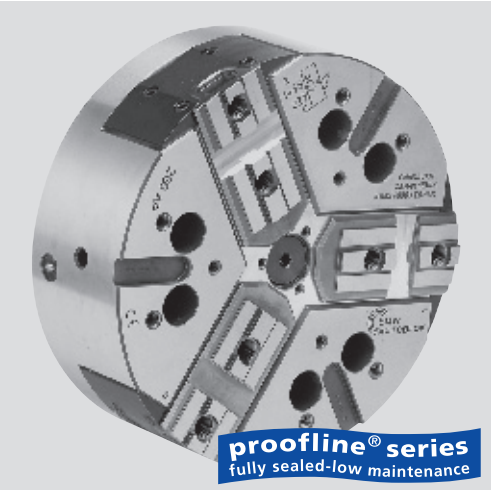
APL-C

Tongue & groove

High precision power chucks Ø 215 - 400 mm

- LONG STROKE
- closed center
- 3 jaws
- proofline® chucks = fully sealed – low maintenance



Application/customer benefits

- For large batch production
- Fully sealed, ideal for dry machining of castings and forgings or if high pressure coolant is used
- Large clamping range

APL-C: Tongue & groove master jaws (American Standard)

Technical features

- Extra long jaw stroke
- Constant gripping force with permanent grease lubrication
- Center bore for coolant and/or air
- Chuck body and internal parts case hardened
- **proofline® chucks** = fully sealed – low maintenance

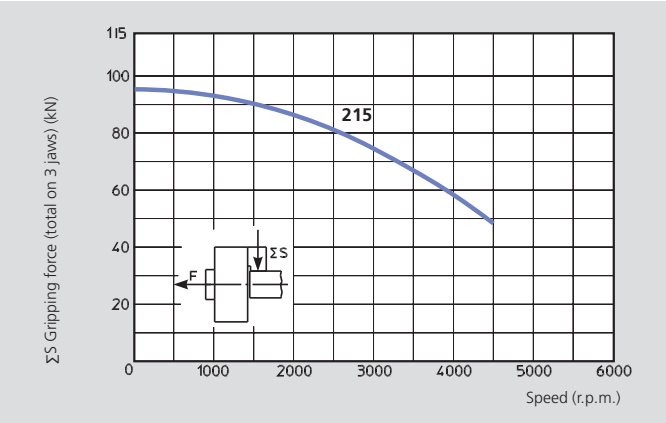
Standard equipment

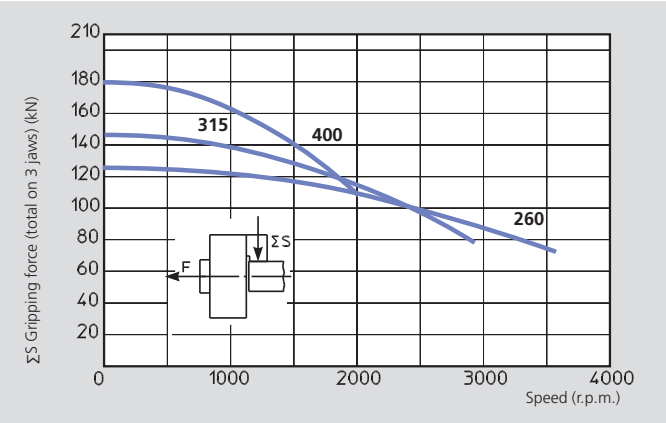
3 jaw chuck
mounting bolts

Ordering example

3 jaw chuck APL-C 215/A6

Actual gripping force diagrams





The data in the diagrams refer to 3-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.

⚠ **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		APL-C 215	APL-C 260	APL-C 315	APL-C 400
Radial jaw stroke	mm	8.5	9.7	12.1	13.3
Axial piston stroke	mm	21	24	30	33
Max. draw pull*	kN	53	68	80	100
Max. gripping force*	kN	95	125	145	180
Max. speed	r.p.m.	4500	3600	2800	2000
Weight (without top jaws)	kg	19.5	32.5	56	90
Moment of inertia	kg·m²	0.113	0.28	0.69	1.7
Recommended actuating cylinders		SIN-S 100/125	SIN-S 125/150	SIN-S 125/150	SIN-S 150/175

