

4-Axis Workholding

Clamping systems for rotary tables



APS 140

- Flange

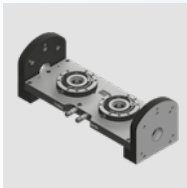
Page 16.4



APS 140

- Pin

Page 16.5



APS 140

- Multiple trunnion
- Smooth trunnion
- Grid trunnion

Page 16.6



PLUS 5 INDEX

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

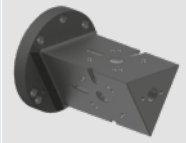
Page 16.9



PLUS 5

- Multiple trunnion Plus 5 - 52
- Trunnion Plus 5 - 96
- Multiple trunnion Plus 5 - 96

Page 16.12



IMG

- Triangular tombstone for IMG 88-130

Page 16.15



Y CHUCK

- Trunnion for Y CHUCK
- Static chuck
- Flanges for chuck

Page 16.16



CHUCKS

- SGSF Manual chuck

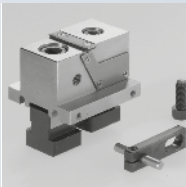
Page 16.19



CIVI-CN

- CIVI 2000 Column

Page 16.20



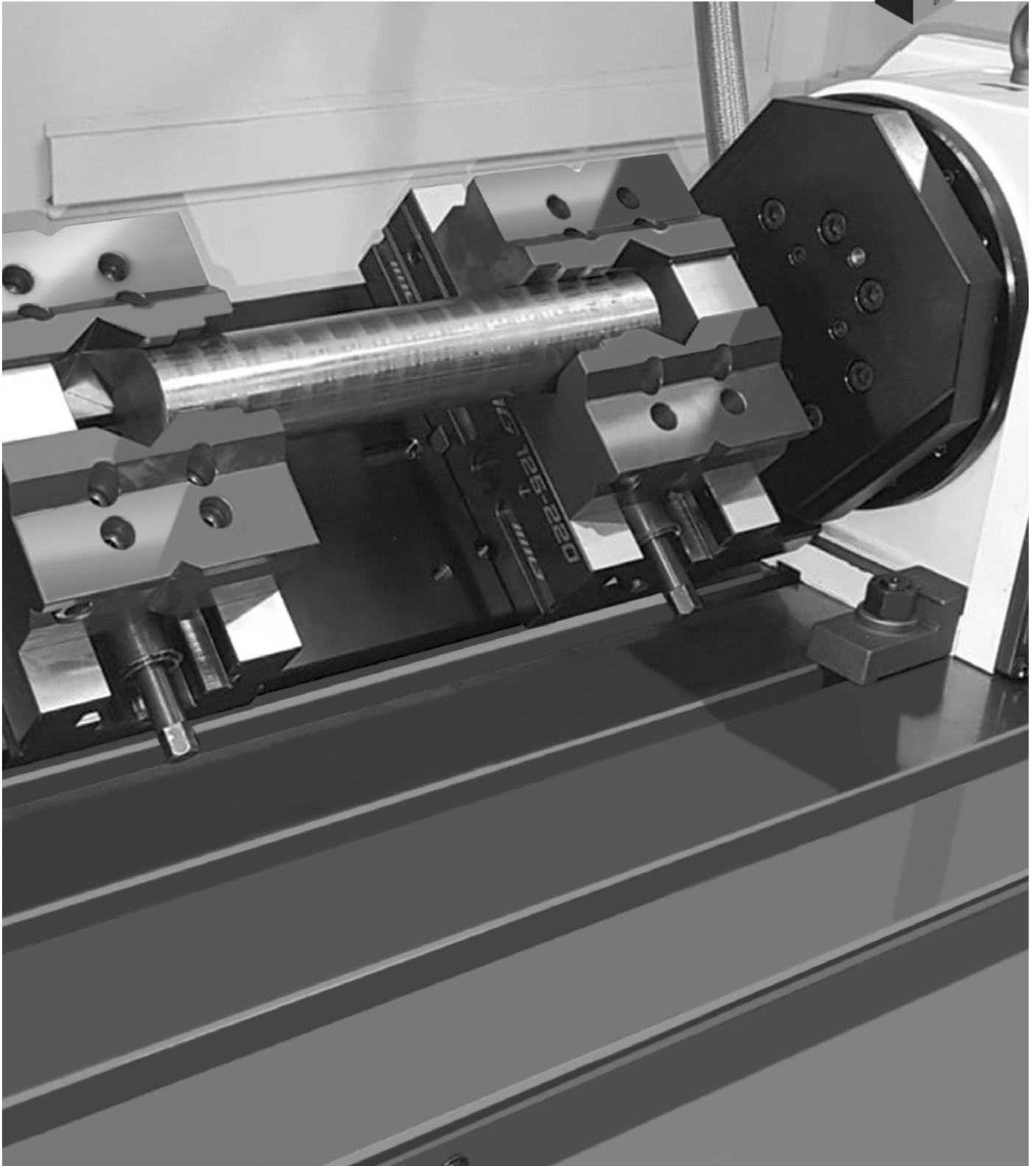
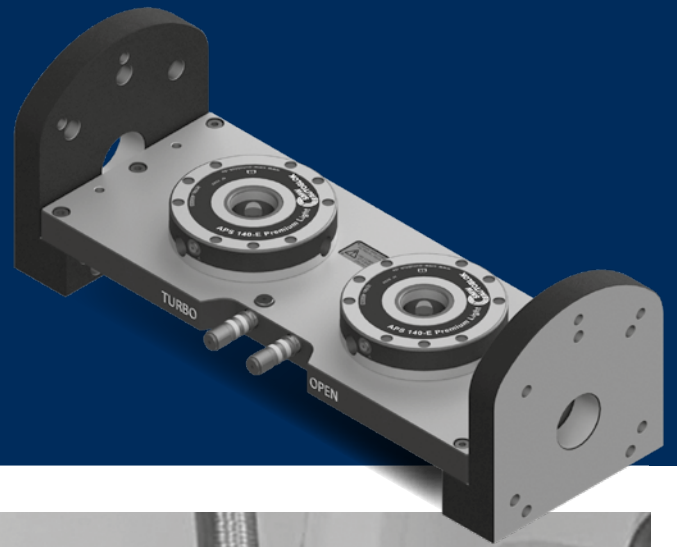
CIVI 2000

- Multiple clamping system

Page 16.21

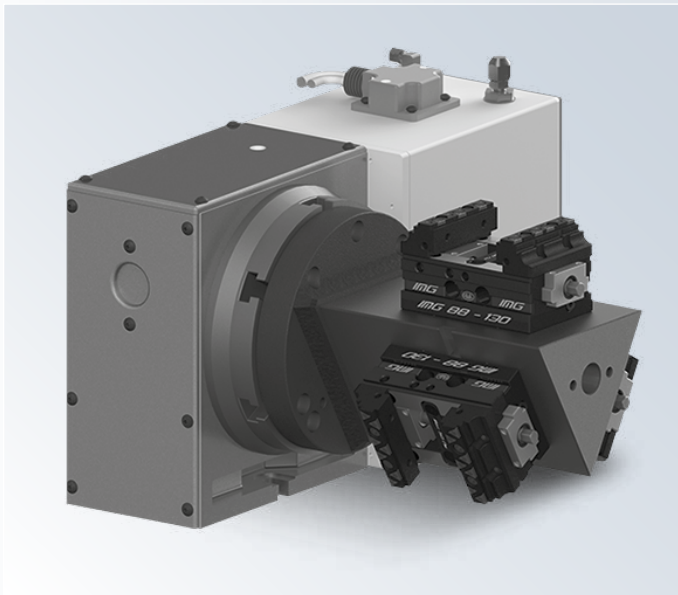
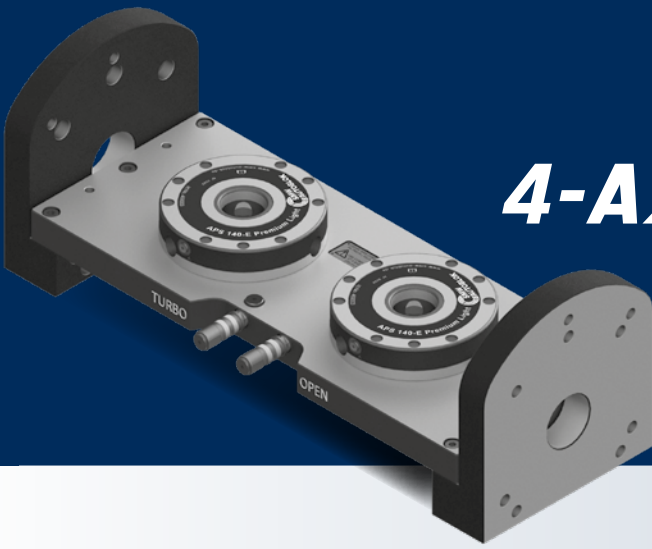
4-AXIS Workholding

