

# BH-D

## Big diameters

INCH  
SERRATION

## High precision power chucks Ø 500 - 800 mm

- Large through hole
- 3 jaws

### Application/customer benefits

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

**BH-D:** Master jaws with INCH SERRATION 3/32" x 90°

### Technical features

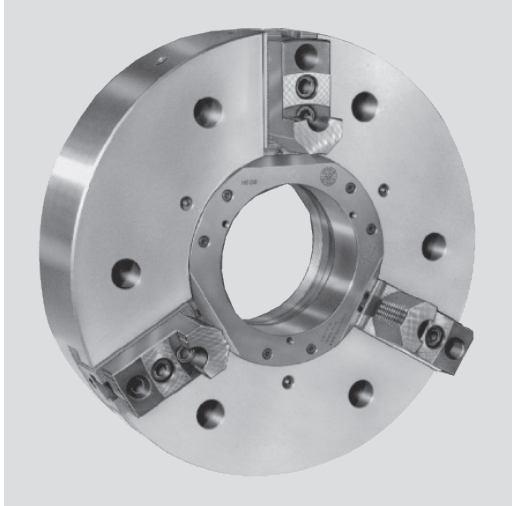
- Gripping force transmission via wedge hook

### Standard equipment

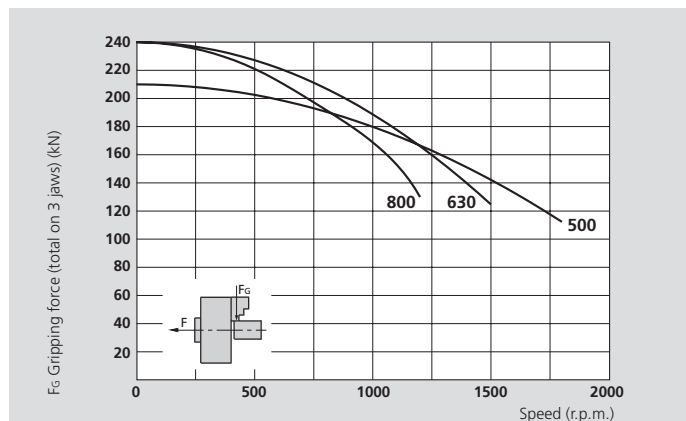
3 jaw chuck  
1 set T-nuts with bolts  
1 set soft top jaws  
Blank ring-nut  
Mounting bolts

### Ordering example

3 jaw chuck BH-D 500 / A15  
or  
3 jaw chuck BH-D 800 / Z520



## Actual gripping force diagram



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.

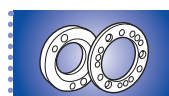
#### ⚠ Safety advice / danger of damage:

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

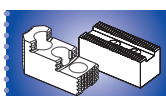
## Technical data

| SMW-AUTOBLOK Type               |                   | BH-D 500                       | BH-D 630                       | BH-D 800                       |
|---------------------------------|-------------------|--------------------------------|--------------------------------|--------------------------------|
| Number of jaws                  |                   | 3                              | 3                              | 3                              |
| Through-hole                    | mm                | 180                            | 230                            | 230                            |
| Radial jaw stroke               | mm                | 6.5                            | 9                              | 9                              |
| Axial piston stroke             | mm                | 31                             | 34                             | 34                             |
| Max. draw pull*                 | kN                | 70                             | 100                            | 100                            |
| Max. gripping force*            | kN                | 210                            | 240                            | 240                            |
| Max. speed                      | r.p.m.            | 1800                           | 1500                           | 1200                           |
| Weight (without top jaws)       | kg                | 140                            | 280                            | 530                            |
| Moment of inertia               | kg·m <sup>2</sup> | 5                              | 16                             | 47                             |
| Recommended actuating cylinders |                   | SIN-S 150 / 200<br>VSG 450-165 | SIN-S 150 / 200<br>VSG 550-205 | SIN-S 150 / 200<br>VSG 550-205 |

