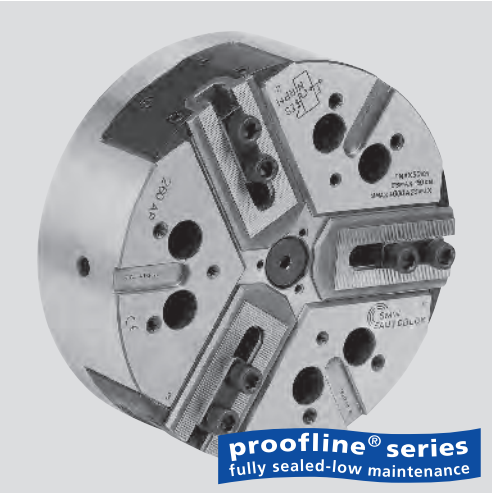
APL-D
INCH serration

APL-C
Tongue & groove

High precision power chucks Ø 500 - 800 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

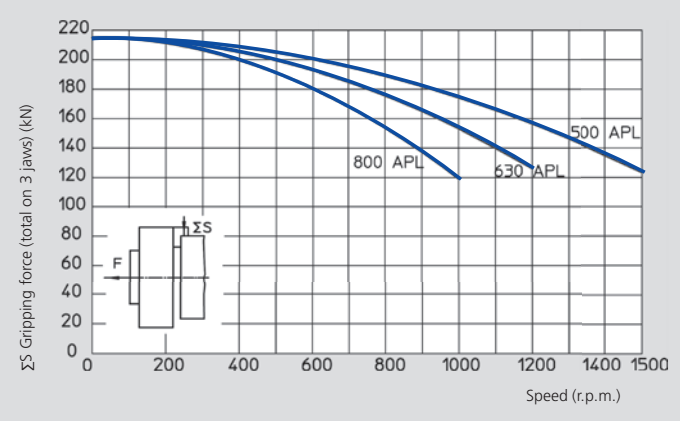
APL-D: INCH serration master jaws
APL-C: Tongue & groove master jaws (American Standard)

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 630 Z380

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-D 500 APL-C 500	APL-D 630 APL-C 630	APL-D 800 APL-C 800
Radial jaw stroke	mm	13.3	13.3	13.3
Axial piston stroke	mm	33	33	33
Max. draw pull	kN	120	120	120
Max. gripping force	kN	215	215	215
Max. speed	r.p.m.	1400	1000	800
Weight (without top jaws)	kg	170	297	535
Moment of inertia	kg·m²	5.5	14.6	44
Recommended actuating cylinders		**SIN-S 175/200**	**SIN-S 175/200**	**SIN-S 175/200**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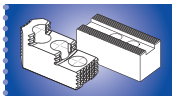
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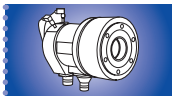
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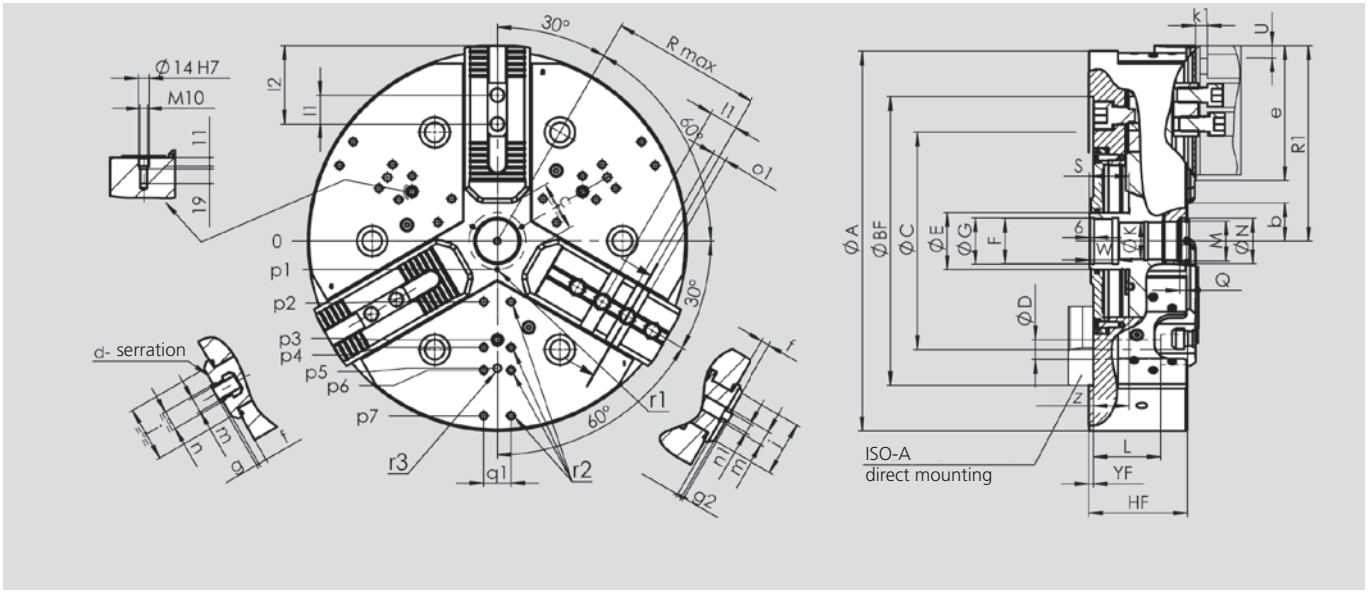
High precision power chucks Ø 500 - 800 mm

