

# High precision air chuck $\varnothing$ 80 - 250 mm

# AcuGrind

- with built-in pneumatic actuating cylinder
- fully sealed



## Application/customers benefits

- Sealed standard chuck for high-precision turning and grinding
- Highest accuracy - runout and repeatability
- Built-in pneumatic actuation, no hydraulic cylinder required

## Technical features

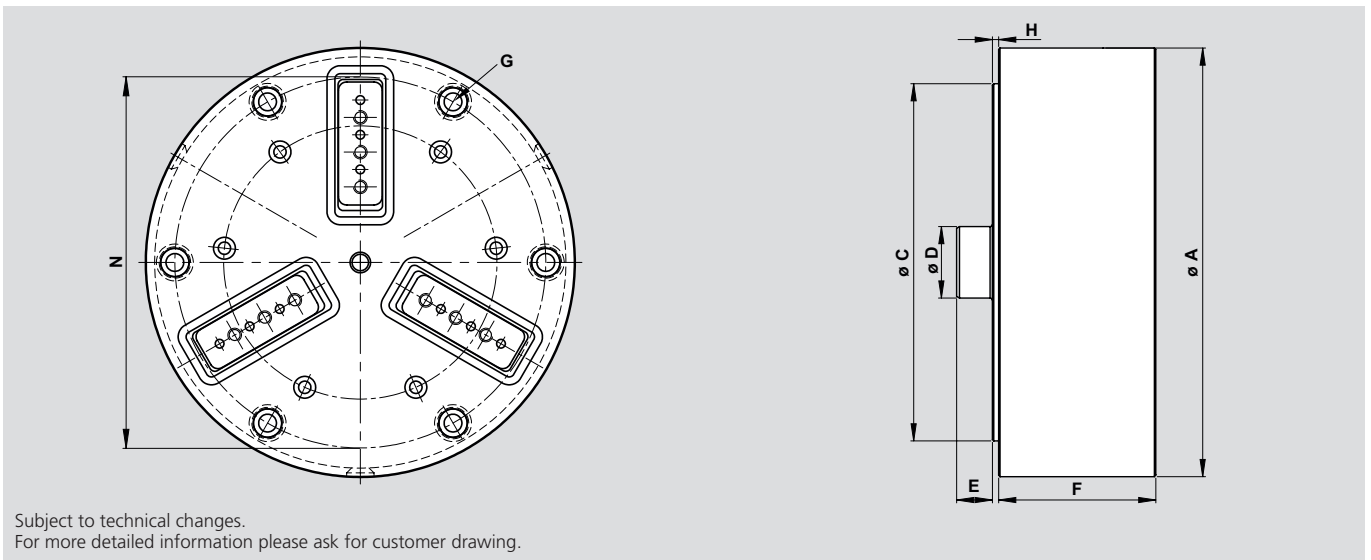
- Base jaws case hardened
- proofline - fully sealed - low maintenance
- Repeatability < 0.002 mm

## Standard equipment

Power chuck  
Boring ring for I.D. clamping  
Boring ring for O.D. clamping  
Lubricating oil

## Ordering example

AcuGrind 150, Id.No. 5302503



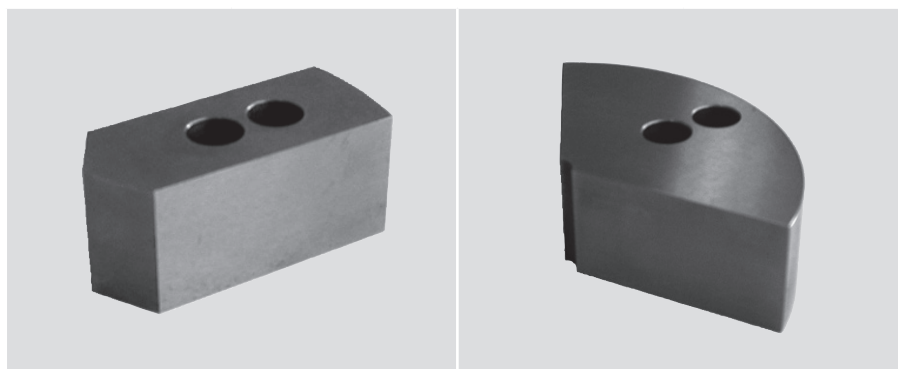
Subject to technical changes.  
For more detailed information please ask for customer drawing.

