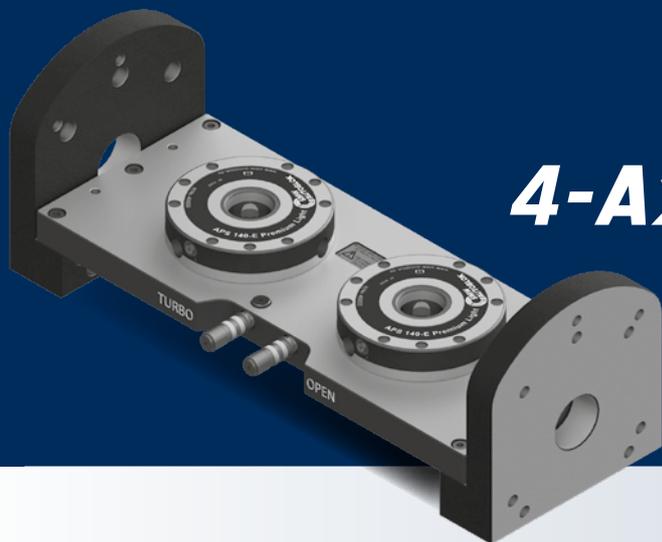


# 4-Axis Workholding

## Sistemi di bloccaggio per tavole indexate



### APS 140

- Flangia

Pag. 16.4



### APS 140

- Perni

Pag. 16.5



### APS 140

- Bascula multipla
- Bascula liscia
- Bascula a reticolo

Pag. 16.6



### PLUS 5 INDEX

- Plus 5 INDEX 52
- Plus 5 INDEX 96
- Plus 5 INDEX All in One 52/96

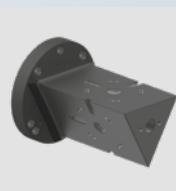
Pag. 16.9



### PLUS 5

- Bascula multipla Plus 5 - 52
- Bascula Plus 5 - 96
- Bascula multipla Plus 5 - 96

Pag. 16.12



### IMG

- Cubo triangolare per IMG 88-130

Pag. 16.15



### Y CHUCK

- Bascula per Y CHUCK
- Autocentrante statico
- Flange per mandrini

Pag. 16.16



### MANDRINI

- Mandrino manuale SGSF

Pag. 16.19



### CIVI-CN

- Colonna CIVI 2000

Pag. 16.20



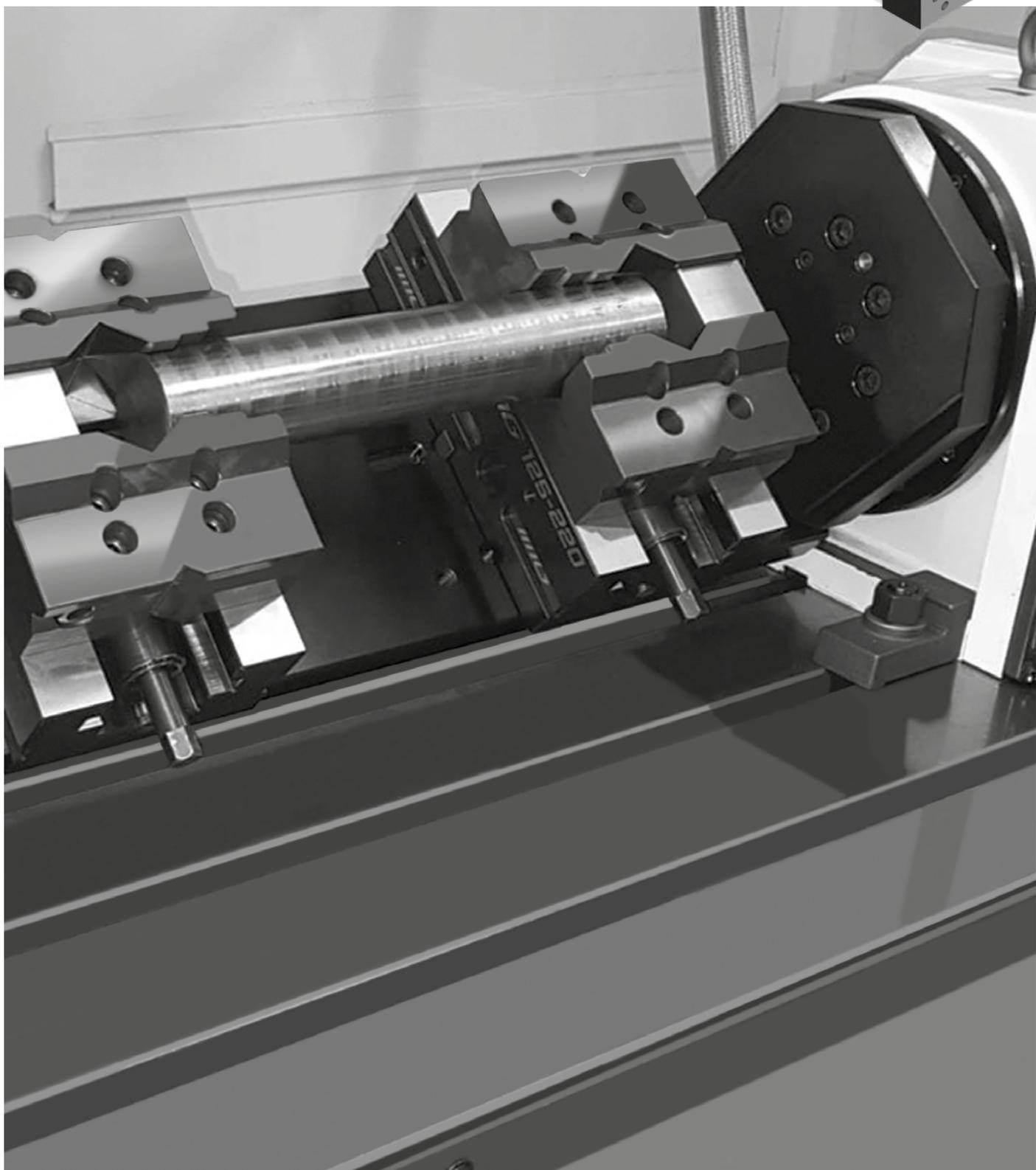
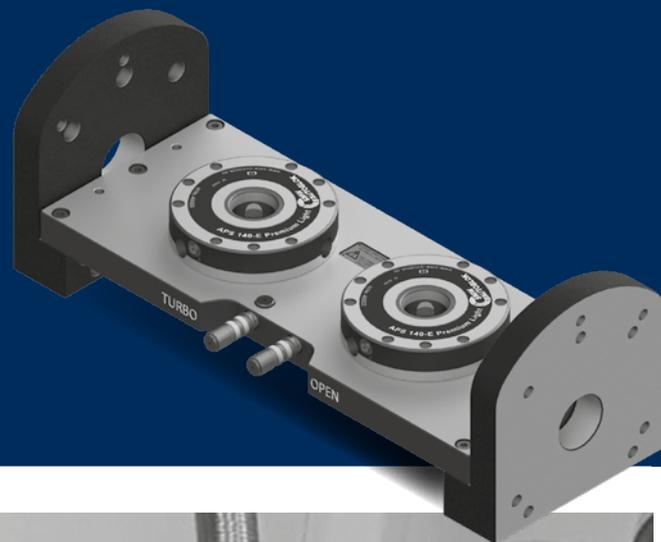
### CIVI 2000

- Sistema di bloccaggio multiplo

Pag. 16.21

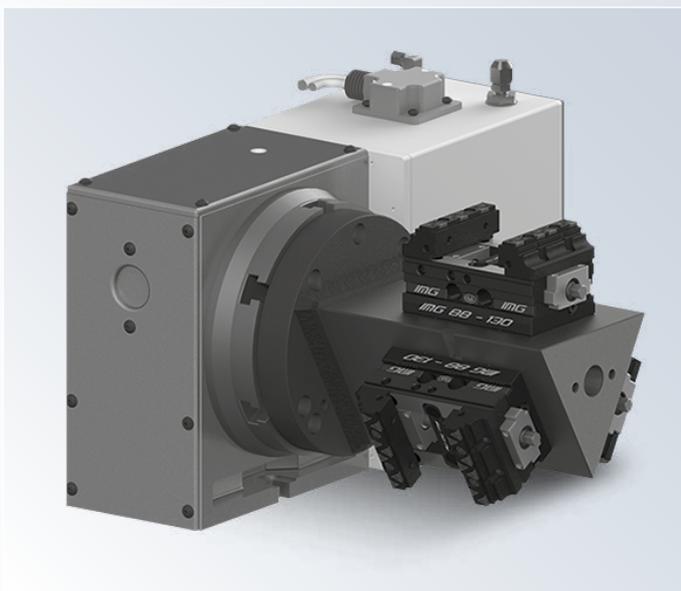
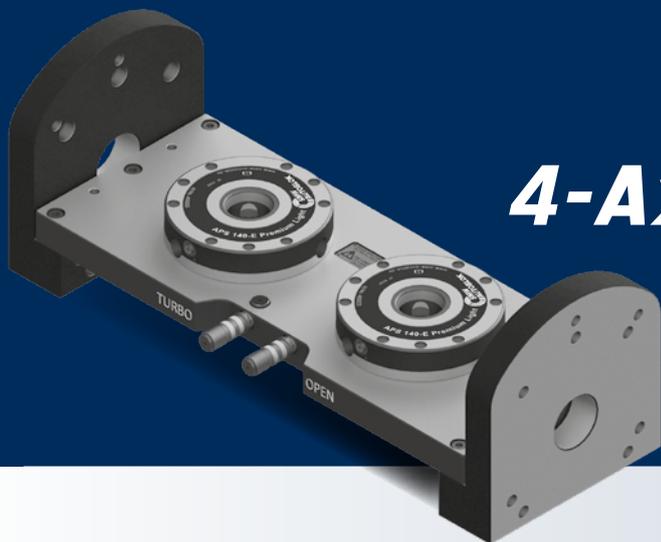
# 4-AXIS Workholding

Sistemi di bloccaggio per tavole indexate



# 4-Axis Workholding

## Sistemi di bloccaggio per tavole indexate

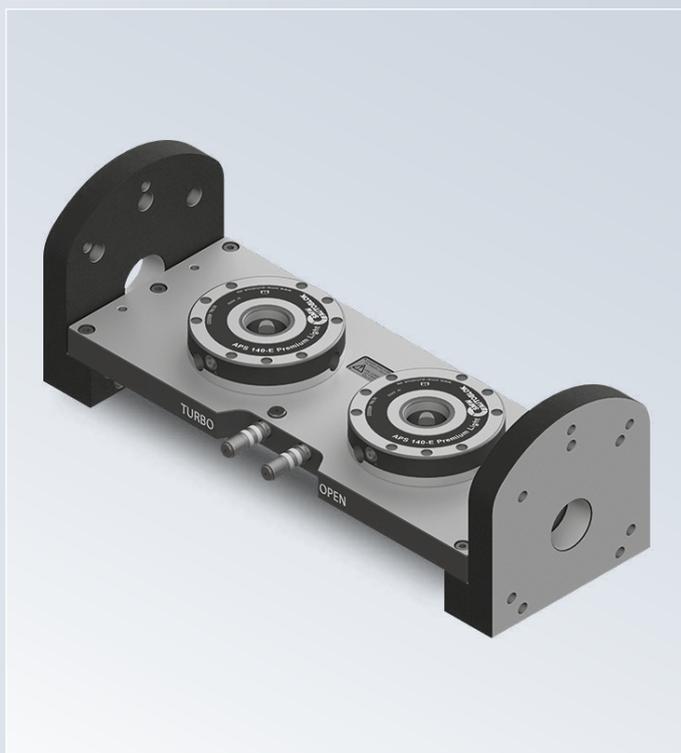


La crescente domanda di componenti ad alta precisione in settori strategici quali automotive, aerospaziale, medica ed elettronico ha determinato un'ampia diffusione delle tavole rotanti CNC.