Clamping systems for rotary tables



4-Axis Workholding

Clamping systems for rotary tables

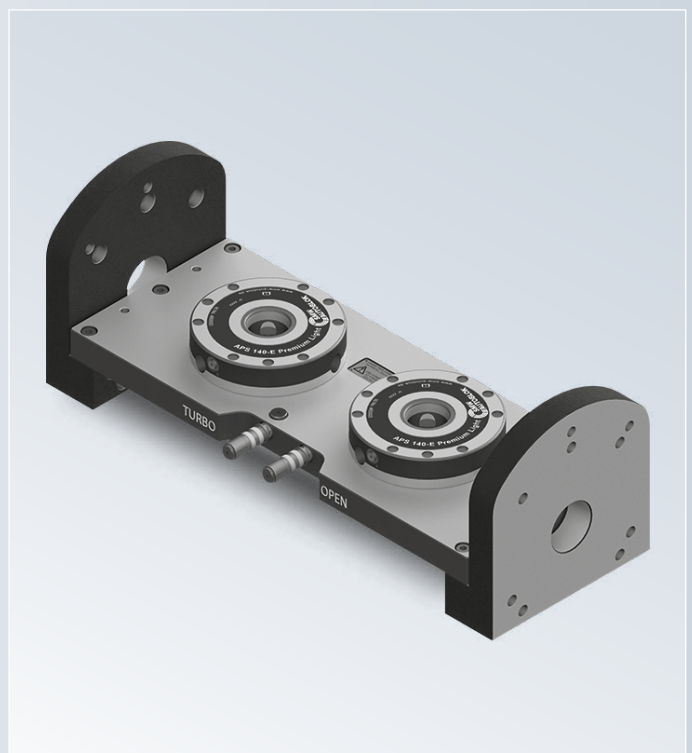
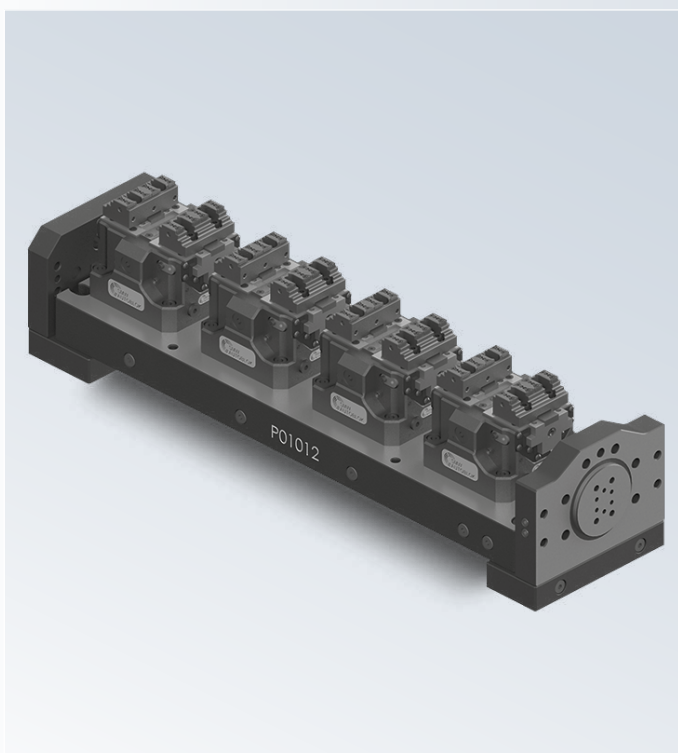


The growing demand for high-precision components in strategic sectors such as automotive, aerospace, medical, and electronics has led to widespread adoption of CNC rotary tables.

These devices play a crucial role in production, and thanks to their characteristics, rotary tables have become an essential tool for manufacturing complex, high-quality parts capable of meeting the most stringent technical specifications.

OML positions itself as an innovative and reliable technology partner, offering a comprehensive range of standard products and special solutions designed to optimize productivity and enhance the performance of these indexed rotary tables.

Through in-depth application expertise and a continuous commitment to innovation, OML supports companies in achieving higher levels of efficiency, precision, and competitiveness ■





Application

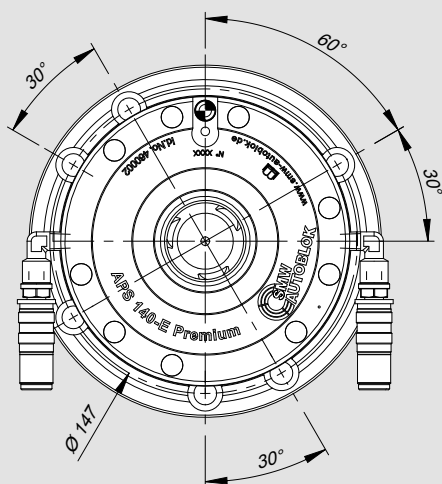
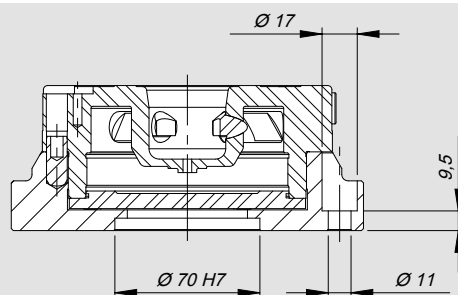
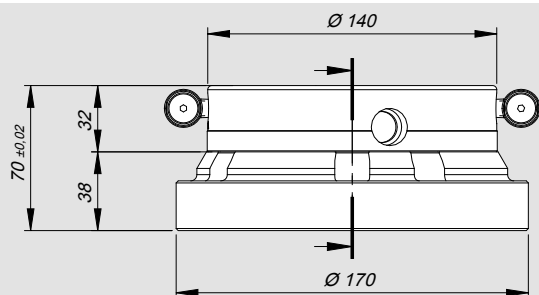
- Flange for CNC indexing tables with T-slots flange
- Included 1 modul APS 140 Premium

Technical features

- 3 clamping jaws
- Repeatability < 0.005 mm
- Turbo function to increase the clamping force (without Turbo 7.5 kN)
- Anti rotation key
- Air sensing
- Air cleaning
- Fully sealed (proofline)

Standard equipment

Flange with 1 APS 140 module for indexing tables and for orientation on indexing tables with T-slots



Subject to technical changes

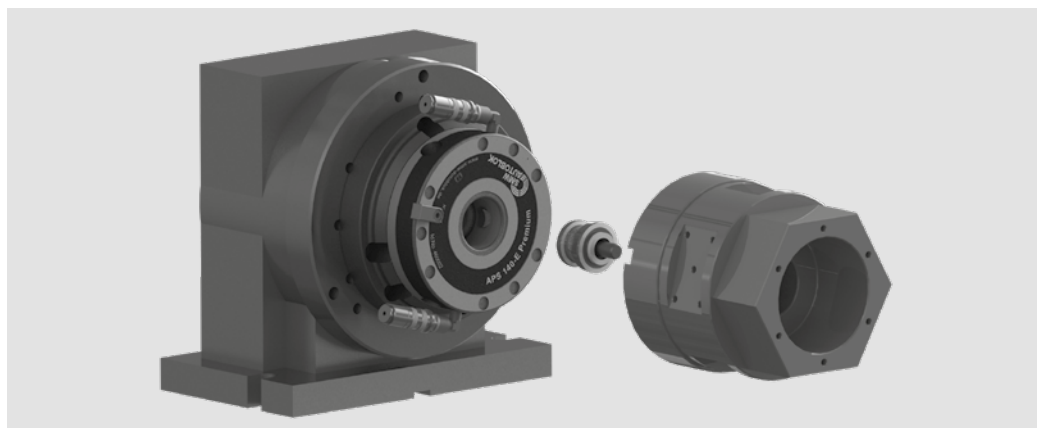
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Weight (Kg)

17

Application example





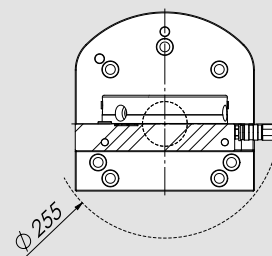
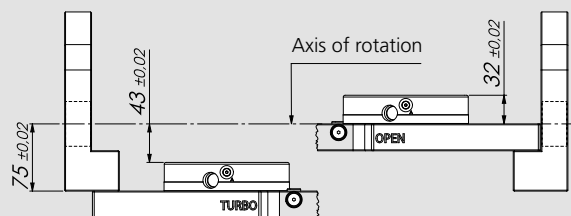
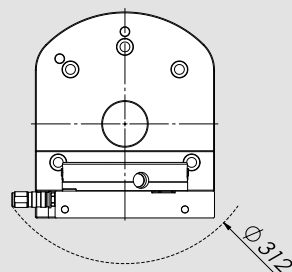
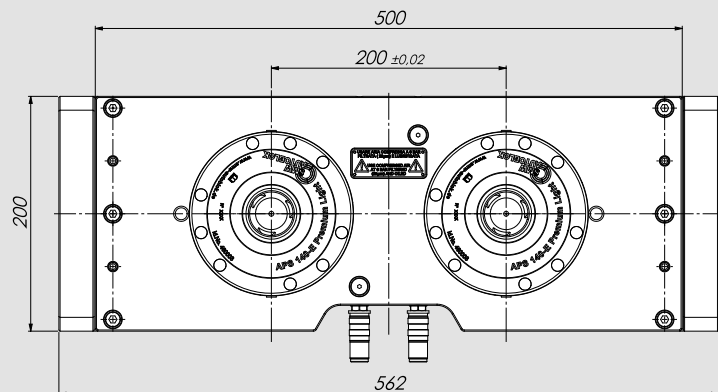
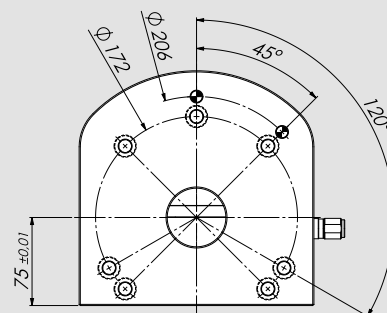
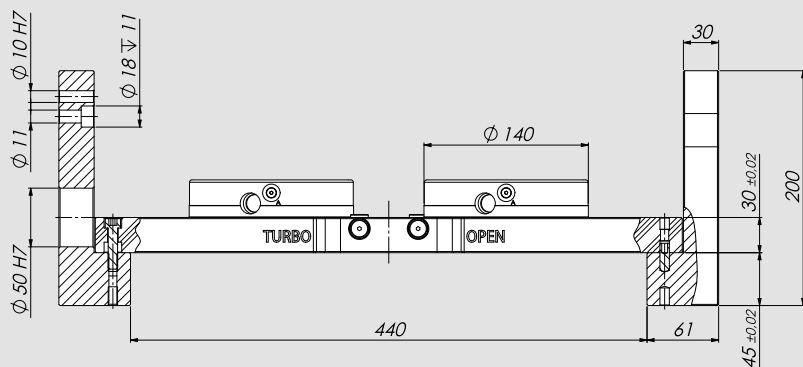
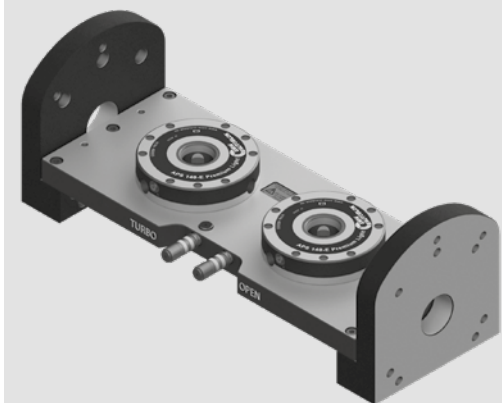
M16 thread



