

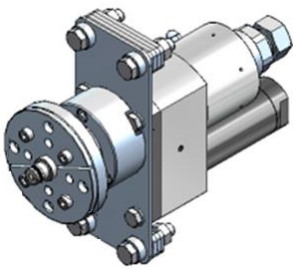
# Rotary bushing

## DDF 3000-45

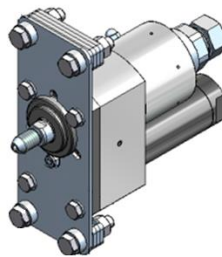
The DDF 3000-45 is a driven rotary bushing. The rotary bushing is suitable for stationary and mobile applications, and is available in pneumatic or self-driven variants. The combination of DDF 3000-45 and nozzle arms/nozzle bars produces a high-performance water jet tool that provides an efficient tool for working on large areas and surface cleaning, as a result of its variable rotational speed.

### Special features

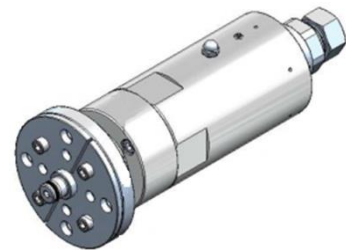
- Controllable/adjustable speed
- Pressurised components made from stainless steel
- Rugged design



9.895-534.0



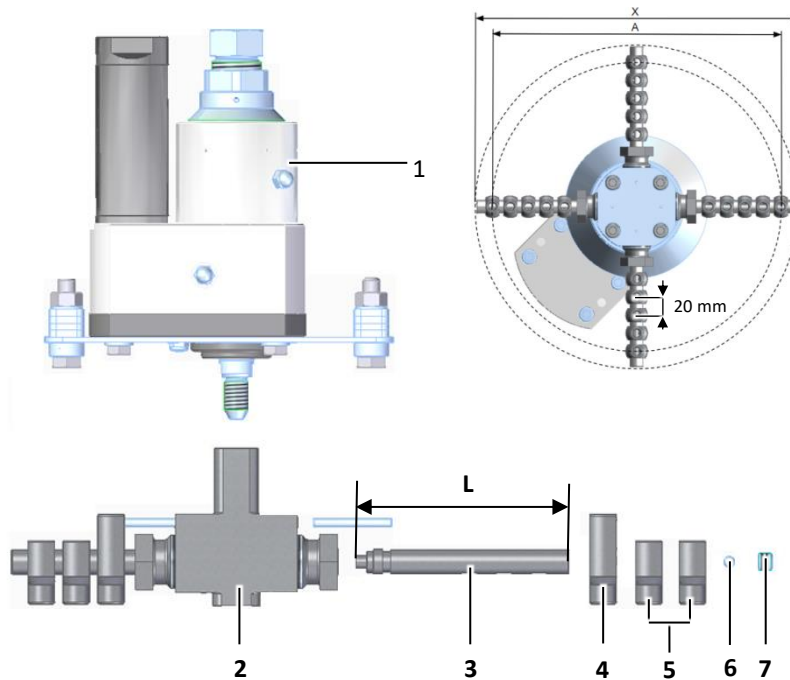
9.895-566.0



9.872-982.0

| Technical data                 |         |                 |             |                           |
|--------------------------------|---------|-----------------|-------------|---------------------------|
| Type                           |         | Pneumatic       | Pneumatic   | Self-propelled            |
| Connection                     |         | Flange          | Thread      | Flange                    |
| Material number                |         | 9.895-534.0     | 9.895-566.0 | 9.872-982.0               |
| Medium temperature             | max.    | 60 °C           |             |                           |
| Operating pressure             | max.    | 3000 bar        |             |                           |
| Volume flow rate               | max.    | 45 l/min        |             |                           |
| Rotational speed               | max.    | 2,500 rpm       |             |                           |
| Weight                         | approx. | 9.5 kg          | 9.5 kg      | 6 kg                      |
| Pneumatic motor inlet pressure | max.    | 6.5 bar         |             |                           |
| Direction of rotation          |         | clockwise       | clockwise   | clockwise, anti-clockwise |
| Length                         | approx. | 200 mm          | 200 mm      | 97 mm                     |
| Width                          | approx. | 97 mm           | 80 mm       | 97 mm                     |
| Height                         | approx. | 268 mm          | 223 mm      | 268 mm                    |
| High-pressure connection       |         | 9/16"-18-UNF-LH |             |                           |

