

# US-CL

With 2 jaw  
long stroke chuck

# US-A

With 3 jaw long or  
normal stroke chuck

## Stationary cylinder + chuck unit Ø 80 - 315 mm

- Hydraulic cylinder module + chuck
- Closed center chucks type CL / AN / AL

### Application/customer benefits

- Gripping units designed to suit special purpose machines and transfer lines
- Also used as loading chucks to handle workpieces

### Technical features

- Stationary hydraulic cylinder + chuck unit consisting of a modular cylinder and standard 2- or 3-jaw chuck
- Permanent oil pressure required
- For chuck details please see technical data of the selected chuck

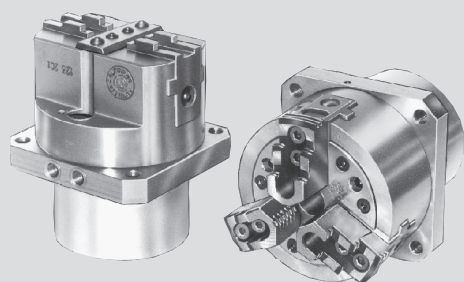
**Remark:** when ordering please specify the position of the oil connectors  
(on the side or on the back)

### Standard equipment

Standard chuck with cylinder and  
connecting parts

### Ordering example

US 125-CLC with rear oil connection, or  
US 250-AND with side oil connection and  
chuck 90° revolved



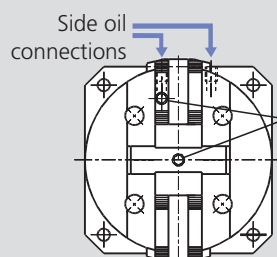
CL-C Ø 80 – 160  
CL-D Ø 200 – 315

US cylinder

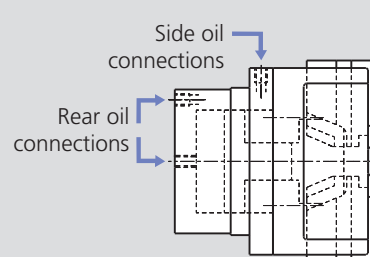
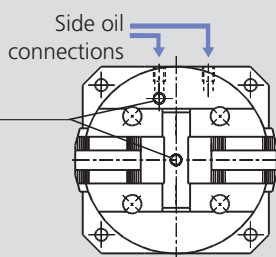
AN-D/AN-M Ø 125 – 315  
AL-D/AL-M Ø 125 – 315  
AN-C Ø 165 – 315

- **US-CL-C** = cylinder equipped with a 2 jaw chuck type CL-C (long stroke / tongue & groove). Chuck Ø 80 to 160 mm.
- **US-CL-D** = cylinder equipped with a 2 jaw chuck type CL-D (long stroke / inch serration). Chuck Ø 200 to 315 mm.
- **US-AN-D** = cylinder equipped with a 3 jaw chuck type AN-D (normal stroke / inch serration). Chuck Ø 125 to 315 mm.
- **US-AN-M** = cylinder equipped with a 3 jaw chuck type AN-M (normal stroke / metric serration). Chuck Ø 125 to 315 mm.
- **US-AL-D** = cylinder equipped with a 3 jaw chuck type AL-D (long stroke / inch serration). Chuck Ø 125 to 315 mm.
- **US-AL-M** = cylinder equipped with a 3 jaw chuck type AL-M (long stroke / metric serration). Chuck Ø 125 to 315 mm.
- **US-AN-C** = cylinder equipped with a 3 jaw chuck type AN-C (normal stroke / tongue & groove). Chuck Ø 165 to 315 mm.
- **Special units** = on request the US cylinder can be equipped with other chucks, for example with a quick jaw change chuck type AN-RM with stationary cylinder available.

