

4-Axis Workholding

Clamping systems for rotary tables



APS 140

- Flange

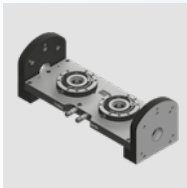
Page 16.4



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

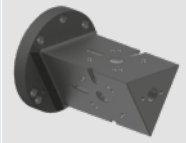
Page 16.9



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

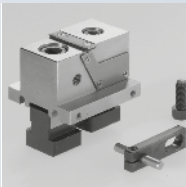
Page 16.19



CIVI-CN

- CIVI 2000 Column

Page 16.20



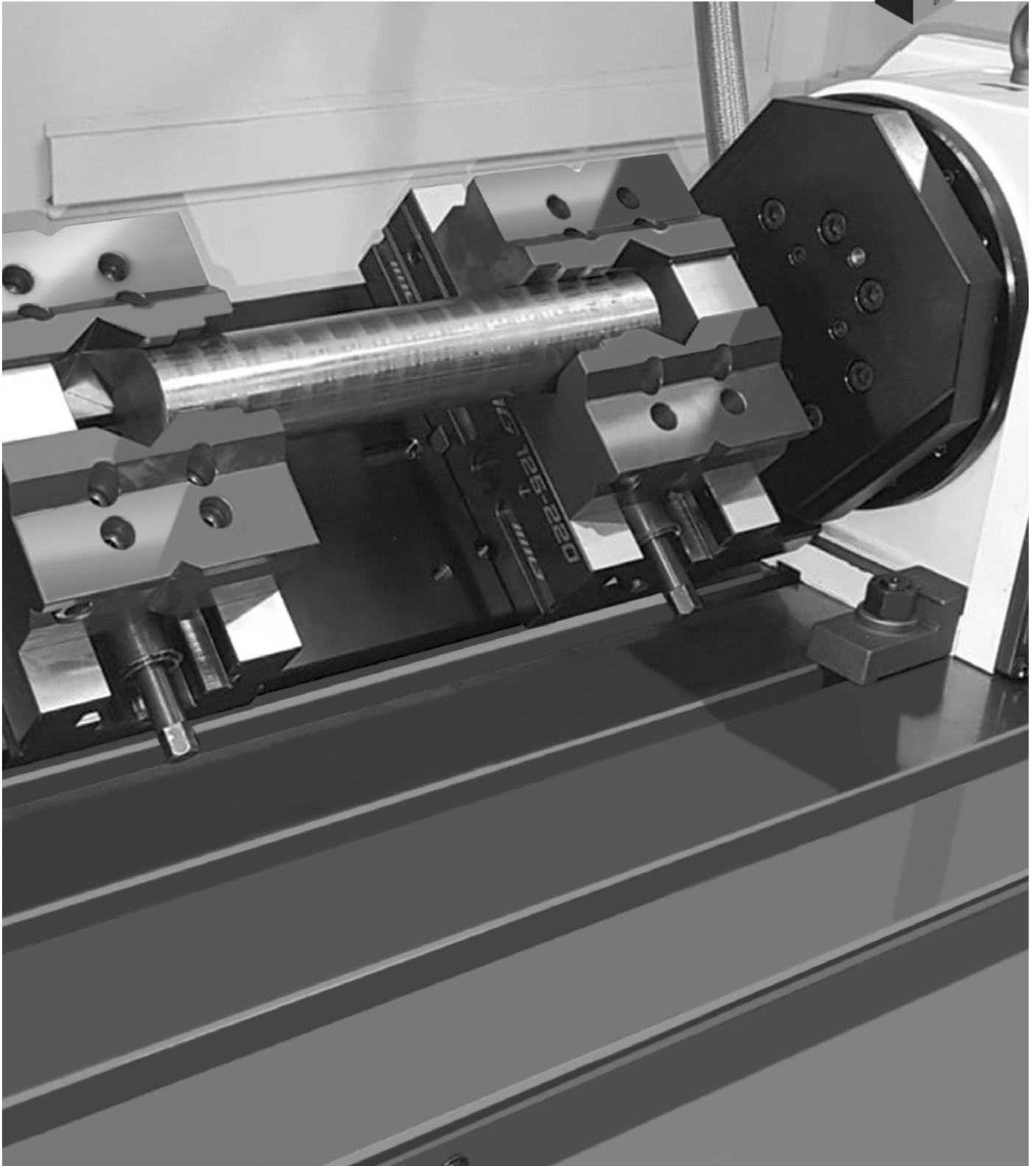
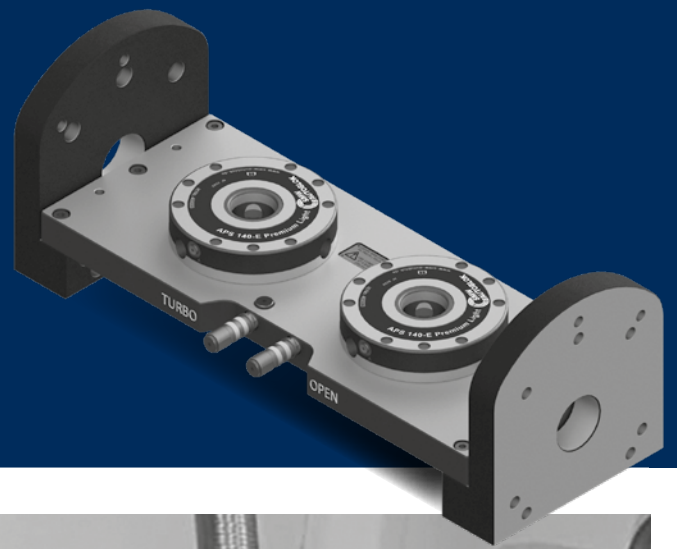
CIVI 2000

- Multiple clamping system

Page 16.21

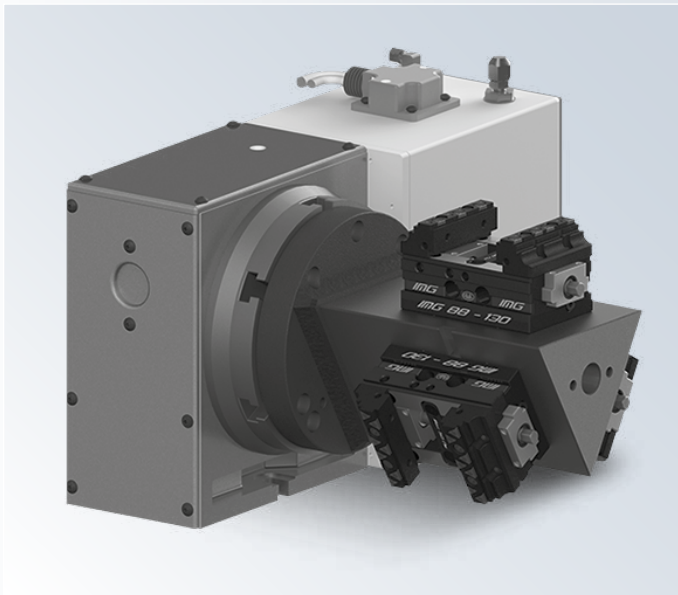
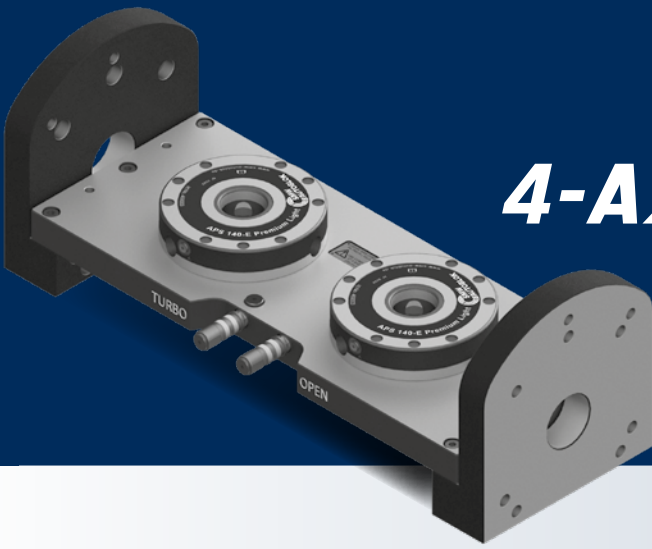
4-AXIS Workholding

Clamping systems for rotary tables



4-Axis Workholding

Clamping systems for rotary tables

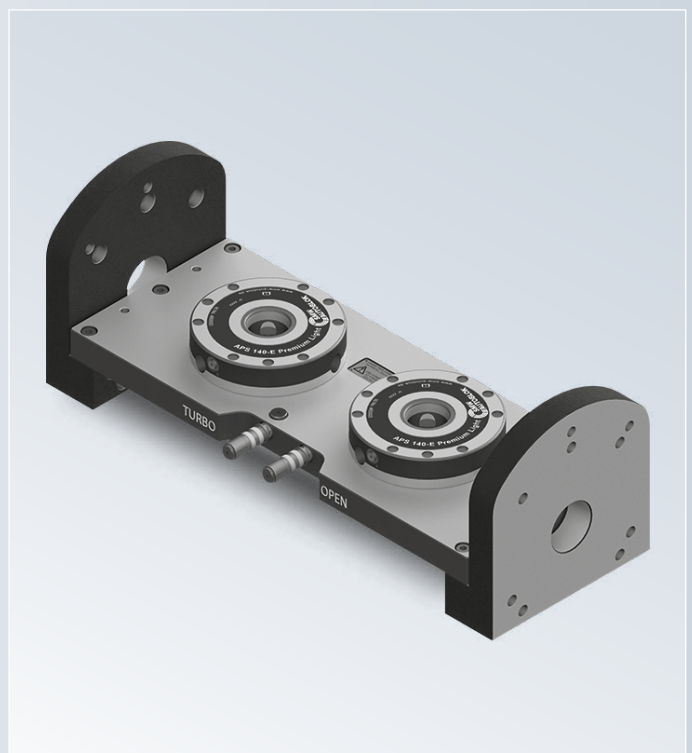
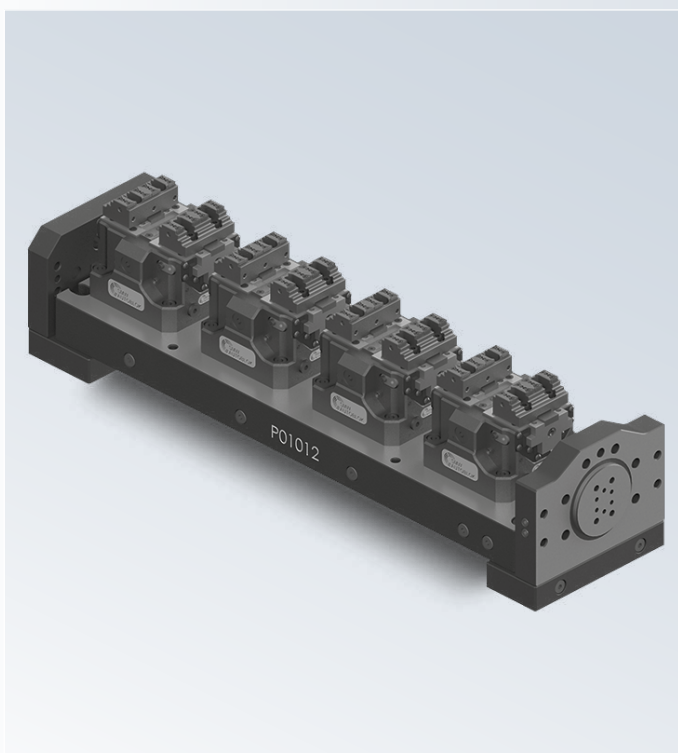


