

5

*Single, Double
or Self-centering!*

FMS

Morse e Cubi / Vises & Vise Towers

INDICE - INDEX

pages		pages		pages		pages		pages	
Art.	5.	Art.	5.	Art.	5.	Art.	5.	Art.	5.
62	50	805M	55	810X	27	860C	44 - 45		
62K	67 - 69	805N	54 - 55	810XA	27	860D	14		
81P	50	805O	54 - 55	810Y	27	860E	14		
84U	31	805P	55	810YA	27	860F	14		
90	35	805Q	55	810Z	27	863	16		
99A	67 - 69	805R	55	812	31	863C	46		
99B	67 - 69	805T	55	812A	31	863D	16		
99H	67 - 69	805U	31	812B	31	863E	16		
99S	67 - 69	805UA	31	812C	31	863F	16		
220 G01	58	805V	35	813	31	864	18		
220 G02	58	805VA	35	813A	31	865	20		
220 G11	58	806	22	813C	31	865D	20		
266B	62 - 63 - 64	806A	22	814	56	865E	20		
247T	35	806B	23	815	31	865F	20		
375	61	806C	23	815A	31	866	24		
512	57	806D	23	815C	31	866D	24		
296	6	806E	23	818	52	866E	24		
547G	58	806F	22	821	53	866F	24		
547K	58	806G	23	822	53	867	28		
566	62	806H	23	823	59	867D	28		
571	62	806M	23	823B	59	867E	28		
800	38	806K	23	825	59	867F	28		
800A	38	806SLD	23	825A	61	868	32		
800B	38	806SLE	23	825B	59	868D	32		
800C	42-43	807	22	825C	59	868E	32		
800D	38	807A	22	827A	60	868F	32		
800E	61	808	22	828A	60	870	36		
800G	42-43	808A	22	829A	52	870A	54		
800I	61	808B	22	830	52	870C	46		
800Z	38 - 39	810	56	831	59	870D	36		
801	50	810A	56	832	59	870E	36		
801G	61	810B	56	833	59	870F	36		
801H	61	810D	56	834	59	882A	38		
801I	61	810DT	57	835	60	890	62 - 65		
801S	61	810E	57	836	60	890K/1	62		
802	72	810J	56 - 57	837	60	890K/2	63		
804	49	810K	57	838	60	890K/3	63		
805	54	810L	57	850B	61	890K/4	64		
805A	54	810M	57	850C	61	891	62		
805B	54	810O	56 - 57	850E	61	892	62		
805C	54	810P	57	850H	61	900	40		
805D	55	810Q	31	850P	72	900Y	40		
805DT	55	810QA	31	850T	61	983	3		
805E	55	810R	57	852	60	DPG250	66		
805F	54 - 55	810T	57	853	60	DIVIGER			
805G	55	810U	31	855	12	205	68		
805H	55	810UA	31	855C	44 - 45 - 48				
805I	55	810UZ	31	855D	12				
805J	55	810V	57	855E	12				
805K	55	810W	27	855F	12				
805L	55	810WA	27	860	14				

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

NEW



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
Art. 814	Art.806E	Art.375 CH12
Art. 810J	Art.806F	-
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
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

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).

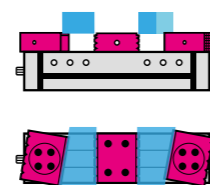
- 3 positions for the fixed jaw; • Outside to inside clamping and viceversa; • Vertically, horizontally and sideways vise positioning; • Side to side, back to back and back to side vise positioning; • Unlimited special jaws; • Simple and precise exchange of jaws; • Extension element for extra-long pieces; • Mechanic, hydraulic or pneumatic or electrical clamping system or with pressure multiplier, through manual, pedal or push button board control (see page 12); • Space saving design, solid construction and maximum blocking ratio to total length; • Deflection reduced two times with respect to the STANDARD modular vises; • Very accurate repeatability of workpiece position; • Geometrical accuracy with tolerances within 0,02 mm; • Integral protection from chips and dirty through sliding protection; • Possibility to transform 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)



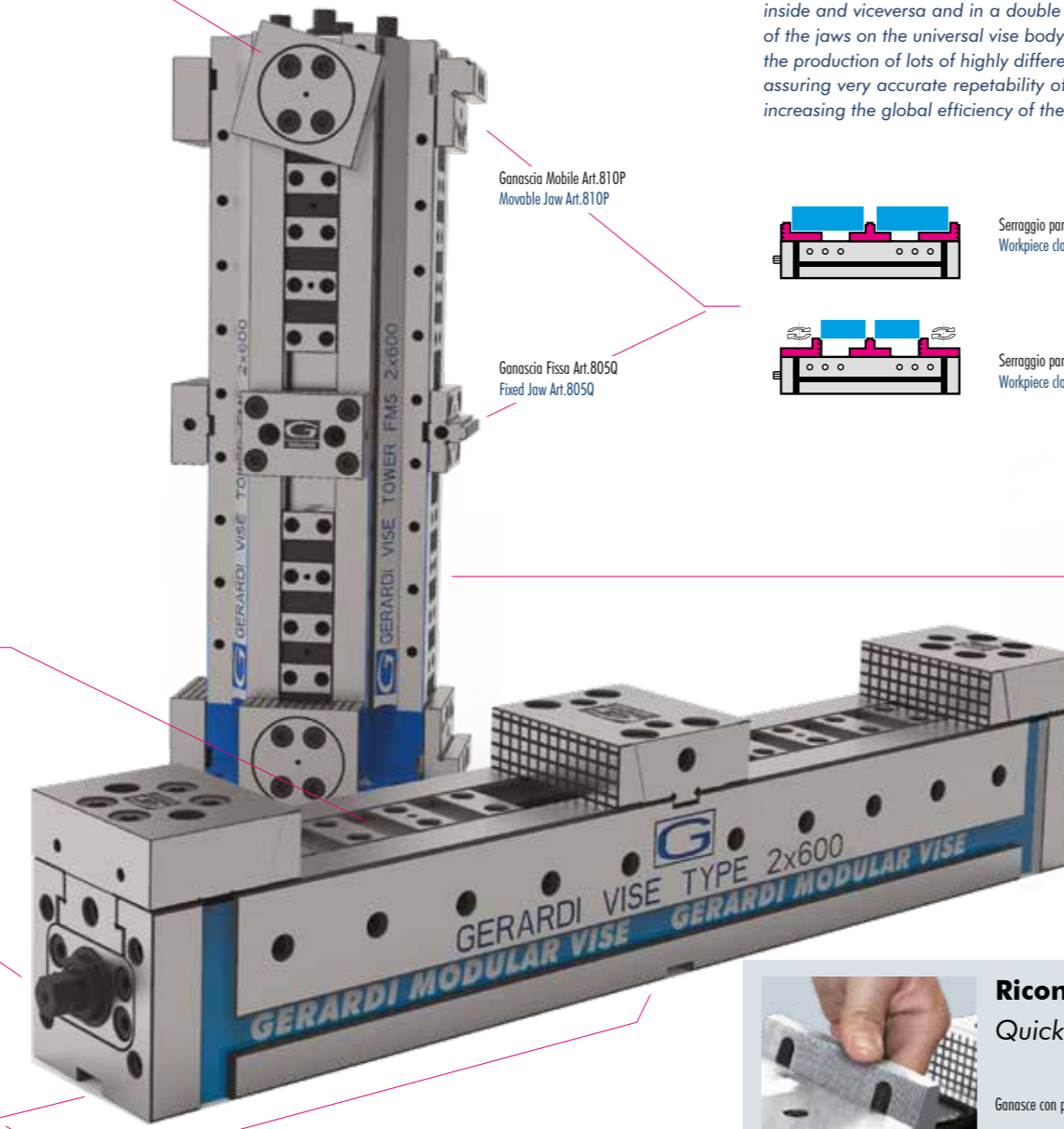
Precisione / Accuracy
 $\pm 0,02\text{mm}$



Durezza / Hardened
HRC 58 \pm 2

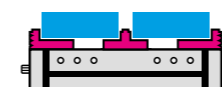


Ganasce Mobili Oscillanti
per serraggio di pezzi irregolari
Floating Movable Jaws
for irregular workpieces

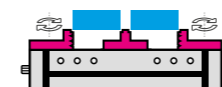


Ganascia Mobile Art.810P
Movable Jaw Art.810P

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



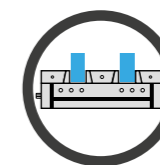
Serraggio particolare su gradino grande
Workpiece clamping on the large step



Serraggio particolare su gradino piccolo
Workpiece clamping on the small step

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 (Brevetata) 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, extremely high wear resistance, 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 length. The feature (Patented) which identifies this line of vises consists in the possibility to transform 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 repeatability 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.

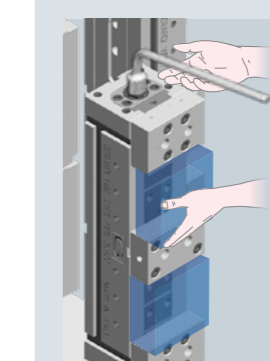
Possibility to transform each single vise in a self-centering vise with possibility to block from outside to inside and viceversa and in a double vise through the simple substitution of the jaws on the universal vise body base



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 frattappe 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.



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

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



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 2021

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

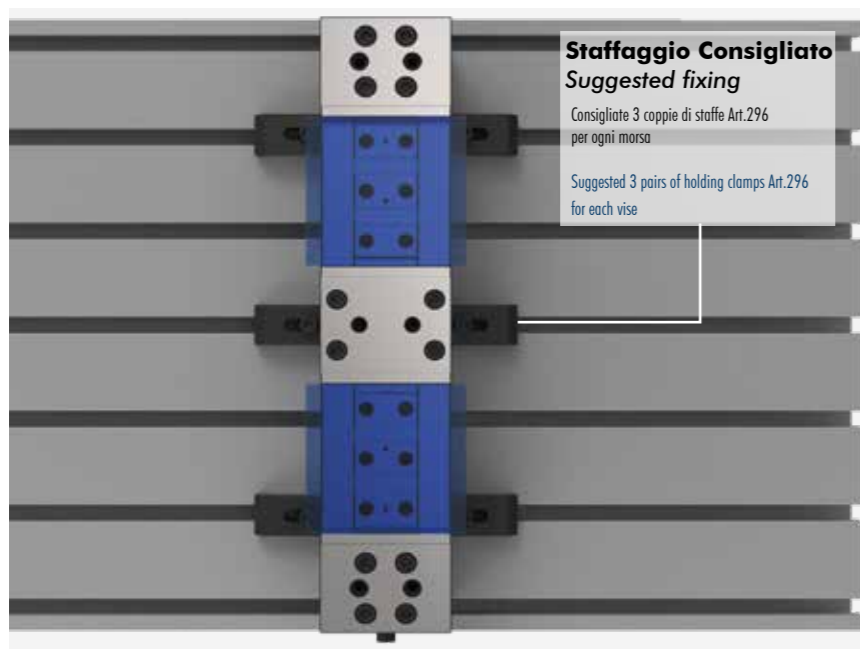


Esempio d'ordine per morsa tipo 3 su macchina con cave a T da 18mm: Art.296 T.3 X=18mm

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**

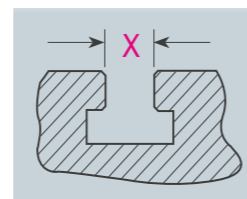
Also with code: **2.29.6300 X=18mm**



Staffaggio Consigliato Suggested fixing

Consigliate 3 coppie di staffe Art.296 per ogni morsa

Suggested 3 pairs of holding clamps Art.296 for each vise

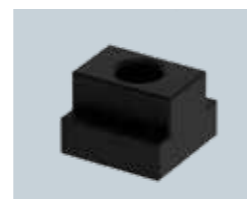


Cava a T

T Slot

Specificare sempre la cava della vostra macchina

Always specify the machine T-slot dimension

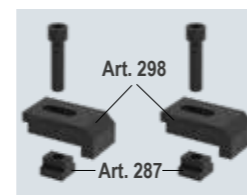


Art.287 (Pag.4.34)

Dadi a T - T Nuts

Per fissaggio morsa 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	Cava a T slot X				12* 14 16 18				12* 14 16 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							
Coppia di staffe Holding clamps pair	Filetto vite Screw thread				M8				M10				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	ØD	8,5	11	13	17	13	17	13	17		
	E	10	10	10	10	13	13	15	15	ØF	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		

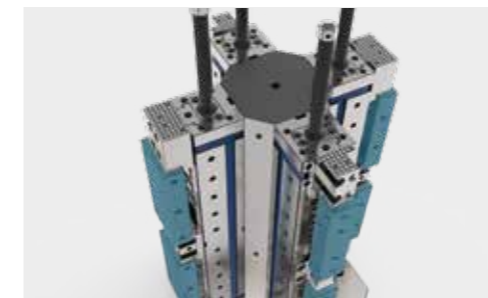
* Scelta consigliata - Suggested choice

* 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

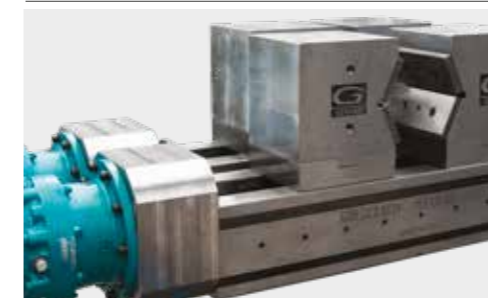


Morse FMS automatizzate in verticale

FMS vises automated vertically mounted

Gestione automatica di morsa 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.

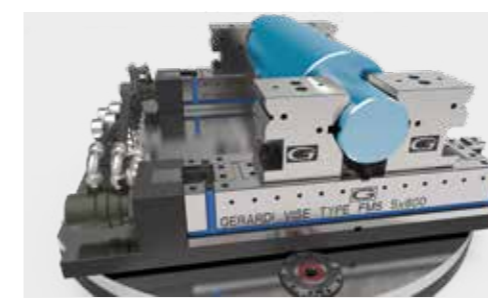


Morsa FMS con riduttore epicicloidale

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 morsa 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 morsa 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

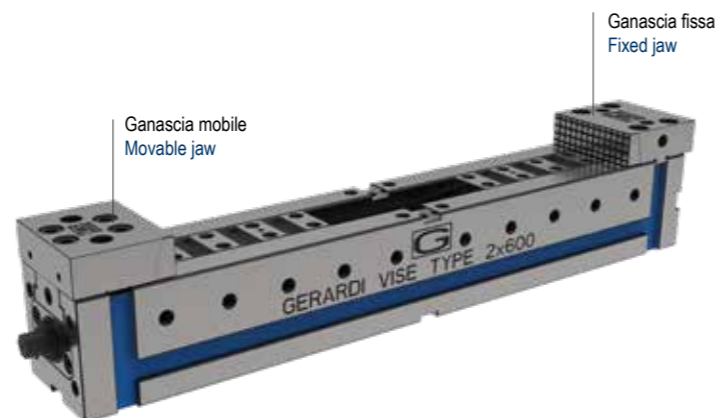
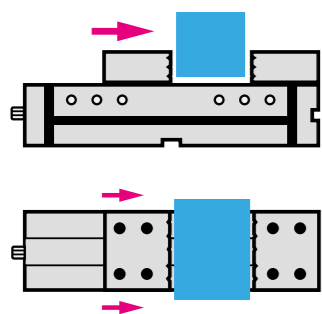
BASE BODY Art.855

Modulo base universale
CENTINAIA DI GANASCE DISPONIBILI !!

Universal vise body module
HUNDREDS OF JAWS AVAILABLE !!

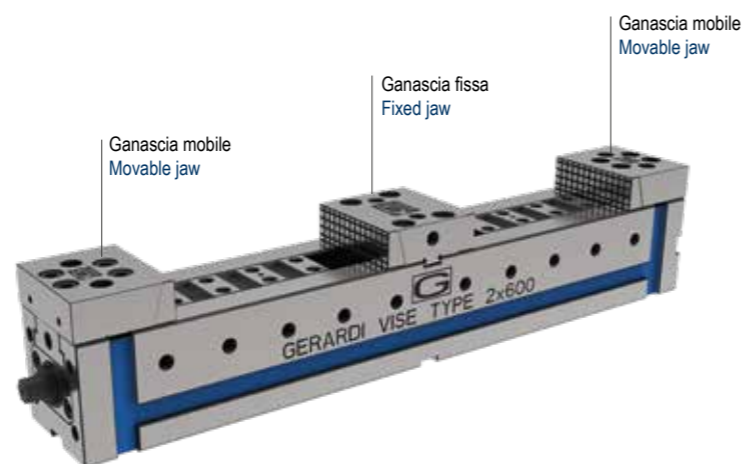
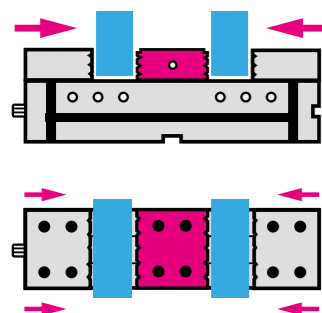
SERRAGGI SINGOLI

SINGLE CLAMPING



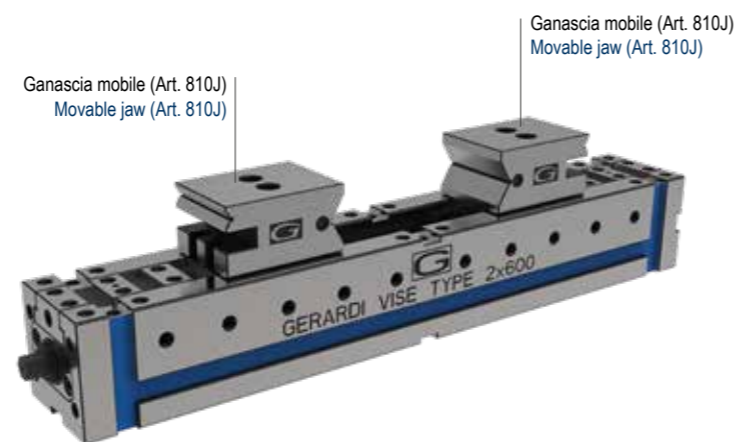
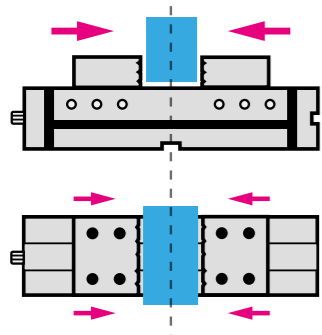
SERRAGGI DOPPI

DOUBLE CLAMPING



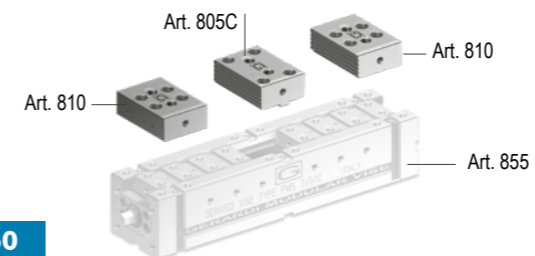
AUTOCENTRANTE

SELF-CENTERING

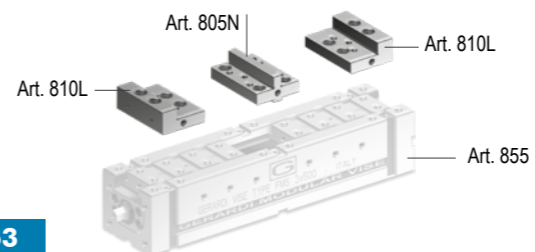


VERSIONI PER SERRAGGI DOPPI

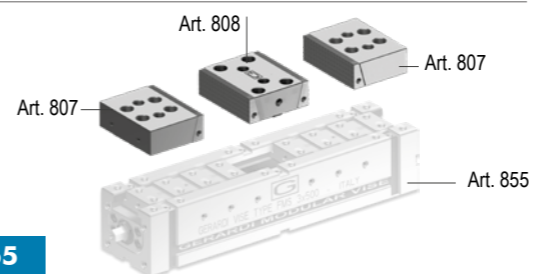
DOUBLE CLAMPING CONFIGURATION



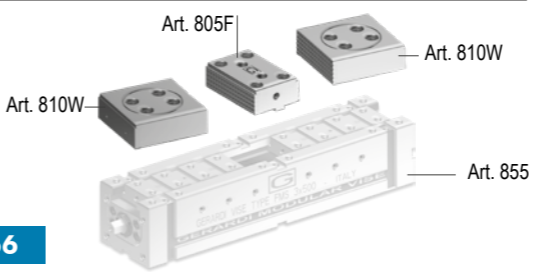
Art. 860



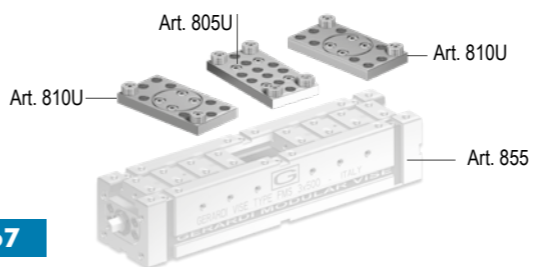
Art. 863



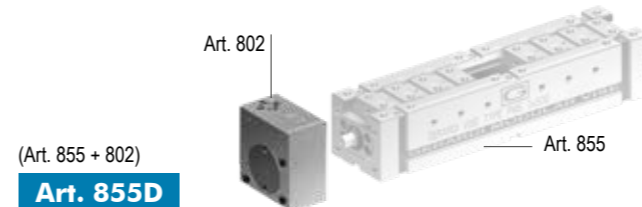
Art. 865



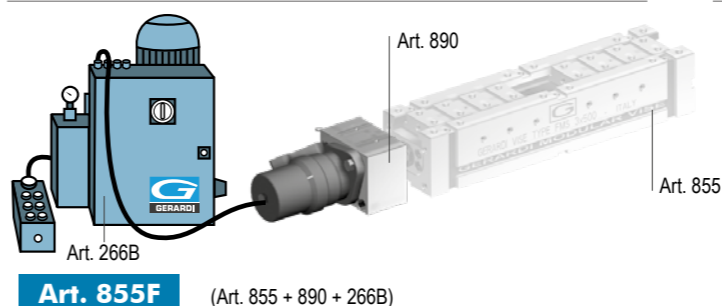
Art. 866



Art. 867



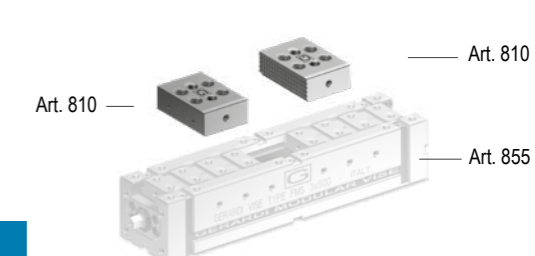
Art. 855D



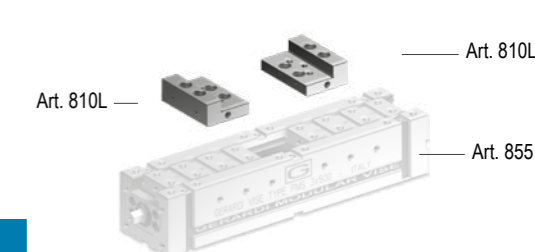
Art. 855F

VERSIONI AUTOCENTRANTI

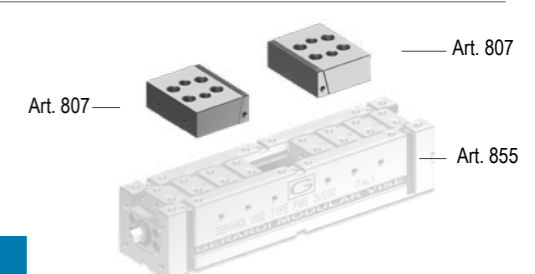
SELF-CENTERING TYPE



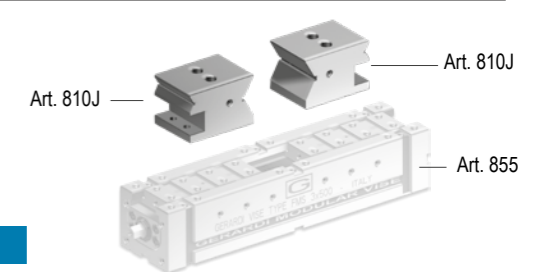
Art. 860



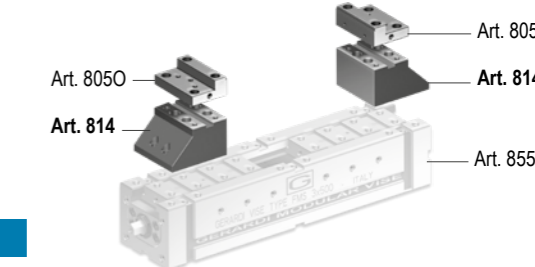
Art. 863



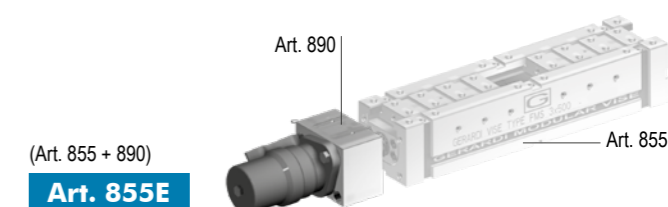
Art. 865



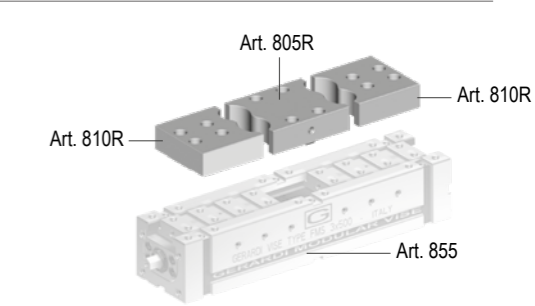
Art. 870



Art. 868

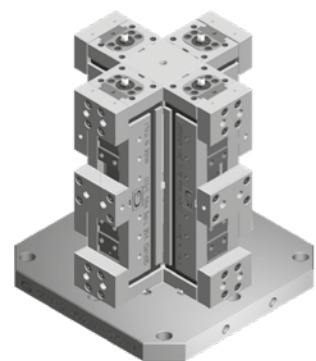


Art. 855E



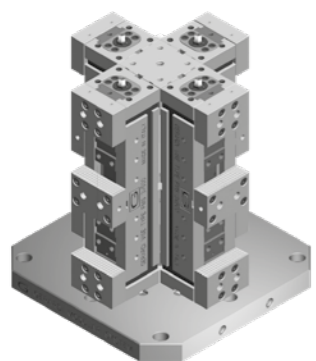
Art. 855R

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



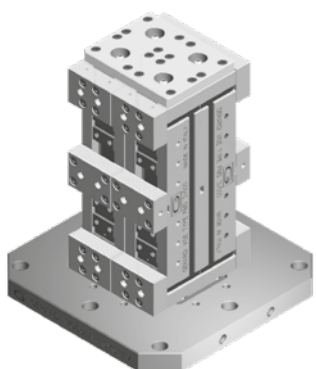
N° 4 MORSE FMS
montate a croce su piastra base (Art. 827A)
con distanziali (Art. 835)