Questi dispositivi rivestono un ruolo cruciale nella produzione e grazie alle loro caratteristiche, le tavole rotanti rappresentano uno strumento imprescindibile nella produzione di parti complesse e di elevata qualità, capaci di rispondere alle più rigorose specifiche tecniche.

OML si pone come partner tecnologico innovativo e affidabile, offrendo una gamma completa di prodotti standard e soluzioni speciali progettate per ottimizzare la produttività e migliorare le prestazioni delle precitate tavole indexate.

Attraverso un'approfondita conoscenza applicativa e un costante impegno nell'innovazione, OML supporta le aziende nel raggiungimento di livelli superiori di efficienza, precisione e competitività ■





### Applicazioni

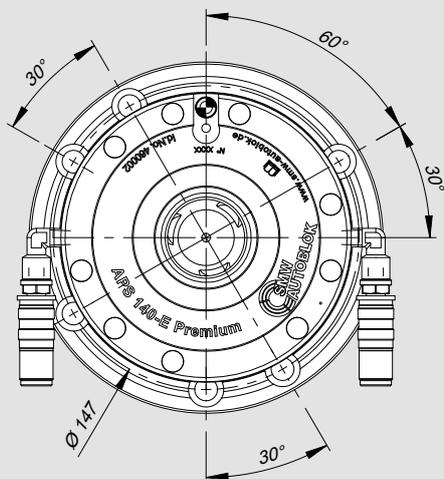
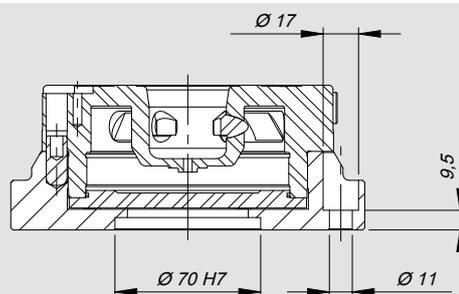
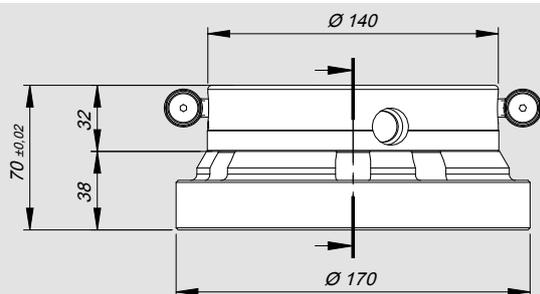
- Flangia per tavole indexate CNC con cave a T
- Incluso 1 modulo APS 140 Premium

### Caratteristiche tecniche

- 3 griffe di bloccaggio
- Ripetibilità < 0.005 mm
- Rivestimento di protezione
- Funzione Turbo per incrementare la forza di serraggio (senza Turbo 7.5 kN)
- Protezione anti-rotazione
- PEL
- Funzione di pulizia
- Completamente sigillato (proofline)

### Dotazione standard

Flangia con 1 modulo APS 140 per tavole indexate Touchdex e CNC e per orientamento su tavole indexate con cave a T



Soggetto a modifiche tecniche

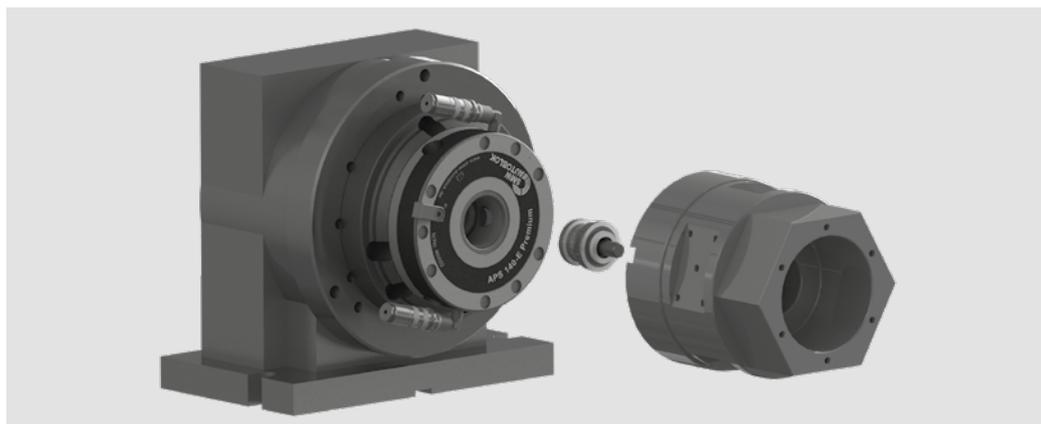
Codice

46167620

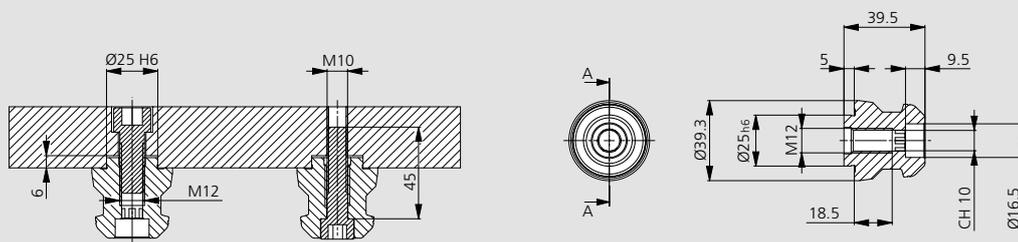
Peso (Kg)

17

### Esempio di impiego



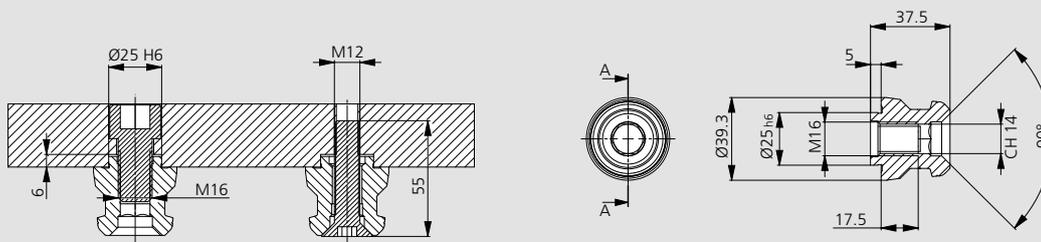
Filetto M12



Soggetto a modifiche tecniche

Codice	Tipo	Peso
46162355	A	M12 0.2
46162356	B	M12 0.2
46162357	C	M12 0.2

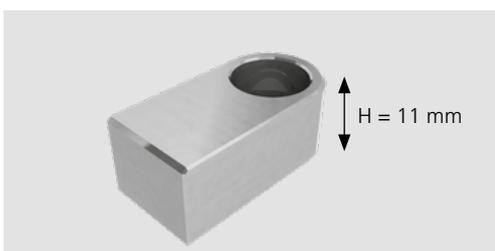
Filetto M16



Soggetto a modifiche tecniche

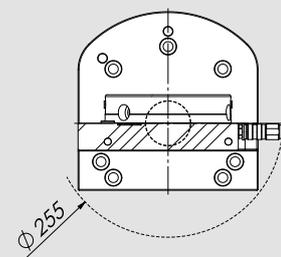
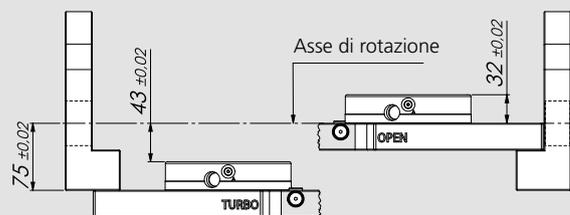
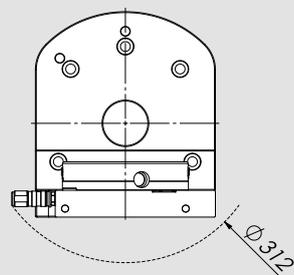
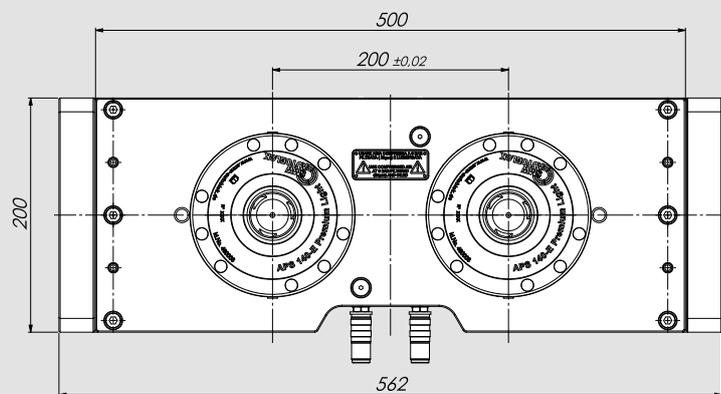
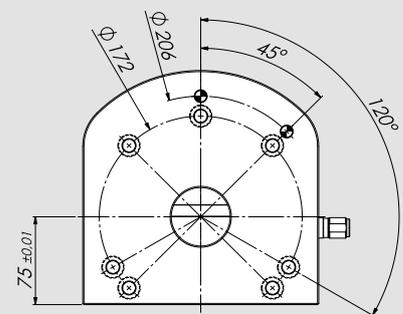
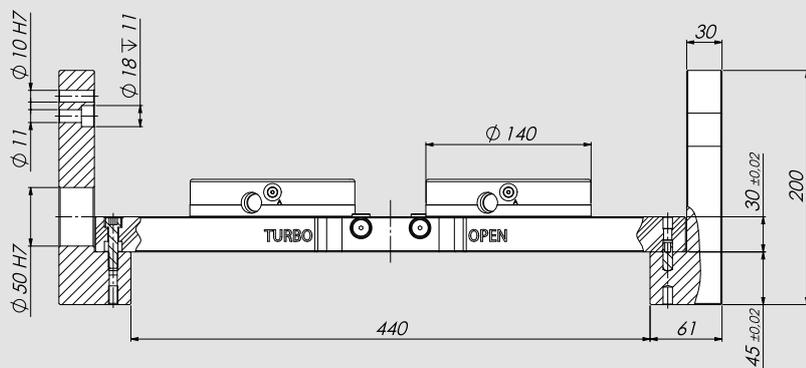
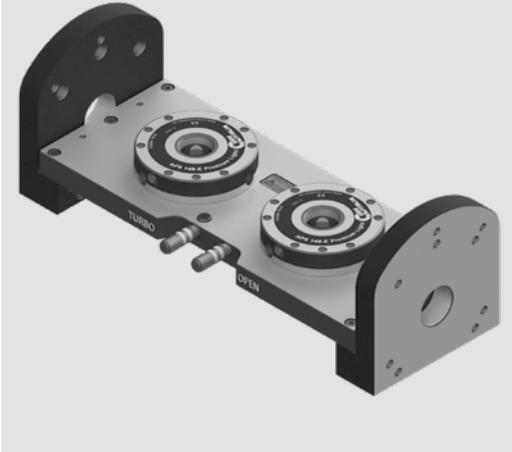
Codice	Tipo	Peso (Kg)
46162455	A	M16 0.2
46162456	B	M16 0.2
46162457	C	M16 0.2