The growing demand for high-precision components in strategic sectors such as automotive, aerospace, medical, and electronics has led to widespread adoption of CNC rotary tables.

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

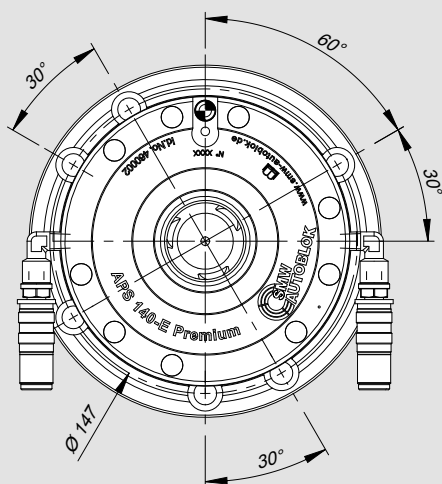
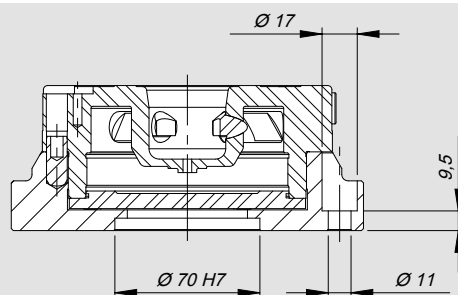
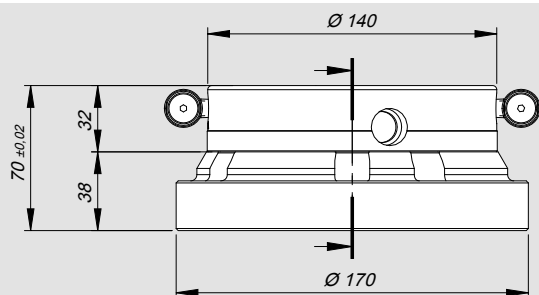
- Flange for CNC indexing tables with T-slots flange
- Included 1 modul APS 140 Premium

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

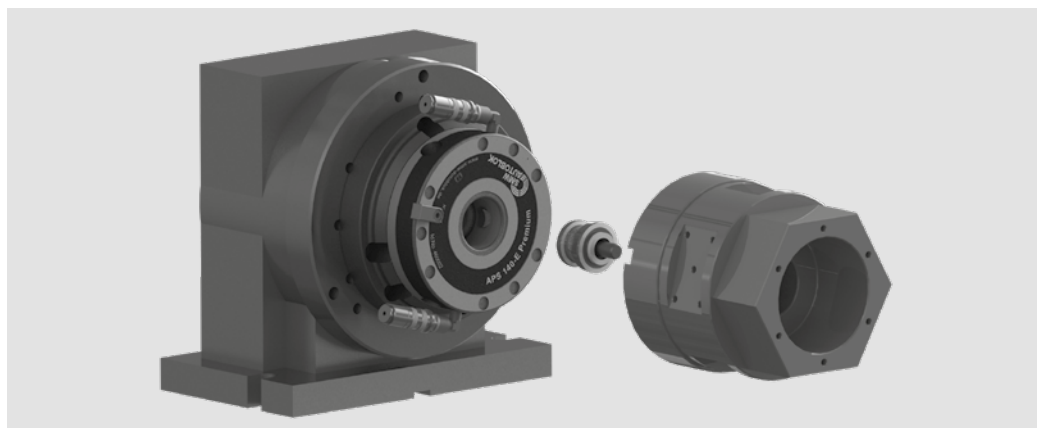
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46167620

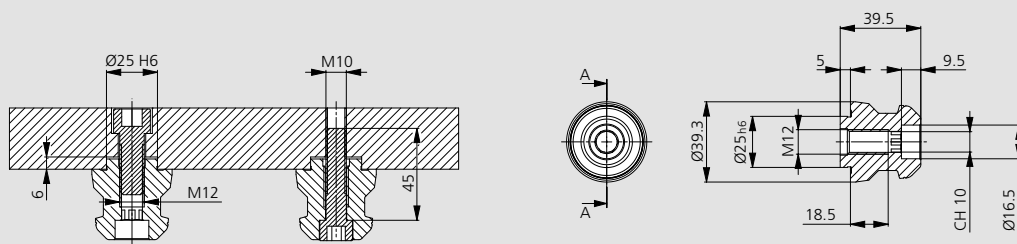
Weight (Kg)

17

Application example



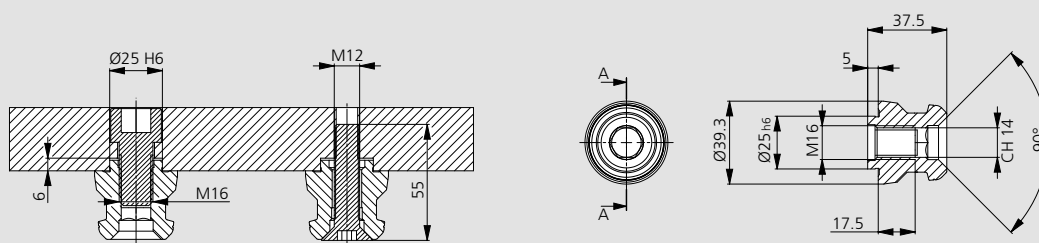
M12 thread



Subject to technical changes

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46162356	B	M12	0.2
46162357	C	M12	0.2

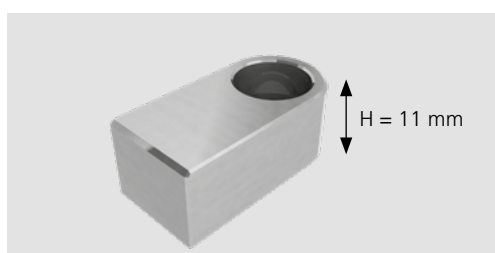
M16 thread



Subject to technical changes

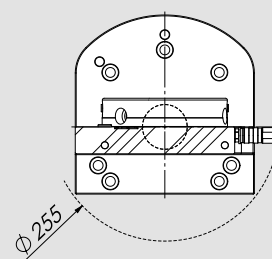
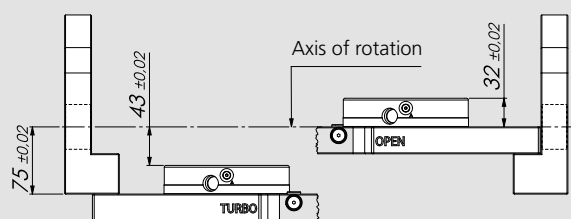
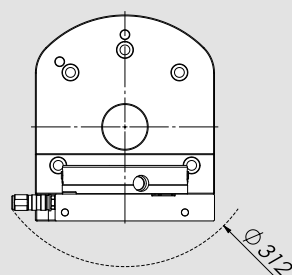
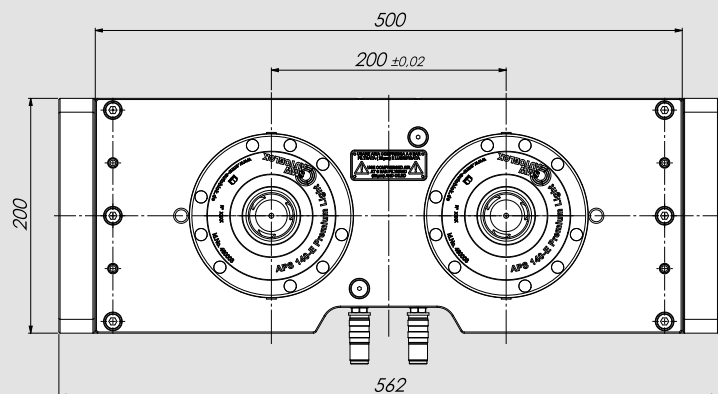
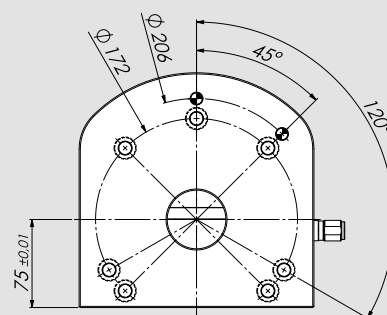
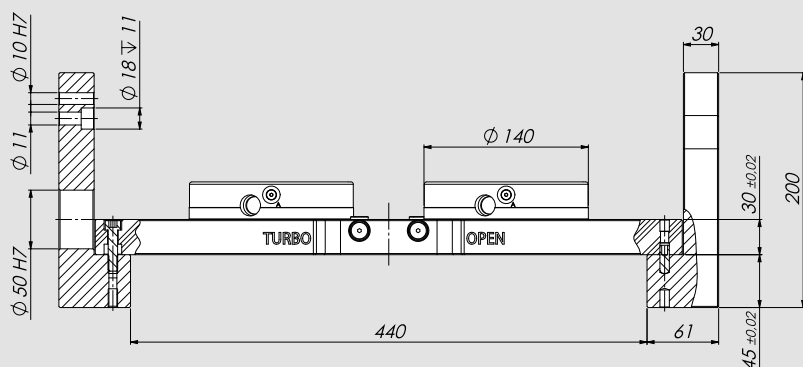
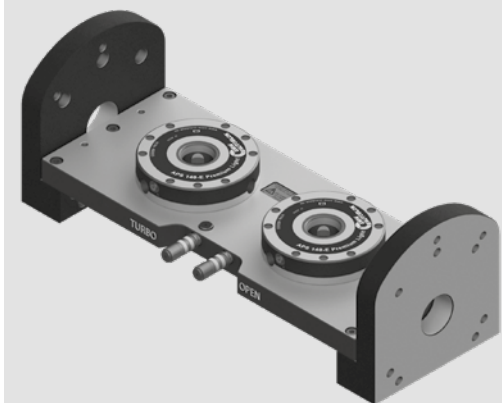
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46162456	B	M16	0.2
46162457	C	M16	0.2

