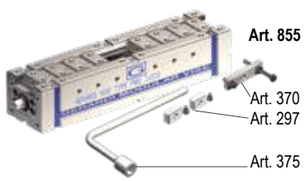


(Art. 855 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

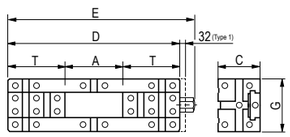
Cod.	5.85.5F120	5.85.5F130	5.85.5F230	5.85.5F240	5.85.5F250	5.85.5F260	5.85.5F340	5.85.5F350

Meccanica elettroidraulica completa di centralina idraulica apparecchiatura elettrica con pulsantiera

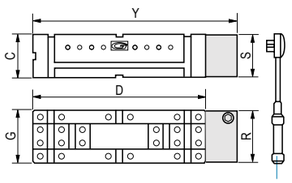
Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375

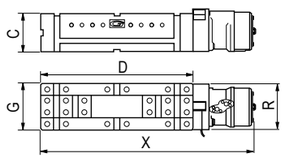


Art. 855

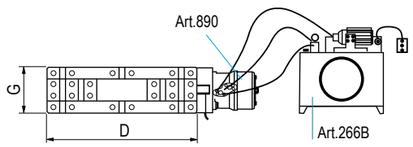


Art. 855D

Art.357 **(Incluso)**
Art.357 **(Included)**



Art. 855E



Art. 855F

	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	136	136	136	188	168	148	128	152	216	252	316	280	244
C		100			120				140			160	
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G		125			145				170			190	
R		124			144				169			189	
S		99			119				139			159	
T	232	282	332	156	216	276	336	174	242	274	242	310	378
Y	670	770	870	570	670	770	870	-	-	-	-	-	-
X	837	937	1037	737	837	937	1037	837	937	1037	1037	1137	1237
kg	50	55	60	66	72	80	88	115	125	135	170	190	210
Cod.	5.85.53600	5.85.53700	5.85.53800	5.85.54500	5.85.54600	5.85.54700	5.85.54800	5.85.55600	5.85.55700	5.85.55800	5.85.56800	5.85.56900	5.85.56100

Art. 855D

(Art. 855 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.85.5D360	5.85.5D370	5.85.5D380	5.85.5D450	5.85.5D460	5.85.5D470	5.85.5D480	5.85.5D560	5.85.5D570	5.85.5D580	5.85.5D680	5.85.5D690	5.85.5D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 855E

(Art. 855 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.85.5E360	5.85.5E370	5.85.5E380	5.85.5E450	5.85.5E460	5.85.5E470	5.85.5E480	5.85.5E560	5.85.5E570	5.85.5E580	5.85.5E680	5.85.5E690	5.85.5E610

Mechanical with prepared hydraulic connection complete with motor plate,bushing and proximity switch

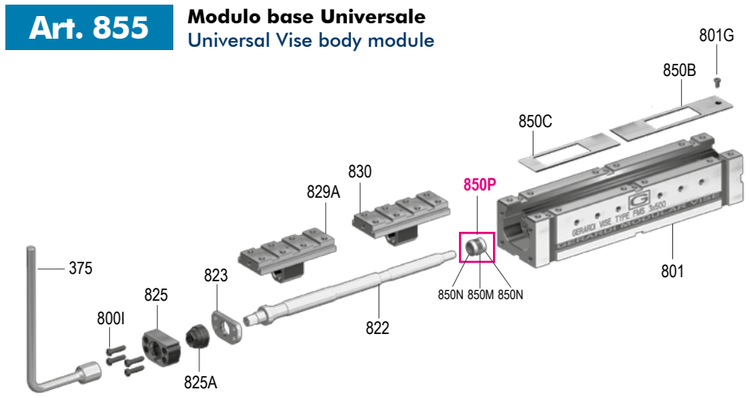
Art. 855F

(Art. 855 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.85.5F360	5.85.5F370	5.85.5F380	5.85.5F450	5.85.5F460	5.85.5F470	5.85.5F480	5.85.5F560	5.85.5F570	5.85.5F580	5.85.5F680	5.85.5F690	5.85.5F610

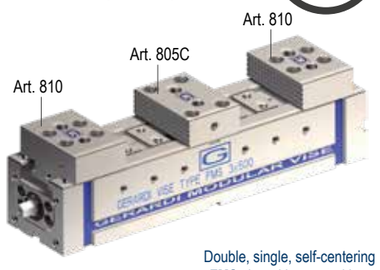
Mechanical with elettrohydraulicpower-pack ready to work

Art. 855 Modulo base Universale
Universal Vise body module



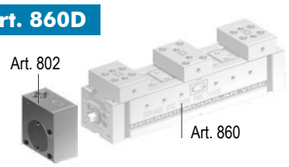
Art.	Pag.	Art.	Pag.
375	4.35	850C	5.61
800I	5.61	850P	5.72
801G	5.61	-	-
801I	5.61	-	-
822	5.53	-	-
823	5.59	-	-
825	5.59	-	-
825A	5.61	-	-
829A	5.52	-	-
830	5.52	-	-
850B	5.61	-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3	
		25 kN		25 kN				30 kN	
Apertura massima / Maximum opening	A	2 x 16	2 x 66	2 x 54	2 x 104	2 x 154	2 x 204	2 x 74	2 x 124
Art. 860	B	25		30				40	
Morsa **FMS** doppia, singola, autocentrante con ganasce zigrinate	C	70		90				100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75		95				125	
	J	56		64				84	
	W	74		94				124	
	kg	9	12	22	29	35	42	44	49
	Cod.	5.86.01200	5.86.01300	5.86.02300	5.86.02400	5.86.02500	5.86.02600	5.86.03400	5.86.03500



Double, single, self-centering **FMS** vise with serrated jaws

Art. 860D (Art. 860 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier



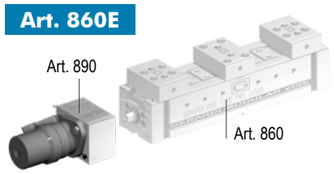
Cod.	5.86.0D120	5.86.0D130	5.86.0D230	5.86.0D240	5.86.0D250	5.86.0D260	5.86.0D340	5.86.0D350

Art. 802 Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

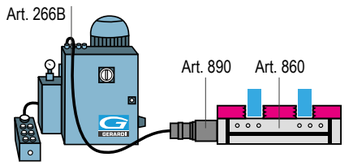
Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 860E (Art. 860 + 890) Morsa + motore idraulico / Vise + hydraulic motor



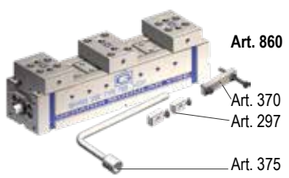
Cod.	5.86.0E120	5.86.0E130	5.86.0E230	5.86.0E240	5.86.0E250	5.86.0E260	5.86.0E340	5.86.0E350

Art. 860F (Art. 860 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

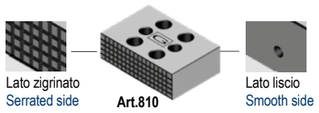


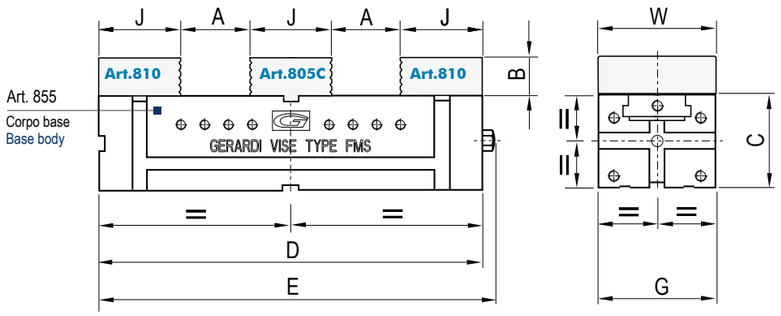
Cod.	5.86.0F120	5.86.0F130	5.86.0F230	5.86.0F240	5.86.0F250	5.86.0F260	5.86.0F340	5.86.0F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375





	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	2 x 174	2 x 224	2 x 274	2 x 103	2 x 153	2 x 203	2 x 253	2 x 138	2 x 188	2 x 238	2 x 238	2 x 288	2 x 338
B	40			50				60			60		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G	125			145				170			190		
J	84			98				108			108		
W	124			144				169			189		
kg	54	59	64	71	79	88	96	130	140	150	210	230	250
Cod.	5.86.03600	5.86.03700	5.86.03800	5.86.04500	5.86.04600	5.86.04700	5.86.04800	5.86.05600	5.86.05700	5.86.05800	5.86.06800	5.86.06900	5.86.06100

Art. 860D (Art. 860 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.0D360	5.86.0D370	5.86.0D380	5.86.0D450	5.86.0D460	5.86.0D470	5.86.0D480	5.86.0D560	5.86.0D570	5.86.0D580	5.86.0D680	5.86.0D690	5.86.0D610

Art. 802 Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

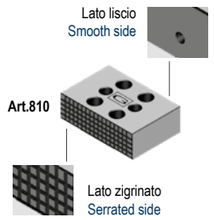
Art. 860E (Art. 860 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.0E360	5.86.0E370	5.86.0E380	5.86.0E450	5.86.0E460	5.86.0E470	5.86.0E480	5.86.0E560	5.86.0E570	5.86.0E580	5.86.0E680	5.86.0E690	5.86.0E610

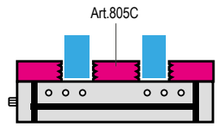
Art. 860F (Art. 860 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.0F360	5.86.0F370	5.86.0F380	5.86.0F450	5.86.0F460	5.86.0F470	5.86.0F480	5.86.0F560	5.86.0F570	5.86.0F580	5.86.0F680	5.86.0F690	5.86.0F610

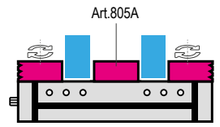
Art. 860 Esempi applicativi ganasce: Jaw application examples:



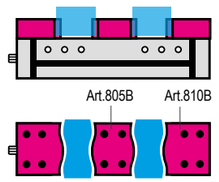
Ganascia Mobile reversibile
Reverible movable jaw



Ganascia Zigrinata Art.805C
Serrated Jaw Art.805C



Ganascia Liscia Art.805A
Smooth Jaw Art.805A



Ganasce Lavorabil Art.805B + Art.810B
Soft Jaws Art.805B + Art.810B

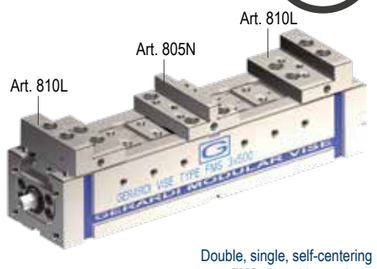
Art.	Pag.
810	5.56
805C	5.54
805A	5.54
805B	5.54
810B	5.56

Tipo (grandezza) morsa / Vise type (size)		1		2				3	
	kN	25 kN		25 kN				30 kN	
Apertura massima / Maximum opening	A	2 x 60	2 x 110	2 x 118	2 x 168	2 x 218	2 x 268	2 x 162	2 x 212
	B	25		30				40	
	C	70		90				100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75		95				125	
	J	56		64				84	
	J1	22		24				30	
	J2	16		16				16	
	W	74		94				124	
	kg	8	11	20	27	33	40	40	45
	Cod.	5.86.31200	5.86.31300	5.86.32300	5.86.32400	5.86.32500	5.86.32600	5.86.33400	5.86.33500

Art. 863

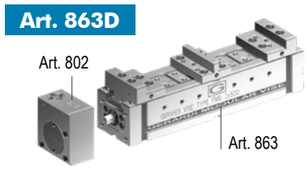
3 in 1 VISES SINGLE / DOUBLE / SELF-CENTERING

Morsa **FMS** doppia, singola, autocentrante con ganasce a gradino



Double, single, self-centering **FMS** vise with step jaws

Art. 863D



(Art. 863 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.3D120	5.86.3D130	5.86.3D230	5.86.3D240	5.86.3D250	5.86.3D260	5.86.3D340	5.86.3D350

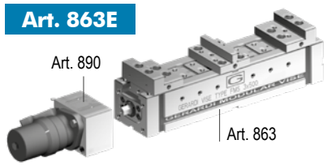
Art. 802

Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Cod.	5.80.21000	5.80.22000	5.80.23000

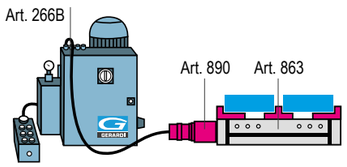
Art. 863E



(Art. 863 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.3E120	5.86.3E130	5.86.3E230	5.86.3E240	5.86.3E250	5.86.3E260	5.86.3E340	5.86.3E350

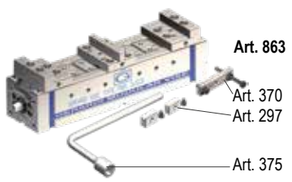
Art. 863F



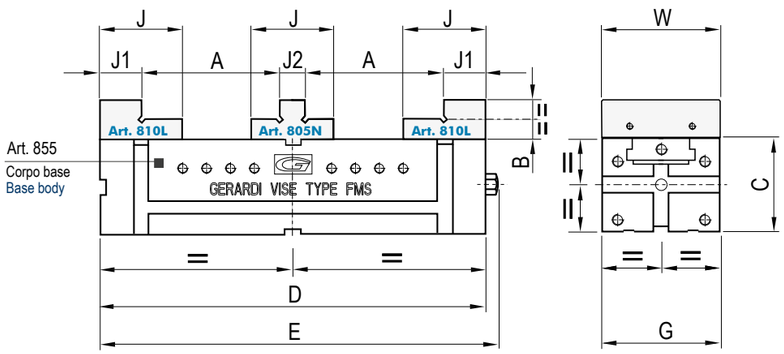
(Art. 863 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.3F120	5.86.3F130	5.86.3F230	5.86.3F240	5.86.3F250	5.86.3F260	5.86.3F340	5.86.3F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297



		3			4				5			6		
	kN	30 kN			30 kN				32 kN			32 kN		
	A	2 x 262	2 x 312	2 x 362	2 x 204	2 x 254	2 x 304	2 x 354	2 x 254	2 x 304	2 x 354	2 x 354	2 x 404	2 x 454
	B	40			50				60			60		
	C	100			120				140			160		
	D	600	700	800	500	600	700	800	600	700	800	800	900	1000
	E	625	725	825	525	625	725	825	625	725	825	825	925	1025
	G	125			145				170			190		
	J	84			98				108			108		
	J1	30			38				38			38		
	J2	16			16				16			16		
	W	124			144				169			189		
	kg	50	55	60	68	76	85	93	124	134	144	200	220	240
	Cod.	5.86.33600	5.86.33700	5.86.33800	5.86.34500	5.86.34600	5.86.34700	5.86.34800	5.86.35600	5.86.35700	5.86.35800	5.86.36800	5.86.36900	5.86.36100

Art. 863D

(Art. 863 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.3D360	5.86.3D370	5.86.3D380	5.86.3D450	5.86.3D460	5.86.3D470	5.86.3D480	5.86.3D560	5.86.3D570	5.86.3D580	5.86.3D680	5.86.3D690	5.86.3D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 863E

(Art. 863 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.3E360	5.86.3E370	5.86.3E380	5.86.3E450	5.86.3E460	5.86.3E470	5.86.3E480	5.86.3E560	5.86.3E570	5.86.3E580	5.86.3E680	5.86.3E690	5.86.3E610

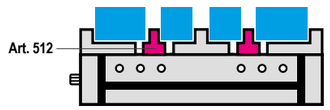
Art. 863F

(Art. 863 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

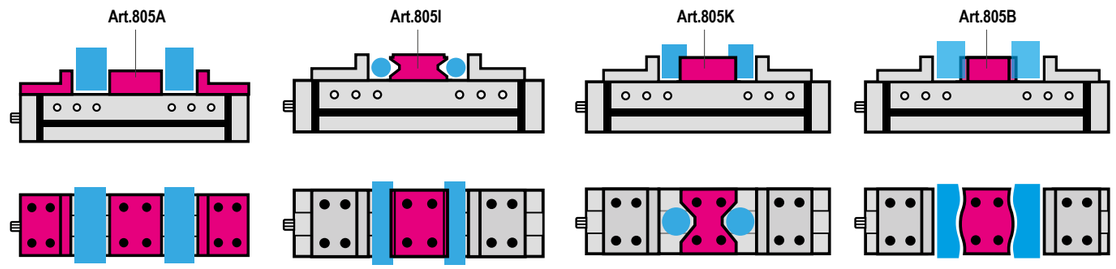
Cod.	5.86.3F360	5.86.3F370	5.86.3F380	5.86.3F450	5.86.3F460	5.86.3F470	5.86.3F480	5.86.3F560	5.86.3F570	5.86.3F580	5.86.3F680	5.86.3F690	5.86.3F610

Art. 863

Esempi applicativi ganasce:
Jaw application examples:



Serraggio simultaneo di 4 pezzi con ganascia intermedia
4 Workpieces simultaneous clamping with intermediate jaw



Ganasce liscie per fissaggio centrale
Smooth jaws for central fixed

Ganascia primatica orizzontale per fissaggio centrale
Horizontal prismatic jaws for central fixed

Ganascia prismatica verticale per fissaggio centrale
Vertical prismatic jaw for central fixed

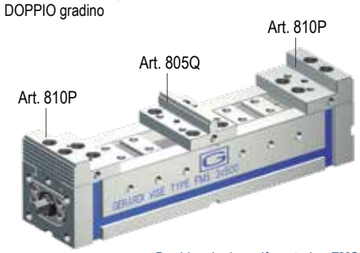
Ganascia lavorabile per fissaggio centrale
Soft jaws for central fixed

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3	
		25 kN		25 kN				30 kN	
Apertura massima / Maximum opening	A	2 x 32	2 x 82	2 x 54	2 x 104	2 x 154	2 x 204	2 x 77	2 x 127
	A1	2 x 84	2 x 134	2 x 118	2 x 168	2 x 218	2 x 268	2 x 162	2 x 212
	B	25		30				40	
	C	70		90				100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75		95				125	
	J	56		64				84	
	J1	24		24				30	
	J2	16		16				16	
	W	74		94				124	
	kg	8	11	20	27	33	40	40	45
	Cod.	5.86.41200	5.86.41300	5.86.42300	5.86.42400	5.86.42500	5.86.42600	5.86.43400	5.86.43500

Art. 864

NEW

Morsa **FMS** doppia, singola, autocentrante con ganasce a DOPPIO gradino



Double, single, self-centering **FMS** vise with DOUBLE step jaws

Art. 805F

Ganascia fissa con doppio gradino 3x5 LISCIA

Fixed jaw with double 3x5 step SMOOTH

Cod.	5.80.5F100	5.80.5F200	5.80.5F300

Art. 805G

Ganascia fissa con doppio gradino 3x5 ZIGRINATA

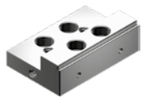
Fixed jaw with double 3x5 step SERRATED

Cod.	5.80.5G100	5.80.5G200	5.80.5G300

Art. 810O

Ganascia mobile con gradino piccolo e grande

Movable jaw with small and large step

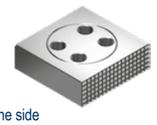


Cod.	5.81.0O100	5.81.0O200	5.81.0O300

Art. 810X

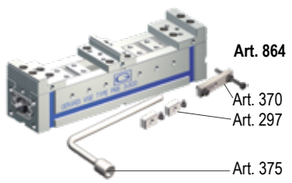
Ganascia mobile oscillante con gradino 3x5 zigrinata da un lato con albero a gradino (**Art. 810Z**)

Floating movable jaw with 3x5 step one side serrated with step block pin (**Art. 810Z**)

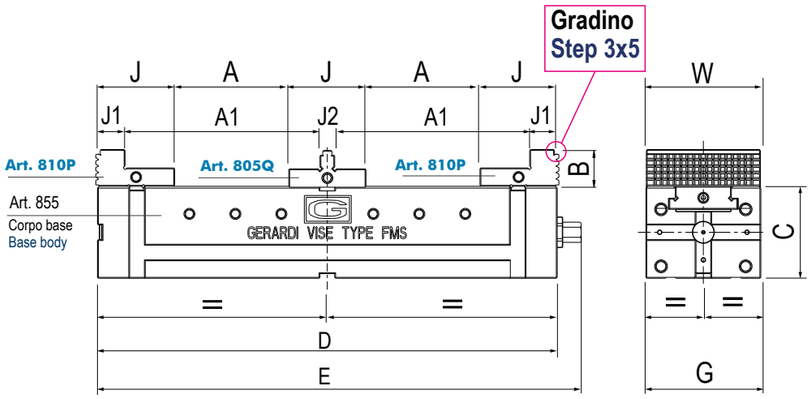


Cod.	5.81.0X100	5.81.0X200	5.81.0X300

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375



Tipo (grandezza) morsa / Vise type (size)	kN	3			4				5			6		
		30 kN			30 kN				32 kN			32 kN		
Apertura massima / Maximum opening	A	2 x 177	2 x 227	2 x 277	2 x 103	2 x 153	2 x 203	2 x 253	2 x 138	2 x 188	2 x 238	2 x 238	2 x 288	2 x 338
	A1	2 x 262	2 x 312	2 x 362	2 x 204	2 x 254	2 x 304	2 x 354	2 x 254	2 x 304	2 x 354	2 x 354	2 x 404	2 x 454
	B	40			50				60			60		
	C	100			120				140			160		
	D	600	700	800	500	600	700	800	600	700	800	800	900	1000
	E	625	725	825	525	625	725	825	625	725	825	825	925	1025
	G	125			145				170			190		
	J	84			98				108			108		
	J1	30			38				38			38		
	J2	16			16				16			16		
	W	124			144				169			189		
	kg	50	55	60	68	76	85	93	124	134	144	200	220	240
	Cod.	5.86.43600	5.86.43700	5.86.43800	5.86.44500	5.86.44600	5.86.44700	5.86.44800	5.86.45600	5.86.45700	5.86.45800	5.86.46800	5.86.46900	5.86.46100

Art. 805F

Cod.	5.80.5F300	5.80.5F400	5.80.5F500	5.80.5F300

Art. 805G

Cod.	5.80.5G300	5.80.5G400	5.80.5G500	5.80.5G600

Art. 810O

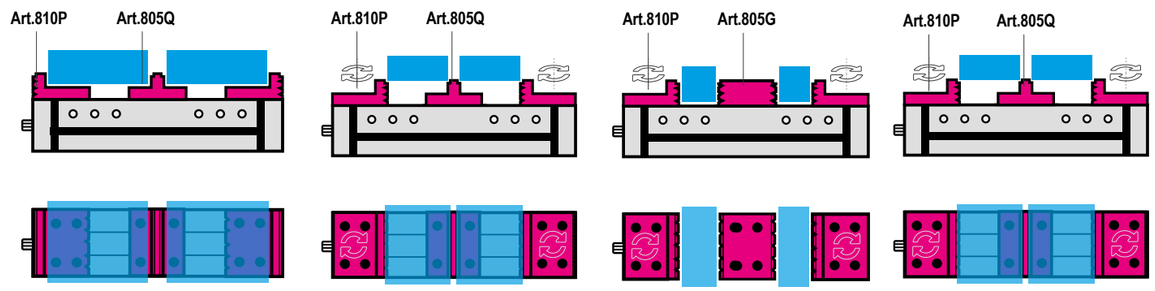
Cod.	5.81.0O300	5.81.0O400	5.81.0O500	5.81.0O600

Art. 810X

Cod.	5.81.0X300	5.81.0X400	5.81.0X500	5.81.0X600

Art. 864

Esempi applicativi ganasce a doppio gradino:
Double step jaw application examples:



Utilizzo del gradino standard per alzare il particolare rispetto alla base

Use the main step for raising the workpiece

Per utilizzare il 2° gradino (3x5) ruotare le ganasce mobili di 180°

In order to use the second 3x5mm step turn the movable jaw 180°

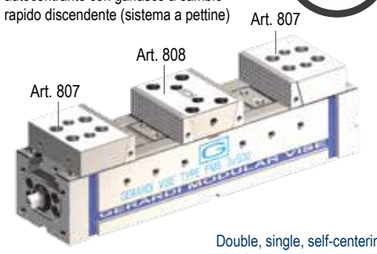
Per sfruttare il lato zigrinato delle ganasce mobili Art.810P sostituisci la ganascia fissa centrale con l'Art.805G

To exploit the serrated side of the movable jaws Art.810P change the fixed central jaw with Art.805G

Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN	2 25 kN				3 30 kN	
Apertura massima / Maximum opening	A	2 x 52	2 x 30	2 x 80	2 x 130	2 x 180	2 x 46	2 x 96
	B	25	30				40	
	C	70	90				100	
	D	332	300	400	500	600	400	500
	E	349	320	420	520	620	425	525
	G	75	95				125	
	J	63	76				98	
	J1	70	88				111	
	W	74	94				124	
	kg	12	23	30	36	43	46	51
	Cod.	5.86.51300	5.86.52300	5.86.52400	5.86.52500	5.86.52600	5.86.53400	5.86.53500

Art. 865

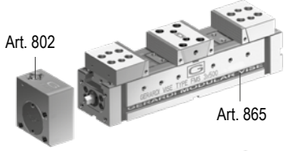
Morsa **FMS** doppia, singola, autocentrante con ganasce a cambio rapido discendente (sistema a pettine)



Double, single, self-centering **FMS** vise with quick change pull down jaws (comb system)

Art. 865D

(Art. 865 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier



Cod.	5.86.5D130	5.86.5D230	5.86.5D240	5.86.5D250	5.86.5D260	5.86.5D340	5.86.5D350

Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

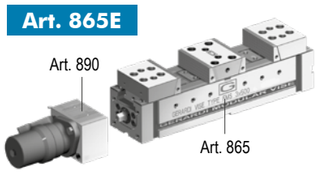
Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Art. 802

Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 865E

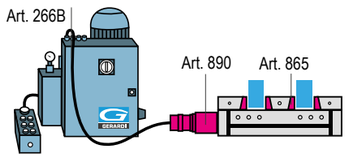
(Art. 865 + 890) Morsa + motore idraulico / Vise + hydraulic motor



Cod.	5.86.5E130	5.86.5E230	5.86.5E240	5.86.5E250	5.86.5E260	5.86.5E340	5.86.5E350

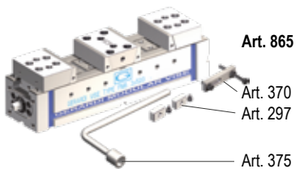
Art. 865F

(Art. 865 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

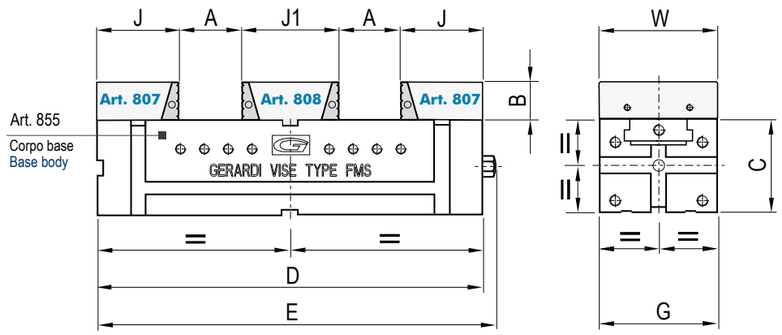


Cod.	5.86.5F130	5.86.5F230	5.86.5F240	5.86.5F250	5.86.5F260	5.86.5F340	5.86.5F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375



	3 30 kN			4 30 kN				5 32 kN			6 32 kN		
A	2 x 146	2 x 196	2 x 246	2 x 65	2 x 115	2 x 165	2 x 215	2 x 90	2 x 140	2 x 190	2 x 216	2 x 256	2 x 316
B	40			50				60			60		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G	125			145				170			190		
J	98			117				132			119		
J1	111			136				155			130		
W	124			144				169			189		
kg	54	59	64	74	82	91	99	134	144	154	215	235	255
Cod.	5.86.53600	5.86.53700	5.86.53800	5.86.54500	5.86.54600	5.86.54700	5.86.54800	5.86.55600	5.86.55700	5.86.55800	5.86.56800	5.86.56900	5.86.56100

Art. 865D

(Art. 865 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.5D360	5.86.5D370	5.86.5D380	5.86.5D450	5.86.5D460	5.86.5D470	5.86.5D480	5.86.5D560	5.86.5D570	5.86.5D580	5.86.5D680	5.86.5D690	5.86.5D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 865E

(Art. 865 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.5E360	5.86.5E370	5.86.5E380	5.86.5E450	5.86.5E460	5.86.5E470	5.86.5E480	5.86.5E560	5.86.5E570	5.86.5E580	5.86.5E680	5.86.5E690	5.86.5E610

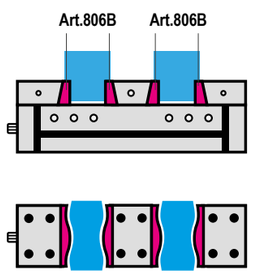
Art. 865F

(Art. 865 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

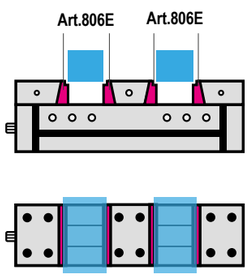
Cod.	5.86.5F360	5.86.5F370	5.86.5F380	5.86.5F450	5.86.5F460	5.86.5F470	5.86.5F480	5.86.5F560	5.86.5F570	5.86.5F580	5.86.5F680	5.86.5F690	5.86.5F610

Art. 865

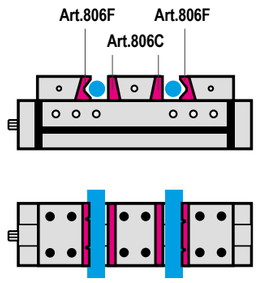
Esempi applicativi piastre ganasce:
Jaw plates application examples:



Piastre ganasce lavorabili Art.806B
Soft machineable Jaw plates Art.806B

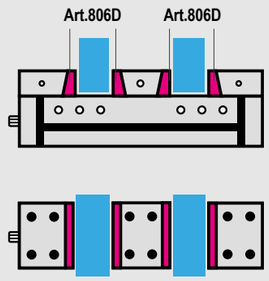


Piastre ganasce a gradino Art.806E
Step jaw plates Art.806E



2 piastre ganasce Art.806F + 2 Art.806C
2 jaw plates Art.806F + 2 Art.806C

Configurazione standard / Standard configuration

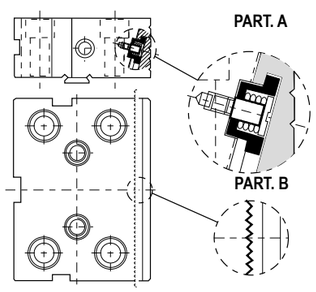


Piastre ganasce zigrinate Art.806D
Serrated jaw plates Art.806D

CORPI GANASCE FMS & PIASTRE GANASCE INTERCAMBIABILI RAPIDE
FMS COMB JAW BODIES & QUICK INTERCHANGEABLE JAW PLATES

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 806* Ganascia fissa con piastra ganascia zigrinata intercambiabile rapida / Fixed jaw with quick interchangeable serrated jaw plate	Cod.	5.80.61000	5.80.62000	5.80.63000	5.80.64000	5.80.65000	5.80.66000
Art. 807* Ganascia mobile con piastra ganascia zigrinata intercambiabile rapida / Movable jaw with quick interchangeable serrated jaw plate	Cod.	5.80.71000	5.80.72000	5.80.73000	5.80.74000	5.80.75000	5.80.76000
Art. 808* Ganascia fissa doppia con piastre ganasce zigrinate intercambiabili rapide / Double fixed jaw with quick interchangeable serrated jaw plate	Cod.	5.80.81000	5.80.82000	5.80.83000	5.80.84000	5.80.85000	5.80.86000
Art. 806A Corpo ganascia fissa per piastra ganascia intercambiabile rapida / Fixed jaw body for quick interchangeable jaw plate	Cod.	5.80.6A100	5.80.6A200	5.80.6A300	5.80.6A400	5.80.6A500	5.80.6A600
Art. 807A Corpo ganascia mobile per piastra ganascia intercambiabile rapida / Movable jaw body for quick interchangeable jaw plate	Cod.	5.80.7A100	5.80.7A200	5.80.7A300	5.80.7A400	5.80.7A500	5.80.7A600
Art. 808A Corpo ganascia fissa doppia per piastre ganasce intercambiabili rapide / Double fixed jaw body for quick interchangeable jaw plate	Cod.	5.80.8A100	5.80.8A200	5.80.8A300	5.80.8A400	5.80.8A500	5.80.8A600
Art. 808B Corpo ganascia fissa doppia ridotta per piastre ganasce intercambiabili rapide / Double fixed jaw body narrow for quick interchangeable jaw plate	Cod.	5.80.8B100	5.80.8B200	5.80.8B300	5.80.8B400	5.80.8B500	5.80.8B600

* Viti per fissaggio a richiesta Fixing screws on request



RAPIDA SOSTITUZIONE DELLE PIASTRE GANASCE DISCENDENTI SENZA BISOGNO DI ALCUN UTENSILE

Il nuovo sistema con piastre ganasce intercambiabili, conferisce alla morsa FMS un ulteriore aumento di flessibilità dato dalla rapidità di sostituzione delle piastre ganasce e dalla precisione di riposizionamento.
La rapidità di sostituzione delle piastre ganasce è resa possibile dal nuovo sistema con perno a molla (**PART. A**), mentre le righe prismatiche (**PART. B**) effettuate con mola sagomata sui piani d'appoggio rendono possibile un riposizionamento di elevata precisione. La vasta gamma di piastre ganasce intercambiabili va a soddisfare le più svariate esigenze di lavorazione.

