

# AL-D

INCH serration

# AL-M

METRIC serration

## High precision power chucks Ø 125 - 400 mm

- closed center
- LONG STROKE
- 2 and 3 jaws (4 jaws only Ø 400 mm)



### Application/customer benefits

- For chucking parts
- Suitable for vertical machines
- Long clamping stroke (possibility to clamp 1st and 2nd operation with the same jaws)

**AL-D:** Master jaws with INCH serration (1/16" x 90°, 3/32" x 90°)  
**AL-M:** Master jaws with METRIC serration (1.5 mm x 60°)  
 (suitable for japanese jaws)

### Technical features

- Extra long stroke per jaw
- Gripping force transmission via wedge hook
- Case hardened body to assure greatest precision and long chuck life

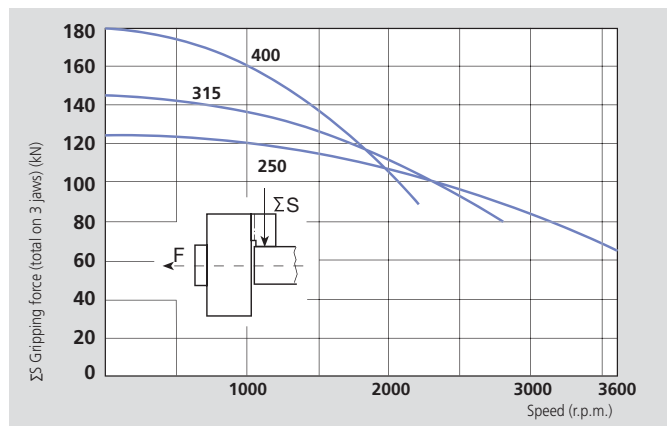
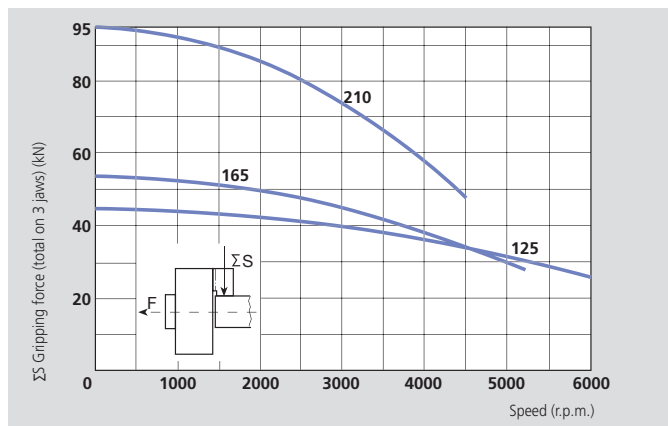
### Standard equipment

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

### Ordering example

3 jaw chuck AL-D 210/A6  
 or  
 2 jaw chuck AL-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 K05 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:

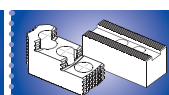
When using taller/heavier jaws and/or clamping on a bigger diameter reduce draw pull/rotating speed accordingly.

## Technical data

SMW-AUTOBLOK Type	AL-D 125 AL-M 125		AL-D 165 AL-M 165		AL-D 210 AL-M 210		AL-D 250 AL-M 250		AL-D 315 AL-M 315		AL-D 400 AL-M 400			
	2	3	2	3	2	3	2	3	2	3	2	3	4	
Number of jaws														
Radial jaw stroke	mm	6	7		8.5		10		12		13			
Axial piston stroke	mm	15	17		21		25		30		33			
Max. draw pull	kN	17	25	20	30	35	53	45	68	54	80	67	100	100
Max. gripping force	kN	30	45	36	54	63	95	83	125	97	145	120	180	180
Max. speed	r.p.m.	6000		5200		4500		3600		2800		2000		1700
Mass (without top jaws)	kg	5.5		9.5		19		32		56		84		
Moment of inertia	kg·m <sup>2</sup>	0.011		0.032		0.105		0.26		0.69		1.6		
Recommended actuating cylinders		SIN-S 85/100		SIN-S 100		SIN-S 100/125		SIN-S 125/150		SIN-S 125/150		SIN-S 150/175		



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