Chiavetta per uso singolo



Codice
58351312

Completo di APS 140 premium light



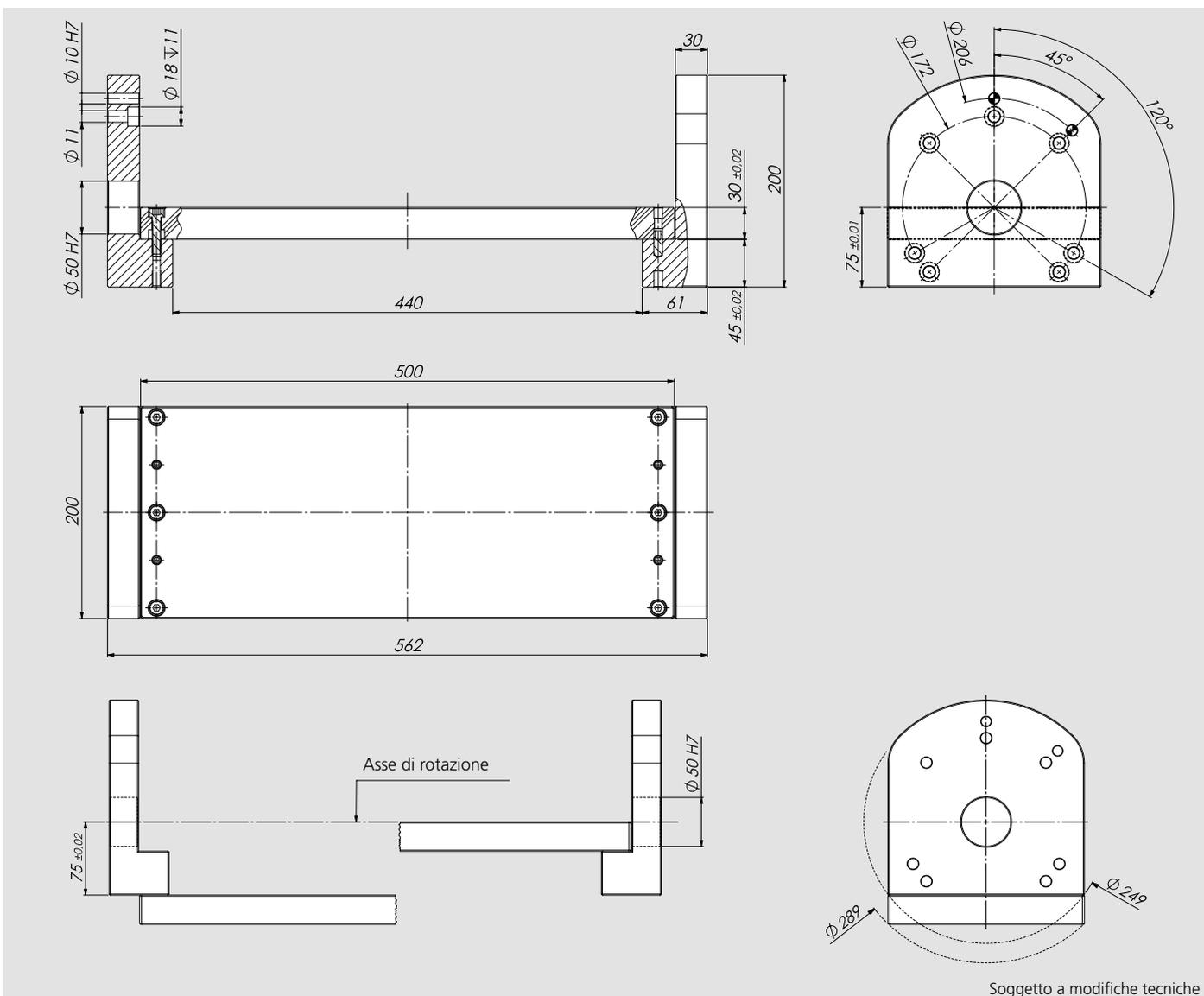
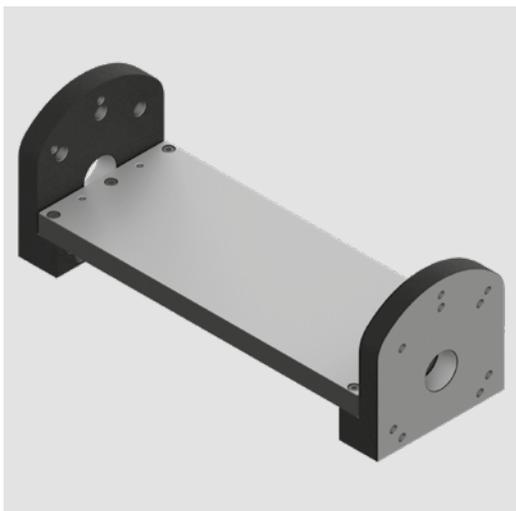
Soggetto a modifiche tecniche

Codice

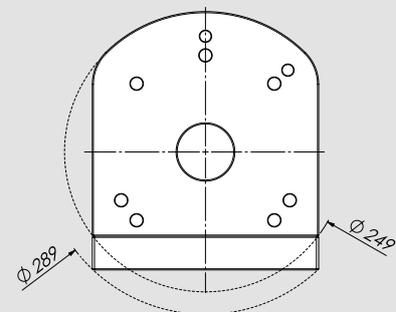
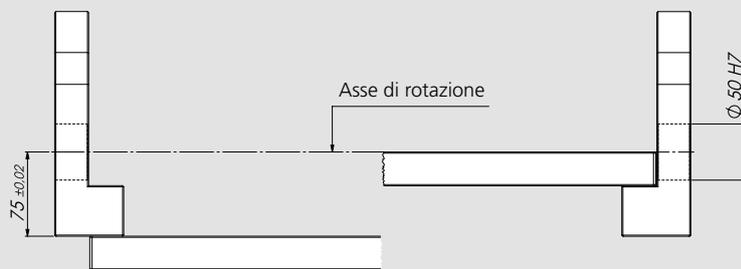
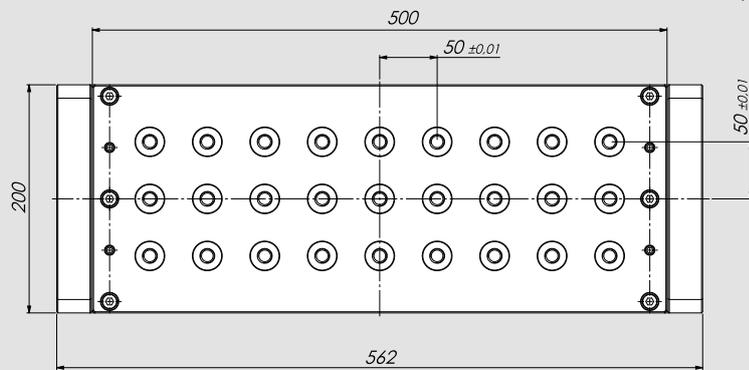
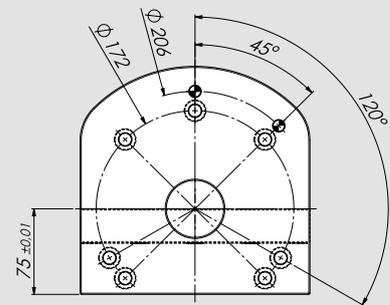
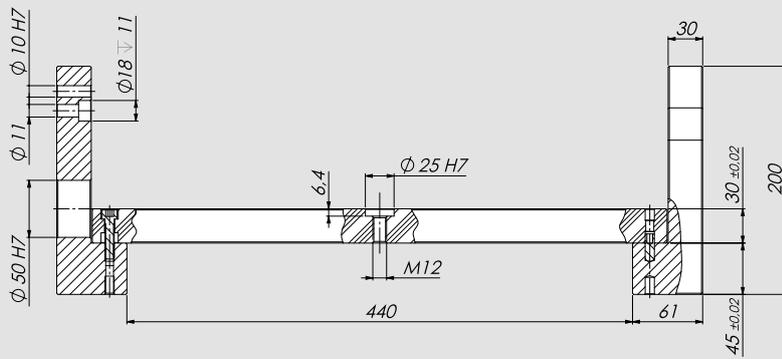
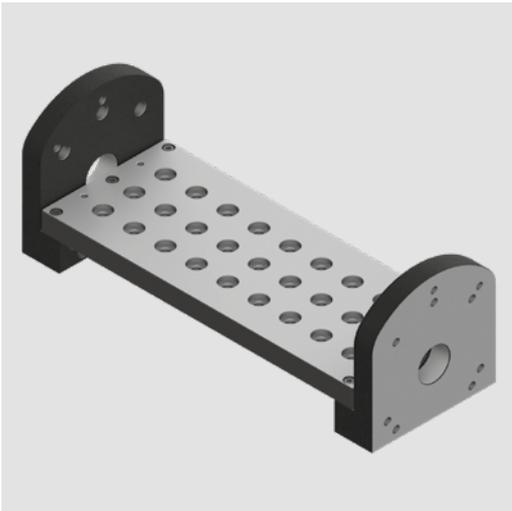
50191454