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)



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

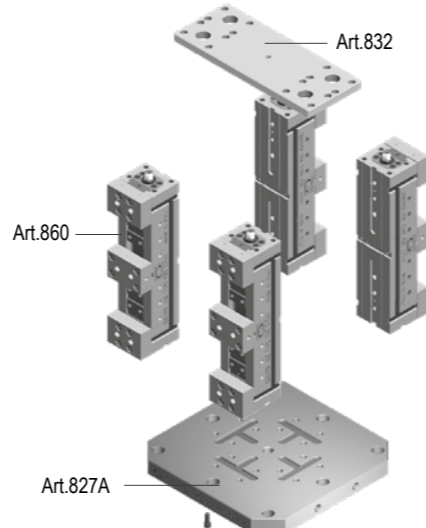
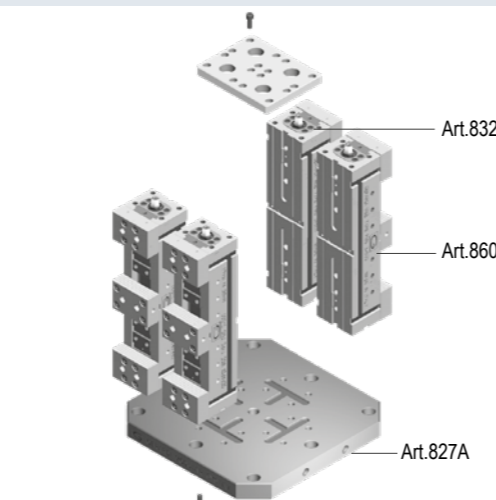
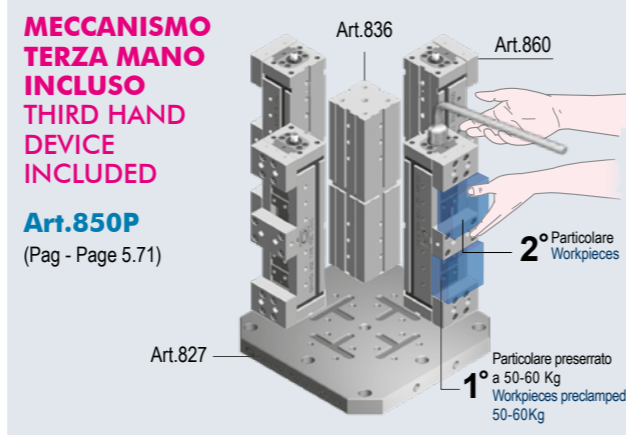
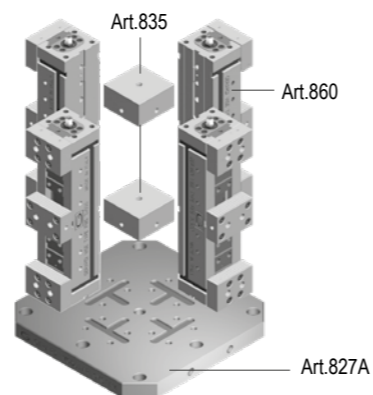
N° 4 FMS VISES
cross-mounted back-to-back, side by side, on base
plate (Art. 827) with connecting plate (Art. 832)



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 alignment mounted with spacers, center support or connecting plate



CUBI DI MORSE MONTATI VERTICALMENTE VISE TOWERS VERTICALLY ASSEMBLED



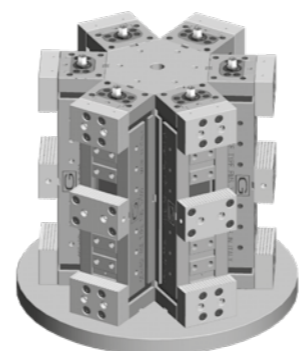
N° 3 morse FMS
montate verticalmente su piastra base a Y (827)
con supporto centrale (Art. 838)

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)

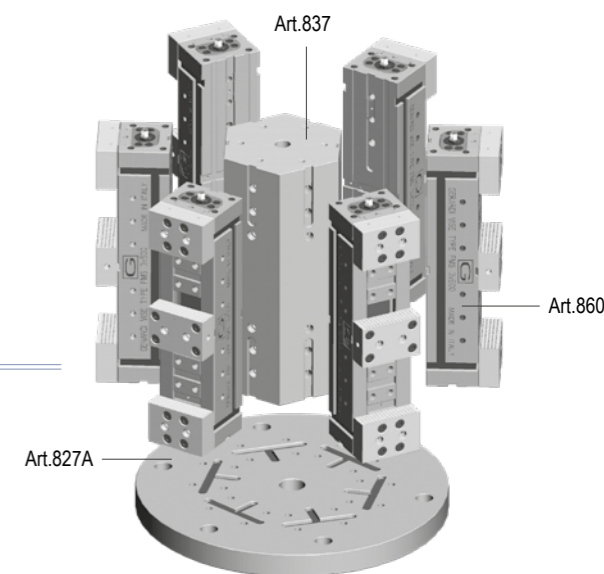
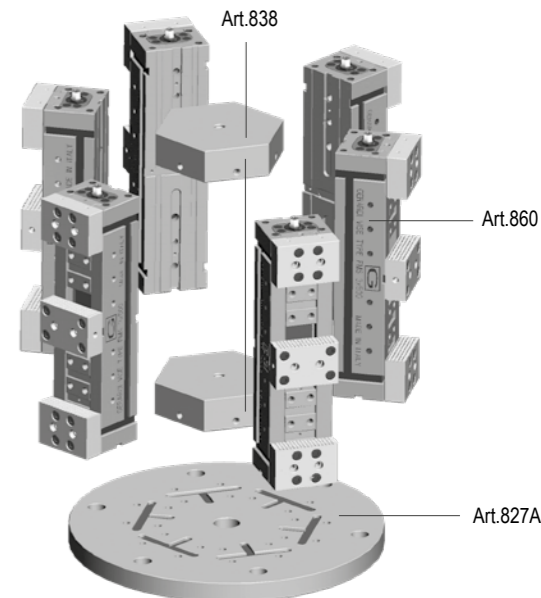
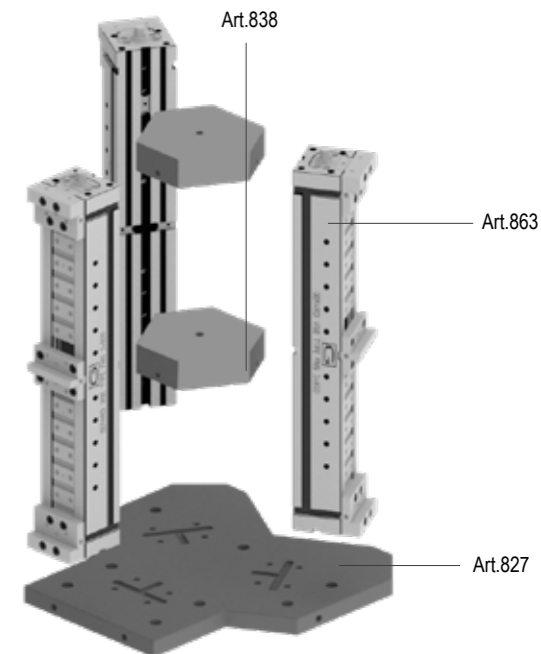
N° 6 FMS vises
vises vertically mounted on base plate (Art. 827A)
with exagon spacer (Art. 838)



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 alignment mounted with spacers, center support or connecting plate



Tipo (grandezza) morsa / Vise type (size)		1 25 kN		2 25 kN			3 30 kN	
kN		25 kN		25 kN			30 kN	
Apertura massima fra le slitte / Maximum opening between slides	A	56	68	96	116	136	156	136
	C	70		90			100	
	D	200 + 32	300 + 32	300	400	500	600	400
	E	249	349	320	420	520	620	425
	G	75		95			125	
	R	74		94			124	
	S	69		89			99	
	T	72	116	102	142	182	222	132
	Y	277	377	360	460	560	660	470
	X	407	507	537	637	737	837	637
	kg	7	10	18	25	32	39	40
	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. 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
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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
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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
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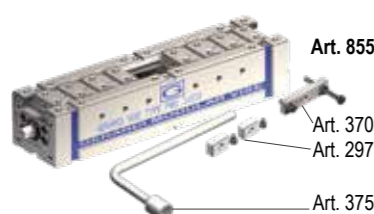
Meccanica con predisposizione elettroidraulica completa di motore, piastra, boccola e fincorsa

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

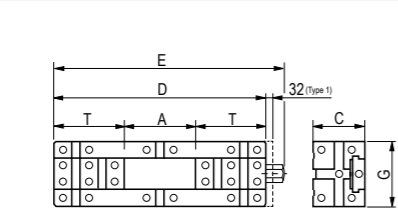
Cod.	5.85.5F120	5.85.5F130	5.85.5F230	5.85.5F240	5.85.5F250	5.85.5F260	5.85.5F340	5.85.5F350
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Meccanica elettroidraulica completa di centralina idraulica apparecchiatura elettrica con pulsantiera

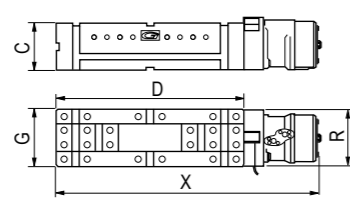
- Dotazione standard:
- 2 arresti laterali Art. 370
 - 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
 - 1 chiave a pipa Art. 375



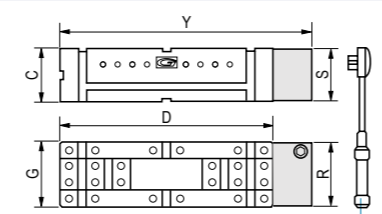
- Standard equipment:
- 2 workstops Art. 370
 - 1 pair of positioning key-nuts for 16 mm slot Art. 297
 - 1 box wrench Art. 375



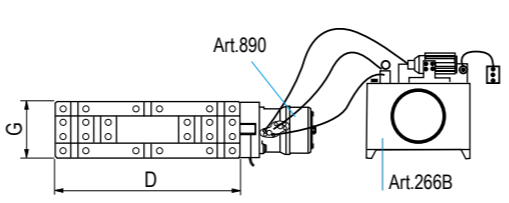
Art. 855



Art. 855E



Art. 855D



Art. 855F

		3 30 kN			4 30 kN				5 32 kN			6 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
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Art. 802 Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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Art. 855E (Art. 855 + 890) Morsa + motore idraulico / Vise + hydraulic motor

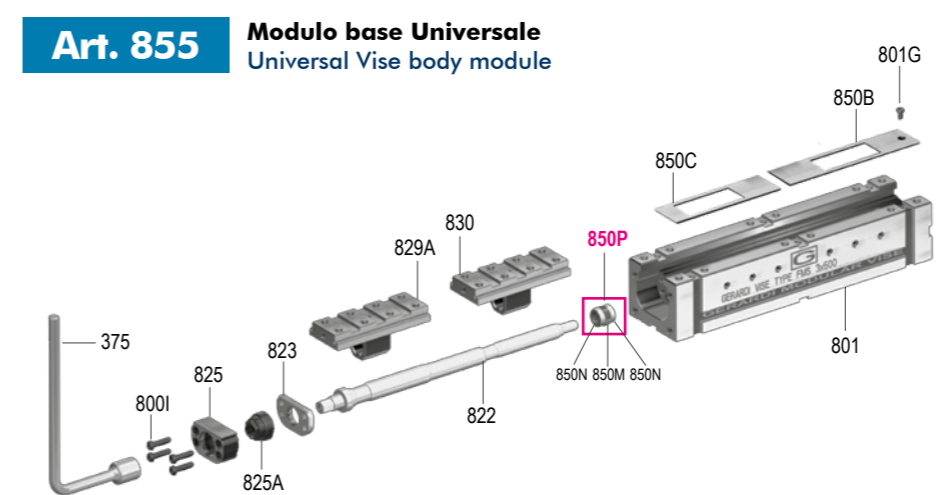
Cod.	5.85.5E360	5.85.5E370	5.85.5E380	5.85.5E450	5.85.5E460	5.85.5E470	5.85.5E480	5.85.5E560	5.85.5E570	5.85.5E580	5.85.5E680	5.85.5E690	5.85.5E610
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Meccanica con predisposizione elettroidraulica completa di motore, piastra, boccola e fincorsa

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
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Meccanica elettroidraulica completa di centralina idraulica apparecchiatura elettrica con pulsantiera



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	-	-

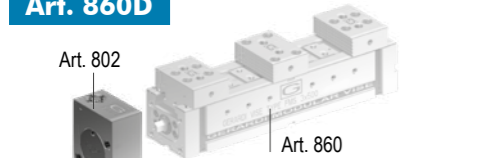
Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN				3 30 kN	
Apertura massima / Maximum opening	A	2 x 16	2 x 66	2 x 54	2 x 104	2 x 154	2 x 204	2 x 74	2 x 124
Art. 860 Morsa FMS doppia, singola, autocentrante con ganasce zigrinate	B	25			30			40	
	C	70			90			100	
	D	232	332	300	400	500	600	400	500
	E	249	349	320	420	520	620	425	525
	G	75			95			125	
	J	56			64			84	
	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
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Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

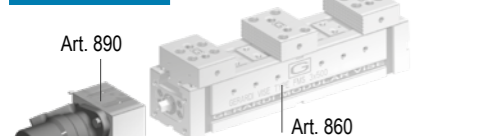
Chiave dinamometrica Art.357 (Consigliata) - Torque wrench Art.357 (Suggested)

Art. 802

Cod.	5.80.21000	5.80.22000	5.80.23000
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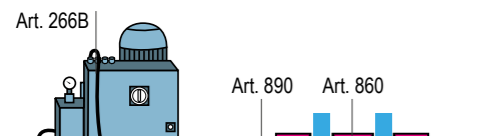
Art. 860E (Art. 860 + 890) Morsa + motore idraulico / Vise + hydraulic motor

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
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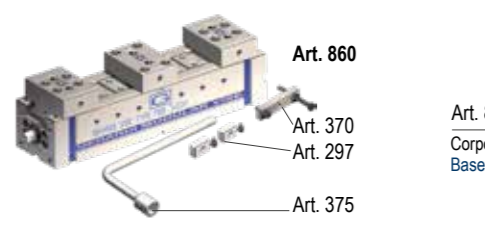


Art. 860F (Art. 860 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

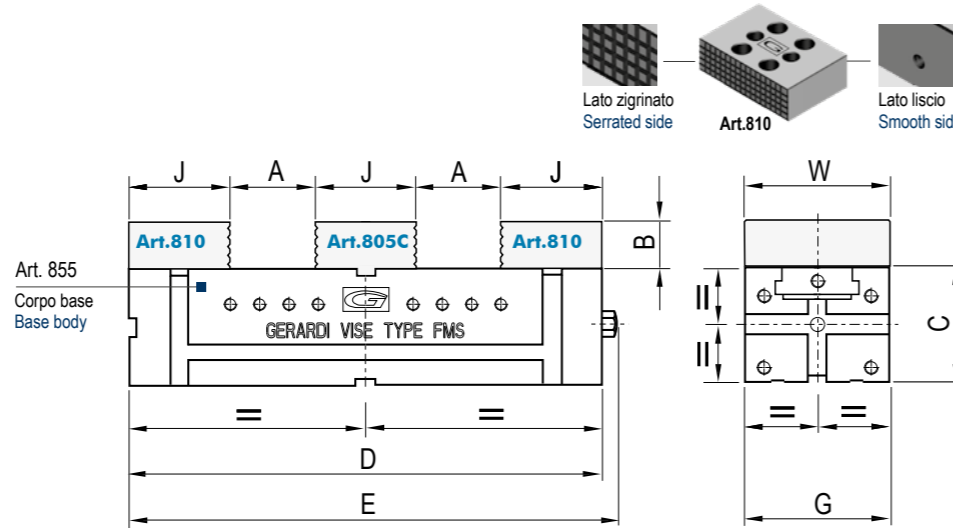
Cod.	5.86.0F120	5.86.0F130	5.86.0F230	5.86.0F240	5.86.0F250	5.86.0F260	5.86.0F340	5.86.0F350
------	------------	------------	------------	------------	------------	------------	------------	------------



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

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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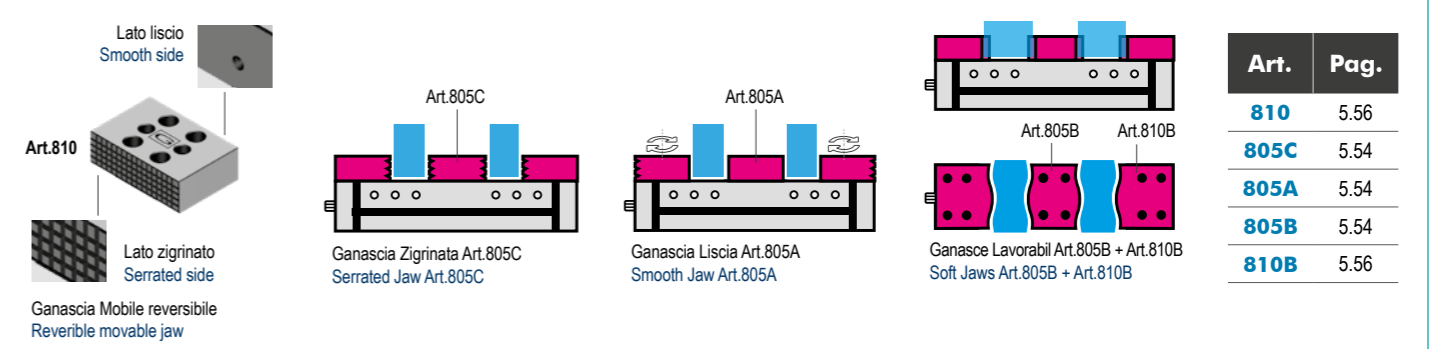
Art. 860E (Art. 860 + 890) Morsa + motore idraulico / Vise + hydraulic motor

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

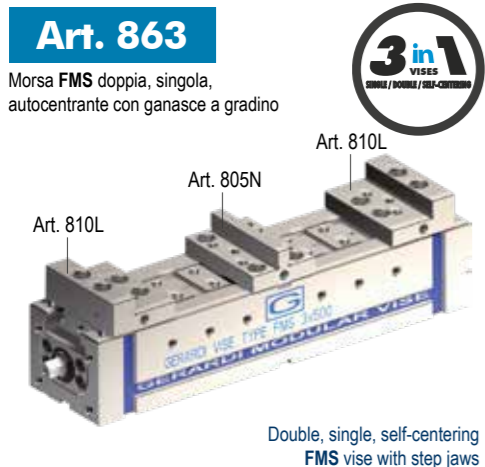
Cod.	5.86.0F360	5.86.0F370	5.86.0F380	5.86.0F450	5.86.0F460	5.86.0F470	5.86.0F480	5.86.0F560	5.86.0F570	5.86.0F580	5.86.0F680	5.86.0F690	5.86.0F610
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Art. 860 Esempi applicativi ganasce:
Jaw application examples:



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

Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN				3 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



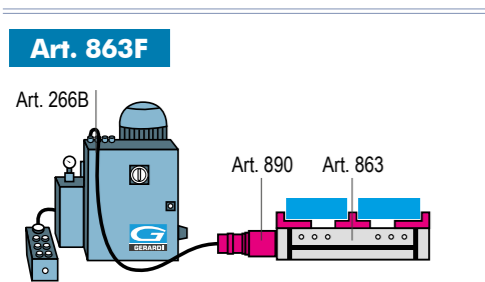
Art. 863D (Art. 863 + 802) Morsa + moltiplicatore di coppia / Vise + torque multiplier

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
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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
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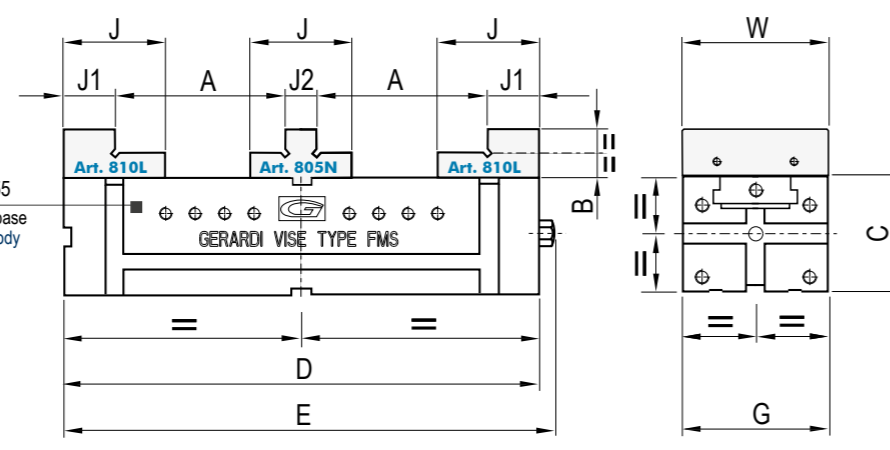


Dotazione standard:

- 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 30 kN			4 30 kN				5 32 kN			6 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
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Art. 802 Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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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
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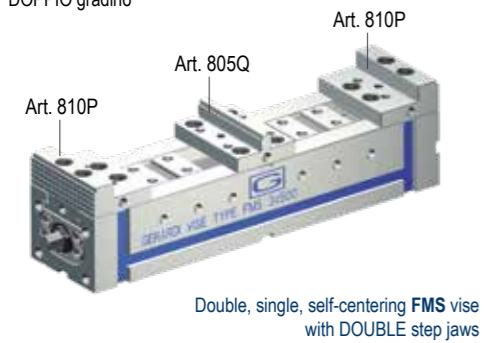
Art. 863F (Art. 863 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

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
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Art. 863 Esempi applicativi ganasce:
Jaw application examples:

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

Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN					2 25 kN				3 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			
Art. 864	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			
NEW	B	25				30			40			
Morsa FMS doppia, singola, autocentrante con ganasce a DOPPIO gradino	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. 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
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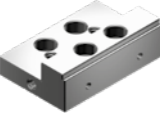
Art. 805G
Ganascia fissa con doppio gradino 3x5 ZIGRINATA
Fixed jaw with double 3x5 step SERRATED

Cod.	5.80.5G100	5.80.5G200	5.80.5G300
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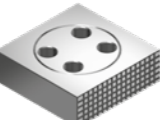
Art. 810O
Ganascia mobile con gradino piccolo e grande
Movable jaw with small and large step

Cod.	5.81.0O100	5.81.0O200	5.81.0O300
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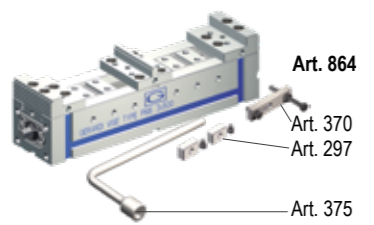


Art. 810X
Ganascia mobile oscillante con gradino 3x5 zigrinata da un lato con albero a gradino (Art. 810Z)
Floating movable jaw with 3x5 step one side serrated with step block pin (Art. 810Z)

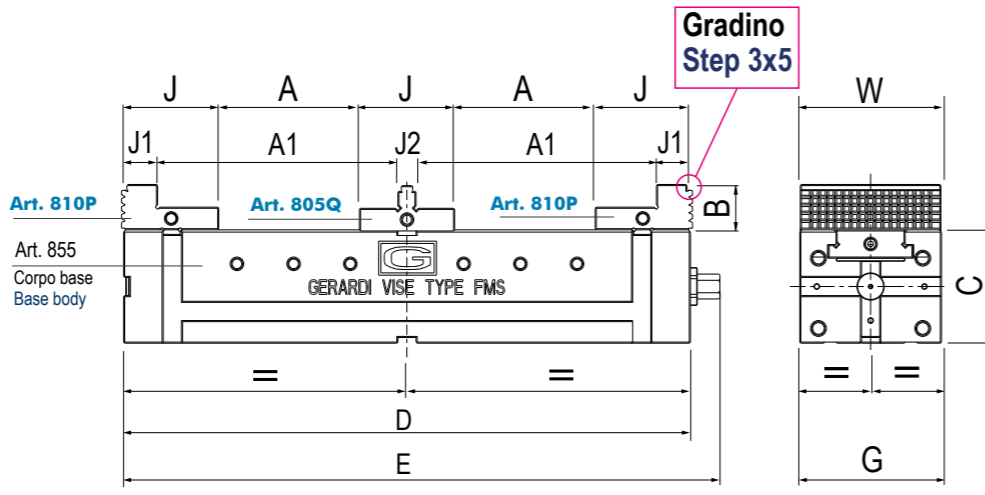
Cod.	5.81.0X100	5.81.0X200	5.81.0X300
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- Dotazione standard:
- 2 arresti laterali Art. 370
 - 1 coppia di tasselli di posizionamento per cava da 16 mm Art. 297
 - 1 chiave a pipa Art. 375



- 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 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
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Art. 805G

Cod.	5.80.5G300	5.80.5G400	5.80.5G500	5.80.5G600
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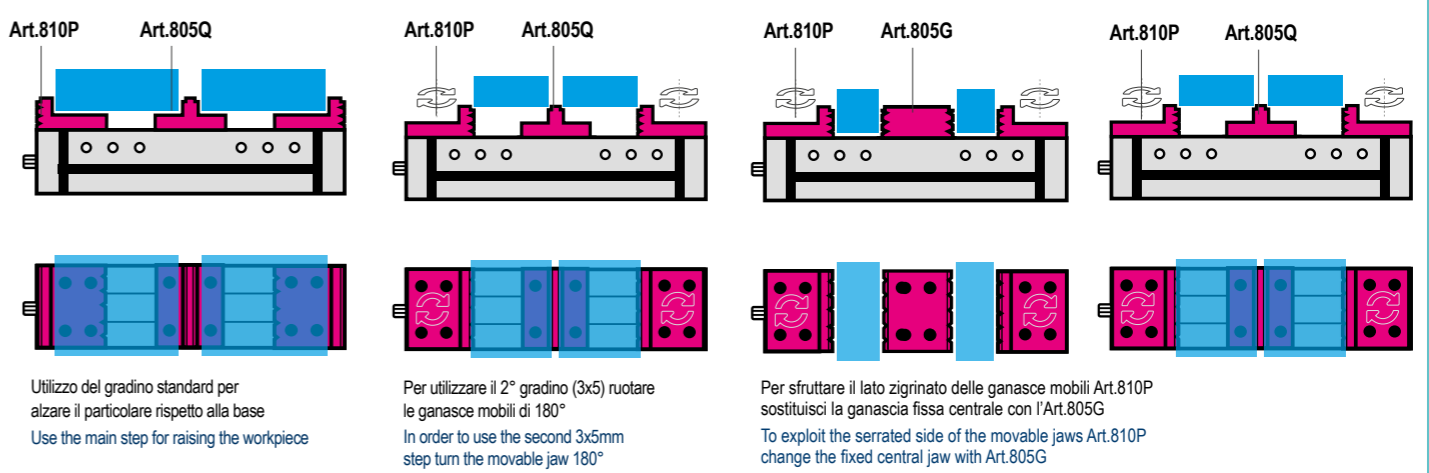
Art. 810O