QUICK HAND CHANGE OF PULL- DOWN JAW PLATES - NO TOOLS NEEDED

The new system with quick interchangeable jaw plates, increase the FMS vise flexibility, and feature the quick jaw plates replacement and their high precision repositioning. The quickness of the jaw plates replacement is allowed by the new system of pin with spring (**PART. A**), while the prismatic grooves (**PART. B**), made with shaped grind wheel on the surface plates, allow a perfect repositioning. The wide range of interchangeable jaws plates can satisfy the most varied workholding needs.

Art. 806F

Piastra ganascia intercambiabile prismatica a pettine
Prismatic comb interchangeable jaw plate

Solo 2 per morsa!! Just 2 pcs each vise!!

Cod.	5.80.6F100	5.80.6F200	5.80.6F300	5.80.6F400	5.80.6F500	5.80.6F600

Piastra ganascia intercambiabile prismatica a pettine
Per serraggi autocentranti è necessario ordinare n. 2 piastrine prismatiche
Prismatic comb interchangeable jaw plate
For self-centering clamping is necessary to order n. 2 prismatic jaws

Ø Min / Max	A	6 / 16	9 / 24	13 / 38	15 / 40	15 / 42	15 / 42
	B	4 / 10	7 / 18	9 / 24	9 / 24	9 / 24	9 / 24

PIASTRE GANASCE INTERCAMBIABILI RAPIDE
QUICK INTERCHANGEABLE JAW PLATES

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
	W	73	93	123	143	168	188
	B	25	30	40	50	60	60
	C	10	10	11	11	16	16
Art. 806B Piastra ganascia lavorabile a pettine / Soft comb jaw plate	Cod.	5.80.6B100	5.80.6B200	5.80.6B300	5.80.6B400	5.80.6B500	5.80.6B600
Art. 806C Piastra ganascia liscia a pettine / Smooth comb jaw plate	Cod.	5.80.6C100	5.80.6C200	5.80.6C300	5.80.6C400	5.80.6C500	5.80.6C600
Art. 806D Piastra ganascia zigrinata a pettine / Serrated comb jaw plate	Cod.	5.80.6D100	5.80.6D200	5.80.6D300	5.80.6D400	5.80.6D500	5.80.6D600
Art. 806E Piastra ganascia a gradino a pettine / Step comb jaw plate	Cod.	5.80.6E100	5.80.6E200	5.80.6E300	5.80.6E400	5.80.6E500	5.80.6E600

KIT RISPARMIO - SAVING KIT

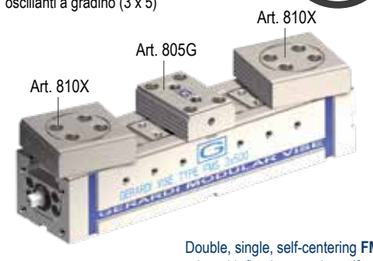
Piastra ganascia intercambiabile a gradino a pettine (SET di coppie)
Step comb interchangeable jaw plate (SET of pair)

A	Set di 8 pezzi / Set of 8 pcs.	Set di 10 pezzi / Set of 10 pcs.	Set di 14 pezzi / Set of 14 pcs.	Set di 14 pezzi / Set of 14 pcs.	Set di 14 pezzi / Set of 14 pcs.	Set di 14 pezzi / Set of 14 pcs.
	3	3	3	3	3	3
	5	5	5	5	5	5
	8	8	8	8	8	8
	13	13	13	13	13	13
	-	18	18	18	18	18
	-	-	23	23	23	23
	-	-	28	28	28	28
B	25	30	40	50	60	60
C	3	3	3	3	3	3
Cod.	5.80.6E112	5.80.6E212	5.80.6E312	5.80.6E412	5.80.6E512	5.80.6E612

Art. 806SLD Piastra ganascia scaricata a pettine / Discharged comb jaw plate	A	28	38	48	58	63	95
	B	12	12	12	12	12	12
	C	14	18	32	42	47	79
	H	8	8	8	8	8	8
	Cod.	5.80.6SLD1	5.80.6SLD2	5.80.6SLD3	5.80.6SLD4	5.80.6SLD5	5.80.6SLD6
Art. 806SLE Piastra ganascia con gradino scaricata a pettine / Discharged step comb jaw plate	Cod.	5.80.6SLE1	5.80.6SLE2	5.80.6SLE3	5.80.6SLE4	5.80.6SLE5	5.80.6SLE6
Art. 806K Piastra ganascia a gradino a pettine con inserti GRIP / Comb step jaw plate with GRIP inserts	C	14	18	32	42	47	79
	H	23	33	43	53	58	73
	Cod.	5.80.6K100	5.80.6K200	5.80.6K300	5.80.6K400	5.80.6K500	5.80.6K600
Art. 806G Piastra ganascia a pettine con arresto a 90° / 90° comb jaw plate	**1 per stazione di serraggio !!** 1 pc per clamping station !!					
	Cod.	5.80.6G100	5.80.6G200	5.80.6G300	5.80.6G400	5.80.6G500	5.80.6G600
Art. 806H Piastra ganascia bombata a pettine / Round comb jaw plate	Cod.	5.80.6H100	5.80.6H200	5.80.6H300	5.80.6H400	5.80.6H500	5.80.6H600
Art. 806M Piastra ganascia a pettine per angolo di 30° o 45° / 30° or 45° angle comb jaw plate	**1 per stazione di serraggio !!** 1 pc per clamping station !!					
	Cod.	5.80.6M100	5.80.6M200	5.80.6M300	5.80.6M400	5.80.6M500	5.80.6M600

Art. 866

Morsa **FMS** doppia, singola, autocentrante con ganasce oscillanti a gradino (3 x 5)

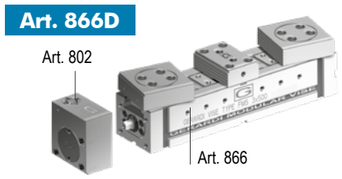


Double, single, self-centering **FMS** vise with floating step jaws (3 x 5)

Tipo (grandezza) morsa / Vise type (size)	kN	1	2				3	
		25 kN	25 kN				30 kN	
Apertura massima / Maximum opening	A	2 x 52	2 x 30	2 x 80	2 x 130	2 x 180	2 x 46	2 x 96
	B	25	30				40	
	C	70	90				100	
	D	332	300	400	500	600	400	500
	E	349	320	420	520	620	425	525
	G	75	95				125	
	J	63	76				98	
	J1	70	88				111	
	W	74	94				124	
	kg	12	23	30	36	43	46	51
	Cod.	5.86.61300	5.86.62300	5.86.62400	5.86.62500	5.86.62600	5.86.63400	5.86.63500

Art. 866D

(Art. 866 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier



Cod.	5.86.6D130	5.86.6D230	5.86.6D240	5.86.6D250	5.86.6D260	5.86.6D340	5.86.6D350

Art. 802

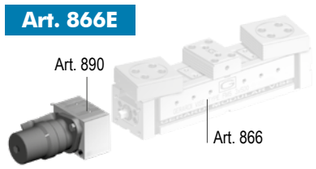
Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 866E

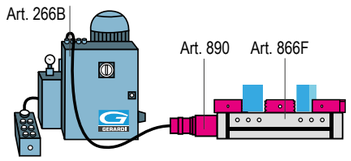
(Art. 866 + 890) Morsa + motore idraulico / Vise + hydraulic motor



Cod.	5.86.6E130	5.86.6E230	5.86.6E240	5.86.6E250	5.86.6E260	5.86.6E340	5.86.6E350

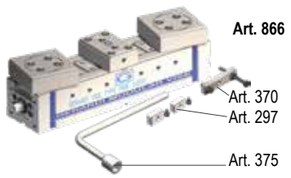
Art. 866F

(Art. 866 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

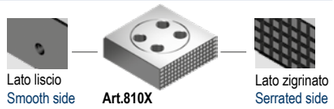


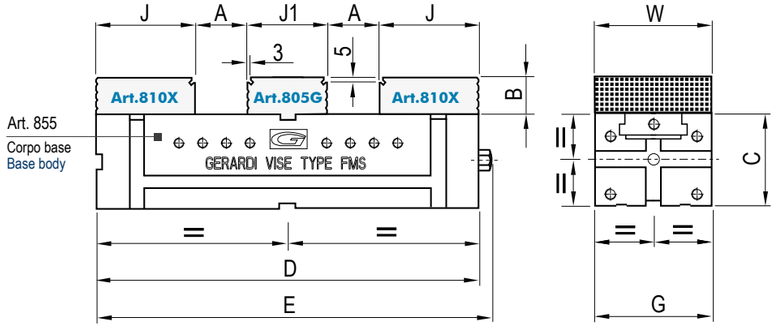
Cod.	5.86.6F130	5.86.6F230	5.86.6F240	5.86.6F250	5.86.6F260	5.86.6F340	5.86.6F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375





	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	2 x 152	2 x 202	2 x 252	2 x 73	2 x 123	2 x 173	2 x 223	2 x 111	2 x 161	2 x 211	2 x 203	2 x 235	2 x 303
B	40			50				60			60		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G	125			145				170			190		
J	106			128				135			143		
J1	84			98				108			108		
W	124			144				169			189		
kg	54	59	64	74	82	91	99	134	144	154	215	235	255
Cod.	5.86.63600	5.86.63700	5.86.63800	5.86.64500	5.86.64600	5.86.64700	5.86.64800	5.86.65600	5.86.65700	5.86.65800	5.86.66800	5.86.66900	5.86.66100

Art. 866D

(Art. 866 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.6D360	5.86.6D370	5.86.6D380	5.86.6D450	5.86.6D460	5.86.6D470	5.86.6D480	5.86.6D560	5.86.6D570	5.86.6D580	5.86.6D680	5.86.6D690	5.86.6D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 866E

(Art. 866 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.6E360	5.86.6E370	5.86.6E380	5.86.6E450	5.86.6E460	5.86.6E470	5.86.6E480	5.86.6E560	5.86.6E570	5.86.6E580	5.86.6E680	5.86.6E690	5.86.6E610

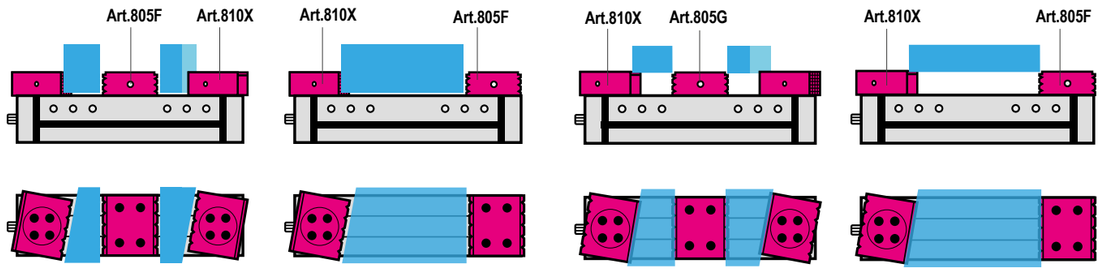
Art. 866F

(Art. 866 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.6F360	5.86.6F370	5.86.6F380	5.86.6F450	5.86.6F460	5.86.6F470	5.86.6F480	5.86.6F560	5.86.6F570	5.86.6F580	5.86.6F680	5.86.6F690	5.86.6F610

Art. 866

Esempi applicativi ganasce oscillanti:
Floating Jaws application examples:



Serraggio di particolari grezzi - Rough workpieces clamping

Serraggio di particolari sul gradino - Rough workpieces clamping on step

FUNZIONAMENTO DELLE GANASCE MOBILI OSCILLANTI CON INSERTI
HOW TO OPERATE FLOATING MOVABLE JAWS WITH INSERTS

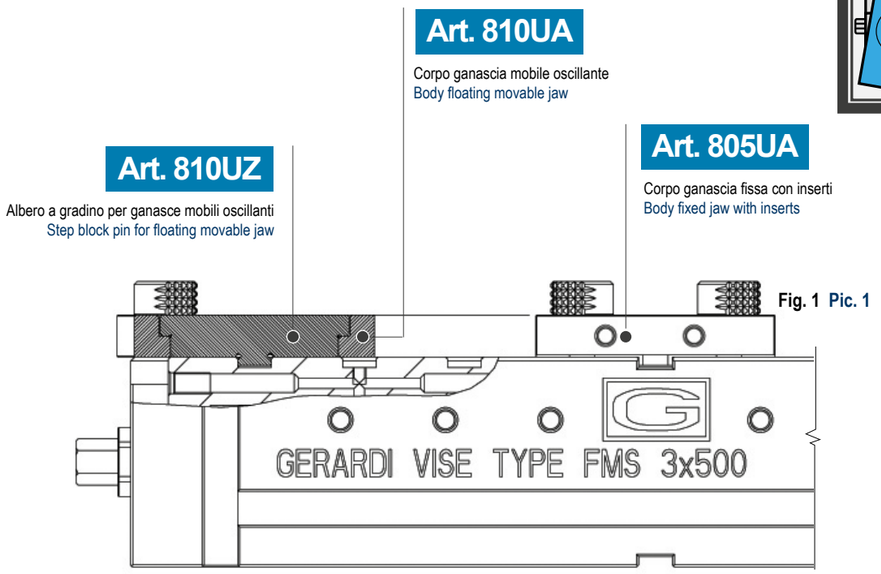


Fig. 1 Pic. 1

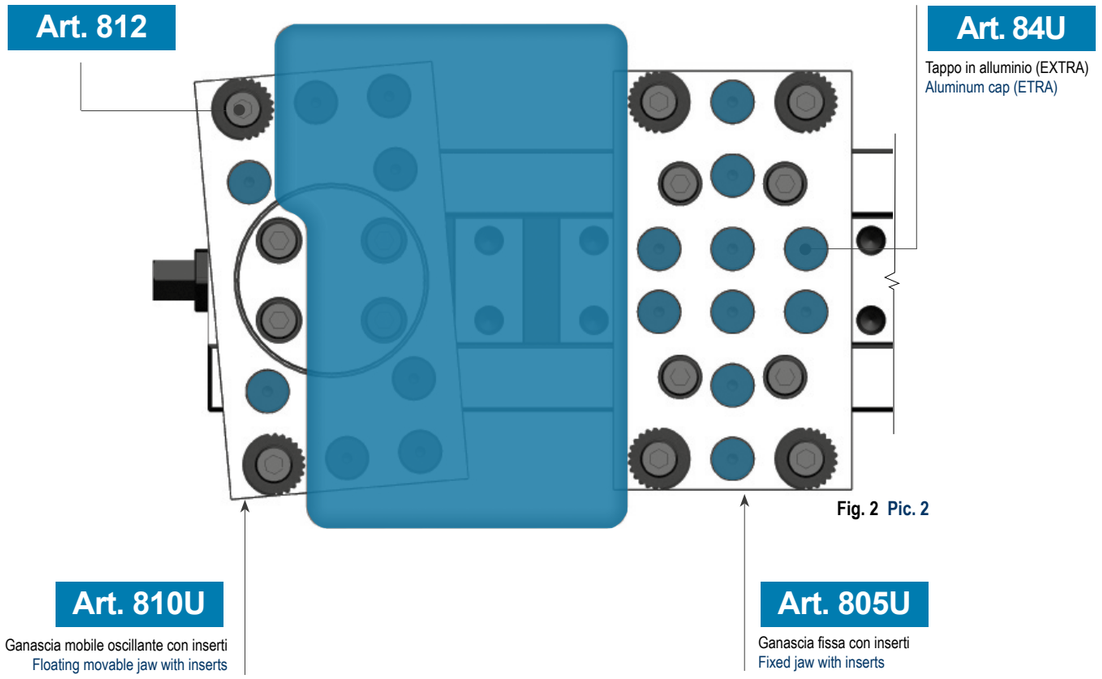


Fig. 2 Pic. 2

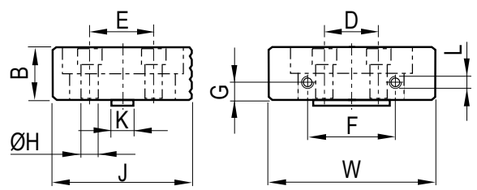
Le ganasce mobili oscillanti consentono il serraggio di pezzi di forma irregolare i cui lati non risultino paralleli (**Fig. 2**). Questo è reso possibile dall'albero a gradino (**Art. 810UZ - Fig. 1**), posto al centro della ganascia, che pur permettendo la rotazione della ganascia, ne mantiene la precisione ed evita il sollevamento del pezzo mentre viene lavorato.
Il tutto a garanzia di un serraggio in piena sicurezza. Gli inserti estremizzano ulteriormente la versatilità delle ganasce mobili oscillanti della morsa FMS.

Floating movable jaws allow to clamp workpieces with irregular shapes whose sides are not parallels (**Pic. 2**).In fact thanks to the step block spindle (**Art. 810UZ - Pic. 1**), positioned in the centre of the jaw body, the jaw can float and guarantee at the same time maximum precision and no tilting of the parts while being worked.
The safety of the workholding is guaranteed. The insert further increase the versatility of the FMS floating movable jaws.

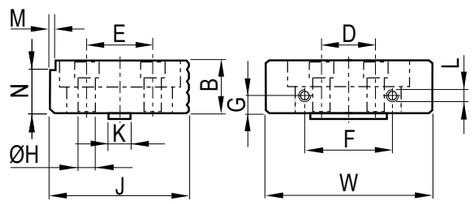
GANASCE MOBILI OSCILLANTI
FLOATING MOVABLE JAWS

Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Art. 810W* Ganascia mobile oscillante zigrinata da un lato con albero a gradino (**Art. 810Z**) Floating movable jaw one side serrated with step block pin (**Art. 810Z**)	Cod. 5.81.0W100	5.81.0W200	5.81.0W300	5.81.0W400	5.81.0W500	5.81.0W600
* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810X* Ganascia mobile oscillante con gradino 3x5 zigrinata da un lato con albero a gradino (**Art. 810Z**) Floating movable jaw with 3x5 step one side serrated with step block pin (**Art. 810Z**)	Cod. 5.81.0X100	5.81.0X200	5.81.0X300	5.81.0X400	5.81.0X500	5.81.0X600
* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810Y* Ganascia mobile oscillante con gradino 3x5 con albero a gradino (**Art. 810Z**) Floating movable jaw with 3x5 step with step block pin (**Art. 810Z**)	Cod. 5.81.0Y100	5.81.0Y200	5.81.0Y300	5.81.0Y400	5.81.0Y500	5.81.0Y600
* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810Z Albero a gradino per ganasce mobili oscillanti Step block pin for floating movable jaw	Cod. 5.81.0Z100	5.81.0Z200	5.81.0Z300	5.81.0Z400	5.81.0Z500	5.81.0Z600
Art. 810WA Corpo ganascia mobile oscillante zigrinata da un lato Body floating movable jaw one side serrated	Cod. 5.81.0WA10	5.81.0WA20	5.81.0WA30	5.81.0WA40	5.81.0WA50	5.81.0WA60
Art. 810XA Corpo ganascia mobile oscillante con gradino 3x5 zigrinata da un lato Body floating movable jaw with 3x5 step one side serrated	Cod. 5.81.0XA10	5.81.0XA20	5.81.0XA30	5.81.0XA40	5.81.0XA50	5.81.0XA60
Art. 810YA Corpo ganascia mobile oscillante con gradino 3x5 Body floating movable jaw with 3x5 step	Cod. 5.81.0YA10	5.81.0YA20	5.81.0YA30	5.81.0YA40	5.81.0YA50	5.81.0YA60

Art. 810W



Art. 810X



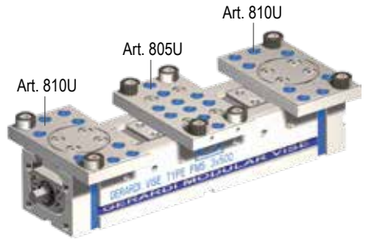
Tipo (grandezza) morsa / Vise (type) size

mm	1	2	3	4	5	6	Tolleranze / Tolerance
B	25	30	40	50	60		- 0,02
D	20	25	38	48	44	54	-
E	32	40	50	60	68	68	-
F	40	50		65		100	-
G	10		15	20	25		-
H	9	11	13	17		22	-
L	M5	M6					-
K	16						H7
M	5						± 0,01
N	3						± 0,02
J	72	84	106	128	135	143	- 0,02
W	74	94	124	144	169	189	-

Art. 867

Morsa **FMS** doppia, singola, autocentrante con ganasce oscillanti con inserti regolabili

3 in 1 VISES – SINGLE / DOUBLE / SELF-CENTERING

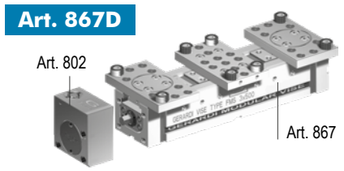


Double, single, self-centering **FMS** vise with floating jaws with adjustable inserts

Tipo (grandezza) morsa / Vise type (size)	1	2				3	
kN	25 kN	25 kN				30 kN	
A1	91	91	141	191	241	141	191
B	20	20				20	
C	70	90				100	
D	332	300	400	500	600	400	500
E	349	320	420	520	620	425	525
G	75	95				125	
J1	50	50				70	
J2	25	25				35	
Ø	30 (H = 16)	30 (H = 16)				30 (H = 16)	
W	100	120				170	
kg	11	20	27	33	40	40	45
Cod.	5.86.71300	5.86.72300	5.86.72400	5.86.72500	5.86.72600	5.86.73400	5.86.73500

Art. 867D

(Art. 867 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier



Cod.	5.86.7D130	5.86.7D230	5.86.7D240	5.86.7D250	5.86.7D260	5.86.7D340	5.86.7D350

Art. 802

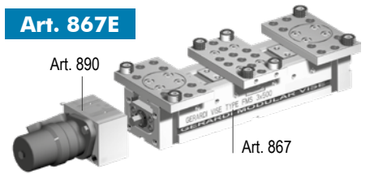
Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 867E

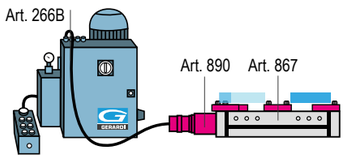
(Art. 867 + 890) Morsa + motore idraulico / Vise + hydraulic motor



Cod.	5.86.7E130	5.86.7D230	5.86.7E240	5.86.7E250	5.86.7E260	5.86.7E340	5.86.7E350

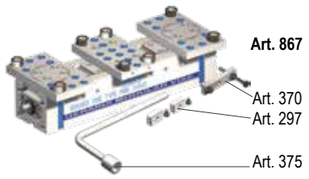
Art. 867F

(Art. 867 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

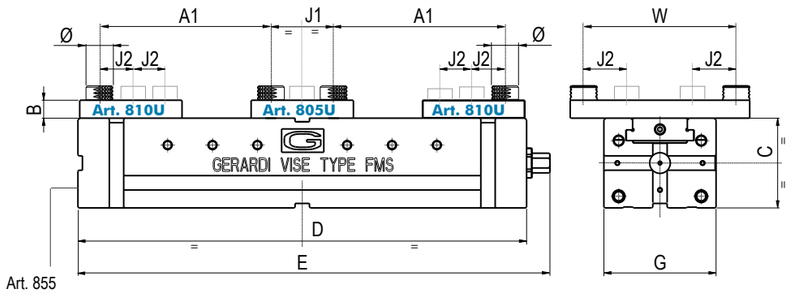


Cod.	5.86.7F130	5.86.7F230	5.86.7F240	5.86.7F250	5.86.7F260	5.86.7F340	5.86.7F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375



Art. 855
Corpo base / Base body

	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A1	241	291	341	191	241	291	341	231	281	331	331	381	431
B	20			30				35			35		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G	125			145				170			190		
J1	70			80				100			100		
J2	35			40				40			40		
Ø	30 (H = 16)			30 (H = 16)				40 (H = 30)			40 (H = 30)		
W	170			220				250			300		
kg	50	55	60	68	76	85	93	124	134	144	200	220	240
Cod.	5.86.73600	5.86.73700	5.86.73800	5.86.74500	5.86.74600	5.86.74700	5.86.74800	5.86.75600	5.86.75700	5.86.75800	5.86.76800	5.86.76900	5.86.76100

Art. 867D

(Art. 867 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.7D360	5.86.7D370	5.86.7D380	5.86.7D450	5.86.7D460	5.86.7D470	5.86.7D480	5.86.7D560	5.86.7D570	5.86.7D580	5.86.7D680	5.86.7D690	5.86.7D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 867E

(Art. 867 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.7E360	5.86.7E370	5.86.7E380	5.86.7E450	5.86.7E460	5.86.7E470	5.86.7E480	5.86.7E560	5.86.7E570	5.86.7E580	5.86.7E680	5.86.7E690	5.86.7E610

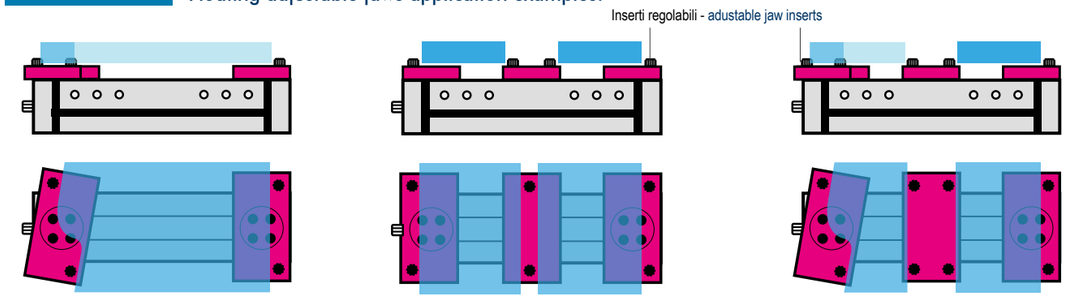
Art. 867F

(Art. 867 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.7F360	5.86.7F370	5.86.7F380	5.86.7F450	5.86.7F460	5.86.7F470	5.86.7F480	5.86.7F560	5.86.7F570	5.86.7F580	5.86.7F680	5.86.7F690	5.86.7F610