Peso (Kg)

46



Codice	Peso (Kg)
50191450	43



Soggetto a modifiche tecniche

**Codice**

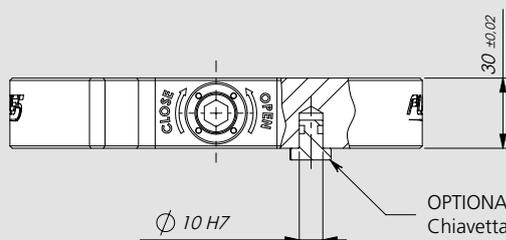
50191452

**Peso (Kg)**

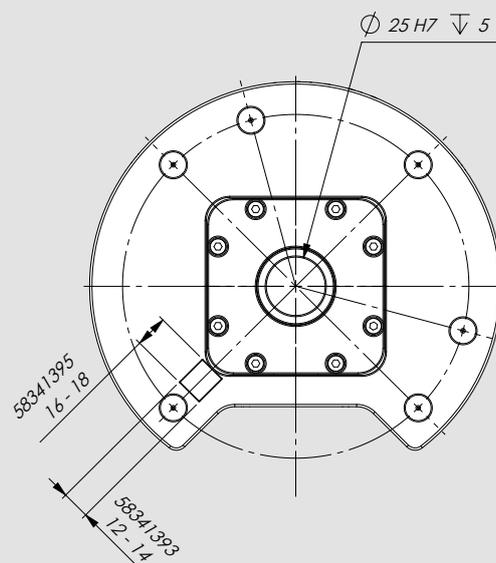
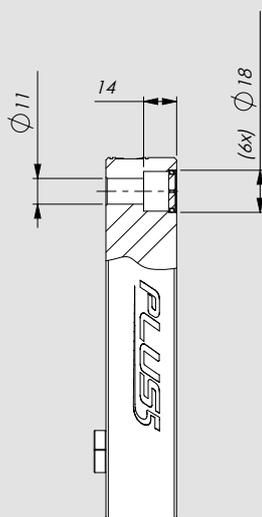
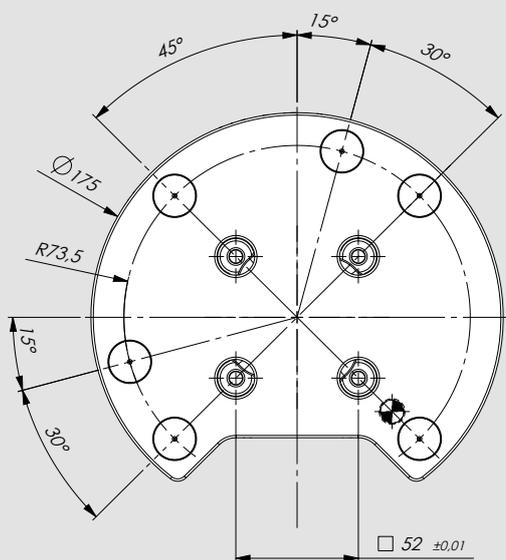
42