Cod.	5.81.0O300	5.81.0O400	5.81.0O500	5.81.0O600
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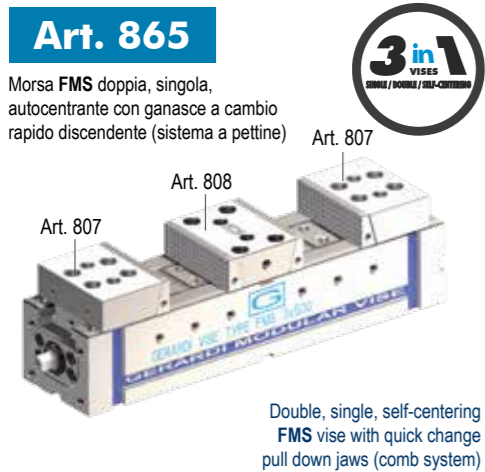
Art. 810X

Cod.	5.81.0X300	5.81.0X400	5.81.0X500	5.81.0X600
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Art. 864 Esempi applicativi ganasce a doppio gradino:
Double step jaw application examples:

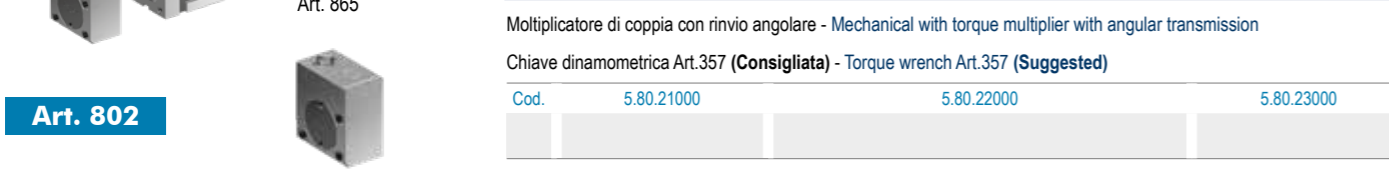


Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN				3 30 kN	
Apertura massima / Maximum opening	A	2 x 52		2 x 30	2 x 80	2 x 130	2 x 180	2 x 46	2 x 96
	B	25		30				40	
	C	70		90				100	
	D	332	300	400	500	600	400	500	
	E	349	320	420	520	620	425	525	
	G	75		95				125	
	J	63		76				98	
	J1	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. 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
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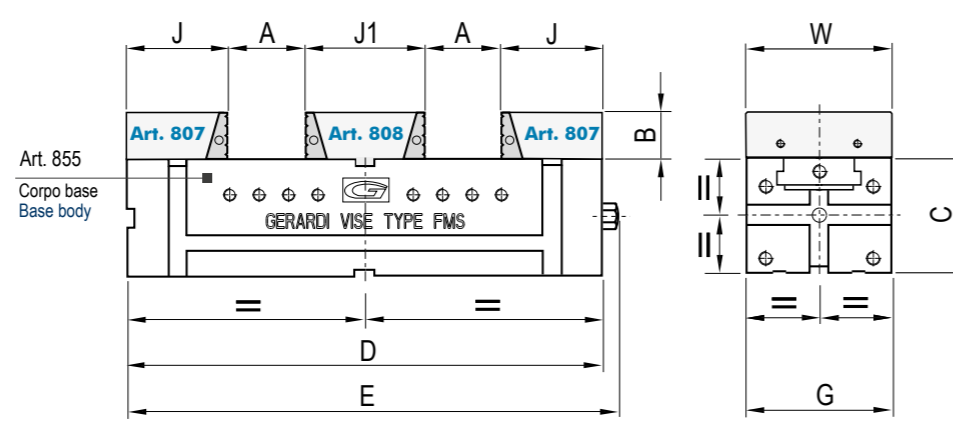
Art. 865E (Art. 865 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.5E130	5.86.5E230	5.86.5E240	5.86.5E250	5.86.5E260	5.86.5E340	5.86.5E350
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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
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- 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
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Art. 802 Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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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
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Art. 865F (Art. 865 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

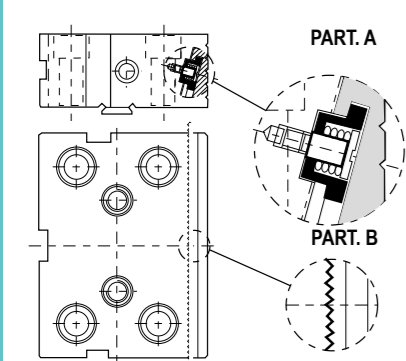
Cod.	5.86.5F360	5.86.5F370	5.86.5F380	5.86.5F450	5.86.5F460	5.86.5F470	5.86.5F480	5.86.5F560	5.86.5F570	5.86.5F580	5.86.5F680	5.86.5F690	5.86.5F610
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Art. 865 Esempi applicativi piastre ganasce:
Jaw plates application examples:

Configurazione standard / Standard configuration

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



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

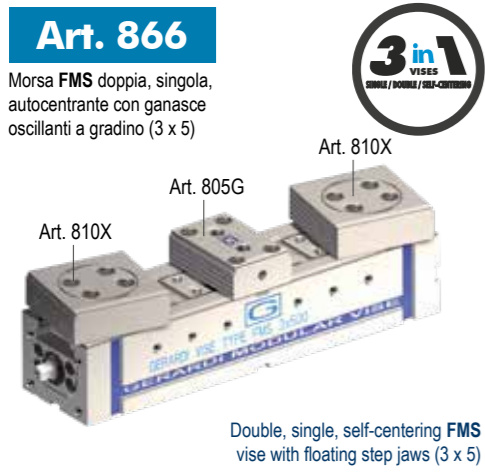
Solo 2 per morsa!! Just 2 pcs each vise!!

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

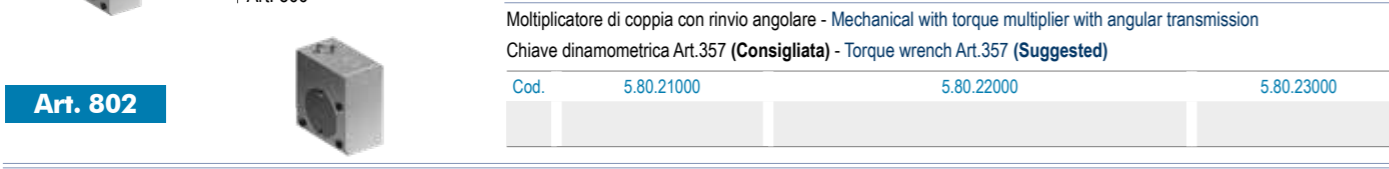
Tipo (grandezza) / Type (size)	1	2	3	4	5	6	
Art. 806B Piastra ganascia lavorabile a pettine Soft comb jaw plate	Cod. 5.80.6B100	5.80.6B200	5.80.6B300	5.80.6B400	5.80.6B500	5.80.6B600	
Art. 806C Piastra ganascia liscia a pettine Smooth comb jaw plate	Cod. 5.80.6C100	5.80.6C200	5.80.6C300	5.80.6C400	5.80.6C500	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.	3	5	8	13	18	
	Set di 10 pezzi Set of 10 pcs.	3	5	8	13	18	
	Set di 14 pezzi Set of 14 pcs.	3	5	8	13	18	
	Set di 14 pezzi Set of 14 pcs.	3	5	8	13	18	
	Set di 14 pezzi Set of 14 pcs.	3	5	8	13	18	
	Set di 14 pezzi Set of 14 pcs.	3	5	8	13	18	
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	
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	

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.	5.86.61300	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
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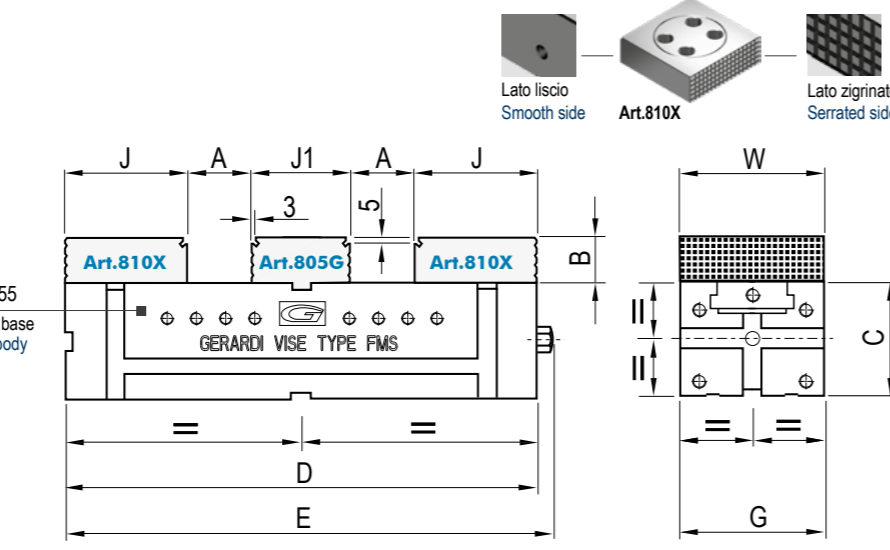
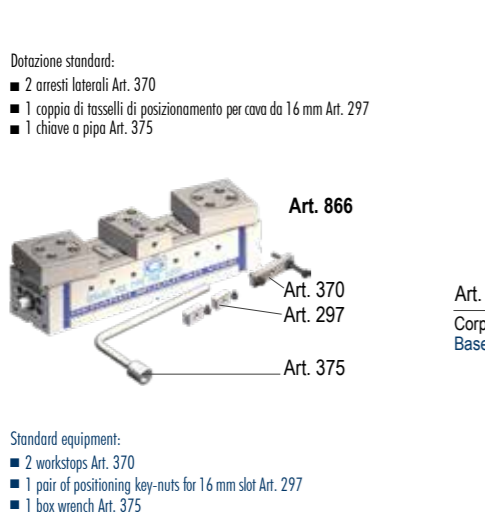


Art. 866E (Art. 866 + 890) Morsa + motore idraulico / Vise + hydraulic motor

Cod.	5.86.6E130	5.86.6E230	5.86.6E240	5.86.6E250	5.86.6E260	5.86.6E340	5.86.6E350
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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
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	3 30 kN			4 30 kN				5 32 kN			6 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
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Art. 802 Multiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

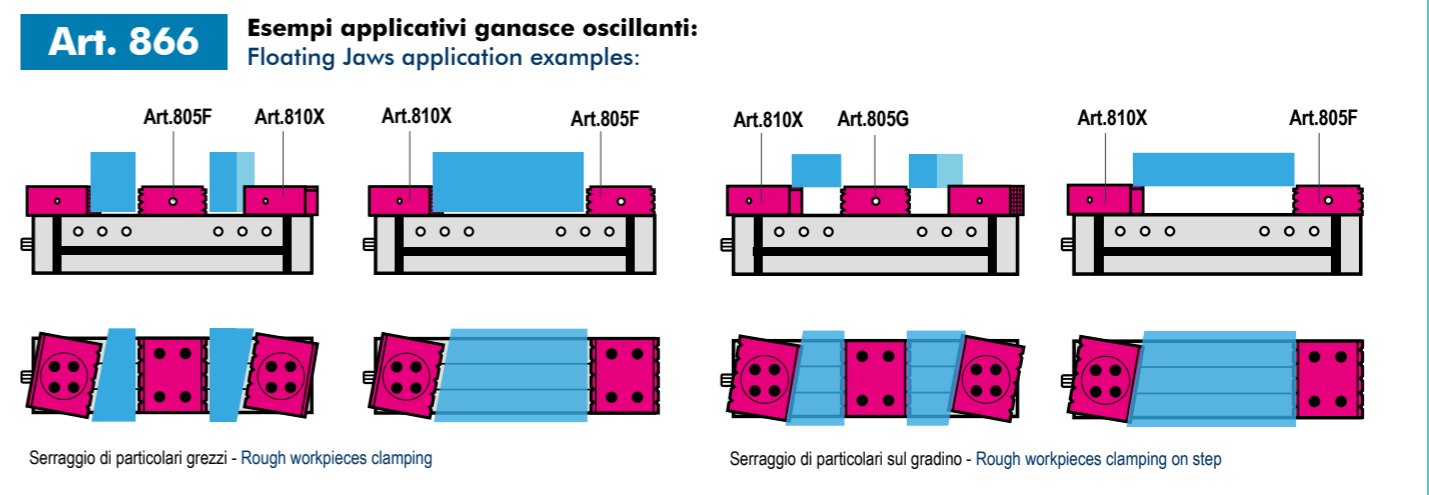
Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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Art. 866E (Art. 866 + 890) Morsa + motore idraulico / Vise + hydraulic motor

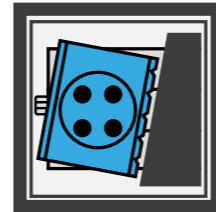
Cod.	5.86.6E360	5.86.6E370	5.86.6E380	5.86.6E450	5.86.6E460	5.86.6E470	5.86.6E480	5.86.6E560	5.86.6E570	5.86.6E580	5.86.6E680	5.86.6E690	5.86.6E610
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Art. 866F (Art. 866 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power 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
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FUNZIONAMENTO DELLE GANASCE MOBILI OSCILLANTI THE OPERATION OF MOVABLE JAWS



Art. 810Z

Albero a gradino per ganasce mobili oscillanti
Step block pin for floating movable jaw

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)

Fig. 1 Pic. 1

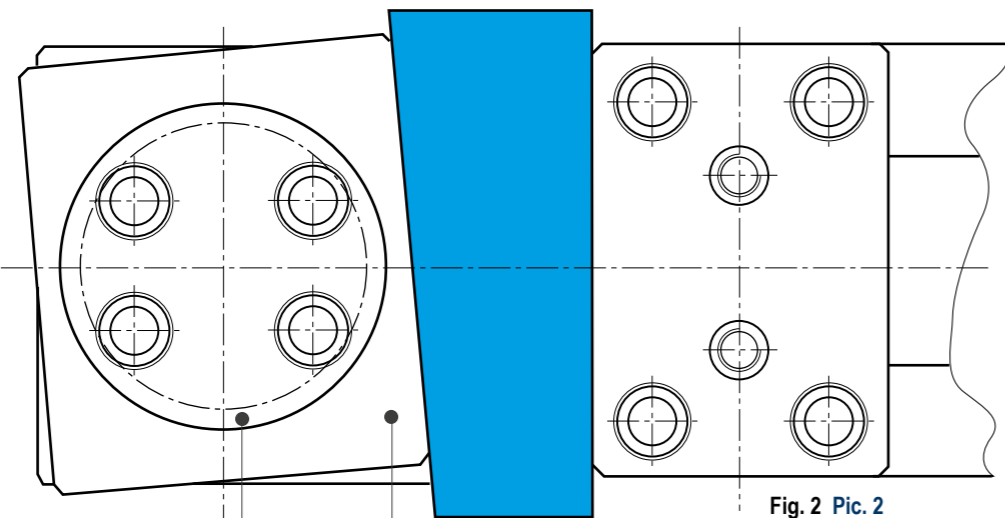
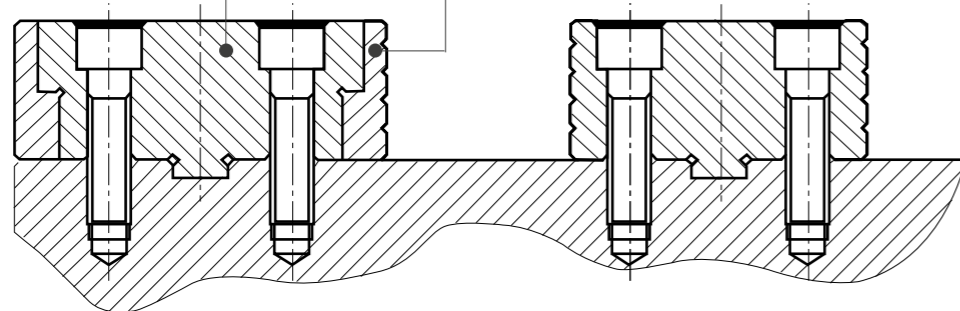


Fig. 2 Pic. 2

Art. 810Z

Albero a gradino per ganasce mobili oscillanti
Step block pin for floating movable jaw

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)

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. 810Z - 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.

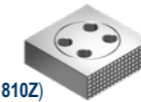
Floating movable jaws allow to clamp workpieces with irregular shapes whose sides are not parallels (Pic. 2). In fact thanks to the step block spindle (Art. 810Z - Pic. 1), positioned in the centre of the jaw body, the jaw can float and guarantee at the same time maximum precision and no tilting of the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

GANASCE MOBILI OSCILLANTI FLOATING MOVABLE JAWS

Tipo (grandezza) / Type (size)

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)

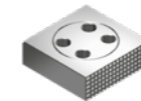


Cod.	1	2	3	4	5	6
5.81.0W100	5.81.0W200	5.81.0W300	5.81.0W400	5.81.0W500	5.81.0W600	

* 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)

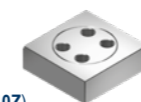


Cod.	1	2	3	4	5	6
5.81.0X100	5.81.0X200	5.81.0X300	5.81.0X400	5.81.0X500	5.81.0X600	

* 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.	1	2	3	4	5	6
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

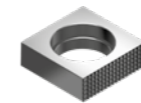
Albero a gradino per ganasce mobili oscillanti
Step block pin for floating movable jaw



Cod.	1	2	3	4	5	6
5.81.0Z100	5.81.0Z200	5.81.0Z300	5.81.0Z400	5.81.0Z500	5.81.0Z600	

Art. 810WA

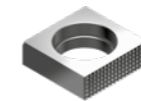
Corpo ganascia mobile oscillante zigrinata da un lato
Body floating movable jaw one side serrated



Cod.	1	2	3	4	5	6
5.81.0WA10	5.81.0WA20	5.81.0WA30	5.81.0WA40	5.81.0WA50	5.81.0WA60	

Art. 810XA

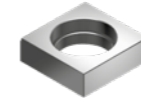
Corpo ganascia mobile oscillante con gradino 3x5 zigrinata da un lato
Body floating movable jaw with 3x5 step one side serrated



Cod.	1	2	3	4	5	6
5.81.0XA10	5.81.0XA20	5.81.0XA30	5.81.0XA40	5.81.0XA50	5.81.0XA60	

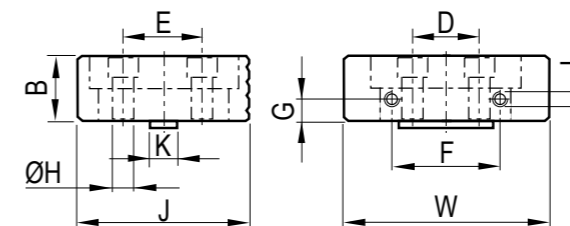
Art. 810YA

Corpo ganascia mobile oscillante con gradino 3x5
Body floating movable jaw with 3x5 step

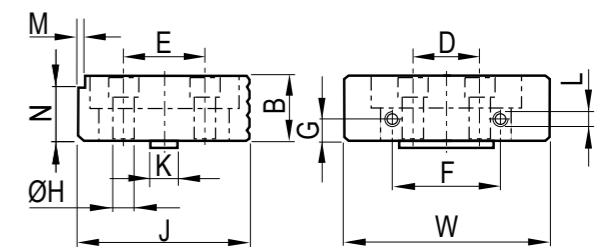


Cod.	1	2	3	4	5	6
5.81.0YA10	5.81.0YA20	5.81.0YA30	5.81.0YA40	5.81.0YA50	5.81.0YA60	

Art. 810W



Art. 810X



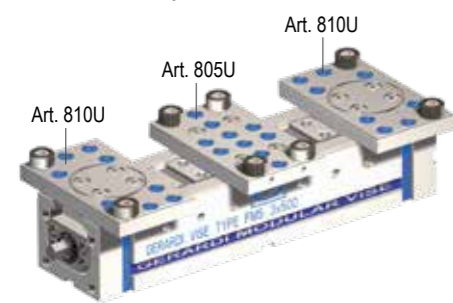
Tipo (grandezza) morsa / Vise (type) size

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	-

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	

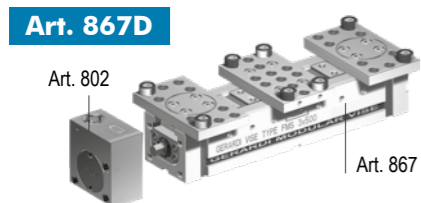
Art. 867

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



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

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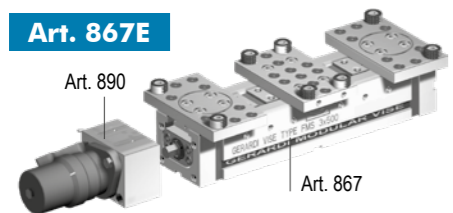
Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission
Chiave dinamometrica Art.357 (Consigliata) - Torque wrench Art.357 (Suggested)

Cod.	5.80.21000	5.80.22000	5.80.23000
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Art. 802



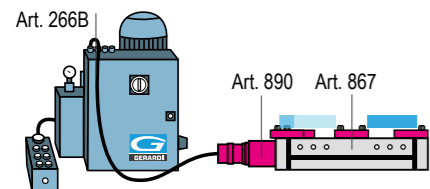
Art. 867E



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

Cod.	5.86.7E130	5.86.7E230	5.86.7E240	5.86.7E250	5.86.7E260	5.86.7E340	5.86.7E350
------	------------	------------	------------	------------	------------	------------	------------

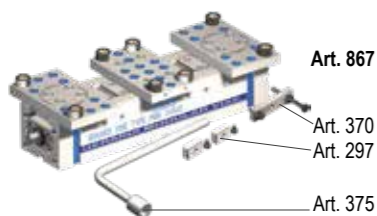
Art. 867F



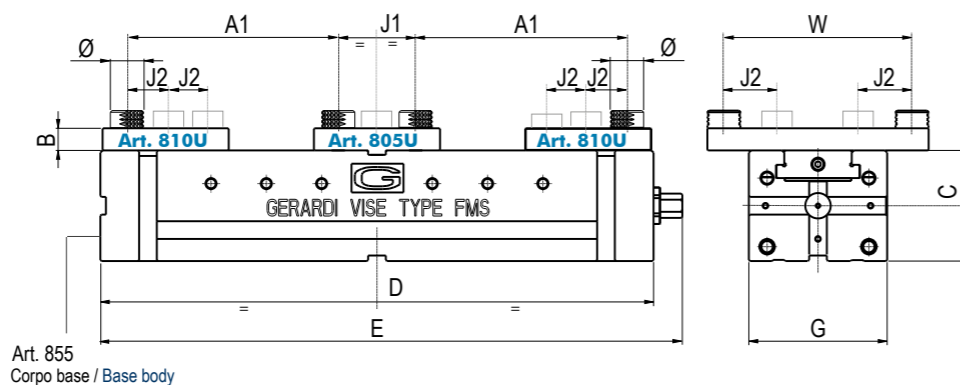
(Art. 867 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

Cod.	5.86.7F130	5.86.7F230	5.86.7F240	5.86.7F250	5.86.7F260	5.86.7F340	5.86.7F350
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- 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		
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
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Art. 802

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

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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Art. 867E

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

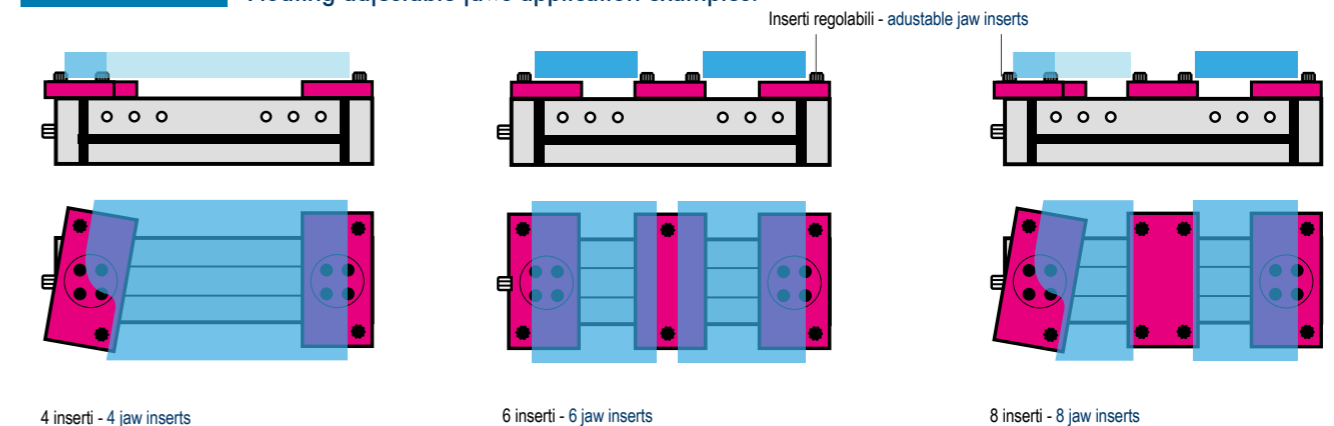
Cod.	5.86.7E360	5.86.7E370	5.86.7E380	5.86.7E450	5.86.7E460	5.86.7E470	5.86.7E480	5.86.7E560	5.86.7E570	5.86.7E580	5.86.7E680	5.86.7E690	5.86.7E610
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Art. 867F

(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:



