



BX

high precision power chuck

BX-D BX-M

WITH LIGHTWEIGHT BODY

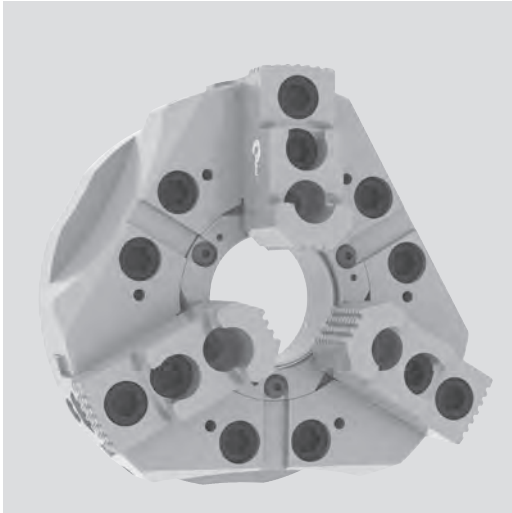


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HIGH PRECISION POWER CHUCK

BX-DINCH
SERRATION**BX-M**METRIC
SERRATION**High precision power chuck with lightweight body
Ø 175 - 315 mm**

- EXTRA large through-hole
- 3 jaws

**Application/customer benefits**

- Clamping of workpieces using partial or complete through-hole
- For machines with very large spindle bore
- Ideal for turning/milling centers

BX-D: Master jaws with INCH SERRATION (1/16" x 90°)**BX-M:** Master jaws with METRIC SERRATION (1.5 mm x 60°)
(Suitable for Japanese chucks top jaws)**Technical features**

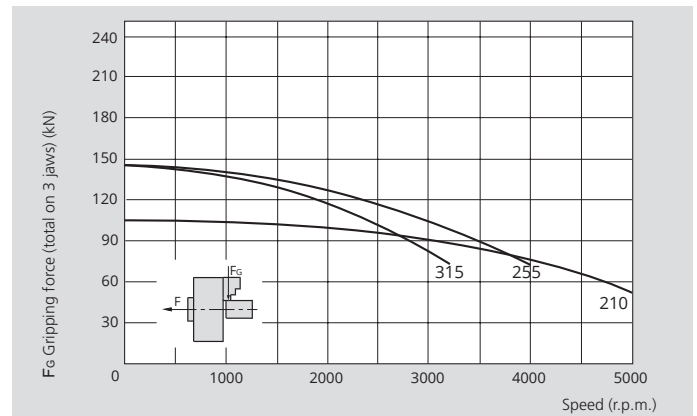
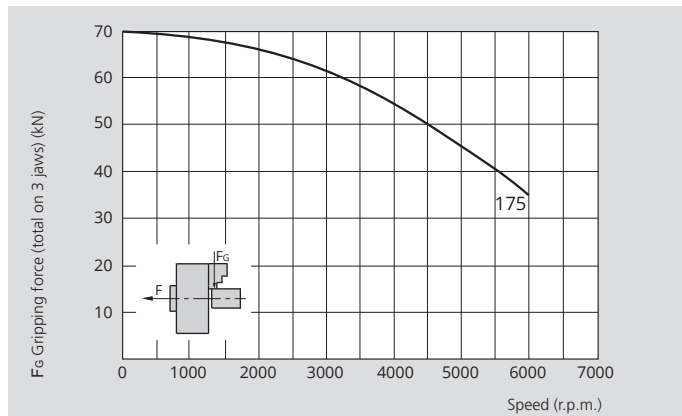
- EXTRA large through-hole
- Gripping force transmission via wedge hook
- Case hardened body to assure greatest precision and long chuck life
- Weight-optimised and outer geometry of the chuck body between the base jaws to allow accessibility with live tools.