- Completo di chiave 10mm
- Perni non inclusi



OPTIONAL:  
Chiavetta di posizionamento multislot 58341393 / 58341395

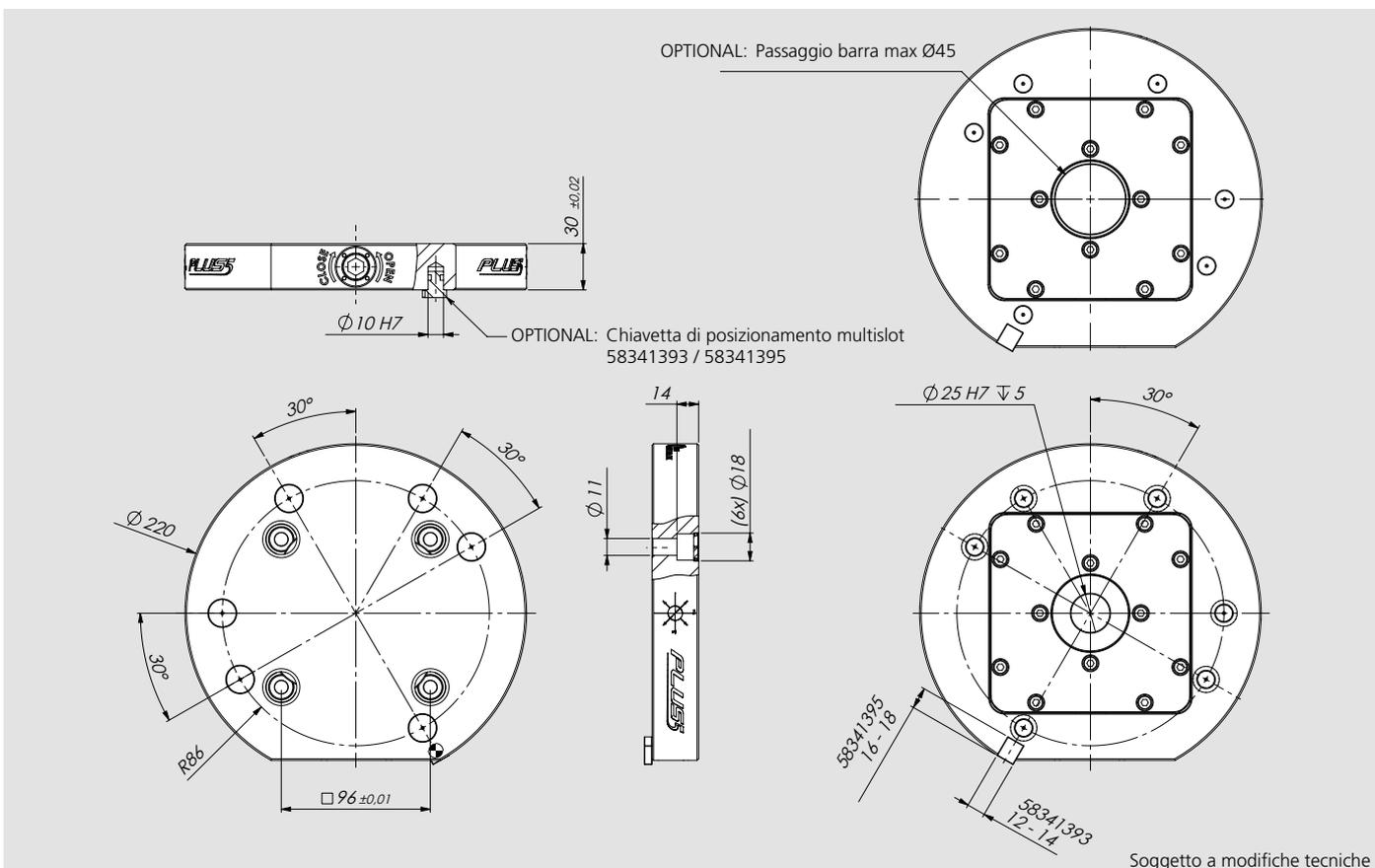


Soggetto a modifiche tecniche

Codice	Peso (Kg)
46240111	6

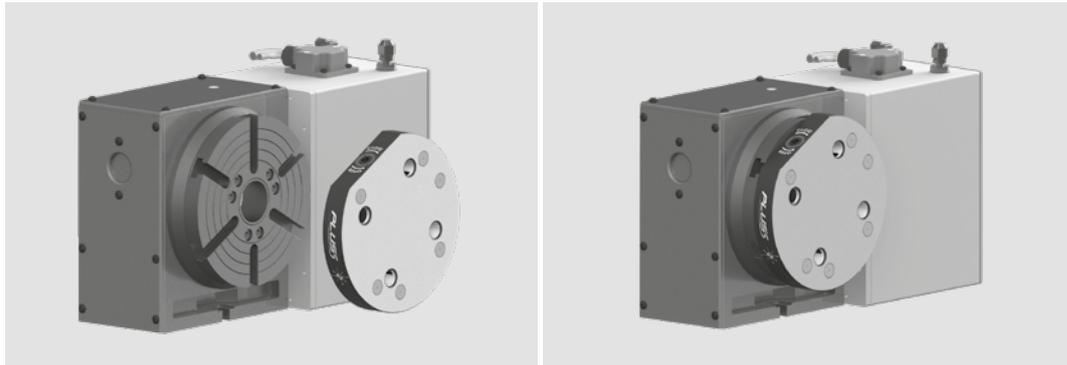


- Completo di chiave 10mm
- Perni non inclusi



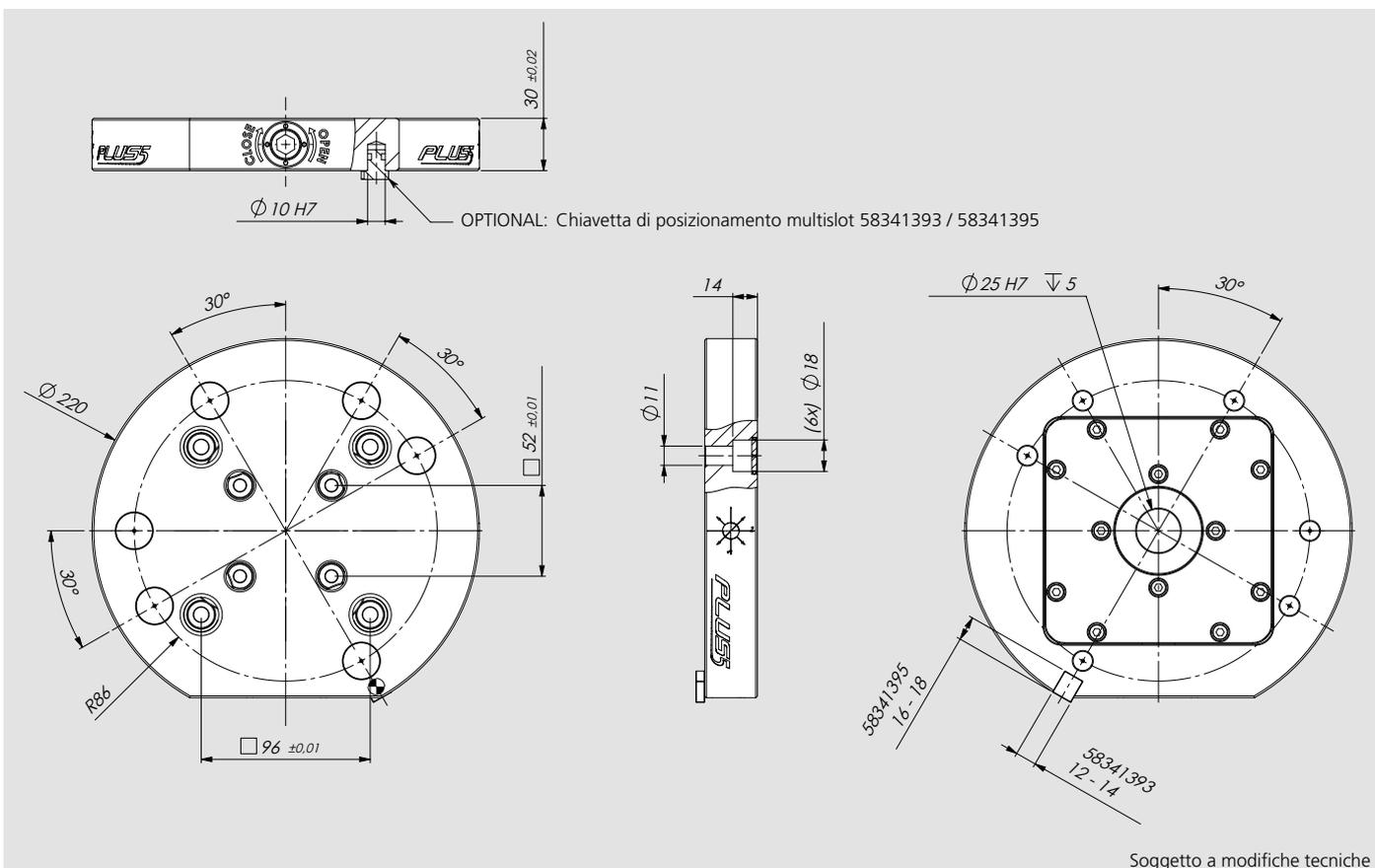
Codice	Peso (Kg)
46240112	8

#### Esempio di impiego





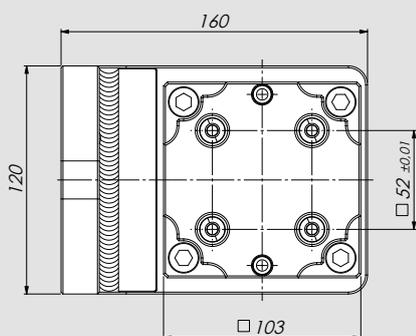
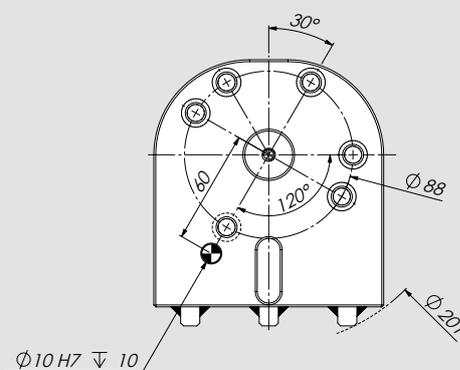
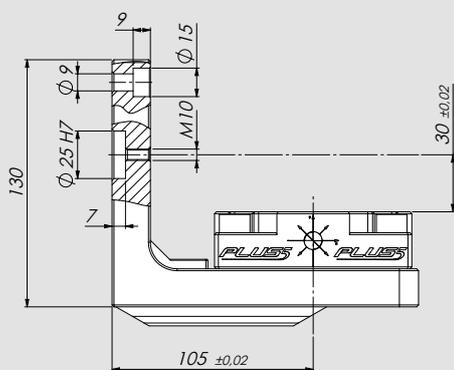
- Completo di:
  - chiave 10mm
  - tappi di protezione (Plus 5 - 96)
- Perni non inclusi



Codice	Peso (Kg)
46240113	8



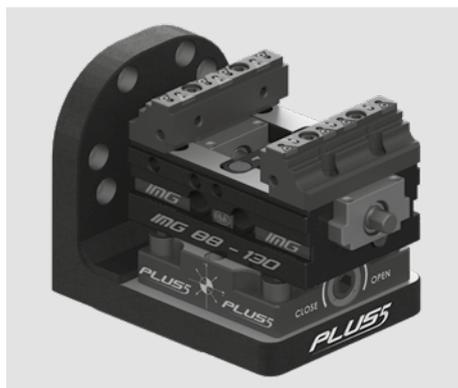
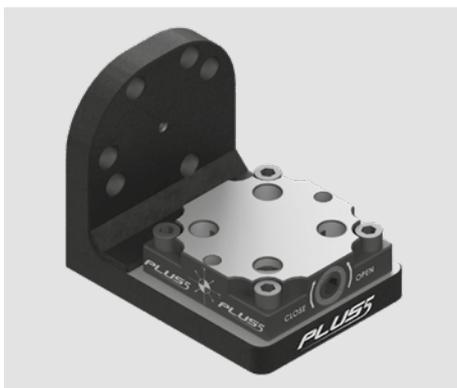
Plus 5 - 52 non incluso



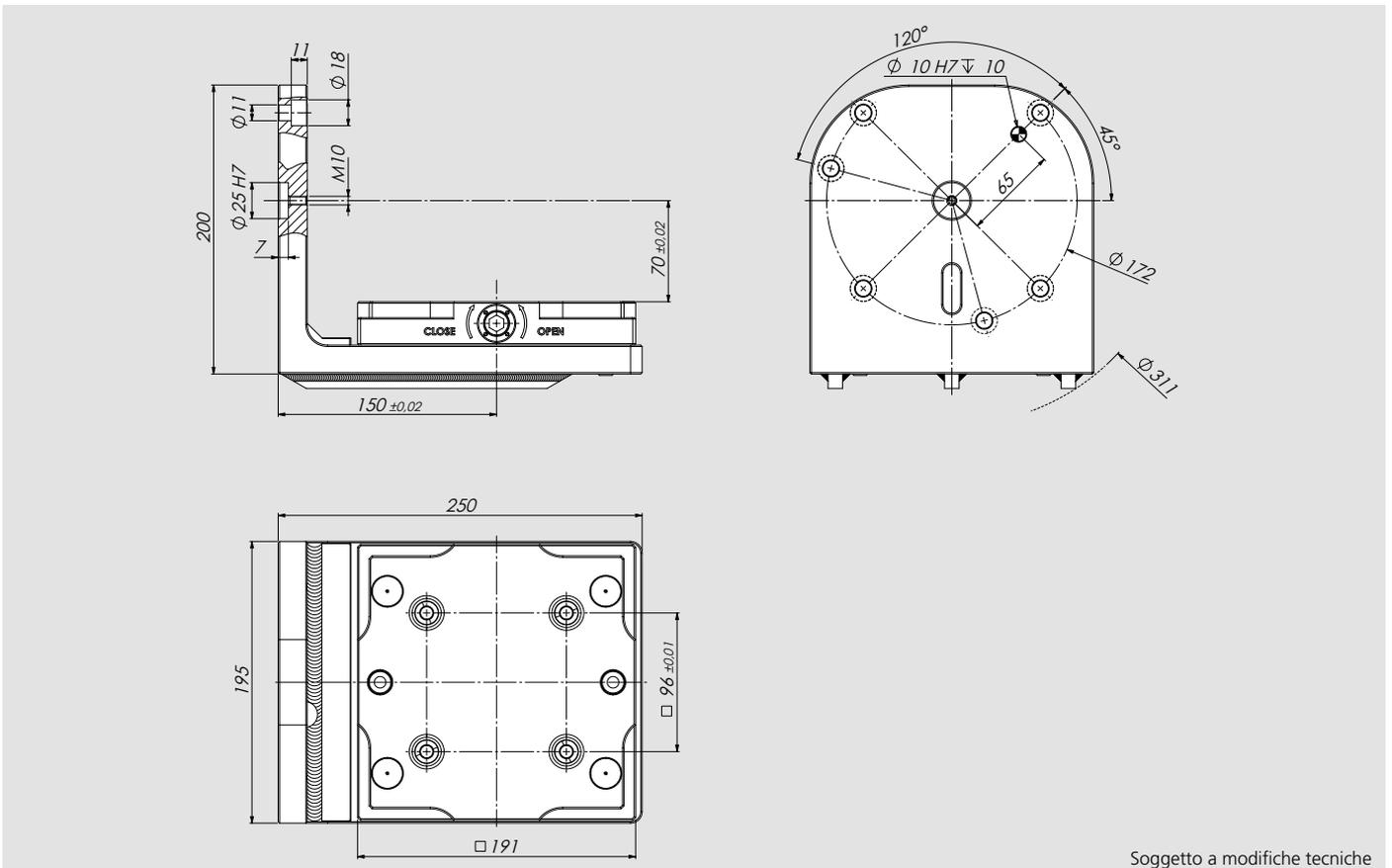
Soggetto a modifiche tecniche

Codice	Peso (Kg)
46242038	6

### Esempio di impiego

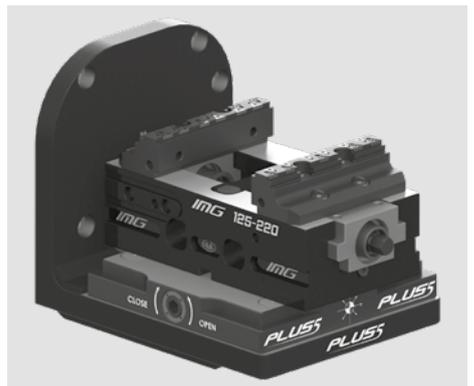
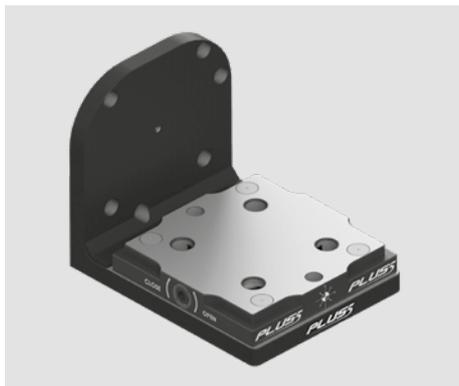


