

RANPull-down effect
Tongue & groove**High precision pull-down chucks Ø 160 - 400 mm**

- pull-down effect of inclined master jaws
- tongue & groove master jaws
- 3 jaws

**Application/customer benefits**

- 1st or 2nd operation of parts requesting close squareness and parallelism tolerances
- For chucking parts
- External clamping only

RAN: inclined master jaws with pull-down effect and tongue & groove**Technical features**

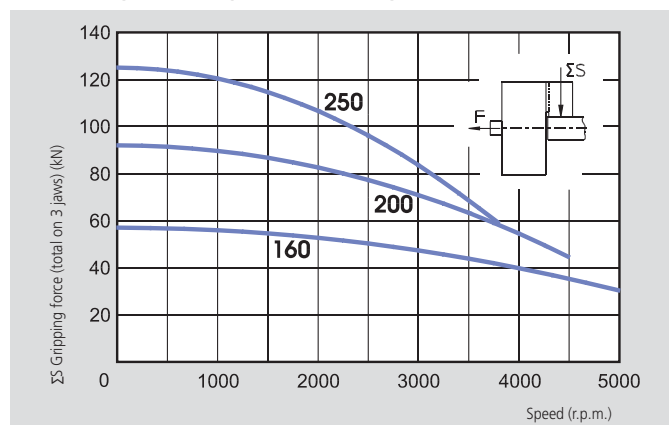
- Chuck only available with tongue & groove master jaws
- Clamping on raw diameters with carbide inserts, increases the pull-down effect thanks to the penetration into the work piece
- Central bore for coolant and/or air
- Chuck body and internal parts case hardened

Standard equipment

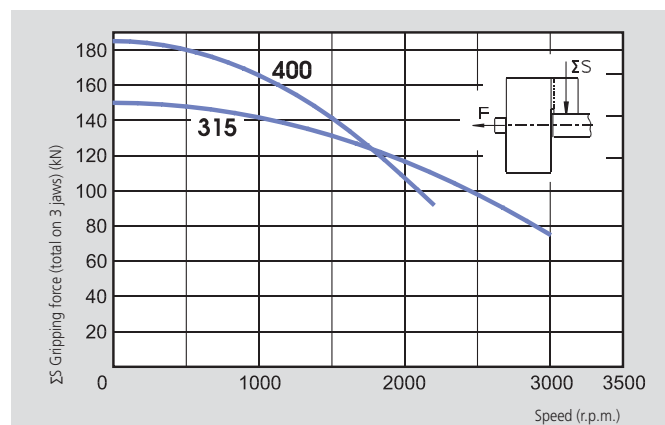
3 jaw chuck
Mounting bolts
Grease gun

Ordering example

3 jaw chuck RAN 200/A6
or
3 jaw chuck RAN 315/A8

Actual gripping force diagrams

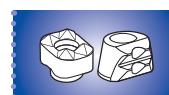
The data in the diagrams refer to 3-jaw-chucks, newly maintained according to their service manuals using SMW-AUTOBLOK K05 grease. The static and dynamic gripping forces have been measured using standard soft top jaws, placed in a position not exceeding the outer diameter of the chuck.

**△ 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

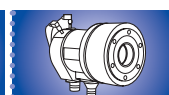
| SMW-AUTOBLOK Type | | RAN 160 | RAN 200 | RAN 250 | RAN 315 | RAN 400 |
|---------------------------------|-------------------|--------------|---------------|---------------|---------------|---------------|
| Number of jaws | | 3 | 3 | 3 | 3 | 3 |
| Radial jaw stroke | mm | 5 | 5 | 6 | 8 | 8 |
| Axial jaw stroke (pull-down) | mm | 1.25 | 1.25 | 1.5 | 2 | 2 |
| Axial piston stroke | mm | 20 | 20 | 25 | 32 | 32 |
| Max. draw pull | kN | 25 | 40 | 55 | 65 | 80 |
| Max. gripping force | kN | 57 | 92 | 125 | 150 | 185 |
| Max. speed | r.p.m. | 5000 | 4500 | 3800 | 3000 | 2200 |
| Mass (without top jaws) | kg | 10 | 17 | 31 | 54 | 95 |
| Moment of inertia | kg·m ² | 0.034 | 0.10 | 0.26 | 0.65 | 1.85 |
| Top jaw reference mass | kg | 0.58 | 0.92 | 1.25 | 2.15 | 3.6 |
| Recommended actuating cylinders | | SIN-S 85/100 | SIN-S 100/125 | SIN-S 125/150 | SIN-S 125/150 | SIN-S 150/175 |



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