Art. 867

Esempi applicativi ganasce oscillanti regolabili:
Floating adjustable jaws application examples:



4 inserti - 4 jaw inserts
6 inserti - 6 jaw inserts
8 inserti - 8 jaw inserts

FUNZIONAMENTO DELLE GANASCE MOBILI OSCILLANTI CON INSERTI
HOW TO OPERATE FLOATING MOVABLE JAWS WITH INSERTS

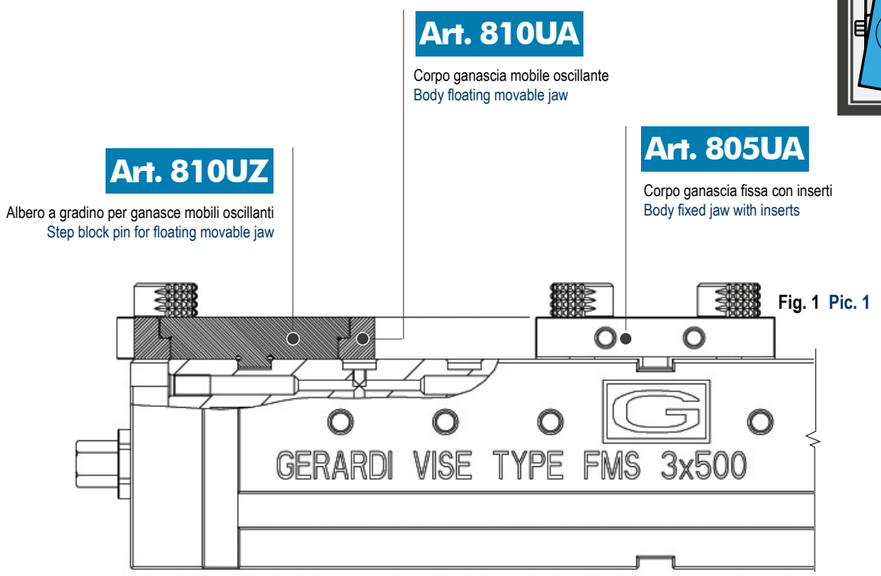


Fig. 1 Pic. 1

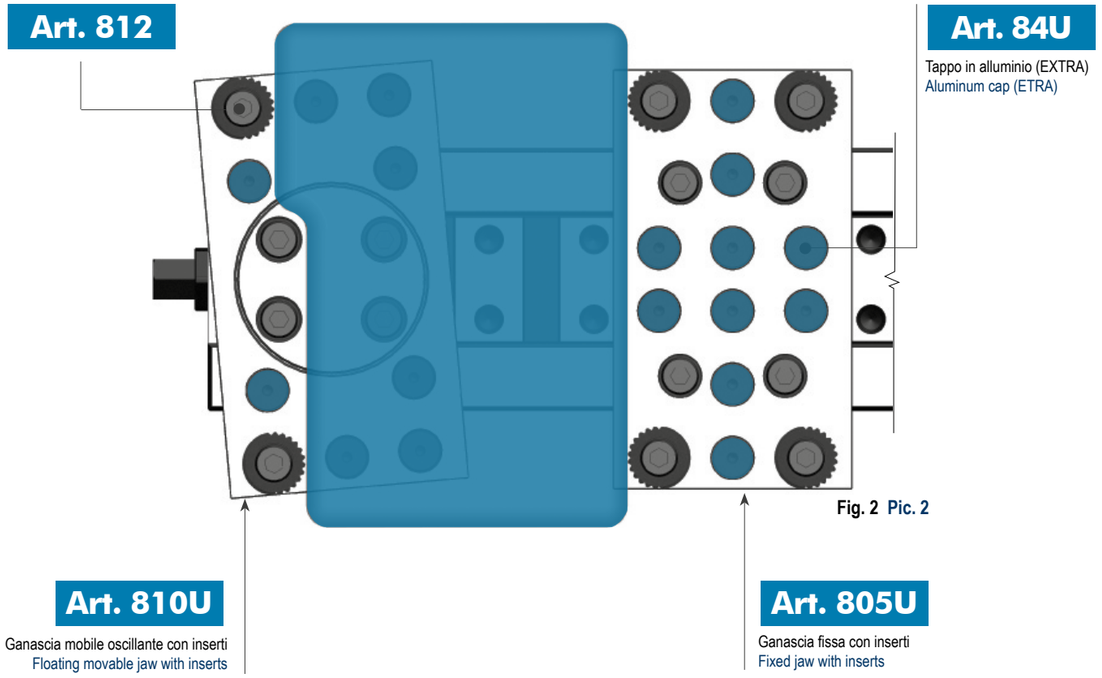


Fig. 2 Pic. 2

Le ganasce mobili oscillanti consentono il serraggio di pezzi di forma irregolare i cui lati non risultino paralleli (**Fig. 2**). Questo è reso possibile dall'albero a gradino (**Art. 810UZ - Fig. 1**), posto al centro della ganascia, che pur permettendo la rotazione della ganascia, ne mantiene la precisione ed evita il sollevamento del pezzo mentre viene lavorato.
Il tutto a garanzia di un serraggio in piena sicurezza. Gli inserti estremizzano ulteriormente la versatilità delle ganasce mobili oscillanti della morsa FMS.

Floating movable jaws allow to clamp workpieces with irregular shapes whose sides are not parallels (**Pic. 2**).In fact thanks to the step block spindle (**Art. 810UZ - Pic. 1**), positioned in the centre of the jaw body, the jaw can float and guarantee at the same time maximum precision and no tilting of the parts while being worked.
The safety of the workholding is guaranteed. The insert further increase the versatility of the FMS floating movable jaws.

GANASCE FISSE & MOBILI FMS
FMS FIXED AND MOVABLE JAWS

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 810U* Ganascia mobile regolabile oscillante con inserti / Floating movable jaw with inserts	Cod.	5.81.0U100	5.81.0U200	5.81.0U300	5.81.0U400	5.81.0U500	5.81.0U600
	* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810UA Corpo ganascia mobile oscillante / Body floating movable jaw	Cod.	5.81.0UA10	5.81.0UA20	5.81.0UA30	5.81.0UA40	5.81.0UA50	5.81.0UA60
Art. 810UZ* Albero a gradino per ganasce mobili oscillanti / Step block pin for floating movable jaw	Cod.	5.81.0UZ10	5.81.0UZ20	5.81.0UZ30	5.81.0UZ40	5.81.0UZ50	5.81.0UZ60
	* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810Q* Ganascia mobile regolabile con inserti / Movable jaw with inserts	Cod.	5.81.0Q100	5.81.0Q200	5.81.0Q300	5.81.0Q400	5.81.0Q500	5.81.0Q600
	* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 810QA Corpo ganascia regolabile mobile per inserti / Body movable jaw for inserts	Cod.	5.81.0QA10	5.81.0QA20	5.81.0QA03	5.81.0QA40	5.81.0QA50	5.81.0QA60
Art. 805U* Ganascia fissa regolabile con inserti / Fixed jaw with inserts	Cod.	5.80.5U100	5.80.5U200	5.80.5U300	5.80.5U400	5.80.5U500	5.80.5U600
	* Set viti per fissaggio a richiesta - Set of fixing screws on request						
Art. 805UA Corpo ganascia fissa regolabile per inserti / Body fixed jaw per inserti	Cod.	5.80.5UA10	5.80.5UA20	5.80.5UA30	5.80.5UA40	5.80.5UA50	5.80.5UA60

Art. 812 Inserto liscio e zigrinato / Smooth and serrated insert	Ø	30	40
	H	16	30
Art. 812A Inserto liscio / Smooth insert	Cod.	5.81.21000	5.81.25000
	Cod.	5.81.2A100	5.81.2A500
Art. 812C Inserto zigrinato / Serrated insert	Cod.	5.81.2C100	5.81.2C500

Art. 813 Inserto liscio e zigrinato alto / Smooth and serrated high insert	Ø	30	40
	H	28	50
Art. 813A Inserto liscio alto / Smooth high insert	Cod.	5.81.31000	5.81.35000
	Cod.	5.81.3A100	5.81.3A500
Art. 813C Inserto zigrinato alto / Serrated high insert	Cod.	5.81.3C100	5.81.3C500

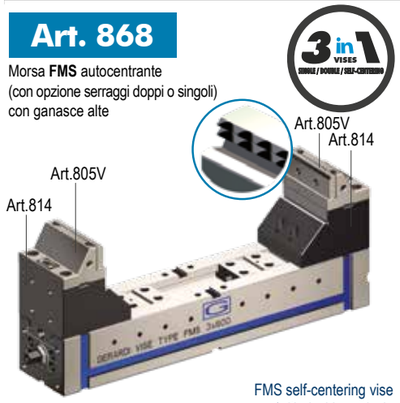
Art. 815 Inserto liscio e zigrinato a gradino / Pair of smooth and serrated step insert	H	16	30
Art. 815A Inserto liscio a gradino / Smooth step insert	Cod.	5.81.51000	5.81.55000
	Cod.	5.81.5A100	5.81.5A500
Art. 815C Inserto zigrinato a gradino / Serrated step insert	Cod.	5.81.5C100	5.81.5C500

Art. 812B Inserto in acciaio lavorabile / Insert in machineable steel metal	Ø	40	60
	H	40	60
	Cod.	5.81.2B100	5.81.2B500

Art. 84U Tappo in alluminio (EXTRA) / Aluminum cap (ETRA)	Cod.	5.84.U1000	5.84.U5000

Art. 868

Morsa **FMS** autocentrante
(con opzione serraggi doppi o singoli)
con ganasce alte



FMS self-centering vise
(with double or single
clamping option) with high jaws

Tipo (grandezza) morsa / Vise type (size)	1		2				3	
kN	25 kN		25 kN				30 kN	
A	130	230	182	282	382	482	244	344
B	99,5		117				137	
C	70		90				100	
D	232	332	300	400	500	600	400	500
E	249	349	320	420	520	620	425	525
F	169,5		207				237	
G	75		95				125	
H	75		85				98	
L	56		64				84	
J3	76	76	101				132	
J4	55	55	63				82	
X	39,5		47				57	
W	74		94				124	
kg	-		-				-	
Cod.	5.86.81200	5.86.81300	5.86.82300	5.86.82400	5.86.82500	5.86.82600	5.86.83400	5.86.83500

Art. 868D

(Art. 868 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.8D120	5.86.8D130	5.86.8D230	5.86.8D240	5.86.8D250	5.86.8D260	5.86.8D340	5.86.8D350

Art. 802

Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

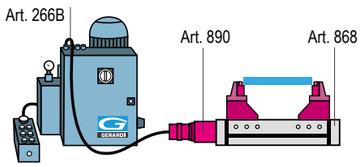
Cod.	5.80.21000	5.80.22000	5.80.23000

Art. 868E

(Art. 868 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.8E120	5.86.8E130	5.86.8E230	5.86.8E240	5.86.8E250	5.86.8E260	5.86.8E340	5.86.8E350

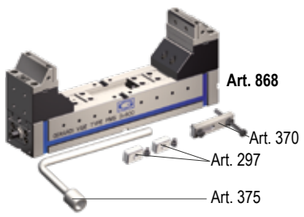
Art. 868F



(Art. 868 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

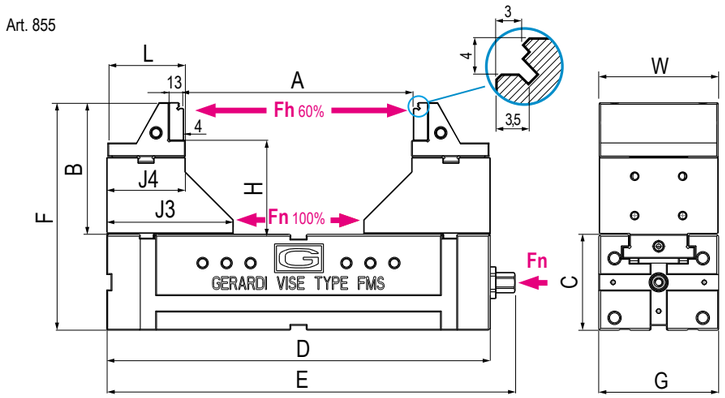
Cod.	5.86.8F120	5.86.8F130	5.86.8F230	5.86.8F240	5.86.8F250	5.86.8F260	5.86.8F340	5.86.8F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375

Art. 855



	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	444	544	644	316	416	516	616	396	496	596	596	696	796
B	137			171				186			246		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
F	237			291				326			406		
G	125			145				170			190		
H	98			128				138			180		
L	84			97				107			107		
J3	132			154				169			189		
J4	82			96				106			106		
X	57			64				66			86		
W	124			144				169			189		
kg	-			-				-			-		
Cod.	5.86.83600	5.86.83700	5.86.83800	5.86.84500	5.86.84600	5.86.84700	5.86.84800	5.86.85600	5.86.85700	5.86.85800	5.86.86800	5.86.86900	5.86.86100

Art. 868D

(Art. 868 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.86.8D360	5.86.8D370	5.86.8D380	5.86.8D450	5.86.8D460	5.86.8D470	5.86.8D480	5.86.8D560	5.86.8D570	5.86.8D580	5.86.8D680	5.86.8D690	5.86.8D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 868E

(Art. 868 + 890) Morsa + motore idraulico / Vise + hydraulic motor

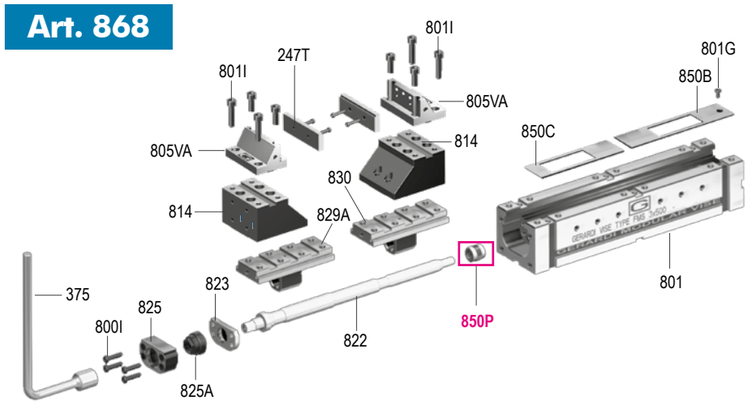
Cod.	5.86.8E360	5.86.8E370	5.86.8E380	5.86.8E450	5.86.8E460	5.86.8E470	5.86.8E480	5.86.8E560	5.86.8E570	5.86.8E580	5.86.8E680	5.86.8E690	5.86.8E610

Art. 868F

(Art. 868 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.8F360	5.86.8F370	5.86.8F380	5.86.8F450	5.86.8F460	5.86.8F470	5.86.8F480	5.86.8F560	5.86.8F570	5.86.8F580	5.86.8F680	5.86.8F690	5.86.8F610

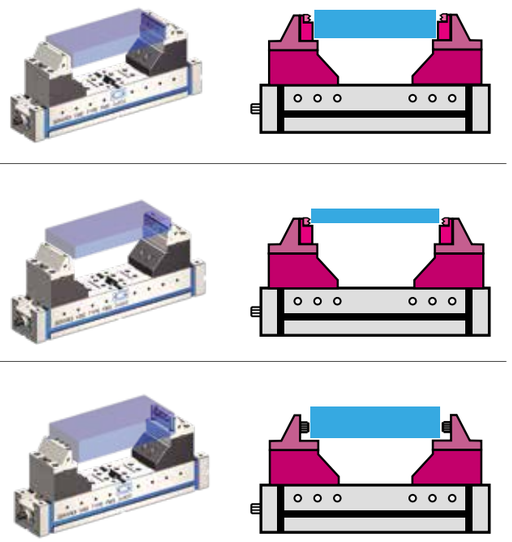
Art. 868



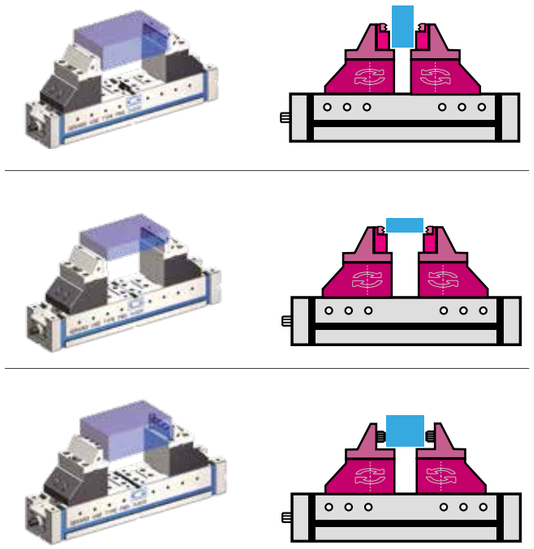
Art.	Pag.	Art.	Pag.
375	4.35	830	5.52
800I	5.61	850B	5.61
801	5.50	850C	5.61
801G	5.61	850P	5.72
801I	5.61	814	5.56
810J	5.56	805VA	5.35
822	5.53	247T	5.35
823	5.59	-	-
825	5.59	-	-
825A	5.61	-	-
829A	5.52	-	-

POSSIBILI COMBINAZIONI DELLA MORSA Art.868
POSSIBLE ARRANGEMENTS OF THE Art.868 VISE

Orientamento base mobile Art.814 per massima apertura ganasce
Movable base Art.814 oriented for the maximum jaws opening



Orientamento base mobile Art.814 per chiusura ganasce a zero
Movable base Art.814 oriented in order to close jaws completely



Art. 868

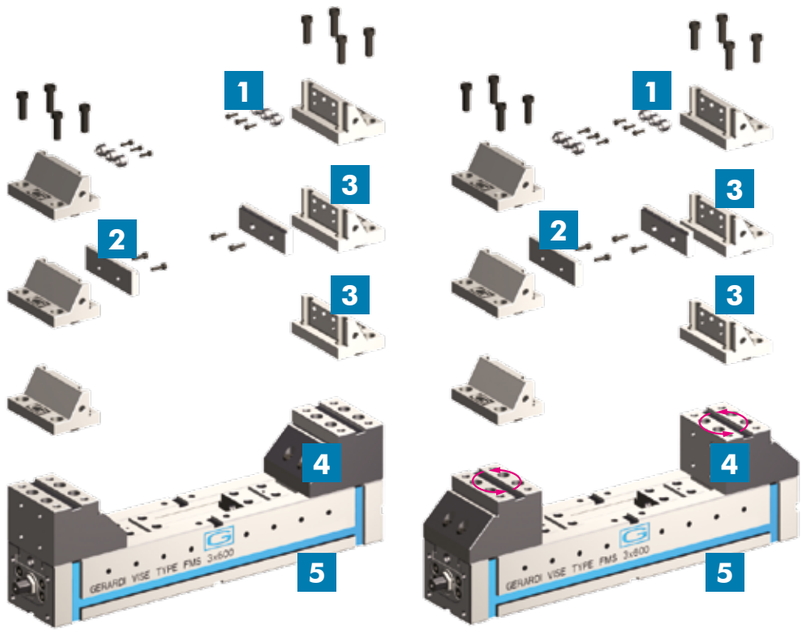
1 **Art.90**
PUNTALE TEMPRATO GRIP
HARDENED GRIP POINT

2 **Art.247T**
PIASTRINA PIANA GRIP
STRAIGHT JAW PLATE GRIP

3 **Art.805VA**
CORPO GANASCIA
JAW PLATE BODY

4 **Art.814**
BASE PER GANASCE FISSE
BASE FOR FIXED JAWS

5 **Art.855**
CORPO BASE CUBO
CUBE BASE BODY



Possibilità di utilizzo di qualsiasi ganascia fissa FMS anzichè del corpo ganascia 805V. Possibilità di due posizioni per ciascuna ganascia fissa e per base ganascia mobile Art.814
Possibility to use each FMS fixed jaw instead of jaw body Art.805V. Possibility of two positions (at 180°) for each fixed jaw and for movable base jaw Art.814

GANASCE & PIASTRE GANASCE PER Art.868
JAWS & JAW PLATES FOR Art.868

Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Art. 805V* Ganascia per piastrine e puntali / Jaw for plates and points — Cod.	5.80.5V100	5.80.5V200	5.80.5V300	5.80.5V400	5.80.5V500	5.80.5V600

* Viti per fissaggio a richiesta Fixing screws on request

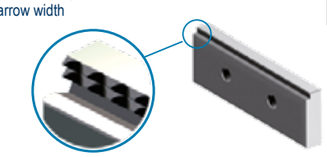
Art. 90
Puntale temprato GRIP
Hardened GRIP Insert

Cod. 5.90.10000

Art. 247T (W2)
Piastra piana temprata GRIP con larghezza ridotta
Hardened straight jaw plate GRIP with narrow width

Cod.	4.24.7T100	4.24.7T200	4.24.7T300	4.24.7T400	4.24.7T500	4.24.7T600

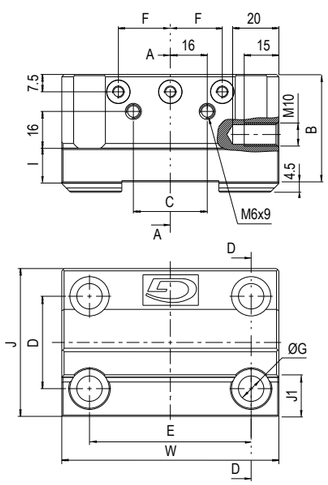
Per qualsiasi piastra piana speciale, raddoppiare il prezzo
For specia l taylor made straighr jaw plate double the price



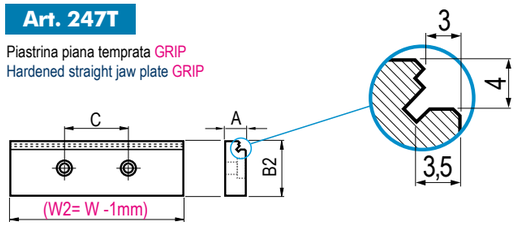
PIASTRE GANASCE "GRIP" JAW PLATES

MINOR SUPERFICIE DI CONTATTO + PRESSIONE DI SERRAGGIO
LESS SURFACE CONTACT + CLAMPING PRESSURE

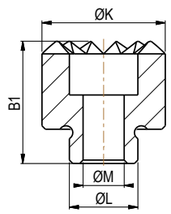
Art. 805VA
Corpo Ganascia
Jaw for plates and points



Art. 247T
Piastrina piana temprata GRIP
Hardened straight jaw plate GRIP



Art. 90
Puntale temprato GRIP
Hardened GRIP Point



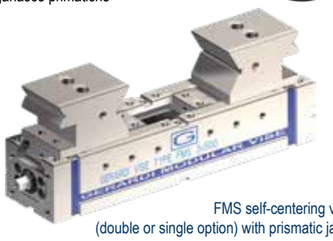
mm	1	2	3	4	5	6
W	74	94	124	144	169	189
A	12	12	13	13	18	
B	39,5	47	57	61	66	86
B2	24,5	32	39	43	48	56
C	25	32	50	50	76	90
D	32	40	50	60	68	68
E	56	70	92	108	126	144
F	2X26	3x20	3x25	4x20	4x25	4x30
ØG	9	11	13	17	17	21
I	15	15	18	18	18	20
J	56	64	84	97	107	107
J1	17					
ØK	-	18				-
ØL	-	10 h8				-
ØM	-	6				-

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3	
		25 kN		25 kN				30 kN	
Apertura minima - massima / minimum - maximum Aperture	A	10 / 25	10 / 25	20 / 50	20 / 50	20 / 50	20 / 50	40 / 100	40 / 100
Apertura minima - massima / minimum - maximum Aperture	A1	10 / 15	10 / 15	10 / 25	10 / 25	10 / 25	10 / 25	25 / 50	25 / 50
	B	34		55				90	
	C	70		90				100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	F	104		145				190	
	G	75		95				125	
	J	48	60	102				132	
	W	50		75				100	
	kg	9	12	23	30	63	43	47	52
	Cod.	5.87.01200	5.87.01300	5.87.02300	5.87.02400	5.87.02500	5.87.02600	5.87.03400	5.87.03500

Art. 870

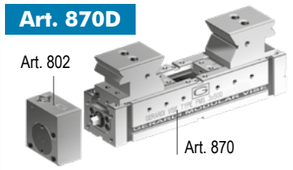
Morsa **FMS** autocentrante
(opzione doppia o singola)
con ganasce primatiche

3 in 1 VISES SINGLE / DOUBLE / SELF-CENTERING



FMS self-centering vise
(double or single option) with prismatic jaws

Art. 870D



(Art. 870 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.87.0D120	5.87.0D130	5.87.0D230	5.87.0D240	5.87.0D250	5.87.0D260	5.87.0D340	5.87.0D350

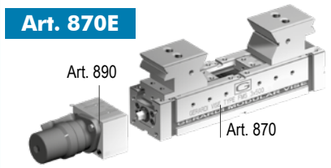
Art. 802

Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

Cod.	5.80.21000	5.80.22000	5.80.23000

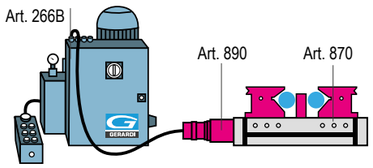
Art. 870E



(Art. 870 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.87.0E120	5.87.0E130	5.87.0E230	5.87.0E240	5.87.0E250	5.87.0E260	5.87.0E340	5.87.0E350

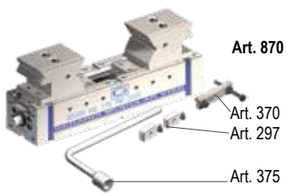
Art. 870F



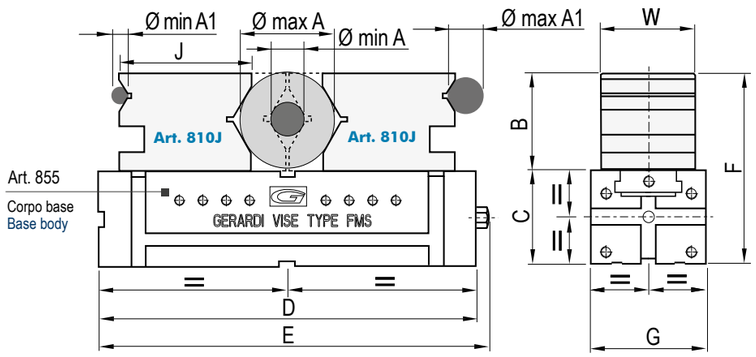
(Art. 870 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.87.0F120	5.87.0F130	5.87.0F230	5.87.0F240	5.87.0F250	5.87.0F260	5.87.0F340	5.87.0F350

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375



	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	40 / 100	40 / 100	40 / 100	40 / 150	40 / 150	40 / 150	40 / 150	63 / 200	65 / 240	80 / 280	100 / 300	120 / 350	140 / 400
A1	25 / 50	25 / 50	25 / 50	30 / 60	30 / 60	30 / 60	30 / 60	35 / 70	35 / 70	35 / 80	40 / 140	40 / 140	40 / 140
B	90			132				171	191	226	250	275	300
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
F	190			252				311	331	366	410	435	460
G	125			145				170			190		
J	132			156				176			174		
W	100			132				140			160		
kg	57	62	67	74	82	91	99	135	145	155	225	245	265
Cod.	5.87.03600	5.87.03700	5.87.03800	5.87.04500	5.87.04600	5.87.04700	5.87.04800	5.87.05600	5.87.05700	5.87.05800	5.87.06800	5.87.06900	5.87.06100

Art. 870D

(Art. 870 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

Cod.	5.87.0D360	5.87.0D370	5.87.0D380	5.87.0D450	5.87.0D460	5.87.0D470	5.87.0D480	5.87.0D560	5.87.0D570	5.87.0D580	5.87.0D680	5.87.0D690	5.87.0D610

Art. 802

Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 870E

(Art. 870 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.87.0E360	5.87.0E370	5.87.0E380	5.87.0E450	5.87.0E460	5.87.0E470	5.87.0E480	5.87.0E560	5.87.0E570	5.87.0E580	5.87.0E680	5.87.0E690	5.87.0E610

Art. 870F

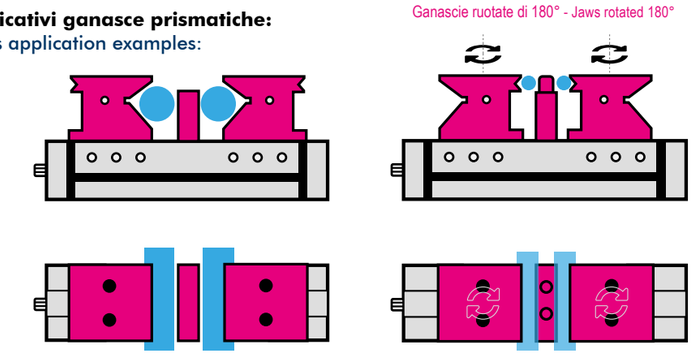
(Art. 870 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.87.0F360	5.87.0F370	5.87.0F380	5.87.0F450	5.87.0F460	5.87.0F470	5.87.0F480	5.87.0F560	5.87.0F570	5.87.0F580	5.87.0F680	5.87.0F690	5.87.0F610

Art. 870

Esempi applicativi ganasce prismatiche:
Prismatic jaws application examples:

Ganascie ruotate di 180° - Jaws rotated 180°



Art. 870A

Pag.5.54 Page. 5.54

Per il serraggio di 2 particolari tondi contemporaneamente per mezzo della ganascia intermedia alta Art.870A
For clamping 2 round workpieces simultaneously by intermediate high jaw Art.870A

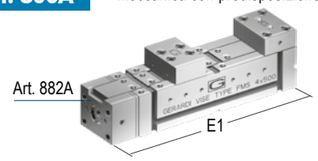
N.B: Realizzabili versioni speciali per diametro **Max.1500** - Special Types available on request for **up to Ø1500**