Standard equipment

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

Ordering example

- 3-jaw chuck BX-D 175 / A6
- or
- 3-jaw chuck BX-M 255 / Z220

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		BX-D 175 BX-M 175	BX-D 210 BX-M 210	BX-D 255 BX-M 255	BX-D 315 BX-M 315	BX-D 400 BX-M 400
Number of jaws		3	3	3	3	3
Through-hole	mm	56	66	82	106	106
Radial jaw stroke	mm	3.2	4	5	5	5
Axial piston stroke	mm	15	19	24	24	24
Max. draw pull*	kN	25	38	50	50	50
Max. gripping force*	kN	70	108	145	145	145
Max. speed	r.p.m.	6000	5000	4000	3200	3200
Weight (without top jaws)	kg	10.1	14.6	26.6	40.3	40.3
Moment of inertia	kg·m ²	0.045	0.091	0.24	0.56	0.56
Recommended actuating cylinders		SIN-S 100 VNK-T2 130-52	SIN-S 100/125 VNK-T2 150-67	SIN-S 125/150 VNK-T2 176-82	SIN-S 125/150 VNK-T2 320-127	SIN-S 125/150 VNK-T2 320-127
Id.No. BX-D 3 jaws		77155517	77155521	77155526	77155531	77155531
Id.No. BX-M 3 jaws		77155617	77155621	77155626	77155631	77155631

