

# AN-D

INCH  
SERRATION

# AN-M

METRIC  
SERRATION

## High precision power chucks Ø 125 - 400 mm

- Closed center
- 2 and 3 jaws (4 jaws only Ø 400 mm)



### Application/customer benefits

- For chucking parts
- Suitable for vertical machines

**AN-D:** Master jaws with INCH SERRATION (1/16" x 90°, 3/32" x 90°)

**AN-M:** Master jaws with METRIC SERRATION (1.5 mm x 60°)  
(suitable for japanese chuck top jaws)

### Technical features

- Gripping force transmission via wedge hook
- Sealed against swarfs and chips
- Case hardened body to assure greatest precision and long chuck life

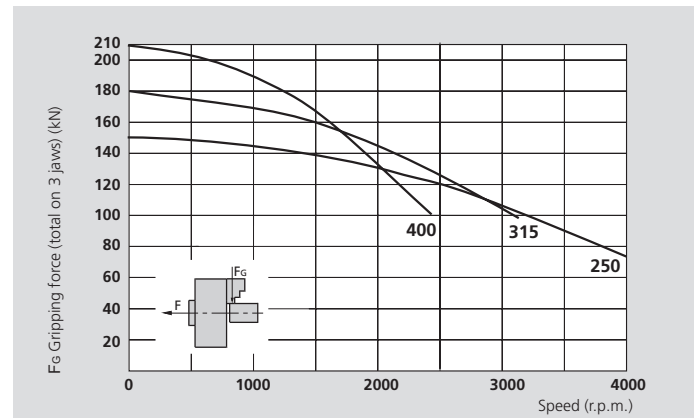
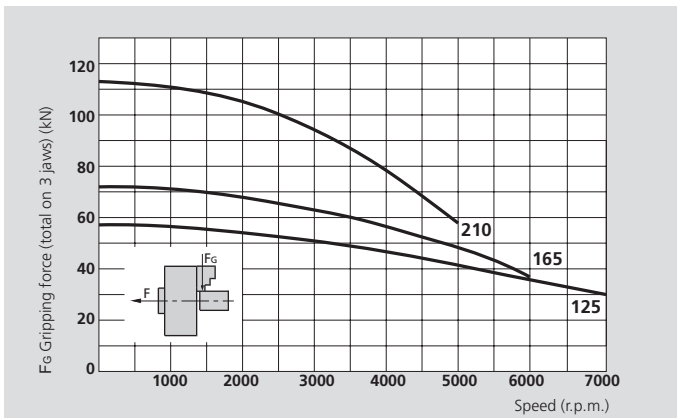
### Standard equipment

- 2, 3 or 4 jaw chuck
- 1 set T-nuts with bolts
- 1 set soft top jaws
- Mounting bolts

### Ordering example

- 3 jaw chuck AN-D 210 / A6
- or
- 2 jaw chuck AN-M 250 / 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 KO5 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.

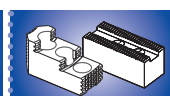
## Technical data

SMW-AUTOBLOK Type		AN-D 125		AN-D 165		AN-D 210		AN-D 250		AN-D 315		AN-D 400		
		AN-M 125	AN-M 165	AN-M 210	AN-M 250	AN-M 315	AN-M 400							
<b>Number of jaws</b>		2	3	2	3	2	3	2	3	2	3	2	3	4
<b>Radial jaw stroke</b>	mm	3.2		3.6		4.4		5		6.3		7		
<b>Axial piston stroke</b>	mm	15		17		21		24		30		33		
<b>Max. draw pull*</b>	kN	14	20	17	25	25	38	33	50	40	60	50	70	70
<b>Max. gripping force*</b>	kN	40	56	50	72	75	115	100	150	120	180	150	210	210
<b>Max. speed</b>	r.p.m.	7000		6000		5000		4000		3200		2400		
<b>Weight (without top jaws)</b>	kg	5.5		9.5		19		32		56		84		
<b>Moment of inertia</b>	kg·m <sup>2</sup>	0.011		0.032		0.105		0.26		0.69		1.6		
<b>Recommended actuating cylinders</b>	<b>Type</b>	SIN-S 85 / 100		SIN-S 100		SIN-S 100 / 125		SIN-S 125 / 150		SIN-S 125 / 150		SIN-S 150 / 175		