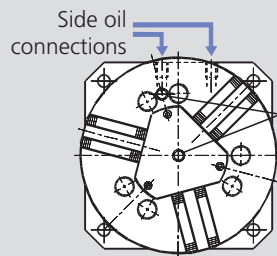
### CL chuck in standard position



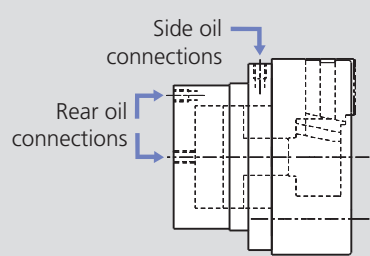
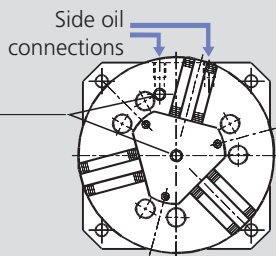
### CL chuck 90° revolved



### AN / AL chuck in standard position



### AN / AL chuck 90° revolved

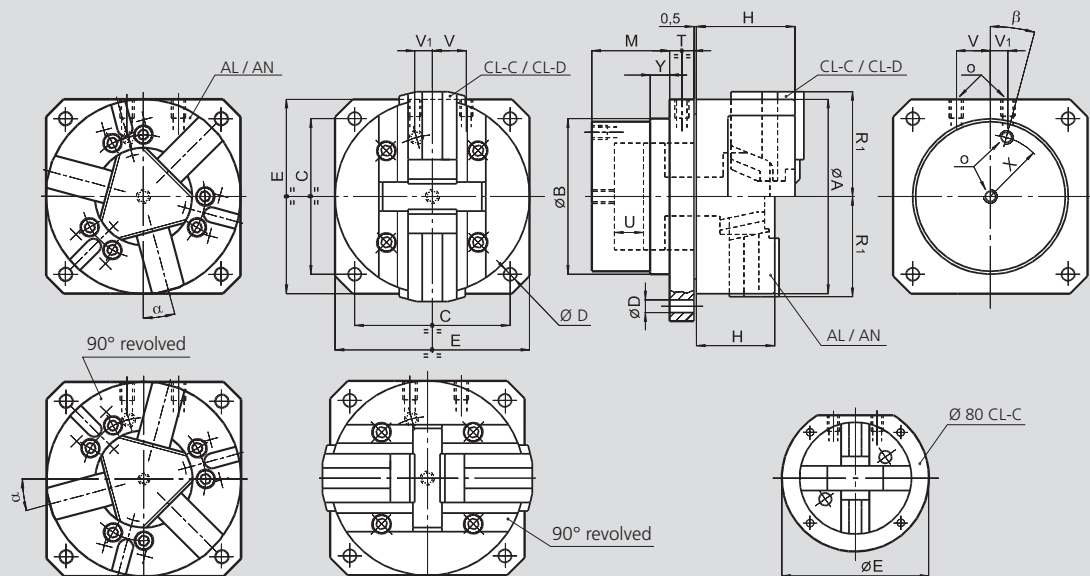


- The chuck can be mounted on the cylinder 90° revolved if the standard position creates interferences with the working cycle. Please specify in the order, if a revolved position is needed.

- The oil connections can be on the side or on the back of the cylinder in order to ease the installation of the gripping unit. Please specify in the order, which version is preferred.