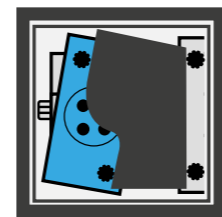
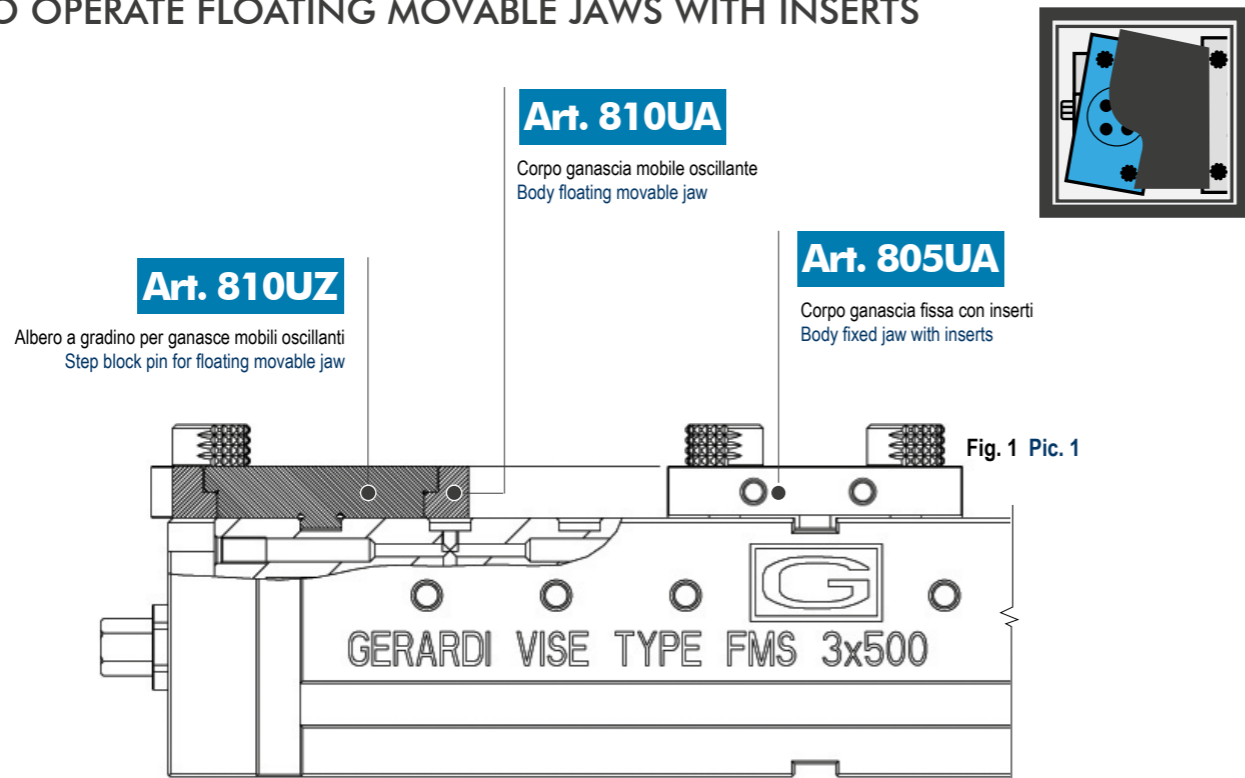
4 inserti - 4 jaw inserts

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



Art. 810UA

Corpo ganascia mobile oscillante
Body floating movable jaw

Art. 810UZ

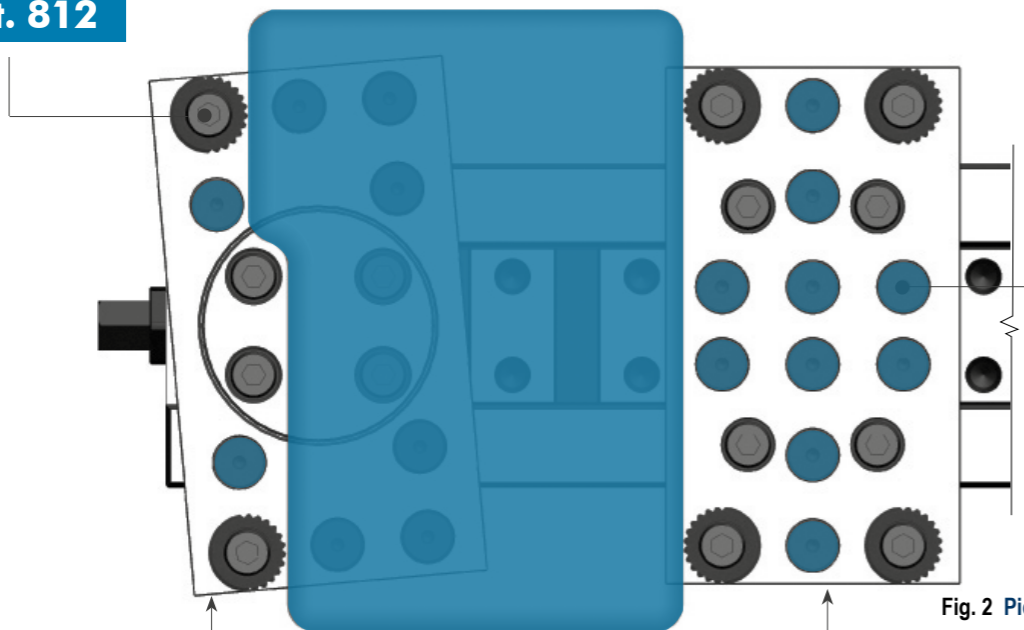
Albero a gradino per ganasce mobili oscillanti
Step block pin for floating movable jaw

Art. 805UA

Corpo ganascia fissa con inserti
Body fixed jaw with inserts

Fig. 1 Pic. 1

Art. 812



Art. 84U

Tappo in alluminio (EXTRA)
Aluminum cap (ETRA)

Art. 810U

Ganascia mobile oscillante con inserti
Floating movable jaw with inserts

Art. 805U

Ganascia fissa con inserti
Fixed jaw with inserts

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.

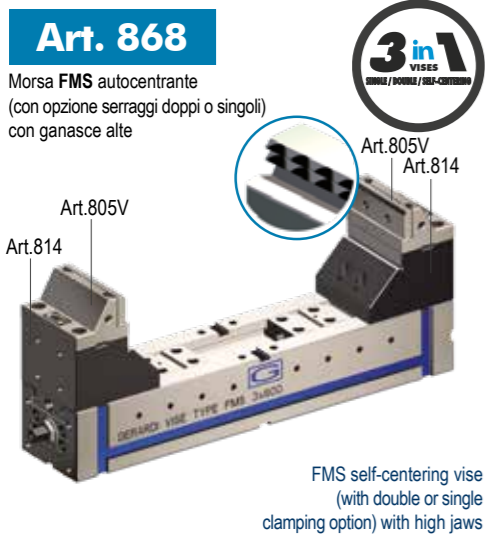
Floating movable jaws allow to clamp workpieces with irregular shapes whose sides are not parallels (Pic. 2). In fact thanks to the step block spindle (Art. 810UZ - Pic. 1), positioned in the centre of the jaw body, the jaw can float and guarantee at the same time maximum precision and no tilting of 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	5.81.0QA30	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		Ø 40			
	H 16		H 30			
Cod.	5.81.21000		5.81.25000			
Cod.	5.81.2A100		5.81.2A500			
Cod.	5.81.2C100		5.81.2C500			
Art. 812A Inserto liscio Smooth insert	Ø 30		Ø 40			
	H 28		H 50			
Cod.	5.81.31000		5.81.35000			
Cod.	5.81.3A100		5.81.3A500			
Cod.	5.81.3C100		5.81.3C500			
Art. 812C Inserto zigrinato Serrated insert	Ø 30		Ø 40			
	H 16		H 30			
Cod.	5.81.51000		5.81.55000			
Cod.	5.81.5A100		5.81.5A500			
Cod.	5.81.5C100		5.81.5C500			
Art. 813 Inserto liscio e zigrinato alto Smooth and serrated high insert	Ø 40		Ø 60			
	H 40		H 60			
Cod.	5.81.2B100		5.81.2B500			
Art. 813A Inserto liscio alto Smooth high insert	Ø 40		Ø 60			
	H 5		H 5			
Art. 813C Inserto zigrinato alto Serrated high insert	Ø 40		Ø 60			
Art. 815 Inserto liscio e zigrinato a gradino Pair of smooth and serrated step insert	Ø 40		Ø 60			
	H 16		H 30			
Cod.	5.81.51000		5.81.55000			
Cod.	5.81.5A100		5.81.5A500			
Cod.	5.81.5C100		5.81.5C500			
Art. 815A Inserto liscio a gradino Smooth step insert	Ø 40		Ø 60			
	H 5		H 5			
Art. 815C Inserto zigrinato a gradino Serrated step insert	Ø 40		Ø 60			
Art. 812B Inserto in acciaio lavorabile Insert in machineable steel metal	Ø 40		Ø 60			
	H 40		H 60			
Cod.	5.81.2B100		5.81.2B500			
Art. 84U Tappo in alluminio (EXTRA) Aluminum cap (ETRA)	Cod. 5.84.U1000		5.84.U5000			

Tipo (grandezza) morsa / Vise type (size)	1		2				3	
	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
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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)

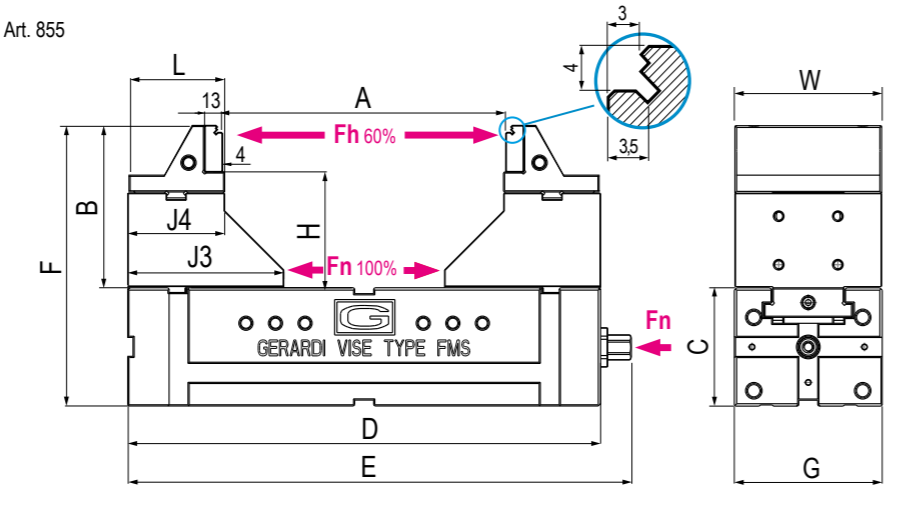
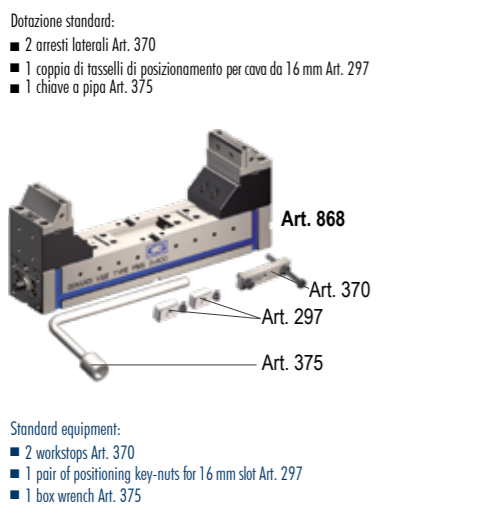
Cod.	5.80.21000	5.80.22000	5.80.23000
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Art. 868E (Art. 868 + 890) Morsa + motore idraulico / Vise + hydraulic motor

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

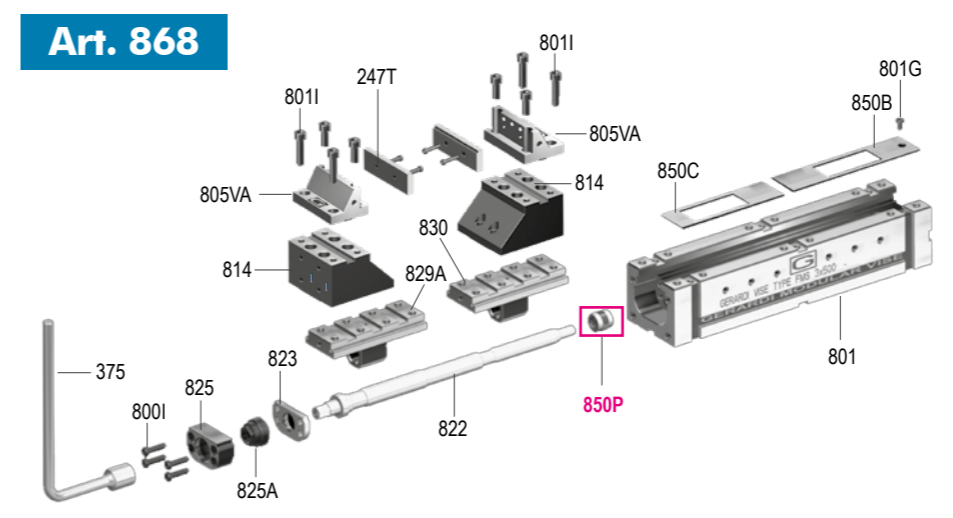
Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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Art. 868E (Art. 868 + 890) Morsa + motore idraulico / Vise + hydraulic motor

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

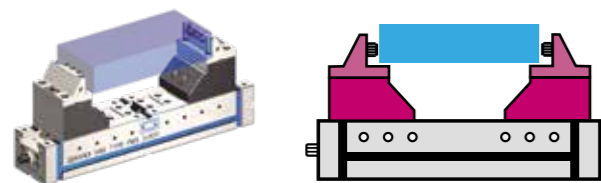
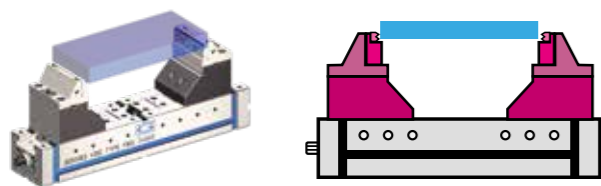
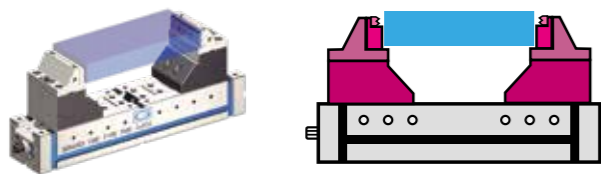
Cod.	5.86.8F360	5.86.8F370	5.86.8F380	5.86.8F450	5.86.8F460	5.86.8F470	5.86.8F480	5.86.8F560	5.86.8F570	5.86.8F580	5.86.8F680	5.86.8F690	5.86.8F610
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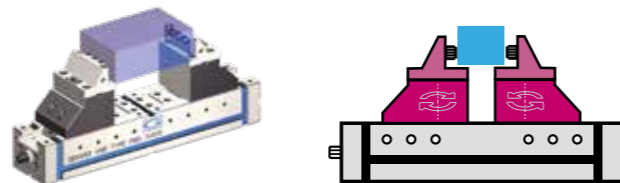
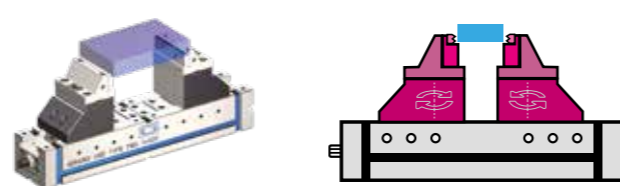
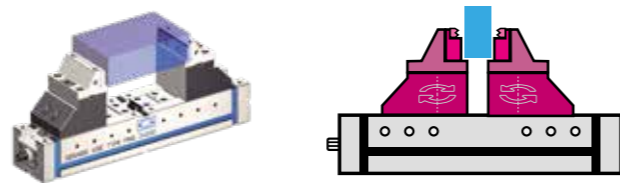
Art.	Pag.	Art.	Pag.
375	4.35	830	5.52
800I	5.61	850B	5.61
801	5.50	850C	5.61
801G	5.61	850P	5.72
801I	5.61	814	5.56
810J	5.56	805VA	5.35
822	5.53	247T	5.35
823	5.59	-	-
825	5.59	-	-
825A	5.61	-	-
829A	5.52	-	-

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

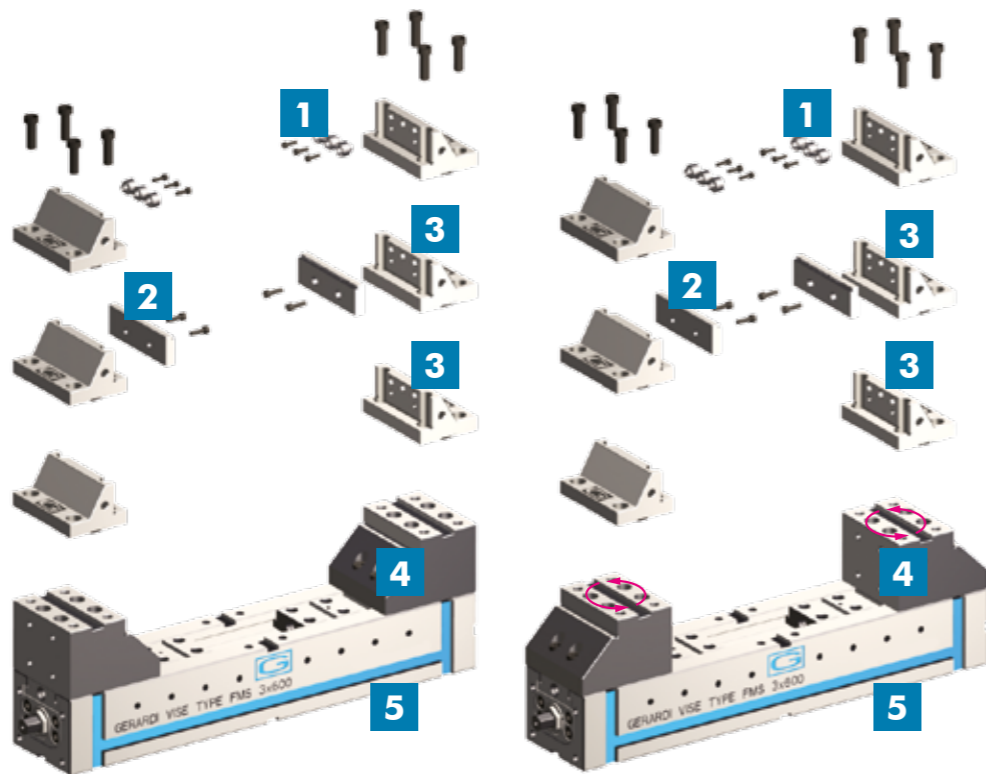
1 Art.90
PUNTALE TEMPRATO GRIP
HARDENED GRIP POINT

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 anziché 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

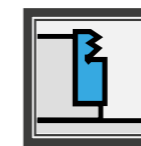
Puntale temprato GRIP
Hardened GRIP Insert



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

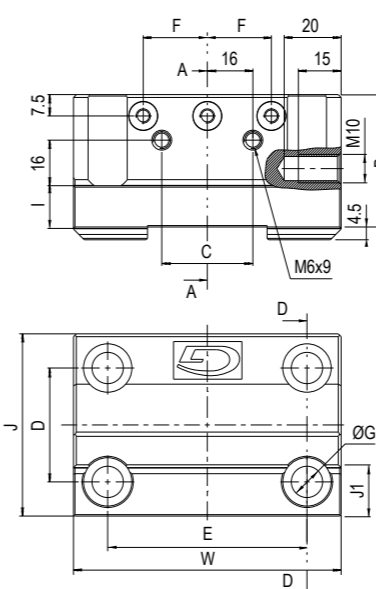
Per qualsiasi piastra piana speciale, raddoppiare il prezzo
For special Taylor made straight jaw plate double the price

PIASTRE GANASCE "GRIP" JAW PLATES

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

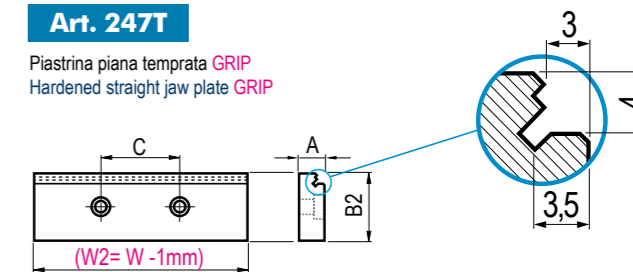
Art. 805VA

Corpo Ganascia
Jaw for plates and points



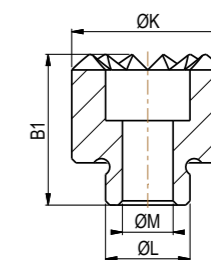
Art. 247T

Piastrina piana temprata GRIP
Hardened straight jaw plate GRIP



Art. 90

Puntale temprato GRIP
Hardened GRIP Point

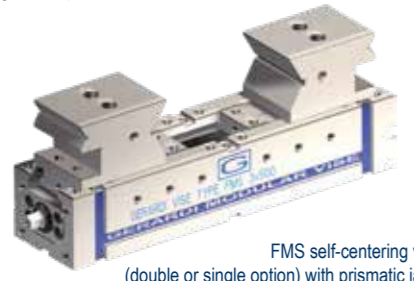


mm	1	2	3	4	5	6
W	74	94	124	144	169	189
A	12	12	13	13	18	18
B	39,5	47	57	61	66	86
B2	24,5	32	39	43	48	56
C	25	32	50	50	76	90
D	32	40	50	60	68	68
E	56	70	92	108	126	144
F	2X26	3x20	3x25	4x20	4x25	4x30
ØG	9	11	13	17	17	21
I	15	15	18	18	18	20
J	56	64	84	97	107	107
J1				17		
ØK	-			18		-
ØL	-			10 h8		-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

Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN				3 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

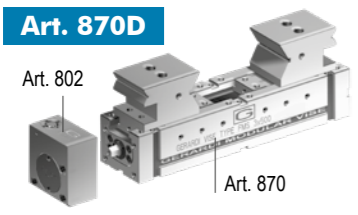
Art. 870

Morsa FMS autocentrante (opzione doppia o singola) con ganasce prismatiche



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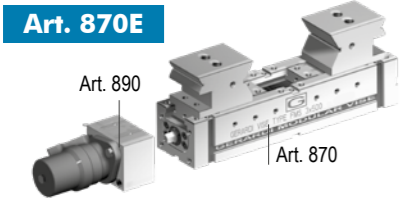
Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission
Chiave dinamometrica Art.357 (Consigliata) - Torque wrench Art.357 (Suggested)

Art. 802



Cod.	5.80.21000	5.80.22000	5.80.23000
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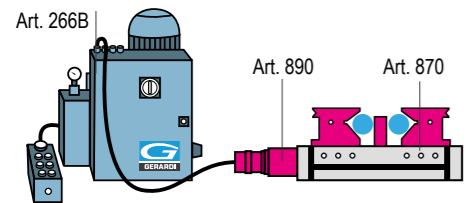
Art. 870E



(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
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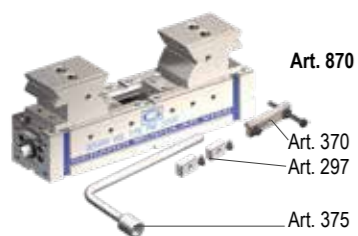
Art. 870F



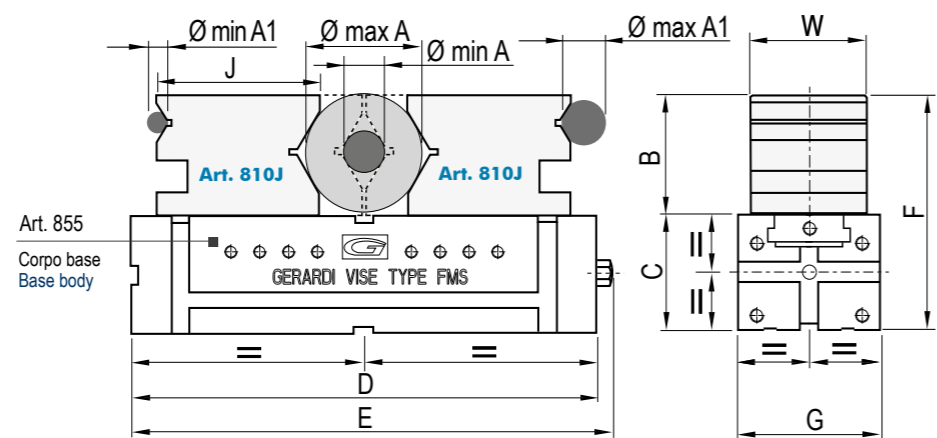
(Art. 870 + 890 + 266B) Morsa + motore idraulico + centralina / Vise + hydraulic motor + power unit

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
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- 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	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
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Art. 802

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

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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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
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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
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Art. 870

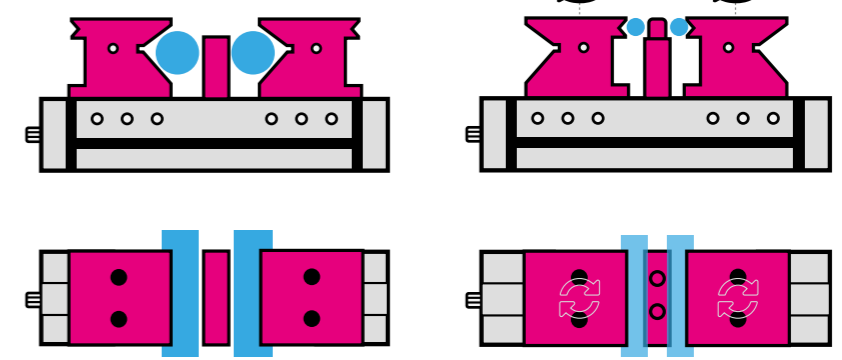
Esempi applicativi ganasce prismatiche: Prismatic jaws application examples:

Ganasce ruotate di 180° - Jaws rotated 180°



Art. 870A

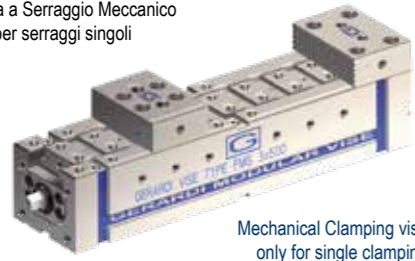
Pag.5.54 Page. 5.54



Per il serraggio di 2 particolari tondi contemporaneamente per mezzo della ganasca 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

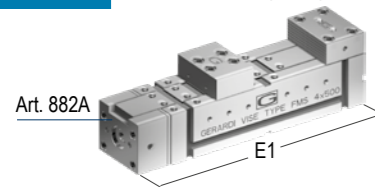
Tipo (grandezza) morsa / Vise type (size)	kN	1 25 kN		2 25 kN			3 30 kN		
Apertura massima / Maximum opening	A	85	185	170	270	370	470	230	330
Minima apertura interno-esterno / Minimum opening inside-outside	A1	115 / 200	115 / 300	130 / 300	130 / 400	130 / 500	130 / 600	170 / 400	170 / 500
Art. 800 Morsa a Serraggio Meccanico solo per serraggi singoli	B	25		30			40		
SPECIFICA SOLO PER SERRAGGI SINGOLI SPECIFIC FOR SINGLE CLAMPING ONLY	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