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3	
		25 kN		25 kN				30 kN	
Apertura massima / Maximum opening	A	85	185	170	270	370	470	230	330
Minima apertura interno-esterno / Minimum opening inside-outside	A1	115 / 200	115 / 300	130 / 300	130 / 400	130 / 500	130 / 600	170 / 400	170 / 500
Art. 800 SPECIFICA SOLO PER SERRAGGI SINGOLI / SPECIFIC FOR SINGLE CLAMPING ONLY	B	25		30				40	
	C	70		90				100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75		95				125	
	W	74		94				124	
	kg	7	10	18	25	32	39	40	45
	Cod.	5.80.01200	5.80.01300	5.80.02300	5.80.02400	5.80.02500	5.80.02600	5.80.03400	5.80.03500
Art. 800Z Corpo morsa / Vise body	Cod.	5.80.0Z120	5.80.0Z130	5.80.0Z230	5.80.0Z240	5.80.0Z250	5.80.0Z260	5.80.0Z340	5.80.0Z350

Morsa a Serraggio Meccanico solo per serraggi singoli

Mechanical Clamping vise only for single clamping

Art. 800A Meccanica con predisposizione idraulica solo per serraggi singoli / Mechanical with prepared hydraulic connection only for single clamping

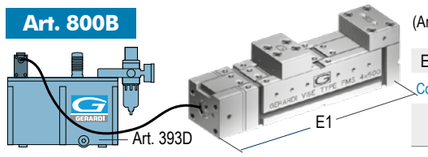


E1	273	373	370,5	470,5	570,5	670,5	485	585
Cod.	5.80.0A120	5.80.0A130	5.80.0A230	5.80.0A240	5.80.0A250	5.80.0A260	5.80.0A340	5.80.0A350

Art. 882A Connettore Idraulico - Hydraulic Connexion

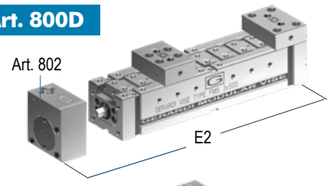
Corsa - Stroke mm	4	7	10
Superficie - Surface cm^2	6	21	21
Pressione - Pressure bar	417	119	143

Art. 800B (Art. 800A + Art.393) Morsa + centralina a comando manuale singolo / Vise + power unit with single manual control



E1	273	373	370,5	470,5	570,5	670,5	485	585
Cod.	5.80.0B120	5.80.0B130	5.80.0B230	5.80.0B240	5.80.0B250	5.80.0B260	5.80.0B340	5.80.0B350

Art. 800D (Art. 800 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

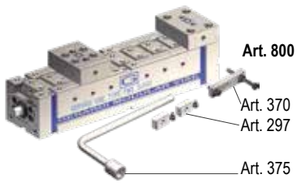


E2	277	377	360	460	560	660	470	570
Nm	Max 20		Max 25				Max 20	
Cod.	5.80.0D120	5.80.0D130	5.80.0D230	5.80.0D240	5.80.0D250	5.80.0D260	5.80.0D340	5.80.0D350

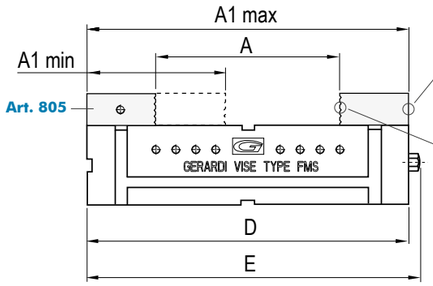
Art. 802 Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission
Chiave dinamometrica Art.357 **(Consigliata)** - Torque wrench Art.357 **(Suggested)**

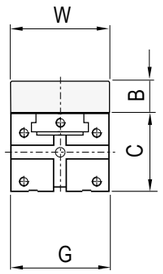
Cod.	5.80.21000	5.80.22000	5.80.23000

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375





	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	430	530	630	300	400	500	600	380	480	580	580	680	780
A1	170 / 600	170 / 700	170 / 800	200 / 500	200 / 600	200 / 700	200 / 800	220 / 600	220 / 700	220 / 800	220 / 800	220 / 800	220 / 100
B	40			50				60			60		
C	100			120				140			160		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G	125			145				170			190		
W	124			144				169			189		
kg	50	55	60	66	72	80	88	115	125	135	170	190	210
Cod.	5.80.03600	5.80.03700	5.80.03800	5.80.04500	5.80.04600	5.80.04700	5.80.04800	5.80.05600	5.80.05700	5.80.05800	5.80.06800	5.80.06900	5.80.06100
Cod.	5.80.0Z360	5.80.0Z370	5.80.0Z380	5.80.0Z450	5.80.0Z460	5.80.0Z470	5.80.0Z480	5.80.0Z560	5.80.0Z570	5.80.0Z580	5.80.0Z680	5.80.0Z690	5.80.0Z610

Art. 800A Meccanica con predisposizione idraulica solo per serraggi singoli / Mechanical with prepared hydraulic connection only for single clamping

E1	685	785	885	585	685	785	885	-	-	-	-	-	-
Cod.	5.80.0A360	5.80.0A370	5.80.0A380	5.80.0A450	5.80.0A460	5.80.0A470	5.80.0A480	5.80.0A560	5.80.0A570	5.80.0A580	5.80.0A680	5.80.0A690	5.80.0A610

Art. 882A Connettore Idraulico - Hydraulic Connexion

	10	10	-	-
	21	21	-	-
	143	143	-	-

Art. 800B (Art. 800A + Art.393) Morsa + centralina a comando manuale singolo / Vise + power unit with single manual control

E1	685	785	885	585	685	785	885	-	-	-	-	-	-
Cod.	5.80.0B360	5.80.0B370	5.80.0B380	5.80.0B450	5.80.0B460	5.80.0B470	5.80.0B480	5.80.0B560	5.80.0B570	5.80.0B580	5.80.0B680	5.80.0B690	5.80.0B610

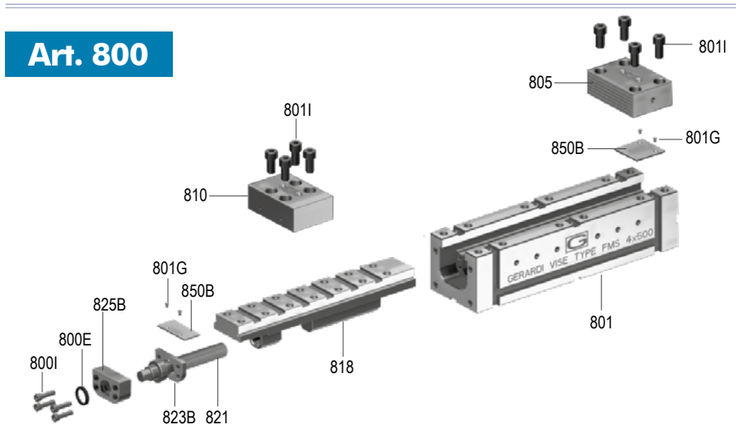
Art. 800D (Art. 800 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

E2	670	770	870	570	670	770	870	685	785	885	-	-	-
Nm	Max 20			Max 20				Max 20			Max 20		
Cod.	5.80.0D360	5.80.0D370	5.80.0D380	5.80.0D450	5.80.0D460	5.80.0D470	5.80.0D480	5.80.0D560	5.80.0D570	5.80.0D580	5.80.0D680	5.80.0D690	5.80.0D610

Art. 802 Moltiplicatore di coppia con rivio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000

Art. 800



Art.	Pag.	Art.	Pag.
800E	5.61	850B	5.61
800I	5.61	-	-
801	5.50	-	-
801G	5.61	-	-
801I	5.61	-	-
805	5.54	-	-
810	5.56	-	-
818	5.52	-	-
821	5.53	-	-
823B	5.59	-	-
825B	5.59	-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3 30 kN	
Apertura massima / Maximum opening	A	-	-	-	-	-	-	232	332
	B	-		-				40	
	C	-		-				100	
	D	-	-	-	-	-	-	510	610
	E	-	-	-	-	-	-	400	500
	G	-		-				125	
	W	-		-				124	
	kg	-	-	-	-	-	-	-	44
	Cod.	-	-	-	-	-	-	5.90.03400	5.90.03500

Art. 900

NEW

Morsa a Serraggio Meccanico con Limitatore di Forza solo per serraggi singoli

Mechanical Clamping vise with Limiting Device only for single clamping

SPECIFICA SOLO PER SERRAGGI SINGOLI

SPECIFIC FOR SINGLE CLAMPING ONLY

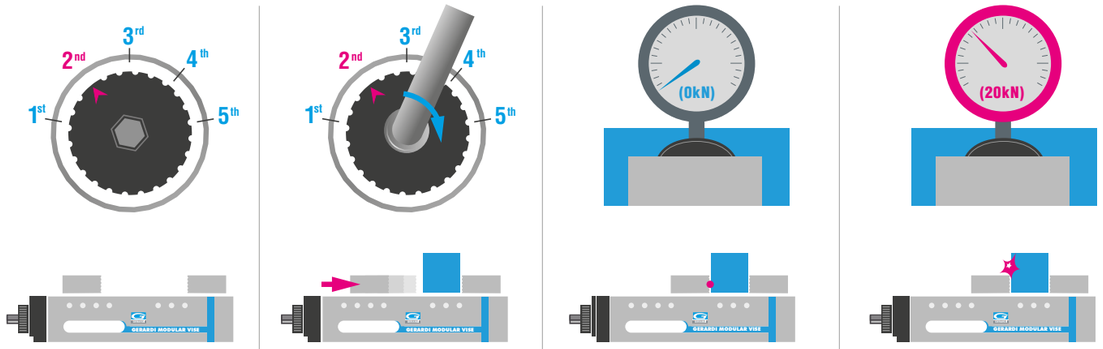
Questa morsa, pur essendo parte del programma FMS, non è predisposta per serraggi doppi o autocentranti

Art. 900Y

Modulo per serraggio idraulico
Module for hydraulic clamping

Cod.	-	-	5.90.0Y300

FUNZIONAMENTO LIMITATORE DI FORZA - HOW TO USE THE LIMITING DEVICE



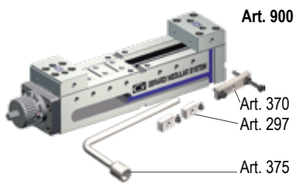
1 Scegliere forza di serraggio tramite ghiera limitatore di forza.
Presetting of the clamping force through the clamping limiter

2 Rapido avvicinamento ganascia mobile al pezzo da serrare
Quick approach of the jaw to the workpiece

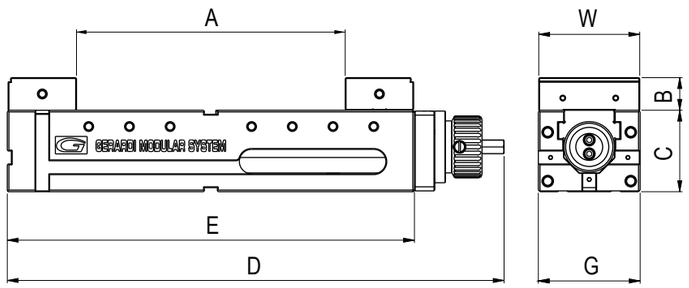
3 Contatto ganascia-particolare e sblocco frizione limitatore di forza.
First contact jaw-workpiece and clamping limiter friction release

4 Avvio meccanismo moltiplica forza
Fermarsi a fine corsa.
Force multiplier device start.
At the end-stroke stop clamping.

Dotazione standard:
- 2 arresti laterali Art. 370
- 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 chiave a pipa Art. 375



Standard equipment:
- 2 workstops Art. 370
- 1 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 box wrench Art. 375



	3 30 kN			4 30 kN				5 32 kN			6		
A	432	532	632	304	404	505	605	384	484	584	-	-	-
B		40			50				60			-	
C		100			120				140			-	
D	710	810	910	610	710	810	910	710	810	910	-	-	-
E	600	700	800	500	600	700	800	600	700	800	-	-	-
G		125			145				170			-	
W		124			144				169			-	
kg	-	-	-	57	-	-	-	99	-	-	-	-	-
Cod.	5.90.03600	5.90.03700	5.90.03800	5.90.04500	5.90.04600	5.90.04700	5.90.04800	5.90.05600	5.90.05700	5.90.05800	-	-	-

This type of vise even if it is part of the FMS series is not suitable for double or self-centering clamping

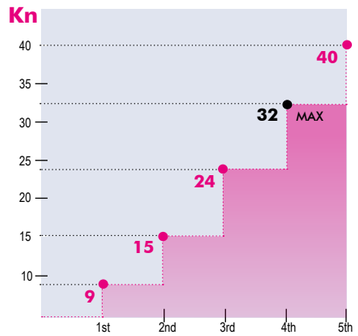
Art. 900Y

Cod.	5.90.0Y300	5.90.0Y300	5.90.0Y300	-

Diagrammi forze di serraggio - Diagrams with clamping force

Morse tipo / Vises type 3

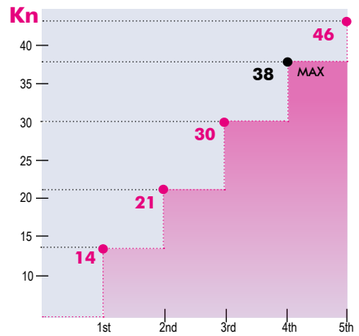
VITE: Ø 24 mm / Ø 30 mm PASSO: 2 mm
SCREW: Ø 24 mm / Ø 30 mm PITCH: 2 mm
Chiave dinamometrica / Torque wrench



Posizioni ghiera limitatore / Fixed nut positions

Morse tipo / Vises type 4

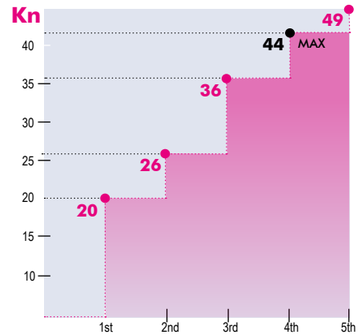
VITE: Ø 24 mm / Ø 30 mm PASSO: 2 mm
SCREW: Ø 24 mm / Ø 30 mm PITCH: 2 mm
Chiave dinamometrica / Torque wrench



Posizioni ghiera limitatore / Fixed nut positions

Morse tipo / Vises type 5

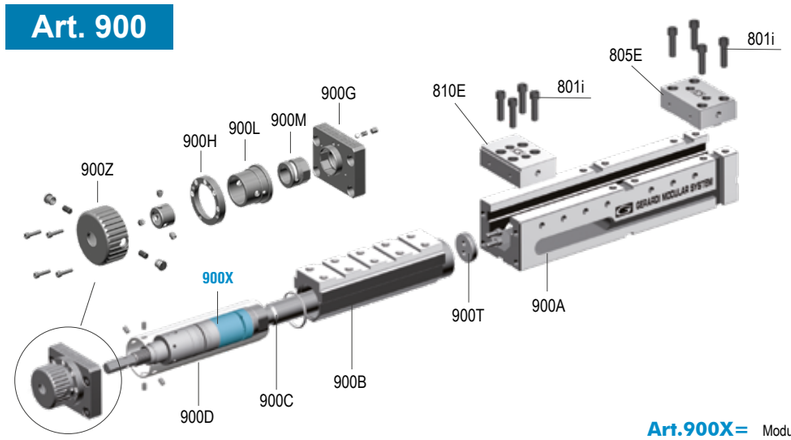
VITE: Ø 24 mm / Ø 30 mm PASSO: 2 mm
SCREW: Ø 24 mm / Ø 30 mm PITCH: 2 mm
Chiave dinamometrica / Torque wrench



Posizioni ghiera limitatore / Fixed nut positions

Art. 900

NEW

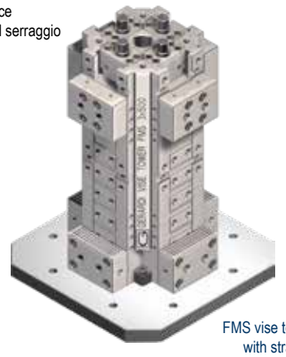


Art.	Pag.
900Y	40
810E	57
805E	55

Art.900X= Modulo per serraggio meccanico - Module for mechanical clamping

Tipo (grandezza) morsa / Vise type (size)	kN	1		2				3	
		25 kN		25 kN				30 kN	
Apertura massima / Max. opening	A	85	185	170	270	370	470	230	330
Art. 800C	A1	115		130				170	
	B	25		30				40	
	D	200	300	300	400	500	600	400	500
	E	232	332	320	420	520	620	425	525
	G1	120		175				210	
	L	300		350				400	
	M	33		33				38	
	W	74		94				124	
	kg	30	45	53	70	88	106	90	112
	Cod.	5.80.0C120	5.80.0C130	5.80.0C230	5.80.0C240	5.80.0C250	5.80.0C260	5.80.0C340	5.80.0C350

Cubo-morsa FMS
con ganasce
piane per il serraggio
di 4 pezzi



FMS vise tower
with straight
jaws for 4
clamping stations

SPECIFICA SOLO PER SERRAGGI SINGOLI
SPECIFIC FOR SINGLE CLAMPING ONLY

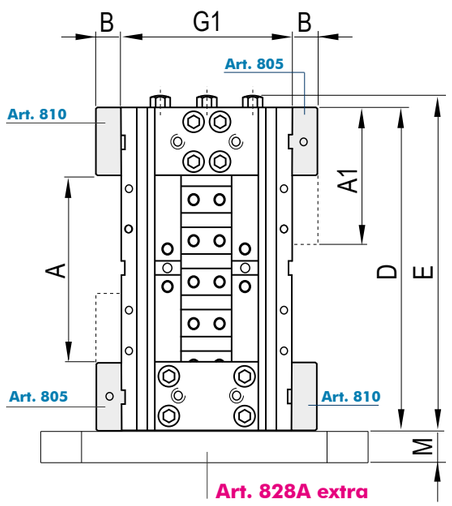
Questa morsa, pur essendo parte del programma FMS, non è predisposta per serraggi doppi o autocentranti

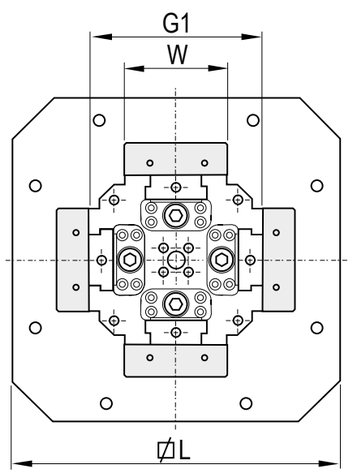
Art. 800G NEW 2023

Modulo base cubo morsa FMS (senza ganasce)
FMS vise tower base (without jaws)

Cod.	5.80.0G120	5.80.0G130	5.80.0G230	5.80.0G240	5.80.0G250	5.80.0G260	5.80.0G340	5.80.0G350

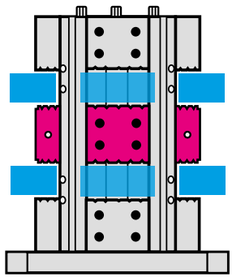
GANASCE REVERSIBILI
REVERSIBLE JAWS





Dotazione standard per Art. 800C
- 1 chiave a pipa Art. 375
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 golfare di sollevamento Art. 848
- Imballo in cassa di legno

Standard equipment for Art. 800C
- 1 box wrench Art. 375
- 4 workstops Art. 370
- 2 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 lifting hook Art. 848
- Wooden box packaging

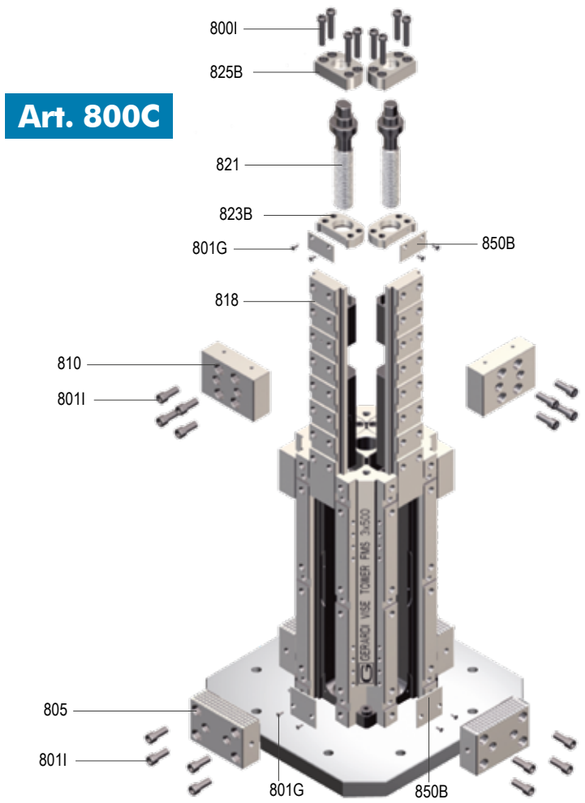


	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	430	530	630	300	400	500	600	380	480	580	480	580	680
A1	170			509				630			810		
B	40			50				60			60		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G1	210			245				280			290		
L	400			450				500			550		
M	38			38				38			38		
W	124			144				169			189		
kg	135	157	180	180	210	252	288	260	303	340	500	562	625
Cod.	5.80.0C360	5.80.0C370	5.80.0C380	5.80.0C450	5.80.0C460	5.80.0C470	5.80.0C480	5.80.0C560	5.80.0C570	5.80.0C580	5.80.0C680	5.80.0C690	5.80.0C610

This type of vise even if it is part of the FMS series is not suitable for double or self-centering clamping

Cod.	5.80.0G360	5.80.0G370	5.80.0G380	5.80.0G450	5.80.0G460	5.80.0G470	5.80.0G480	5.80.0G560	5.80.0G570	5.80.0G580	5.80.0G680	5.80.0G690	5.80.0G610

Art. 800C



GANASCE REVERSIBILI
REVERSIBLE JAWS

Esploso di cubo-morsa FMS con ganasce piane per il serraggio di 4 pezzi
Explose of FMS vise tower with straight jaws for 4 clamping stations

Art.	Pag.	Art.	Pag.
800I	5.61	-	-
801G	5.61	-	-
801I	5.61	-	-
810	5.56	-	-
818	5.52	-	-
821	5.53	-	-
823B	5.59	-	-
825B	5.59	-	-
850B	5.61	-	-
-	-	-	-
-	-	-	-

Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN				3 30 kN	
Apertura massima / Max. opening	A	2 x 16	2 x 66	2 x 54	2 x 104	2 x 154	2 x 204	2 x 74	2 x 124
	B	25		30				40	
	D	200	300	300	400	500	600	400	500
	E	232	332	320	420	520	620	425	525
	G1	120		175				210	
	L	300		350				400	
	M	33		33				38	
	W	74		94				124	
	kg	30	45	53	70	88	106	90	112
	Cod.	5.86.0C120	5.86.0C130	5.86.0C230	5.86.0C240	5.86.0C250	5.86.0C260	5.86.0C340	5.86.0C350

Art. 860C

3 in 1 VISES SINGLE / DOUBLE / SELF-CENTERING

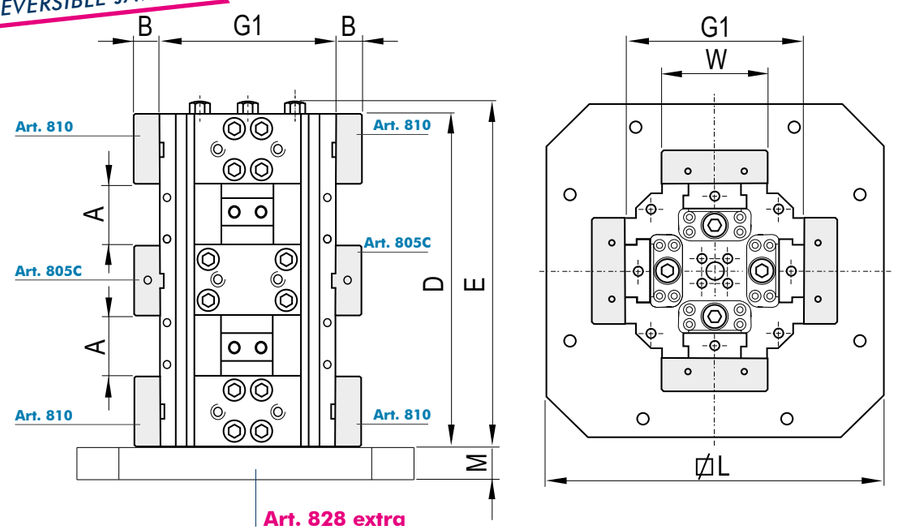
Cubo-morsa FMS doppio per il serraggio di 8 pezzi

Double FMS vise tower for 8 clamping stations

Art. 855C

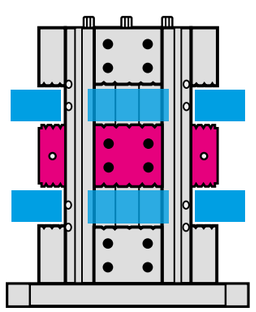
Modulo base cubo morsa FMS doppia (senza ganasce)
FMS Double vise tower base (without jaws)

GANASCE REVERSIBILI
REVERSIBLE JAWS



Dotazione standard per Art. 860C
- 1 chiave a pipa Art. 375
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 golfare di sollevamento Art. 848
- Imballo in cassa di legno
- Meccanismo 3a mano

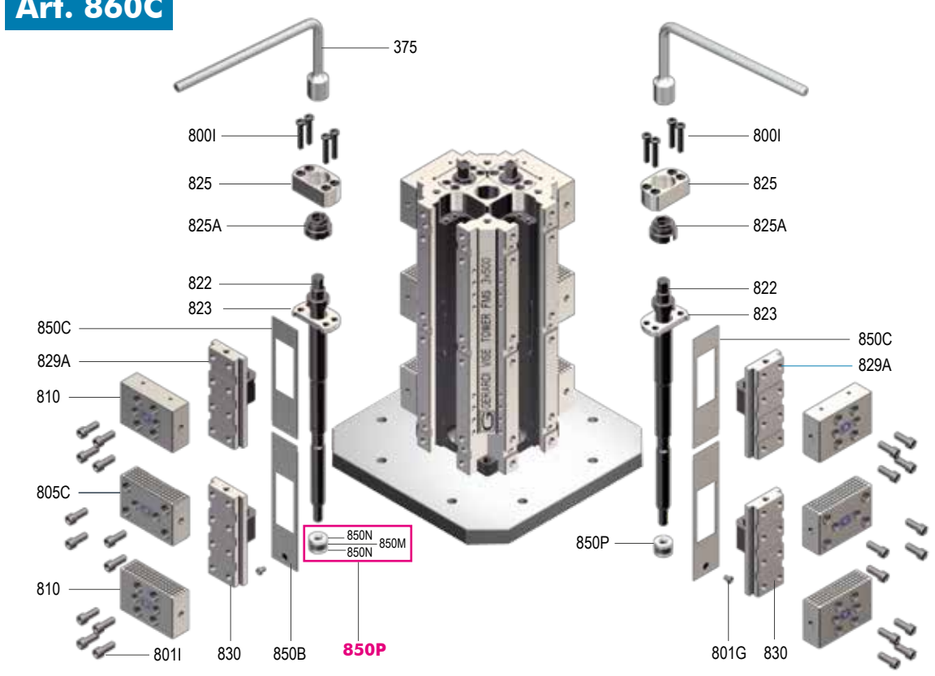
Standard equipment for Art. 860C
- 1 box wrench Art. 375
- 4 workstops Art. 370
- 2 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 lifting hook Art. 848
- Wooden box packaging
- Third hand device



	3 30 kN			4 30 kN				5 32 kN			6 32 kN		
A	2 x 174	2 x 224	2 x 274	2 x 103	2 x 153	2 x 203	2 x 253	2 x 138	2 x 188	2 x 238	2 x 238	2 x 288	2 x 338
B	40			50				60			60		
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G1	210			245				280			290		
L	400			450				500			550		
M	38			38				38			38		
W	124			144				169			189		
kg	135	157	180	180	210	252	288	260	303	340	500	562	625
Cod.	5.86.0C360	5.86.0C370	5.86.0C380	5.86.0C450	5.86.0C460	5.86.0C470	5.86.0C480	5.86.0C560	5.86.0C570	5.86.0C580	5.86.0C680	5.86.0C690	5.86.0C610
Cod.	5.85.5C360	5.85.5C370	5.85.5C380	5.85.5C450	5.85.5C460	5.85.5C470	5.85.5C480	5.85.5C560	5.85.5C570	5.85.5C580	5.85.5C680	5.85.5C690	5.85.5C610

GANASCE REVERSIBILI
REVERSIBLE JAWS

Art. 860C



Art.	Pag.
375	4.35
800I	5.61
801G	5.61
801I	5.61
805C	5.54
810	5.56
822	5.53
823	5.59
825	5.59
825A	5.61
829A	5.52
830	5.52
850B	5.61
850C	5.61
850P	5.61
-	-
-	-

Tipo (grandezza) morsa / Vise type (size)		1		2				3	
	kN	25 kN		25 kN				30 kN	
Apertura massima / Max. opening	A	2 x 60	2 x 110	2 x 118	2 x 168	2 x 218	2 x 268	2 x 162	2 x 212
	Cod.	5.86.3C120	5.86.3C130	5.86.3C230	5.86.3C240	5.86.3C250	5.86.3C260	5.86.3C340	5.86.3C350
Ø Apertura Minima / Massima Ø Minimum - Max Opening	A	10 / 25		10 / 50				25 / 100	
	Cod.	5.87.0C120	5.87.0C130	5.87.0C230	5.87.0C240	5.87.0C250	5.87.0C260	5.87.0C340	5.87.0C350
	D	200	300	300	400	500	600	400	500
	E	232	332	320	420	520	620	425	525
	G1	120		175				210	
	L	300		350				400	
	M	33		33				38	
	W	74		94				124	
	W1	60		75				100	
	kg	42	63	68	90	113	130	118	147

