

- Radial setting of jaws
- Closed center
- 4 jaws (all diameters)

Application/customer benefits

- Clamping of large square and irregular parts using 2 or 4 jaws self centering
- Suitable for vertical machines thanks to the front protection of the slide ways
- Manual radial setting of master jaws
- TONGUE & GROOVE (type "American Standard")

Technical features

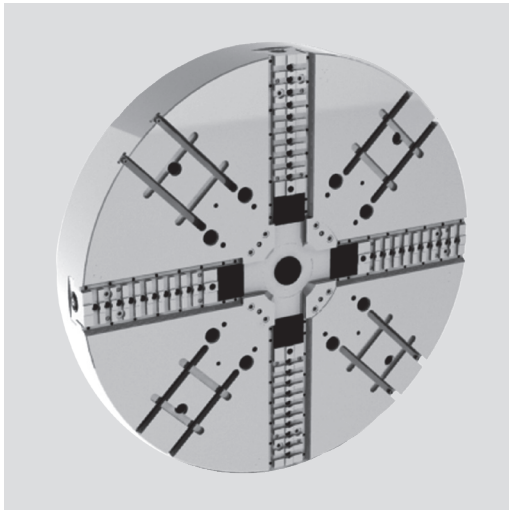
- Gripping force transmission via wedge hook
- Manual radial setting of master jaws for workpiece centering
- Protection from contamination with seals along the master jaw profiles
- Possibility to use jaw boxes for manual clamping mounted on the T-slots between the master jaws

Standard equipment

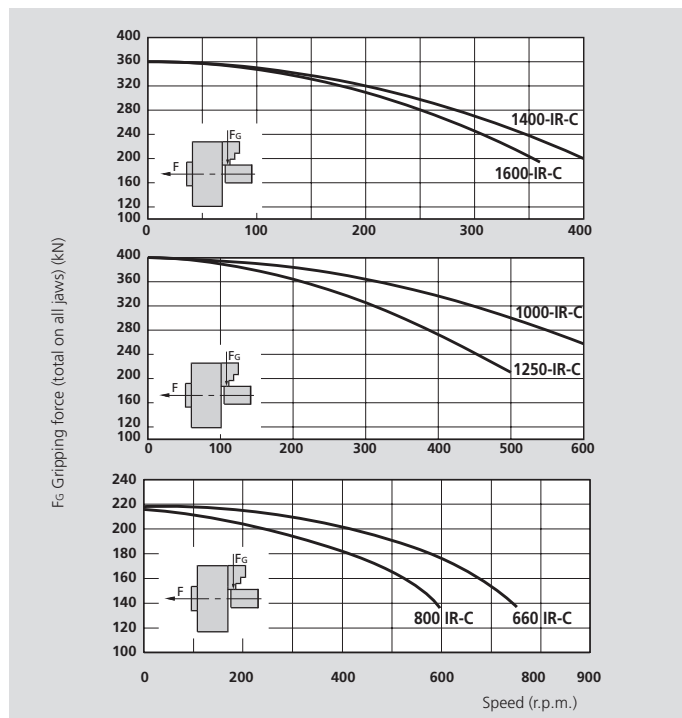
4-jaw chuck
1 set of soft top jaws
Mounting bolts
Grease gun