- Hydraulic cylinder module + chuck
- Closed center chucks type CL / AN / AL

 With 2 jaw  
long stroke chuck

 With 3 jaw long or  
normal stroke chuck


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

## US actuating cylinder dimensions

| SMW-AUTOBLOK cylinder |     | US 80    | US 100   | US 125   | US 160<br>US 165 | US 200   | US 250   | US 315   |
|-----------------------|-----|----------|----------|----------|------------------|----------|----------|----------|
| Id. No. CL            |     | 77755008 | 77755010 | 77755013 | 77755016         | 77755120 | 77755025 | 77755031 |
| Id. No. AL / AN       |     | 77755008 | 77755010 | 77755113 | 77755016         | 77755120 | 77755025 | 77755031 |
| B h7                  | mm  | 70       | 84       | 106      | 128              | 158      | 185      | 185      |
| C                     | mm  | 66       | 84       | 104      | 130              | 160      | 200      | 250      |
| D                     | mm  | 7        | 9        | 11       | 11               | 13.5     | 17       | 17       |
| E                     | mm  | 105      | 100      | 130      | 160              | 200      | 250      | 315      |
| M                     | mm  | 45       | 52       | 60       | 70               | 80       | 90       | 90       |
| Oil connections       | O   | inch     | 1/8 BSP  | 1/4 BSP  | 1/4 BSP          | 3/8 BSP  | 3/8 BSP  | 3/8 BSP  |
|                       | T   | mm       | 16       | 16       | 20               | 25       | 25       | 25       |
|                       | U   | mm       | 11       | 14       | 20               | 25       | 30       | 35       |
|                       | V   | mm       | 15       | 18       | 12               | 28       | 35       | 41       |
|                       | V1  | mm       | 15       | 18       | 12               | 15       | 18       | 15       |
|                       | X   | mm       | 27       | 33       | 43               | 52       | 63       | 75       |
|                       | Y   | mm       | 10       | 10       | 10               | 20       | 20       | 20       |
|                       | β   | deg.     | 30°      | 30°      | 15°              | 15°      | 0°       | 0°       |
| Piston area           | cm² | 16       | 25       | 42       | 68               | 112      | 166      | 166      |

## Units with CL-C and CL-D chucks (more information at general catalog turning page 84)

| SMW-AUTOBLOK Type   |    | US 80-CL-C | US 100-CL-C | US 125-CL-C | US 160-CL-C | US 200-CL-D | US 250-CL-D | US 315-CL-D |
|---------------------|----|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| A                   | mm | 80         | 100         | 125         | 160         | 200         | 250         | 315         |
| H                   | mm | 45         | 54          | 76          | 92          | 103         | 109         | 114         |
| Chuck open          | R1 | mm         | 40          | 50          | 68          | 87          | 108         | 132         |
| Max. pressure       |    | bar        | 38          | 36          | 37          | 32          | 30          | 36          |
| Max. gripping force |    | kN         | 9           | 14          | 24          | 40          | 55          | 78          |

## Units with AN-D / AN-M / AN-C chucks (more information at general catalog turning page 42 and 46)

| SMW-AUTOBLOK Type   |      | US 125-AN-D<br>US 125-AN-M | US 165-AN-D<br>US 165-AN-M<br>US 165-AN-C | US 210-AN-D<br>US 210-AN-M<br>US 210-AN-C | US 250-AN-D<br>US 250-AN-M<br>US 250-AN-C | US 315-AN-D<br>US 315-AN-M<br>US 315-AN-C |
|---------------------|------|----------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| A                   | mm   | 127                        | 165                                       | 210                                       | 254                                       | 315                                       |
| H                   | mm   | 57                         | 71                                        | 85                                        | 95                                        | 105                                       |
| Chuck open          | R1   | mm                         | 64                                        | 83                                        | 105                                       | 128                                       |
| α                   | deg. | 0°                         | 15°                                       | 15°                                       | 15°                                       | 15°                                       |
| Max. pressure       | bar  | 47                         | 36                                        | 31                                        | 28                                        | 36                                        |
| Max. gripping force | kN   | 56                         | 70                                        | 105                                       | 140                                       | 180                                       |

## Units with AL-D / AL-M chucks (more information at general catalog turning page 44)

| SMW-AUTOBLOK Type   |      | US 125-AL-D<br>US 125-AL-M | US 165-AL-D<br>US 165-AL-M | US 210-AL-D<br>US 210-AL-M | US 250-AL-D<br>US 250-AL-M | US 315-AL-D<br>US 315-AL-M |
|---------------------|------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| A                   | mm   | 127                        | 165                        | 210                        | 254                        | 315                        |
| H                   | mm   | 57                         | 71                         | 85                         | 95                         | 105                        |
| Chuck open          | R1   | mm                         | 67                         | 86                         | 109                        | 133                        |
| α                   | deg. | 0°                         | 15°                        | 15°                        | 15°                        | 15°                        |
| Max. pressure       | bar  | 60                         | 44                         | 45                         | 39                         | 45                         |
| Max. gripping force | kN   | 45                         | 54                         | 90                         | 120                        | 135                        |

JAWS-CATALOG  
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