

BP-D

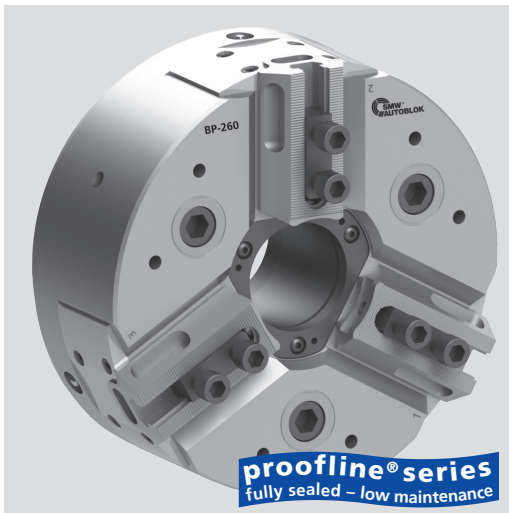
INCH
serration

BP-M

METRIC
serration

High precision power chucks Ø 220 - 320 mm

- LARGE THROUGH HOLE
- 3 jaws
- proofline® chucks = fully sealed – low maintenance



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

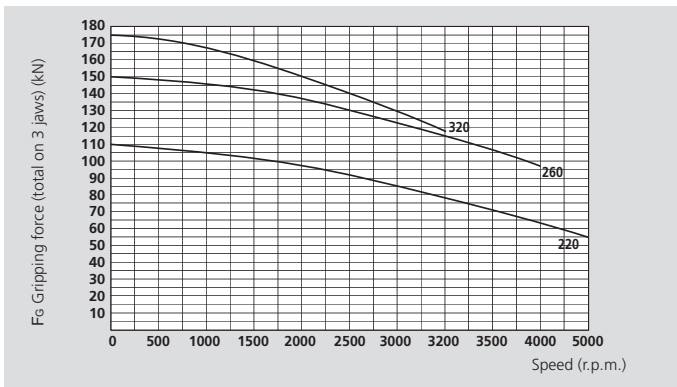
Standard equipment

- 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 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.

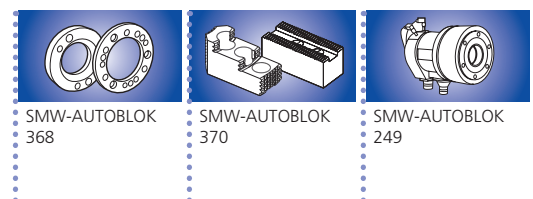
⚠ Safety advice/danger of damage:

When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

Technical data

SMW-AUTOBLOK Type		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	44	60	68
Max. gripping force*	kN	110	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-T2 130-52	SIN-S 125/150 VNK-T2 150-67	SIN-S 125/150 VNK-T2 225-95

* For internal clamping reduce the draw pull by 30 %

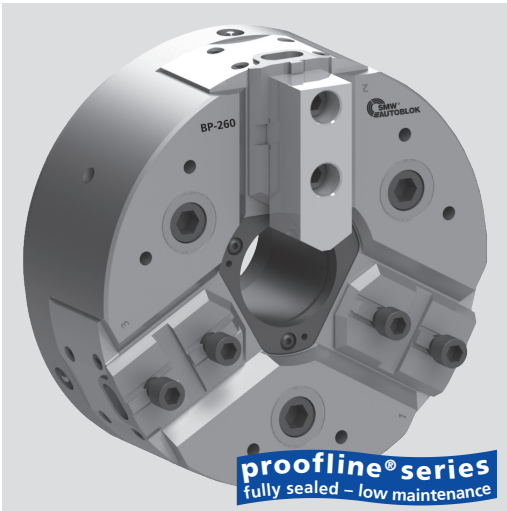


BP-C

Tongue & groove

High precision power chucks \varnothing 220 - 320 mm

- LARGE THROUGH HOLE
- 3 jaws
- proofline® chucks = fully sealed – low maintenance



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

Technical features

- Constant gripping force with permanent grease lubrication
- Large through hole compatible with the standard machines
- 3 jaw version available in all diameters
- **Proofline®chucks**= fully sealed - low maintenance

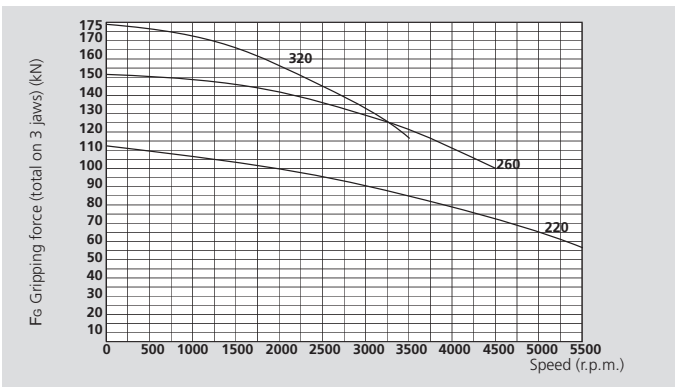
Standard equipment

3 jaw chuck
Mounting bolts

Ordering example

3 jaw chuck BP-C 220/Z170

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.