* For internal clamping reduce the draw pull by 30 %


on request:
Tooling Standard
Parts Catalog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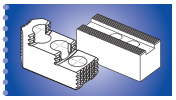
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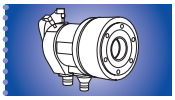
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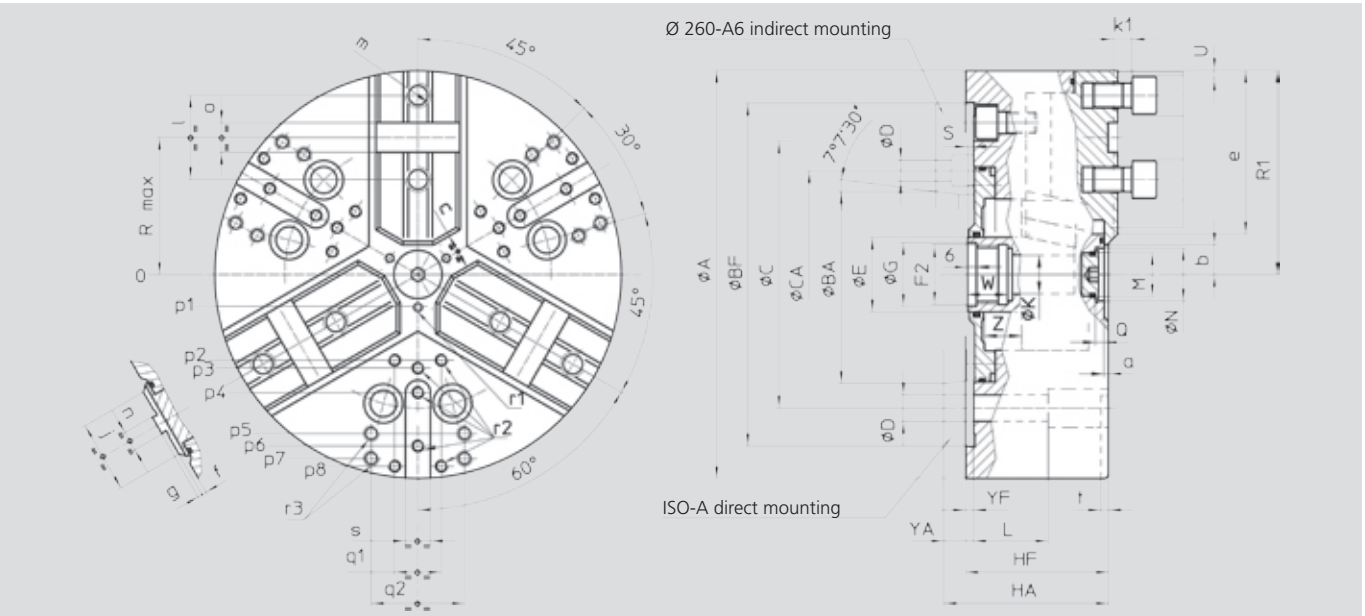
Tongue & groove



Subject to technical changes
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type				APL-C 215		APL-C 260			APL-C 315		APL-C 400	
Mounting				Z170	A6	Z220	A6	A8	Z220	A8	Z300	A11
	A		mm	216		262			315		390	
	BF/BA	H6	mm	170	106.375	220	106.375	139.719	220	139.719	300	196.869
	C		mm	133.4		171.4		171.4	171.4		235	
	CA		mm	-	-	-	133.4	-	-	-	-	-
	D		mm	13.5		17	13.5	17	17		21	
	E		mm	42		48			48		75	
	F2		mm	M32 x 1.5		M38 x 1.5			M38 x 1.5		M60 x 1.5	
	G	H8	mm	33		39			39		61	
	HF/HA		mm	81	93	92	111	106	101	115	112	127
	K		mm	20		25			25		48	
	L		mm	32		38			38		54	
	M		mm	M22 x 1.5		M28 x 1.5			M28 x 1.5		M52 x 1.5	
	N	H9	mm	24		34			34		60	
	Q		mm	5.5		5.5			5.5		9	
Chuck open	R1		mm	112.5		136			163.5		202	
max.	R		mm	76		92.5			111		139	
max./min.	S		mm	25/4		28/4			34/4		37/4	
Radial jaw stroke	U		mm	8.5		9.7			12.1		13.3	
	W		mm	26		26			26		38	
	YF/YA		mm	5	17	5	24	19	5	19	6	21
max./min.	Z		mm	21/0		24/0			30/0		33/0	
	a		mm	3		3			3		3	
min.	b		mm	8.5		9			11		24.5	
min.	c		mm	6.2		6			6		28	
	e		mm	87		107			129		150	
	f		mm	3		3			3		6	
	g		mm	3		3			3		3	
	j		mm	46		48			58		63	
	k1		mm	11		12			12		14	
	l		mm	44.4		54			63.5		76.2	
	m		mm	M12		M16			M16		M20	
	n	h8	mm	7.94		12.70			12.70		12.70	
	o	H7	mm	12.68		19.03			19.03		19.03	
	p1		mm	16		21			21		37.5	
	p2		mm	-		-			60		80	
	p3		mm	49		55			62.5		83	
	p4		mm	80		70			80		110	
	p5		mm	80		102			102		140	
	p6		mm	-		102			120		155	
	p7		mm	-		-			135		170	
	p8		mm	-		-			-		170	
	q1		mm	-		-			30		36	
	q2		mm	45		60			60		80	
	r1		mm	M5/8		M6/10			M6/10		M6/12	
	r2		mm	M8/17		M8/17			M8/17		M10/19	
	r3		mm	M8/17		M10/19			M10/19		M12/22	
	s		mm	16		16			16		20	
	t		mm	5		5			5		5	