## Technical data

| SMW-AUTOBLOK Type                           |                   | AcuGrind 80 | AcuGrind 100 | AcuGrind 125 | AcuGrind 150 | AcuGrind 200 | AcuGrind 250 |
|---|-------------------|-------------|--------------|--------------|--------------|--------------|--------------|
| Order number                                | Id.No.            | 5302500     | 5302501      | 5302502      | 5302503      | 5302504      | 5302505      |
| <b>Outside diameter</b>                     | A                 | 87          | 107          | 135          | 157          | 214          | 265          |
| <b>Centering diameter</b>                   | C                 | 60          | 82.55        | 114.3        | 125          | 167.6        | 215.8        |
| <b>Distributor <math>\varnothing</math></b> | D                 | 20.7        | 20.7         | 20.7         | 20.7         | 20.7         | 20.7         |
| <b>Min / Max</b>                            | E                 | 8 / 16      | 8 / 16       | 8 / 16       | 8 / 16       | 8 / 16       | 8 / 16       |
| <b>Height</b>                               | F                 | 53.1        | 56.45        | 60           | 50.9         | 80.8         | 74           |
| <b>Jaw mounting bolts</b>                   | G                 | 6 x M5      | 6 x M5       | 6 x M6       | 6 x M6       | 6 x M10      | 6 x M10      |
|   | N                 | 70          | 88.9         | 101.6        | 135.75       | 183          | 233.7        |
|   | H                 | 2           | 2            | 1.8          | 2.2          | 6.8          | 7.2          |
| <b>Jaw stroke <math>\varnothing</math></b>  | mm                | 2.5         | 2.5          | 2.5          | 2.5          | 2.5          | 2.5          |
| <b>Speed max. @ 6 bar</b>                   | min <sup>-1</sup> | 5000        | 4500         | 4500         | 4000         | 3000         | 2500         |
| <b>Clamping force @ 6 bar</b>               | kN                | 3.6         | 6.3          | 9.5          | 10.5         | 28           | 31           |
| <b>Operating pressure</b>                   | bar               | 1-6         | 1-6          | 1-6          | 1-6          | 1-6          | 1-6          |
| <b>Weight</b>                               | kg                | 2.5         | 3.5          | 6.5          | 7.5          | 21           | 28           |

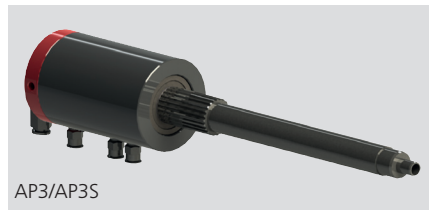
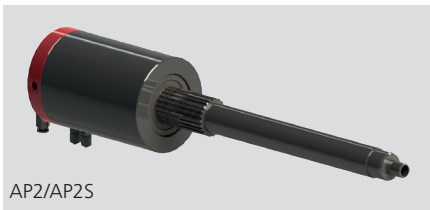
2-jaw and 4-jaw power chucks available on request

