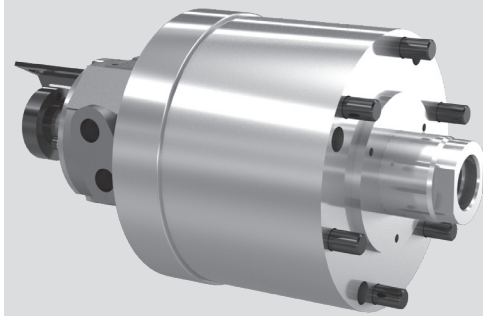


# SIN-S

Closed center  
rotating hydraulic cylinder

## Closed center rotating hydraulic cylinder

- Up to 70 bar
- Central bore for media supply
- Stroke control via proximity switch or LPS 4.0



### Application/customer benefits

- Actuation of power chucks/closed or partial open center mounting applications

### Technical features

- Pressure range 7-70 bar
- Horizontal or vertical installation
- Central bore for coolant, oil or air with thread for rotary union
- Safety valves and excess pressure relief valve
- Mounting from the rear or from the front side
- Stroke control via proximity switch or linear positioning system
- A 10 µm filter in pressure line is requested
- Use oil HM32 ISO 3448

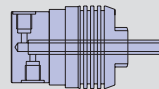
### SIN-S standard version

- Central bore + thread for rotary union

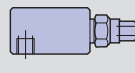
#### Ordering example

##### SIN-S standard version

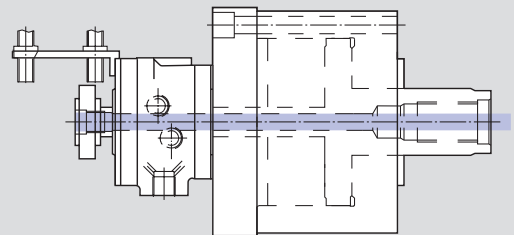
- Cylinder SIN-S 125 Id. No. 33093112
- Rotary union Id. No. 043271  
(proximity switch not included)



RU-2-22  
Id. No. 044970



RU-1-16  
Id. No. 043271



### SIN-PXP with linear positioning system

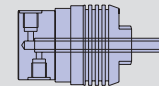
- Central bore + thread for rotary union

#### Ordering example

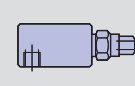
##### SIN-S standard version

- (1)\* Cylinder SIN-S 125  
prepared for PXP / LPS Id. No. 77093112
- (2)\* Kit PXP (bracket and taper)  
Id. No. 60557915  
(sensor PXP Ø 30 not included)
- Rotary union Id. No. 044970

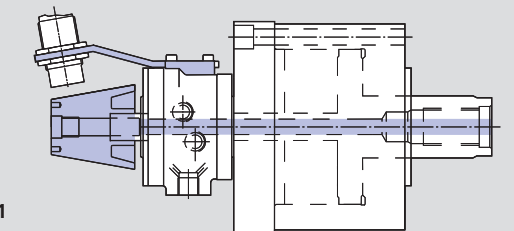
\* Attention: PARTS (1) and PART (2) can be supplied as assembled with the single part number 33092912  
(see table below "SIN-S equipped with kit PXP")



RU-2-22  
Id. No. 044970



RU-1-16  
Id. No. 043271



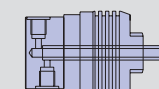
### SIN-LPS 4.0 with linear positioning system

- Central bore + thread for rotary union

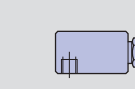
#### Ordering example

##### SIN-S standard version

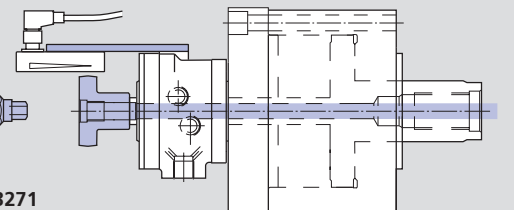
- Cylinder SIN-S 125  
prepared for PXP / LPS Id. No. 77093112
- Kit LPS 4.0 (bracket and cam) Id. No. 046588  
(LPS 4.0 not included)
- Rotary union Id. No. 044970