Key for single use



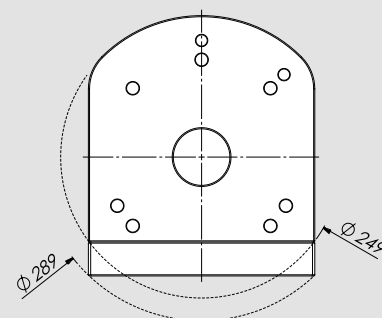
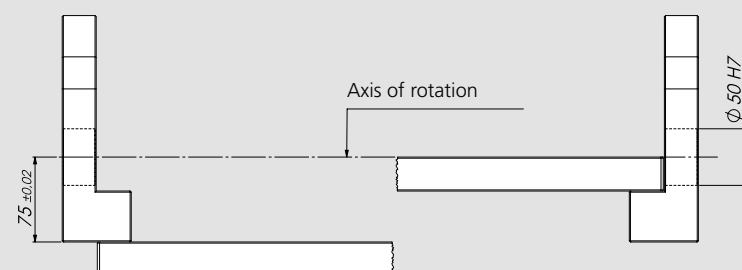
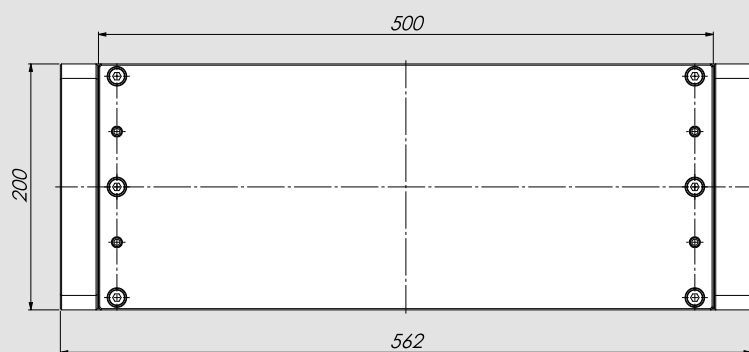
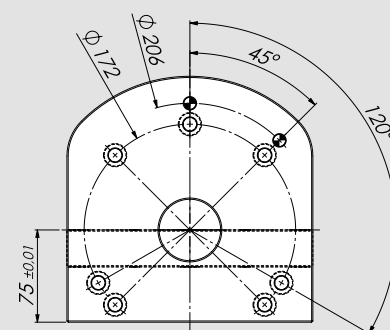
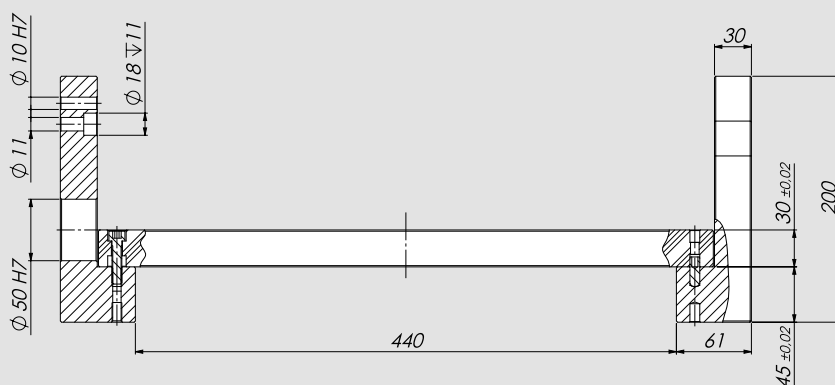
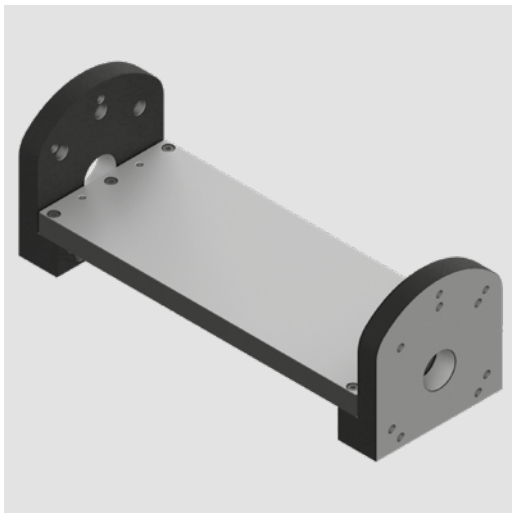
Complete with APS 140 premium Light



Subject to technical changes

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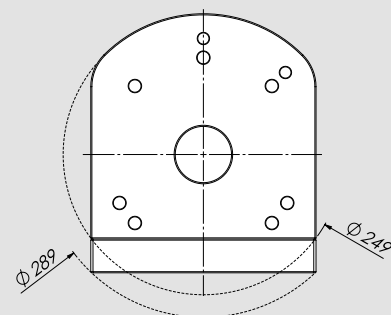
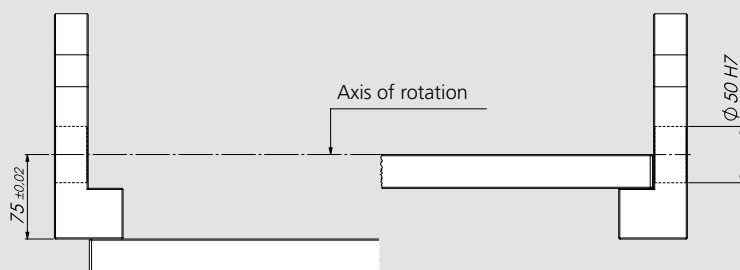
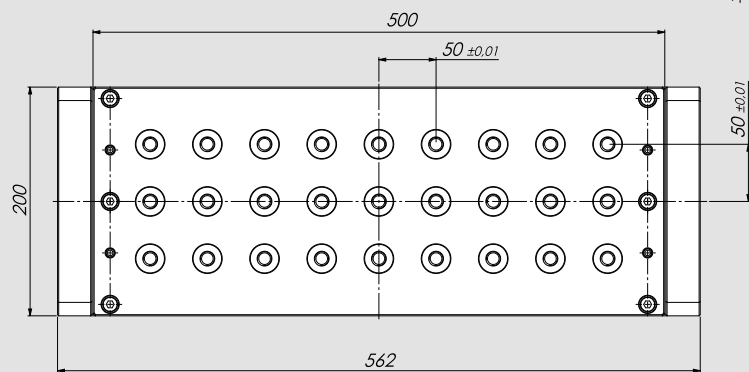
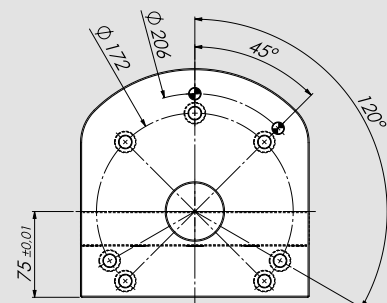
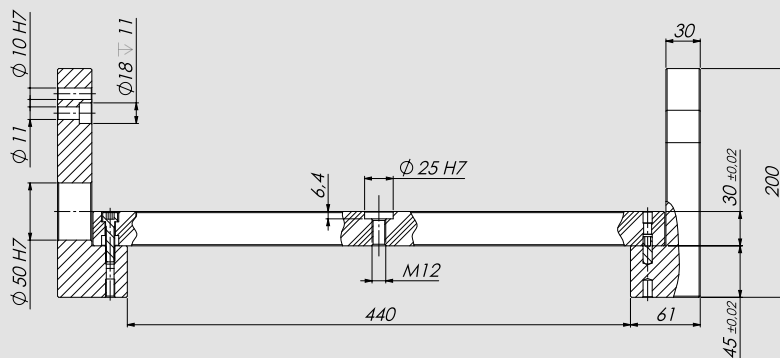
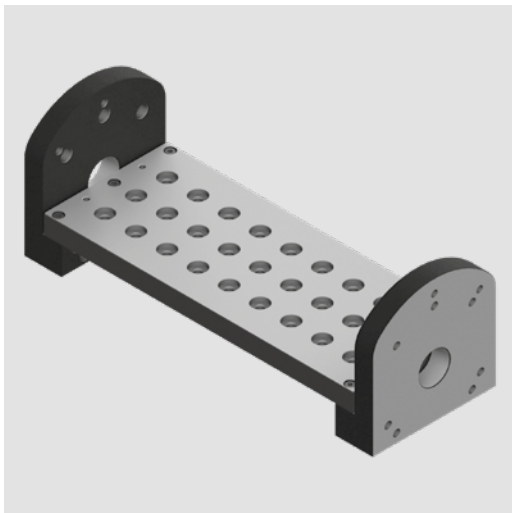
Weight (Kg)
46



Subject to technical changes

Id. No.
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Weight (Kg)
43



Subject to technical changes

Id. No.

