

BP-D

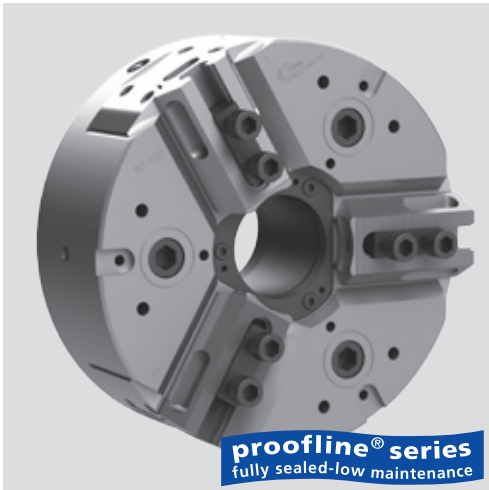
INCH serration

BP-M

METRIC serration

High precision power chucks Ø 220 - 320 mm

- LARGE THROUGH HOLE
- 3 jaws

**Application/customer benefits**

- General use on standard lathes due to the through hole, but with advantage of minimum maintenance and use also in extreme environments
- Longer life at high precision due to less wear
- Fully sealed, ideal for dry machining of castings and forgings or if high pressure coolant is used

BP-D: Master jaws with INCH serration (1/16" x 90°)**BP-M:** Master jaws with METRIC serration (1.5 mm x 60°) (suitable for japanese jaws)**Technical features**

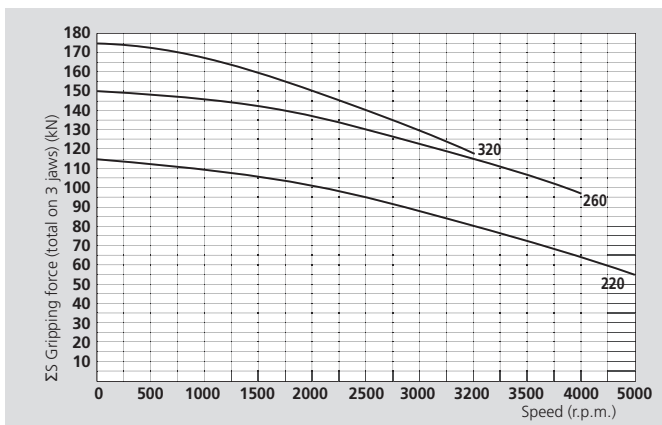
- Constant gripping force with permanent grease lubrication
- Large through hole compatible with the standard machines
- Chuck body and internal parts case hardened
- **Proofline®chucks**= fully sealed - low maintenance

Standard equipment

- 3 jaw chuck
- 1 set T-nuts and bolts
- 1 set soft top jaws
- Mounting bolts

Ordering example

- 3 jaw chuck BP-D 220/Z170
- or
- 3 jaw chuck BP-M 220/A6

Actual gripping force diagrams

The data in the diagram 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.

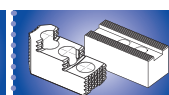
Technical data

SMW-AUTOBLOK Type		BP-D 220 BP-M 220	BP-D 260 BP-M 260	BP-D 320 BP-M 320
Number of jaws		3	3	3
Through-hole	mm	52	66	95
Radial jaw stroke	mm	4	5	5
Axial piston stroke	mm	16	19	19
Max. draw pull*	kN	38	60	68
Max. gripping force*	kN	115	150	175
Max. speed	r.p.m.	5000	4000	3200
Weight (without top jaws)	kg	23	36	60
Moment of inertia	kg·m ²	0.14	0.34	0.85
Recommended actuating cylinders		SIN-S 100/125 VNK 130-52	SIN-S 125/150 VNK 150-67	SIN-S 125/150 VNK 225-95

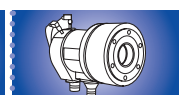
* For internal clamping reduce the draw pull by 30 %