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

APL-D INCH serration

APL-C Tongue & groove



SMW-AUTOBLOK Type				APL-D 500 APL-C 500	APL-D 630 APL-C 630	APL-D 800 APL-C 800
Mounting				**Z380**	**Z380**	**Z520**
	A		mm	500	630	800
	BF	H6	mm	380	380	520
	C		mm	330.2	330.2	463,6
	D		mm	26	26	26
	E		mm	75	75	75
	F		mm	M60 x 1.5	M60 x 1.5	M60 x 1.5
	G	H8	mm	61	61	61
	HF		mm	130	140	150
	K		mm	48	48	48
	L		mm	89	89	89
	M		mm	M52 x 1.5	M52 x 1.5	M52 x 1.5
	N	H8	mm	60	60	60
	Q		mm	7.5	7.5	7.5
chuck open	**R1**		mm	257	322	407
max.	**R**		mm	198	250	351
	S		mm	52	52	52
jaw stroke	**U**		mm	13.3	13.3	13.3
	W		mm	38	38	38
max./min.	**Z**		mm	47/14	47/14	47/14
min.	**b**		mm	36.5	36.5	36.5
min.	**c**		mm	42	42	42
	d		mm	3/32x90°	3/32x90°	3/32x90°
	e		mm	177	242	327
	f		mm	11	11	11
	g		mm	3.5	3.5	3.5
	g2		mm	3	3	3
	g3		mm	6.5	6.5	6.5
	j		mm	72	72	72
	k1		mm	16	16	16
	l1		mm	38	38	38
max./min.	**l2**		mm	145/54	210/54	295/54
	l3		mm	38.1	38.1	38.1
	m		mm	M20	M20	M20
	n	H8	mm	25.5	25.5	25.5
	n1	H8	mm	12.7	12.7	12.7
	o1		mm	19.03	19.03	19.03
	p1		mm	37.5	37.5	37.5
	p2		mm	80	80	-
	p3		mm	130	130	130
	p4		mm	140	170	200
	p5		mm	167,5	280	280
	p6		mm	170	-	290
	p7		mm	230	260	380
	q1		mm	36	36	36
	r1		mm	M6	M6	M6
	r2		mm	M10	M10	M10
	r3		mm	M12	M16	M16
	YF		mm	6	6	6
Number of 01 cross grooves				2	3	6
Number of "m" threads				4	5	8