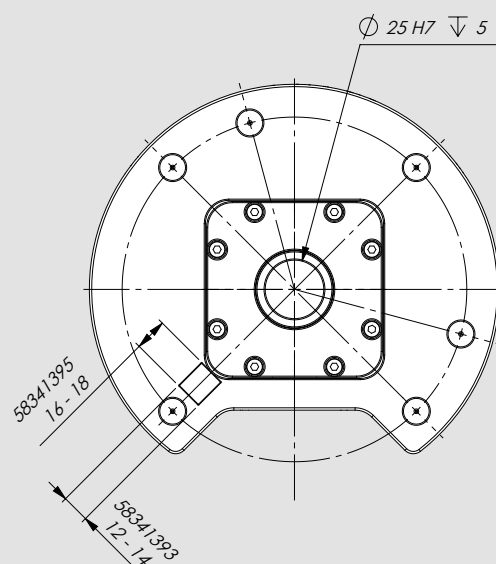
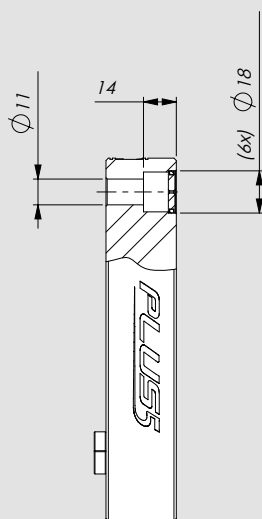
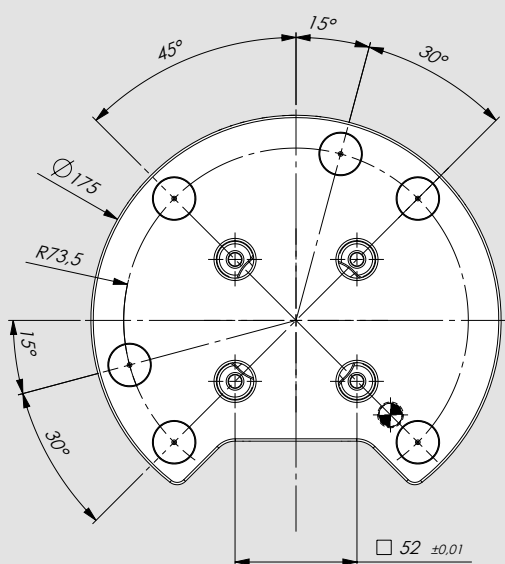
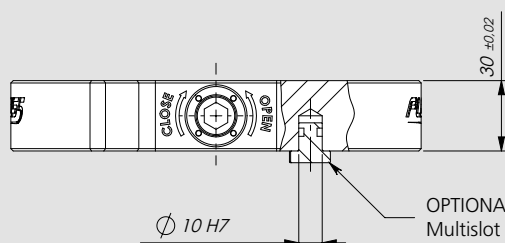
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Weight (Kg)

42

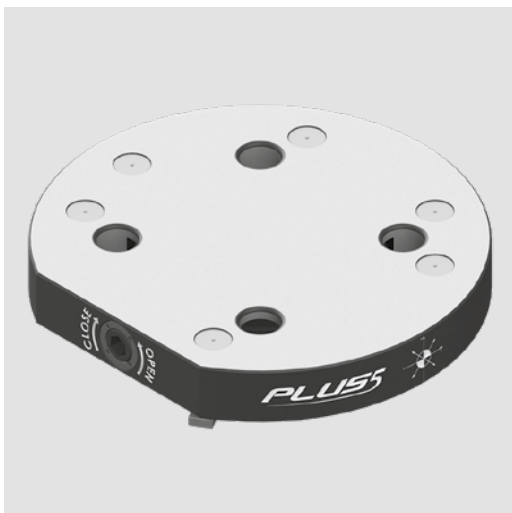


- Complete with wrench 10mm
- Pins not included

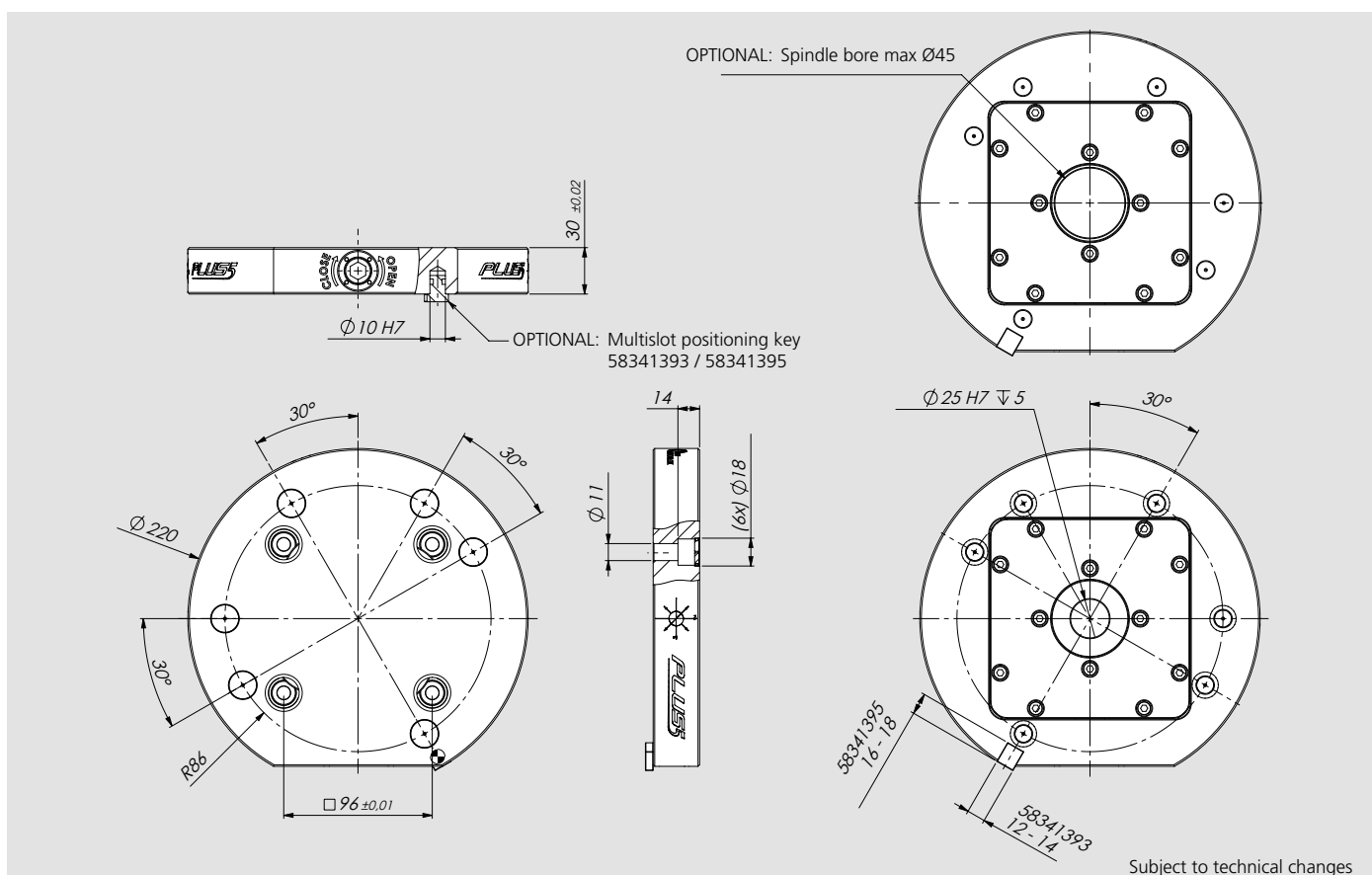


Subject to technical changes

Id. No.	Weight (Kg)
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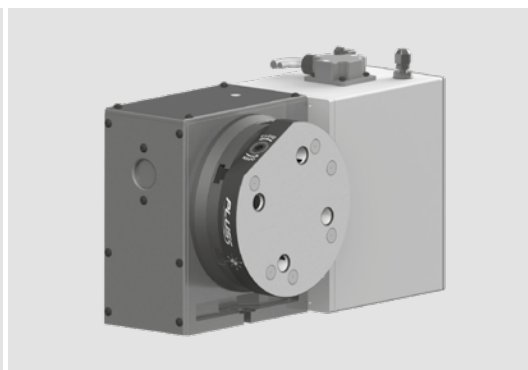
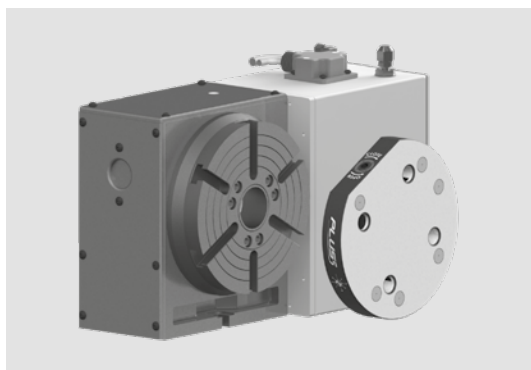