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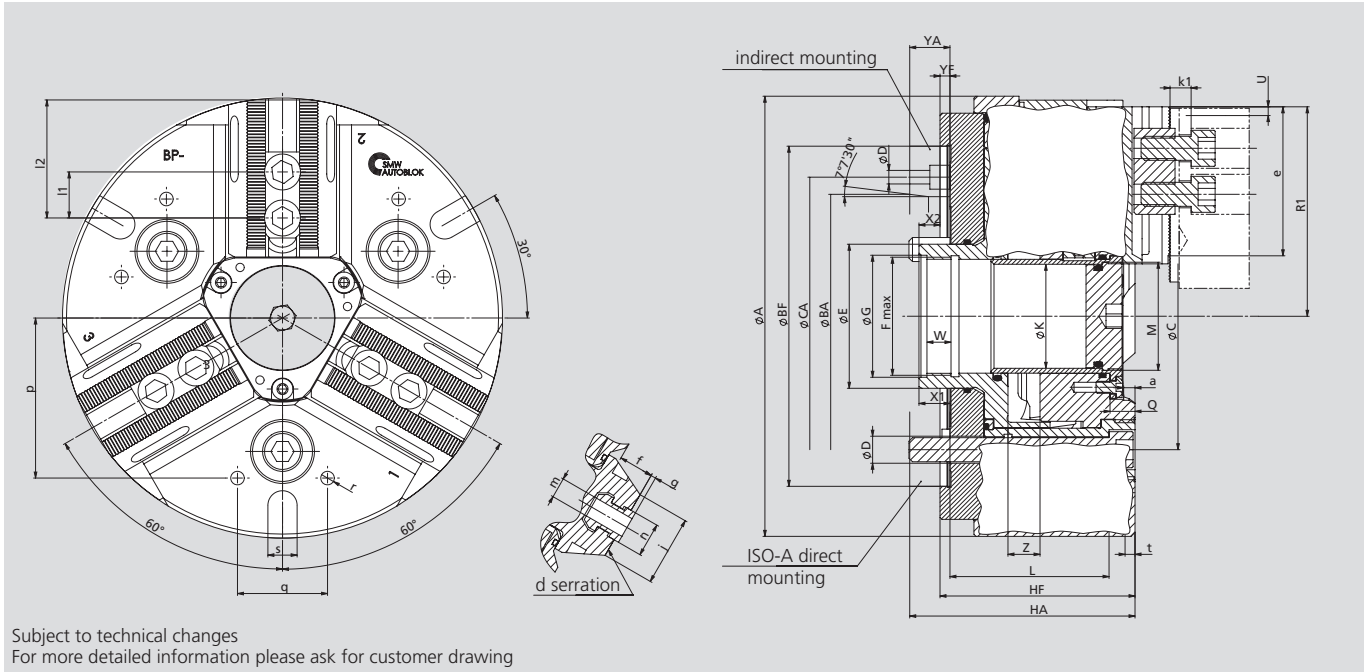
BP-D

BP-M

- LARGE THROUGH HOLE
- 3 jaws

INCH serration

METRIC serration



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

SMW-AUTOBLOK Type			BP-D 220 BP-M 220		BP-D 260 BP-M 260			BP-D 320 BP-M 320		
Mounting			Z170	A6	Z220	A6	A8	Z300	A8	A11
	A	mm	220		262			320		
	Bf/BA H6	mm	170	106.375	220	106.375	139.719	300	139.719	196.869
	C	mm	133.4		171.4			235		
	CA	mm	-	-	-	133.4	-	-	171.4	-
	D	mm	13.5		17	13.5	17	21		
	E	mm	72		88			115		
	Fmax	mm	M60 x 1.5		M75 x 2			M102 x 2		
	G	mm	61		76			102.5		
	Hf/HA	mm	97.5	109.5	114	149	128	121	163	137
	K	mm	52		66			95		
	L	mm	79.5		92			95		
	M	mm	M54 x 1.5		M68 x 2			M98 x 2		
	Q	mm	12.5		16.5			16.5		
Chuck open	R1	mm	109		131			159		
Jaw stroke	U	mm	4.3		5			5		
	W	mm	12		14			16.5		
	X₁/X₂	mm	15.5 / 10.5		22 / 17			25 / 20		
	Yf/YA	mm	5	17	5	40	19	5	47	21
max./min.	Z	mm	16 / 0		19 / 0			19 / 0		
	a	mm	5.7		9.7			9.7		
BP-D Serration	d	inch	1/16" x 90°		1/16" x 90°			1/16" x 90°		
BP-M Serration	d	mm	1.5x60°		1.5x60°			1.5x60°		
	e	mm	74.5		89			100.5		
	f	mm	17.5		12			19		
	g	mm	2.5		2.5			3.5		
	j	mm	35		35.22			48.3		
	k1	mm	10.5		12			12		
BP-D	l1	mm	23		30			30		
BP-M	l1	mm	25		30			30		
max./min.	l2	mm	59 / 33		67 / 43			79 / 43		
BP-D/ BP-M	m	mm	M12		M12			M16		
BP-D	n h8	mm	17		17			21		
BP-M	n h8	mm	14		16			21		
	p	mm	80		102			100		
	q	mm	45		60			60		
	r	mm	M8		M10			M10		
	s H12	mm	-		16			-		
	t	mm	-		5			-		