AP-RC

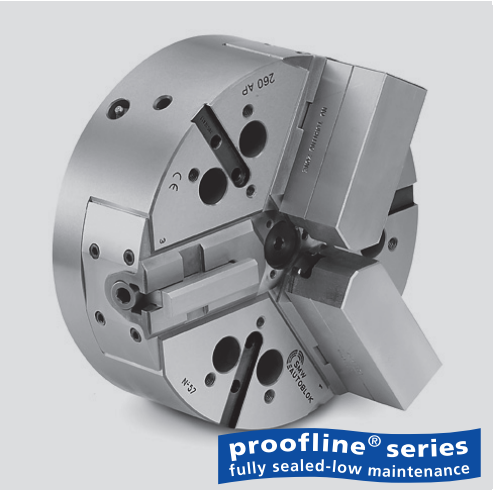
QUICK JAW CHANGE
Tongue & groove

AP-RD

QUICK JAW CHANGE
serrated master jaws

Quick jaw change high precision power chucks Ø 170 - 400 mm

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



Application/customer benefits

- For mid to large batch flexible production
- Quick jaw change = short set up time
- Fully sealed, ideal for dry machining of castings and forgings or if high pressure coolant is used
- Ideal for vertical, pick up and horizontal machines

AP-RC: quick jaw change with tongue & groove master jaws
AP-RD: quick jaw change with serrated master jaws (2.5 mm x 60°) (radially adjustable)

Technical features

- High accuracy patented quick jaw change
- Constant gripping force with permanent grease lubrication
- Central bore for coolant and/or air
- Chuck body and internal parts case hardened
- **proofline® chucks** = fully sealed – low maintenance

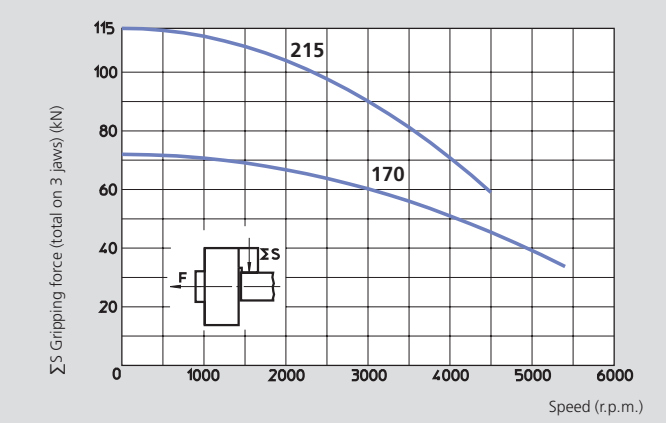
Standard equipment

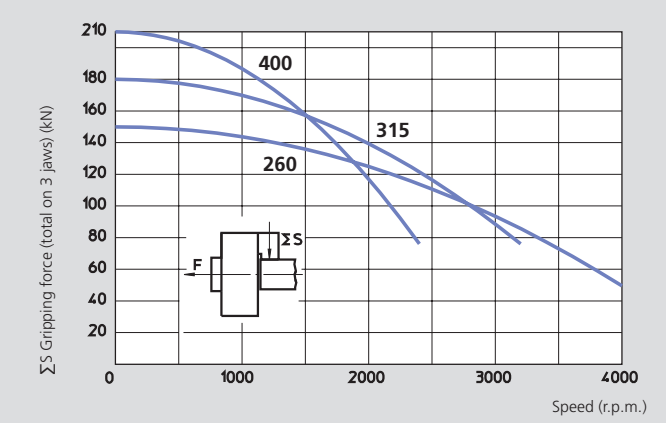
3 jaw chuck
1 set soft top jaws
1 quick jaw change T wrench
mounting bolts

Ordering example

3 jaw chuck AP-RC 215/A6
or
3 jaw chuck AP-RD 260/FL220

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		AP-RC 170 AP-RD 170	AP-RC 215 AP-RD 215	AP-RC 260 AP-RD 260	AP-RC 315 AP-RD 315	AP-RC 400 AP-RD 400
Number of jaws		**3**	**3**	**3**	**3**	**3**
Radial jaw stroke	mm	3.6	4.6	5	6.3	7
Axial piston stroke	mm	17	22	24	30	33
Max. draw-pull	kN	30	42	55	65	75
Max. gripping force	kN	72	112	150	180	210
Max. speed	r.p.m.	5400	4600	4000	3200	2400
Weight (without top jaws)	kg	10	19.5	32.5	56	90
Moment of inertia	kg·m²	0.037	0.113	0.28	0.69	1.7
Recommended actuating cylinders		**SIN-S 100**	**SIN-S 100/125**	**SIN-S 125/150**	**SIN-S 125/150**	**SIN-S 150/175**