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



Connettore Idraulico - Hydraulic Connexion

Art. 882A

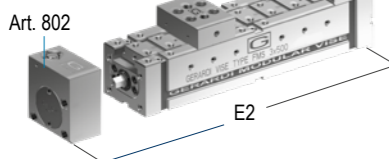
Corsa - Stroke	mm	4	7	10
Superficie - Surface	cm ²	6	21	21
Pressione - Pressure	bar	417	119	143

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

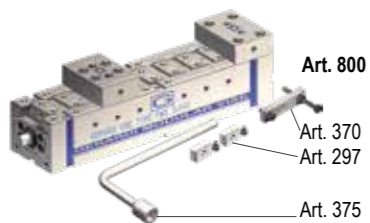


Moltiplicatore di coppia con rinvio angolare - Mechanical with torque multiplier with angular transmission

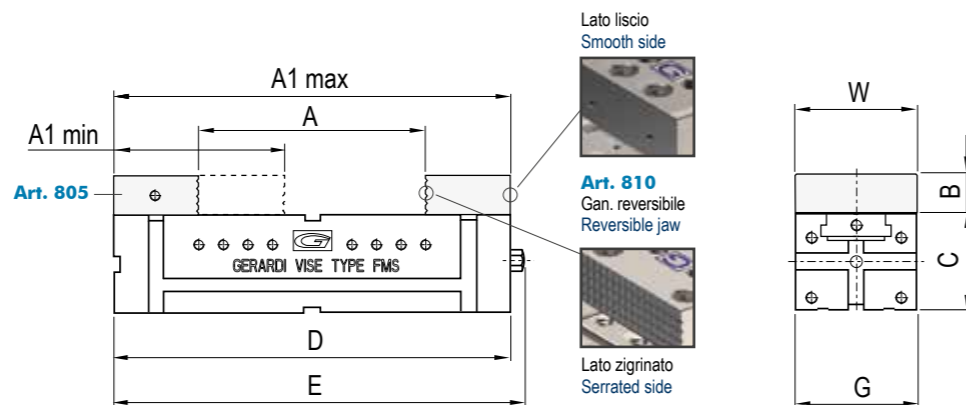
Art. 802 Chiave dinamometrica Art.357 (Consigliata) - Torque wrench Art.357 (Suggested)

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 30 kN			4 30 kN				5 32 kN			6 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

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			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 rinvio angolare - Mechanical with torque multiplier with angular transmission

Cod.	5.80.23000	5.80.24000	5.80.25000	5.80.26000
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Art. 800

Art.	Pag.	Art.	Pag.
800E	5.61	850B	5.61
800I	5.61	-	-
801	5.50	-	-
801G	5.61	-	-
8011	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	



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

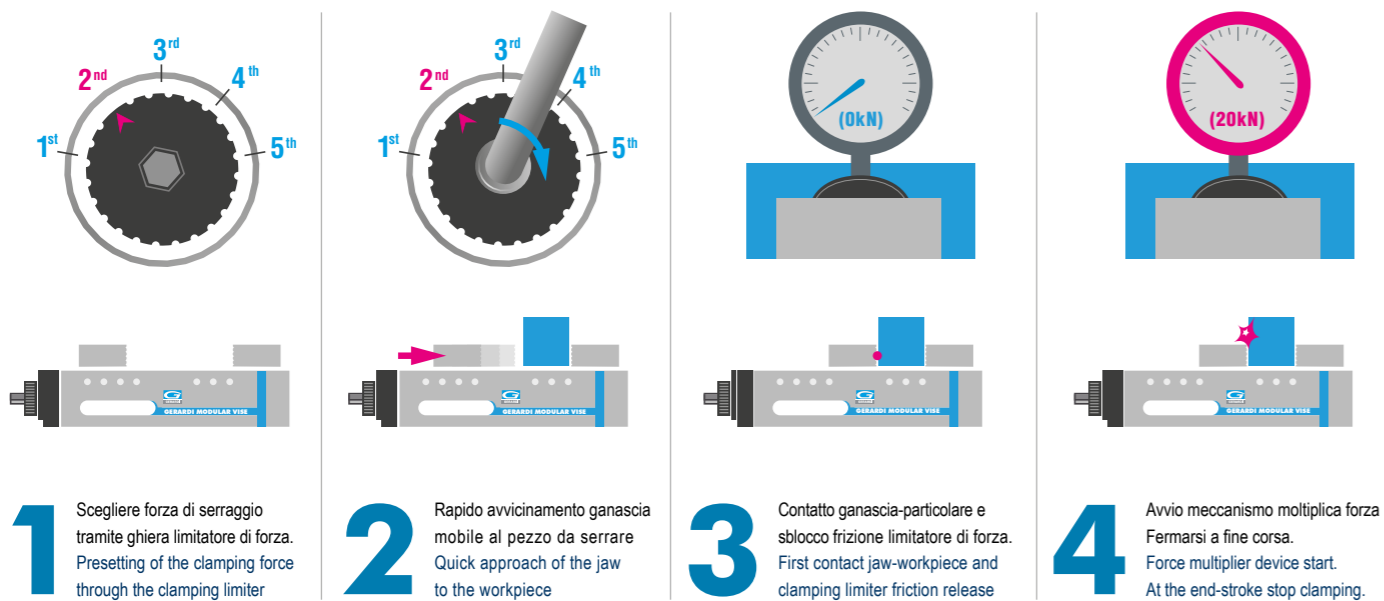
Art. 900Y	Cod.	5.90.0Y300
Modulo per serraggio idraulico Module for hydraulic clamping		

	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	-	-	-

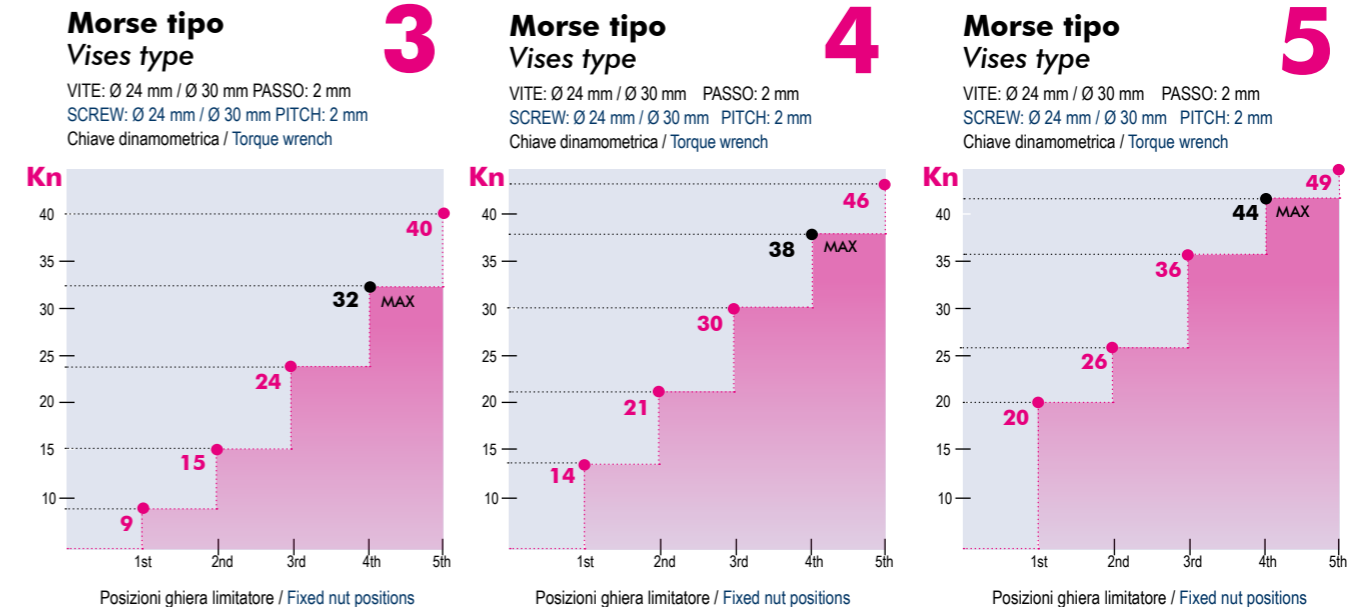
This type of vise even if it is part of the FMS series is not suitable for double or self-centering clamping

Art. 900Y	Cod.	5.90.0Y300	5.90.0Y300	5.90.0Y300

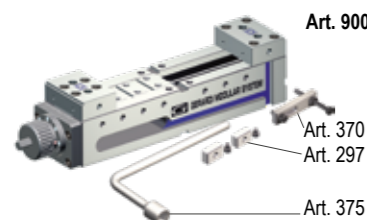
FUNZIONAMENTO LIMITATORE DI FORZA - HOW TO USE THE LIMITING DEVICE



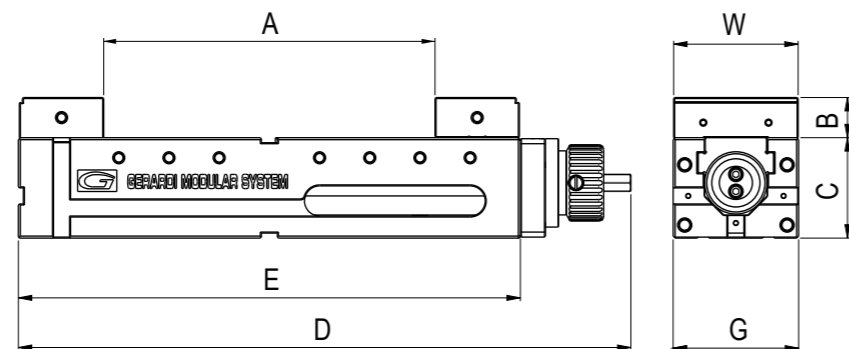
Diagrammi forze di serraggio - Diagrams with clamping force



- 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. 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)		1 25 kN		2 25 kN				3 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



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 2021
Modulo base cubo morsa FMS (senza ganasce)
FMS vise tower base (without jaws)

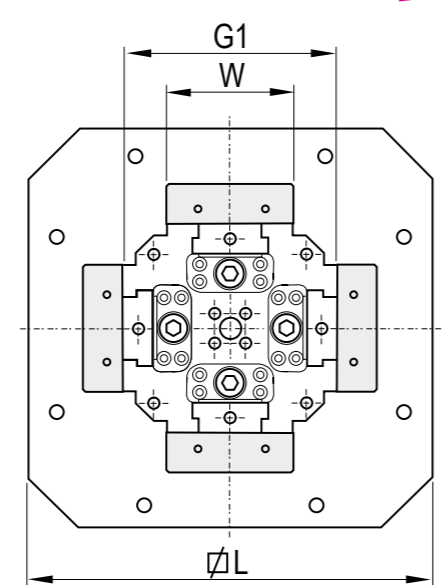
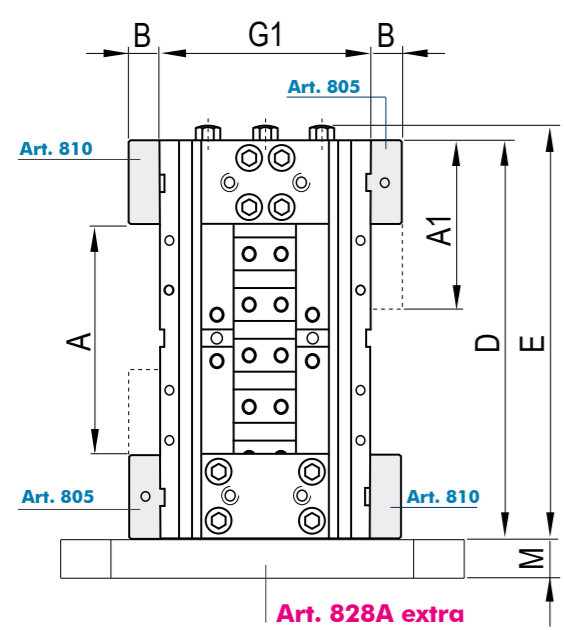
Cod.	5.80.0G120	5.80.0G130	5.80.0G230	5.80.0G240	5.80.0G250	5.80.0G260	5.80.0G340	5.80.0G350
------	------------	------------	------------	------------	------------	------------	------------	------------

		3 30 kN			4 30 kN				5 32 kN			6 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
------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------	------------

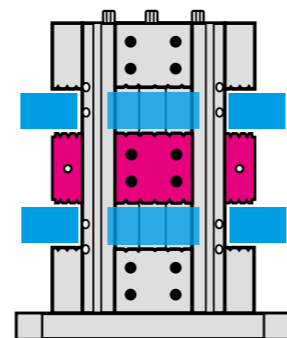


GANASCE REVERSIBILI
REVERSIBLE JAWS

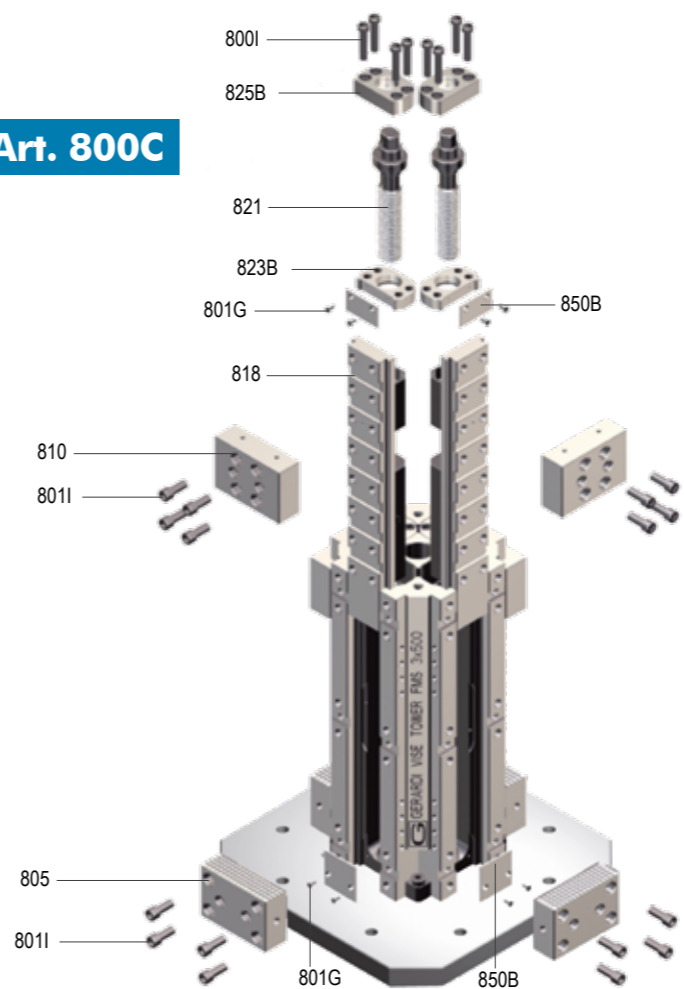


- Dotazione standard per Art. 800C
- 1 chiave a pipa Art. 375
 - 4 arresti laterali Art. 370
 - 2 coppie di tasselli di posizionamento per cava da 16 mm Art. 297
 - 1 galfare di sollevamento Art. 848
 - Imballo in cassa di legno

- 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



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

Cubo-morsa FMS doppio per il serraggio di 8 pezzi



Double FMS vise tower for 8 clamping stations

Art. 855C

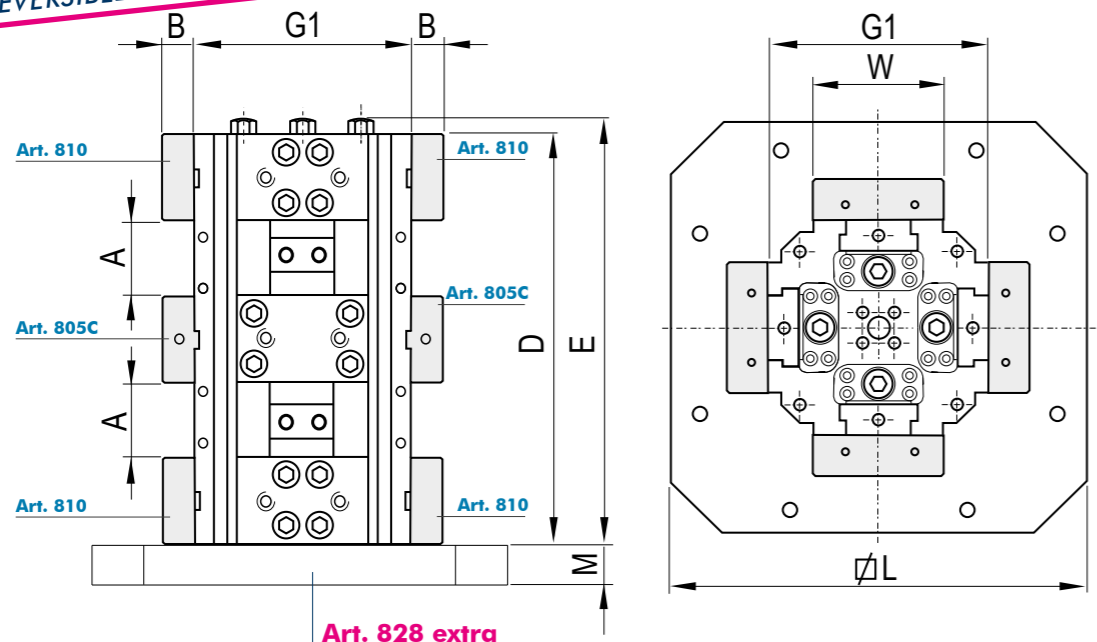
Modulo base cubo morsa FMS doppia (senza ganasce)
FMS Double vise tower base (without jaws)

Cod.	5.85.5C120	5.85.5C130	5.85.5C230	5.85.5C240	5.85.5C250	5.85.5C260	5.85.5C340	5.85.5C350

	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

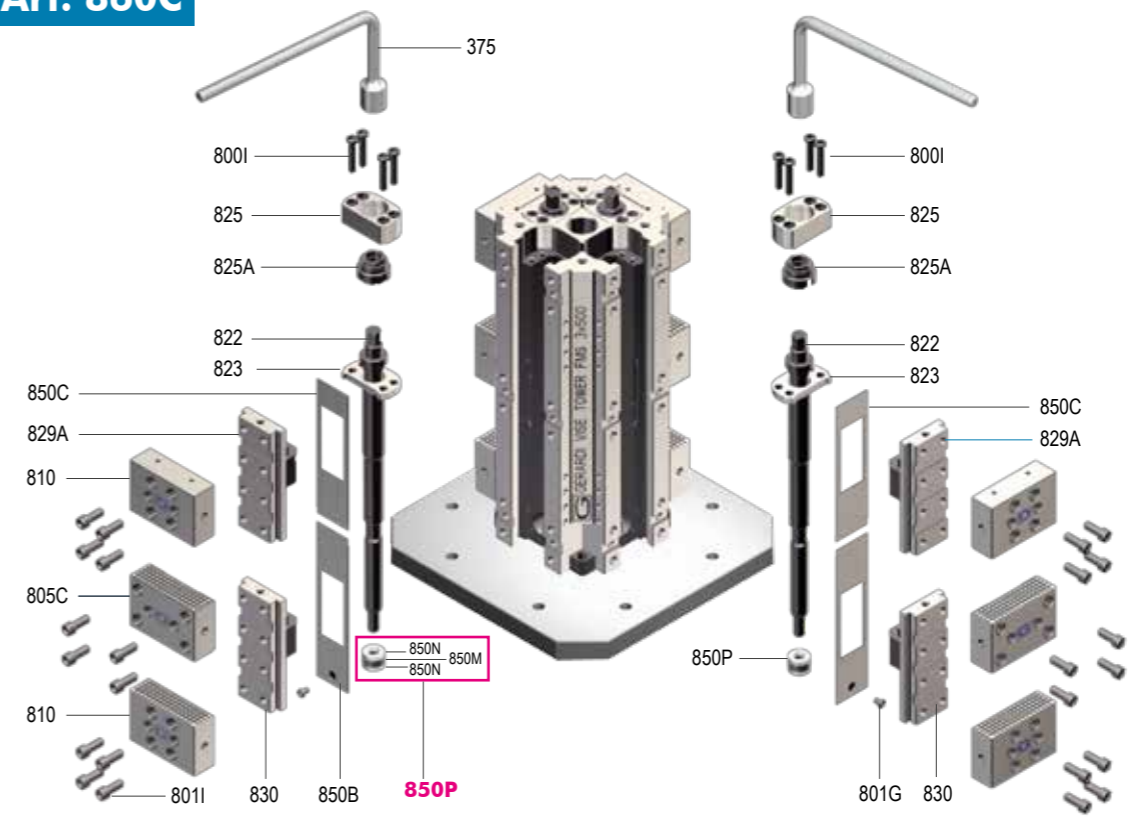
Cod.	5.85.5C360	5.85.5C370	5.85.5C380	5.85.5C450	5.85.5C460	5.85.5C470	5.85.5C480	5.85.5C560	5.85.5C570	5.85.5C580	5.85.5C680	5.85.5C690	5.85.5C610

**GANASCE REVERSIBILI
REVERSIBLE JAWS**



**GANASCE REVERSIBILI
REVERSIBLE JAWS**

Art. 860C



Art.	Pag.
375	4.35
8001	5.61
801G	5.61
8011	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
-	-
-	-

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 golphare 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

Tipo (grandezza) morsa / Vise type (size)		1 25 kN		2 25 kN				3 30 kN	
kN		25 kN		25 kN				30 kN	
A	Apertura massima Max. opening	2 x 60	2 x 110	2 x 118	2 x 168	2 x 218	2 x 268	2 x 162	2 x 212

Art. 863C

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



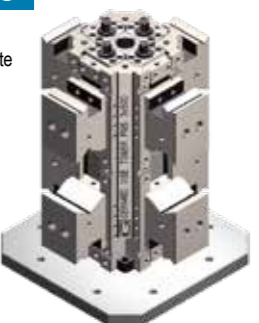
Double FMS vise
tower with step-type
jaws for 8 clamping
stations

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 / 50				25 / 100	

Art. 870C

Cubo morsa
FMS autocentrante
con ganasse
prismatiche



Self-centering FMS vise
tower with prismatic
jaws

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

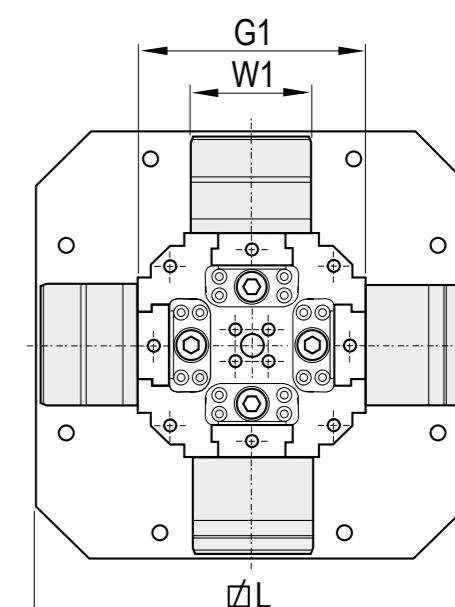
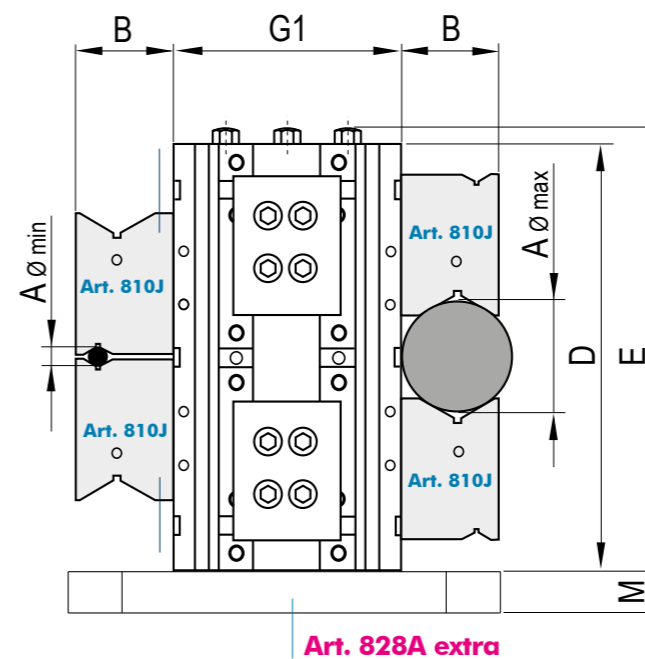
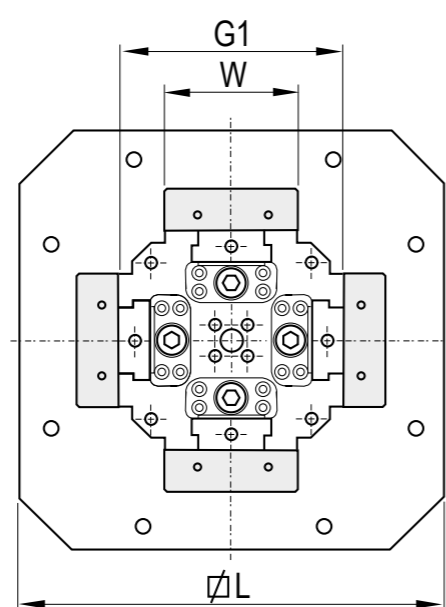
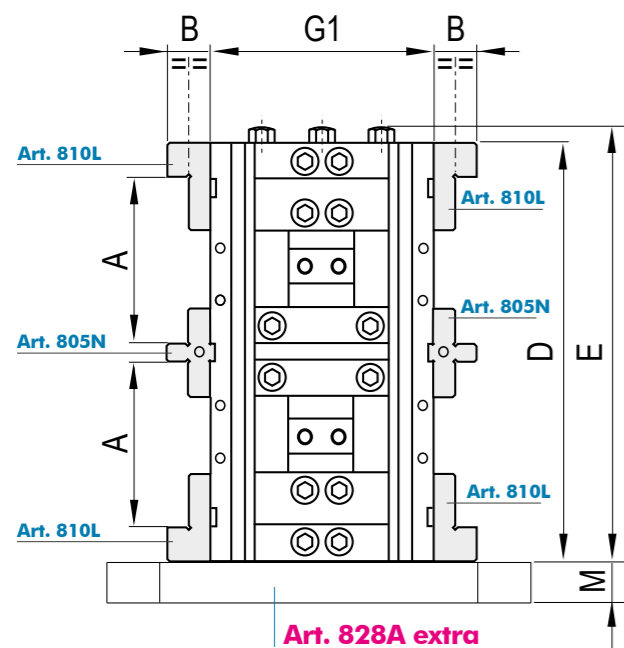
3 30 kN		4 30 kN				5 32 kN			6 32 kN				
A	2 x 262	2 x 312	2 x 362	2 x 204	2 x 254	2 x 304	2 x 354	2 x 254	2 x 304	2 x 354	2 x 354	2 x 404	2 x 454