Plus 5 - 96 non incluso



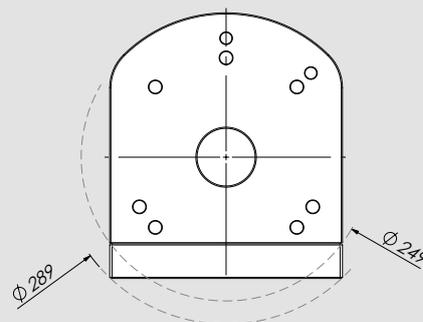
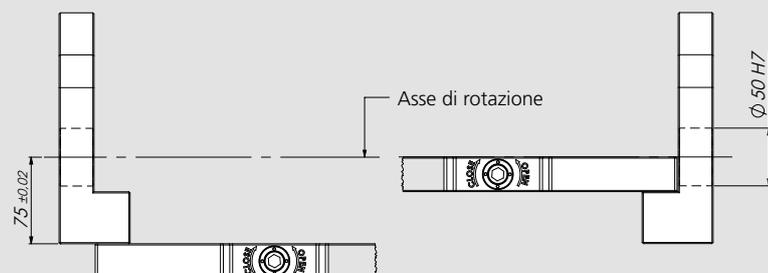
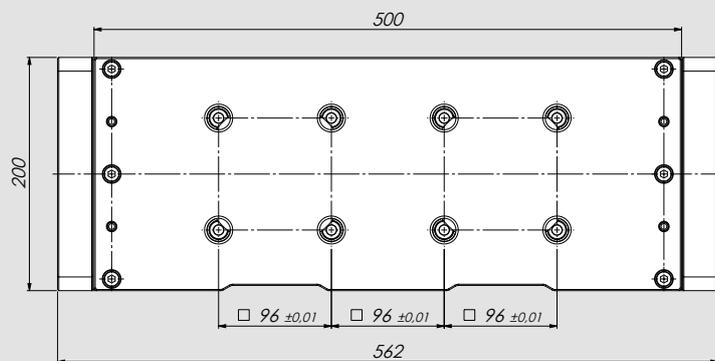
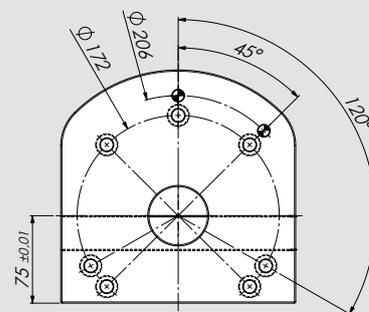
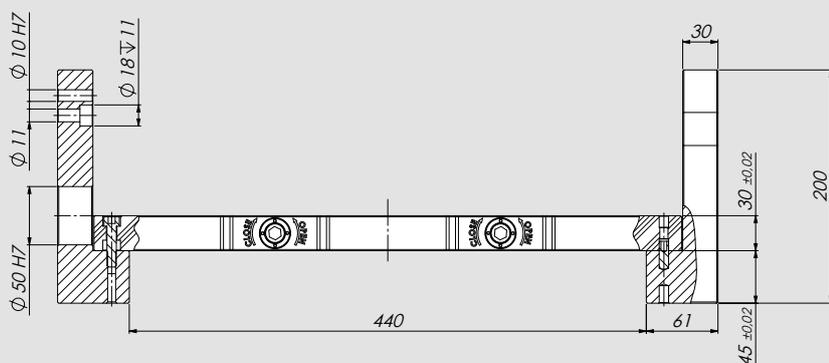
Codice	Peso (Kg)
46242039	14

Esempio di impiego





- Completo di:
  - chiave 10mm
  - n. 2 piastrine di sicurezza (cod. 46248215)
- Perni non inclusi

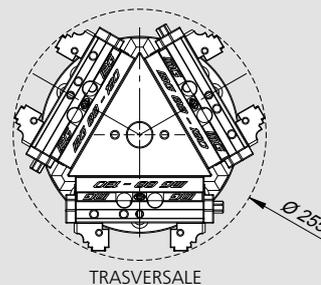
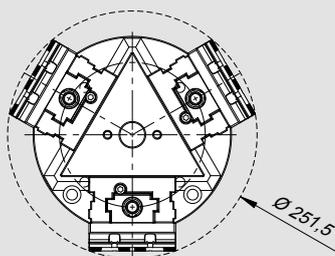
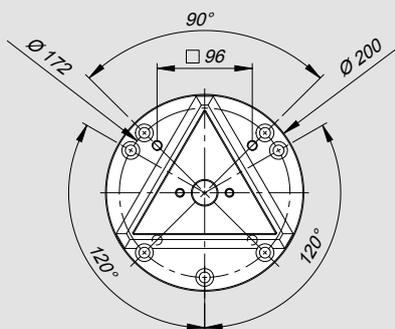
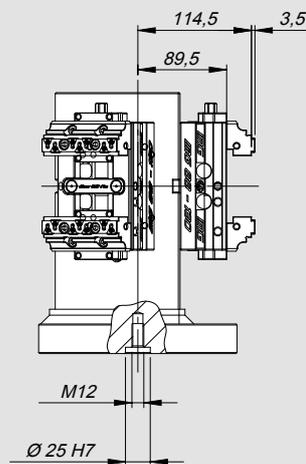
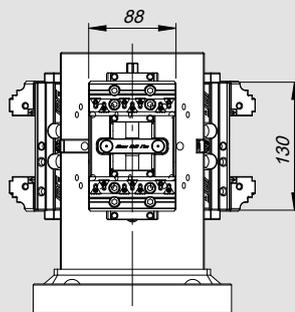
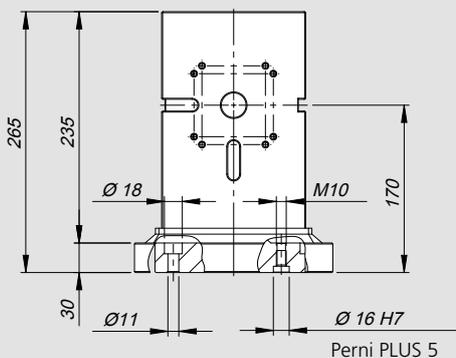
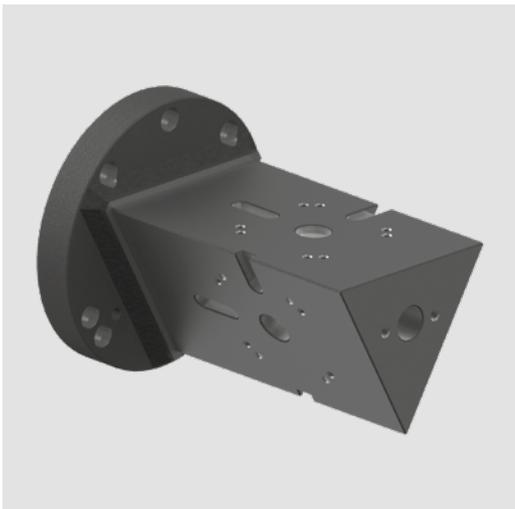


Soggetto a modifiche tecniche

Codice  
46248320

Peso (Kg)  
43

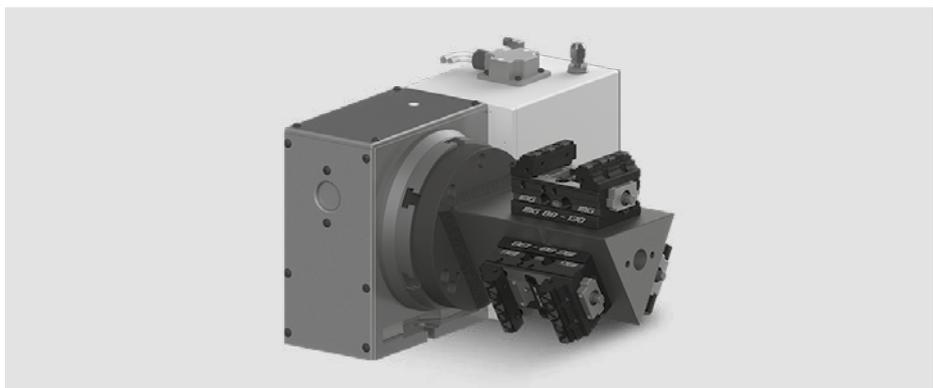
Morse non incluse



Soggetto a modifiche tecniche

Codice	Peso (Kg)
50191460	25

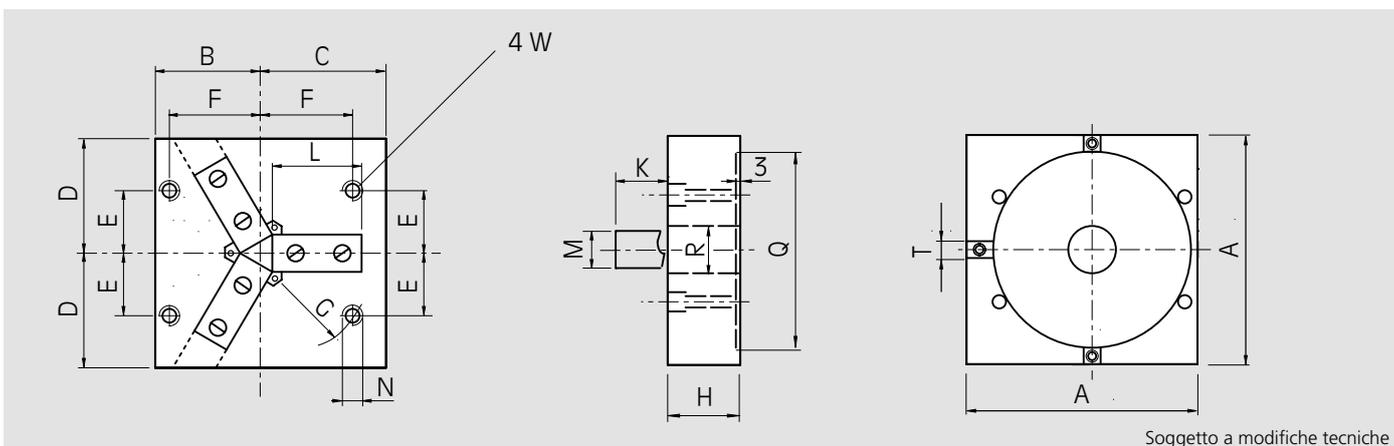
Esempio di impiego







Autocentrante statico YC, caratterizzato da un'innovativa funzionalità che consente la trasformazione in una morsa estremamente compatta e robusta.