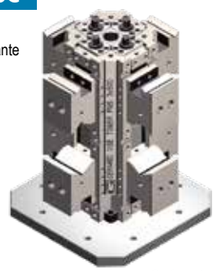
Art. 863C

Cubo morsa FMS doppio con ganasce a gradino per il serraggio di 8 pezzi

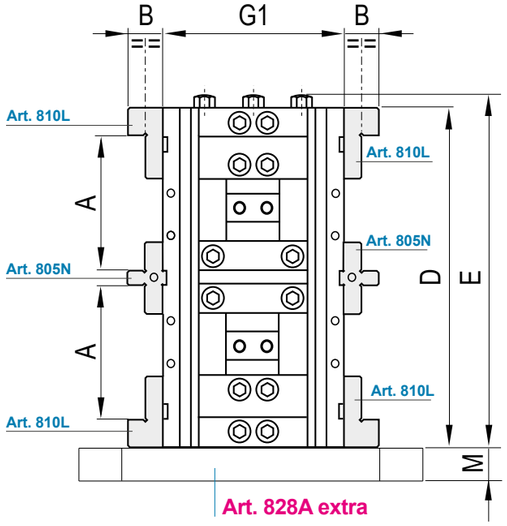
Double FMS vise tower with step-type jaws for 8 clamping stations

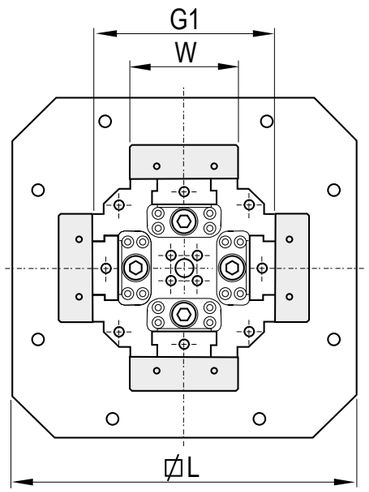
Art. 870C

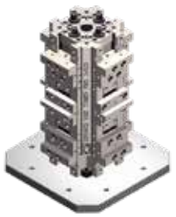
Cubo morsa FMS autocentrante con ganasce prismatiche



Self-centering FMS vise tower with prismatic jaws

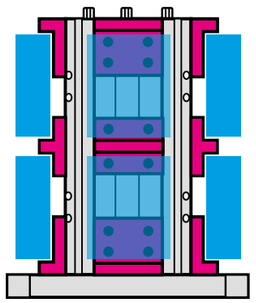




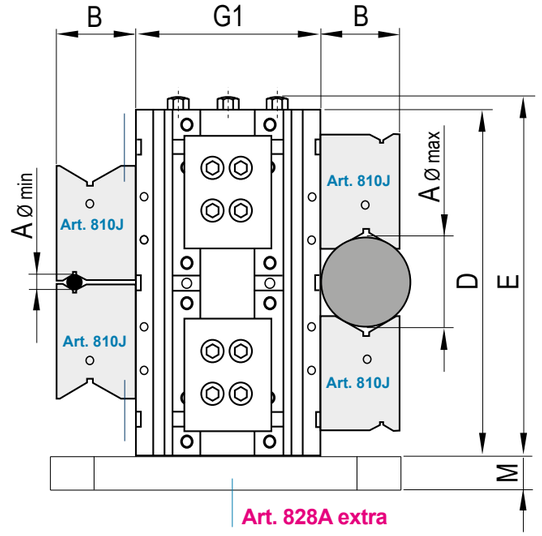


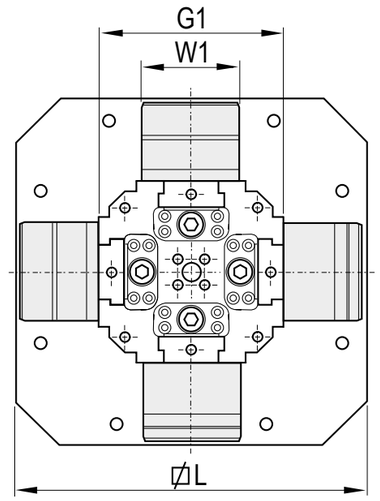
Dotazione standard per Art. 860C
- 1 chiave a pipa Art. 375
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 golfare di sollevamento Art. 848
- Imballo in cassa di legno
- Meccanismo 3a mano

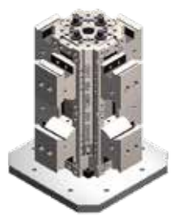
Standard equipment for Art. 860C
- 1 box wrench Art. 375
- 4 workstops Art. 370
- 2 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 lifting hook Art. 848
- Wooden box packaging
- Third hand device



	3			4				5			6		
	30 kN			30 kN				32 kN			32 kN		
A	2 x 262	2 x 312	2 x 362	2 x 204	2 x 254	2 x 304	2 x 354	2 x 254	2 x 304	2 x 354	2 x 354	2 x 404	2 x 454
Cod.	5.86.3C360	5.86.3C370	5.86.3C380	5.86.3C450	5.86.3C460	5.86.3C470	5.86.3C480	5.86.3C560	5.86.3C570	5.86.3C580	5.86.3C680	5.86.3C690	5.86.3C610
A	25 / 100			30 / 150				35 / 200			40 / 300		
Cod.	5.87.0C360	5.87.0C370	5.87.0C380	5.87.0C450	5.87.0C460	5.87.0C470	5.87.0C480	5.87.0C560	5.87.0C570	5.87.0C580	5.87.0C680	5.87.0C690	5.87.0C610
D	600	700	800	500	600	700	800	600	700	800	800	900	1000
E	625	725	825	525	625	725	825	625	725	825	825	925	1025
G1	210			245				280			290		
L	400			450				500			550		
M	38			38				38			38		
W	124			144				169			189		
W1	100			132				140			160		
kg	177	206	236	242	290	339	388	328	383	437	656	738	820

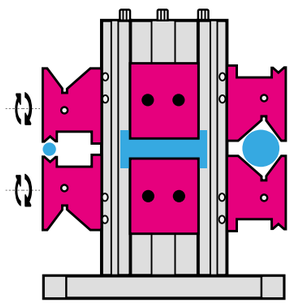






Dotazione standard per Art. 863C e Art. 870C:
- 1 chiave a pipa Art. 375
- 4 arresti laterali Art. 370
- 2 coppie di tasselli di posizionamento per cava da 16 mm Art. 297
- 1 golfare di sollevamento Art. 848
- Imballo in cassetta di legno
- Meccanismo 3a mano

Standard equipment for Art. 863C and Art. 870C:
- 1 box wrench Art. 375
- 4 workstops Art. 370
- 2 pair of positioning key-nuts for 16 mm slot Art. 297
- 1 lifting hook Art. 848
- Packaging wooden box
- Third hand device



COMPONENTI PER CUBO FMS
SPARE PARTS FOR FMS CUBE

Art. 855C

3 in 1 VISES — SINGLE / DOUBLE / SELF-CENTERING

Precisione / Accuracy
±0,02mm

HRC

Durezza / Hardened
HRC 58±2

1 **Art.800I**
VITI PER GANASCE
SCREWS FOR JAWS

2 **Art.825A**
GHIERA
NUT

3 **Art.825B**
PIASTRA DI CONTENIMENTO
SCREW HOLDING PLATE

4 **Art.823**
PIASTRA INTERMEDIA
MIDDLE PLATE

5 **Art.804**
CORPO BASE CUBO
CUBE BASE BODY

6 **Art.822**
VITE DI BLOCCAGGIO
MAIN SCREW

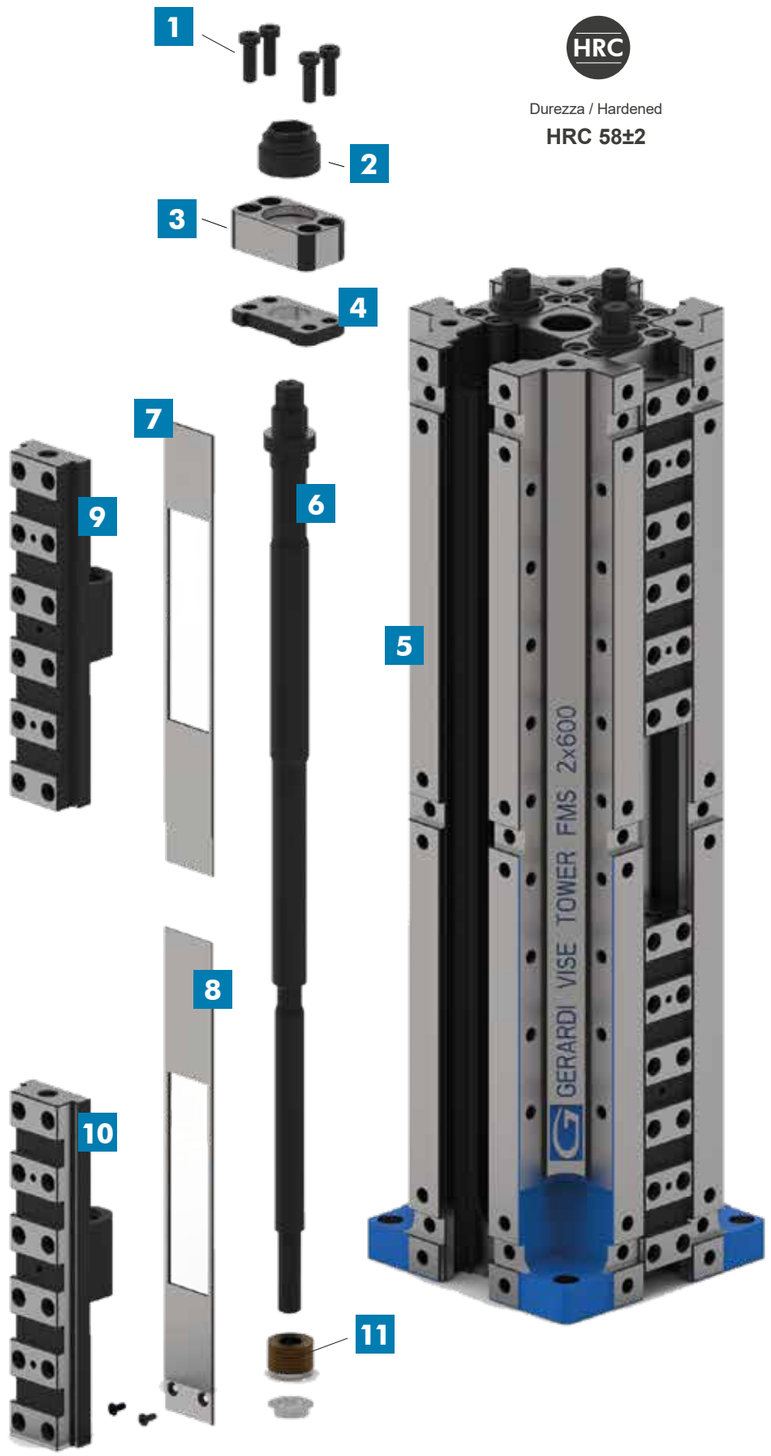
7 **Art.850C**
RIPARO
PROTECTION

8 **Art.850B**
RIPARO LATO VITE
PROTECTION SIDE SCREW

9 **Art.830**
SLITTA FILETTO DESTRO
SLIDE WITH RIGHT THREAD

10 **Art.829A**
SLITTA FILETTO SINISTRO
SLIDE WITH LEFT THREAD

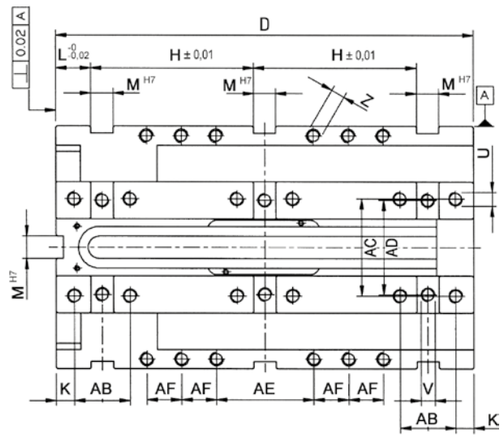
11 **Art.850P**
DISPOSITIVO TERZA MANO
THIRD HAND DEVICE

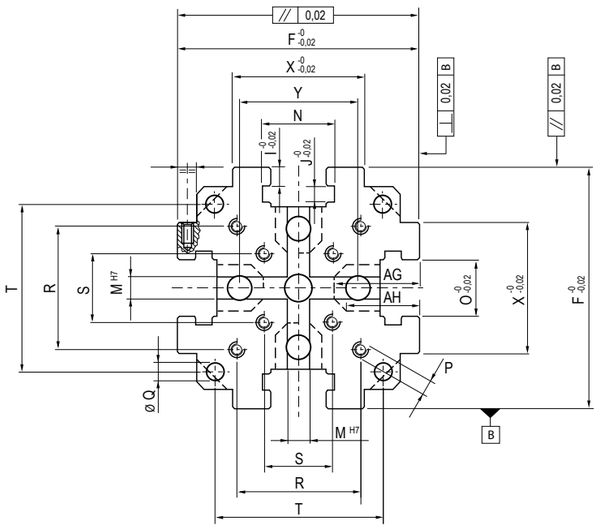


Art. 804

Corpo base cubo FMS.
Disegni e tabella dimensionale
FMS cube base body.
Drawing and table dimension

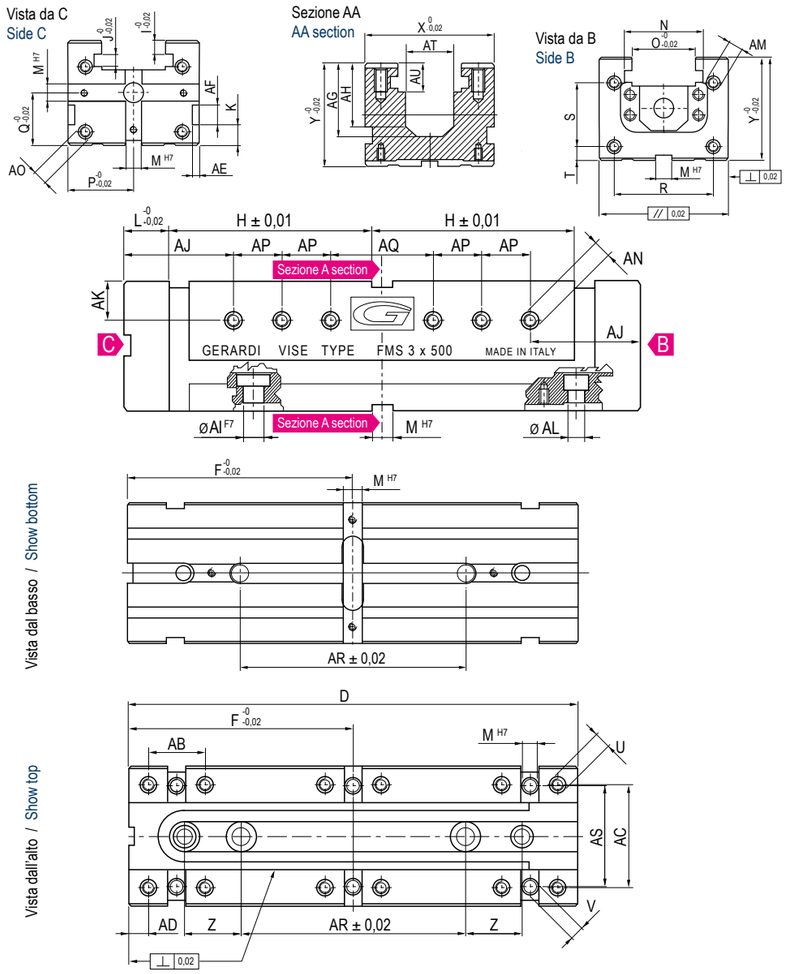
Tipo (grandezza) / Type (size)	1		2				3					4				5			6		
Larghezza base / Base lenght	200	300	300	400	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
Cod.	5.80. 41200	5.80. 41300	5.80. 42300	5.80. 42400	5.80. 42500	5.80. 42600	5.80. 43400	5.80. 43500	5.80. 43600	5.80. 43700	5.80. 43800	5.80. 44500	5.80. 44600	5.80. 44700	5.80. 44800	5.80. 45600	5.80. 45700	5.80. 45800	5.80. 46800	5.80. 46900	5.80. 46100
D	200	300	300	400	300	400	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
F	140		175				210					245				280			290		
H	71	121	117	167	217	267	157	207	257	307	357	200	250	300	350	245	295	345	345	395	445
I	10		13				13					20				20			20		
J	10		12				12					18				18			18		
K	13		13				13					20				20			20		
L	21		25				35					42				47			47		
M	16		16				16					16				16			16		
N	45		53				76					86				96			110		
O	35		41				61					71				81			94		
P	M10		M12				M12					M16				M16			M20		
Q	11		13				13					13				17			17		
R	-		100				120					150				150			150		
S	-		40				40					40				50			50		
T	-		120				16					16				16			210		
U	M8		M10				M12					M16				M16			M20		
V	M8		M10				M12					M12				M12			M12		
Z	M10		M10				M10					M10				M10			M10		
X	75		95				125					145				170			190		
Y	70		85				110					125				140			130		
AB	32		40				50					60				68			68		
AC	56		70				92					108				126			144		
AD	56		68				92					106				126			144		
AE	50	70	70				100					100				100			125		
AF	10	25	50				50					50				50			50		
AG	49		62				62					80				95			105		
AH	41		53				72					70				82			95		





Tipo (grandezza) morsa / Vise type (size)

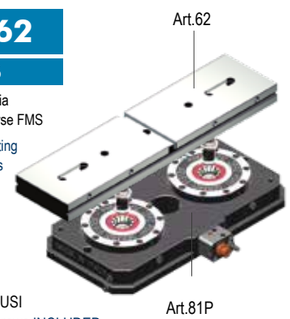
Art. 801 Base morsa FMS. Disegni e tabella dimensionale
FMS vise base body. Drawing and table dimension



Tipo (grandezza) morsa / Vise type (size)	1		2	
kg	4,7	7,3	12,8	19
Cod.	5.80.11200	5.80.11300	5.80.12300	5.80.12400
D	200	300	300	400
F	100	150	150	200
H	71	121	117	167
I	10		13	
J	10		12	
K	15		20	
L	21		25	
M	16		16	
N	45		53	
O	35		41	
P	37,5		47,5	
Q	35		45	
R	52		70	
S	30		48	
T	20		22	
U	M8		M10	
V	M8		M10	
Z	50		50	
X	75		95	
Y	70		90	
AB	32		40	
AC	56		70	
AD	13		13	
AE	4		6	
AF	16		16	
AG	49		62	
AH	41		53	
AI	Ø 16 X 2		Ø 16 X 2	
AJ	55		65	
AK	20		27	
AL	Ø 11		Ø 13	
	n°0	n°2	n° 2	n° 2
AM	M10		M10	
AN	M10		M10	
	n°8	n°12	n° 12	n° 16
AO	M10		M10	
AP	20	25	50	
AQ	50	70	70	
AR	100	200	200	
AS	56		68	
AT	28		34	
AU	23		28	

PIASTRE D'INTERFACCIA ZERO POINT

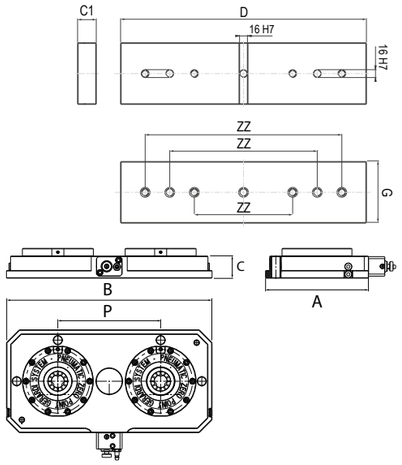
Art. 62
FMS
Piastra di interfaccia
Zero Point per morse FMS
Zero Point connecting
plate for FMS vises



Tiranti e viti INCLUSI
Pull Studs and screws INCLUDED

Art. 81P
NEW 2023

Piastra Zero Point in acciaio con montaggio incassato
Zero Point steel plate built-in mounting



Tipo (grandezza) / Type (size)	1		2	
D	232	332	300	400
G	75		95	
C1	38		38	
ZZ	200 / 300		200 / 300 / 400	
kg	5	7	11	13,4
Cod.	5.62.12000	5.62.13000	5.62.23000	5.62.24000
A	200		200	
B	400		400	
C	43		43	
Art. 665	Tipo / Type T.2		Tipo / Type T.2	
P	200		200	
kg	29		29	
Cod.	9.81.P2040S2		9.81.P2040S2	

	2		3					4				5			6		
kg	23	27	26	31	39	46	52	47	56	65	75	71	82	94	140	156	174
Cod.	5.80.12500	5.80.12600	5.80.13400	5.80.13500	5.80.13600	5.80.13700	5.80.13800	5.80.14500	5.80.14600	5.80.14700	5.80.14800	5.80.15600	5.80.15700	5.80.15800	5.80.16800	5.80.16900	5.80.16100
D	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
F	250	300	200	250	300	350	400	250	300	350	400	300	350	400	400	450	500
H	217	267	157	207	257	307	357	200	250	300	350	245	295	345	345	395	445
I	13		13					20				20			20		
J	12		12					18				18			18		
K	20		20					20				26			26		
L	25		35					42				47			47		
M	16		16					16				16			16		
N	53		76					86				96			110		
O	41		61					71				82			94		
P	47,5		62,5					72,5				85			95		
Q	45		50					60				70			80		
R	70		92					108				126			144		
S	48		62					72				92			100		
T	22		13					16				18			20		
U	M10		M12					M16				M16			M20		
V	M10		M12					M12				M12			M12		
Z	50		50					50				50			50		
X	95		125					145				170			190		
Y	90		100					120				140			160		
AB	40		50					60				68			68		
AC	70		92					108				126			144		
AD	13		18					20				21			20		
AE	6		6					10				10			10		
AF	16		16					16				16			16		
AG	62		72					80				95			105		
AH	53		62					70				82			95		
AI	Ø 16 x 2		Ø 16 x 2					Ø 16 x 2				Ø 16 x 2			Ø 16 x 2		
AJ	65		100					100				100			125		
AK	27		32					40				48			58		
AL	Ø 13		Ø 13					Ø 13				Ø 17			Ø 17		
	n° 4	n° 6	n° 2	n° 4	n° 6	n° 8	n° 10	n° 4	n° 6	n° 8	n° 10	n° 6	n° 8	n° 10	n° 10	n° 12	n° 14
AM	M10		M12					M12				M16			M20		
AN	M10		M10M					M10				M10					
	n° 20	n° 24	n° 8	n° 12	n° 16	n° 20	n° 24	n° 12	n° 16	n° 20	n° 24	n° 16	n° 20	n° 24	n° 24	n° 28	n° 32
AO	M10		M12					M16				M16			M20		
AP	50		50					50				50			50		
AQ	70		100					100				100			125		
AR	200		200					200				400	400	600	400	400	400
AS	68		92					106				126			144		
AT	34		44					44				52			49		
AU	28		28					41				41			41		

ZERO POINT CONNECTING PLATES

	2		3					4				5			6		
D	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
G	95		125					145				170			190		
C1	38		53					38				38			38		
ZZ	200 / 300 / 400		200 / 300 / 400					200 / 300 / 400				200 / 300 / 400			200 / 300 / 400		
kg	16,1	18,9	13,9	17,8	21,5	25,1	28,5	20,8	25	29,3	33,5	29	34	39	44	49	55
Cod.	5.62.25000	5.62.26000	5.62.34000	5.62.35000	5.62.36000	5.62.37000	5.62.38000	5.62.45000	5.62.46000	5.62.47000	5.62.48000	5.62.56000	5.62.57000	5.62.58000	5.62.68000	5.62.69000	5.62.61000
A	200		200	200	200		200	200	200		200	200		200	250		250
B	600		400	500	600		800	500	600		800	600		800	800		1000
C	43		43					43				43			43		
Art. 665	Tipo / Type T.2		Tipo / Type T.2					Tipo / Type T.2				Tipo / Type T.2			Tipo / Type T.3		
P	300		200	250	200x2		300x2	250	200x2		300x2	200x2		300x2	300x2		400x2
kg	42		29	41	42		59	41	42		59	42		59	68,5		81,5
Cod.	9.81.P2060S2		9.81.P2040S2	9.81.P2060S2	9.81.P2060S3		9.81.P2080S3	9.81.P2060S2	9.81.P2060S3		9.81.P2080S3	9.81.P2060S3		9.81.P2080S3	9.81.P32580S3		9.81.P325100S3

Tipo (grandezza) / Type (size)	1		2				3					4				5			6		
Larghezza base / Base lenght	200	300	300	400	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000

Art. 818

Slitta integrale lunga
Solid long slide

Cod.	5.81.81200	5.81.81300	5.81.82300	5.81.82400	5.81.82500	5.81.82600	5.81.83400	5.81.83500	5.81.83600	5.81.83700	5.81.83800	5.81.84500	5.81.84600	5.81.84700	5.81.84800	5.81.85600	5.81.85700	5.81.85800	5.81.86800	5.81.86900	5.81.86100
A	18		24				30					30				36			36		
A1	18		18				24					24				30			30		
A2	24		24				30					30				36			36		
B	35		45				50					60				70			80		
C	170	264	256	356	456	556	346	446	546	646	746	435	535	635	735	525	625	725	725	825	925
D	M8		M10				M12					M16				M16			M20		
E	72	116	102	142	182	222	132	182	232	282	332	156	216	276	336	174	242	310	242	310	378
F	48,5		61,5				71					80				95			106		
G	15	18	23				33					40				45			45		
H	2	3	2	3	4	5	2	3	4	5	6	2	3	4	5	2	3	4	2	3	4
I	10		13				13					20				20			20		
J	10		12				12					18				18			18		
K	-	-	5	7	9		5					5				6			9		
L	44		51				74					84				95			108		
M	16		16				16					16				16			16		
N	20		23				33					40				45			45		
O	35		41				61					71				82			94		
S	26	32	40				50					60				68			68		
T	20		25				38					44				44			54		
V	27		33				43					43				51			48		
W	10	16	24				34					44				52			52		

Art. 829A

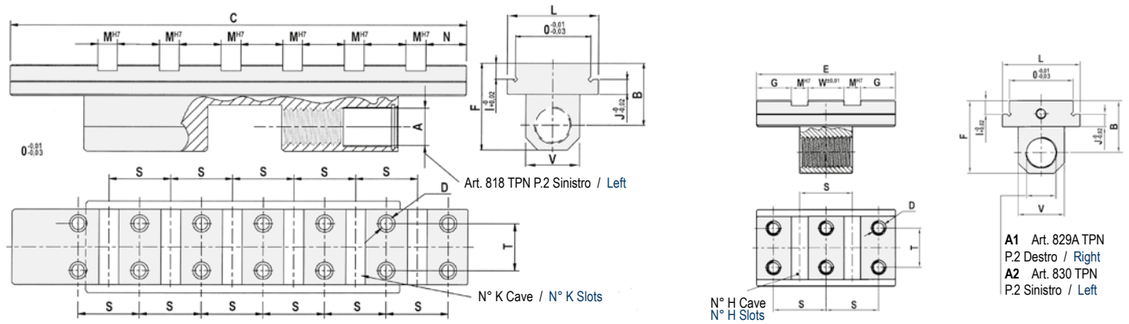
Slitta con filetto destro
Slide with right thread

Cod.	5.82.9A120	5.82.9A130	5.82.9A230	5.82.9A240	5.82.9A250	5.82.9A260	5.82.9A340	5.82.9A350	5.82.9A360	5.82.9A370	5.82.9A380	5.82.9A450	5.82.9A460	5.82.9A470	5.82.9A480	5.82.9A560	5.82.9A570	5.82.9A580	5.82.9A680	5.82.9A690	5.82.9A610

Art. 830

Slitta con filetto sinistro
Slide with left thread

Cod.	5.83.01200	5.83.01300	5.83.02300	5.83.02400	5.83.02500	5.83.02600	5.83.03400	5.83.03500	5.83.03600	5.83.03700	5.83.03800	5.83.04500	5.83.04600	5.83.04700	5.83.04800	5.83.05600	5.83.05700	5.83.05800	5.83.06800	5.83.06900	5.83.06100



Tipo (grandezza) / Type (size)	1		2				3					4				5			6		
Larghezza base / Base lenght	200	300	300	400	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000

Art. 821

Vite di bloccaggio con filetto sinistro
Main screw left thread

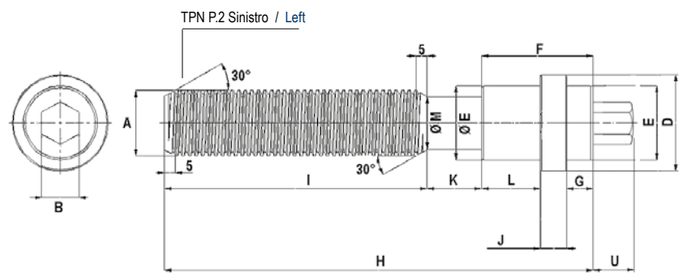
Cod.	5.82.11300		5.82.12600				5.82.14800					5.82.14800				5.82.16100			5.82.16100		
A	18		24				30					30				36			36		
A1	18		18				24					24				30			30		
A2	20		24				30					30				36			36		
B	16		16				19					19				19			19		
C	-		-				-					-				-			-		
D	35		35				45					45				48			48		
E	20		25				30					30				30			30		
F	82		33				42					42				115			115		
G	13		12				16					16				15			15		
H	152		135				136					186				225			225		
I	65		90				118					118				135			135		
J	14		12				15					15				20			20		
K	5		12				26					26				55			55		
L	55		9				11					11				80			80		
M	14		19				24					24				30			30		
N	242	333	308	399	500	600	414	499	599	699	822	499	599	699	797	610	700	790	790	881	961
O	12	17	25	32	52	52	25	35	54	87	121	35	54	87	121	47	71	101	101	81	100
P	65	84	84	98	116	151	123	123	140	124	118	123	140	124	118	176	158	140	140	205	187
Q	32	66	66	106	134	164	82	132	160	226	282	132	160	226	282	124	192	256	256	245	308
R	68	85	75	94	116	136	118	118	140	124	118	118	140	124	118	176	158	140	140	205	187
S	44	6	38	49	62	77	41	66	80	113	136	66	80	113	136	62	96	128	128	120	154
T	32		32				38					38				45			45		
U	21		15		20		25					25				25			25		
AA	10		10				15					15				22			22		
AB	10		10				12					12				15			15		