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

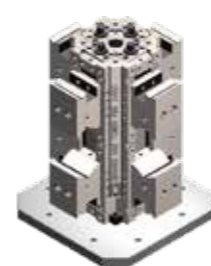
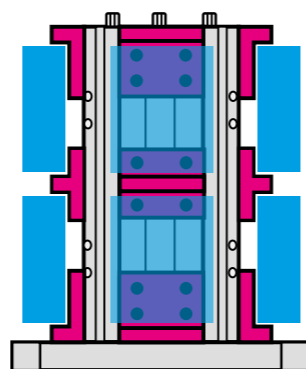


Dotazione standard per Art. 860C

- 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 lifting hook Art. 848
- 1 goliere 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

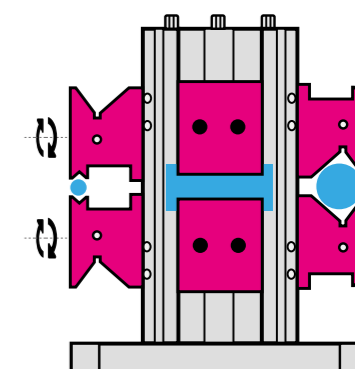


Dotazione standard per Art. 863C e Art. 870C:

- 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 goliere 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

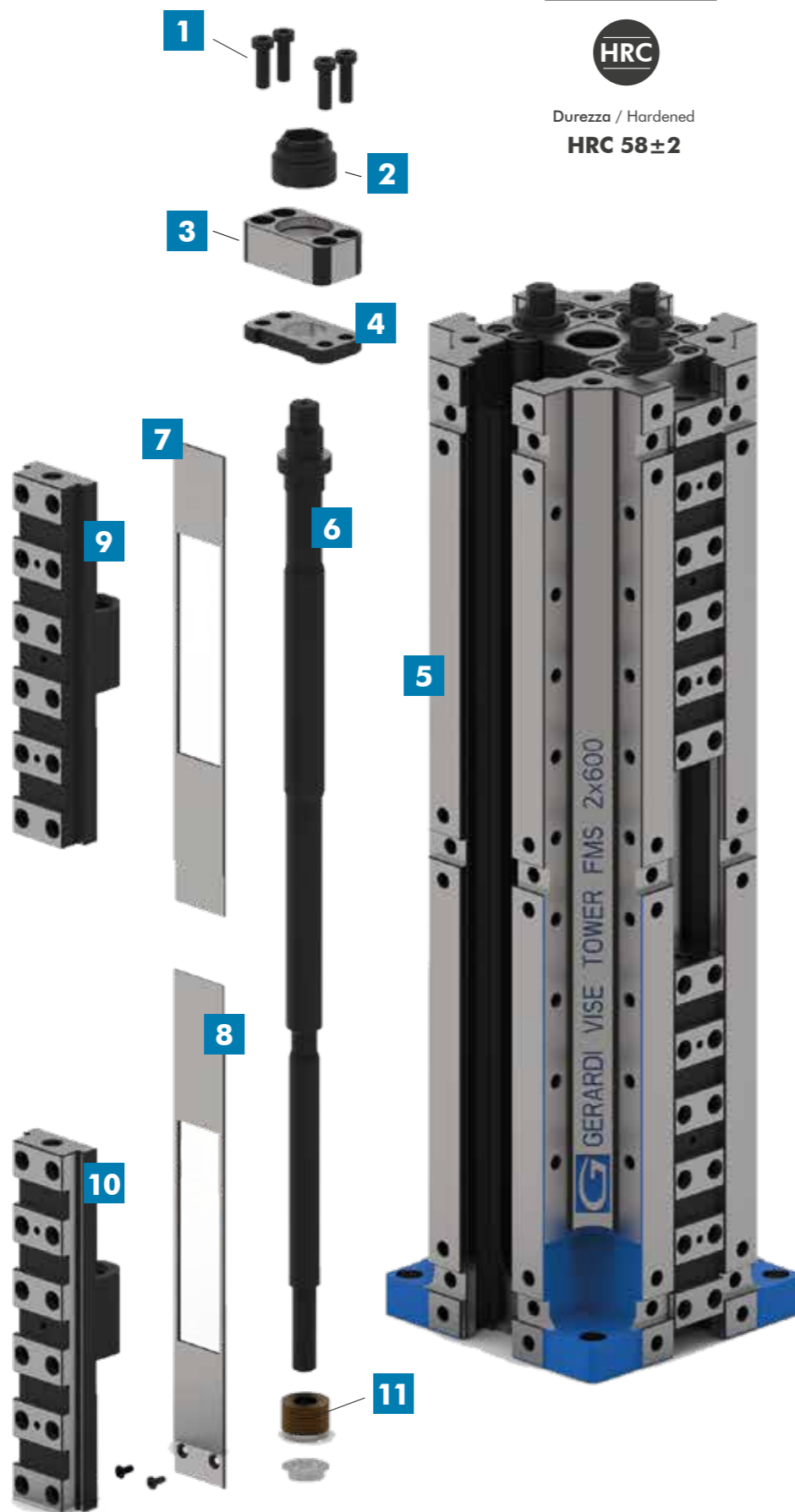
Art. 855C



Precisione / Accuracy
±0,02mm

Durezza / Hardened
HRC 58±2

- 1** Art.8001
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

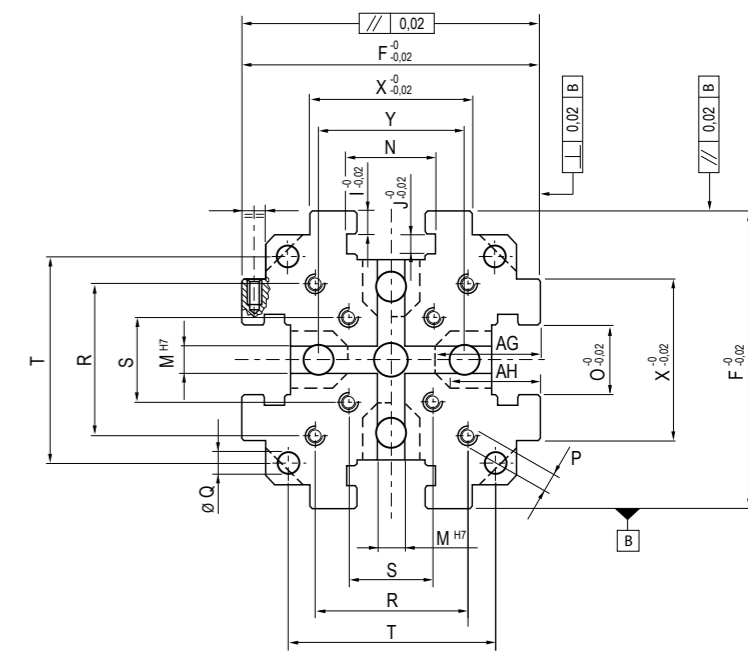
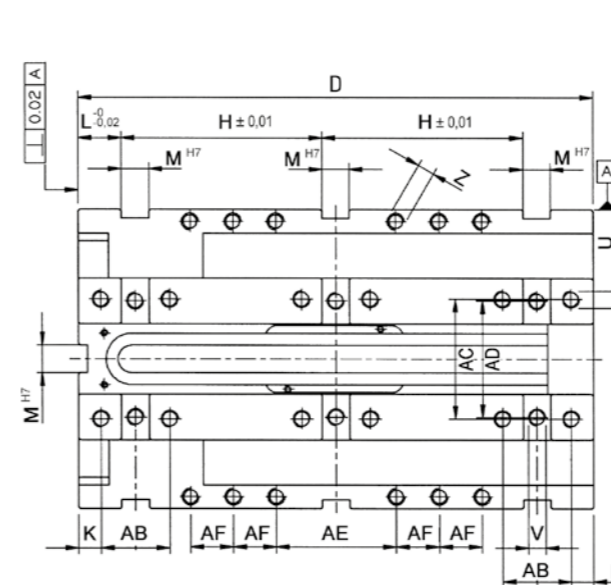


Tipo (grandezza) Type (size)	1		2		3		4		5		6										
Larghezza base / Base length	200	300	300	400	500	600	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
Cod.	5.80.41200	5.80.41300	5.80.42300	5.80.42400	5.80.42500	5.80.42600	5.80.43400	5.80.43500	5.80.43600	5.80.43700	5.80.43800	5.80.44500	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

Art. 804

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

	200	300	300	400	300	400	400	500	600	700	800	500	600	700	800	600	700	800	800	900	1000
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) 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	Cod. 5.81.																				

Art. 818
Slitta integrale lunga
Solid long slide



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
D	M8	M10	M12	M16	M16	M20
E	72	116	102	142	182	222
F	48,5	61,5	71	80	95	106
G	15	18	23	33	40	45
H	2	3	2	3	4	5
I	10	13	13	20	20	20
J	10	12	12	18	18	18
K	-	-	5	7	9	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	68	68
T	20	25	38	44	44	54
V	27	33	43	43	51	48
W	10	16	24	34	44	52

Art. 829A

Slitta con filetto destro
Slide with right thread



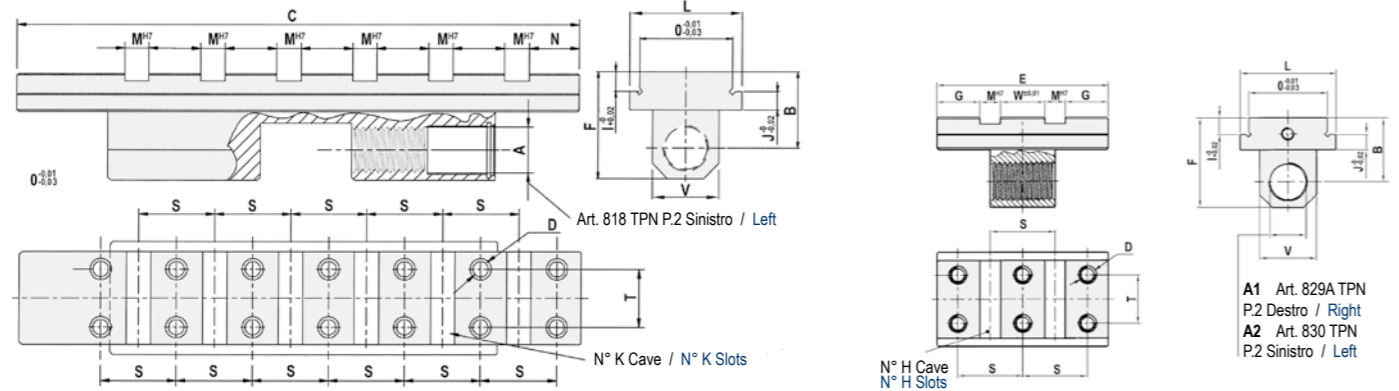
Art. 829A	Cod. 5.82.																			
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Art. 830

Slitta con filetto sinistro
Slide with left thread



Art. 830	Cod. 5.83.																			
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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	Cod. 5.82.11300 5.82.12600 5.82.14800 5.82.14800 5.82.16100 5.82.16100																				

Art. 821
Vite di bloccaggio con filetto sinistro
Main screw left thread

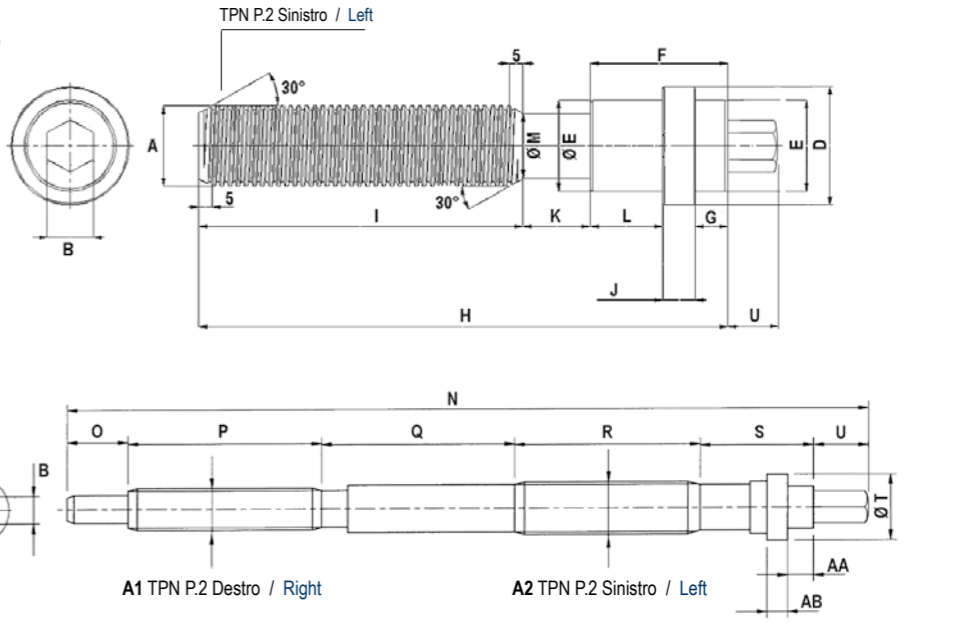


A	18	24	30	30	36	36
A1	18	18	24	24	30	30
A2	20	24	30	30	36	36
B	16	16	19	19	19	19
C	-	-	-	-	-	-
D	35	35	45	45	48	48
E	20	25	30	30	30	30
F	82	33	42	42	115	115
G	13	12	16	16	15	15
H	152	135	136	186	225	225
I	65	90	118	118	135	135
J	14	12	15	15	20	20
K	5	12	26	26	55	55
L	55	9	11	11	80	80
M	14	19	24	24	30	30
N	242	333	308	399	500	600
O	12	17	25	32	52	52
P	65	84	84	98	116	151
Q	32	66	66	106	134	164
R	68	85	75	94	116	136
S	44	6	38	49	62	77
T	32	32	38	38	45	45
U	21	15	20	25	25	25
AA	10	10	15	15	22	22
AB	10	10	12	12	15	15

Art. 822

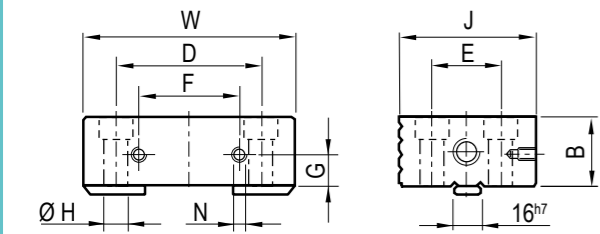
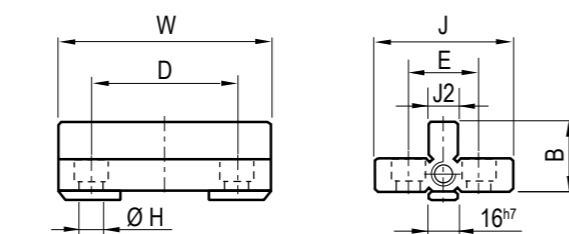
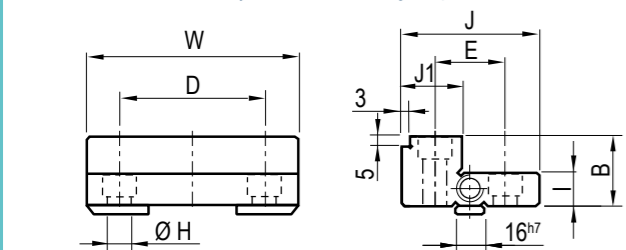
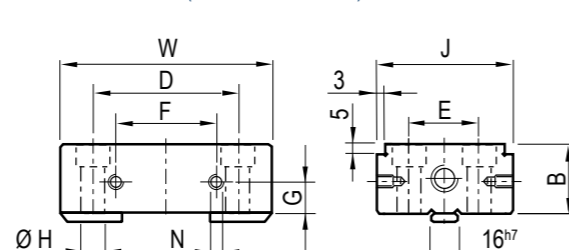
Vite di bloccaggio con filetto destro e sinistro
Main screw right and left thread

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



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
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

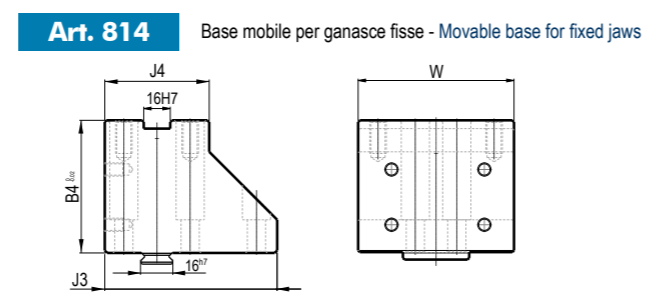
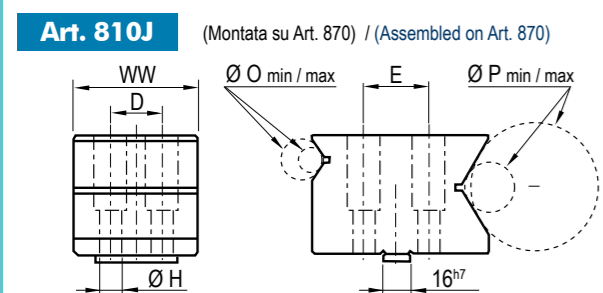
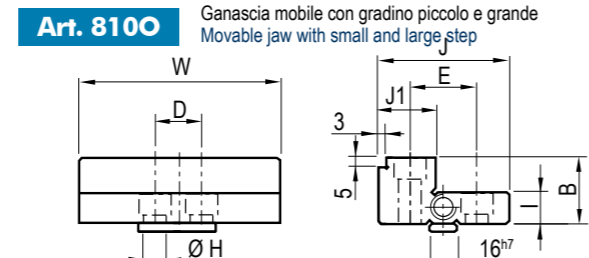
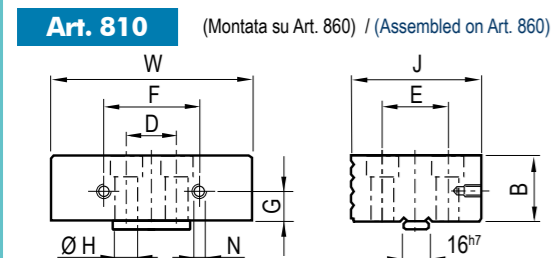
Richiedere scheda tecnica - Technical data sheet on request

* 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

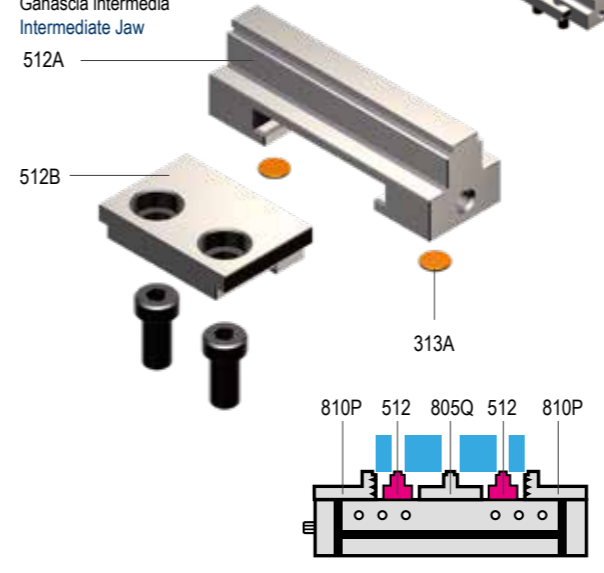
Predisposizione per tutte le ganasce FMS fisse - Fit all FMS fixed jaws



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	-	-
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	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

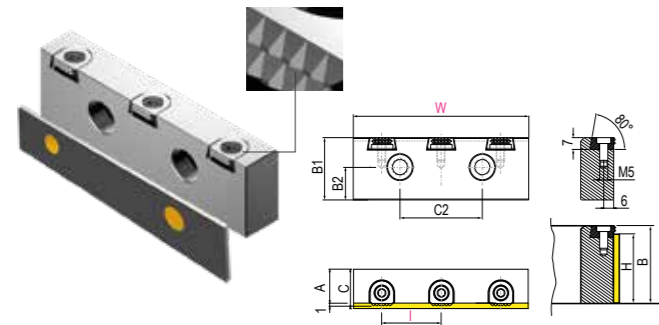
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PIASTRE GANASCE PIANE CON INSERTI GRIP STRAIGHT INSERT GRIP JAW PLATES

**NEW
2021**

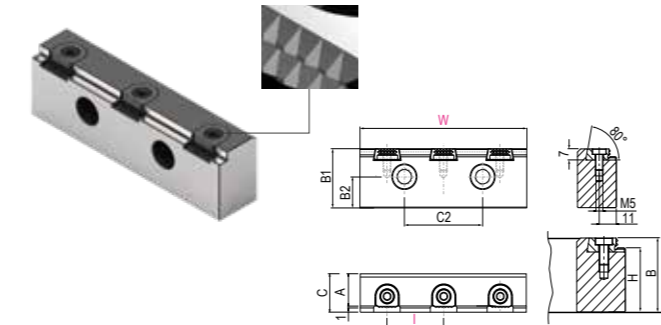
Art. 547G Piastra Piana con inserti GRIP
Straight plate with GRIP inserts



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

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 gradino integrale con inserti GRIP
Straight integral step plate with GRIP inserts



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



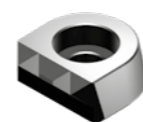
Cod. 4.22.01000 / G01

Art. 220 G02
Per materiali di notevole durezza.
For hardened workpieces clamping

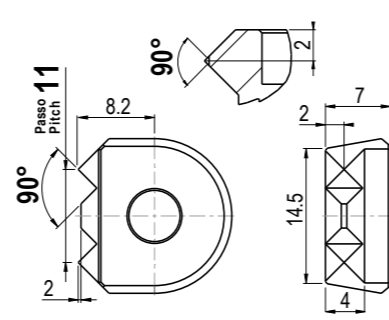
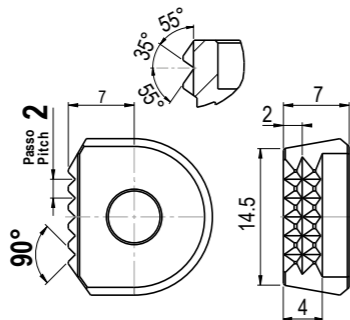
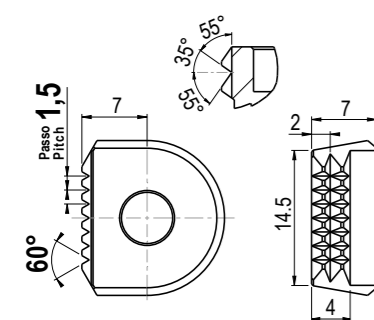


Cod. 4.22.01000 / G02

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)

Art. 823
Piastra intermedia per Art. 855
Middle plate for Art. 855



	1	2	3	4	5	6
Cod.	5.82.31000	5.82.32000	5.82.33000	5.82.34000	5.82.35000	5.82.36000

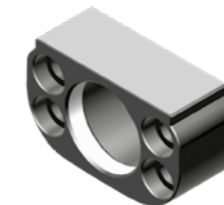
Art. 823B
Piastra intermedia per Art. 800
Middle plate for Art. 800

	1	2	3	4	5	6
Cod.	5.82.3B100	5.82.3B200	5.82.3B300	5.82.3B400	5.82.3B500	5.82.3B600

Art. 825
Piastra di contenimento vite per morsa FMS per Art. 855
Screw holding plate for FMS vise for Art. 855

	1	2	3	4	5	6
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



	1	2	3	4	5	6
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

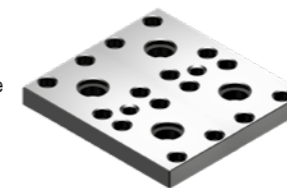
	1	2	3	4	5	6
Cod.	5.82.5C100	5.82.5C200	5.82.5C300	5.82.5C400	5.82.5C500	5.82.5C600

Art. 831
Piastra di collegamento per 2 morse FMS
montate verticalmente dorso a dorso o fianco a fianco
Connecting plate for 2 FMS vises
vertically mounted back-to-back or side by side



	1	2	3	4	5	6
Cod.	5.83.11000	5.83.12000	5.83.13000	5.83.14000	5.83.15000	5.83.16000

Art. 832
Piastra di collegamento per 4 morse FMS montate
verticalmente dorso a dorso o fianco a fianco
Connecting plate for 4 FMS vises
vertically mounted back-to-back or side by side



	1	2	3	4	5	6
Cod.	5.83.21000	5.83.22000	5.83.23000	5.83.24000	5.83.25000	5.83.26000

Art. 833
Piastra di collegamento personalizzata per 2 morse FMS
Connecting plate for 2 FMS vises tailor made

	1	2	3	4	5	6
Cod.	5.83.31000	5.83.32000	5.83.33000	5.83.34000	5.83.35000	5.83.36000

Art. 834
Piastra di collegamento personalizzata per 4 morse FMS
Connecting plate for 4 FMS vises tailor made

	1	2	3	4	5	6
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)	1	2	3	4	5	6	7
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Art. 827A
 Piastra base personalizzata 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

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

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)	1	2	3	4	5	6
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Art. 835
 Distanziale quadrato per 4 morse FMS
 Square spacer for 4 FMS vises

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

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

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

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

Cod.	5.85.21000	5.85.22000	5.85.23000	5.85.24000	5.85.25000	5.85.26000
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Art. 853
 Centraggio orizzontale per cubo FMS
 Horizontal centering for FMS cube

Cod.	5.85.31000	5.85.32000	5.85.33000	5.85.34000	5.85.35000	5.85.36000
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Tipo (grandezza) / Type (size)	1	2	3	4	5	6
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Art. 825A
 Ghiera per morse e cubi FMS
 Nut for FMS vises and cubes

Cod.	5.82.5A100	5.82.5A200	5.82.5A300	5.82.5A400	5.82.5A500	5.82.5A600
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Art. 850B
 Riparo lato vite
 Protection side screw

Cod.	5.85.0B100	5.85.0B200	5.85.0B300	5.85.0B400	5.85.0B500	5.85.0B600
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Art. 850C
 Riparo
 Protection

Cod.	5.85.0C100	5.85.0C200	5.85.0C300	5.85.0C400	5.85.0C500	5.85.0C600
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Art. 850P
 Dispositivo "Terza Mano"
 "Third Hand" device

Cod.	5.85.0P100	5.85.0P200	5.85.0P300	5.85.0P400	5.85.0P500	5.85.0P600
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Foto indicativa
 Indicative picture

Art. 850E
 Bussola esagonale per innesto automatico
 Hexagonal bushing for automatic connection