- Complete with wrench 10mm
- Pins not included



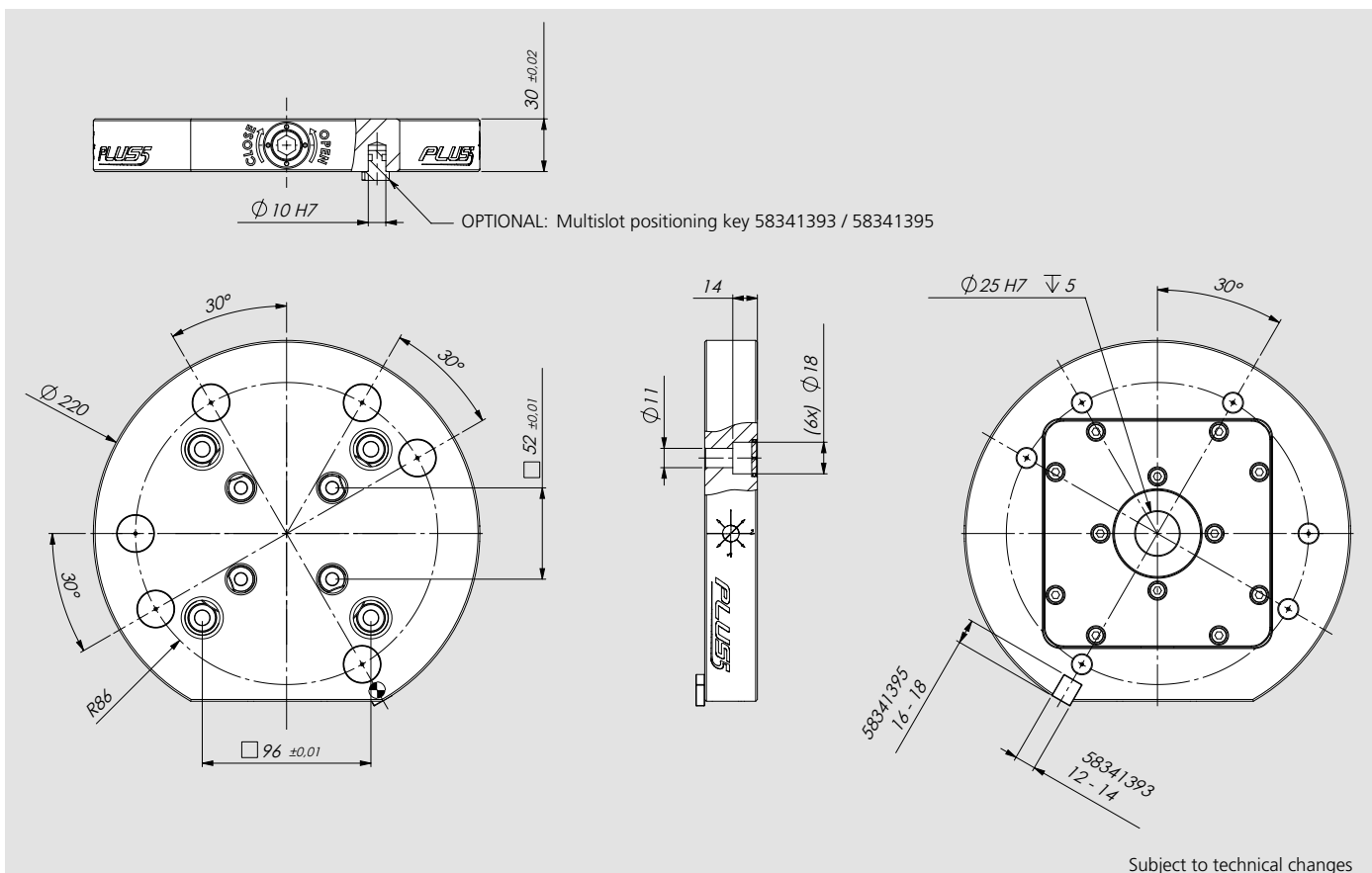
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Application example



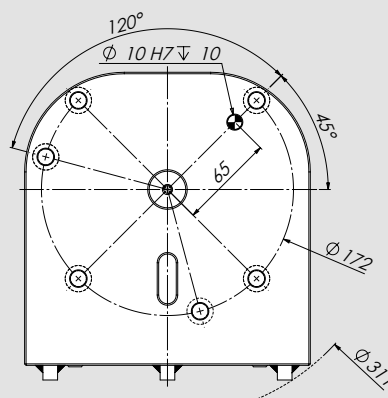
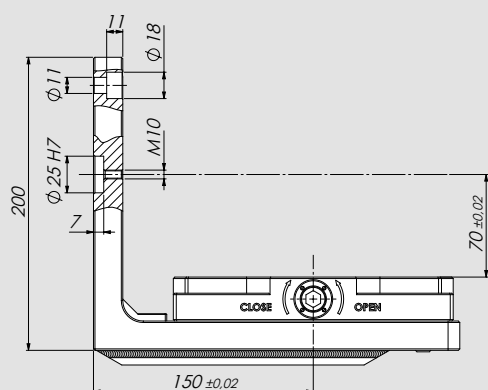


- Complete with:
 - wrench 10mm
 - protection caps (Plus 5 - 96)
- Pins not included



Id. No.	Weight (Kg)
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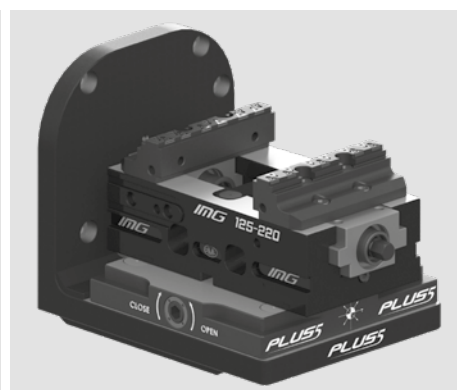
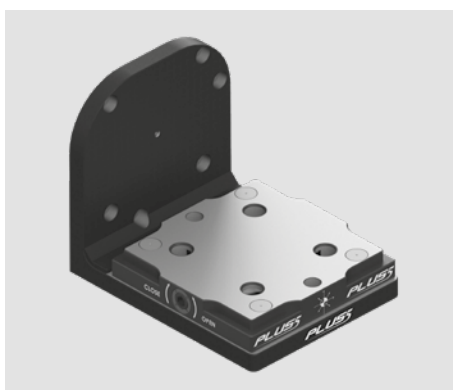
Plus 5 - 96 not included



Subject to technical changes

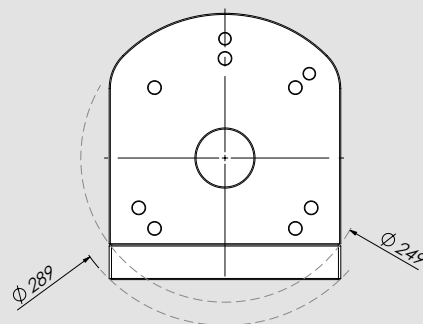
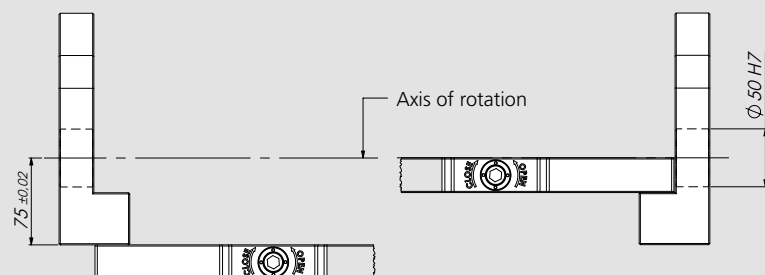
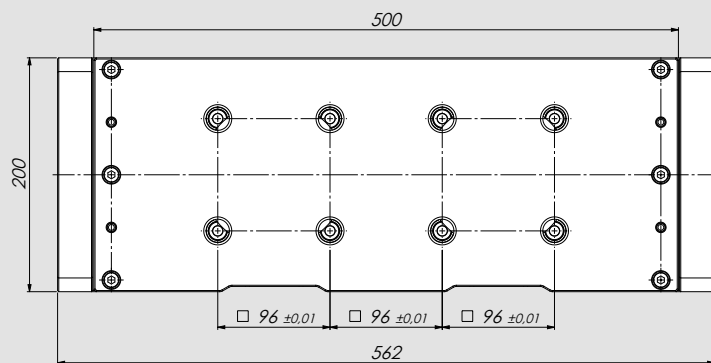
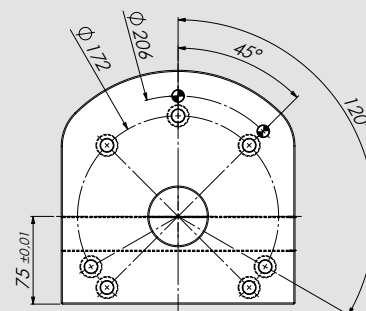
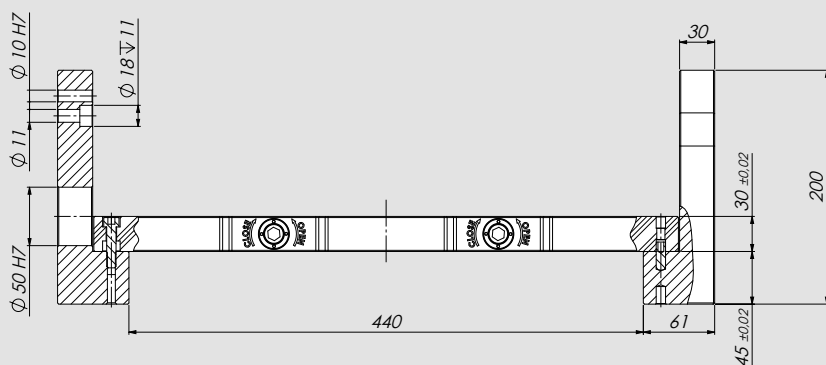
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Application example