Ordering example

4-jaw chuck IR-C 1600 / Z720

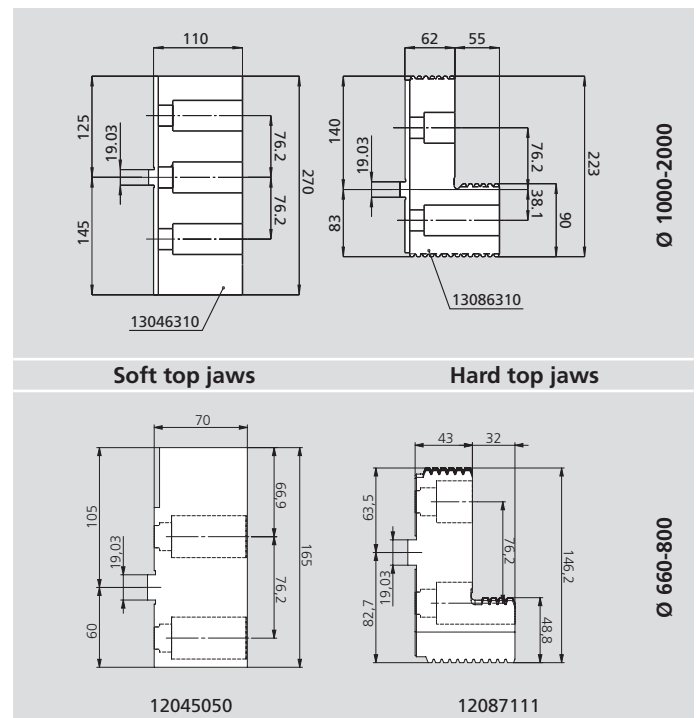


Actual gripping force diagrams



The data in the diagram refer to 4-jaw chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K67 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

Soft and hard top jaws for IR-C



△ Safety advice / danger of damage:

When using taller / heavier jaws and / or clamping on a bigger diameter reduce draw pull / rotating speed accordingly.

Technical data

SMW-AUTOBLOK Type		IR-C 660	IR-C 800	IR-C 1000	IR-C 1250	IR-C 1400	IR-C 1600	IR-C 2000
Number of jaws		4	4	4	4	4	4	4
Radial jaw stroke (+ manual setting)	mm	20 + (20)	20 + (20)	23 + (30)	23 + (30)	24 + (40)	24 + (40)	24 + (40)
Axial piston stroke	mm	50	50	57	57	60	60	60
Max. draw pull*	kN	120	120	180	180	200	200	200
Max. gripping force*	kN	215	215	320	320	360	360	360
Max. speed	r.p.m.	750	600	550	450	380	340	280
Weight (without top jaws)	kg	390	490	660	900	1425	1765	2730
Moment of inertia	kg·m ²	16	40	84	178	347	562	1360
Hard, reversible top jaw (piece)	Id. No.	12087111	12087111	13086310	13086310	13086310	13086310	13086310
Soft top jaw (piece)	Id. No.	12045050	12045050	13046310	13046310	13046310	13046310	13046310
Recommended actuating cylinders	Type	SIN-S 150-175-200	SIN-S 150-175-200	SIN-S 250	SIN-S 250	SIN-S 250	SIN-S 250	SIN-S 250
Id. No. IR-C (Center mounting)		77996601	77998024	77137439	77137449	77137455	77137463	77137479

* For internal clamping reduce the draw pull by 30%.

High precision power chuck Ø 660 - 2000 mm

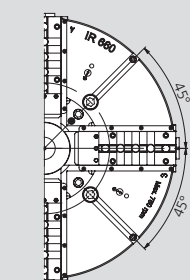
IR-C

- Radial setting of jaws
- Closed center
- 4 jaws (all diameters)