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

Cod.	5.85.0T100	5.85.0T200	5.85.0T300	5.85.0T400	5.85.0T500	5.85.0T600
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Art. 850H
 Chiave esagonale per morsa FMS e cubo
 Hexagonal wrench for FMS vise and cube

Cod.	5.85.0H100	5.85.0H300	5.85.0H500
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Art. 801S
 Piastrina di collegamento slitte morsa
 Slides vise connecting plate

Cod.	5.80.1S100	5.80.1S200	5.80.1S300	5.80.1S400	5.80.1S500	5.80.1S600
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Dimensioni / Dimension

	CH	B	CH	B	CH	B	CH	B	CH	B	CH	B
Art.375	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	4.37.519250	4.37.519250	4.37.519250	4.37.519250	4.37.519250	4.37.519250

Chiave a pipa
 Box wrench

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

Art. 800E
 Guarnizione per slitta integrale
 O ring for solid slide

Cod.	5.80.0E100	5.80.0E200	5.80.0E300	5.80.0E400	5.80.0E500	5.80.0E600
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Art. 801G
 Grano di bloccaggio protezione centrale
 Setscrew for clamping central protection

Cod.	5.80.1G100	5.80.1G200	5.80.1G300	5.80.1G400	5.80.1G500	5.80.1G600
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Art. 800I
 Vite tcei per ganasce
 Hex.socket head screw for jaws

Cod.	5.80.0I100	5.80.0I200	5.80.0I300	5.80.0I400	5.80.0I500	5.80.0I600
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Art. 801H
 Vite tcei per ganasce a gradino
 Hex.socket head screw for step jaws

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

Art. 801I
 Vite tcei per piastra di contenimento
 Hex.socket head screw for screw holding plate

Cod.	5.80.1I100	5.80.1I200	5.80.1I300	5.80.1I400	5.80.1I500	5.80.1I600
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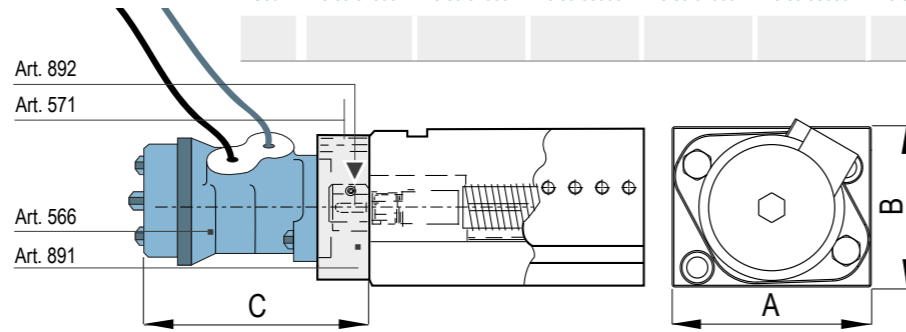
SERVOCOMANDI OLEODINAMICI PER MOTORI IDRAULICI
ELECTRO-HYDRAULIC POWER PACK FOR HYDRAULIC MOTORS

Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Art. 566 Motore idraulico / Hydraulic motor	OMM32	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	Cod.	5.89.11000	5.89.12000	5.89.13000	5.89.14000	5.89.15000	5.89.16000
Piastra attacco motore idraulico / Hydraulic motor mounting plate							
Art. 892	Cod.	5.89.21000	5.89.22000	5.89.23000	5.89.24000	5.89.25000	5.89.26000
Boccola di trascinamento vite motore / Drive bushing screw-motor							
Art. 566	Cod.	5.56.61000	5.56.62000	5.56.63000	5.56.63000	5.56.63000	5.56.63000
Motore Idraulico / Hydraulic motor							
Art. 571	Cod.	5.57.11000	5.57.12000	5.57.13000	5.57.14000	5.57.15000	5.57.16000
Fine corsa elettronico / Electronic proximity switch							

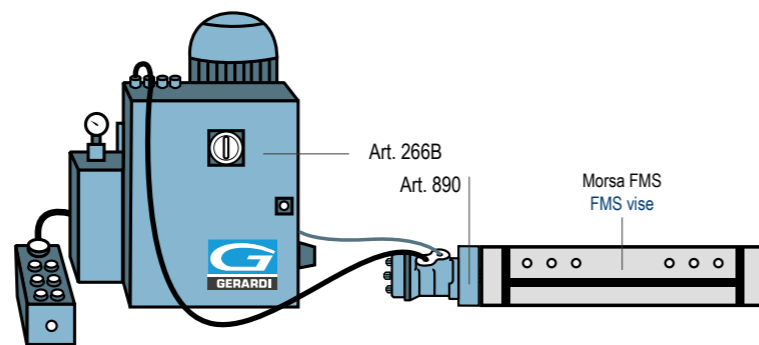
Tipo (grandezza) / Type (size)	1	2	3	4	5	6	
Art.890K/1	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	5	10	20	20	20	20
	Cod.	5.89.0K101	5.89.0K201	5.89.0K301	5.89.0K401	5.89.0K501	5.89.0K601

Art. 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
Velocità apertura-chiusura morse da calcolarsi in base al diagramma 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

COMPOSIZIONE 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 electronic proximity switch

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

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

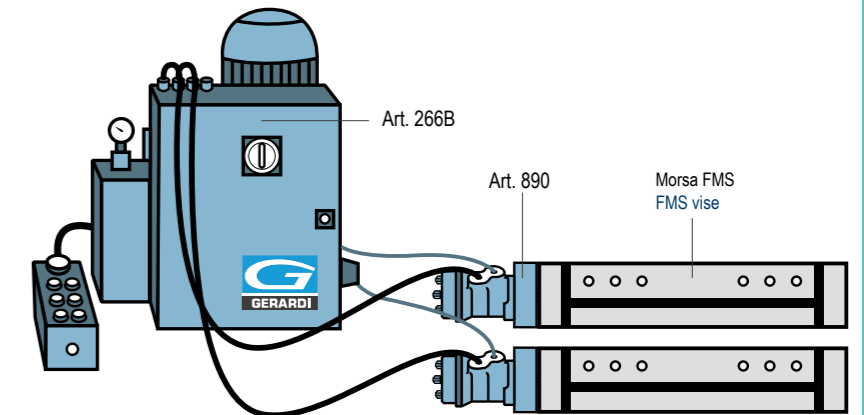
Tipo (grandezza) / Type (size)	1	2	3	4	5	6	
Art.890K/2	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	10	20	40	40	40	40
	Cod.	5.89.0K102	5.89.0K202	5.89.0K302	5.89.0K402	5.89.0K502	5.89.0K602

Art. 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
Velocità apertura-chiusura morse da calcolarsi in base al diagramma 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

COMPOSIZIONE 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 electronic proximity switch

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

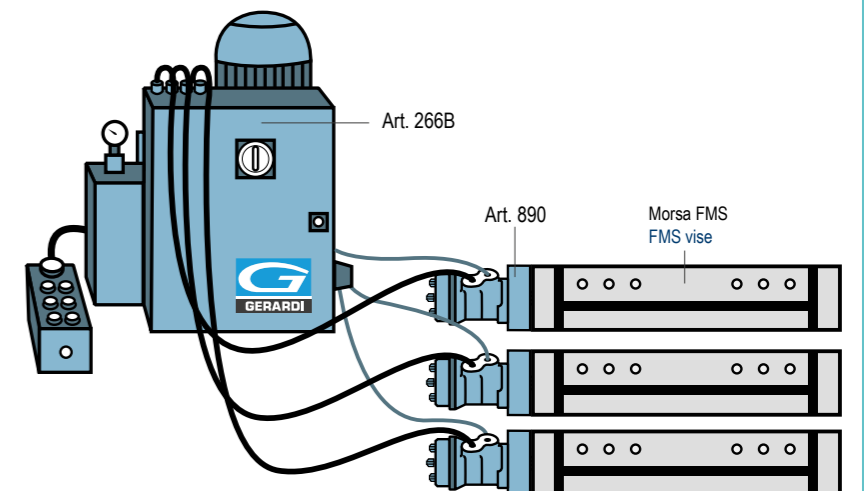
Tipo (grandezza) / Type (size)	1	2	3	4	5	6	
Art.890K/3	Passo vite / screw pitch mm	2	2	2	2	3	3
	bar	130	100	100	100	120	120
	l/min	15	30	60	60	60	60
	Cod.	5.89.0K103	5.89.0K203	5.89.0K303	5.89.0K403	5.89.0K503	5.89.0K603

Art. 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
Velocità apertura-chiusura morse da calcolarsi in base al diagramma 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

COMPOSIZIONE 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 electronic proximity switch

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

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

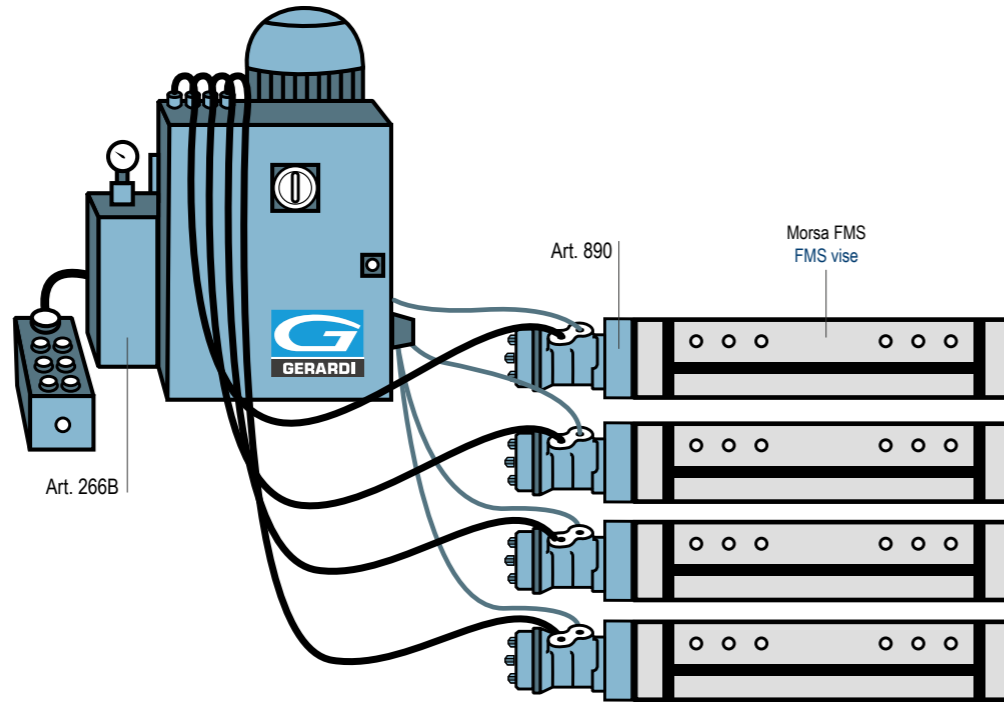
Tipo (grandezza) / Type (size)	1	2	3	4	5	6
Passo vite / screw pitch mm	2	2	2	2	3	3
bar	130	100	100	100	120	120
l/min	20	40	80	80	80	80
Cod.	5.89.0K104	5.89.0K204	5.89.0K304	5.89.0K404	5.89.0K504	5.89.0K604

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
Velocità apertura-chiusura morse 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



5 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 electronic proximity switch

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.

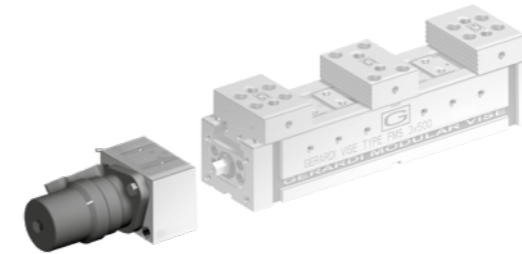


Tubi e cavi di collegamento elettrici ed idraulici con massima lunghezza 1600 mm / Hydraulic pipes and electrical cables with max length 1600 mm

DIAGRAMMI COPPIE MOTORI IDRAULICI
HYDRAULIC MOTOR TORQUE DIAGRAMS

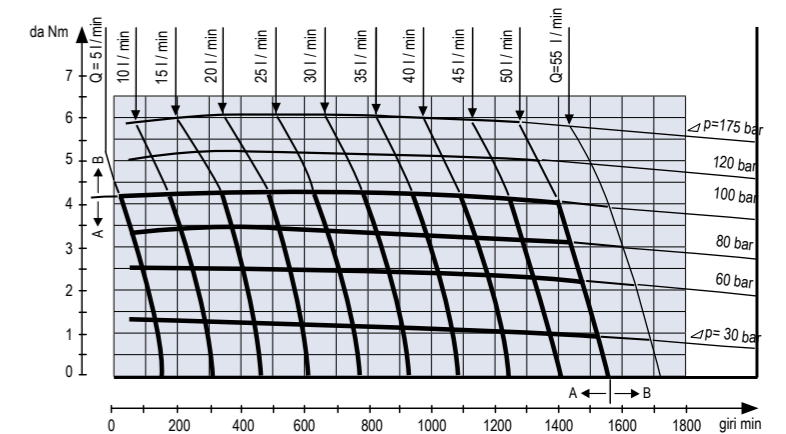
Art.890

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



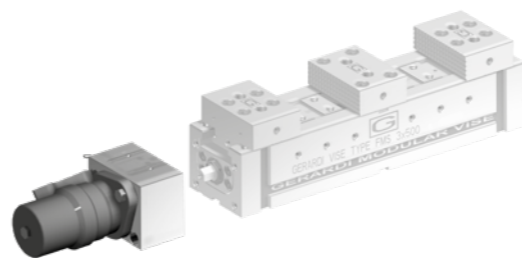
OMR 32

Morse FMS tipo 1 / Type 1 FMS vises



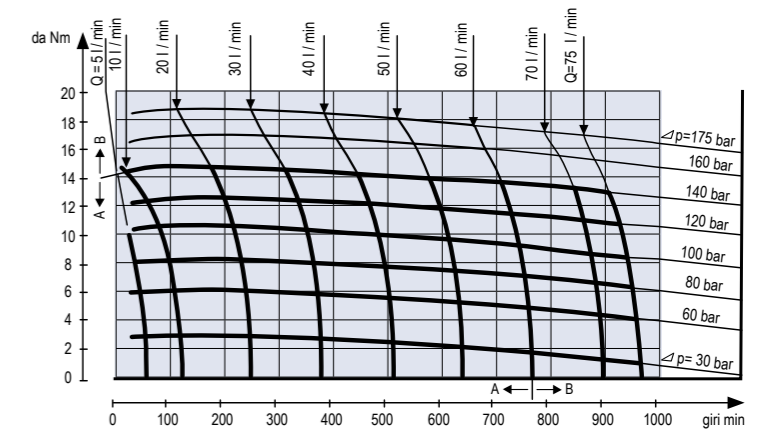
Art.890

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



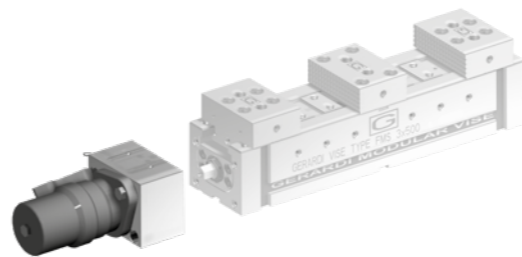
OMR 80

Morse FMS tipo 2 / Type 2 FMS vises



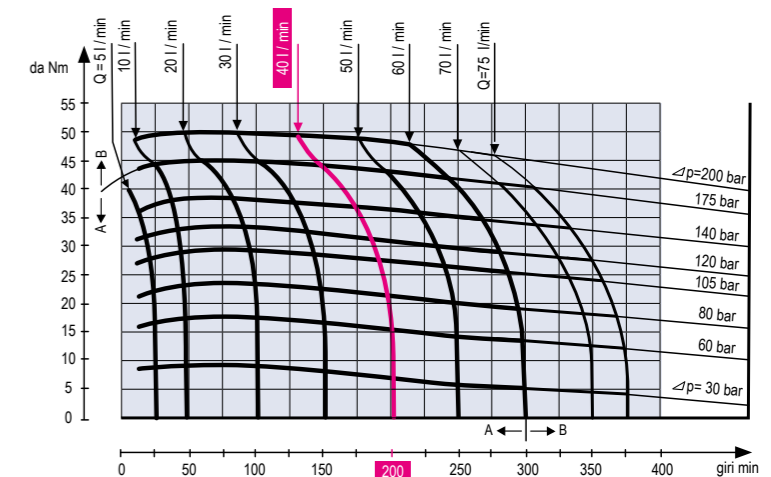
Art.890

(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 morse.
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.

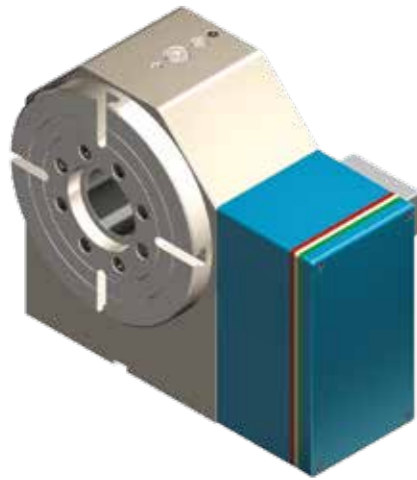
DIVISORE AUTOMATICO DPG 250

AUTOMATIC DIVIDING HEAD DPG 250

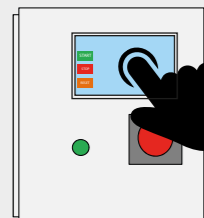
Divisore automatico
Automatic dividing head

Dati tecnici
Technical Data

DPG 250



Diametro del divisore Dividing head diameter		250 mm
Diametro del foro passante Clearance hole diameter		70,5 mm
Altezza punta Center height		200 mm
Dimensione della scanalatura a T T-Slot width		12 mm
Sistema di bloccaggio Clamping system		Idrraulico 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
Rapporti vite/corona Speed reduction ratio (screw/gear)	Verticale Vertical	10,5 Kg. m ²
	Corona dentata Worm gear	698 Nm
Kg		110
Cod.		8.DP.G2500



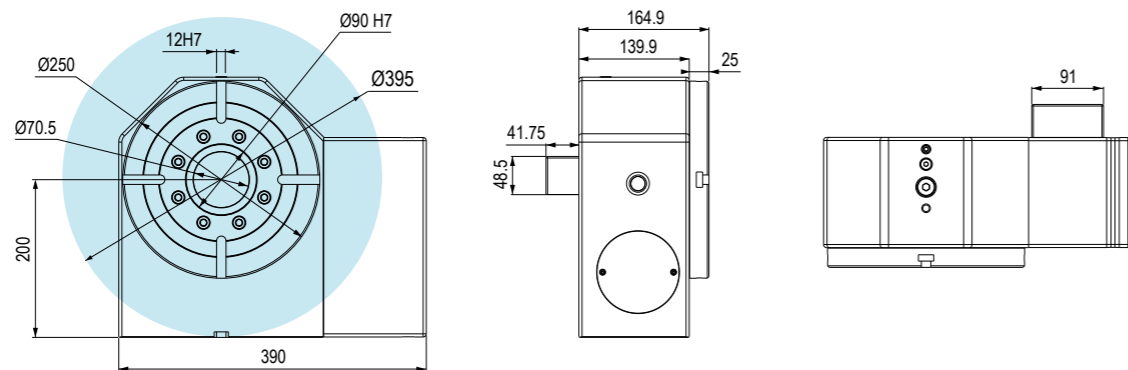
PROGRAMMAZIONE TOUCH SCREEN
FACILE ED INTUITIVA O TRAMITE COLLEGAMENTO DIRETTO AL CNC

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°

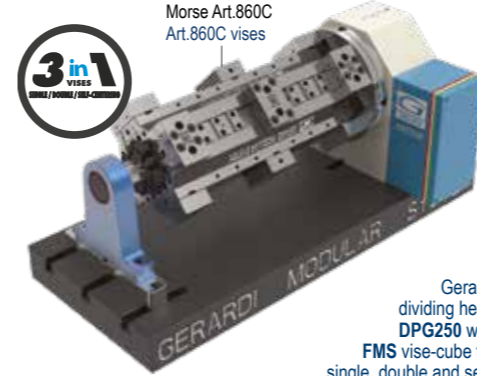
- Easy installation (220V)
- Special bronze crown
- Simple tailstock
- Worm screw in hardened ground steel
- Bath lubrication Screw and Crown
- Pre-loaded screw bearings
- Over-dimensioned crossed-roller front bearing
- Play recover with axial approach
- Watertight seal with possibility of pressurization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

DPG 250



Tipo (grandezza) / Type (size)

Divisore Gerardi DPG250 con cubo-morsa FMS per serraggi singoli, doppi o autocentranti



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

D	1		2				3				
	25 kN	300	25 kN		30 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.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

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

UPGRADE YOUR VISE APPLICATIONS THROUGH MODULAR ACCESSORIES !

Art. 99A

Supporto
Support



Cod.	5.99.A1000				
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Art. 99B

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



Cod.	5.99.B1000	5.99.B2000	5.99.B3000
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Art. 99H

Distanziale per supporto
Spacer support



Cod.	5.99.H1000				
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Art. 62K

DPG 250

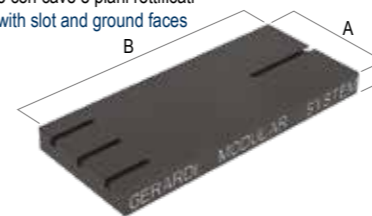
Piastra di interfaccia per cubo FMS completa di sistema d'allineamento
Connecting plate with alignment system for FMS



Cod.	5.62.K801A5	5.62.K801A6	5.62.K801A7
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Art. 99S

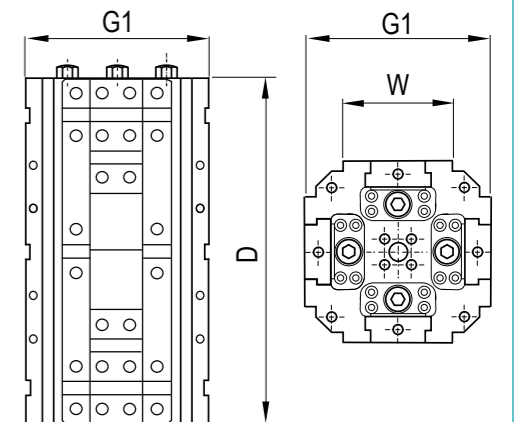
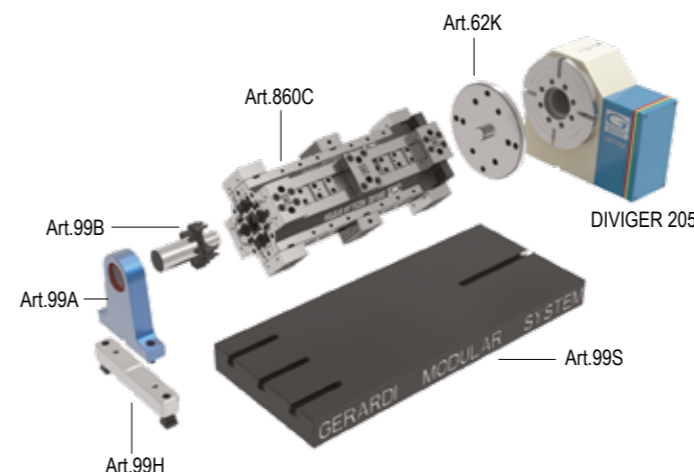
Piastra base con cave e piani rettificati
Base plate with slot and ground faces



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



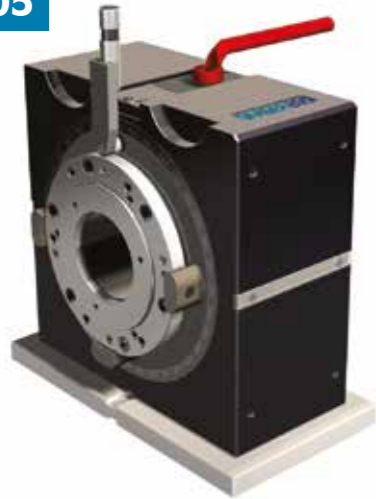
DIVISORE MECCANICO DIVIGER 205

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

DIVISORE MECCANICO, SENZA CAVI O IDRAULICA,
PERMACCHINE A CNC

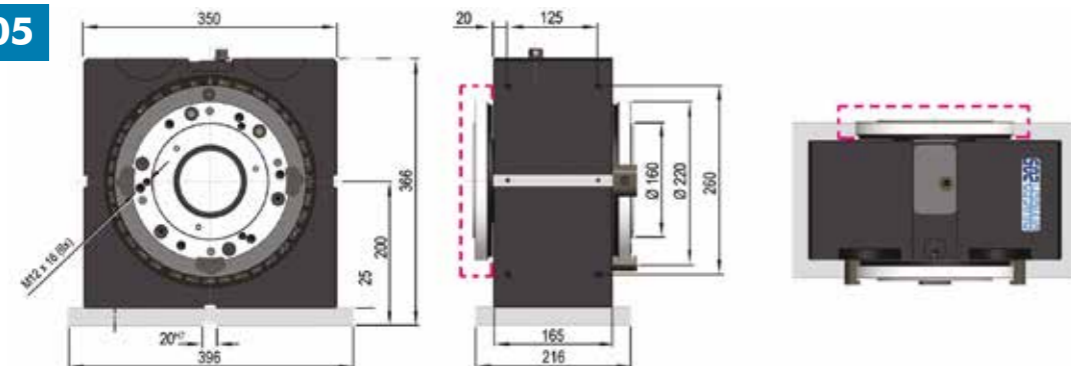
MECHANICAL DIVIDING HEAD, WITHOUT ELECTRICAL CABLES
OR HYDRAULIC, FOR CNC MILLING MACHINE

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

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

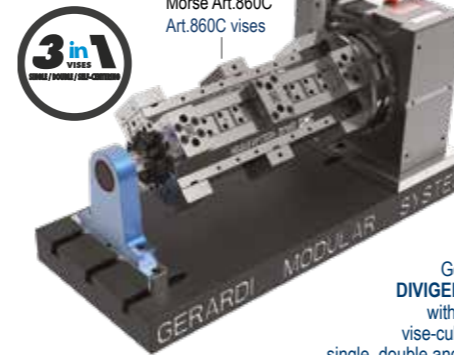


DIVIGER 205



Tipo (grandezza) / Type (size)

	1 25 kN		2 25 kN				3 30 kN				
	kN		kN				kN				
D	200	300	300	400	500	600	400	500	600	700	800
G1	120			175					210		
W	74			94					124		
Cod.	5.D.I.V20500	5.D.I.V20510	5.D.I.V20520	5.D.I.V20530	5.D.I.V20540	5.D.I.V20550	5.D.I.V20560	5.D.I.V20570	5.D.I.V20580	5.D.I.V20590	5.D.I.V20511