## Standard nozzle arm accessory



| Standard nozzle arm |                 |  |                  |               |                              |
|---------------------|-----------------|--|------------------|---------------|------------------------------|
| Item                | Material number | Number of nozzles, shape 21                          | Working Ø A [mm] | Length L [mm] | Displacement circle Ø X [mm] |
| 1                   | 9.895-534.0     | DDF 3000-45 pneumatic flange                         |                  |               |                              |
| 2                   | 9.917-640.0     | Connecting flange                                    |                  |               |                              |
|                     | 9.917-643.0     | Connecting flange with thread                        |                  |               |                              |
| 3                   | 9.917-971.0     | 1  | 160              | 82            | 196                          |
|                     | 9.917-972.0     | 2  | 200              | 102           | 236                          |
|                     | 9.917-973.0     | 3  | 240              | 122           | 276                          |
|                     | 9.917-974.0     | 4  | 280              | 142           | 316                          |
|                     | 9.917-975.0     | 5  | 320              | 162           | 356                          |
|                     | 9.917-976.0     | 6  | 360              | 182           | 396                          |
|                     | 9.917-644.0     | Plug   |                  |               |                              |
| 4                   | 9.917-968.0     | Nozzle holder I (always required for nozzle locking) |                  |               |                              |
| 5                   | 9.917-969.0     | Nozzle holder II                                     |                  |               |                              |
| 6                   | 9.883-217.0     | Ball *   |                  |               |                              |
| 7                   | 9.881-012.0     | Grub screw *   |                  |               |                              |