Art. 822

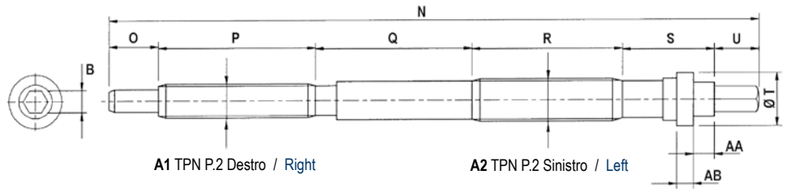
Vite di bloccaggio con filetto destro e sinistro
Main screw right and left thread

Viti con esagono maschio o femmina a seconda delle dimensioni
Screw available with external or internal exagon

Cod.	5.82.21200	5.82.21300	5.82.22300	5.82.22400	5.82.22500	5.82.22600	5.82.23400	5.82.23500	5.82.23600	5.82.23700	5.82.23800	5.82.23500	5.82.23600	5.82.23700	5.82.23800	5.82.25600	5.82.25700	5.82.25800	5.82.26800	5.82.26900	5.82.26100

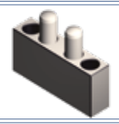


Passo Filetto - Thread Pitch	
TYPE	PITCH
T1 / T2 / T3	P2
T5x6	P2
T5x7	P2
T5x8	P3
T5x6	P3

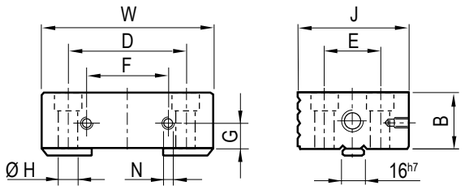


GANASCE FISSE PER MORSE FMS
FIXED JAWS FOR FMS VISES

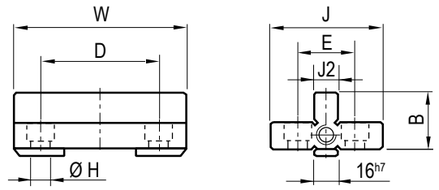
Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 805* Ganascia fissa zigrinata da un lato / Fixed jaw one side serrated	Cod.	5.80.51000	5.80.52000	5.80.53000	5.80.54000	5.80.55000	5.80.56000
Art. 805A* Ganascia fissa liscia / Smooth fixed jaw	Cod.	5.80.5A100	5.80.5A200	5.80.5A300	5.80.5A400	5.80.5A500	5.80.5A600
Art. 805B* Ganascia fissa dolce / Soft fixed jaw	Cod.	5.80.5B100	5.80.5B200	5.80.5B300	5.80.5B400	5.80.5B500	5.80.5B600
Art. 805C* Ganascia fissa zigrinata da ambo i lati / Fixed jaw serrated on both sides	Cod.	5.80.5C100	5.80.5C200	5.80.5C300	5.80.5C400	5.80.5C500	5.80.5C600
Art. 870A* Ganascia fissa intermedia alta / Fixed Intermediate high jaw	Cod.	5.87.0A100	5.87.0A200	5.87.0A300	5.87.0A400	5.87.0A500	5.87.0A600



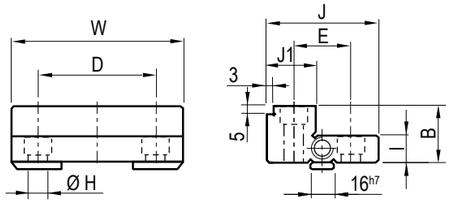
Art. 805 (Montata su Art. 860) (Assembled on Art. 860)



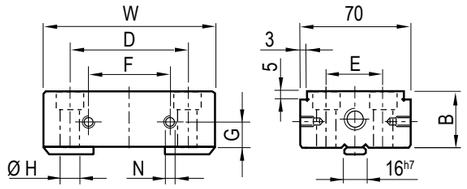
Art. 805N (Montata su Art. 863) (Assembled on Art. 863)



Art. 805O Ganascia fissa con gradino piccolo e grande / Fixed jaw with small and large step



Art. 805F (Montata su Art. 866) (Assembled on Art. 866)

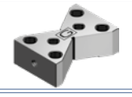


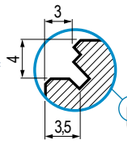
Tipo (grandezza) morsa / Vise (type) size

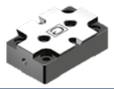
mm	1	2	3	4	5	6	Tolleranze Tolerance
W	74	94	124	144	169	189	-
J	56	64	84	98	108	108	- 0,02
J1	24	24	30	38	38	38	
J2	16	16	16	16	16	16	
B	25	30	40	50	60	60	- 0,02
D	56	70	92	108	126	144	-
E	32	40	50	60	68	68	-
F	40	50	65	65	65	100	-
G	10	10	15	20	25	25	-
H	9	11	13	17	17	22	-
I	12,5	15	20	25	30	30	- 0,02
N	M5	M6	M6	M6	M6	M6	-

* Set viti per fissaggio a richiesta - Fixing screws set on request

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 805D* Ganascia fissa con gradino 3x5 zigrinata da un lato / Fixed jaw with 3x5 step on side serrated	Cod.	5.80.5D100	5.80.5D200	5.80.5D300	5.80.5D400	5.80.5D500	5.80.5D600
Art. 805E* Ganascia fissa con gradino 3x5 liscia / Fixed jaw with 3x5 step smooth	Cod.	5.80.5E100	5.80.5E200	5.80.5E300	5.80.5E400	5.80.5E500	5.80.5E600
Art. 805F* Ganascia fissa con doppio gradino 3x5 liscia / Fixed jaw with double 3x5 step smooth	Cod.	5.80.5F100	5.80.5F200	5.80.5F300	5.80.5F400	5.80.5F500	5.80.5F600
Art. 805G* Ganascia fissa con doppio gradino 3x5 zigrinata / Fixed jaw with double 3x5 step serrated	Cod.	5.80.5G100	5.80.5G200	5.80.5G300	5.80.5G400	5.80.5G500	5.80.5G600
Art. 805H* Ganascia fissa con prisma verticale / Fixed jaw with vertical prism	Cod.	5.80.5H100	5.80.5H200	5.80.5H300	5.80.5H400	5.80.5H500	5.80.5H600
Art. 805I* Ganascia fissa con doppio prisma verticale / Fixed jaw with double vertical prism	Cod.	5.80.5I100	5.80.5I200	5.80.5I300	5.80.5I400	5.80.5I500	5.80.5I600
Art. 805J* Ganascia fissa con prisma orizzontale / Fixed jaw with horizontal prism	Cod.	5.80.5J100	5.80.5J200	5.80.5J300	5.80.5J400	5.80.5J500	5.80.5J600
Art. 805K* Ganascia fissa con doppio prisma orizzontale / Fixed jaw with double horizontal prism	Cod.	5.80.5K100	5.80.5K200	5.80.5K300	5.80.5K400	5.80.5K500	5.80.5K600
Art. 805L* Ganascia fissa con gradino / Step fixed jaw	Cod.	5.80.5L100	5.80.5L200	5.80.5L300	5.80.5L400	5.80.5L500	5.80.5L600
Art. 805M* Ganascia fissa con gradino zigrinata da un lato / Step fixed jaw one side serrated	Cod.	5.80.5M100	5.80.5M200	5.80.5M300	5.80.5M400	5.80.5M500	5.80.5M600
Art. 805N* Ganascia fissa con doppio gradino / Fixed jaw with double step	Cod.	5.80.5N100	5.80.5N200	5.80.5N300	5.80.5N400	5.80.5N500	5.80.5N600
Art. 805O* Ganascia fissa con gradino piccolo e grande liscia da un lato / Fixed jaw with small and large step on side smooth	Cod.	5.80.5O100	5.80.5O200	5.80.5O300	5.80.5O400	5.80.5O500	5.80.5O600
Art. 805P* Ganascia fissa con gradino piccolo e grande zigrin. da un lato / Fixed jaw with small and large step one side serrated	Cod.	5.80.5P100	5.80.5P200	5.80.5P300	5.80.5P400	5.80.5P500	5.80.5P600
Art. 805Q* Ganascia fissa doppia con gradino piccolo e grande / Double fixed jaw with small and large step	Cod.	5.80.5Q100	5.80.5Q200	5.80.5Q300	5.80.5Q400	5.80.5Q500	5.80.5Q600
Art. 805R* Ganascia fissa in alluminio / Fixed jaw aluminium	Cod.	5.80.5R100	5.80.5R200	5.80.5R300	5.80.5R400	5.80.5R500	5.80.5R600
Art. 805T* Ganascia fissa doppia GRIP per forti serraggi / GRIP Double fixed jaw for strongest clamping	Cod.	5.80.5T100	5.80.5T200	5.80.5T300	5.80.5T400	5.80.5T500	5.80.5T600
							Richiedere scheda tecnica - Technical data sheet on request
Art. 805DT* Ganascia fissa a coda di rondine / Dove tail fixed jaw	Cod.	5.80.5DT10	5.80.5DT20	5.80.5DT30	5.80.5DT40	5.80.5DT50	5.80.5DT60







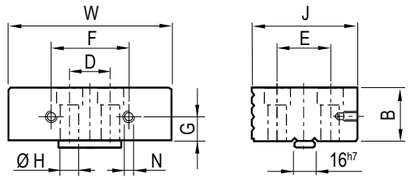
* Set viti per fissaggio a richiesta - Set of fixing screws on request

GANASCE MOBILI PER MORSE FMS
MOVABLE JAWS FOR FMS VISES

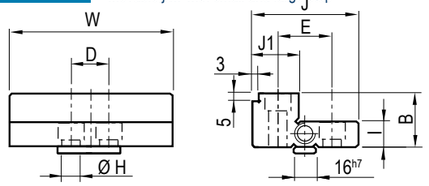
Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 810* Ganascia mobile zigrinata da un lato / Movable jaw one side serrated	Cod.	5.81.01000	5.81.02000	5.81.03000	5.81.04000	5.81.05000	5.81.06000
Art. 810A* Ganascia mobile liscia / Smooth movable jaw	Cod.	5.81.0A100	5.81.0A200	5.81.0A300	5.81.0A400	5.81.0A500	5.81.0A600
Art. 810B* Ganascia mobile dolce / Soft movable jaw	Cod.	5.81.0B100	5.81.0B200	5.81.0B300	5.81.0B400	5.81.0B500	5.81.0B600
Art. 810D* Ganascia mobile con gradino 3x5 zigrinata da un lato / Movable jaw with 3x5 step on side serrated	Cod.	5.81.0D100	5.81.0D200	5.81.0D300	5.81.0D400	5.81.0D500	5.81.0D600
Art. 814* Base mobile per ganasce fisse / Movable base for fixed jaws	Cod.	5.81.41000	5.81.42000	5.81.43000	5.81.44000	5.81.45000	5.81.4.6000

Predisposizione per tutte le ganasce FMS fisse - Fit all FMS fixed jaws

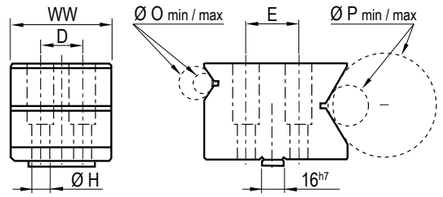
Art. 810 (Montata su Art. 860) / (Assembled on Art. 860)



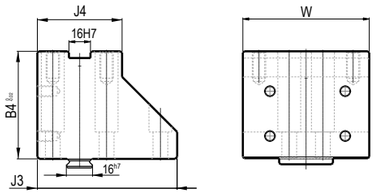
Art. 810O Ganascia mobile con gradino piccolo e grande / Movable jaw with small and large step



Art. 810J (Montata su Art. 870) / (Assembled on Art. 870)



Art. 814 Base mobile per ganasce fisse - Movable base for fixed jaws

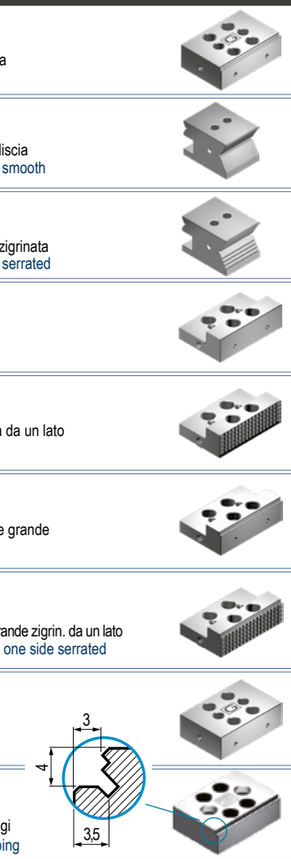


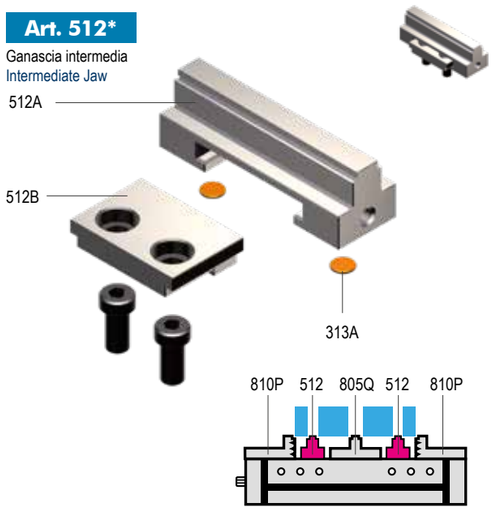
Tipo / Type	1x200	1x300	2	3	4	5	6	Tolleranze Tolerance
W	74		94	124	144	169	189	-
WW	60		75	100	132	140	160	-
B	25		30	40	50	60	60	- 0,02
B4	60		80	90	110	120	160	- 0,02
D	20		25	38	44	44	54	-
E	26	32	40	50	60	68	68	-
F	40		50	65	65	65	100	-
G	10		10	15	20	25	25	-
H	9		11	13	17	17	22	-
I	12,5		15	20	25	30	30	- 0,02
J	56		64	84	98	108	108	- 0,02
J1	24		24	30	38	38	38	- 0,02
J3	76	76	104	134	158	169	189	-
J4	55		63	83	97	106	107	-
N	M5		M6	M6	M6	M6	M6	-
Ø O	10 / 15		20 / 30	25 / 30	20 / 60	35 / 70	40 / 80	-
Ø P	10 / 25		20 / 50	40 / 100	45 / 150	63 / 200	73 / 300	-

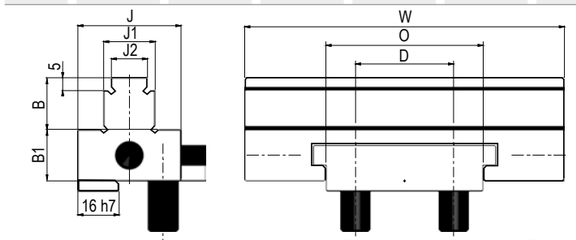
* Set viti per fissaggio a richiesta - Fixing screws set on request

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 810E* Ganascia mobile con gradino 3x5 liscia / Movable jaw with 3x5 step smooth	Cod.	5.81.0E100	5.81.0E200	5.81.0E300	5.81.0E400	5.81.0E500	5.81.0E600
Art. 810J* Ganascia mobile prismatica per tondi liscia / Prismatic movable jaw for round parts smooth	Cod.	5.81.0J100	5.81.0J200	5.81.0J300	5.81.0J400	5.81.0J500	5.81.0J600
Art. 810K* Ganascia mobile prismatica per tondi zigrinata / Prismatic movable jaw for round parts serrated	Cod.	5.81.0K100	5.81.0K200	5.81.0K300	5.81.0K400	5.81.0K500	5.81.0K600
Art. 810L* Ganascia mobile con gradino / Step movable jaw	Cod.	5.81.0L100	5.81.0L200	5.81.0L300	5.81.0L400	5.81.0L500	5.81.0L600
Art. 810M* Ganascia mobile con gradino zigrinata da un lato / Step movable jaw one side serrated	Cod.	5.81.0M100	5.81.0M200	5.81.0M300	5.81.0M400	5.81.0M500	5.81.0M600
Art. 810O* Ganascia mobile con gradino piccolo e grande / Movable jaw with small and large step	Cod.	5.81.0O100	5.81.0O200	5.81.0O300	5.81.0O400	5.81.0O500	5.81.0O600
Art. 810P* Ganascia mobile con gradino piccolo e grande zigrin. da un lato / Movable jaw with small and large step one side serrated	Cod.	5.81.0P100	5.81.0P200	5.81.0P300	5.81.0P400	5.81.0P500	5.81.0P600
Art. 810R* Ganascia mobile in alluminio / Movable jaw aluminium	Cod.	5.81.0R100	5.81.0R200	5.81.0R300	5.81.0R400	5.81.0R500	5.81.0R600
Art. 810T* Ganascia mobile GRIP per forti serraggi / GRIP movable jaw for strongest clamping	Cod.	5.81.0T100	5.81.0T200	5.81.0T300	5.81.0T400	5.81.0T500	5.81.0T600
Art. 810DT Ganascia mobile a coda di rondine / Dove tail movable jaw	Cod.	5.81.0DT10	5.81.0DT20	5.81.0DT30	5.81.0DT40	5.81.0DT50	5.81.0DT60
Art. 810V* Ganascia mobile con segmenti oscillanti / Movable jaw with floating inserts	Cod.	5.81.0V100	5.81.0V200	5.81.0V300	5.81.0V400	5.81.0V500	5.81.0V600
Art. 512* Ganascia intermedia / Intermediate Jaw	Cod.	5.51.21000	5.51.22000	5.51.23000	5.51.24000	5.51.25000	5.51.26000

Richiedere scheda tecnica - Technical data sheet on request







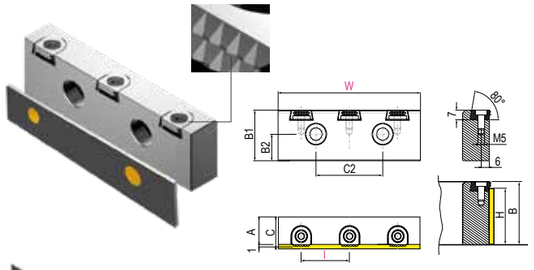
Type	1	2	3	4	5	6
W	74	94	124	144	169	189
J	25	35	40	40	50	50
J1	15	15	20	20	30	30
J2	9	9	14	14	19	19
B / B1	12,5	15	20	25	30	30
D	20	25	38	44	44	54
O	34	40	60	70	81	93

* Set viti per fissaggio a richiesta - Set of fixing screws on request

PIASTRE GANASCE PIANE CON INSERTI GRIP
STRAIGHT INSERT GRIP JAW PLATES

NEW 2023

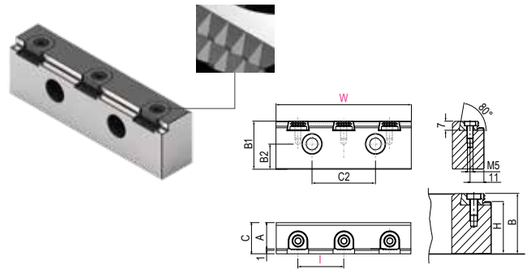
Art. 547G Piastra Piana con inserti GRIP
Straight plate with GRIP inserts



Dotazione Standard - Standard Equipment
1 pc. Art.414R parallela magnetica - 1 pc. Art.414R magnetic parallel

Tipe Type	1	2	3	4	5	6
W	74	94	124	144	169	189
I	26	33	23,5	29,5	23	27
C	22,7	22,7	22,7	22,7	22,7	22,7
C2	40	50	65	65	65	100
B	25	30	40	50	60	60
B1	25	30	40	50	60	60
B2	**10**	**10**	**15**	**20**	**25**	**25**
A	**20**	**20**	**20**	**20**	**20**	**20**
H	**20**	**25**	**35**	**45**	**55**	**55**
Cod.	5.54.7G100	5.54.7G200	5.54.7G300	5.54.7G400	5.54.7G500	5.54.7G600

Art. 547K Piastra Piana a grardino integrale con inserti GRIP
Straight integral step plate with GRIP inserts



Tipe Type	1	2	3	4	5	6
W	74	94	124	144	169	189
I	26	33	23,5	29,5	23	27
C	25	25	25	25	25	25
C2	40	50	65	65	65	10
B	25	30	40	50	60	60
B1	25	30	40	50	60	60
B2	**10**	**10**	**15**	**20**	**25**	**25**
A	**20**	**20**	**20**	**20**	**20**	**20**
H	**20**	**25**	**35**	**45**	**55**	**55**
Cod.	5.54.7K100	5.54.7K200	5.54.7K300	5.54.7K400	5.54.7K500	5.54.7K600

INSERTI GRIP PER MORSE FMS
INSERT GRIP JAW PLATES FOR FMS VISES

Art. 220 G01

Per materiali di durezza normale
For standard workpieces hardness clamping

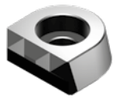
Cod.	4.22.01000 / G01

Art. 220 G02

Per materiali di notevole durezza.
For hardened workpieces clamping

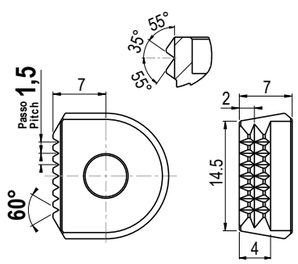
Cod.	4.22.01000 / G02

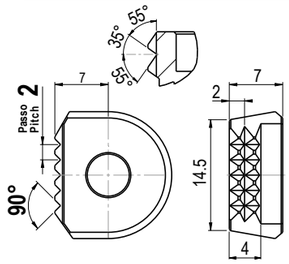
Art. 220 G11

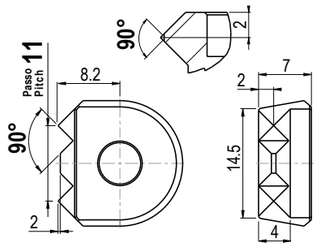


Per materiali teneri
For soft material clamping

Cod.	4.22.01000 / G11





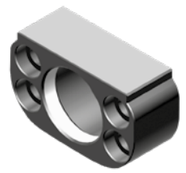


Tipo / Type	1	2	3	4	5	6
Art.547G - Art.547K	3 pcs each	3 pcs each	5 pcs each	5 pcs each	7 pcs each	7 pcs each
Viti a testa bassa M5 x 10mm Low head screws M5 x 10mm	3 pcs each	3 pcs each	5 pcs each	5 pcs each	7 pcs each	7 pcs each

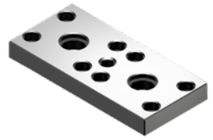
PIASTRE PER MORSE FMS
PLATES FOR FMS VISES

Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Art. 823 Piastra intermedia per Art. 855 / Middle plate for Art. 855 — Cod.	5.82.31000	5.82.32000	5.82.33000	5.82.34000	5.82.35000	5.82.36000
Art. 823B Piastra intermedia per Art. 800 / Middle plate for Art. 800 — Cod.	5.82.3B100	5.82.3B200	5.82.3B300	5.82.3B400	5.82.3B500	5.82.3B600

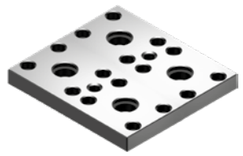
	1	2	3	4	5	6
Art. 825 Piastra di contenimento vite per morsa FMS per Art. 855 / Screw holding plate for FMS vise for Art. 855 — Cod.	5.82.51000	5.82.52000	5.82.53000	5.82.54000	5.82.55000	5.82.56000
Art. 825B Piastra di contenimento vite per morsa FMS per Art. 800 / Screw holding plate for FMS vise for Art. 800 — Cod.	5.82.5B100	5.82.5B200	5.82.5B300	5.82.5B400	5.82.5B500	5.82.5B600
Art. 825C Piastra di contenimento vite per morsa FMS per Art. 855W / Screw holding plate for FMS vise for Art. 855W — Cod.	5.82.5C100	5.82.5C200	5.82.5C300	5.82.5C400	5.82.5C500	5.82.5C600



	1	2	3	4	5	6
Art. 831 Piastra di collegamento per **2** morse FMS montate verticalmente dorso a dorso o fianco a fianco / Connecting plate for **2** FMS vises vertcally mounted back-to-back or side by side — Cod.	5.83.11000	5.83.12000	5.83.13000	5.83.14000	5.83.15000	5.83.16000



	1	2	3	4	5	6
Art. 832 Piastra di collegamento per **4** morse FMS montate verticalmente dorso a dorso o fianco a fianco / Connecting plate for **4** FMS vises vertcally mounted back-to-back or side by side — Cod.	5.83.21000	5.83.22000	5.83.23000	5.83.24000	5.83.25000	5.83.26000



	1	2	3	4	5	6
Art. 833 Piastra di collegamento personalizzata per **2** morse FMS / Connecting plate for **2** FMS vises tailor made — Cod.	5.83.31000	5.83.32000	5.83.33000	5.83.34000	5.83.35000	5.83.36000

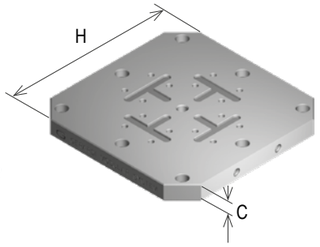
	1	2	3	4	5	6
Art. 834 Piastra di collegamento personalizzata per **4** morse FMS / Connecting plate for **4** FMS vises tailor made — Cod.	5.83.41000	5.83.42000	5.83.43000	5.83.44000	5.83.45000	5.83.46000

PIASTRE BASE PER MORSE FMS
BASE PLATES FOR FMS VISES

Tipo (grandezza) / Type (size)

Art. 827A

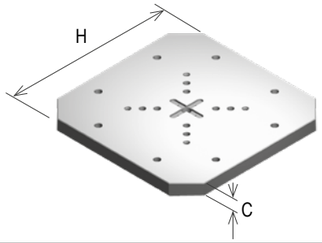
Piastra base pesonalizzata per una o più morse
Bussola di centraggio Art. 852 compresa
Tailor made head plate for one or more vises
Centering bushing Art. 852 included



	1	2	3	4	5	6	7
H	300	350	400	450	500	630	800
C	33	33	38	38	38	38	38
Kg	21,5	29,5	43,5	55	70	112	181
Cod.	5.82.7A100	5.82.7A200	5.82.7A300	5.82.7A400	5.82.7A500	5.82.7A600	5.82.7A700

Art. 828A

Piastra base personalizzata per cubo morsa
bussola di centraggio Art. 852 compresa
Tailor made head plate for vise tower
Centering bushing Art. 852 included

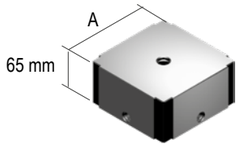


	1	2	3	4	5	6	7
H	300	350	400	450	500	630	800
C	33	33	38	38	38	38	38
Kg	22	30	44,5	56,5	71	113	182
Cod.	5.82.8A100	5.82.8A200	5.82.8A300	5.82.8A400	5.82.8A500	5.82.8A600	5.82.8A700

Tipo (grandezza) / Type (size)

Art. 835

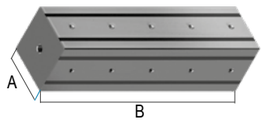
Distanziale quadrato per **4** morse FMS
Square spacer for **4** FMS vises



	1	2	3	4	5	6
A	75	95	125	145	170	190
Cod.	5.83.51000	5.83.52000	5.83.53000	5.83.54000	5.83.55000	5.83.56000

Art. 836

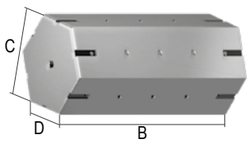
Supporto quadrato per **4** morse FMS
Square support for **4** FMS vises



	1	2	3	4	5	6
A	75	95	125	145	170	190
B	200	300	400	500	600	800
Cod.	5.83.61000	5.83.62000	5.83.63000	5.83.64000	5.83.65000	5.83.66000

Art. 837

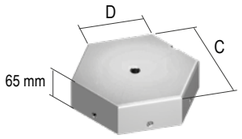
Supporto esagonale per **6** morse FMS
Exagon support for **6** FMS vises



	1	2	3	4	5	6
B	200	300	400	500	600	800
C	132	170	220	255	300	335
D	76 ~	98 ~	127 ~	147 ~	173 ~	193 ~
Cod.	5.83.71000	5.83.72000	5.83.73000	5.83.74000	5.83.75000	5.83.76000

Art. 838

Distanziale esagonale per **6** morse FMS
Exagon spacer for **6** FMS vises



	1	2	3	4	5	6
C	132	170	220	255	300	335
D	76 ~	98 ~	127 ~	147 ~	173 ~	193 ~
Cod.	5.83.81000	5.83.82000	5.83.83000	5.83.84000	5.83.85000	5.83.86000

Art. 852

Bussola di centraggio per piastra base
Centering bushing for base plate

	1	2	3	4	5	6
Cod.	5.85.21000	5.85.22000	5.85.23000	5.85.24000	5.85.25000	5.85.26000

Art. 853

Centraggio orizzontale per cubo FMS
Horizontal centering for FMS cube

	1	2	3	4	5	6
Cod.	5.85.31000	5.85.32000	5.85.33000	5.85.34000	5.85.35000	5.85.36000

Tipo (grandezza) / Type (size)

Art. 825A

Ghiera per morse e cubi FMS
Nut for FMS vises and cubes

	1	2	3	4	5	6
Cod.	5.82.5A100	5.82.5A200	5.82.5A300	5.82.5A400	5.82.5A500	5.82.5A600