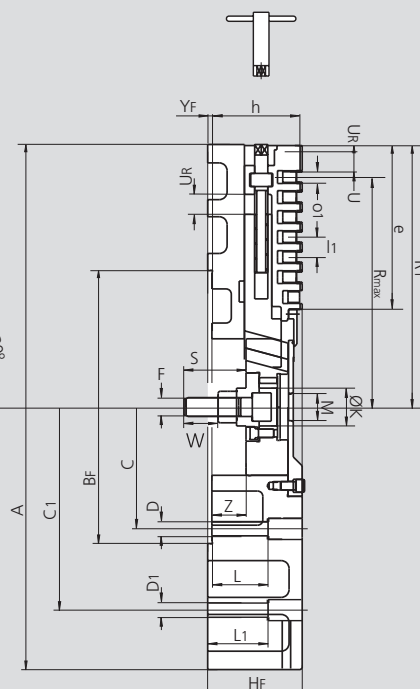
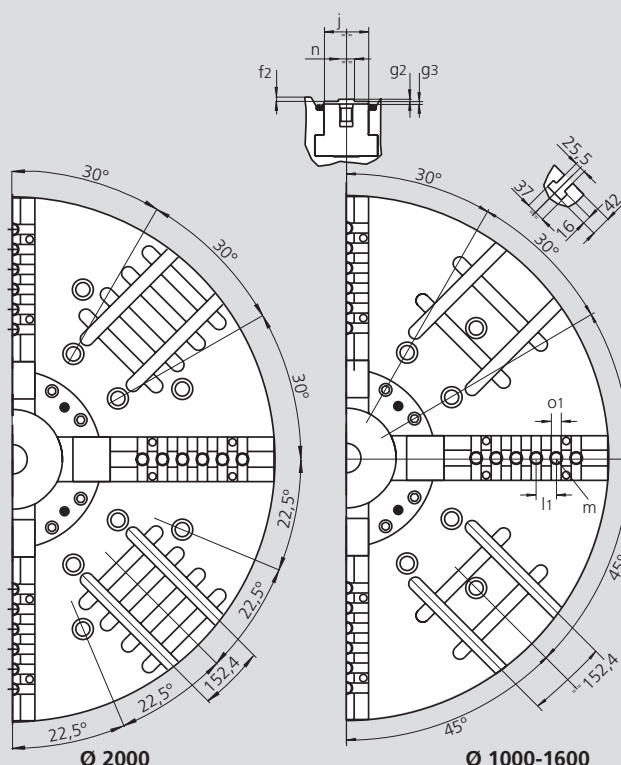
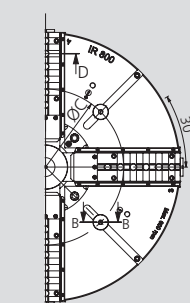
TONGUE & GROOVE

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Ø 660



Ø 800



Subject to technical changes.
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			IR-C 660		IR-C 800		IR-C 1000		IR-C 1250		IR-C 1400	IR-C 1600	IR-C 2000
Mounting			Z380	A15	Z520	A20	Z520	A20	Z520	A20	Z720	Z720	Z720
	A	mm	660		800		1005		1250		1400	1600	2000
	B _F H6	mm	380	285.775	520	417.775	520		520		720	720	720
	C	mm	330.2		463.6		463.6		463.6		647.6	647.6	647.6
	C ₁	mm	-		-		700		700		1110	1110	1110
	D	mm	27		27		27		27		33	33	33
	D ₁	mm	-		-		27		27		27	27	27
	F	mm	M30		M30		M36		M36		M36	M36	M36
	H _F	mm	154		150		200		200		240	240	260
	K	mm	50		105		72.5		72.5		72.5	72.5	72.5
	L	mm	75		55		137		137		177	177	197
	L ₁	mm	-		-		145		145		177	177	205
	M	mm	M52 x 1.5		M52 x 1.5		M52 x 1.5		M52 x 1.5		M52 x 1.5	M52 x 1.5	M52 x 1.5
Chuck open	R ₁	mm	340.5		400		502		623		696	796	996
Chuck open	R _{max}	mm	307		375		457		563		651	738	914
Radial stroke	U	mm	20		20		23		23		24	24	24
Setting stroke	U _R	mm	20		20		30		30		40	40	40
	W	mm	57,5		60		65		65		65	65	65
	S	mm	97		95		118		118		118	118	118
	Y _F	mm	8		8		8		8		8	8	8
Max.	Z	mm	56		66		75		75		100	100	120
Min.	Z	mm	6		16		18		18		40	40	40
	e	mm	194		246		295		416		446	539	739
	f ₁	mm	-		-		-		-		-	-	-
	f ₂	mm	7		13		8		8		8	8	8
	g ₂	mm	3		3		4		4		4	4	4
	g ₃	mm	7		7		7		7		7	7	7
	h	mm	156		158		184		184		224	224	244
	j	mm	85		85		85		85		110	110	110
	l ₁	mm	38.1		38.1		38.1		38.1		38.1	38.1	38.1
	m	mm	M20		50		M24		M24		M24	M24	M24
	n h8	mm	12.7		50		30		30		30	30	30
	o ₁ H7	mm	19.03		19.03		19.03		19.03		19.03	19.03	19.03
Number of „o ₁ “ cross grooves			3		5		6		9		10	12	16
Number of „m“ threads			5		6		7		9		11	13	17