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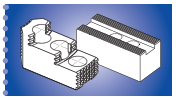
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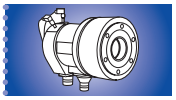
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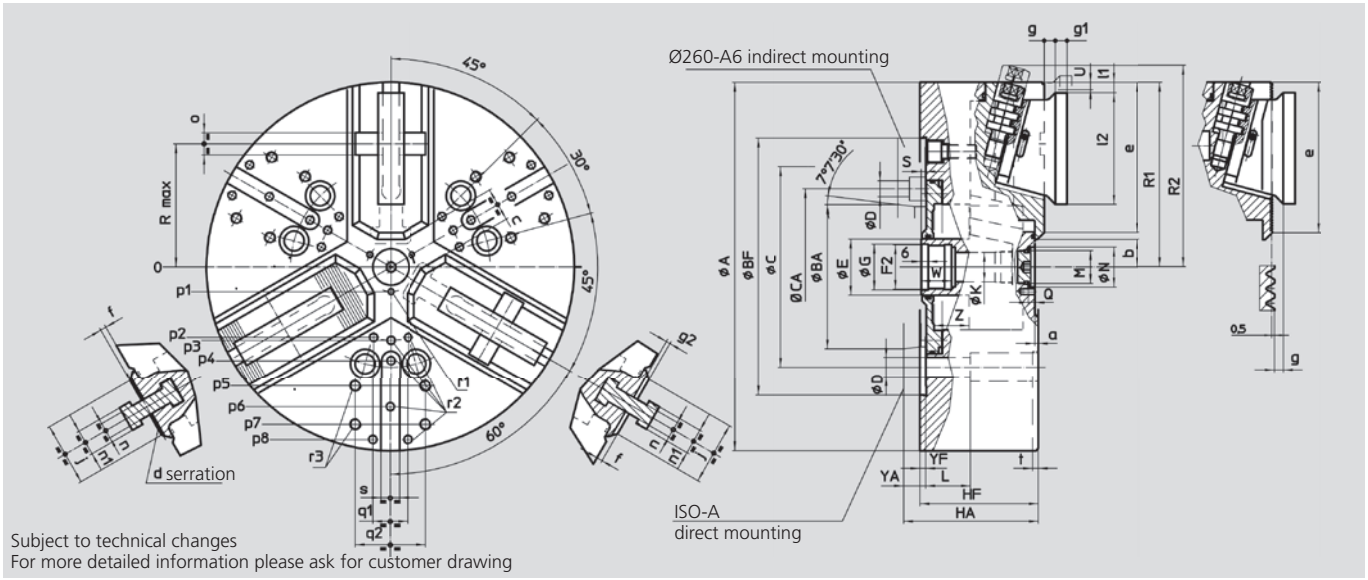

Subject to technical changes
For more detailed information please ask for customer drawing

SMW-AUTOBLOK Type				AP-RC 170 AP-RD 170		AP-RC 215 AP-RD 215		AP-RC 260 AP-RD 260			AP-RC 315 AP-RD 315		AP-RC 400 AP-RD 400	
Mounting				Z140	A5	Z170	A6	Z220	A6	A8	Z220	A8	Z300	A11
	A		mm	172		216		262			315		390	
	BF/BA	H6	mm	140	82.563	170	106.375	220	106.375	139.719	220	139.719	300	196.869
	C		mm	104.8		133.4		171.4	-	171.4	171.4		235	
	CA		mm	-	-	-	-	-	133.4	-	-	-	-	-
	D		mm	11.5		13.5		17	13.5	17	17		21	
	E		mm	32		42		48			48		75	
	F2		mm	M24 x 2		M32 x 1.5		M38 x 1.5			M38 x 1.5		M60 x 1.5	
	G	H8	mm	25		33		39			39		61	
	HF/HA		mm	68	78	81	93	92	111	106	101	115	112	127
	K		mm	18.5		20		25			25		48	
	L		mm	23		32		38			38		54	
	M		mm	M22 x 1.5		M22 x 1.5		M28 x 1.5			M28 x 1.5		M52 x 1.5	
	N	H9	mm	24		24		34			34		60	
	Q		mm	5.5		5.5		5.5			5.5		9	
max.	R		mm	56		72		88			105		133.5	
Chuck open	R1		mm	86.5		108		131			157.5		195	
	R2 *		mm	99		122.5		145.5			172		217.5	
max./min.	S		mm	21/4		26/4		28/4			34/4		37/4	
Radial jaw stroke	U		mm	3.6		4.6		5			6.3		7	
	W		mm	22		26		26			26		38	
	YF/YA		mm	5	15	5	17	5	24	19	5	19	6	21
max./min.	Z		mm	17/0		22/0		24/0			30/0		33/0	
	a		mm	3		3		3			3		3	
min.	b		mm	8.5		12		14			16.5		31	
min.	c		mm	9		13		14			16		38	
serration AP-RD	d		mm	2.5 x 60°		2.5 x 60°		2.5 x 60°			2.5 x 60°		2.5 x 60°	
	e		mm	68		85		106			128.5		150	
	f		mm	5		5		5			5		7	
	g		mm	7.5		7.5		8.5			9.5		11.5	
	g1		mm	8		8		9			10		12	
	g2		mm	3.5		3.5		3.5			3.5		5.5	
	j		mm	30		38		44			54		63	
	l1		mm	2.5		2.5		9			9		8.5	
	l2		mm	52		66		78			95		118	
	n	h8	mm	10		10		12			14		18	
	n1		mm	16		16		19			22		28	
	o	H7	mm	12.68		12.68		19.03			19.03		19.03	
	p1		mm	16		16		21			21		37.5	
	p2		mm	-		-		-			60		80	
	p3		mm	38		49		55			62.5		83	
	p4		mm	-		80		70			80		110	
	p5		mm	65		80		102			102		140	
	p6		mm	70		-		102			120		155	
	p7		mm	-		-		-			135		170	
	p8		mm	-		-		-			-		170	
	q1		mm	-		-		-			30		36	
	q2		mm	36		45		60			60		80	
	r1		mm	M5/7		M5/8		M6/10			M6/10		M6/12	
	r2		mm	M6/14		M8/17		M8/17			M8/17		M10/19	
	r3		mm	M8/17		M8/17		M10/19			M10/19		M12/22	
	s		mm	16		16		16			16		20	
	t		mm	5		5		5			5		5	

*quick jaw change position