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

High precision power chuck with lightweight body Ø 175 - 315 mm

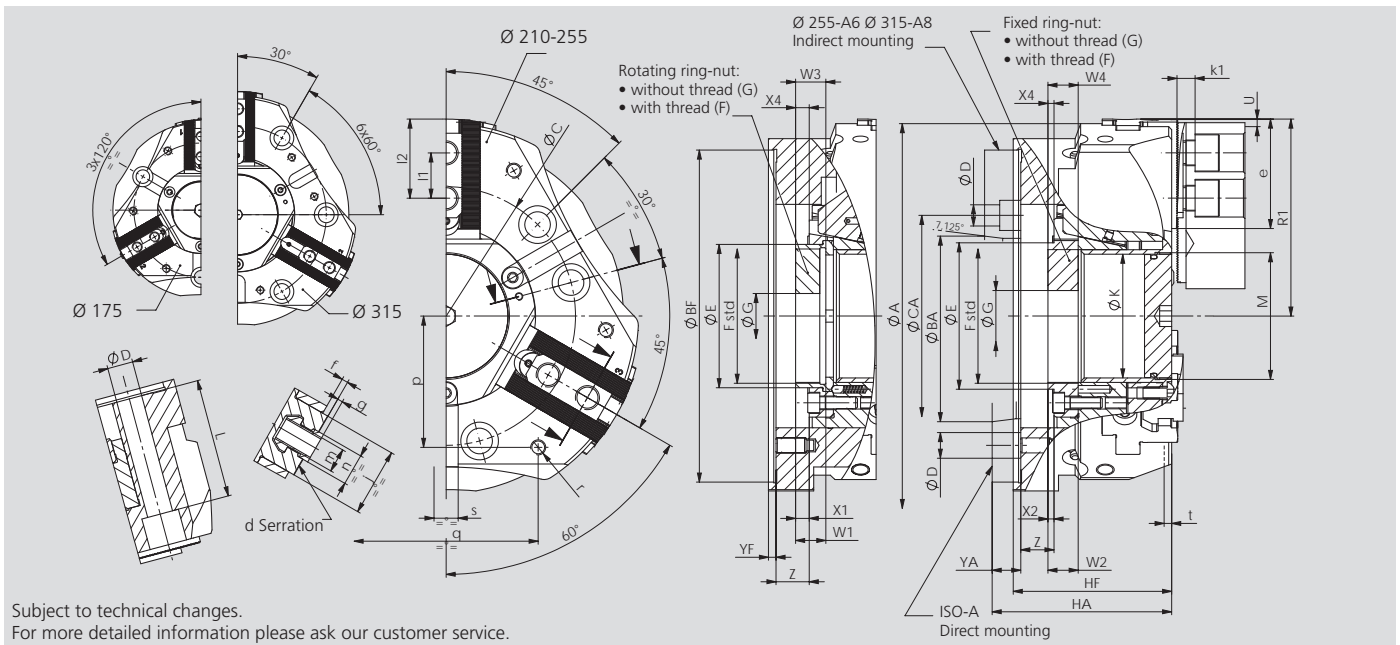
- EXTRA large through-hole
- 3 jaws

BX-D

INCH
SERRATION

BX-M

METRIC
SERRATION



SMW-AUTOBLOK Model			BX-D 175 BX-M 175		BX-D 210 BX-M 210		BX-D 255 BX-M 255			BX-D 315 BX-M 315			BX-D 400 BX-M 400		
Mounting			Z160	A6	Z170	A6	Z220	A6	A8	Z280	A8	A11	Z280	A8	A11
	A	mm	175		210		255			315			315		
	BF/BA H6	mm	160	106.375	170	106.375	220	106.375	139.719	280	139.719	196.869	280	139.719	196.869
	C	mm	133.4		133.4		171.4	-	171.4	235	-	235	235	-	235
	CA	mm	-	-	-	-	-	133.4	-	-	171.4	-	-	171.4	-
	D	mm	13.5		13.5		17	13.5	17	21	17	21	21	17	21
	E	mm	72		84		97			130			130		
	Fstd	mm	M62 x 1.5		M72 x 1.5		M90 x 2			M120 x 2			M120 x 2		
	G	mm	20		20		25			35			35		
	Hf/HA	mm	82	94	92	104	105	124	119	111	136	127	111	136	127
	K	mm	56		66		82			106			106		
	L	mm	14		73		79			33			33		
	M	mm	M58 x 1.5		M68 x 2		M84 x 2			M108 x 2			M108 x 2		
Chuck open	R1	mm	90		106		130.5			163.5			163.5		
Jaw stroke	U	mm	3.2		4		5			5			5		
	(1) W1/W2	mm	18 / 16		20 / 18		20 / 20			23 / 23			23 / 23		
	(2) W3/W4	mm	24 / 35		25 / 35		28 / 38			29 / 40			29 / 40		
	X1/ X2	mm	12 / 5		12 / 5		8 / 5			12 / 7			12 / 7		
	X4	mm	21 / 24		22 / 22		22 / 23			24 / 24			24 / 24		
	Yf/YA	mm	5	17	5	17	5	24	19	5	30	21	5	30	21
Max. / min.	Z	mm	15 / 0		19 / 0		24 / 0			24 / 0			24 / 0		
BX-D serration	d	inch	1/16" x 90°		1/16" x 90°		1/16" x 90°			1/16" x 90°			1/16" x 90°		
BX-M serration	d	mm	1.5 x 60°		1.5 x 60°		1.5 x 60°			1.5 x 60°			1.5 x 60°		
	e	mm	49.5		59		72.5			93			93		
	f	mm	3		3		4			4			4		
	g	mm	2.5		2.5		3.5			3.5			3.5		
	j	mm	33		38		45			45			45		
	k1	mm	10		11		12			12			12		
BX-D	l1	mm	16.5		23		30			30			30		
BX-M	l1	mm	20		25		30			30			30		
Max. / min.	l2	mm	41 / 24		49 / 33		57 / 43			78 / 43			78 / 43		
BX-D	m	mm	M10		M12		M16			M16			M16		
BX-D	n h8	mm	14		17		21			21			21		
BX-M	m	mm	M10		M12		M12			M16			M16		
BX-M	n h8	mm	12		14		16			21			21		
	p	mm	51		59		73			100			100		
	q	mm	36		65		80			60			60		
	r	mm	M6		M8		M8			M10			M10		
	s H12	mm	12		12		16			20			20		
	t	mm	4.5		4.5		5			5			5		

(1) Rotating ring-nut with thread
Fixed ring-nut with thread

(2) Blank rotating ring-nut without thread
Fixed ring-nut blank without thread



HEADQUARTERS



AUTOBLOK s.p.a.

Via Duca D'Aosta n.24 - I-10040 Caprie - Torino
Tel. +39 011 - 9638411 Fax +39 011 - 9632288
E-mail: info@smwautoblok.it

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Z.I. P.zza Alessandro Volta, snc - I- 86038 Petacciato (CB)
Tel. +39 0875 670001



SMW-AUTOBLOK Spannsysteme GmbH

Postfach 1151 • D-88070 Meckenbeuren
Wiesentalstraße 28 • D-88074 Meckenbeuren
Tel. +49 (0) 7542 - 405 - 0

Vertrieb Inland: Fax +49 (0) 7542 - 3886

E-mail: vertrieb@smw-autoblok.de

Sales International: Fax: +49 (0) 7542 - 405 - 181

E-mail: sales@smw-autoblok.de



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