Key for single use



Id. No.
58351312

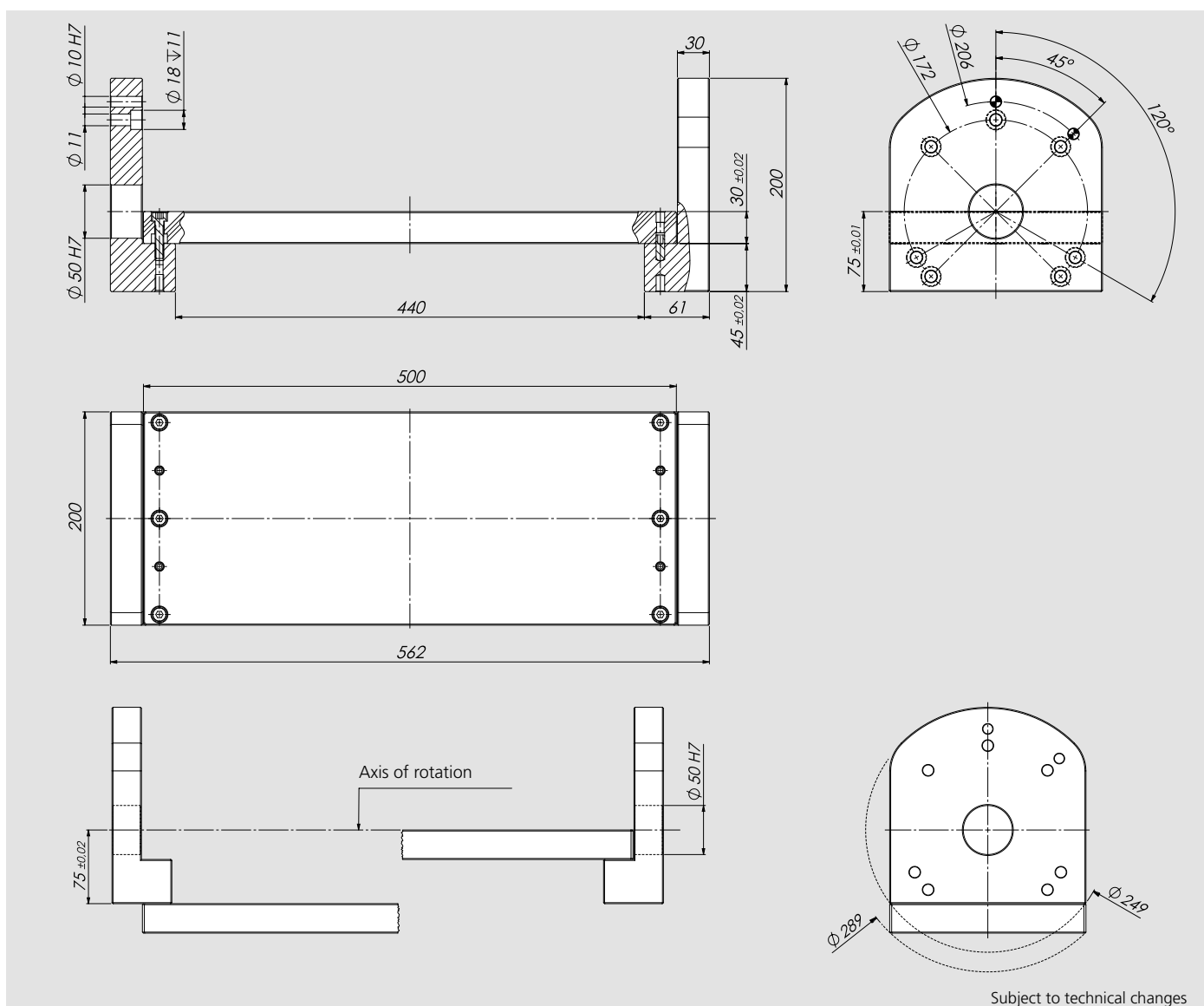
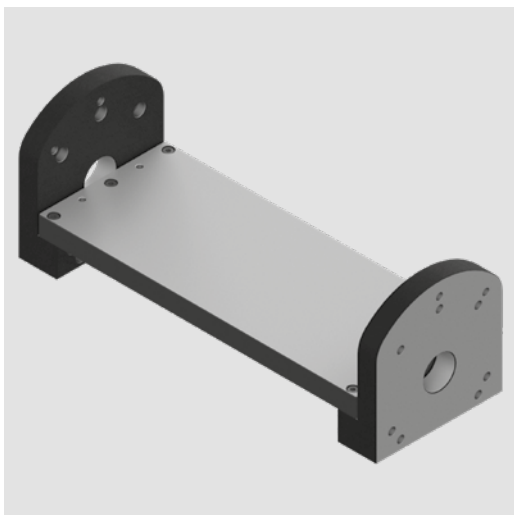
Complete with APS 140 premium Light



Subject to technical changes

Id. No.
50191454

Weight (Kg)
46

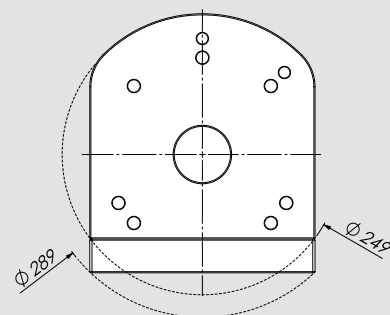
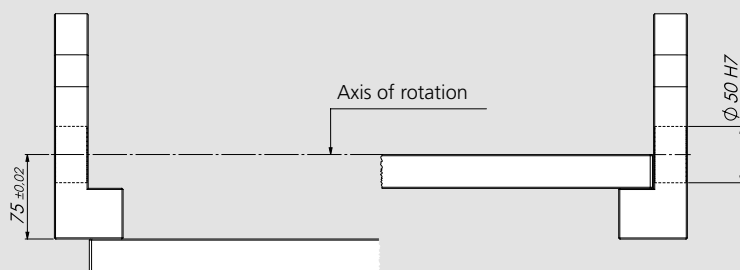
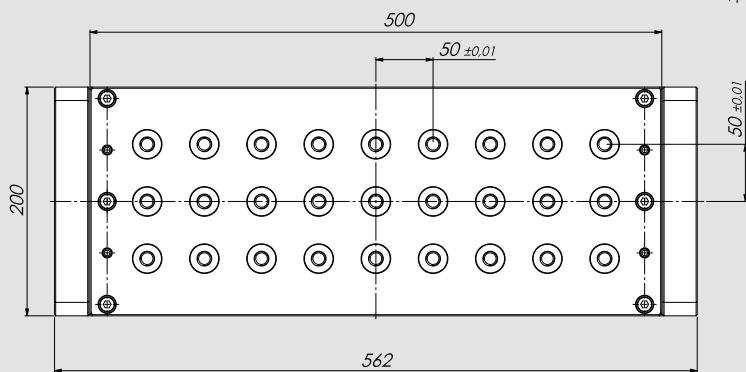
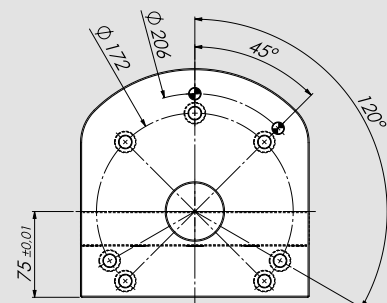
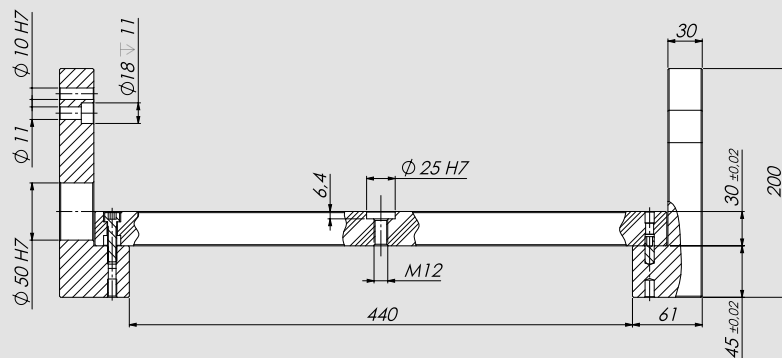
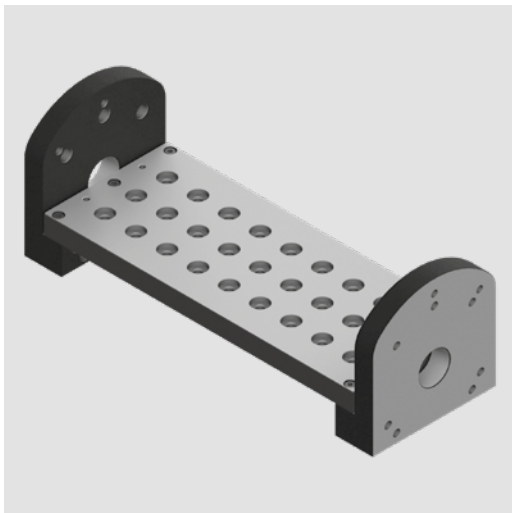


Id. No.

50191450

Weight (Kg)

43



Subject to technical changes

Id. No.