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



SMW-AUTOBLOK  
438

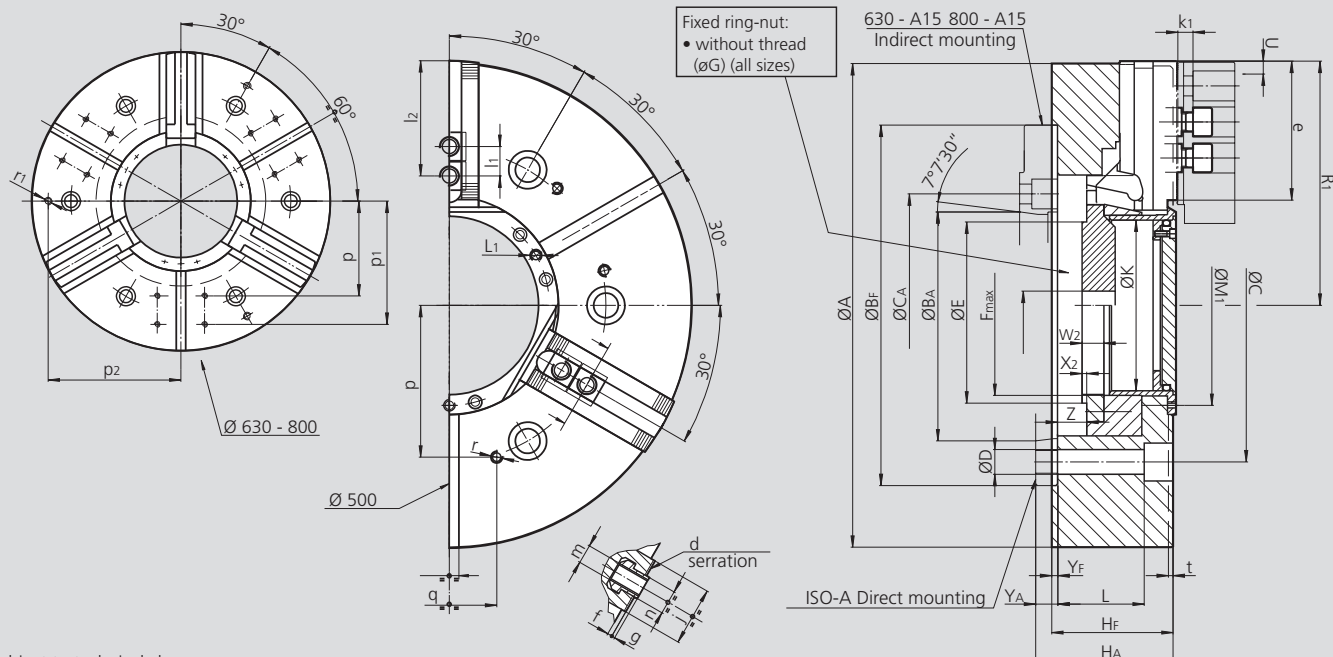


SMW-AUTOBLOK  
440



SMW-AUTOBLOK  
297

- Large through hole
- 3 jaws



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

| SMW-AUTOBLOK Type |          |      | BH-D 500     |         | BH-D 630     |         |         | BH-D 800     |         |         |
|-------------------|----------|------|--------------|---------|--------------|---------|---------|--------------|---------|---------|
| Mounting          |          |      | Z380         | A15     | Z520         | A15     | A20     | Z520         | A15     | A20     |
|                   | A        | mm   | 510          |         | 630          |         |         | 800          |         |         |
|                   | Bf/BA H6 | mm   | 380          | 285.775 | 520          | 285.775 | 412.775 | 520          | 285.775 | 412.775 |
|                   | C        | mm   | 330.2        |         | 463.6        | -       | 463.6   | 463.6        | -       | 463.6   |
|                   | CA       | mm   | -            | -       | -            | 330.2   | -       | -            | 330.2   | -       |
|                   | D        | mm   | 26           |         |              | 26      |         | 26           |         |         |
|                   | E        | mm   | 206          |         | 260          |         |         | 260          |         |         |
|                   | Fmax     | mm   | M190 x 3 (*) |         | M250 x 3 (*) |         |         | M250 x 3 (*) |         |         |
|                   | G        | mm   | 30           |         | 30           |         |         | 30           |         |         |
|                   | Hf/HA    | mm   | 128          | 145     | 150          | 184     | 169     | 150          | 184     | 169     |
|                   | K        | mm   | 180          |         | 230          |         |         | 230          |         |         |
|                   | L        | mm   | 91           |         | 99           |         |         | 99           |         |         |
|                   | L1       | mm   | M8 / 9       |         | M8 / 16      |         |         | M8 / 16      |         |         |
|                   | M1       | mm   | 211          |         | 270          |         |         | 270          |         |         |
| Chuck open        | R1       | mm   | 257.5        |         | 314          |         |         | 399          |         |         |
| Jaw stroke        | U        | mm   | 6.5          |         | 9            |         |         | 9            |         |         |
|                   | W2       | mm   | 23           |         | 23           |         |         | 23           |         |         |
|                   | X2       | mm   | 5            |         | 5            |         |         | 5            |         |         |
|                   | Yf/YA    | mm   | 6            | 23      | 6            | 40      | 25      | 6            | 40      | 25      |
| Max. / min.       | Z        | mm   | 31 / 0       |         | 34 / 0       |         |         | 34 / 0       |         |         |
| BH-D serration    | d        | inch | 3/32" x 90°  |         | 3/32" x 90°  |         |         | 3/32" x 90°  |         |         |
|                   | e        | mm   | 146.5        |         | 152          |         |         | 237          |         |         |
|                   | f        | mm   | 5            |         | 10           |         |         | 10           |         |         |
|                   | g        | mm   | 3.5          |         | 3.5          |         |         | 3.5          |         |         |
|                   | j        | mm   | 62           |         | 62           |         |         | 62           |         |         |
|                   | k1       | mm   | 16           |         | 16           |         |         | 16           |         |         |
|                   | l1       | mm   | 38           |         | 38           |         |         | 38           |         |         |
| Max. / min.       | l2       | mm   | 121 / 53     |         | 127 / 53     |         |         | 212 / 53     |         |         |
|                   | m        | mm   | M20          |         | M20          |         |         | M20          |         |         |
|                   | n h8     | mm   | 25.5         |         | 25.5         |         |         | 25.5         |         |         |
|                   | p        | mm   | 160          |         | 200          |         |         | 200          |         |         |
|                   | p1       | mm   | -            |         | 260          |         |         | 260          |         |         |
|                   | p2       | mm   | -            |         | 280          |         |         | 280          |         |         |
|                   | q        | mm   | 100          |         | 100          |         |         | 100          |         |         |
|                   | r        | mm   | M12 / 22     |         | M12 / 22     |         |         | M12 / 22     |         |         |
|                   | r1       | mm   | -            |         | M16 / 28     |         |         | M16 / 28     |         |         |
|                   | s H12    | mm   | 20           |         | 20           |         |         | 20           |         |         |
|                   | t        | mm   | 5            |         | 5            |         |         | 5            |         |         |

\* Max. possible thread on blank ring-nut.