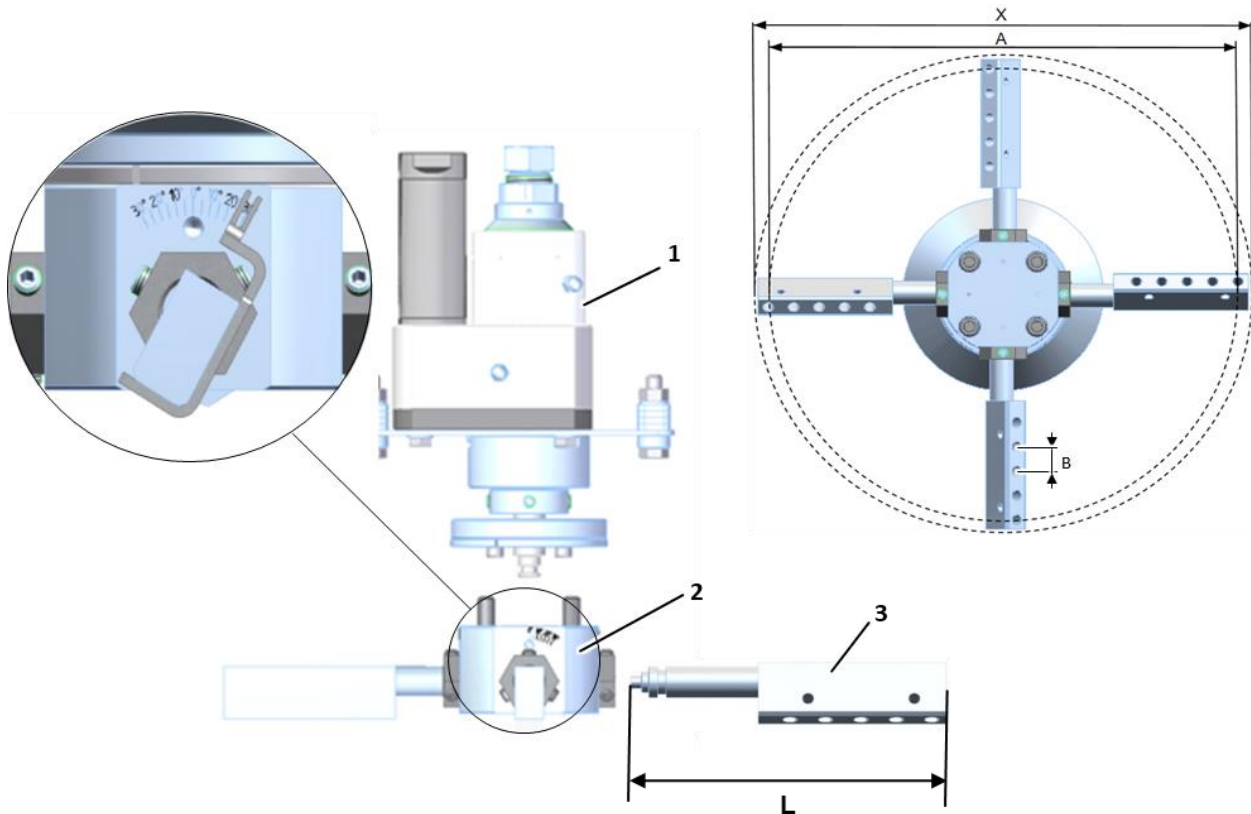
\* 1x required per nozzle arm

### Example order

Pneumatic rotary bushing with 4 nozzle arms and 240 mm working width

1. 9.895-534.0 DDF 3000-45 pneumatic flange
2. 9.917-640.0 connecting flange
3. 4x 9.917-973.0 240 mm nozzle arm
4. 4x 9.917-968.0 nozzle holder I
5. 8x 9.917-969.0 nozzle holder II
6. 4x 9.883-217.0 ball
7. 4x 9.881-012.0 grub screw

## Extra-rugged nozzle arm accessory



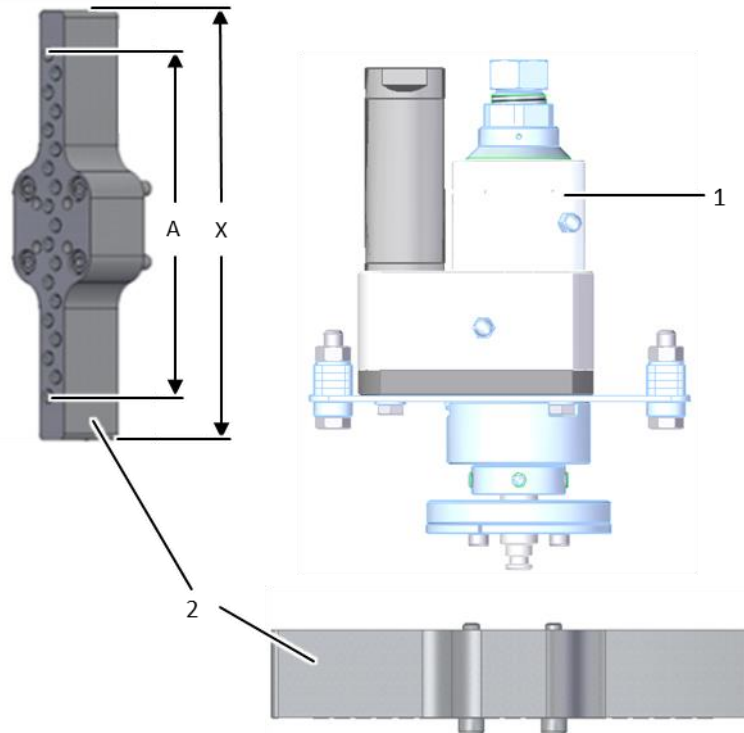
| Extra-rugged nozzle arms |                 |                             |  |               |                              |
|--------------------------|-----------------|-----------------------------|--|---------------|------------------------------|
| Item                     | Material number | Number of nozzles, shape 21 | Working Ø A [mm]                         | Length L [mm] | Displacement circle Ø X [mm] |
| 1                        | 9.895-534.0     |                             | DDF 3000-45 pneumatic flange             |               |                              |
|                          | 9.895-566.0     |                             | DDF 3000-45 pneumatic thread             |               |                              |
|                          | 9.872-982.0     |                             | DDF 3000-45 self-driven flange           |               |                              |
| 2                        | 9.917-641.0     |                             | Connecting flange for rugged nozzle arms |               |                              |
| 3                        | 9.875-958.0     | 2                           | 194                                      | 100           | 235                          |
|                          | 9.875-959.0     | 2                           | 214                                      | 100           | 235                          |
|                          | 9.876-810.0     | 5                           | 350                                      | 178           | 390                          |
|                          | 9.876-811.0     | 5                           | 370                                      | 178           | 390                          |
|                          | 9.878-406.0     |                             | Plug                                     |               |                              |