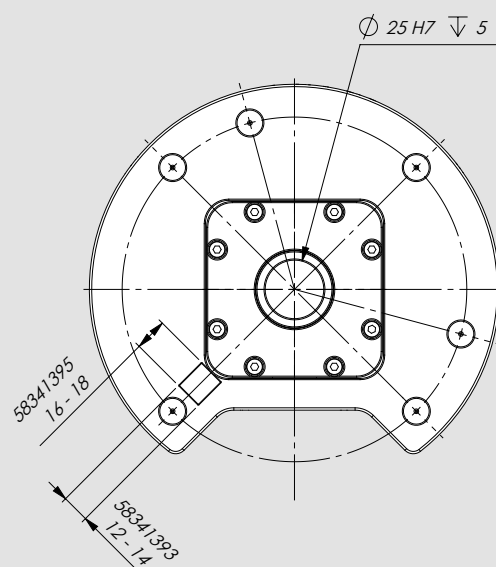
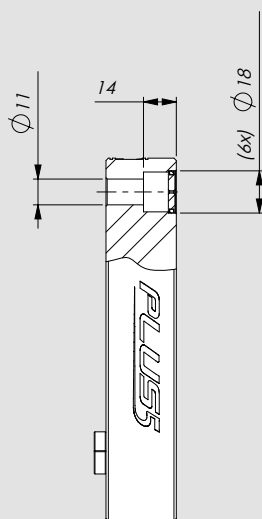
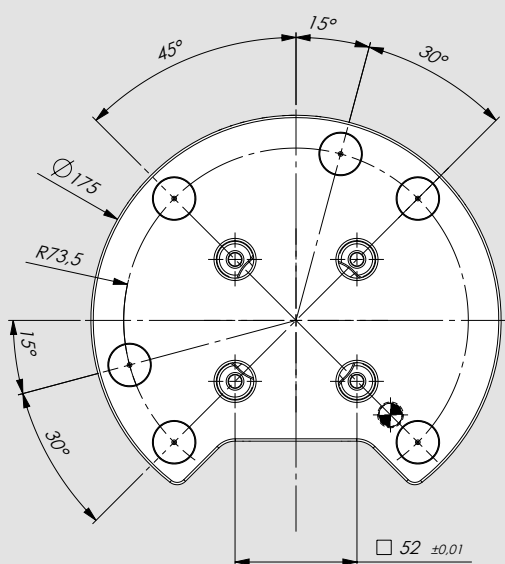
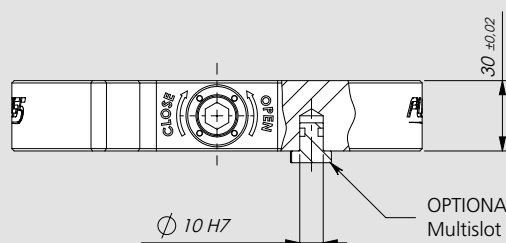
50191452

Weight (Kg)

42

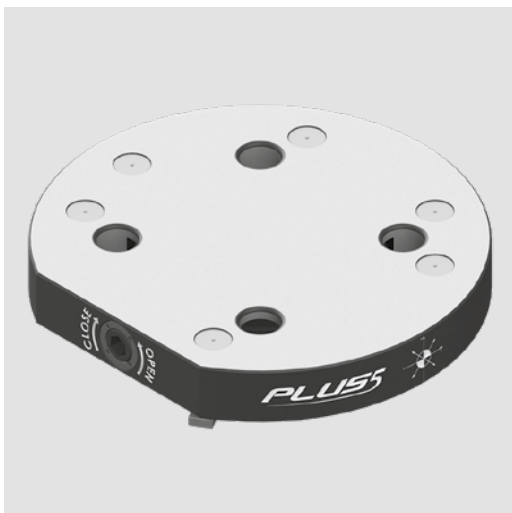


- Complete with wrench 10mm
- Pins not included

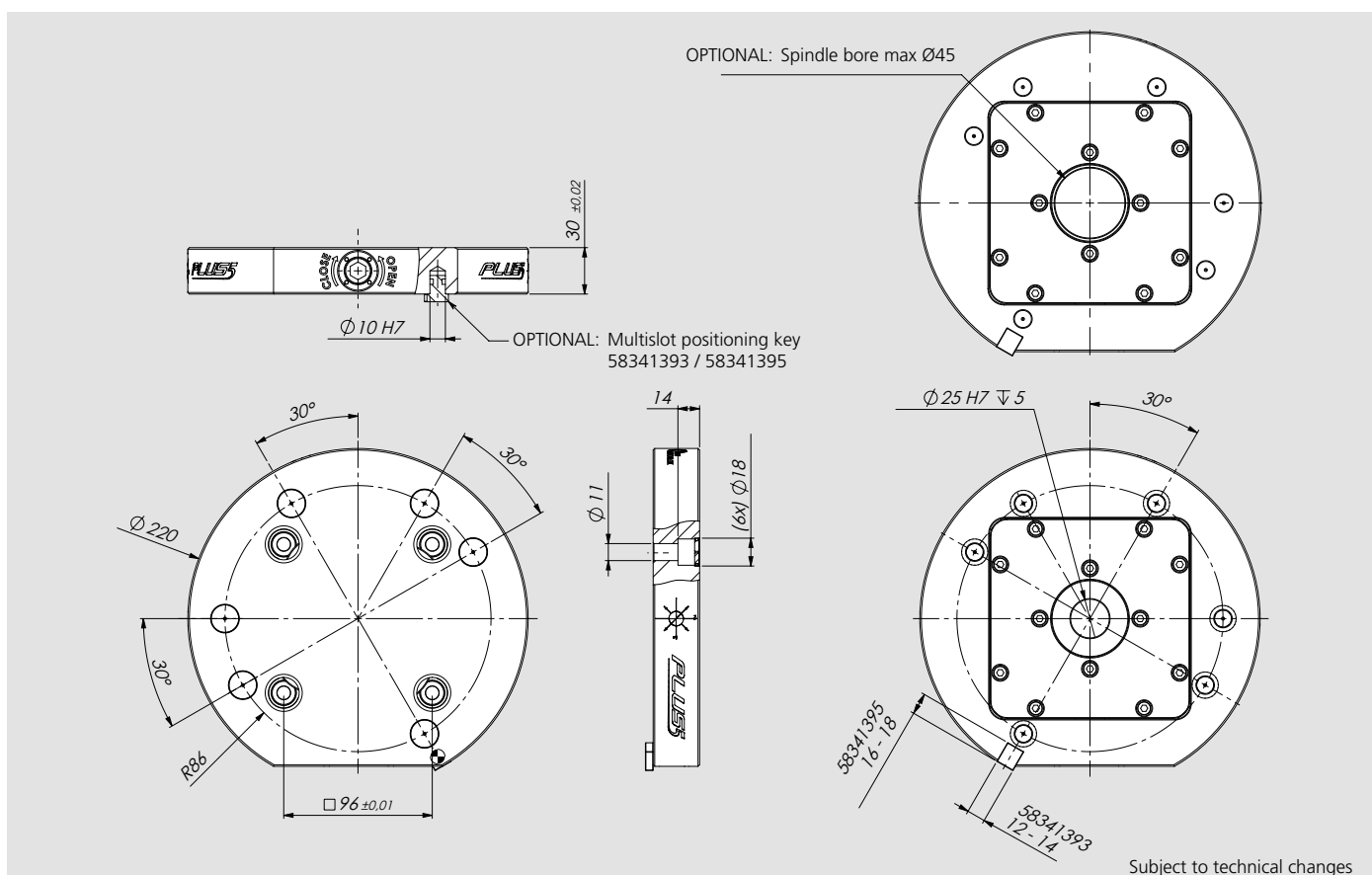


Subject to technical changes

Id. No.	Weight (Kg)
46240111	6

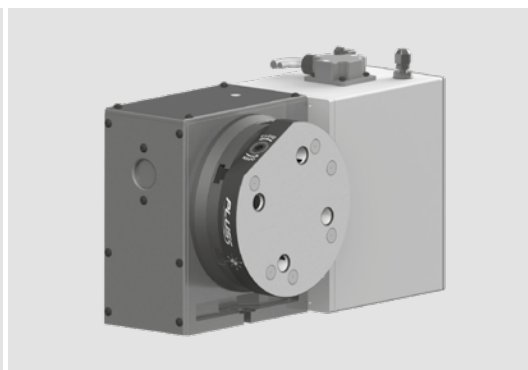
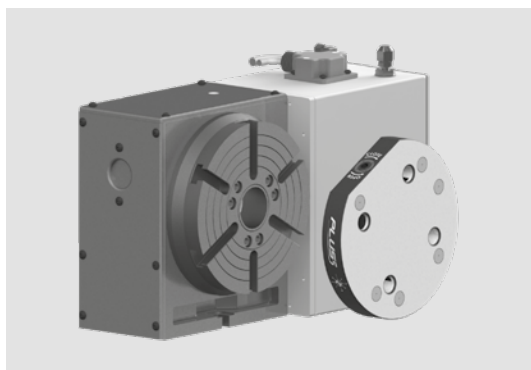