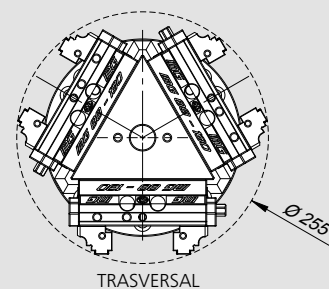
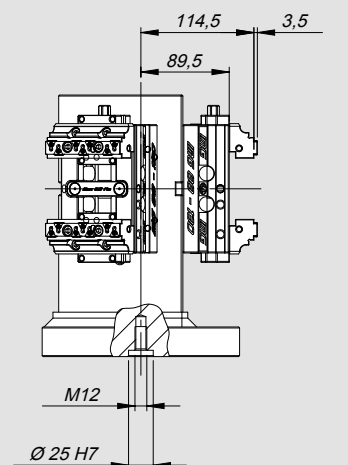
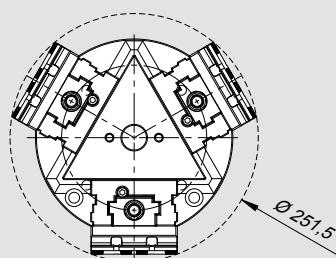
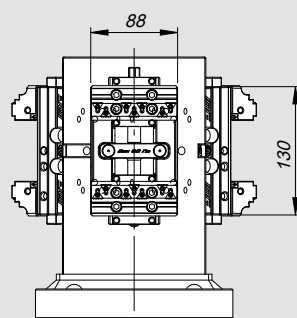
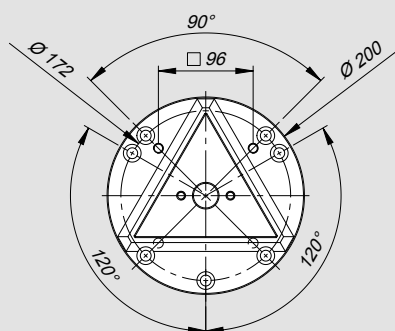
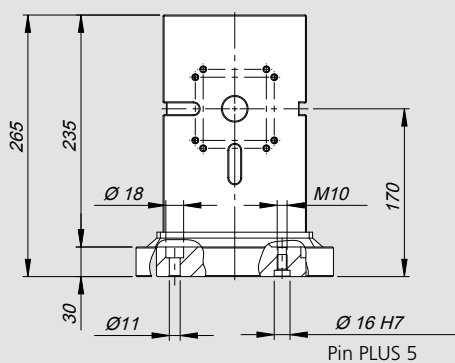
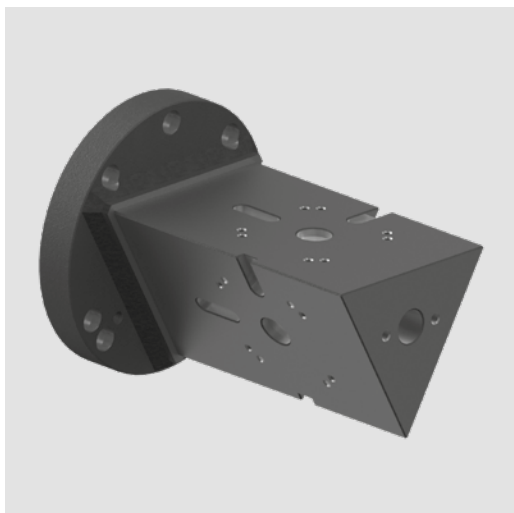
- Complete with:
 - wrench 10mm
 - n. 2 safety plates (Id. No. 46248215)
- Pins not included



Subject to technical changes

Id. No.	Weight (Kg)
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Vices not included

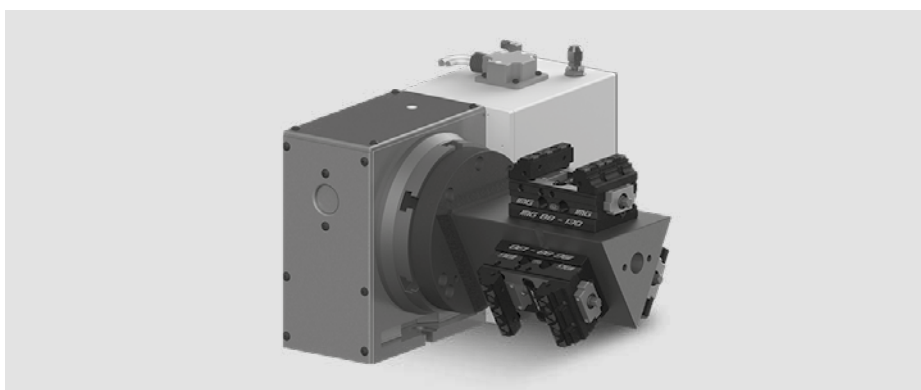


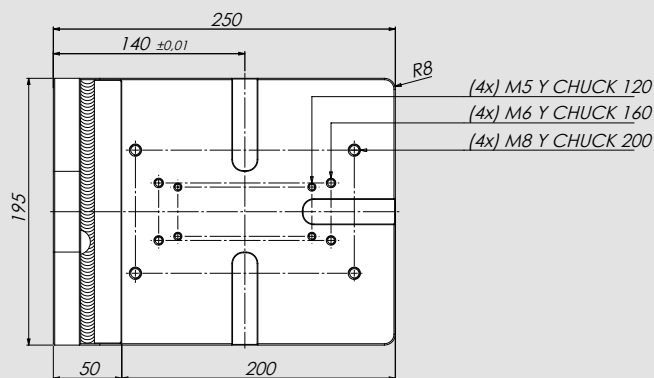
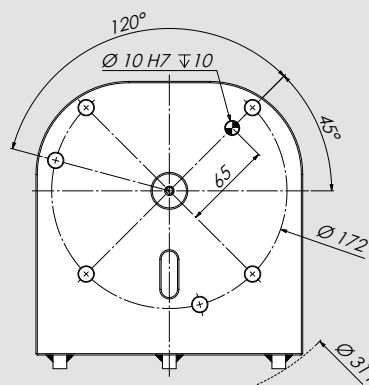
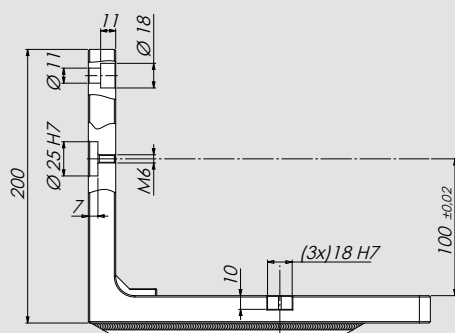
Subject to technical changes

Id. No.
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Weight (Kg)
25

Application example

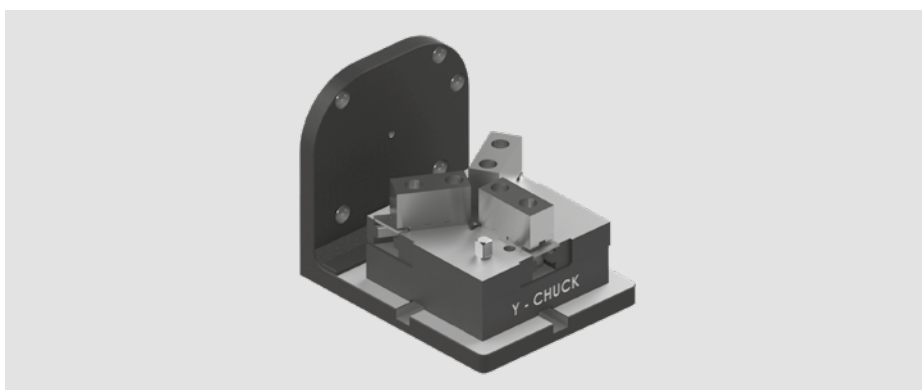




Subject to technical changes

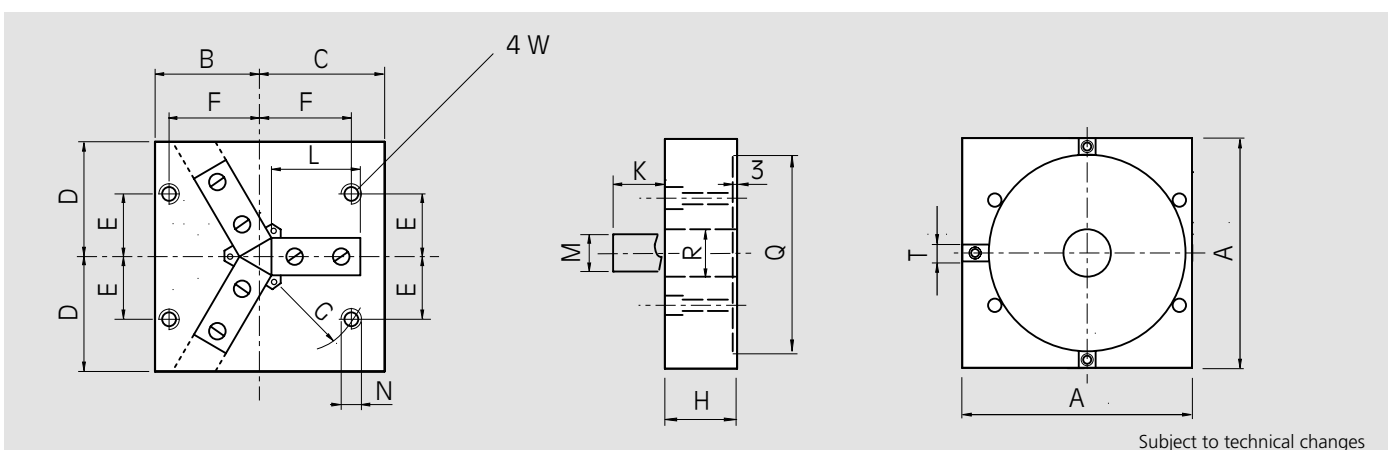
Id. No.	Weight (Kg)
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Application example





The YC static chuck features an innovative function that allows it to be transformed into an extremely compact and strong vise.



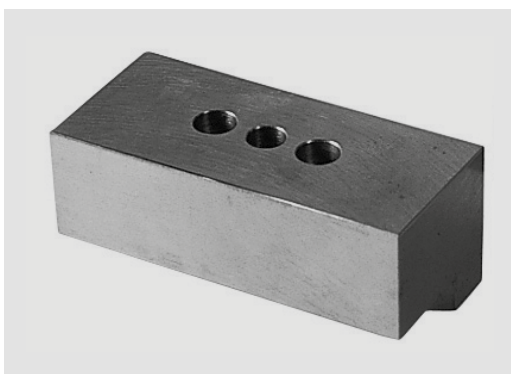
Id. No.	Type	A mm	B mm	C mm	D mm	H mm	R mm	Q mm	N mm	G mm	T mm	E mm	F mm	W
51 99 13 33	Y - 120	120	55	65	60	43	Ø 25	--	10	55	12	18	49	M 5
51 99 13 34	Y - 160	160	70	90	80	65	Ø 34	Ø 119	12	73,5	18	21	63	M 6
51 99 13 35	Y - 200	200	90	110	100	65	Ø 44	Ø 170	12	99	18	45	80	M 8
51 99 13 36	Y - 300	300	140	160	150	65	Ø 104	Ø 270	12	147	18	80	120	M 10

Specification

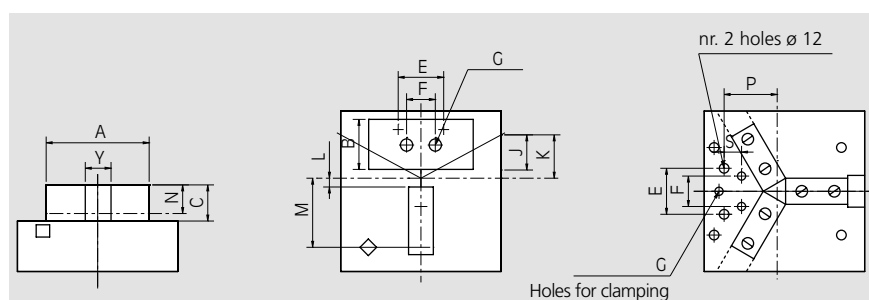
Type	jaw stroke mm	input torque N-m	gripping force kN	gripping range mm	weight Kg
Y - 120	7	50	11	8 ~ 90	4,5
Y - 160	10	100	22	15 ~ 126	12
Y - 200	15	130	33	20 ~ 173	19
Y - 300	25	150	38	40 ~ 266	40

Soft-jaw dim.