### Top jaws for AcuGrind



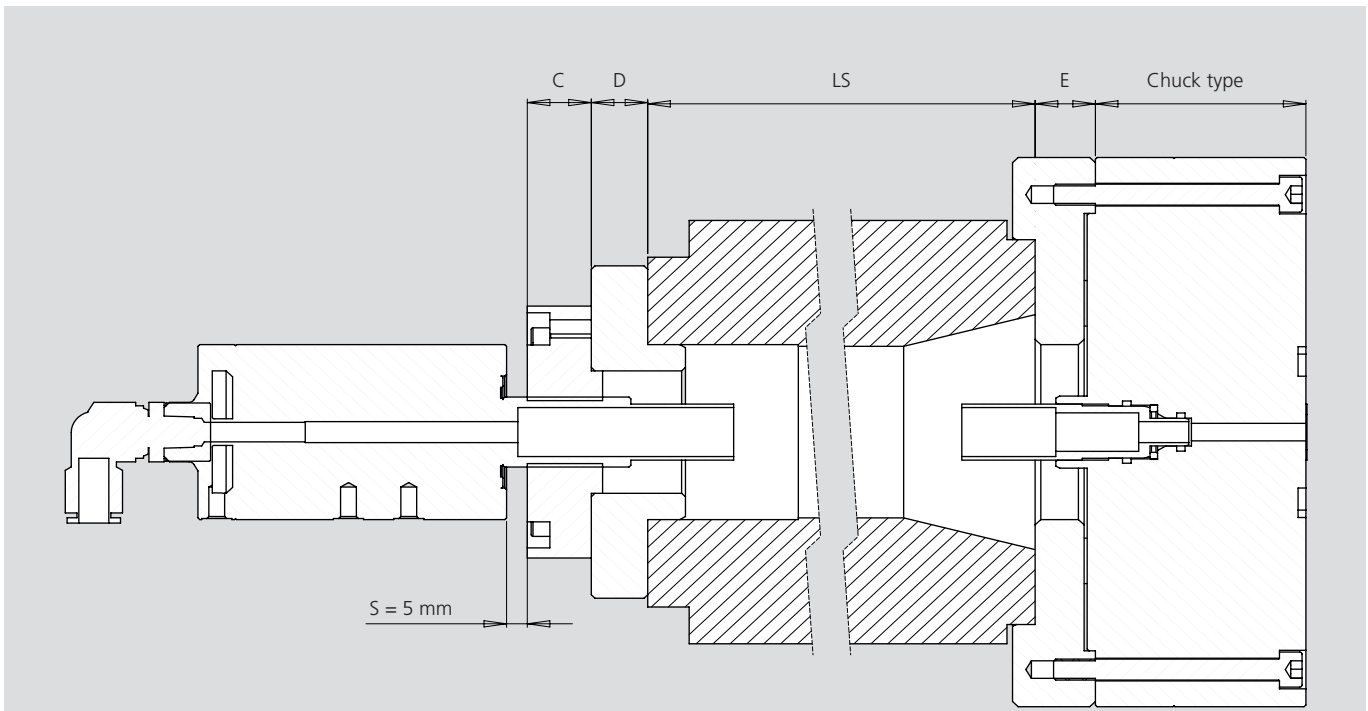
| Chuck type   | Material  | WAK Soft top jaws |        | SBK Segment jaws 120° |        |
|--------------|-----------|-------------------|--------|-----------------------|--------|
|              |           | Id.No.            | Height | Id.No.                | Height |
| AcuGrind 80  | Aluminium | 5302511           | 25     | 5302545               | 25     |
|              |           | 5302512           | 38     | 5302546               | 38     |
|              | Steel     | 5302513           | 25     | 5302547               | 25     |
|              |           | 5302514           | 38     | 5302548               | 38     |
| AcuGrind 100 | Aluminium | 5302515           | 25     | 5302549               | 25     |
|              |           | 5302516           | 38     | 5302550               | 50     |
|              | Steel     | 5302517           | 25     | 5302551               | 75     |
|              |           | 5302518           | 38     | 5302552               | 100    |
|              | Steel     | 5302519           | 50     | 5302553               | 20     |
|              |           |                   |        | 5302554               | 38     |
|              | Steel     |                   |        | 5302555               | 50     |
|              |           |                   |        |                       |        |
| AcuGrind 125 | Aluminium | 5302520           | 25     | 5302556               | 25     |
|              |           | 5302521           | 38     | 5302557               | 38     |
|              | Aluminium | 5302522           | 50     | 5302558               | 50     |
|              |           | 5302523           | 75     | 5302559               | 75     |
|              | Steel     | 5302524           | 25     | 5302560               | 20     |
|              |           | 5302525           | 38     | 5302561               | 25     |
|              | Steel     | 5302526           | 50     | 5302562               | 38     |
|              |           |                   |        | 5302563               | 50     |
| AcuGrind 150 | Aluminium | 5302527           | 25     | 5302564               | 25     |
|              |           | 5302528           | 38     | 5302565               | 38     |
|              | Aluminium | 5302529           | 50     | 5302566               | 50     |
|              |           | 5302530           | 75     | 5302567               | 75     |
|              | Aluminium |                   |        | 5302568               | 100    |
|              |           |                   |        |                       |        |
|              | Steel     | 5302531           | 25     | 5302569               | 25     |
|              |           | 5302532           | 38     | 5302570               | 38     |
|              | Steel     | 5302533           | 50     | 5302571               | 50     |
|              |           | 5302534           | 75     | 5302572               | 75     |
| AcuGrind 200 | Aluminium | 5302535           | 50     | 5302573               | 38     |
|              |           | 5302536           | 75     | 5302574               | 50     |
|              | Aluminium | 5302537           | 100    | 5302575               | 75     |
|              |           |                   |        |                       |        |
|              | Steel     | 5302538           | 50     | 5302576               | 50     |
|              |           | 5302539           | 75     | 5302577               | 75     |
|              | Steel     | 5302540           | 100    |                       |        |
|              |           |                   |        |                       |        |
| AcuGrind 250 | Aluminium | 5302541           | 50     | 5302578               | 75     |
|              |           | 5302542           | 75     | 5302579               | 100    |
|              | Aluminium |                   |        |                       |        |
|              |           |                   |        |                       |        |
|              | Steel     | 5302543           | 50     | 5302580               | 50     |
|              |           | 5302544           | 75     | 5302581               | 75     |