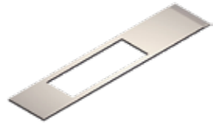
Art. 850B

Riparo lato vite
Protection side screw

	1	2	3	4	5	6
Cod.	5.85.0B100	5.85.0B200	5.85.0B300	5.85.0B400	5.85.0B500	5.85.0B600

Art. 850C

Riparo
Protection



	1	2	3	4	5	6
Cod.	5.85.0C100	5.85.0C200	5.85.0C300	5.85.0C400	5.85.0C500	5.85.0C600

Art. 850P

Dispositivo "**Terza Mano**"
"**Third Hand**" device

	1	2	3	4	5	6
Cod.	5.85.0P100	5.85.0P200	5.85.0P300	5.85.0P400	5.85.0P500	5.85.0P600

Art. 850E

Bussola esagonale per innesto automatico
Hexagonal bushing for automatic connection

	1	2	3	4	5	6
CH	12 / 22	14 / 24	19 / 30	19 / 30	27 / 40	27 / 40
Cod.	5.85.0E100	5.85.0E200	5.85.0E300	5.85.0E400	5.85.0E500	5.85.0E600

Art. 850T

Distanziale per morsa solo autocentrante
Spacer for Self-centering vise only

	1	2	3	4	5	6
Cod.	5.85.0T100	5.85.0T200	5.85.0T300	5.85.0T400	5.85.0T500	5.85.0T600

Art. 850H

Chiave esagonale per morsa FMS e cubo
Hexagonal wrench for FMS vise and cube

	1	2	3	4	5	6
Cod.	5.85.0H100		5.85.0H300		5.85.0H500	

Art. 801S

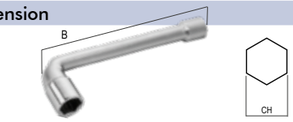
Piastrina di collegamento slitte morsa
Slides vise connecting plate

	1	2	3	4	5	6
Cod.	5.80.1S100	5.80.1S200	5.80.1S300	5.80.1S400	5.80.1S500	5.80.1S600

Dimensioni / Dimension

Art.375

Chiave a pipa
Box wrench



	1		2		3		4		5		6	
	CH	B	CH	B	CH	B	CH	B	CH	B	CH	B
	16	250	16	250	19	250	19	250	19	250	19	250
Cod.	4.37.516250		4.37.516250		4.37.519250		4.37.519250		4.37.519250		4.37.519250	

RICAMBI PER MORSE Art.800 - SPARE PARTS FOR VISES Art.800

Art. 800E

Guarnizione per slitta integrale
O ring for solid slide

	1	2	3	4	5	6
Cod.	5.80.0E100	5.80.0E200	5.80.0E300	5.80.0E400	5.80.0E500	5.80.0E600

Art. 801G

Grano di bloccaggio protezione centrale
Setscrew for clamping central protection

	1	2	3	4	5	6
Cod.	5.80.1G100	5.80.1G200	5.80.1G300	5.80.1G400	5.80.1G500	5.80.1G600

Art. 800I

Vite tcei per ganasce
Hex.socket head screw for jawsw

Art. 801H

Vite tcei per ganasce a gradino
Hex.socket head screw for step jaws

Art. 801I

Vite tcei per piastra di contenimento
Hex.socket head screw for screw holding plate

	1	2	3	4	5	6
Cod.	5.80.0I100	5.80.0I200	5.80.0I300	5.80.0I400	5.80.0I500	5.80.0I600
Cod.	5.80.1H100	5.80.1H200	5.80.1H300	5.80.1H400	5.80.1H500	5.80.1H600
Cod.	5.80.1I100	5.80.1I200	5.80.1I300	5.80.1I400	5.80.1I500	5.80.1I600

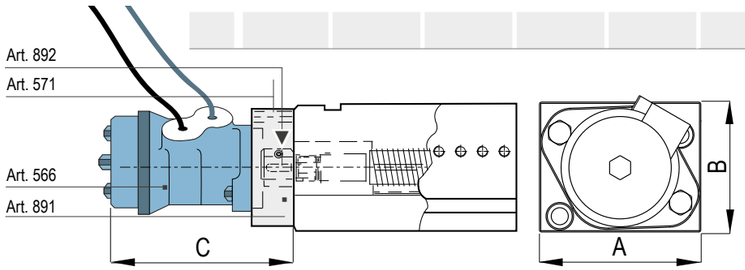
SERVOCOMANDI OLEODINAMICI PER MOTORI IDRAULICI
ELECTRO-HYDRAULIC POWER PACK FOR HYDRAULIC MOTORS

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
Art. 566 *Motore idraulico / Hydraulic motor*		0MM32	OMP80	OMR200	OMR200	OMR200	OMR200
	bar	140					
	A mm	75	130	123	145	168	188
	B mm	70	100	104	119	139	159
	C mm	175	234	244	246	261	261
	Cod.	5.89.01000	5.89.02000	5.89.03000	5.89.04000	5.89.05000	5.89.06000

Art.890

Art. 566 + Art. 571 + Art. 891 + Art. 892

Motore idraulico completo di piastra d' interfaccia, boccola e fine corsa elettronico regolabile
Hydraulic motor complete with connecting plate, bushing and adjustable electronic proximity switch



Art. 891 Piastra attacco motore idraulico / Hydraulic motor mounting plate	Cod.	5.89.11000	5.89.12000	5.89.13000	5.89.14000	5.89.15000	5.89.16000
Art. 892 Boccola di trascinamento vite motore / Drive bushing screw-motor	Cod.	5.89.21000	5.89.22000	5.89.23000	5.89.24000	5.89.25000	5.89.26000
Art. 566 Motore Idraulico / Hydraulic motor	Cod.	5.56.61000	5.56.62000	5.56.63000	5.56.63000	5.56.63000	5.56.63000
Art. 571 Fine corsa elettronico / Electronic proximity switch	Cod.	5.57.11000	5.57.12000	5.57.13000	5.57.14000	5.57.15000	5.57.16000

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	5	10	20	20	20	20
	Cod.	5.89.0K101	5.89.0K201	5.89.0K301	5.89.0K401	5.89.0K501	5.89.0K601

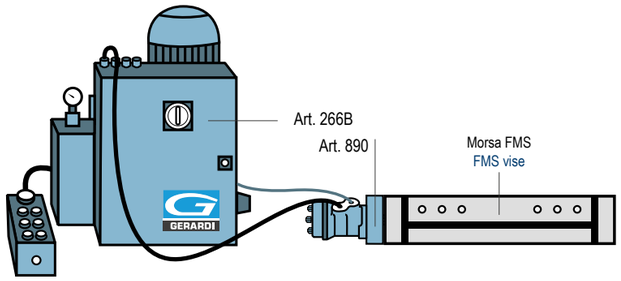
Art.890K/1

Art. 266B + Art. 890

Kit per automazione morse FMS
Kit for FMS vises automation.

DATI TECNICI:
IDROMOTORE: Art.566
Motore elettrico Kw 5.5
Portata Min. 40 litri al minuto
Velocotà apertura-chiusura morsa da calcolarsi in base al digramma idromotore (vedi pag. 5.65)
Per il diagramma forza di serraggio vedi pag. 5.74
Pressione massima di esercizio: 140 bar

TECHNICAL DATA:
HYDRAULIC MOTOR Art.566
Electric motor kW 5,5
Oil pumps: 40l/min
Opening and closing speed of vise to be calculated from hydraulic motor diagram at page 5.65
For clamping forces diagram see pag. 5.75
Max operating pressure: 140 bar



COMPOSIZIONE COMPLETA DI:
- N° 1 servocomando Art. 890
- N° 1 centralina elettroidraulica Art. 266B/1
- Comando manuale elettrico da pulsantiera con chiusura ed apertura indipendente, singola o simultanea
- Regolazione forza di bloccaggio desiderata
- Fine corsa elettronico regolabile

COMPOSITION COMPLETE OF:
- N° 1 hydraulic servo unit Art. 890
- N° 1 electro-hydraulic power pack Art. 266B/1
- Electrically controlled by manual switch board
- Adjustable clamping force as required
- Adjustable elettronic proximity switch

Tubi e cavi di collegamento elettrici ed idraulici con massima lunghezza 1600 mm / Hydraulic pipes and electrical cables with max lenght 1600 mm

SERVOCOMANDI OLEODINAMICI PER MOTORI IDRAULICI
ELECTRO-HYDRAULIC POWER PACK FOR HYDRAULIC MOTORS

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	10	20	40	40	40	40
	Cod.	5.89.0K102	5.89.0K202	5.89.0K302	5.89.0K402	5.89.0K502	5.89.0K602

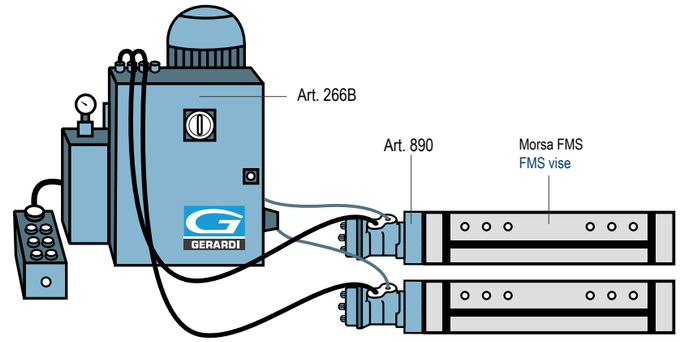
Art.890K/2

Art. 266B + 2 Art. 890

Kit per automazione morse FMS
Kit for FMS vises automation.

DATI TECNICI:
IDROMOTORE: Art.566
Motore elettrico Kw 5.5
Portata Min. 40 litri al minuto
Velocotà apertura-chiusura morsa da calcolarsi in base al digramma idromotore (vedi pag. 5.65)
Per il diagramma forza di serraggio vedi pag. 5.74
Pressione massima di esercizio: 140 bar

TECHNICAL DATA:
HYDRAULIC MOTOR Art.566
Electric motor kW 5,5
Oil pumps: 40l/min
Opening and closing speed of vise to be calculated from hydraulic motor diagram at page 5.65
For clamping forces diagram see pag. 5.75
Max operating pressure: 140 bar



COMPOSIZIONE COMPLETA DI:
- N° 2 servocomandi Art. 89
- N° 1 centralina elettroidraulica Art. 266B/1
- Comando manuale elettrico da pulsantiera con chiusura ed apertura indipendente, singola o simultanea
- Regolazione forza di bloccaggio desiderata
- Fine corsa elettronico regolabile

COMPOSITION COMPLETE OF:
- N° 2 hydraulic servo units Art. 890
- N° 1 electro-hydraulic power pack Art. 266B/1
- Electrically controlled by manual switch board
- Adjustable clamping force as required
- Adjustable elettronic proximity switch

Tubi e cavi di collegamento elettrici ed idraulici con massima lunghezza 1600 mm / Hydraulic pipes and electrical cables with max lenght 1600 mm

Tipo (grandezza) / Type (size)		1	2	3	4	5	6
	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	15	30	60	60	60	60
	Cod.	5.89.0K103	5.89.0K203	5.89.0K303	5.89.0K403	5.89.0K503	5.89.0K603

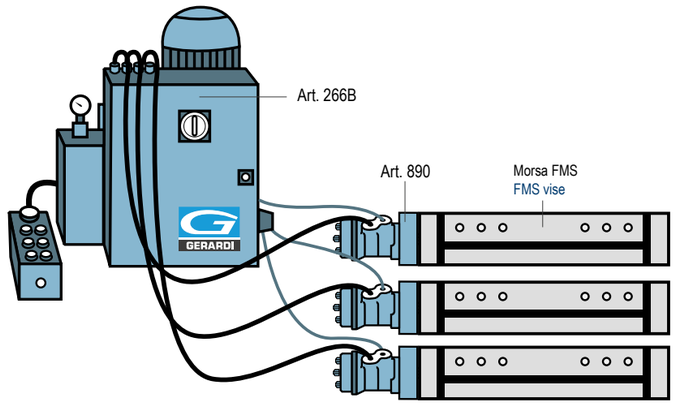
Art.890K/3

Art. 266B + 3 Art. 890

Kit per automazione morse FMS
Kit for FMS vises automation.

DATI TECNICI:
IDROMOTORE: Art.566
Motore elettrico Kw 5.5
Portata Min. 40 litri al minuto
Velocotà apertura-chiusura morsa da calcolarsi in base al digramma idromotore (vedi pag. 5.65)
Per il diagramma forza di serraggio vedi pag. 5.74
Pressione massima di esercizio: 140 bar

TECHNICAL DATA:
HYDRAULIC MOTOR Art.566
Electric motor kW 5,5
Oil pumps: 40l/min
Opening and closing speed of vise to be calculated from hydraulic motor diagram at page 5.65
For clamping forces diagram see pag. 5.75
Max operating pressure: 140 bar



COMPOSIZIONE COMPLETA DI:
- N° 3 servocomandi Art. 89
- N° 1 centralina elettroidraulica Art. 266B/1
- Comando manuale elettrico da pulsantiera con chiusura ed apertura indipendente, singola o simultanea
- Regolazione forza di bloccaggio desiderata
- Fine corsa elettronico regolabile

COMPOSITION COMPLETE OF:
- N° 3 hydraulic servo units Art. 890
- N° 1 electro-hydraulic power pack Art. 266B/1
- Electrically controlled by manual switch board
- Adjustable clamping force as required
- Adjustable elettronic proximity switch

Tubi e cavi di collegamento elettrici ed idraulici con massima lunghezza 1600 mm / Hydraulic pipes and electrical cables with max lenght 1600 mm

SERVOCOMANDI OLEODINAMICI PER MOTORI IDRAULICI
ELECTRO-HYDRAULIC POWER PACK FOR HYDRAULIC MOTORS

Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Passo vite / screw pitch mm	2	2	2	2	3	3
bar	130	100	100	100	120	120
l/min	20	40	80	80	80	80
Cod.	5.89.0K104	5.89.0K204	5.89.0K304	5.89.0K404	5.89.0K504	5.89.0K604

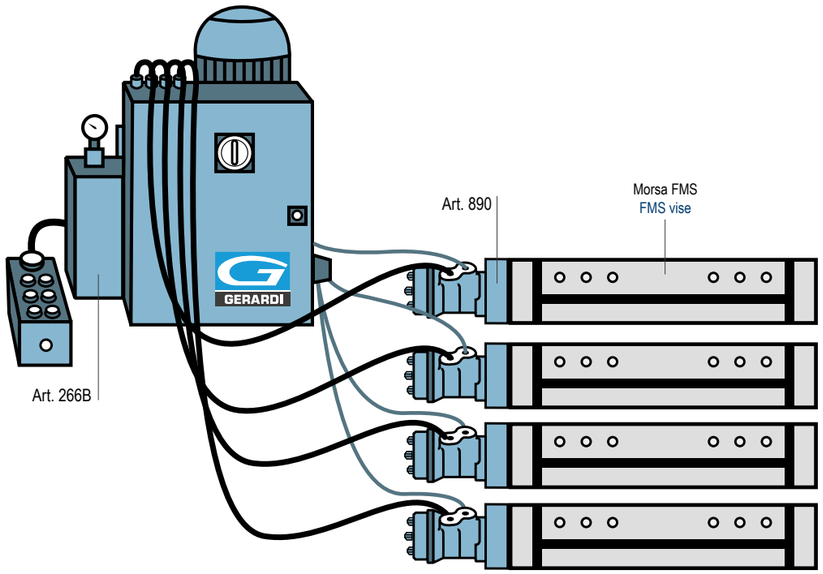
Art.890K/4

Art. 266B + 4 Art. 890

Kit per automazione morse FMS
Kit for FMS vises automation.

DATI TECNICI:
IDROMOTORE: Art.566
Motore elettrico Kw 5.5
Portata Min. 40 litri al minuto
Velocotà apertura-chiusura morsa da calcolarsi in base al digramma idromotore (vedi pag. 5.65)
Per il diagramma forza di serraggio vedi pag. 5.74
Pressione massima di esercizio: 140 bar

TECHNICAL DATA:
HYDRAULIC MOTOR Art.566
Electric motor kW 5,5
Oil pumps: 40l/min
Opening and closing speed of vise to be calculated from hydraulic motor diagram at page 5.65
For clamping forces diagram see pag. 5.75
Max operating pressure: 140 bar



COMPOSIZIONE COMPLETA DI:
- N° 3 servocomandi Art. 89
- N° 1 centralina elettroidraulica Art. 266B/1
- Comando manuale elettrico da pulsantiera con chiusura ed apertura indipendente, singola o simultanea
- Regolazione forza di bloccaggio desiderata
- Fine corsa elettronico regolabile

COMPOSITION COMPLETE OF:
- N° 3 hydraulic servo units Art. 890
- N° 1 electro-hydraulic power pack Art. 266B/1
- Electrically controlled by manual switch board
- Adjustable clamping force as required
- Adjustable elettronic proximity switch

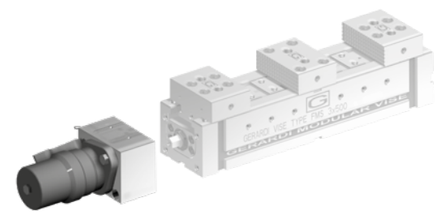
Riduttore epicicloidale il quale consente di moltplicare notevolmente la coppia sviluppata dal motore idraulico consentendo di arrivare a elevate forze di serraggio , fino a 480 kN

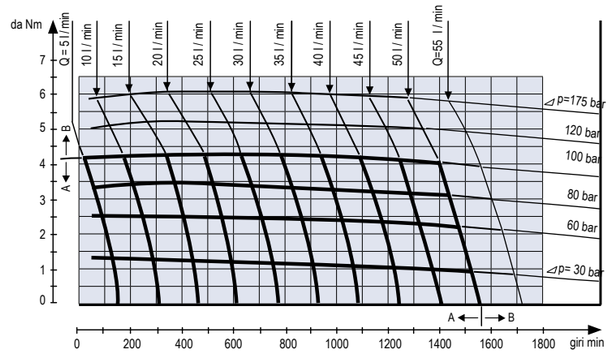
Epicyclic force reducer able to multiply greatly the torque generated by the hydraulic engine reaching a very high clamping force, maximum 480kN.

Tubi e cavi di collegamento elettrici ed idraulici con massima lunghezza 1600 mm / Hydraulic pipes and electrical cables with max lenght 1600 mm

DIAGRAMMI COPPIE MOTORI IDRAULICI
HYDRAULIC MOTOR TORQUE DIAGRAMS

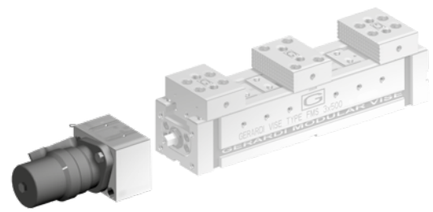
Art.890 (Art.890) Motore idraulico
(Art.890) Hydraulic motor

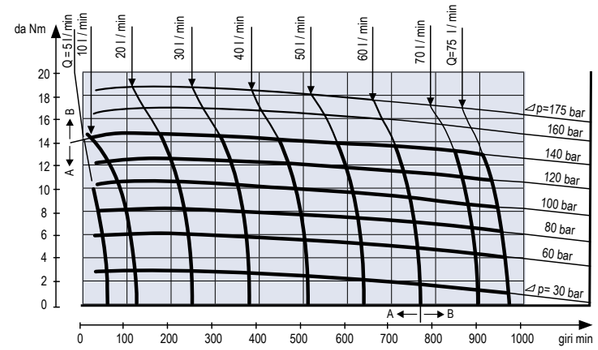




OMR 32
Morse FMS tipo 1 / Type 1 FMS vises

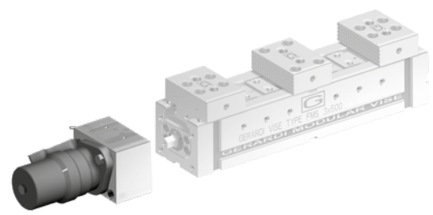
Art.890 (Art.890) Motore idraulico
(Art.890) Hydraulic motor

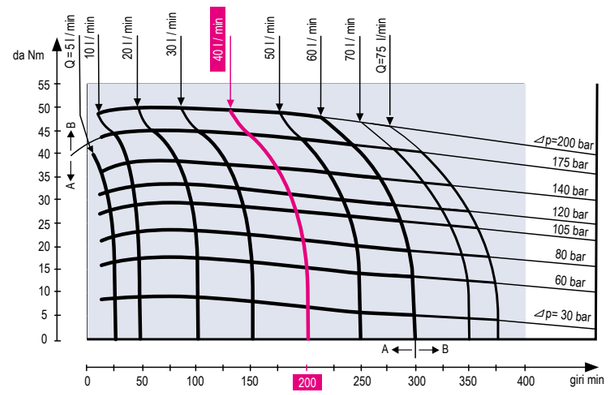




OMR 80
Morse FMS tipo 2 / Type 2 FMS vises

Art.890 (Art.890) Motore idraulico
(Art.890) Hydraulic motor





OMR 200
Morse FMS tipo 3 - 4 - 5 - 6 Type 3 - 4 - 5 - 6 FMS vises

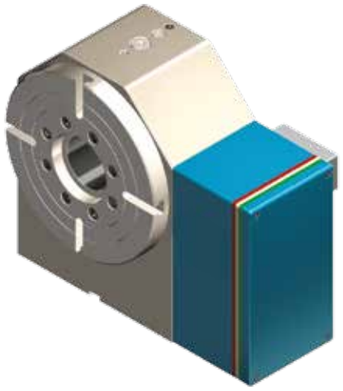
VELOCITA' = Passo vite x giri/min (dati dalla portata di olio in l/min) - 25% circa per attriti e resistenze varie.
Esempio: Vite passo 2 mm; Giri 200/min (ipotizzando una portata olio di 40 l/min); V = 2 X 200 = 400 - 25% = **300 mm/min per una morsa.**
Per più morse dividere la velocità ottenuta per il numero delle morse impiegate.

SPEED = Screw pitch x RPM (that you get from oil pump of 40 l/min) about - 25% for friction and other resistance.
Example: Screw pitch 2mm; RPM 200/min (taking in consideration oil pump of 40 l/min); V = 2 x 200 = 400 - 25% = **300 mm/min for one vise.**
For more vises divide the speed obtained by the number of vises used.

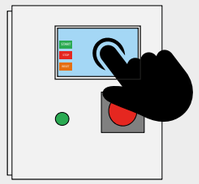
DIVISORE AUTOMATICO DPG 250
AUTOMATIC DIVIDING HEAD DPG 250

Divisore automatico
Automatic dividing head

DPG 250



Dati tecnici Technical Data		
Diametro del divisore Dividing head diameter		250 mm
Diametro del foro passante Cleareance 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



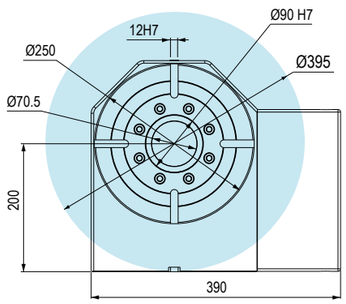
PROGRAMMAZIONE **TOUCH SCREEN**
FACILE ED INTUITIVA O TRAMITE COLLEGAMENTO DIRETTO AL CNC

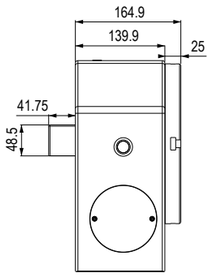
EASY AND INTUITIVE **TOUCH SCREEN**
PROGRAMMING OR THROUGH DIRECT CONNECTION TO THE CNC

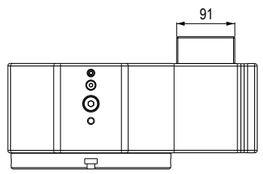
- Installazione semplice (alimentazione 220V)
- Corona in bronzo speciale
- Controsupporto semplice
- Vite senza fine in acciaio temprato e rettificato
- Vite e corona in bagno d'olio
- Cuscinetti a vite precaricati
- Cuscinetto anteriore a rulli incrociati sovradimensionato
- Recupero gioco con avvicinamento 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

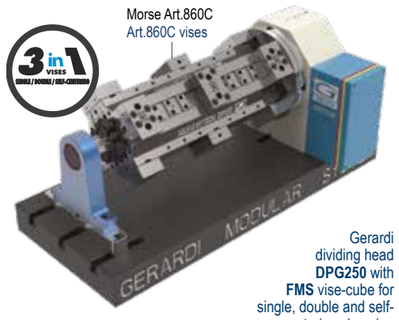
DPG 250







Tipo (grandezza) / Type (size)	kN	1 25 kN		2 25 kN				3 30 kN				
Divisore Gerardi **DPG250** con cubo-morsa **FMS** per serraggi singoli, doppi o autocentranti	D	200	300	300	400	500	600	400	500	600	700	800
	G1	120		175				210				
	W	74		94				124				
	Cod.	5.DP.G25000	5.DP.G25010	5.DP.G25020	5.DP.G25030	5.DP.G25040	5.DP.G25050	5.DP.G25060	5.DP.G25070	5.DP.G25080	5.DP.G25090	5.DP.G25011



Gerardi dividing head **DPG250** with **FMS** vise-cube for single, double and self-centering clamping

Nel caso si disponga di un proprio divisore, il prezzo dell'attrezzatura potrebbe subire variazioni
In case you already have a diviger, the price may be revised

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

Art. 99A

Supporto
Support

Cod.	5.99.A1000

Art. 99B

Perno di centraggio completo di sistema d'allineamento
Horizontal centering pin with alignement system

Cod.	5.99.B1000	5.99.B2000	5.99.B3000

Art. 99H

Distanziale per supporto
Spacer support

Cod.	5.99.H1000

Art. 62K
DPG 250

Piastra di interfaccia per cubo FMS completa di sistema d'allineamento
Connecting plate with alignement systemfor FMS

Cod.	5.62.K801A5	5.62.K801A6	5.62.K801A7

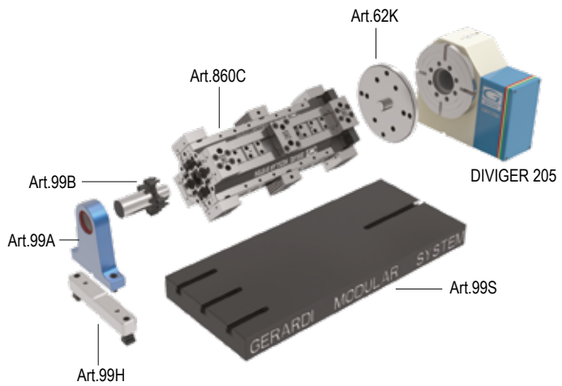
Art. 99S

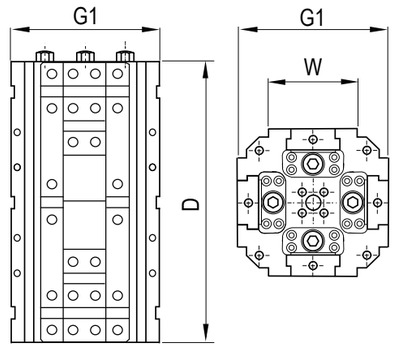
Piastra base con cave e piani rettificati
Base plate with slot and ground faces

Dimensioni B mm Dimension B mm	A	C	Kg	Cod.
650	400	50	102	7.99.S065S
950	400	50	149	7.99.S095S
1250	400	50	195	7.99.S125S

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





DIVISORE MECCANICO DIVIGER 205
MECHANICAL DIVIDING HEAD DIVIGER 205

Divisore automatico
Automatic dividing head

Dati tecnici
Technical Data

DIVIGER 205

Diametro del divisore Dividing head diameter	220 mm
Diametro del foro passante Cleareance 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

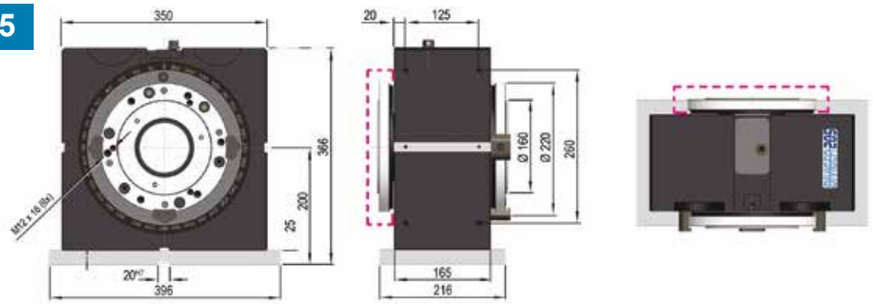
DIVISORE MECCANICO, SENZA CAVI O IDRAULICA, PERMACCHINE A CNC

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

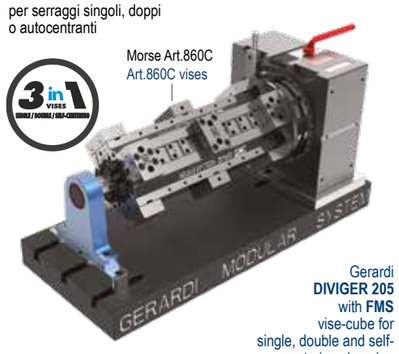
- Cost-effective on multiple-sides machining
- Machine independent
- High holding torque
- Dividing manually or automatically using the machine spindle
- 360 x 1° division
- Simultaneous clamping of 2 workpieces thanks to the dual flange
- 5 faces machining without counter-holder
- Bar machining due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

DIVIGER 205



Tipo (grandezza) / Type (size)		**1**		**2**				**3**				
	kN	25 kN		25 kN				30 kN				
	D	200	300	300	400	500	600	400	500	600	700	800
	G1	120		175				210				
	W	74		94				124				
	Cod.	5.DI.V20500	5.DI.V20510	5.DI.V20520	5.DI.V20530	5.DI.V20540	5.DI.V20550	5.DI.V20560	5.DI.V20570	5.DI.V20580	5.DI.V20590	5.DI.V20511