- Complete with wrench 10mm
- Pins not included



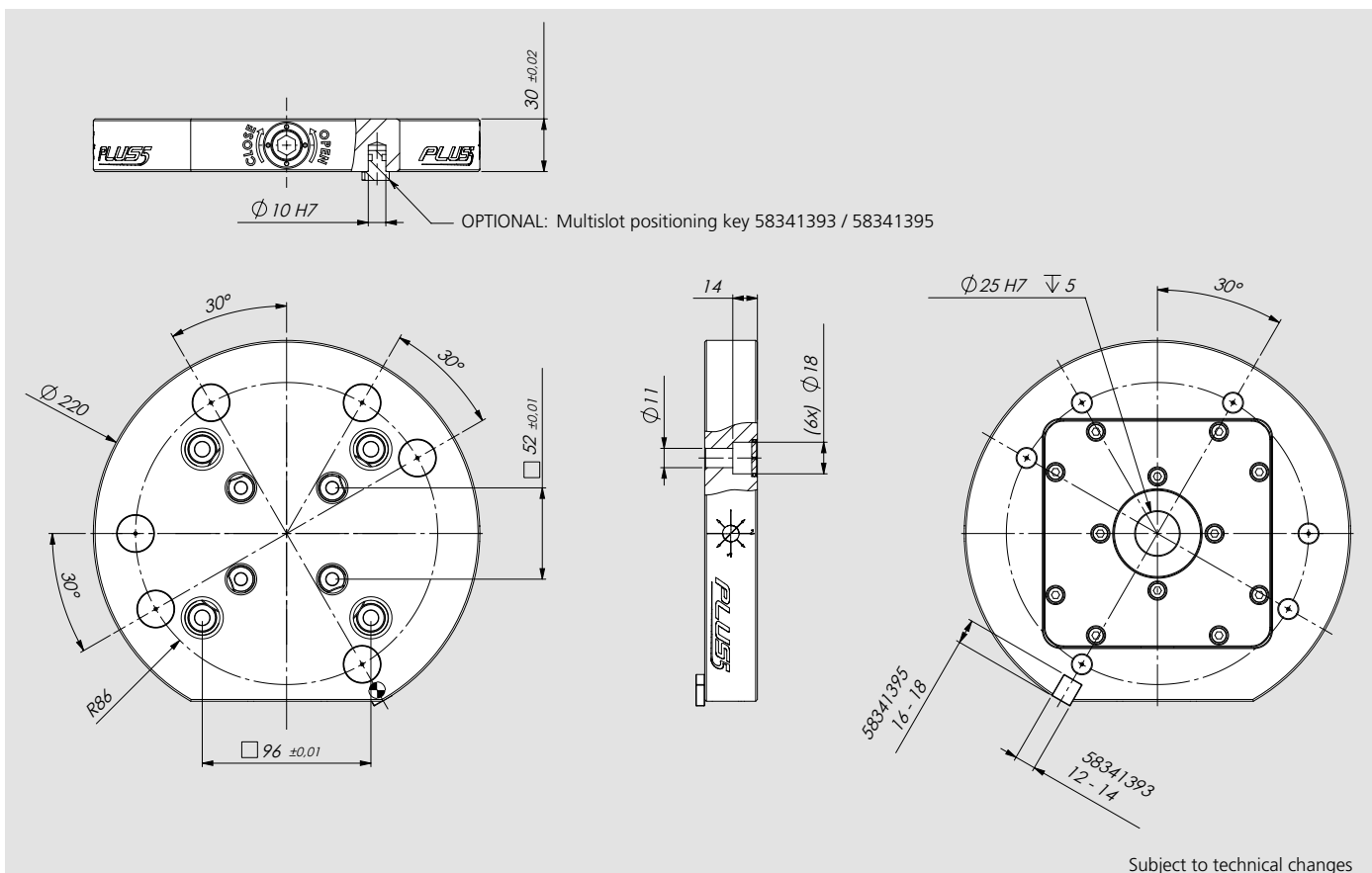
Id. No.	Weight (Kg)
46240112	8

Application example





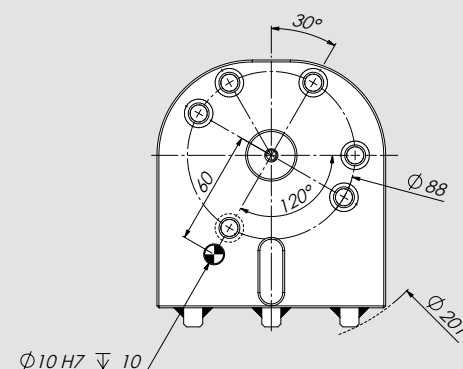
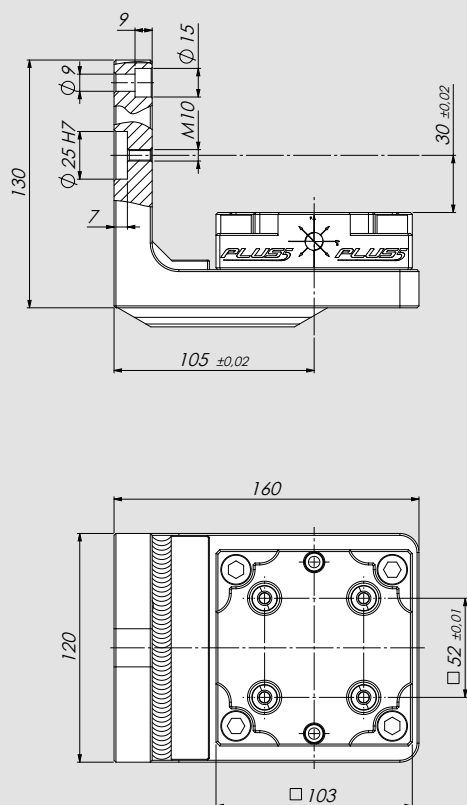
- Complete with:
 - wrench 10mm
 - protection caps (Plus 5 - 96)
- Pins not included



Id. No.	Weight (Kg)
46240113	8



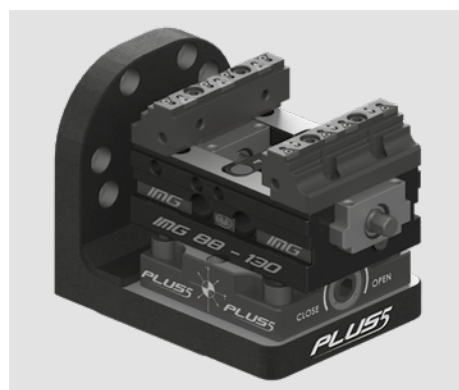
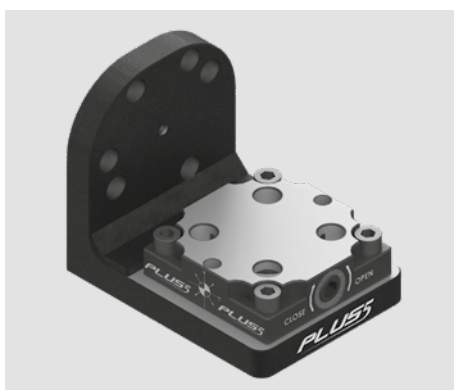
Plus 5 - 52 not included



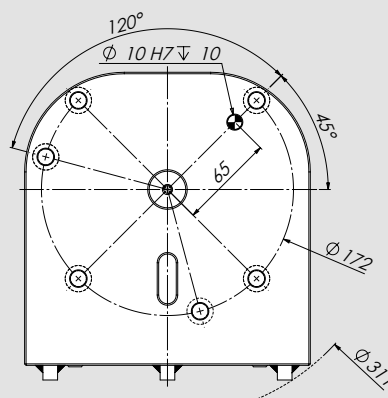
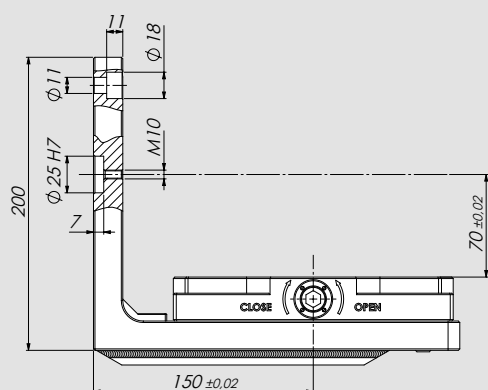
Subject to technical changes

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Application example



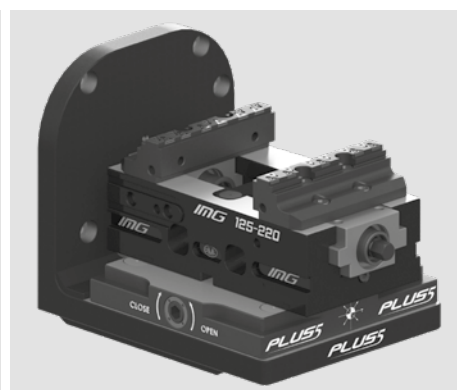
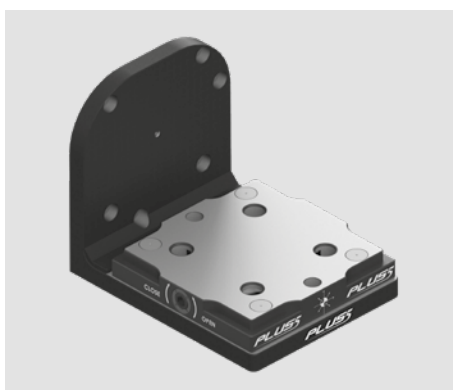
Plus 5 - 96 not included



Subject to technical changes

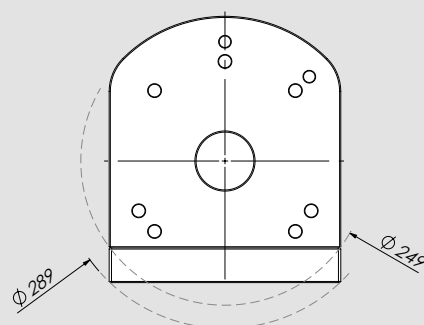
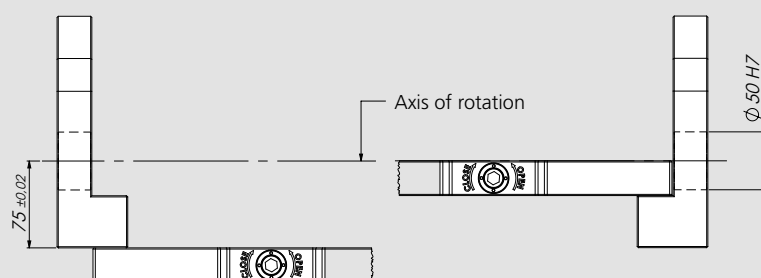
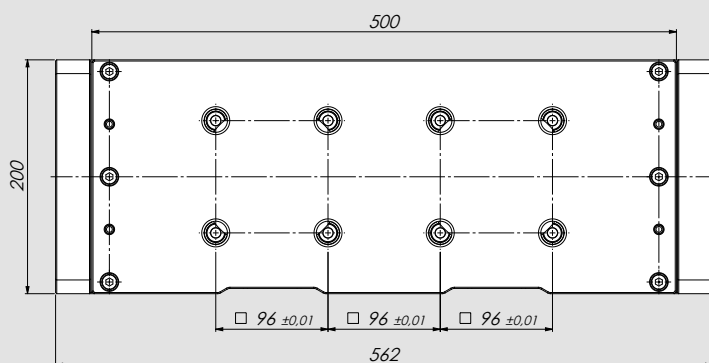
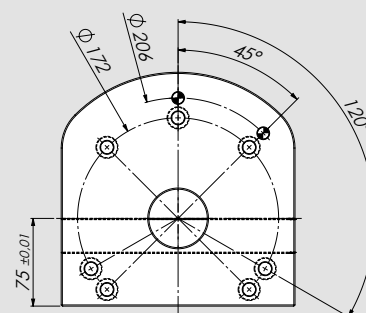
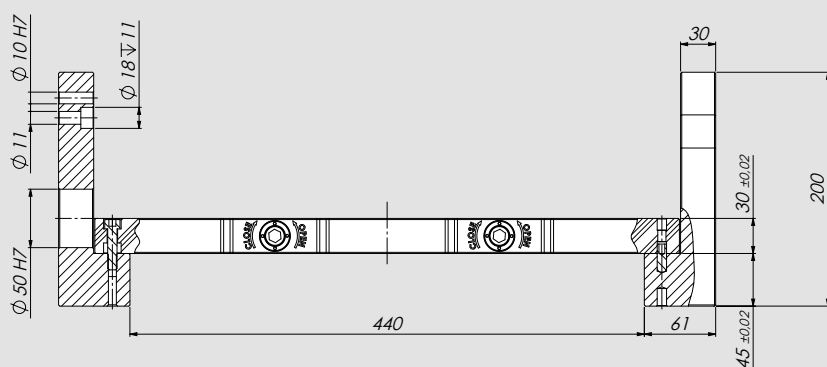
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Application example