Soggetto a modifiche tecniche

Codice	Modello	A mm	B mm	C mm	D mm	H mm	R mm	Q mm	N mm	G mm	T mm	E mm	F mm	W
51 99 13 33	Y - 120	120	55	65	60	43	Ø 25	--	10	55	12	18	49	M 5
51 99 13 34	Y - 160	160	70	90	80	65	Ø 34	Ø 119	12	73,5	18	21	63	M 6
51 99 13 35	Y - 200	200	90	110	100	65	Ø 44	Ø 170	12	99	18	45	80	M 8
51 99 13 36	Y - 300	300	140	160	150	65	Ø 104	Ø 270	12	147	18	80	120	M 10

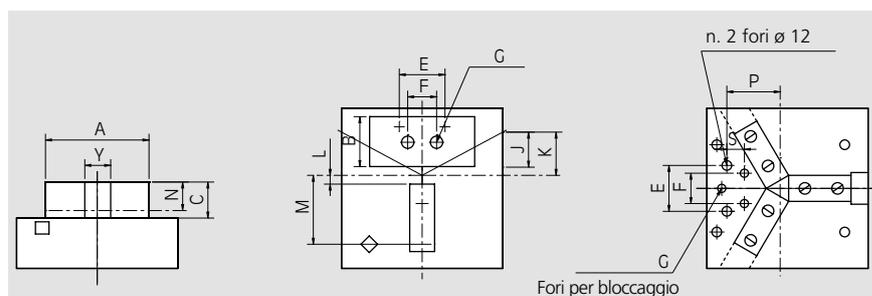
Specifiche

Dim. ganascia tenera

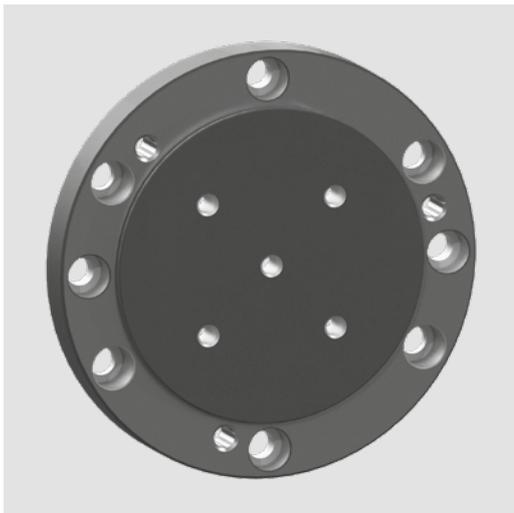
Modello	corsa ganascia mm	coppia consentita N-m	forza bloccaggio kN	campo di presa mm	peso Kg
Y - 120	7	50	11	8 ~ 90	4,5
Y - 160	10	100	22	15 ~ 126	12
Y - 200	15	130	33	20 ~ 173	19
Y - 300	25	150	38	40 ~ 266	40

Modello	K mm	L mm	M mm	Codice
Y - 120	30	60	19	51991366
Y - 160	41	70	30	51991367
Y - 200	43	85	30	51991368
Y - 300	54	115	45	51991369

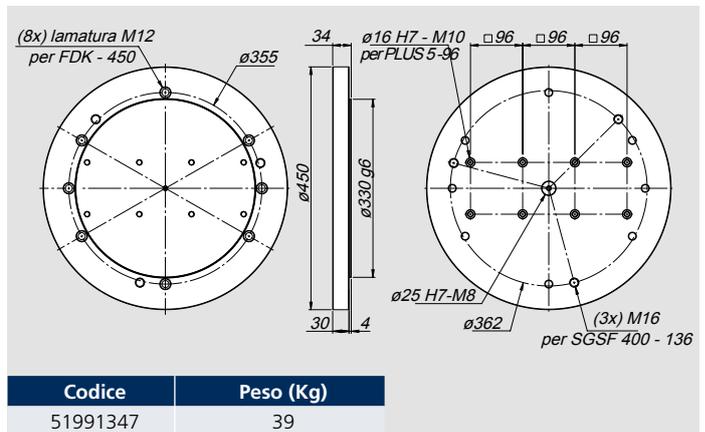
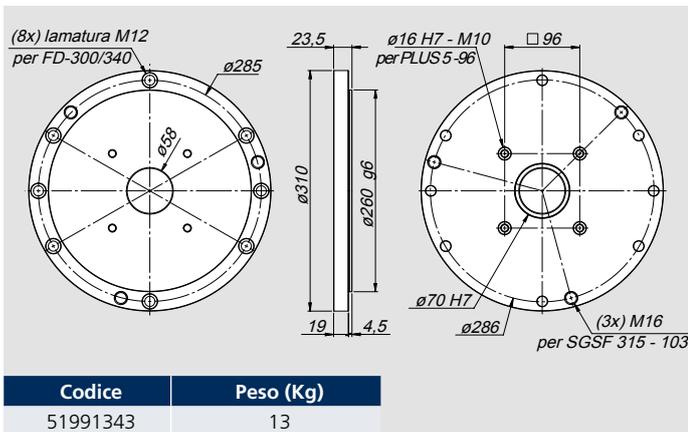
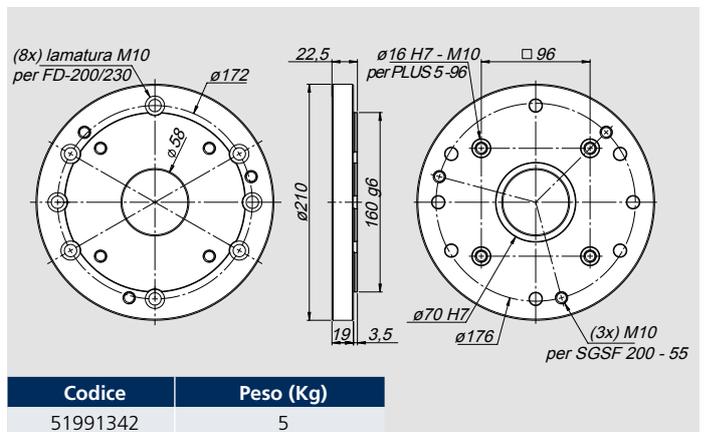
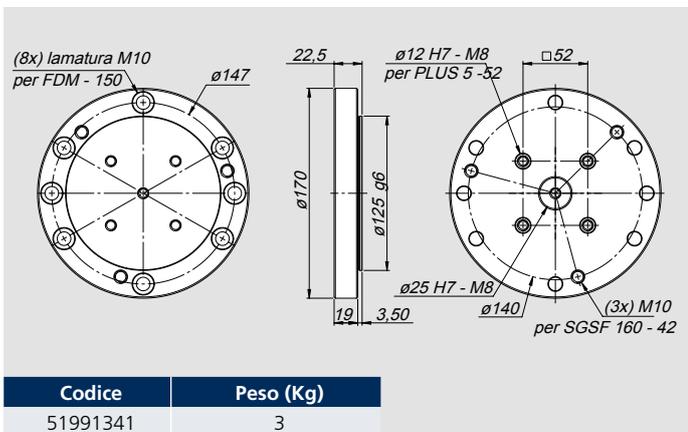
Ganascia fissa



Codice	Modello	A mm	B mm	C mm	E mm	F mm	G mm	N mm	Y mm	S mm	P mm	min J mm	max K mm	min L mm	max M mm
51 99 13 37	Y - 120	80	45	30	60	30	2-M6	16	18	10	45	12	45	6	55
51 99 13 38	Y - 160	100	45	41	70	30	2-M8	18	30	10	53	20	40	10	65
51 99 13 39	Y - 200	130	62	43	60	40	2-M10	20	30	20	65	15	50	10	70
51 99 13 40	Y - 300	160	115	54	60	120	3-M12	35	45	20	105	15	100	13	120



Mandrino non incluso

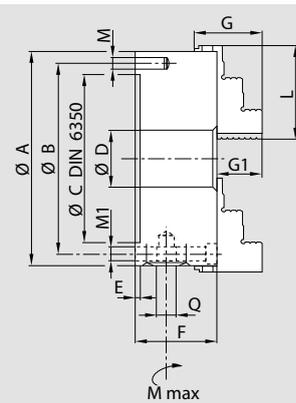
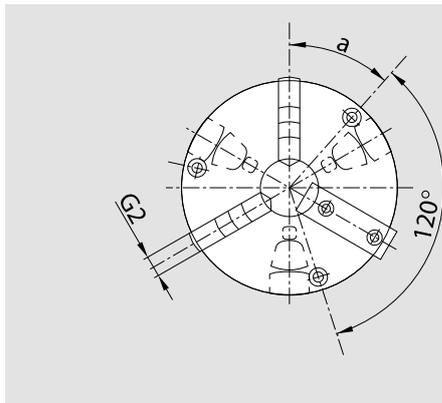


### Esempio di impiego



**MANDRINO MANUALE SGSF (con foratura anteriore)**

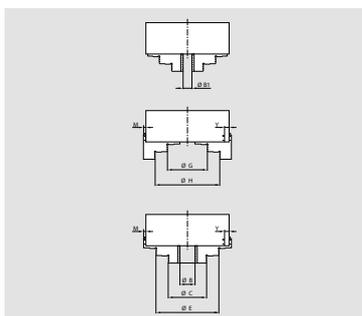
Autocentrante SMW a comando manuale a guida semplice con corpo in acciaio



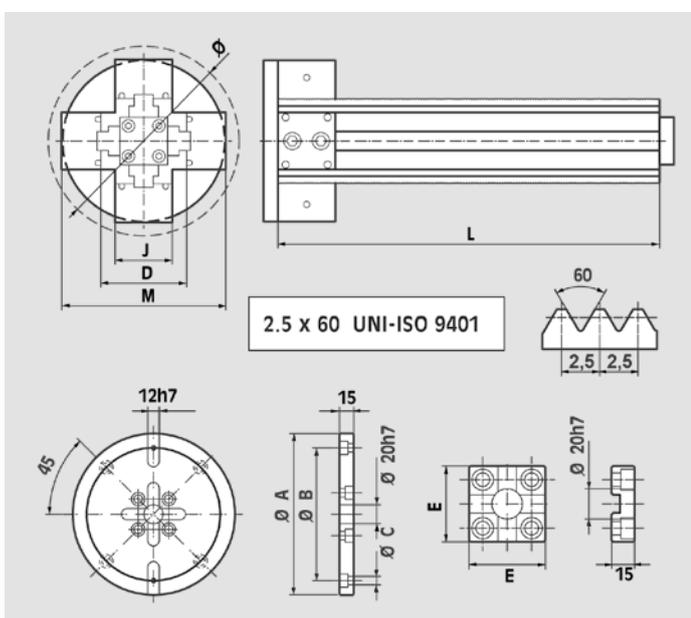
Codice		33031216	33031220	33031231	33031240
Mandrino		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Attacco DIN 6350	Dim	FL 125	FL 160	FL 260	FL 330
	A mm	160	200	315	400
H6	B mm	140	176	286	362
	C mm	125	160	260	330
	D mm	42	55	103	136
	E mm	4	4	5	5
	F mm	68	78	96,2	108
	G mm	53	54	73	92
	G1 mm	32	29	41	55
	G2 mm	20	25	32	36
Foratura anteriore	L mm	70	85	125	145
	M1 mm	3xM10	3xM10	3xM16	3xM16
	Q mm	11	11	14	17
	a °	102°	42°	42°	45°
Massima velocità	rpm	4500	4000	2800	2000
Coppia M max	Nm	120	160	200	280
Massa con griffe	Kg	11,2	20	50	90
Momento d'inerzia	Kgm <sup>2</sup>	0,03	0,10	0,60	1,80