## Example order

Self-driven rotary bushing with 4 extra-rugged nozzle arms and 350 mm working width

1. 9.895-534.0 DDF 3000-45 pneumatic flange
2. 9.917-641.0 connecting flange for rugged nozzle arms
3. 4x 9.876-810.0 extra-rugged nozzle arms

## Nozzle bar/nozzle disc accessory



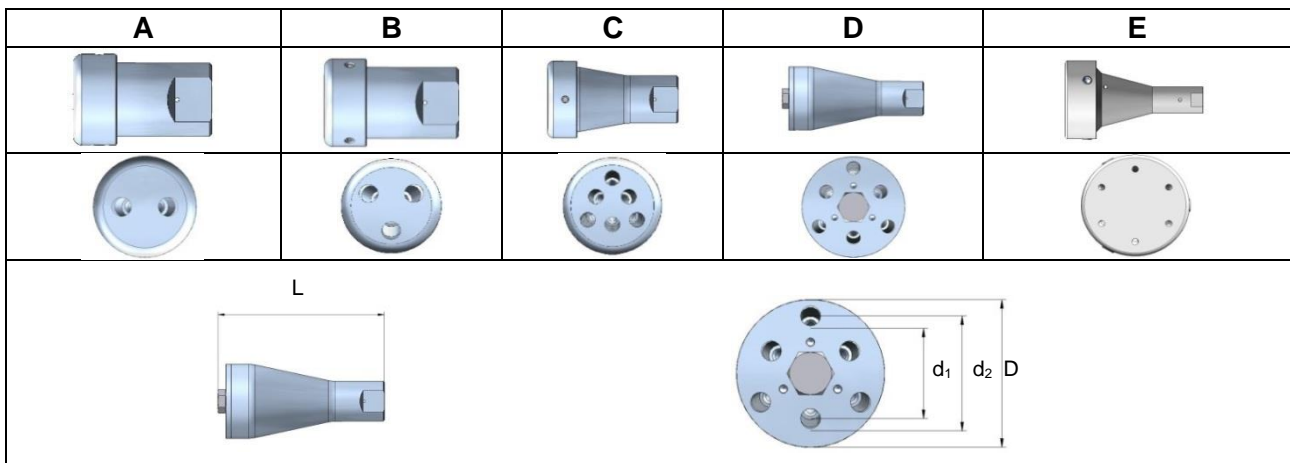
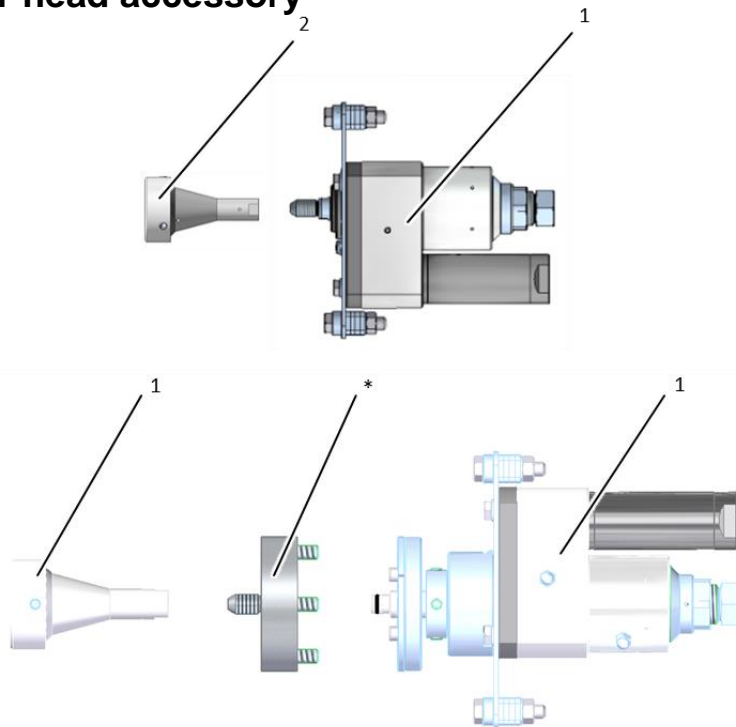
| Nozzle bars/nozzle discs |                 |                               |                                 |  |
|--------------------------|-----------------|-------------------------------|---------------------------------|--|
| Item                     | Material number | Number of nozzles<br>Shape 21 | Working $\varnothing$ A<br>[mm] | Displacement<br>circle $\varnothing$ X<br>[mm] |
| 1                        | 9.895-534.0     | DDF 3000-45 pneumatic         |                                 |  |
| 2                        | 9.916-952.0     | 19                            | max. 248                        | 315  |
|                          | 9.920-926.0     | 12                            | 162                             | 200  |

