

APL-D

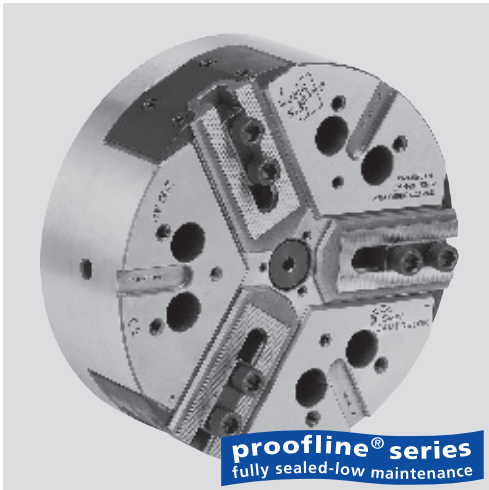
INCH serration

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

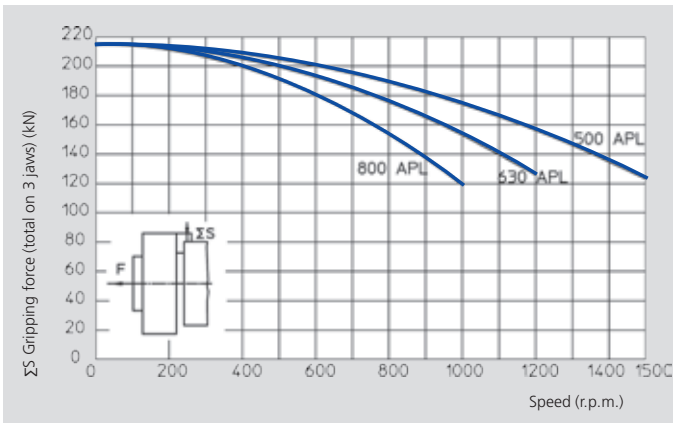
Standard equipment

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.

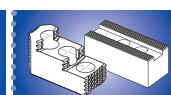
Technical data

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·m ²	5.5	14.6	44
Recommended actuating cylinders		SIN-S 175/200	SIN-S 175/200	SIN-S 175/200

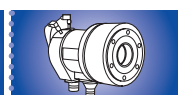
* For internal clamping reduce the draw pull by 30 %



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High precision power chucks Ø 500 - 800 mm

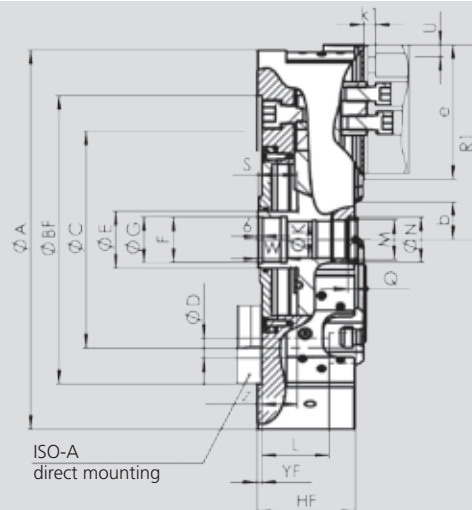
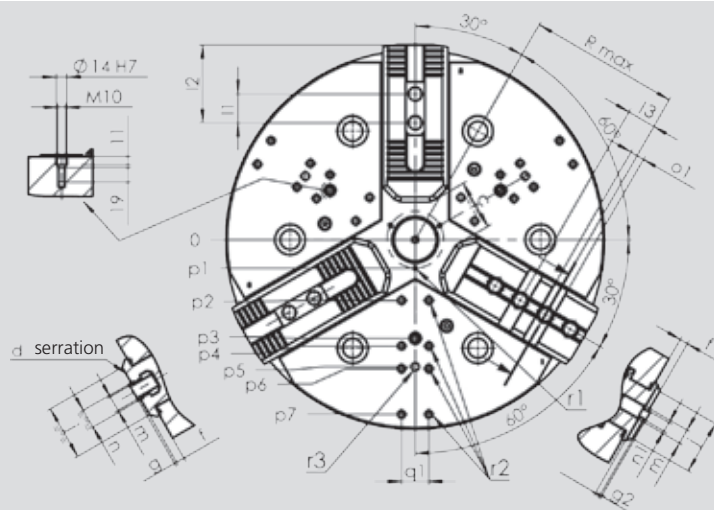
- LONG STROKE
- closed center
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APL-D

INCH serration

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Tongue & groove



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

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	H6	mm	500	630	800
		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 max.	R1	mm	257	322	407
	R	mm	198	250	351
jaw stroke	S	mm	52	52	52
	U	mm	13.3	13.3	13.3
max./min.	W	mm	38	38	38
	Z	mm	47/14	47/14	47/14
min.	b	mm	36.5	36.5	36.5
	c	mm	42	42	42
min.	d	mm	3/32x90°	3/32x90°	3/32x90°
	e	mm	177	242	327
min.	f	mm	11	11	11
	g	mm	3.5	3.5	3.5
min.	g2	mm	3	3	3
	g3	mm	6.5	6.5	6.5
min.	j	mm	72	72	72
	k1	mm	16	16	16
max./min.	l1	mm	38	38	38
	l2	mm	145/54	210/54	295/54
min.	l3	mm	38.1	38.1	38.1
	m	mm	M20	M20	M20
min.	n	mm	25.5	25.5	25.5
	n1	mm	12.7	12.7	12.7
min.	o1	mm	19.03	19.03	19.03
	p1	mm	37.5	37.5	37.5
min.	p2	mm	80	80	-
	p3	mm	130	130	130
min.	p4	mm	140	170	200
	p5	mm	167,5	280	280
min.	p6	mm	170	-	290
	p7	mm	230	260	380
min.	q1	mm	36	36	36
	r1	mm	M6	M6	M6
min.	r2	mm	M10	M10	M10
	r3	mm	M12	M16	M16
min.	YF	mm	6	6	6
		mm	6	6	6
Number of 01 cross grooves (only for APL-C)			2	3	6
Number of "m" threads (only for APL-C)			4	5	8