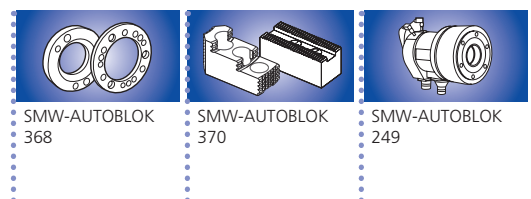
⚠ Safety advice/danger of damage:

When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

Technical data

SMW-AUTOBLOK Type		BP-C 220	BP-C 260	BP-C 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	44	60	68
Max. gripping force*	kN	110	150	175
Max. speed	r.p.m.	5500	4500	3500
Weight (without top jaws)	kg	22	35	59
Moment of inertia	kg·m ²	0.14	0.34	0.85
Recommended actuating cylinders		SIN-S 100/125 VNK-T2 130-52	SIN-S 125/150 VNK-T2 150-67	SIN-S 125/150 VNK-T2 225-95

* For internal clamping reduce the draw pull by 30 %.



SMW-AUTOBLOK
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SMW-AUTOBLOK
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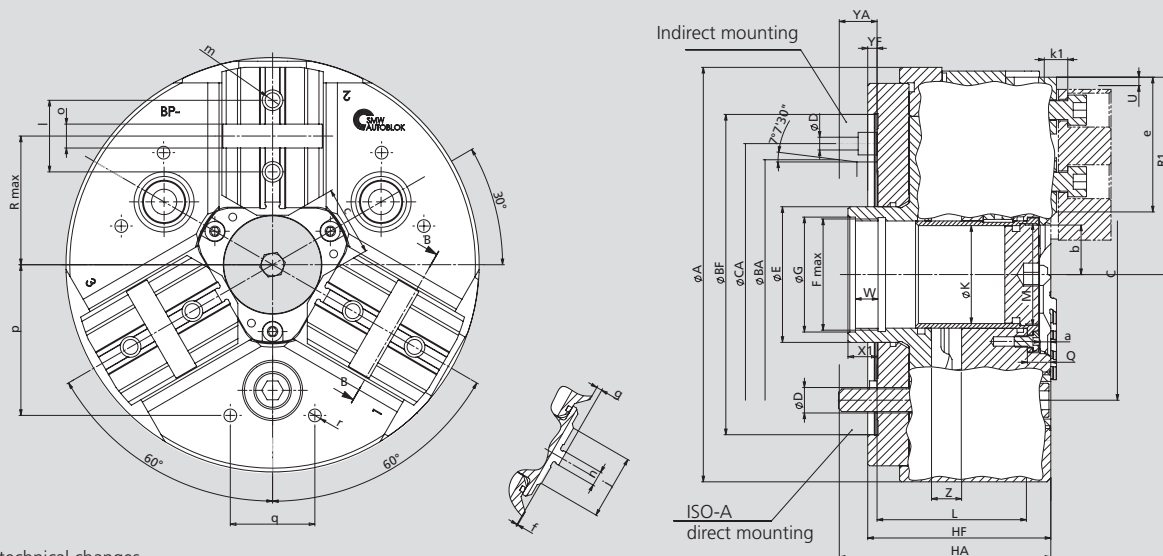
SMW-AUTOBLOK
249

High precision power chucks \varnothing 220 - 320 mm

BP-C

- LARGE THROUGH HOLE
- 3 jaws
- proofline® chucks = fully sealed – low maintenance

Tongue & groove



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

SMW-AUTOBLOK Type			BP-C 220		BP-C 260			BP-C 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	114	149	130
	K	mm	52			66			95	
	L	mm	79.5			92			88	
	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	
max.	R	mm	72.5			89			115	
Jaw stroke	U	mm	4.3			5			5	
	W	mm	12			14			16.5	
	X1	mm	15.5			22			25	
max./min.	YF/YA	mm	5	17	5	40	19	5	40	21
	Z	mm	16 / 0			19 / 0			19 / 0	
min.	a	mm	5.7			9.7			9.7	
min.	b	mm	26.5			36			48	
	c	mm	37			52			70	
	e	mm	74.5			82			98	
	f	mm	0			3			4	
	g	mm	3			0			-1	
	j	mm	34			46			58	
	k1	mm	9			13.5			15.5	
	l	mm	38			44.4			54	
	m	mm	M10			M12			M16	
	n	h7 mm	7.94			7.94			12.7	
	o	H7 mm	12.68			12.68			19.03	
	p	mm	80			102			100	
	q	mm	45			60			60	
	r	mm	M8			M10			M10	