Air feed tubes fix (AP)



| SMW-AUTOBLOK |         | Speed<br>max <sup>-1</sup> | Version   |
|--------------|---------|----------------------------|-----------|
| Typ          | Id.No.  |                            |           |
| AP2          | 5302590 | 5.000                      | 2 airways |
| AP2S         | 5302591 | 5.000                      | 2 airways |
| AP3          | 5302592 | 5.000                      | 3 airways |
| AP3S         | 5302593 | 5.000                      | 3 airways |

AP2S/AP3S = with serration



|    |   |
|----|---|
| LS | Spindle length  |
| E  | Chuck adaptor   |
| C  | Bushing (included in scope of delivery of the air feed tubes type AP) |
| D  | Adaptor (mounting ring manufactured by the customer)                  |
| S  | Safety distance   |
| F  | AcuGrind chuck  |

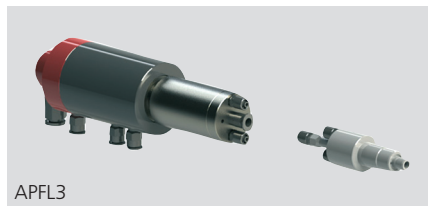
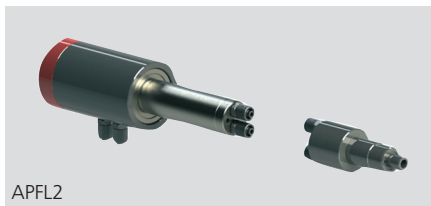
Ordering example