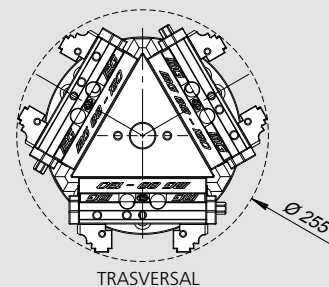
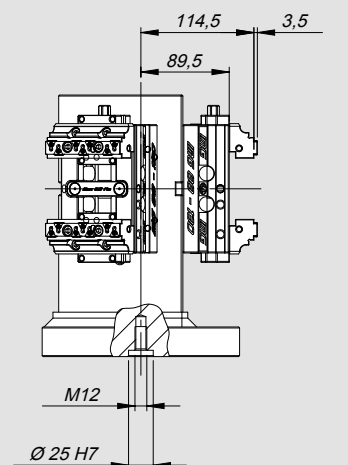
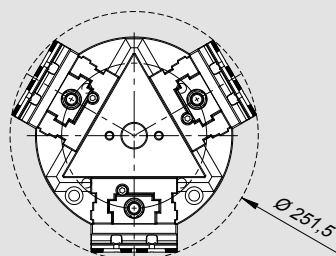
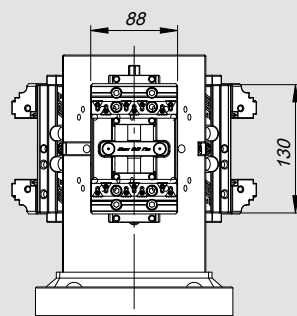
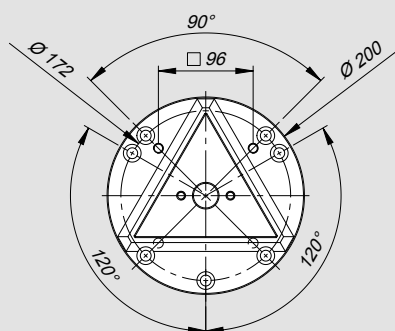
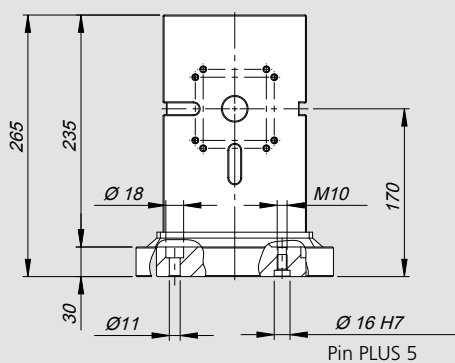
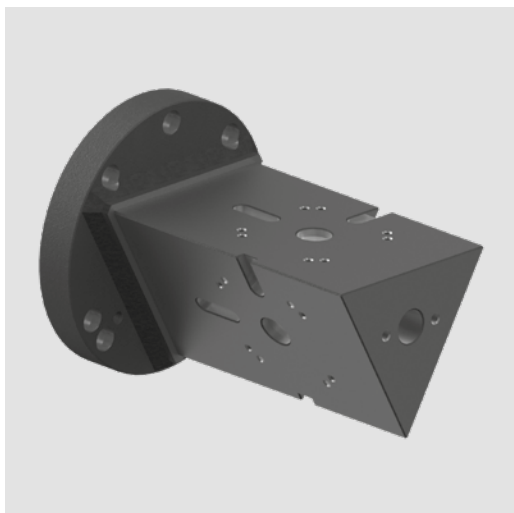
- Complete with:
 - wrench 10mm
 - n. 2 safety plates (Id. No. 46248215)
- Pins not included



Subject to technical changes

Id. No.	Weight (Kg)
46248320	43

Vices not included

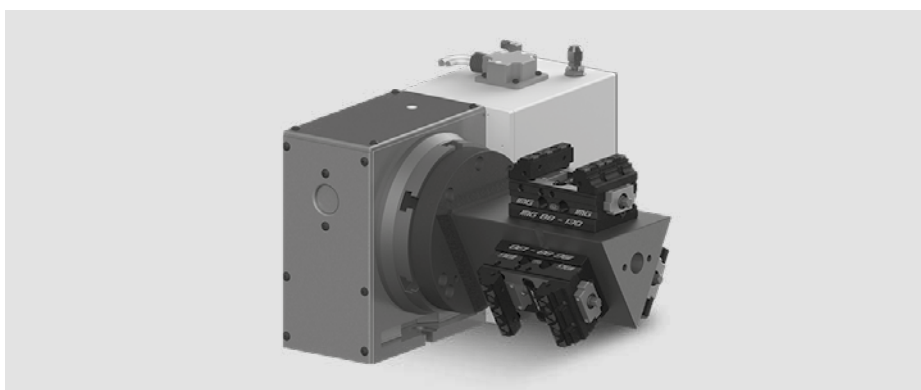


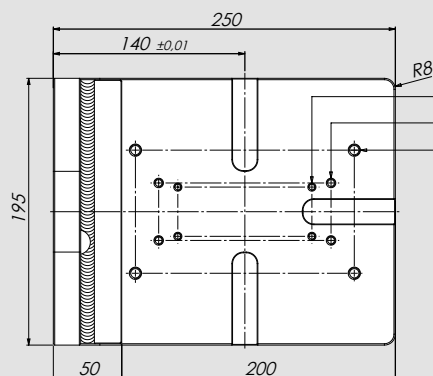
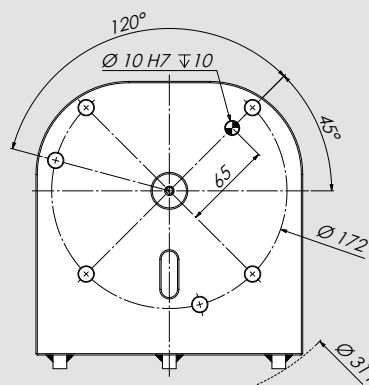
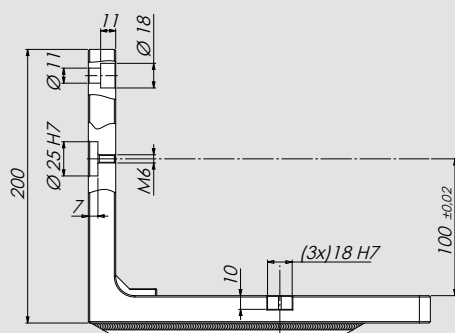
TRASVERSAL

Subject to technical changes

Id. No.	Weight (Kg)
50191460	25

Application example





(4x) M5 Y CHUCK 120
(4x) M6 Y CHUCK 160
(4x) M8 Y CHUCK 200

Subject to technical changes

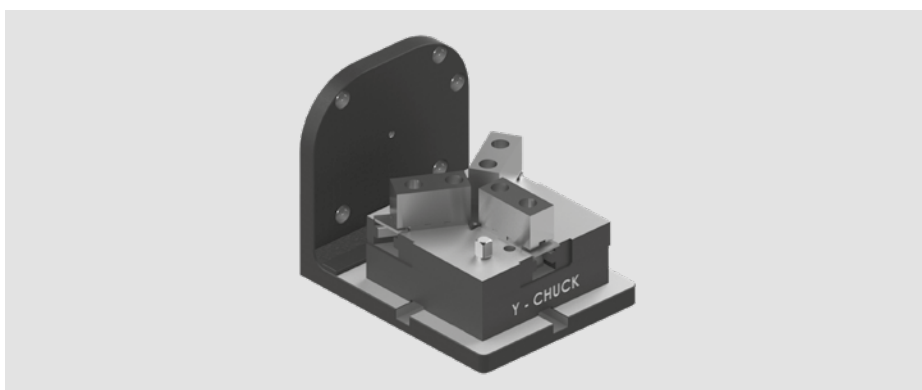
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50191456

Weight (Kg)