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 alignment 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

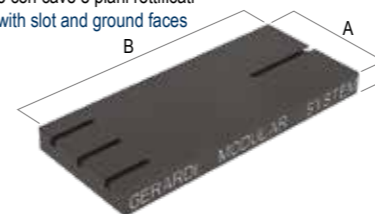
Connecting plate with alignment system for FMS



Cod. 5.62.K801A5 5.62.K801A6 5.62.K801A7

Art. 99S

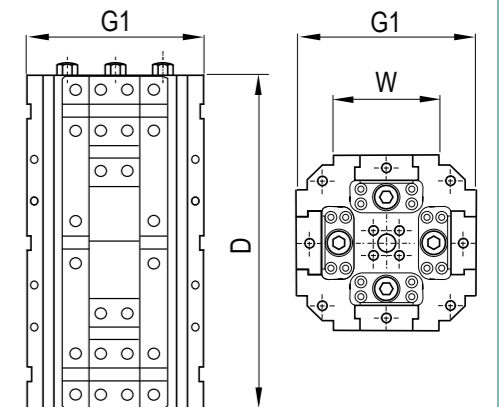
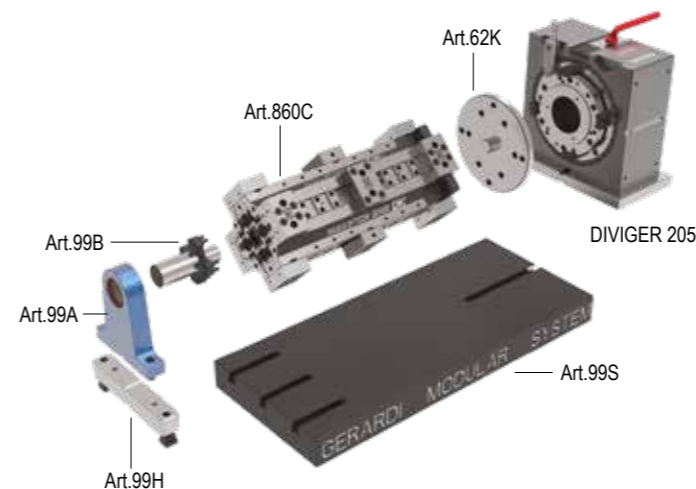
Piastra base con cave e piani rettificati
Base plate with slot and ground faces






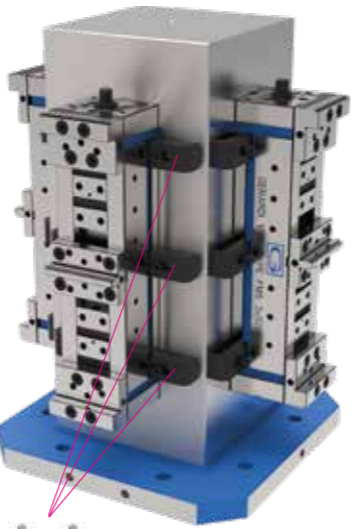
Dimensioni B mm Dimension B mm	A	C	Kg	Cod.
650	400	50	102	7.99.S065S
950	400	50	149	7.99.S095S
1250	400	50	195	7.99.S125S

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





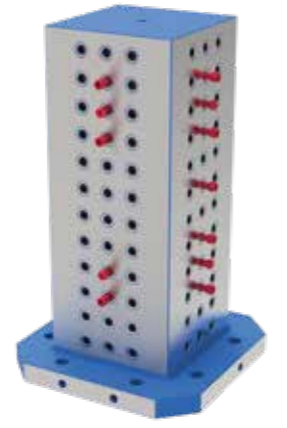

PREDISPOSIZIONE e MONTAGGIO MORSE su CUBI LAVORATI TOMBSTONES SET-UP and VISES MOUNTING on MACHINED TOMBSTONES

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
<p>Cod. 8.53.C00081 Dim. A=250 / B=400 / H=660</p> 	<p>Art.864 Tipo 3x500</p> 	<p>Per morsa / each vise</p>  <p>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 + alignment of each vise on it.</p>	 <p>Art.296</p>
<p>n°morse Vises n° x 4</p>			

* 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.

Certificato di collaudo
Certificate test

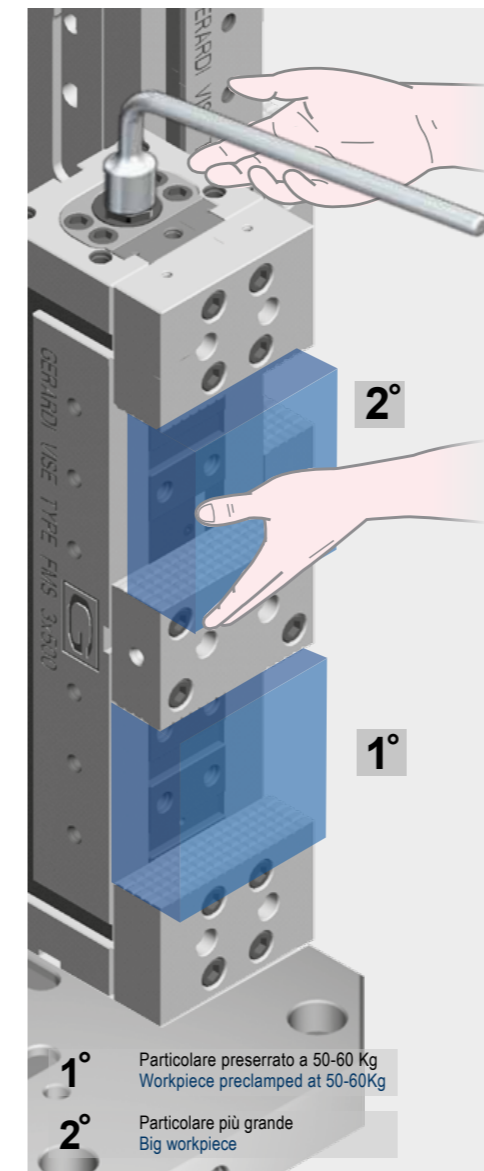
PREDISPOSIZIONE e MONTAGGIO MORSE su CUBO a RETICOLO TOMBSTONES SET-UP and VISES MOUNTING on 2 GRID TOMBSTONES

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
<p>Cod. 8.53.F00081 Dim. A=250 / B=400 / H=660</p> 	<p>Art.864 Tipo 3x500</p> 	<p>Per morsa / each vise</p>  <p>Importo per montaggio ed allineamento di ogni morsa. Amount need for each vise mounting and alignment.</p>	 <p>Art.83</p>
<p>n°morse Vises n° x 4</p>			

* 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.

Certificato 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 può 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.

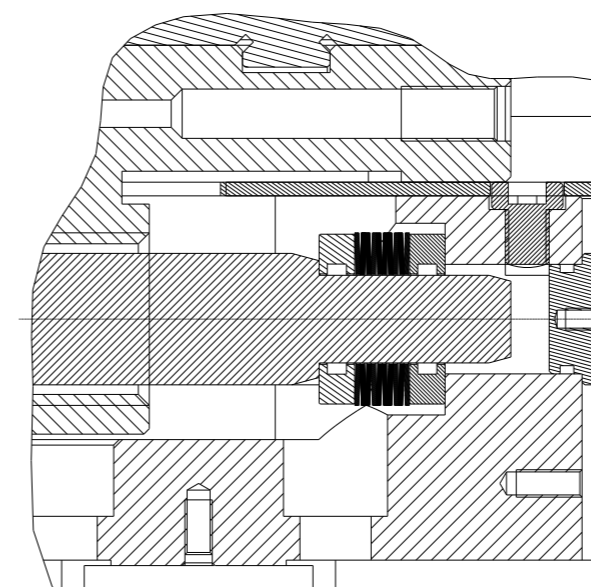
With the "Third Hand" device the two workpiece can be up to 2 mm different in gripping width. The standard "Third Hand" device has a max pressure of 50 Kg.

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 spacer (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

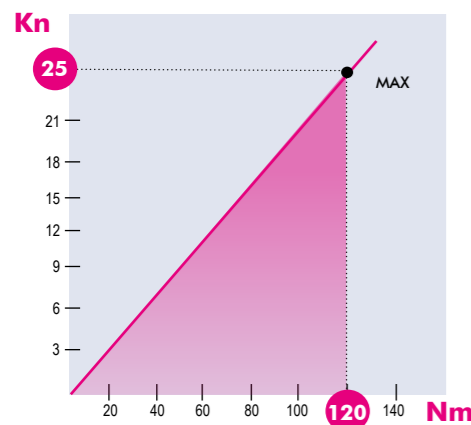
Mechanical clamping diagrams with torque wrench

Art. 357

Morse tipo Vises type

VITE: TPF 18 / 20 mm PASSO: 2 mm
SCREW: TPF 18 / 20 mm PITCH: 2 mm

1

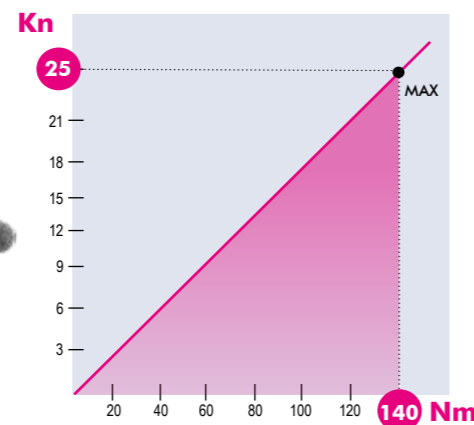


Art. 357

Morse tipo Vises type

VITE: TPF 18 / 24 mm PASSO: 2 mm
SCREW: TPF 18 / 24 mm PITCH: 2 mm

2



Diagrammi serraggio / Clamping diagrams

FMS

Diagrammi di serraggio meccanico con moltiplicatore di potenza

Mechanical clamping diagrams with pressure multiplier

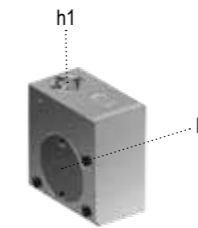
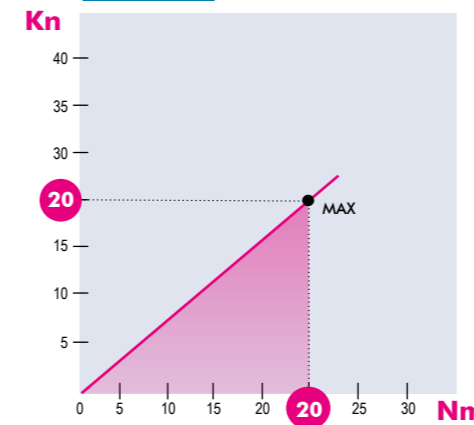
Art. 802

Morse tipo 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

1

Type 1 Cod. 5.80.21000 € 906



Art. 802

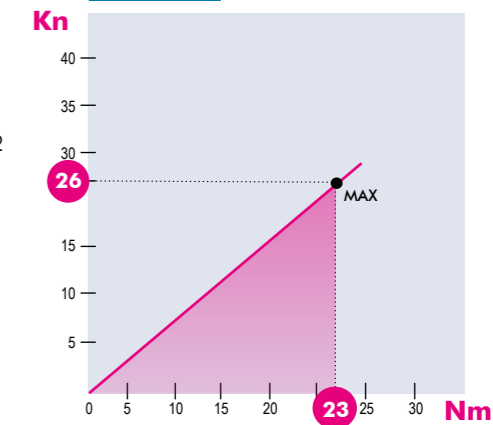
RATIO = h1 : h2

Morse tipo 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

2

Type 2 Cod. 5.80.22000 € 906



RATIO = h1 : h2

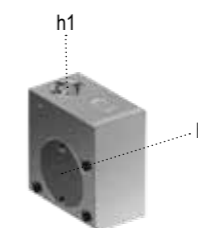
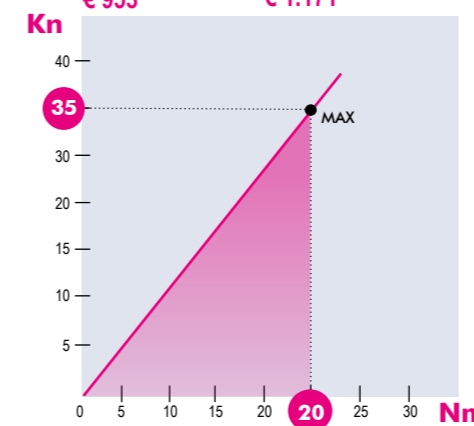
Morse tipo Vises type

VITE: TPF 24 / 30 mm PASSO: 2 mm
SCREW: TPF 24 / 30 mm PITCH: 2 mm
Rapporto trasmissione: 7:1
Gear ratio: 7:1

3-4

Type 3 Cod. 5.80.23000 € 953

Type 4 Cod. 5.80.24000 € 1.171



Art. 802

RATIO = h1 : h2

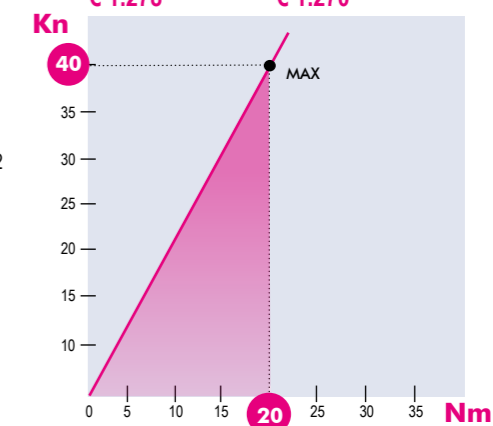
Morse tipo Vises type

VITE: TPF 30 / 36 mm PASSO: 3 mm
SCREW: TPF 30 / 36 mm PITCH: 3 mm
Rapporto trasmissione: 7:1
Gear ratio: 7:1

5-6

Type 5 Cod. 5.80.25000 € 1.278

Type 6 Cod. 5.80.26000 € 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.

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Diagrammi serraggio / Clamping diagrams

FMS

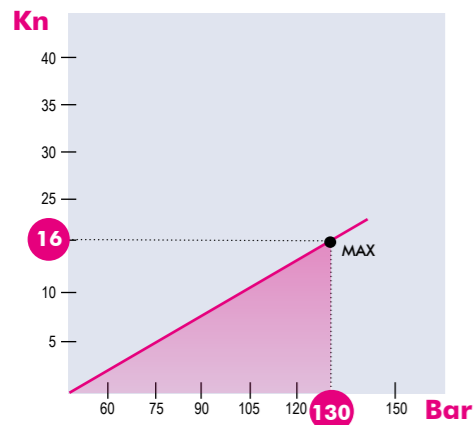
Diagrammi di serraggio meccanico tramite motore idraulico

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

1

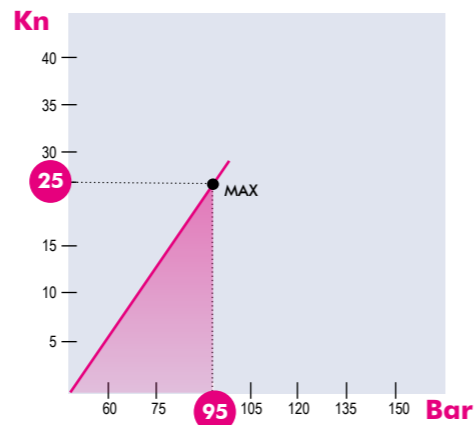


Art. 890

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

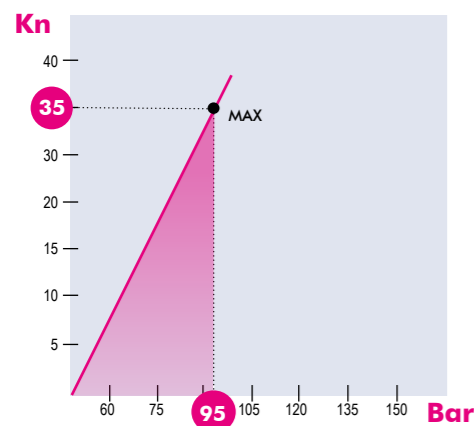
2



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

3-4

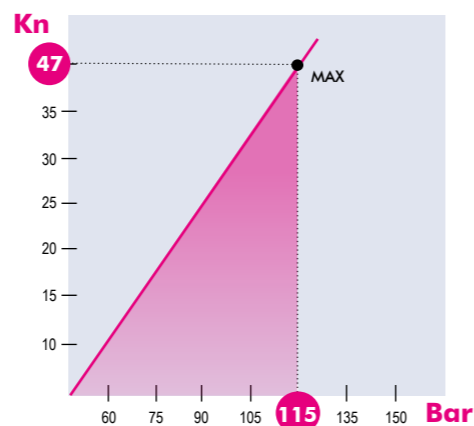


Art. 890

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

5-6



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 $\pm 10\%$. 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 $\pm 10\%$ range. For optimum operation do not exceed chart values.

ISTRUZIONI PER UN CORRETTO UTILIZZO

ISTRUCTIONS FOR A PROPER USE



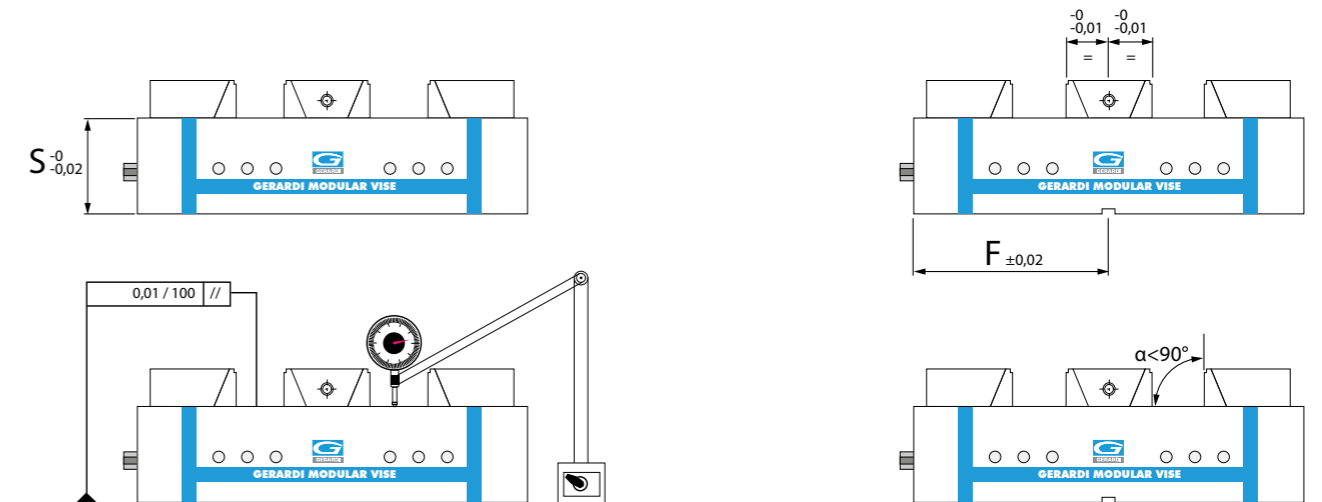
Libretto Istruzioni / Instruction Book

Scansiona il QR code e scarica le istruzioni complete

Scan the QR code to download the complete instructions

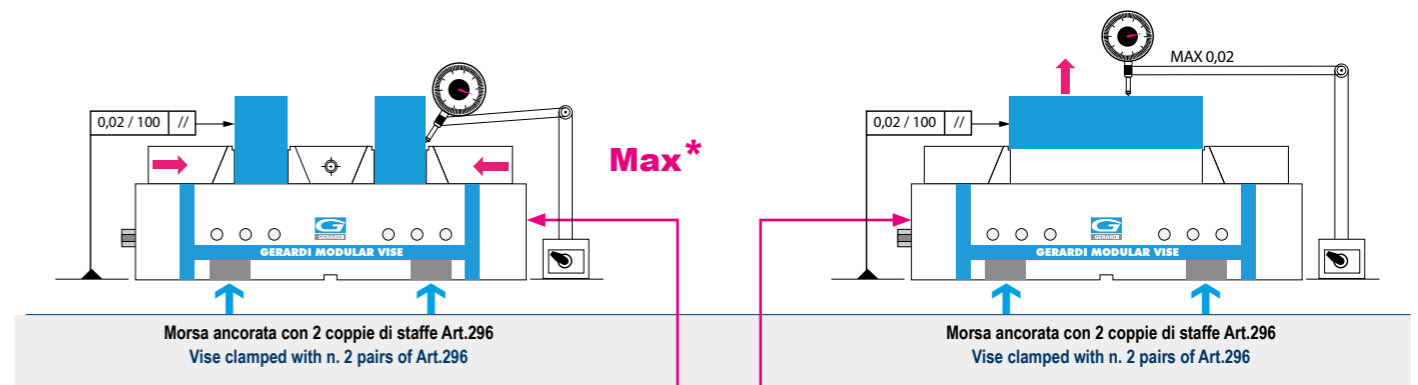
TOLLERANZE GEOMETRICHE

GEOMETRIC ACCURACIES



TOLLERANZE DINAMICHE

DINAMIC ACCURACIES

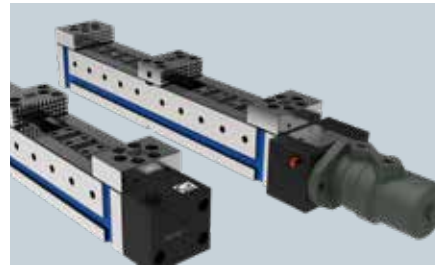


Art 865	* Coppia applicata - Torque Nm	Forza di serraggio - Clamping power
Morsa tipo 1 Vise type 1	120	2500 Kgf
Morsa tipo 2 Vise type 2	140	2500 Kgf
Morsa tipo 3 Vise type 3	180	3000 Kgf
Morsa tipo 4 Vise type 4	180	3000 Kgf
Morsa tipo 5 Vise type 5	240	3200 Kgf
Morsa tipo 6 Vise type 6	240	3200 Kgf

* Max coppia applicabile per non superare i valori consigliati

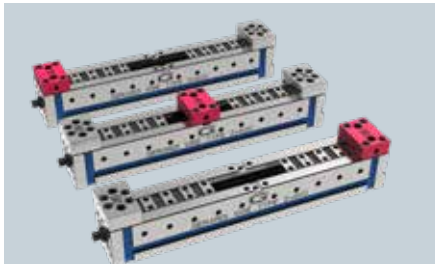
1 kgf . m = 9.806

ESTREMA VERSATILITY
EXTREME VERSATILITY

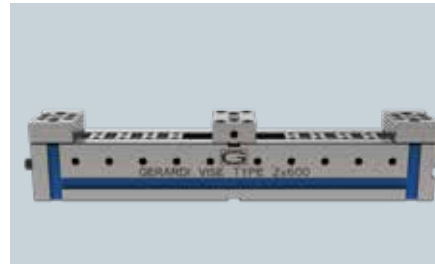


Sistema di serraggio meccanico, idraulico, pneumatico elettrico o con moltiplicatore di potenza, tramite comando manuale, a pedale o mediante pulsante elettrico (vedi pag. 12)

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



3 posizioni per la ganaschia fissa
3 positions for the fixed jaw

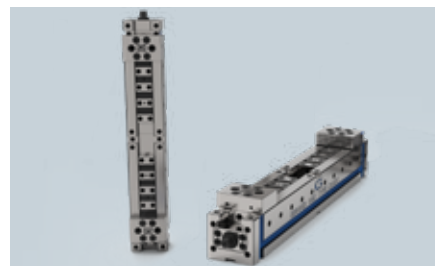


Costruzione solida e compatta e massima apertura rispetto alla sua lunghezza

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

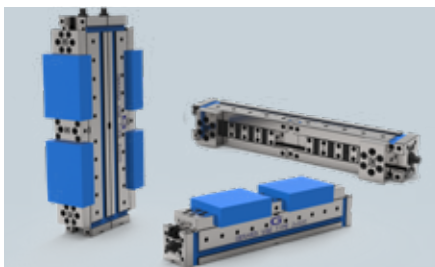


Serraggio dall'esterno all'interno e viceversa
Outside to inside clamping and viceversa

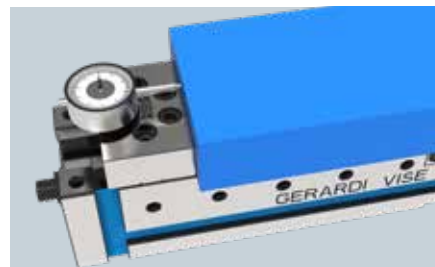


Precisioni geometriche con tolleranze entro 0,02mm

Geometrical accuracy with tolerances 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

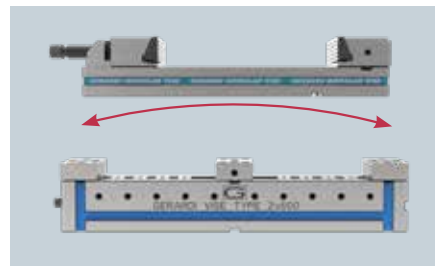


Accurata ripetibilità di posizionamento dei particolari da lavorare

Very accurate repetibility of workpieces position



Collegamento: fianco a fianco, dorso a dorso
Side by side, back to back vise positioning

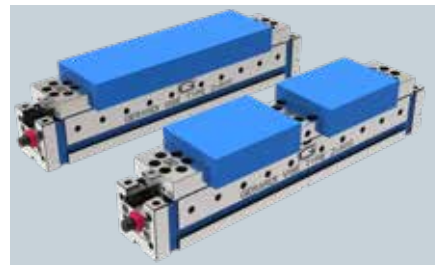


Flessioni ridotte di due volte rispetto alle morse modulari STANDARD

Bending reduced two times with respect to the STANDARD modular vises

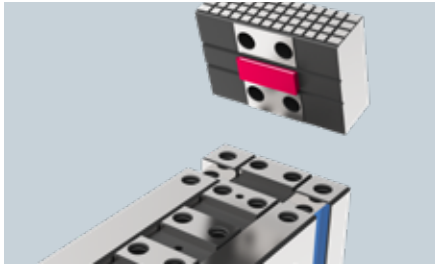


Possibilità illimitata per ganasce speciali
Unlimited range of special jaws

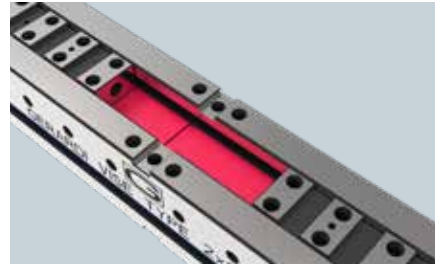


Trasformazione da autocentrante a doppia tramite la sostituzione delle ganasce sul corpo base universale e tramite la ghiera di regolazione.

Transform 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 scorrevoli

Integral protection from chips and dirty through sliding protections

5