**Note** In case of an order of the air feed tubes type AP, the length of the air feed tube is necessary.

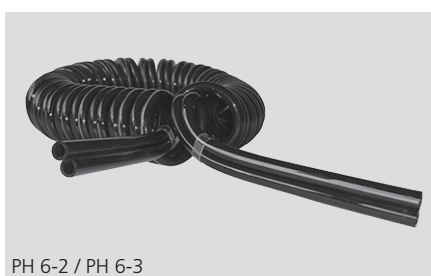
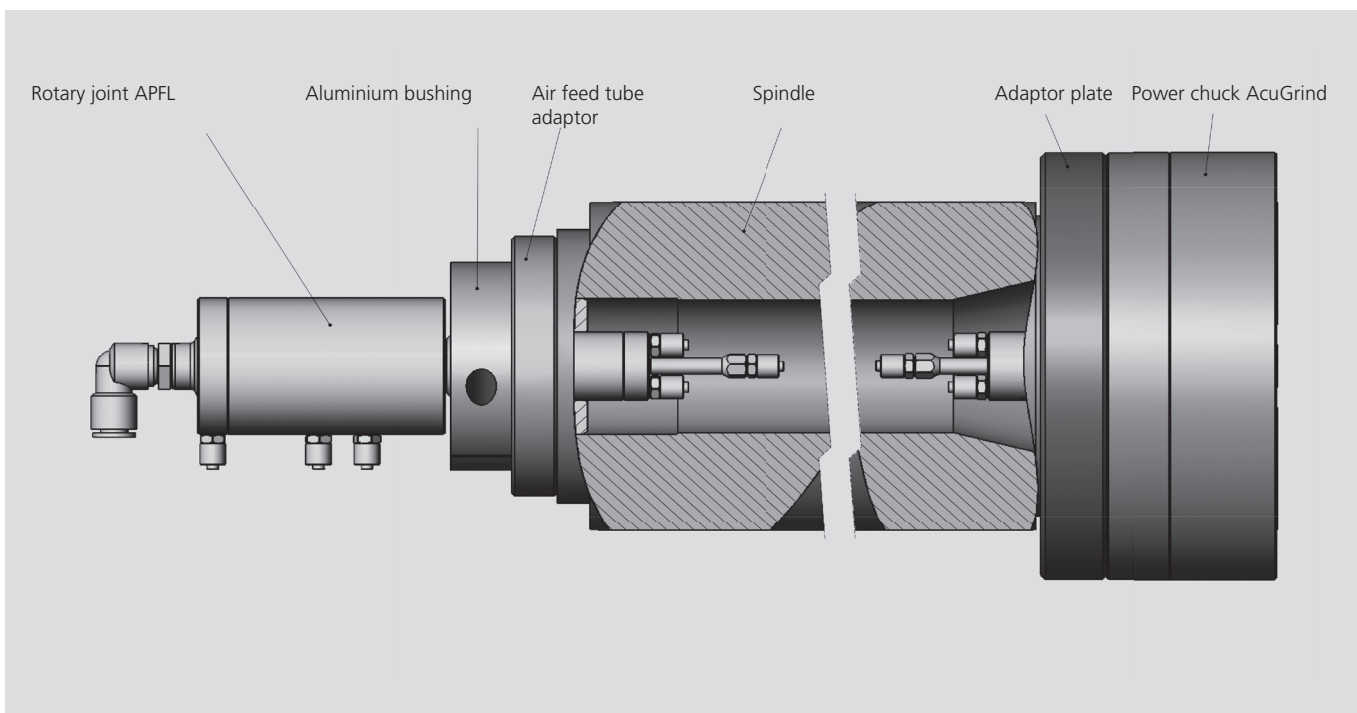
For calculating the correct length of the air feed tube (LR) are the following dimensions necessary: LS, E, C, D and the chuck type.

**Note** Use only with clean and oiled air.

### Air feed tubes flex APFL



| SMW-AUTOBLOK |         | Speed<br>max <sup>1</sup> | Version   |
|--------------|---------|---------------------------|-----------|
| Type         | Id. No. |                           |           |
| APFL2        | 5302594 | 6.000                     | 2 airways |
| APFL3        | 5302595 | 6.000                     | 3 airways |



| SMW-AUTOBLOK<br>Type             | Id.No. | PH 6-2<br>5302585 | PH 6-3<br>5302586 |
|----------------------------------|--------|-------------------|-------------------|
| Number of airways                |        | 2                 | 3                 |
| Outside dia. Ø (mm)              |        | 6                 | 6                 |
| Inside dia. Ø (mm)               |        | 4                 | 4                 |
| Medium                           |        | air               | air               |
| Max. operating pressure at 20 °C |        | 0.8 MPa           | 0.8 MPa           |
| Operating temperature            |        | -20 - +60 °C      | -20 - +60 °C      |
| Length (mm)                      |        | 525               | 505               |
| Max. working distance (mm)       |        | 1.500             | 1.000             |
| Outside dia. Ø coil (mm)         |        | 37                | 37                |
| Material                         |        | Polyurethan       | Polyurethan       |
| Colour                           |        | black             | black             |