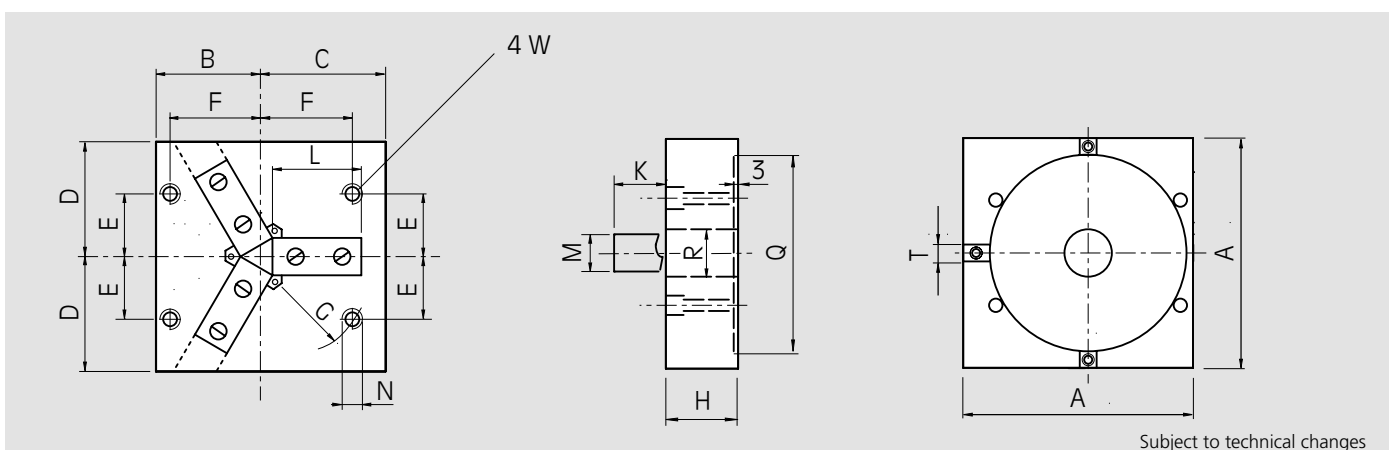
14

Application example





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



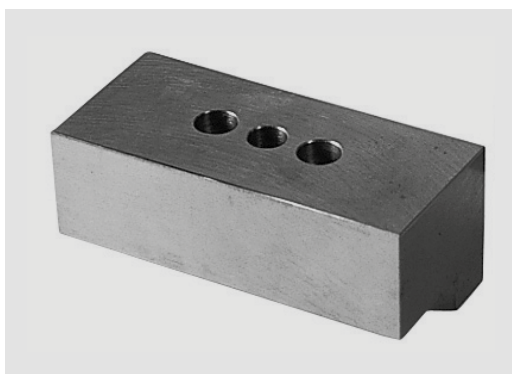
Id. No.	Type	A mm	B mm	C mm	D mm	H mm	R mm	Q mm	N mm	G mm	T mm	E mm	F mm	W
51 99 13 33	Y - 120	120	55	65	60	43	Ø 25	--	10	55	12	18	49	M 5
51 99 13 34	Y - 160	160	70	90	80	65	Ø 34	Ø 119	12	73,5	18	21	63	M 6
51 99 13 35	Y - 200	200	90	110	100	65	Ø 44	Ø 170	12	99	18	45	80	M 8
51 99 13 36	Y - 300	300	140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

Specification

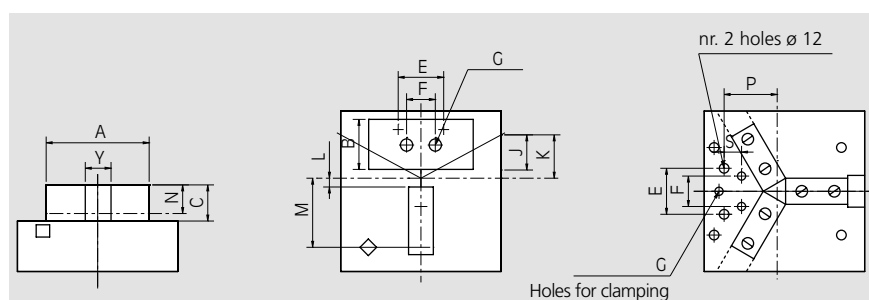
Type	jaw stroke mm	input torque N-m	gripping force kN	gripping range mm	weight Kg
Y - 120	7	50	11	8 ~ 90	4,5
Y - 160	10	100	22	15 ~ 126	12
Y - 200	15	130	33	20 ~ 173	19
Y - 300	25	150	38	40 ~ 266	40

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

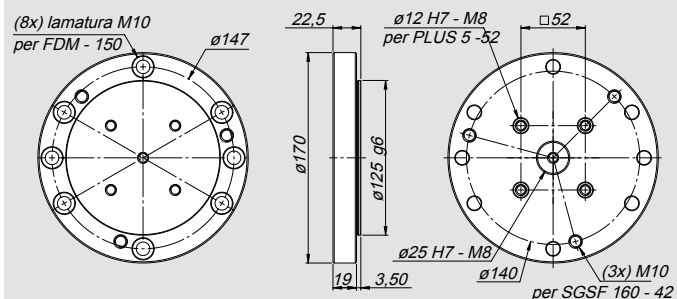
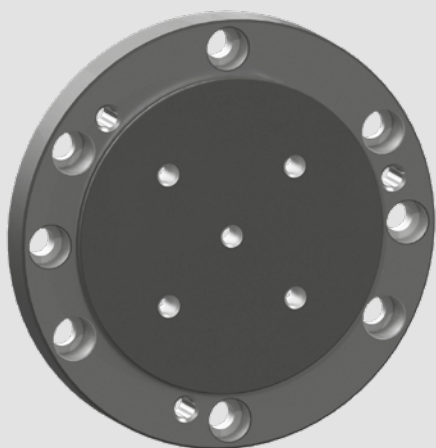


Fixed jaw

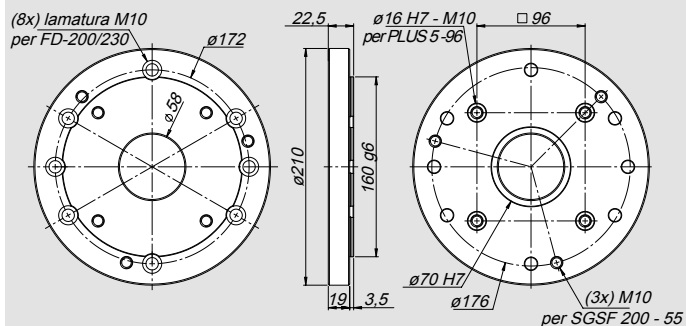


Id. No.	Type	A mm	B mm	C mm	E mm	F mm	G mm	N mm	Y mm	S mm	P mm	min J mm	max K mm	min L mm	max M mm
51 99 13 37	Y - 120	80	45	30	60	30	2-M6	16	18	10	45	12	45	6	55
51 99 13 38	Y - 160	100	45	41	70	30	2-M8	18	30	10	53	20	40	10	65
51 99 13 39	Y - 200	130	62	43	60	40	2-M10	20	30	20	65	15	50	10	70
51 99 13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

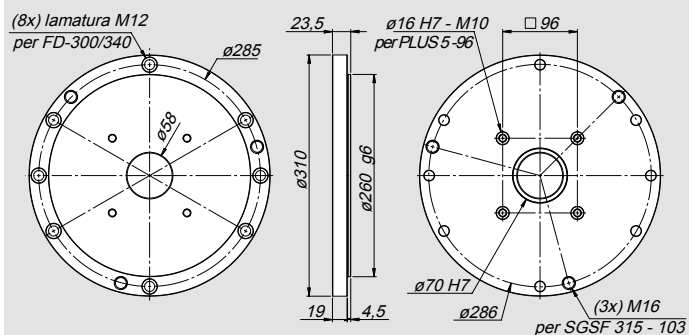
Chuck not included



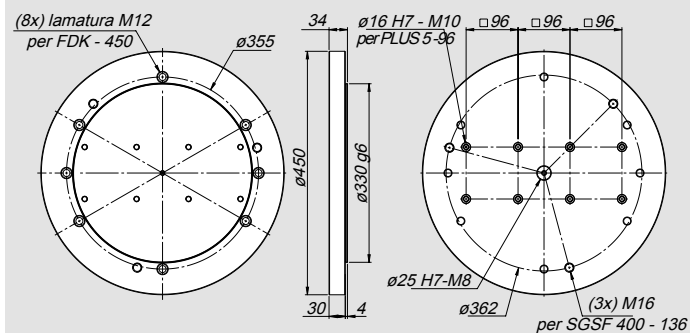
Id. No.	Weight (Kg)
51991341	3



Id. No.	Weight (Kg)
51991342	5



Id. No.	Weight (Kg)
51991343	13



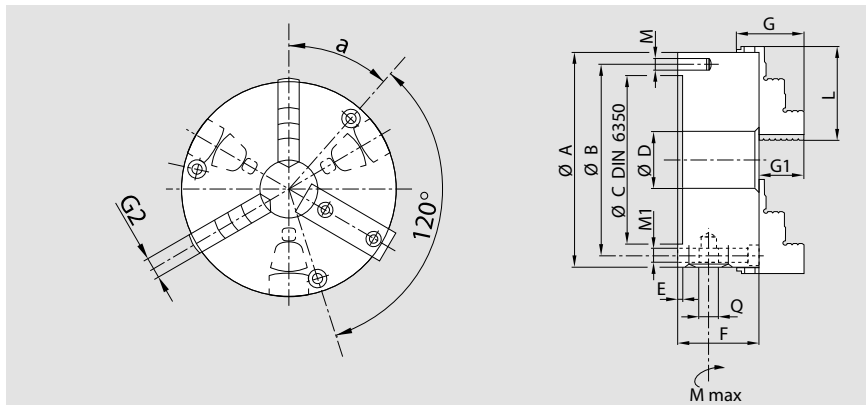
Id. No.	Weight (Kg)
51991347	39

Application example



SGSF MANUAL CHUCK (frontal mounting)

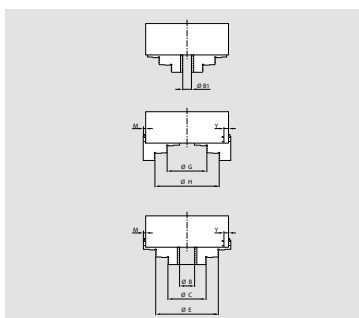
SMW self-centering manual chuck, steel body