Type	K mm	L mm	M mm	Id. No.
Y - 120	30	60	19	51991366
Y - 160	41	70	30	51991367
Y - 200	43	85	30	51991368
Y - 300	54	115	45	51991369

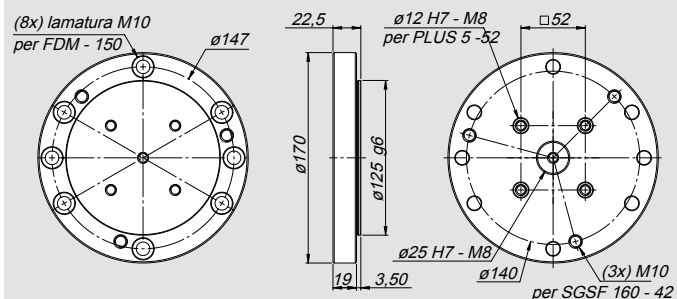
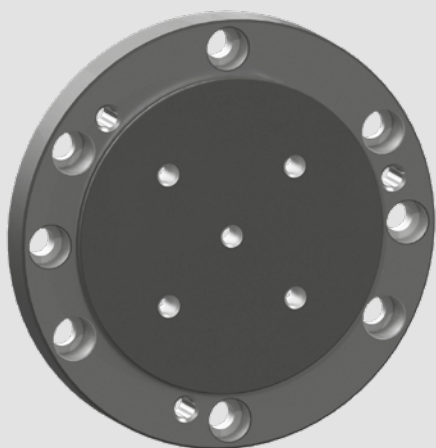


Fixed jaw

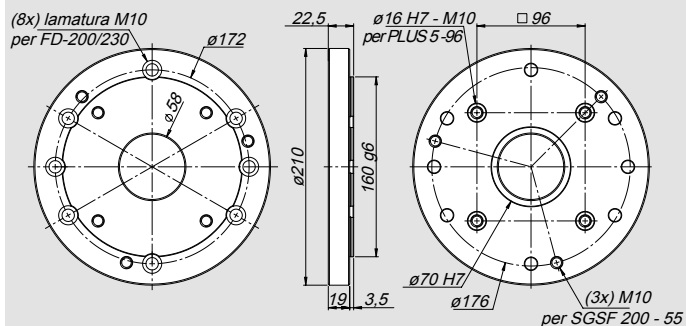


Id. No.	Type	A mm	B mm	C mm	E mm	F mm	G mm	N mm	Y mm	S mm	P mm	min J mm	max K mm	min L mm	max M mm
51 99 13 37	Y - 120	80	45	30	60	30	2-M6	16	18	10	45	12	45	6	55
51 99 13 38	Y - 160	100	45	41	70	30	2-M8	18	30	10	53	20	40	10	65
51 99 13 39	Y - 200	130	62	43	60	40	2-M10	20	30	20	65	15	50	10	70
51 99 13 40	Y - 300	160	115	54	60	120	3-M12	35	45	20	105	15	100	13	120

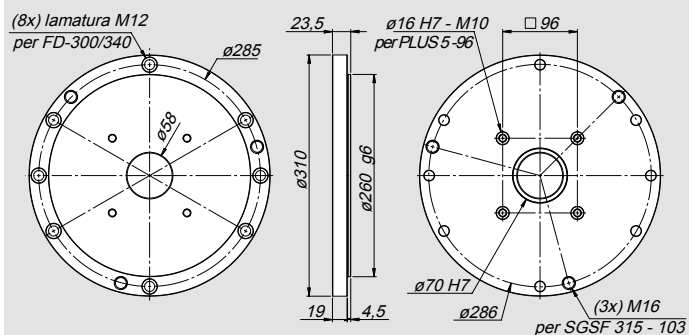
Chuck not included



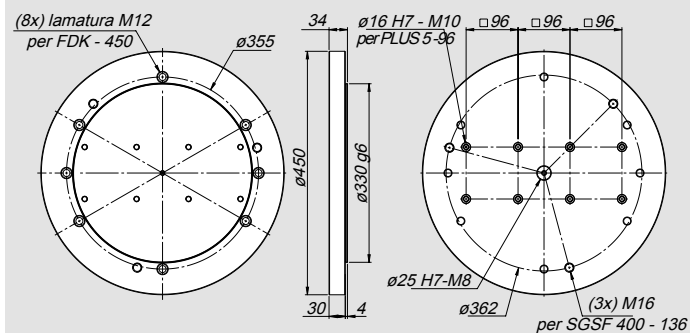
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Id. No.	Weight (Kg)
51991342	5



Id. No.	Weight (Kg)
51991343	13



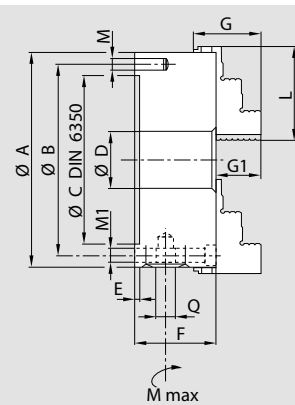
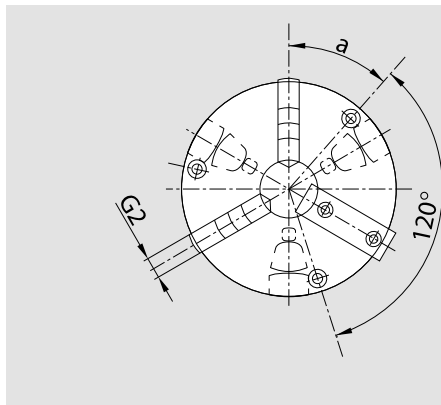
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Application example



SGSF MANUAL CHUCK (frontal mounting)

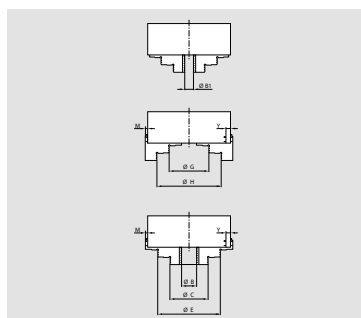
SMW self-centering manual chuck, steel body



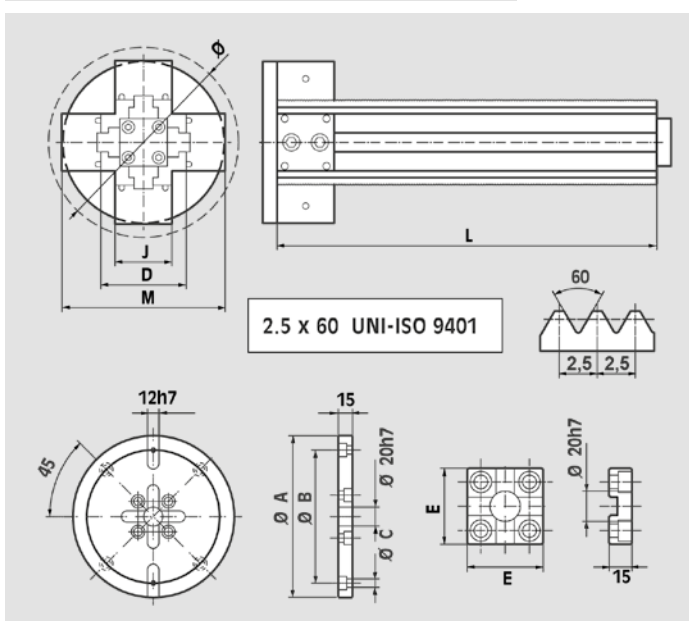
Id. No.		33031216	33031220	33031231	33031240
Chuck		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Attachment DIN 6350	Dim	FL 125	FL 160	FL 260	FL 330
	A mm	160	200	315	400
	B mm	140	176	286	362
	C mm	125	160	260	330
	D mm	42	55	103	136
	E mm	4	4	5	5
	F mm	68	78	96,2	108
	G mm	53	54	73	92
	G1 mm	32	29	41	55
	G2 mm	20	25	32	36
Front mounting	L mm	70	85	125	145
	M1 mm	3xM10	3xM10	3xM16	3xM16
	Q mm	11	11	14	17
	a °	102°	42°	42°	45°
Max speed	rpm	4500	4000	2800	2000
Torque M max	Nm	120	160	200	280
Weight (w. jaws)	Kg	11,2	20	50	90
Moment of inertia	Kgm ²	0,03	0,10	0,60	1,80

Chuck		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Suggested clamping diameters at max. clamping force					
Monoblock jaws	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
Min. clamping diameters with clamping force reduced by 40%					
		3	4	10	10
No. of scroll teeth		2	3	5	5
No. of meshing scroll teets for safety clamping		2	3	5	5