RU-2-22  
Id. No. 044970



RU-1-16  
Id. No. 043271



## Technical data

| SMW-AUTOBLOK Type           |                      | SIN-S 50 | SIN-S 70 | SIN-S 85 | SIN-S 100 | SIN-S 125 | SIN-S 150 | SIN-S 175 | SIN-S 200 | SIN-S 250 |
|-----------------------------|----------------------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| SIN-S standard version      |                      | 33093105 | 33093107 | 33093109 | 33093110  | 33093112  | 33093115  | 33093117  | 33093120  | 33093125  |
| SIN prepared for PXP/LPS    |                      | 77093105 | 77093107 | 77093109 | 77093110  | 77093112  | 77093115  | 77093117  | 77093120  | 77093125  |
| Kit PXP                     |                      | 60557910 | 60557915 | 60557910 | 60557910  | 60557915  | 60557915  | 60557915  | 60557920  | 60557920  |
| Kit LPS 4.0                 |                      | 046588   | 046588   | 046588   | 046588    | 046588    | 046588    | 046588    | 046612    | 046612    |
| SIN-S equipped with kit PXP |                      | 33092905 | 33092907 | 33092909 | 33092910  | 33092912  | 33092915  | 33092917  | 33092920  | 33092925  |
| Piston area                 | cm <sup>2</sup>      | 14       | 28       | 48       | 66        | 103       | 157       | 212       | 280       | 457       |
| Max. pressure               | bar                  | 70       | 70       | 70       | 70        | 70        | 70        | 70        | 70        | 50        |
| Draw pull at 40 bar         | kN                   | 5.5      | 11       | 19       | 26        | 41        | 62        | 84        | 112       | 180       |
| Oil leakage <sup>1</sup>    | dm <sup>3</sup> /min | 1        | 1        | 1        | 1         | 1         | 1         | 1         | 2         | 2         |
| Max. speed                  | r.p.m.               | 7000     | 7000     | 7000     | 7000      | 6000      | 6000      | 5000      | 4000      | 2000      |
| Weight                      | kg                   | 8.5      | 8.5      | 8        | 11        | 16        | 20        | 24        | 45        | 88        |
| Moment of inertia           | kg·m <sup>2</sup>    | 0.012    | 0.012    | 0.012    | 0.016     | 0.04      | 0.08      | 0.12      | 0.32      | 0.92      |

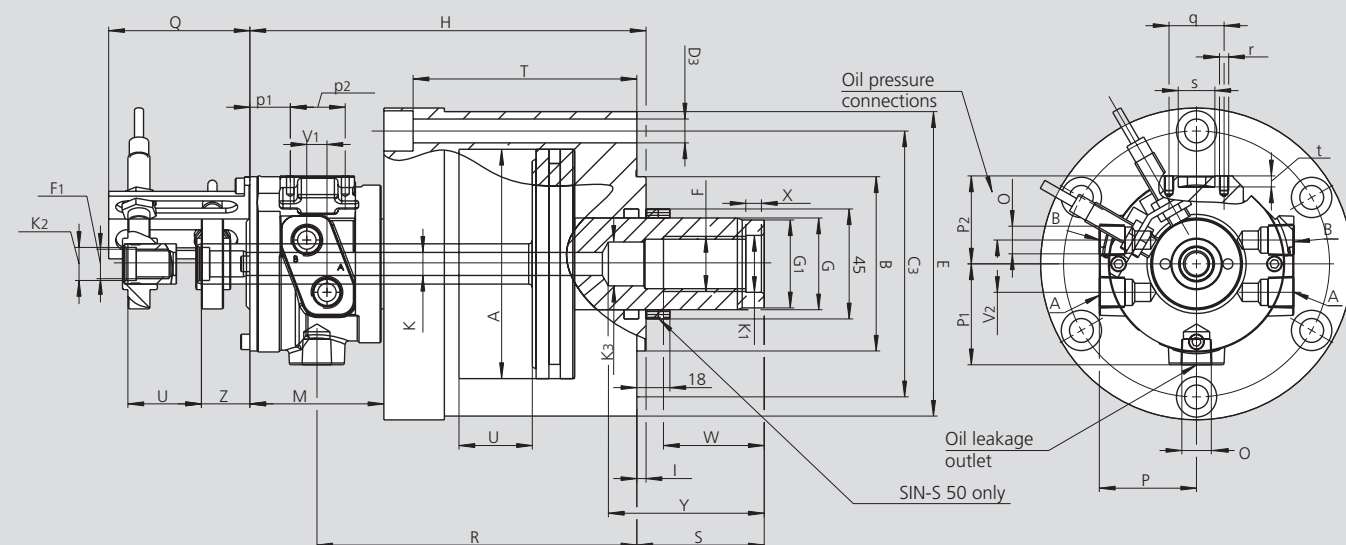
<sup>1</sup> Total at 30 bar and 50°C.