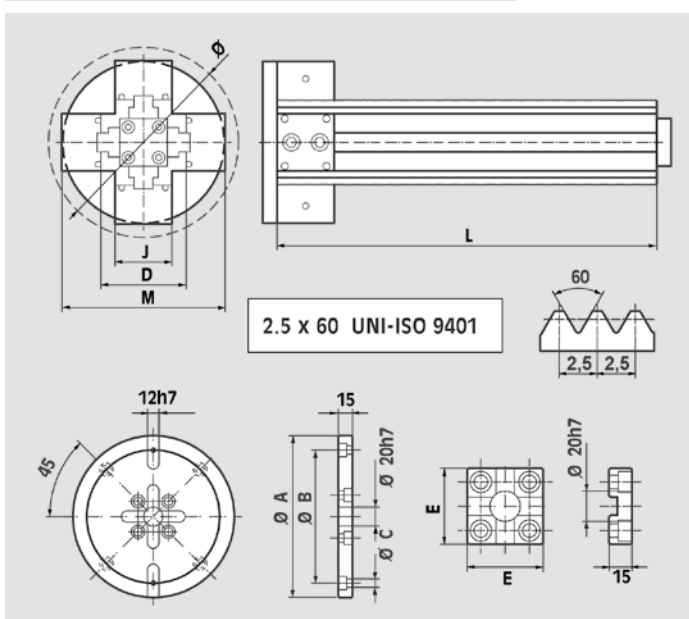
Id. No.		33031216	33031220	33031231	33031240
Chuck		SGSF 160-42	SGSF 200-55	SGSF 315-103	SGSF 400-136
Attachment DIN 6350	Dim	FL 125	FL 160	FL 260	FL 330
	A mm	160	200	315	400
	B mm	140	176	286	362
	C mm	125	160	260	330
	D mm	42	55	103	136
	E mm	4	4	5	5
	F mm	68	78	96,2	108
	G mm	53	54	73	92
	G1 mm	32	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

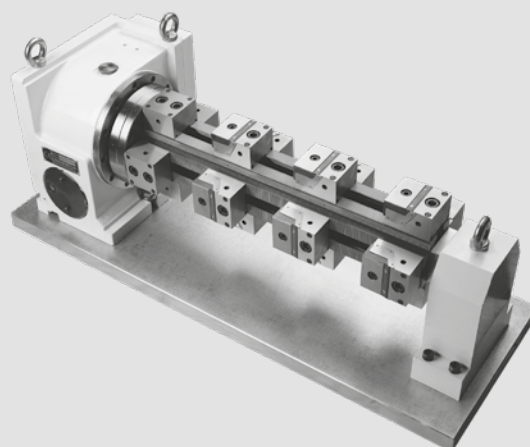
- For max. speed and max. clamping, all teeth shall be meshing
- For meshing teeth control towards outside dimension (M) toward inside dimension (Y)
- For features exceeding these limits ± 16 mm on diameter, shall be reduced by 25%
- ATTENTION: CLAMPING DIAMETERS HAVE BEEN CALCULATED WITH A.M. MESHING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

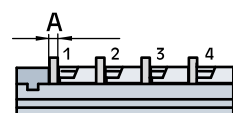
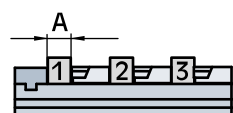
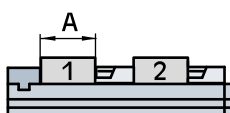
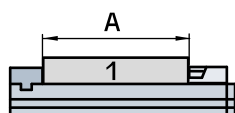


Application example



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

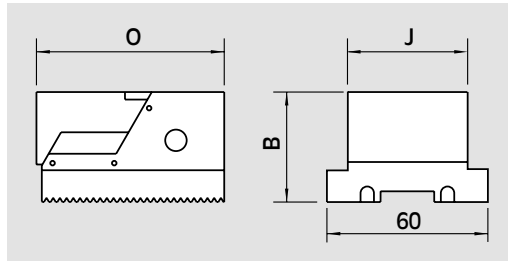
Clamping capacity



A max. mm

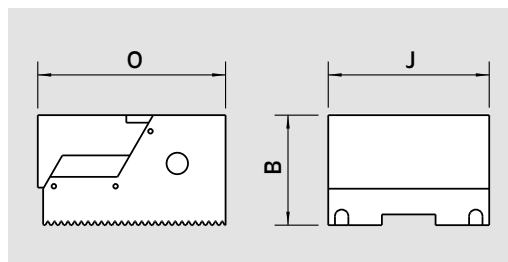
	A max. mm			
CIVI 2000 38/60-250	120	25	-	-
CIVI 2000 38/60-400	270	100	43	15
CIVI 2000 38/60-500	370	150	76	40
CIVI 2000 38/60-630	500	215	120	73
CIVI 2000 90-250	99	-	-	-
CIVI 2000 90-400	249	84	29	-
CIVI 2000 90-500	349	134	62	26
CIVI 2000 90-630	479	199	106	59

Movable smooth jaw set J38



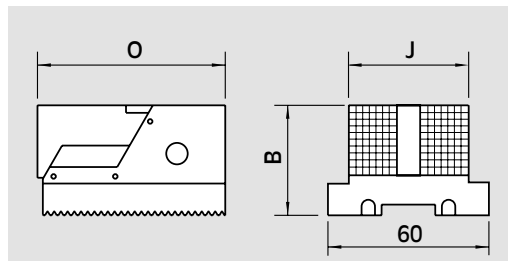
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 38	77584063 *	40	38	70	1

Movable smooth jaw set J60-J90



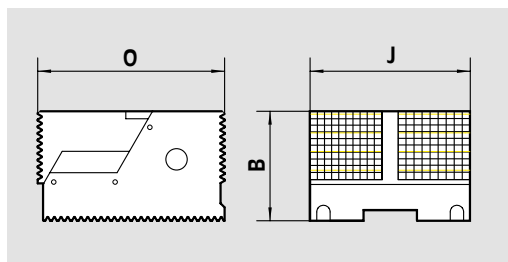
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584163 *	40	60	70	1.4
CV 90	77584263 *	45	90	80	2.9

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

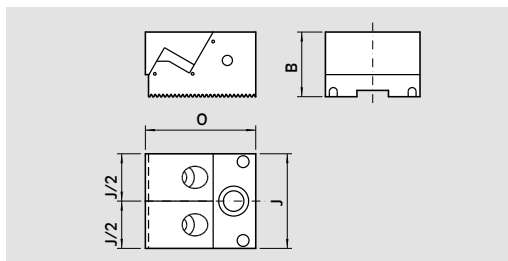
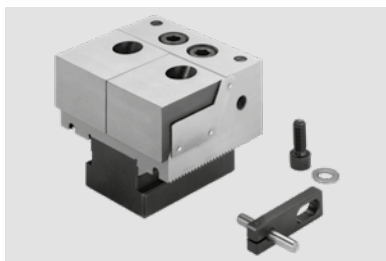
Movable jaw set J60-J90 with grooved jaws (for raw workpieces)



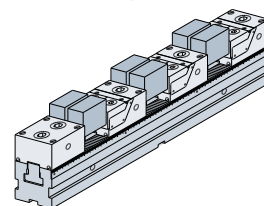
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584168 *	40	60	70	1.4
CV 90	77584268 *	45	90	80	2.9

* Codes valid only for mounting on CIVI column

Movable set with double jaws

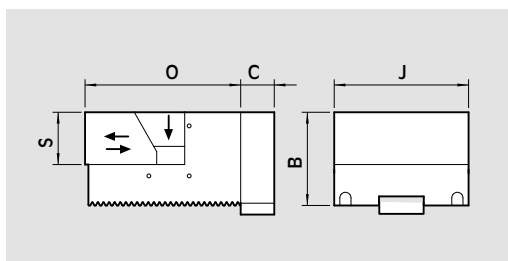


Application example



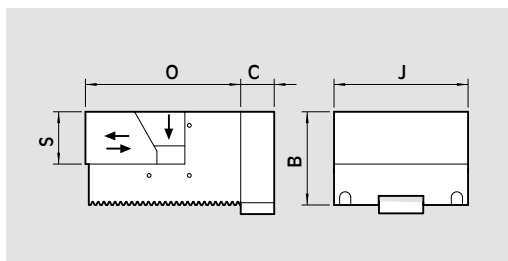
Type	Id. No.	B mm	J mm	O mm	Weight kg
CV 60	77584164 *	40	60	70	1.5
CV 90	77584264 *	45	90	80	3

Movable jaw set with aluminium jaws



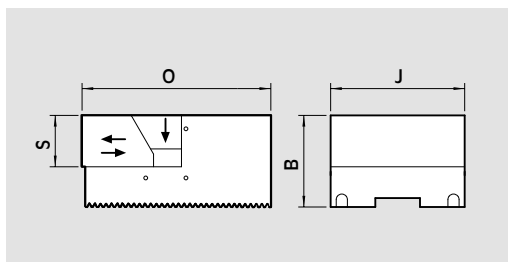
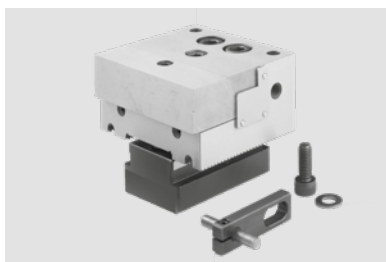
Type	Id. No.	B mm	C mm	J mm	O mm	S mm	Weight kg
CV 60	77584165 *	40	15	60	69.5	23	1.2
CV 90	77584265 *	45	20	90	80	25	2.7

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

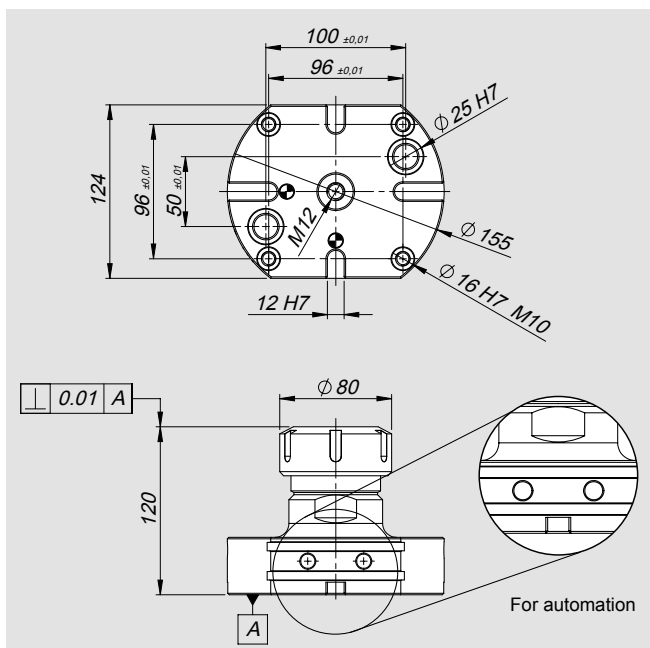
Movable jaw set with steel hardened jaw



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



NOTES	
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[illegible]