### Example order

Electric rotary bushing with 2 nozzle arms and 248 mm working width

1. 9.895-534.0 DDF 3000-45 pneumatic
2. 9.916-952.0 nozzle bar

## Nozzle carrier head accessory



| Nozzle carrier heads |                 |                                |                             |                                  |                                  |                  |                |        |        |
|----------------------|-----------------|--------------------------------|-----------------------------|----------------------------------|----------------------------------|------------------|----------------|--------|--------|
| Item                 | Material number | Shape                          | Number of nozzles, shape 21 | Pitch circle d <sub>1</sub> [mm] | Pitch circle d <sub>2</sub> [mm] | Nozzle jet angle |                | L [mm] | D [mm] |
|                      |                 |                                |                             |                                  |                                  | d <sub>1</sub>   | d <sub>2</sub> |        |        |
| 1                    | 9.895-566.0     | DDF 3000-45 pneumatic thread   |                             |                                  |                                  |                  |                |        |        |
|                      | 9.895-534.0     | DDF 3000-45 pneumatic flange * |                             |                                  |                                  |                  |                |        |        |
| 2                    | 9.886-774.0     | A                              | 2                           | 17                               | –                                | 20°              | –              | 64     | 42     |
|                      | 9.886-775.0     | B                              | 3                           | 20                               | –                                | 30°              | –              | 64     | 42     |
|                      | 9.886-772.0     | C                              | 3 + 3                       | 20                               | 30                               | 20°              | 24°            | 89     | 52     |
|                      | 9.886-773.0     | D                              | 3 + 3                       | 35                               | 45                               | 20°              | 24°            | 133    | 59     |
|                      | 9.886-645.0     | E                              | 3 + 3                       | 40                               | 42                               | 30°              | 30°            | 114    | 65     |

\* Connecting flange 9.920-917.0 for pneumatic variant only