Mandrino - Chuck		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Diametri di bloccaggio consigliati alla max forza di bloccaggio					
Griffe monoblocco	B mm	19-56	22-75	58-115	77-162
	G mm	64-101	78-130	129-199	169-254
	H mm	113-150	146-198	226-296	295-380
	C mm	57-94	68-121	128-184	149-234
	E mm	109-146	136-189	212-281	275-360
	Y mm	0	4	9	16
	M mm	18	22	25	26
Diametro di bloccaggio minimo con forza di bloccaggio ridotta del 40%					
N° spire della corona		3	4	10	10
N° spire della corona in presa per bloccaggio di sicurezza		2	3	5	5

- Per massime velocità e masime chiusure, tutte le spire devono essere in presa
- Per controllo spire in presa verso l'esterno quota (M) verso l'interno quota (Y)
- Per funzionamenti fuori di questi limiti  $\pm 16$  mm sul diametro, ridurre la chiusura del 25%
- ATTENZIONE: I DIAMETRI DI BLOCCAGGIO SONO STATI CALCOLATI CON LE SPIRE IN PRESA SEGNATE IN TABELLA

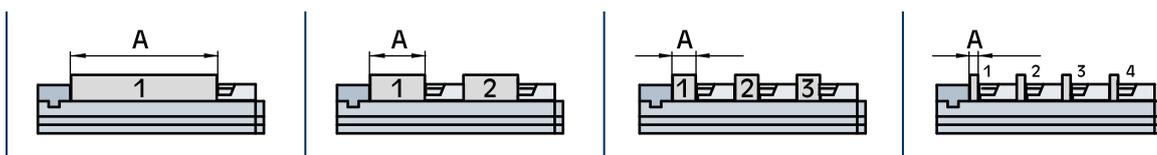


Mandrino	SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Accessori	Codici			
Set-3 GRC	03651630	03652030	03653130	03654030
Set-3 Bloccchetti teneri	03601630	03602030	03603130	03604030
Set-3 Griffe monoblocco Dx	03551630	03552030	03553130	03554030
Set-3 Griffe monoblocco Sx	03561630	03562030	03563130	03564030
Set-3 Griffe reversibili	03631630	03632030	03633130	03634030
Chiave	02711700		02713100	02714000



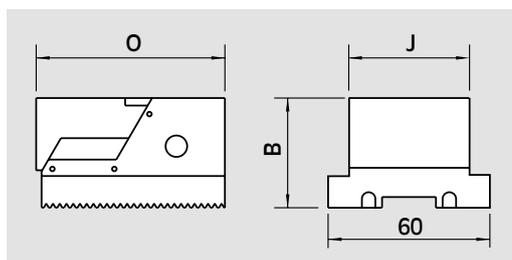
Tipo	Codice	J mm	D mm	M mm	L mm	Ø rot. mm	Ø A mm	Ø B mm	Ø C mm	E mm	Peso Kg
CV-CN 60-400	77584111				400						19
CV-CN 60-500	77584112	60	90	170	500	200	170	140	9	50	23
CV-CN 60-630	77584113				630						29
CV-CN 90-400	77584211				400						34
CV-CN 90-500	77584212	90	115	205	500	230	210	180	11	70	41
CV-CN 90-630	77584213				630						50

### Capacità di serraggio



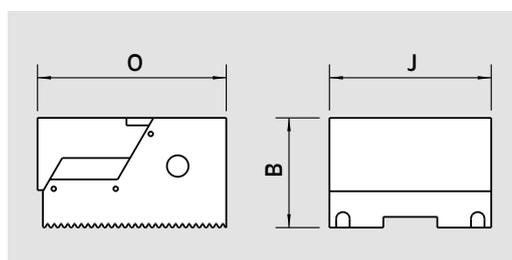
	A max. mm			
CIVI 2000 38/60-250	120		25	-
CIVI 2000 38/60-400	270		100	43
CIVI 2000 38/60-500	370		150	76
CIVI 2000 38/60-630	500		215	120
CIVI 2000 90-250	99		-	-
CIVI 2000 90-400	249		84	29
CIVI 2000 90-500	349		134	62
CIVI 2000 90-630	479		199	106

## Set supporto mobile completo J38 liscio



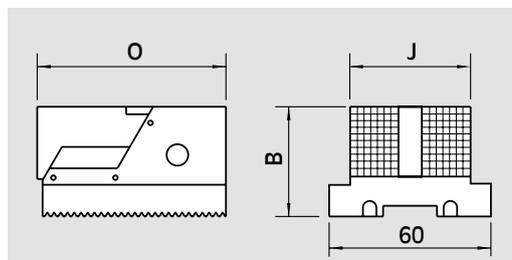
Modello	Codice	B mm	J mm	O mm	Peso kg
CV 38	77584063 *	40	38	70	1

## Set supporto mobile completo J60-J90 liscio



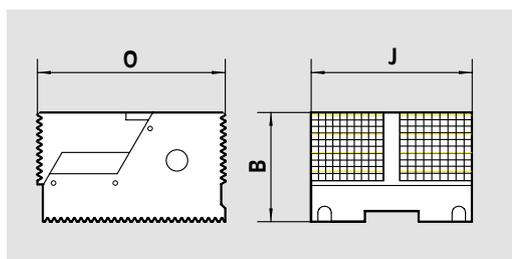
Modello	Codice	B mm	J mm	O mm	Peso kg
CV 60	77584163 *	40	60	70	1.4
CV 90	77584263 *	45	90	80	2.9

## Set supporto mobile completo J38 con dentatura (per pezzi grezzi)



Modello	Codice	B mm	J mm	O mm	Peso kg
CV 38	77584068 *	40	38	70	1

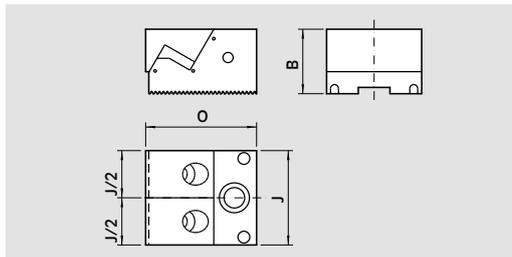
## Set supporto mobile completo J 60-J90 con dentatura (per pezzi grezzi)



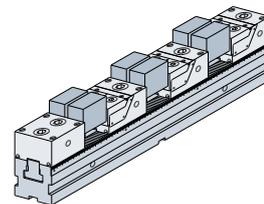
Modello	Codice	B mm	J mm	O mm	Peso kg
CV 60	77584168 *	40	60	70	1.4
CV 90	77584268 *	45	90	80	2.9

\* Codici validi solo per montaggio su colonna CIVI

### Set supporto mobile a doppia ganascia

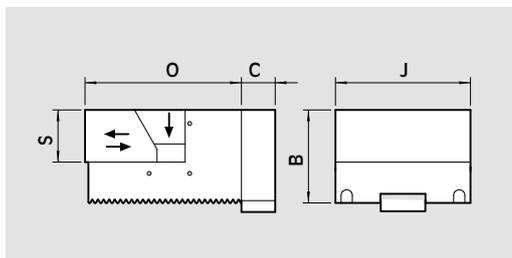


Esempio di utilizzo



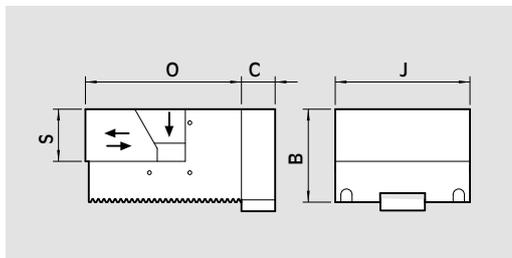
Modello	Codice	B mm	J mm	O mm	Peso kg
CV 60	77584164 *	40	60	70	1.5
CV 90	77584264 *	45	90	80	3

### Set supporto mobile con ganasce tenere in alluminio



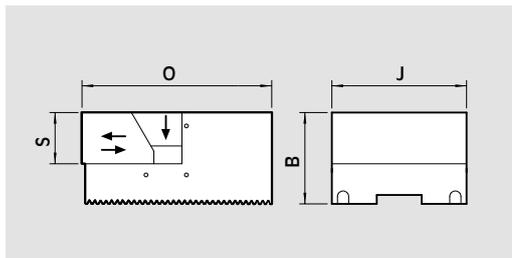
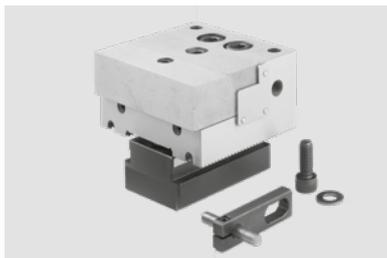
Modello	Codice	B mm	C mm	J mm	O mm	S mm	Peso kg
CV 60	77584165 *	40	15	60	69.5	23	1.2
CV 90	77584265 *	45	20	90	80	25	2.7

### Set supporto mobile con ganasce tenere in acciaio



Modello	Codice	B mm	C mm	J mm	O mm	S mm	Peso kg
CV 60	77584166 *	40	15	60	69.5	23	1.4
CV 90	77584266 *	45	20	90	80	25	3

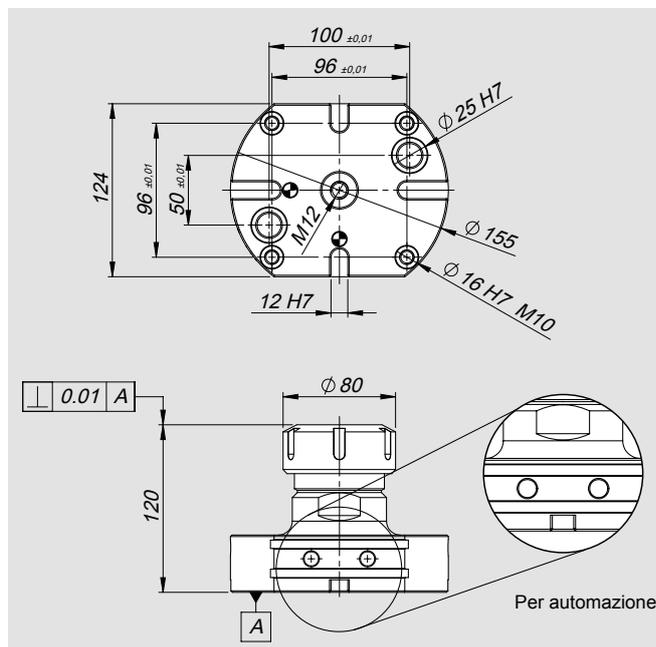
### Set supporto mobile con ganasca in acciaio temprato



Modello	Codice	B mm	J mm	O mm	S mm	Peso kg
CV 60	77584167 *	40	60	69.5	23	1.4
CV 90	77584267 *	45	90	80	25	3

\* Codici validi solo per montaggio su colonna CIVI

## MANDRINO PORTA PINZA ER50



Codice

46233500

## Esempio di impiego