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



SMW-AUTOBLOK  
438



SMW-AUTOBLOK  
440



SMW-AUTOBLOK  
297

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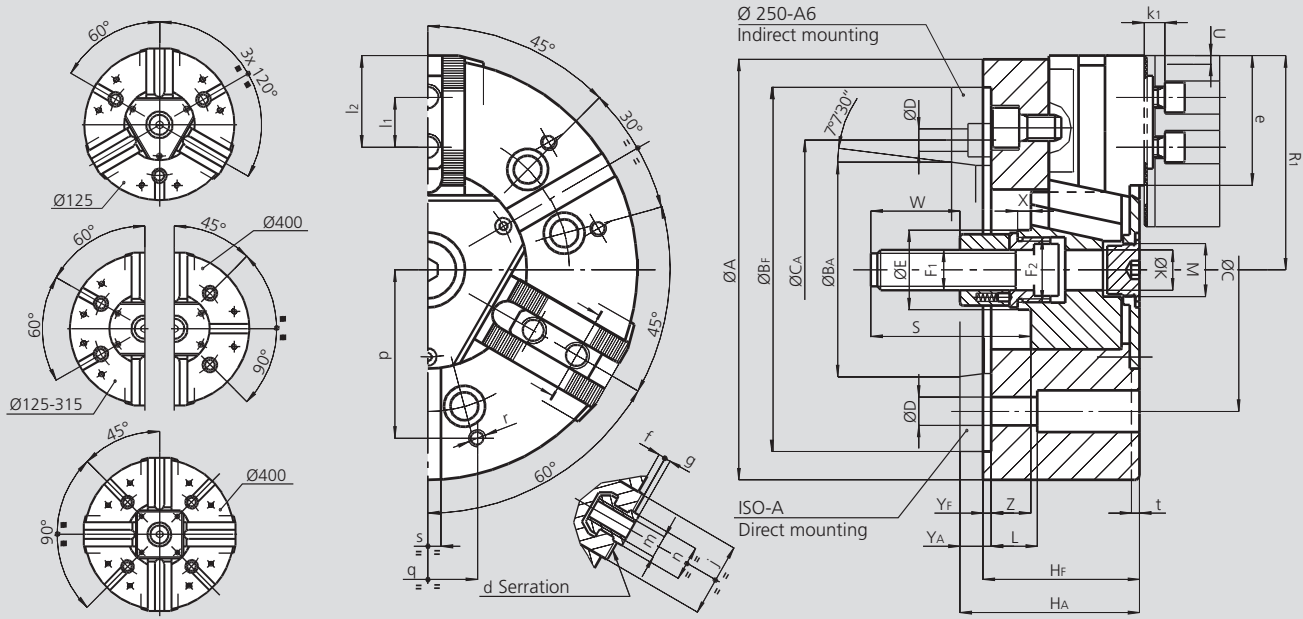
## AN-D

## AN-M

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- 2 and 3 jaws (4 jaws only Ø 400 mm)

INCH  
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Subject to technical changes.  
For more detailed information please ask our customer service.

SMW-AUTOBLOK Type			AN-D 125 AN-M 125		AN-D 165 AN-M 165		AN-D 210 AN-M 210		AN-D 250 AN-M 250			AN-D 315 AN-M 315		AN-D 400 AN-M 400	
Mounting			Z115	A4	Z140	A5	Z170	A6	Z220	A6	A8	Z220	A8	Z300	A11
	<b>A</b>	mm	127		165		210		254			315		390	
	<b>BF/BAH6</b>	mm	115	63.513	140	82.563	170	106.375	220	106.375	139.719	220	139.719	300	196.869
	<b>C</b>	mm	82.6		104.8		133.4		171.4			171.4		235	
	<b>CA</b>	mm	-	-	-	-	-	-	-	133.4	-	-	-	-	-
	<b>D</b>	mm	11.5		11.5		13.5		17			17		21	
	<b>E</b>	mm	25		32		41		47			47		86	
	<b>F1</b>	mm	M12 x 1.25		M16		M20		M24			M24		M24	
	<b>F2</b>	mm	M18 x 1.5		M24 x 2		M32 x 1.5		M38 x 1.5			M38 x 1.5		M75 x 2	
	<b>HF/HA</b>	mm	59	67	71	81	85	97	95	114	109	105	119	116	131
	<b>K</b>	mm	9		17		20		25			25		65	
	<b>L</b>	mm	32		23		32		28			38		54	
	<b>M</b>	mm	M16 x 1.5		M24 x 1.5		M32 x 1.5		M32 x 1.5			M38 x 1.5		M68 x 2	
Chuck open	<b>R1</b>	mm	64		83		105		128			158		196	
	<b>S</b>	mm	77		104		97		103			103		105	
Jaw stroke	<b>U</b>	mm	3.2		3.6		4.4		5			6.3		7	
	<b>W</b>	mm	40		52		55		60			60		60	
	<b>X</b>	mm	12		17		8		8			8		8	
	<b>YF/YA</b>	mm	5	13	5	15	5	17	5	24	19	5	19	6	21
Max. / min.	<b>Z</b>	mm	15/0		17/0		21/0		24/0			30/0		33/0	
<b>AN-D</b>	<b>d</b>	inch	1/16" x 90°		1/16" x 90°		1/16" x 90°		1/16" x 90°			1/16" x 90°		3/32" x 90° <sup>(1)</sup>	
<b>AN-M</b>	<b>d</b>	mm	1.5 x 60°		1.5 x 60°		1.5 x 60°		1.5 x 60°			1.5 x 60°		1.5 x 60°	
	<b>e</b>	mm	37		48		60		77			99		116	
	<b>f</b>	mm	3		4		3		4			4		6	
	<b>g</b>	mm	2.5		2.5		3		3.5			3.5		3.5	
	<b>j</b>	mm	26		30		36		45			45		62	
	<b>k1</b>	mm	10		10		11		12			12		14	
<b>AN-D</b>	<b>l1</b>	mm	16		16.5		23		30			30		38	
<b>AN-M</b>	<b>l1</b>	mm	16		20		25		30			30		38	
Max. / min.	<b>l2</b>	mm	30 / 23		40 / 24		50 / 33		62 / 43			84 / 43		90 / 49	
<b>AN-D</b>	<b>m</b>	mm	M8		M10		M12		M16			M16		M20	
<b>AN-M</b>	<b>m</b>	mm	M8		M10		M12		M12			M16		M20	
<b>AN-D</b>	<b>n h8</b>	mm	12		14		17		21			21		25.5	
<b>AN-M</b>	<b>n h8</b>	mm	12		12		14		16			21		22	
	<b>p</b>	mm	52		65		80		102			120		150	
	<b>q</b>	mm	30		36		45		60			60		80	
	<b>r</b>	mm	M6		M8		M8		M10			M10		M12	
	<b>s</b>	mm	12		16		16		16			16		20	
	<b>t</b>	mm	4		5		5		5			5		5	

<sup>(1)</sup> Serration 1/16 x 90° on request.