

BH-D

INCH
SERRATION

High precision power chuck Ø 130 - 450 mm

- Large through-hole
- 2, 3 and 4 jaws

Application/customer benefits

- For open center or partial open center clamping
- Large through-hole

BH-D: Master jaws with INCH SERRATION (1/16" x 90°) (400 and 450 3/32" x 90°)

Technical features

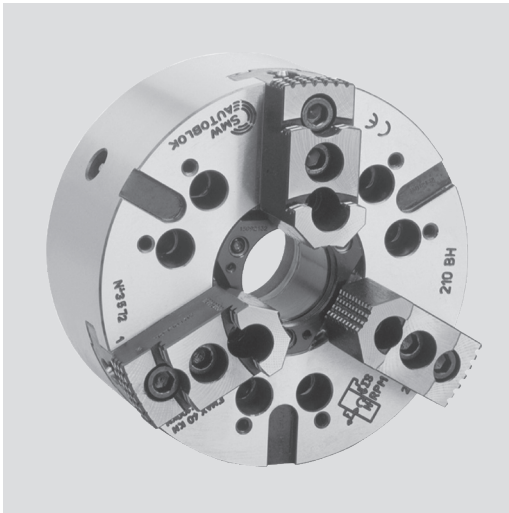
- Gripping force transmission via wedge hook
- Case hardened body to assure greatest precision and long chuck life
- 2-jaw version from diameter 130 to 315
- 3-jaw version available in all diameters
- 4-jaw chuck available starting from diameter 165 mm

Standard equipment

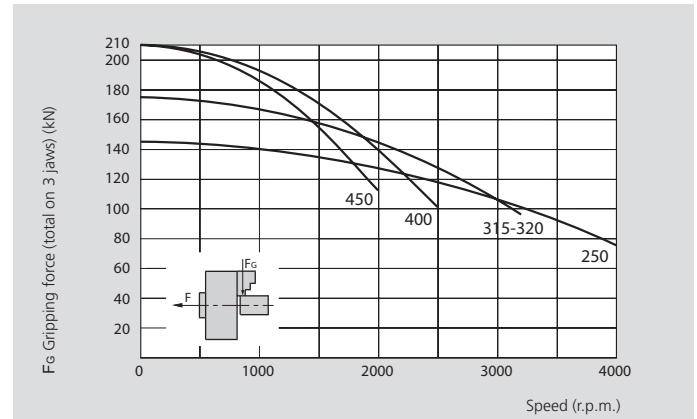
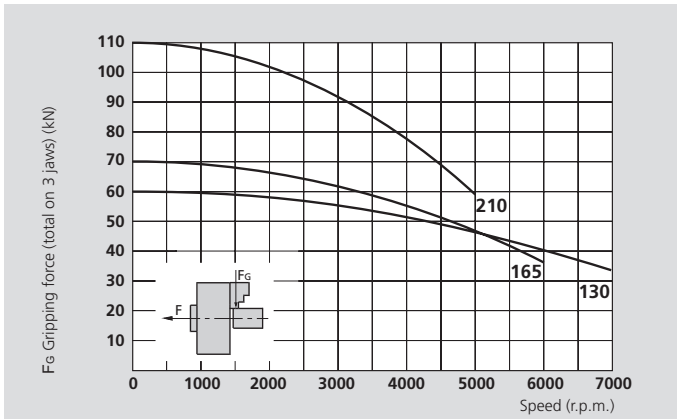
- 2-, 3- or 4-jaw chuck
- 1 set T-nuts with bolts
- 1 set soft top jaws
- Mounting bolts

Ordering example

- 2-jaw chuck BH-D 210 / A6
- or
- 3-jaw chuck BH-D 250 / 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 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 | | BH-D 130 | | BH-D 165 | | | BH-D 210 | | | BH-D 250 | | | BH-D 315 | | | BH-D 320 | | BH-D 400 | | BH-D 450 | |
|---------------------------------------|-------------------|--------------------------------|------|----------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|----------------------------------|------|------|-----------------------------------|------|-----------------------------------|------|----------|--|
| Number of jaws | | 2 | 3 | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 4 | 2 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | |
| Through-hole | mm | 32 | | 46 | | | 52 | | | 66 | | | 95 | | | 103 | | 118 | | 118 | |
| Radial jaw stroke | mm | 3.2 | | 3.2 | | | 4 | | | 5 | | | 5 | | | 5 | | 6.5 | | 6.5 | |
| Axial piston stroke | mm | 15 | | 15 | | | 19 | | | 24 | | | 24 | | | 24 | | 31 | | 31 | |
| Max. draw pull* | kN | 15 | 22 | 17 | 25 | 25 | 25 | 38 | 38 | 34 | 50 | 50 | 40 | 60 | 60 | 60 | 70 | 70 | 70 | 70 | |
| Max. gripping force* | kN | 42 | 60 | 48 | 70 | 70 | 72 | 110 | 110 | 98 | 145 | 145 | 115 | 175 | 175 | 175 | 210 | 210 | 210 | 210 | |
| Max. speed | r.p.m. | 7000 | 7000 | 6000 | 6000 | 5000 | 5000 | 5000 | 4300 | 4000 | 4000 | 3400 | 3200 | 3200 | 2700 | 3200 | 2500 | 2000 | 2000 | 1700 | |
| Weight (without top jaws) | kg | 5 | | 9.5 | | | 19 | | | 30 | | | 46 | | | 52 | | 86 | | 135 | |
| Moment of inertia | kg·m ² | 0.012 | | 0.036 | | | 0.12 | | | 0.27 | | | 0.62 | | | 0.72 | | 2 | | 3.5 | |
| Recommended actuating cylinders | | SIN-S 85 / 100 VNK-T2 70-37 | | SIN-S 100 VNK-T2 102-46 | | | SIN-S 100 / 125 VNK-T2 130-52 | | | SIN-S 125 / 150 VNK-T2 150-67 | | | SIN-S 125 / 150 VNK-T2 225-95 | | | SIN-S 125 / 150 VNK-T2 250-110 | | SIN-S 150 / 175 VNK-T2 320-127 | | | |
| Id. No. BH-D 2 jaws (Center mounting) | | 77152513 | | 77157916 | | | 77157921 | | | 77152525 | | | 77152531 | | | - | | - | | - | |
| Id. No. BH-D 3 jaws (Center mounting) | | 77152713 | | 77158016 | | | 77158021 | | | 77152725 | | | 77152731 | | | 77152732 | | 77152740 | | 77152745 | |
| Id. No. BH-D 4 jaws (Center mounting) | | - | | 77158116 | | | 77158121 | | | 77152925 | | | 77152931 | | | - | | 77152940 | | 77152945 | |

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