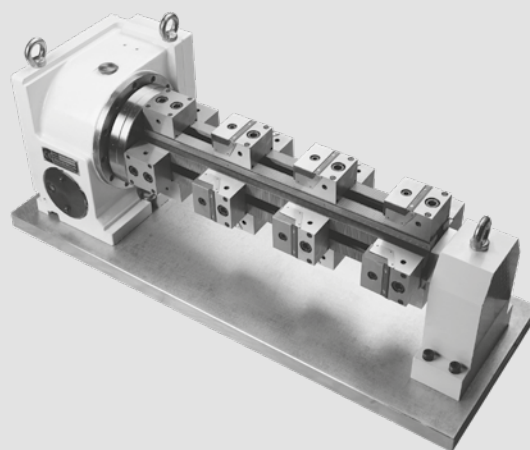
- For max. speed and max. clamping, all teeth shall be meshing
- For meshing teeth control towards outside dimension (M) toward inside dimension (Y)
- For features exceeding these limits ± 16 mm on diameter, shall be reduced by 25%
- ATTENTION: CLAMPING DIAMETERS HAVE BEEN CALCULATED WITH A.M. MESHING TEETH



Chuck		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Accessories		Id. No.			
Set-3 GRC		03651630	03652030	03653130	03654030
Set-3 Soft blocks		03601630	03602030	03603130	03604030
Set-3 Monoblock jaws Dx		03551630	03552030	03553130	03554030
Set-3 Monoblock jaws Sx		03561630	03562030	03563130	03564030
Set-3 Reversible jaws		03631630	03632030	03633130	03634030
Key		02711700		02713100	02714000

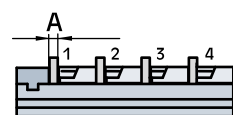
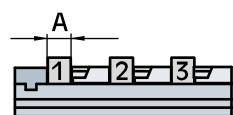
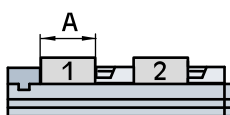
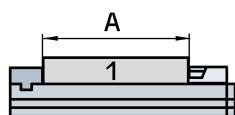


Application example



Type	Id.No.	J mm	D mm	M mm	L mm	Ø rot. mm	Ø A mm	Ø B mm	Ø C mm	E mm	Weight 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

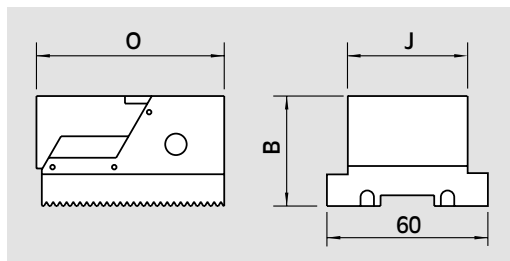
Clamping capacity



A max. mm

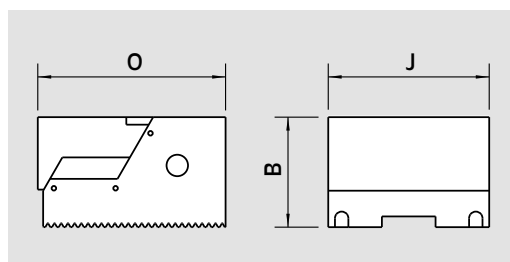
	A max. mm			
CIVI 2000 38/60-250	120	25	-	-
CIVI 2000 38/60-400	270	100	43	15
CIVI 2000 38/60-500	370	150	76	40
CIVI 2000 38/60-630	500	215	120	73
CIVI 2000 90-250	99	-	-	-
CIVI 2000 90-400	249	84	29	-
CIVI 2000 90-500	349	134	62	26
CIVI 2000 90-630	479	199	106	59

Movable smooth jaw set J38



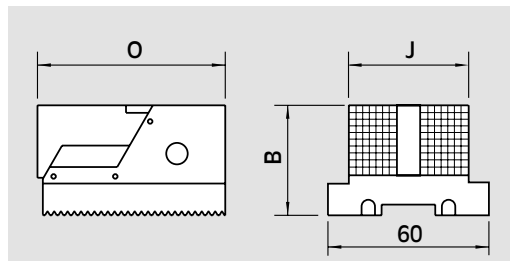
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 38	77584063 *	40	38	70	1

Movable smooth jaw set J60-J90



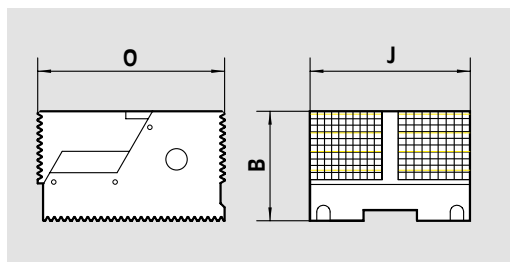
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584163 *	40	60	70	1.4
CV 90	77584263 *	45	90	80	2.9

Movable jaw set J38 with grooved jaws (for raw workpieces)



Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 38	77584068 *	40	38	70	1

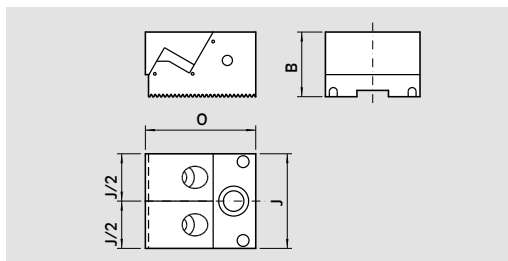
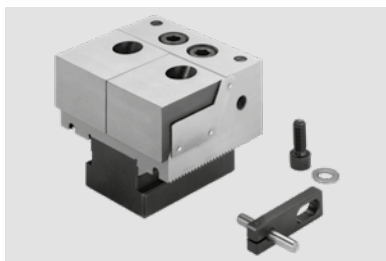
Movable jaw set J60-J90 with grooved jaws (for raw workpieces)



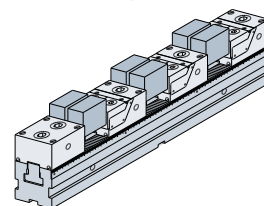
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584168 *	40	60	70	1.4
CV 90	77584268 *	45	90	80	2.9

* Codes valid only for mounting on CIVI column

Movable set with double jaws

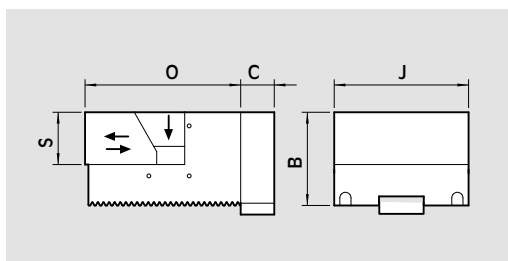


Application example



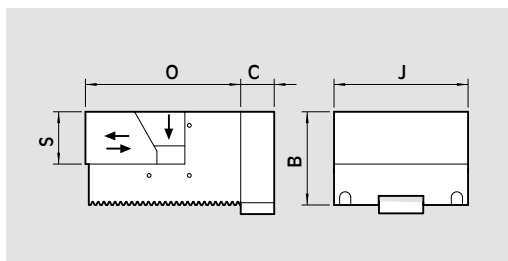
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584164 *	40	60	70	1.5
CV 90	77584264 *	45	90	80	3

Movable jaw set with aluminium jaws



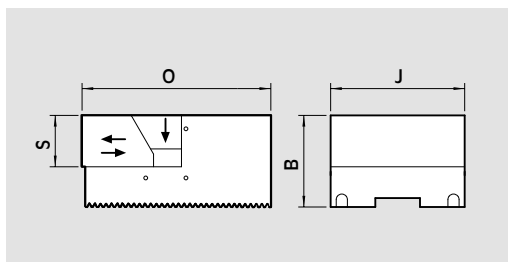
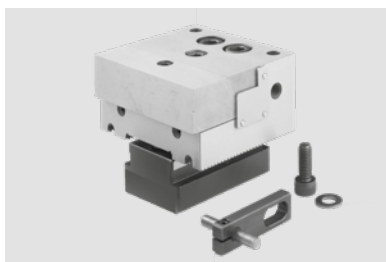
Type	Id. No.	B mm	C mm	J mm	O mm	S mm	Weight kg
CV 60	77584165 *	40	15	60	69.5	23	1.2
CV 90	77584265 *	45	20	90	80	25	2.7

Movable jaw set with steel soft jaws



Type	Id. No.	B mm	C mm	J mm	O mm	S mm	Weight kg
CV 60	77584166 *	40	15	60	69.5	23	1.4
CV 90	77584266 *	45	20	90	80	25	3

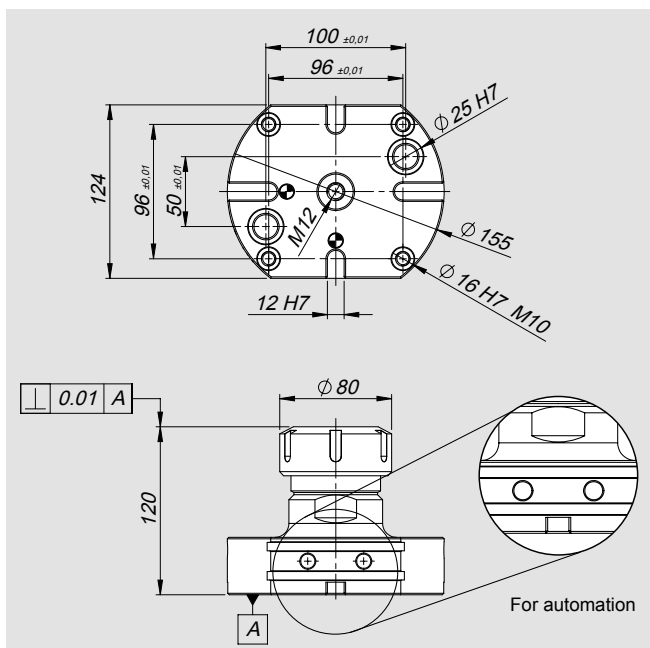
Movable jaw set with steel hardened jaw



Type	Id. No.	B mm	J mm	O mm	S mm	Weight kg
CV 60	77584167 *	40	60	69.5	23	1.4
CV 90	77584267 *	45	90	80	25	3

* Codes valid only for mounting on CIVI column

COLLECT CHUCK ER50



Id. No.
46233500

Application example



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