Divisore Gerardi **DIVIGER 205** con cubo-morsa **FMS** per serraggi singoli, doppi o autocentranti

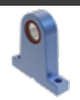


Gerardi **DIVIGER 205** with **FMS** vise-cube for single, double and self-centering clamping

Nel caso si disponga di un proprio divisore, il prezzo dell'attrezzatura potrebbe subire variazioni
In case you already have a diviger, the price could be modified

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

Art. 99A
Supporto
Support



Cod.	5.99.A1000

Art. 99B
Perno di centraggio completo di sistema d'allineamento
Horizontal centering pin with alignement system

Cod.	5.99.B1000	5.99.B2000	5.99.B3000

Art. 99H
Distanziale per supporto
Spacer support

Cod.	5.99.H1000

Art. 62K
DIVIGER 205
Piastra di interfaccia per cubo FMS completa di sistema d'allineamento
Connecting plate with alignement systemfor FMS

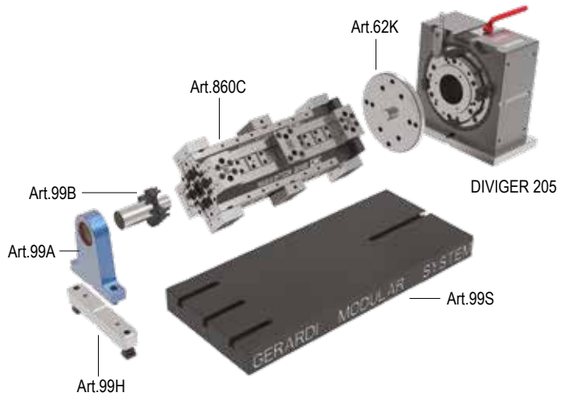
Cod.	5.62.K801A5	5.62.K801A6	5.62.K801A7

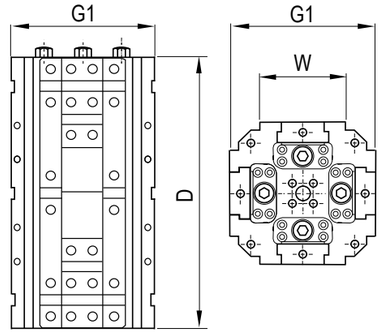
Art. 99S
Piastra base con cave e piani rettificati
Base plate with slot and ground faces

Dimensioni B mm Dimension B mm	A	C	Kg	Cod.
650	400	50	102	7.99.S065S
950	400	50	149	7.99.S095S
1250	400	50	195	7.99.S125S

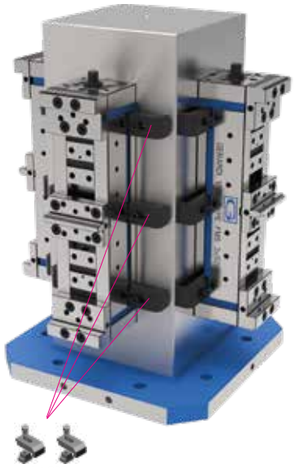
Cave o fori calibrati su richiesta - Slot or calibrated holes on request

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





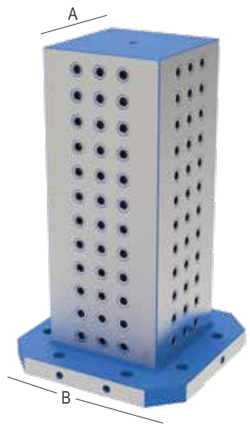
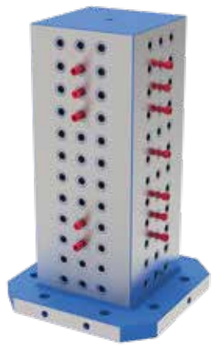
PREDISPOSIZIONE e MONTAGGIO MORSE su CUBI LAVORATI
TOMBSTONES SET-UP and VISES MOUNTING on MACHINED TOMBSTONES

Cubo lavorato Art.57C Machined cube Art.57C	**Tipo di morsa** Vise type	**Predisposizione e montaggio*** Set-up & Mounting*	**Cubo con morse** Cube with vises
Cod. 8.53.C00081 Dim. A=250 / B=400 / H=660 	Art.864 Tipo 3x500 **n°morse** Vises n° x **4**	Per morsa / each vise Importo per lavorazioni necessarie per predisporre ogni faccia del cubo e montaggio più allineamento di ogni morsa. Amount needed for the set-up of each side and mounting + alignement of each vise on it.	 Art.296

* Predisposizione facce cubo, montaggio ed allineamento morse incluso di viti, chiavette, staffe e quant'altro necessario.
Faces set-up, vises mounting including screws, keyways, holding clamps and all the necessary equipment.

Certficato di collaudo
Certificate test

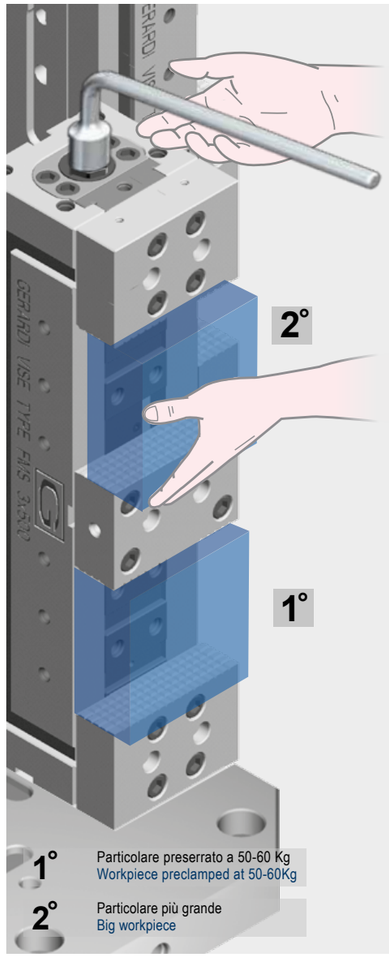
PREDISPOSIZIONE e MONTAGGIO MORSE su CUBO a RETICOLO
TOMBSTONES SET-UP and VISES MOUNTING on 2 GRID TOMBSTONES

Cubo a reticolo Art.53F Grid tombstone Art.53F	**Tipo di morsa** Vise type	**Montaggio e allineamento*** Mounting & alignment*	**Cubo con morse** Cube with vises
Cod. 8.53.F00081 Dim. A=250 / B=400 / H=660 	Art.864 Tipo 3x500 **n°morse** Vises n° x **4**	Per morsa / each vise  Importo per montaggio ed allineamento di ogni morsa. Amount need for each vise mounting and alignement.	Art.750 Tipo 3 Art.83

* Montaggio e allineamento morse incluso di viti, chiavette, staffe e quant'altro necessario.
Vises mounting and alignment includes screws, keyways, holding clamps and all the necessary equipment.

Certficato di collaudo
Certificate test

DISPOSITIVO TERZA MANO PER MORSE FMS DOPPIE
THIRD HAND ACCESSORY FOR DOUBLE FMS VISES



DISPOSITIVO TERZA MANO PER MORSE FMS DOPPIE

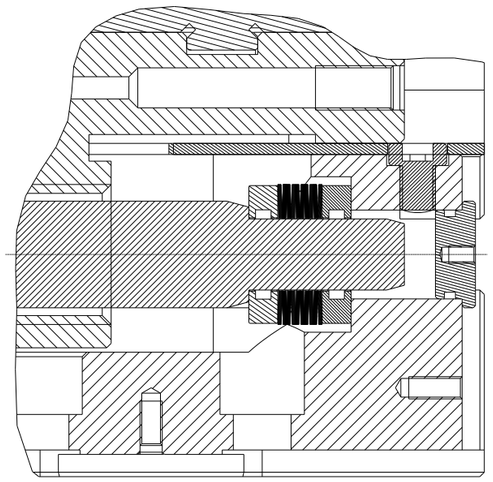
Il meccanismo "Terza mano" nella morsa in versione a doppia stazione, consente il carico e serraggio lieve del primo pezzo (dalla parte opposta alla chiave nella stazione inferiore della morsa), mentre nel frattempo viene caricato il secondo pezzo di dimensione maggiore (da cui la denominazione "Terza mano"). Tale dispositivo risulta particolarmente utile quando la morsa viene usata in posizione verticale. Con il dispositivo "Terza mano", i due particolari da lavorare possono essere di dimensioni diverse con uno scarto massimo fra loro di 2 mm.
Il meccanismo "Terza mano" standard ha una spinta di max 50 Kg.Volendo ottenere una spinta maggiore, basta sostituire le molle in dotazione con altre di maggior potenza (attenzione però a mantenere la stessa quota di altezza del pacchetto molle) oppure aggiungendo un altro distanziale di max. 3mm
N.B: sostituendo le molle o aggiungendo un distanziale extra bisogna tener presente che il maggior precarico comporterà lo stesso carico di spinta anche girando la vite Art.822 a vuoto.

Non volendo il meccanismo "Terza Mano", il tutto puo' essere semplicemente rimosso togliendo le molle con i relativi distanziali dalla loro sede naturale.

Attenzione!! Assicurarsi che Art.850N rimanga fissato nella morsa per proteggere l'eventuale entrata di trucioli.

THIRD HAND DEVICE FOR DOUBLE STATION FMS VISES

The "Third Hand" device in the double station vise configuration, allows the first workpiece loaded to be gripped/clamped lightly with a little pressure (on the opposite side of the wrench and then in the lower vise station), while the second workpiece (bigger than first) is being loaded (from here the "third Hand" denomination). Such device is useful especially with the vise vertically positioned.
With the "Third Hand" device the two workpiece can be up to 2 mm different in gripping width.
The standard "Third Hand" device has a max pressure of 50 Kg.
In order to reach a higher clamping power it is enough to preload by changing the standard springs with more powerful ones or by adding a pacer (max 3 mm). Be careful that remains the same spring and spacer packing height dimensions.
P.S: By changing springs or adding extra spacer remember that the higher preload will give the same resistance (given by the more powerful preload) even just turning the main screw Art.822 freely.
If the "Third Hand" device is not required, it could be simply removed by taking away the springs and their spacers from their standard position.
Attention!! *Make sure that the* **Art.850N** *remains fixed in the vise to provide protection from dirt getting inside the vise.*



Art.850P

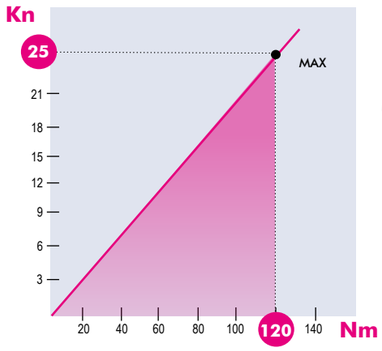
Diagrammi di serraggio / *Clamping diagrams*

FMS

Diagrammi di serraggio meccanico con chiave dinamometrica

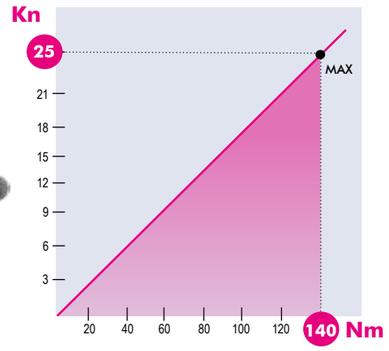
Mechanical clamping diagrams with torque wrench **Art. 357**

Morse tipo **1**
Vises type
VITE: TPF 18 / 20 mm PASSO: 2 mm
SCREW: TPF 18 / 20 mm PITCH: 2 mm

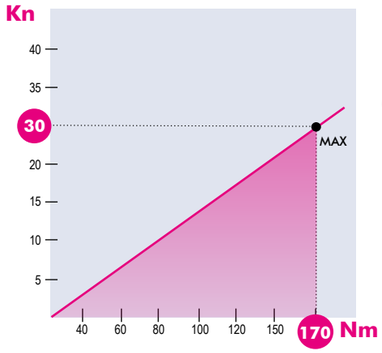


Art. 357

Morse tipo **2**
Vises type
VITE: TPF 18 / 24 mm PASSO: 2 mm
SCREW: TPF 18 / 24 mm PITCH: 2 mm

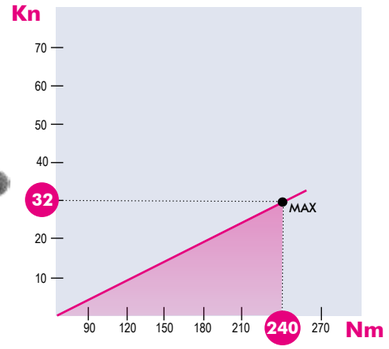


Morse tipo **3-4**
Vises type
VITE: TPF 24 / 30 mm PASSO: 2 mm
SCREW: TPF 24 / 30 mm PITCH: 2 mm



Art. 357

Morse tipo **5-6**
Vises type
VITE: TPF 30 / 36 mm PASSO: 3 mm
SCREW: TPF 30 / 36 mm PITCH: 3 mm



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.

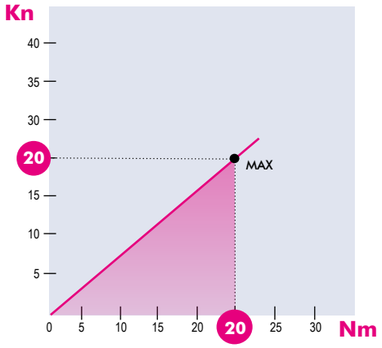
Diagrammi serraggio / *Clamping diagrams*

FMS

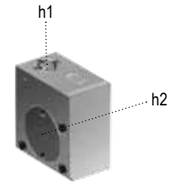
Diagrammi di serraggio meccanico con moltiplicatore di potenza

Mechanical clamping diagrams with pressure multiplier **Art. 802**

Morse tipo **1**
Vises type
VITE: TPF 18 / 20 mm PASSO: 2 mm
SCREW: TPF 18 / 20 mm PITCH: 2 mm
Rapporto trasmissione: 9:1
Gear ratio: 9:1
Type 1 Cod. 5.80.21000 **€ 906**

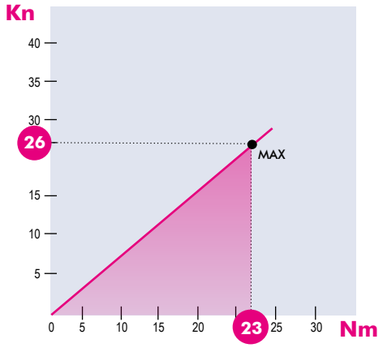


RATIO = h1 : h2



Art. 802

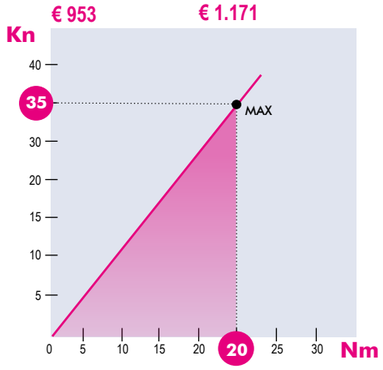
Morse tipo **2**
Vises type
VITE: TPF 18 / 24 mm PASSO: 2 mm
SCREW: TPF 18 / 24 mm PITCH: 2 mm
Rapporto trasmissione: 7:1
Gear ratio: 7:1
Type 2 Cod. 5.80.22000 **€ 906**



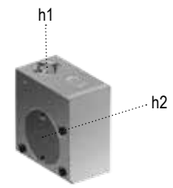
RATIO = h1 : h2

Morse tipo **3-4**
Vises type
VITE: TPF 24 / 30 mm PASSO: 2 mm
SCREW: TPF 24 / 30 mm PITCH: 2 mm
Rapporto trasmissione: 7:1
Gear ratio: 7:1

Type 3	**Type 4**
Cod. 5.80.23000	Cod. 5.80.24000
€ 953	**€ 1.171**



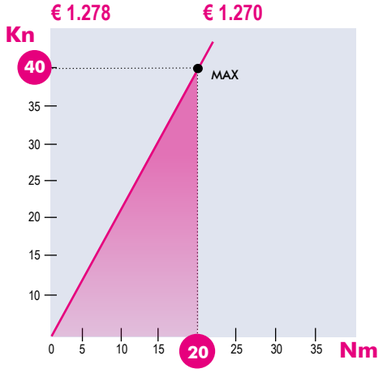
RATIO = h1 : h2



Art. 802

Morse tipo **5-6**
Vises type
VITE: TPF 30 / 36 mm PASSO: 3 mm
SCREW: TPF 30 / 36 mm PITCH: 3 mm
Rapporto trasmissione: 7:1
Gear ratio: 7:1

Type 5	**Type 6**
Cod. 5.80.25000	Cod. 5.80.26000
€ 1.278	**€ 1.270**



RATIO = h1 : h2

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.

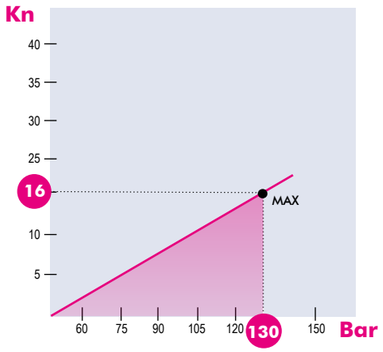
Diagrammi serraggio / Clamping diagrams

FMS

Diagrammi di serraggio meccanico tramite motore idraulico

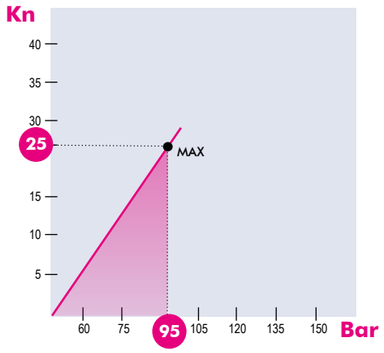
Mechanical clamping diagrams through hydraulic motor **Art. 890**

Morse tipo **1**
Vises type
VITE: TPF 18 / 20 mm PASSO: 2 mm
SCREW: TPF 18 / 20 mm PITCH: 2 mm
Motore idraulico tipo **OMM 32**
Hydraulic motor type **OMM 32**

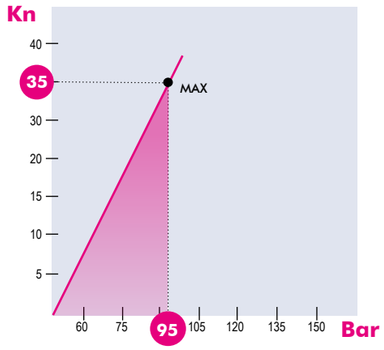


Art. 890

Morse tipo **2**
Vises type
VITE: TPF 18 / 24 mm PASSO: 2 mm
SCREW: TPF 18 / 24 mm PITCH: 2 mm
Motore idraulico tipo **OMP 80**
Hydraulic motor type **OMP 80**

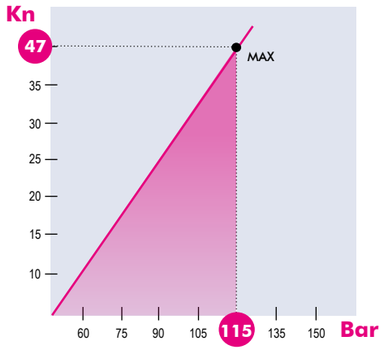


Morse tipo **3-4**
Vises type
VITE: TPF 24 / 30 mm PASSO: 2 mm
SCREW: TPF 24 / 30 mm PITCH: 2 mm
Motore idraulico tipo **OMR 200**
Hydraulic motor type **OMR 200**



Art. 890

Morse tipo **5-6**
Vises type
VITE: TPF 30 / 36 mm PASSO: 3 mm
SCREW: TPF 30 / 36 mm PITCH: 3 mm
Motore idraulico tipo **OMR 200**
Hydraulic motor type **OMR 200**



ATTENZIONE! Azionamento idraulico ma serraggio meccanico (PIU' SICURO) - IMPORTANT! Hydraulic control, but mechanical clamping (SAFER)

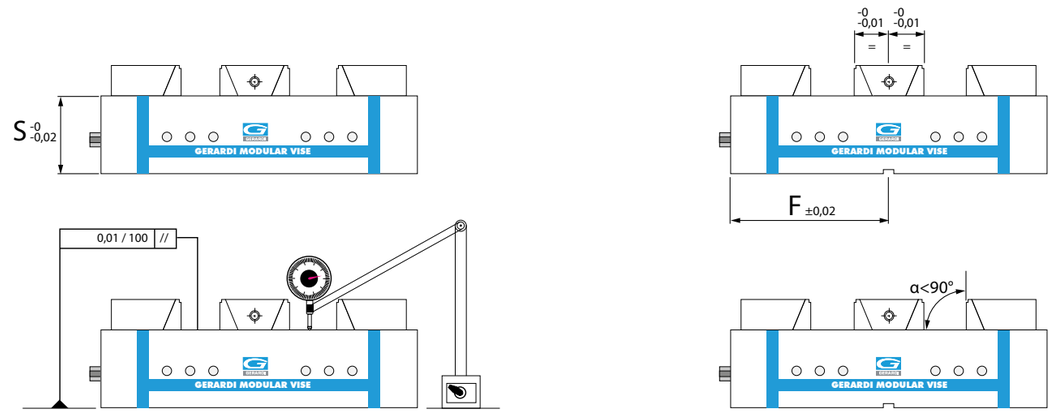
NB: Alcuni fattori, come la lubrificazione, lo staffaggio, gli attriti ed altro, possono modificare i valori indicati fino a ± 10%. Per un corretto utilizzo non superare i valori indicati nel grafico
Some factor as lubrication, clamping on the machine table, frictions and more can modify above values within a ± 10% range. For optimum operation do not exceed chart values.

ISTRUZIONI PER UN CORRETTO UTILIZZO
ISTRUCTIONS FOR A PROPER USE

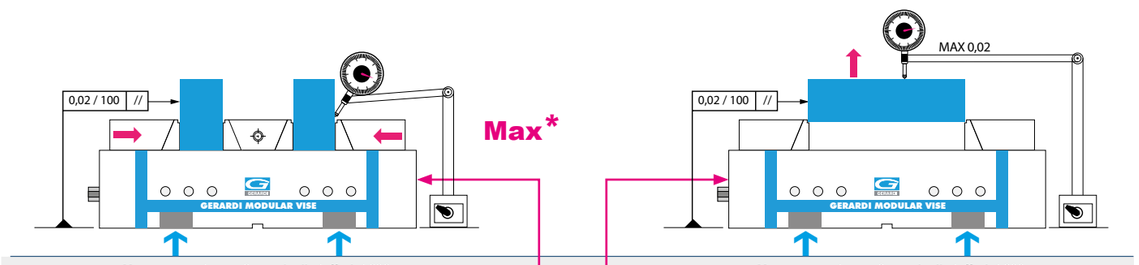
Libretto Istruzioni / Instruction Book

Scansiona il QR code e scarica le istruzioni complete
Scan the QR code to download the complete instructions

TOLLERANZE GEOMETRICHE / GEOMETRIC ACCURACIES



TOLLERANZE DINAMICHE / DINAMIC ACCURACIES



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

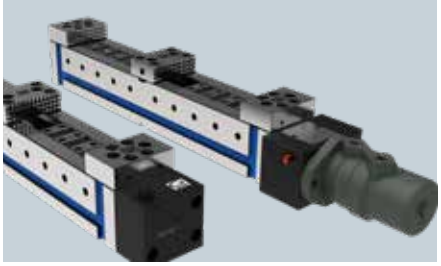
Morsa ancorata con 2 coppie di staffe Art.296
Vise clamped with n. 2 pairs of Art.296

Art 865		* Coppia applicata - Torque Nm	Forza di serraggio - Clamping power
Morsa tipo 1	Vise type 1	120	2500 Kgf
Morsa tipo 2	Vise type 2	140	2500 Kgf
Morsa tipo 3	Vise type 3	180	3000 Kgf
Morsa tipo 4	Vise type 4	180	3000 Kgf
Morsa tipo 5	Vise type 5	240	3200 Kgf
Morsa tipo 6	Vise type 6	240	3200 Kgf

* Max coppia applicabile per non superare i valori consigliati

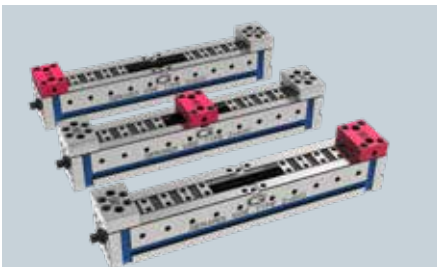
1 kgf . m = 9.806

ESTREMA VERSATILITY
EXTREME VERSATILITY



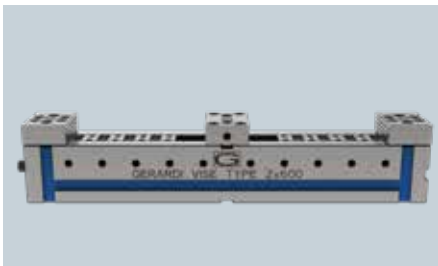
Sistema di serraggio meccanico, idraulico, pneumatico elettrico o con moltiplicatore di potenza, tramite comando manuale, a pedale o mediante pulsante elettrico (vedi pag. 12)

Mechanic, hydraulic or pneumatic or electrical clamping system or with pressure multiplier, through manual, pedal or push botton board control (see page 12)



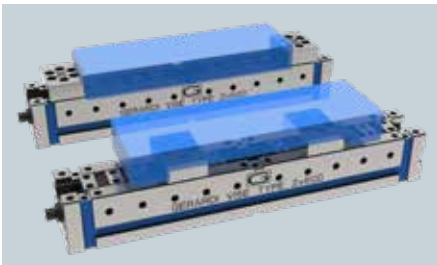
3 posizioni per la ganascia fissa

3 positions for the fixed jaw



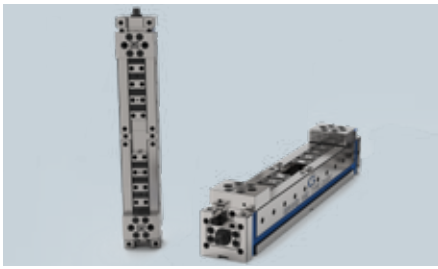
Costruzione solida e compatta e massma apertura rispetto alla sua lunghezza

Space saving design, solid construction and maximum blocking ratio to total lenght



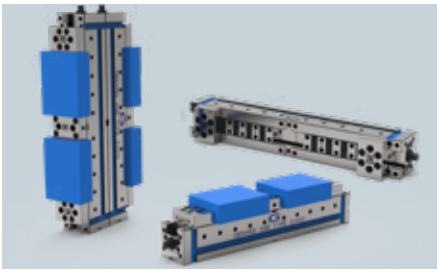
Serraggio dall'esterno all'interno e viceversa

Outside to inside clamping and viceversa



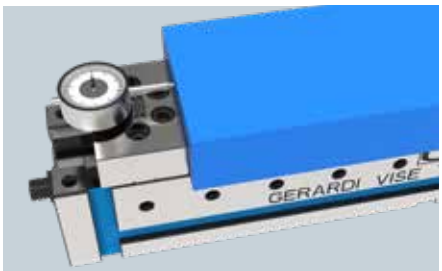
Precisioni geometriche con tolleranze entro 0,02mm

Geometrical accuracy with tollerances within 0,02 mm



Posizionamento verticale-orizzontale laterale grazie alle chiavette longitudinali e trasversali sia sulla base che in testa

Vertically, horizontally and sideway vise positioning by the

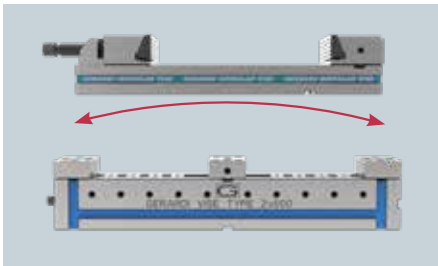


Accurata ripetibilità di posizionamento dei particolari da lavorare

Very accurate repetibility of workpieces position

Collegamento: fianco a fianco, dorso a dorso

Side by side, back to back vise positioning

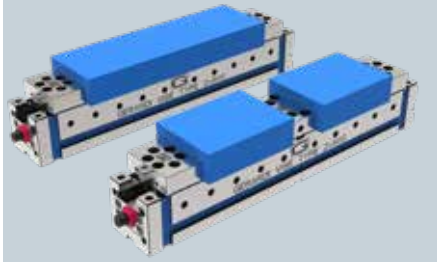


Flessioni ridotte di due volte rispetto alle morse modulari STANDARD

Bending reduced two times with respect to the STANDARD modular vises

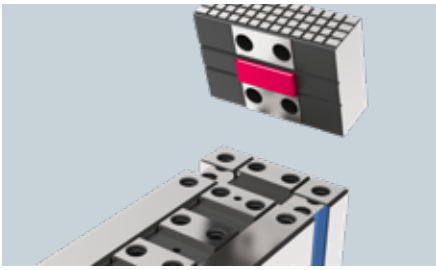
Possibilità illimitata per ganasce speciali

Unlimited range of special jaws



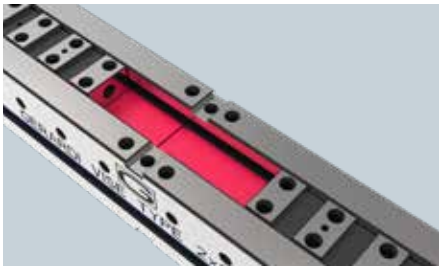
Trasformazione da autocentrante a doppia tramite la sostituzione delle ganasce sul corpo base universale e tramite la ghiera di regolazione.

Trasform each single vise in a self-centering with possibility to block from outside to inside and vice versa and in a double vise through the substitution of the jaws on the universal vise body base and by the setting nut.



Sostituzione semplice e precisa delle ganasce

Simple and precise exchange of jaws



Protezione integrale dalla penetrazione di corpi estranei tramite piastre scorrevvoli

Integral protection from chips and dirty through sliding protections