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

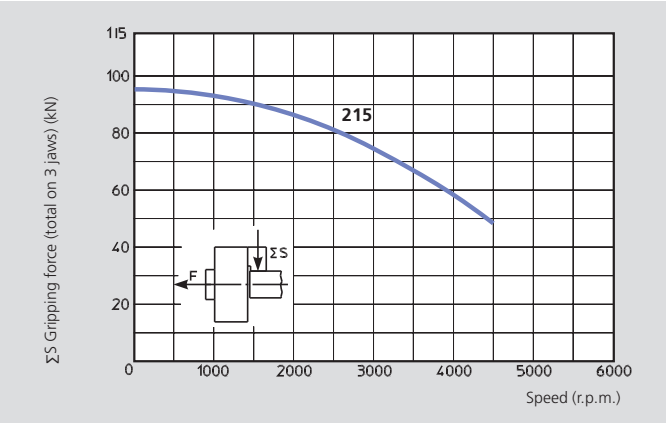
Standard equipment

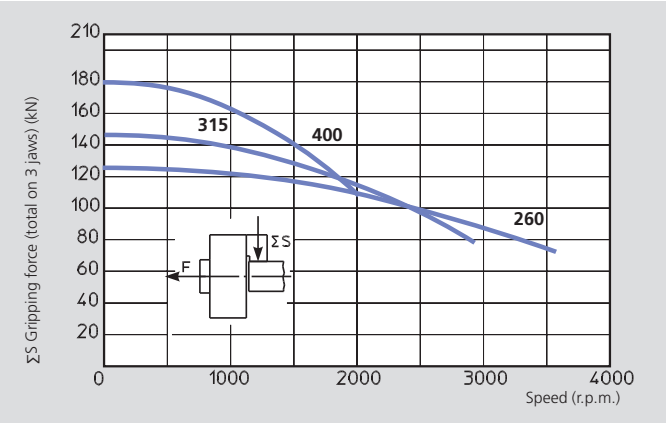
3 jaw chuck
mounting bolts

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**


on request:
Tooling Standard
Parts Catalog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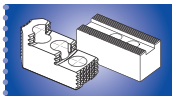
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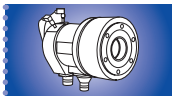
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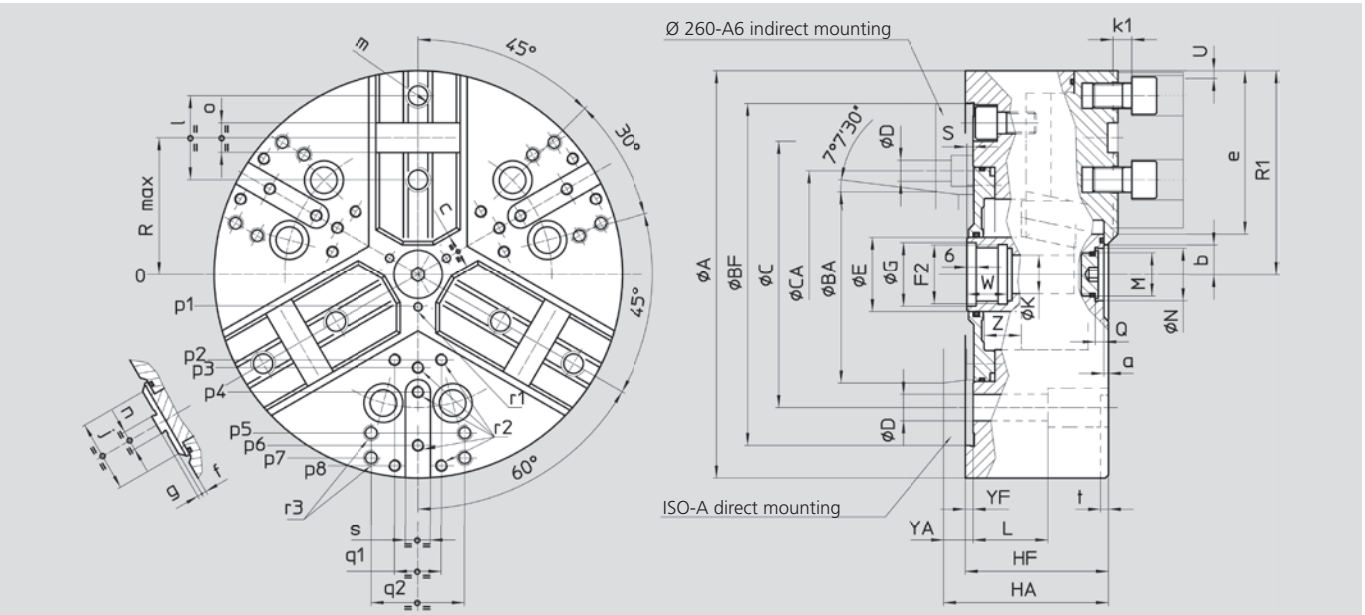
High precision power chucks Ø 215 - 400 mm

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

APL-C

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	