# Closed center rotating hydraulic cylinder

- Up to 70 bar
- Central bore for media supply
- Stroke control via proximity switch or LPS 4.0

# SIN-S

Closed center  
rotating hydraulic cylinder



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

| SMW-AUTOBLOK Type         |       |      | SIN-S 50  | SIN-S 70  | SIN-S 85  | SIN-S 100 | SIN-S 125 | SIN-S 150 | SIN-S 175 | SIN-S 200 | SIN-S 250 |
|---------------------------|-------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                           | A     | mm   | 53        | 68        | 85        | 100       | 125       | 150       | 175       | 200       | 250       |
|                           | B h7  | mm   | 50        | 50        | 50        | 80        | 95        | 95        | 125       | 125       | 160       |
|                           | C3    | mm   | 100       | 100       | 100       | 120       | 145       | 170       | 195       | 225       | 275       |
|                           | D3    | mm   | 6 x 9     | 6 x 9     | 6 x 9     | 6 x 11    | 6 x 13    | 6 x 13    | 6 x 13    | 6 x 17    | 6 x 17    |
|                           | E     | mm   | 120       | 120       | 120       | 140       | 166       | 192       | 217       | 250       | 300       |
|                           | F     | mm   | M20 x 1.5 | M20 x 1.5 | M20 x 1.5 | M24       | M30       | M30       | M36       | M42 x 3   | M42 x 3   |
| Lefthand for rotary union | F1    | mm   | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 | M16 x 1.5 |
|                           | G     | mm   | 32        | 32        | 32        | 40        | 50        | 50        | 60        | 65        | 65        |
|                           | G1 h7 | mm   | 30        | 30        | 30        | 38        | 48        | 48        | 58        | 62        | 62        |
|                           | H     | mm   | 200       | 200       | 192       | 196       | 216       | 216       | 226       | 288       | 313       |
|                           | I     | mm   | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         | 5         |
|                           | K     | mm   | 12.5      | 12.5      | 12.5      | 12.5      | 12.5      | 12.5      | 12.5      | 12.5      | 12.5      |
|                           | K1    | mm   | 20.5      | 20.5      | 20.5      | 25        | 31        | 31        | 37        | 44        | 44        |
|                           | K2 J6 | mm   | 18        | 18        | 18        | 18        | 18        | 18        | 18        | 18        | 18        |
|                           | K3 H8 | mm   | 17        | 17        | 17        | 18        | 24        | 24        | 28        | –         | –         |
|                           | M     | mm   | 73        | 73        | 73        | 73        | 73        | 73        | 73        | 123       | 123       |
|                           | O     | inch | G 3/8"    | G 3/8"    | G 3/8"    | G 3/8"    | G 3/8"    | G 3/8"    | G 3/8"    | G 1/2"    | G 1/2"    |
|                           | P     | mm   | 55        | 55        | 55        | 55        | 55        | 55        | 55        | 65        | 65        |
|                           | P1    | mm   | 55        | 55        | 55        | 55        | 55        | 55        | 55        | 65        | 65        |
|                           | P2    | mm   | 48        | 48        | 48        | 48        | 48        | 48        | 48        | 59        | 59        |
|                           | Q     | mm   | 77        | 77        | 77        | 77        | 77        | 77        | 77        | 97        | 97        |
|                           | R     | mm   | 158.5     | 158.5     | 150.5     | 154.5     | 174.5     | 174.5     | 184.6     | 238       | 268       |
| Max. / min.               | S     | mm   | 55 / 30   | 55 / 15   | 47 / 15   | 47 / 15   | 70 / 30   | 70 / 30   | 70 / 25   | 80 / 30   | 85 / 25   |
|                           | T     | mm   | 112       | 112       | 104       | 104       | 122       | 122       | 132       | 140       | 160       |
| Piston stroke             | U     | mm   | 25        | 40        | 32        | 32        | 40        | 40        | 45        | 50        | 60        |
|                           | V1    | mm   | 10        | 10        | 10        | 10        | 10        | 10        | 10        | 12        | 12        |
|                           | V2    | mm   | 30        | 30        | 30        | 30        | 30        | 30        | 30        | 36        | 36        |
|                           | W     | mm   | 40        | 40        | 40        | 45        | 55        | 55        | 55        | 60        | 60        |
|                           | X     | mm   | 10        | 10        | 10        | 10        | 10        | 10        | 10        | 12        | 12        |
|                           | Y     | mm   | 67        | 67        | 67        | 72        | 85        | 85        | 92        | –         | –         |
|                           | Z     | mm   | 27        | 27        | 27        | 27        | 27        | 27        | 27        | 27        | 27        |
|                           | p1    | mm   | 23.5      | 23.5      | 23.5      | 23.5      | 23.5      | 23.5      | 23.5      | 36        | 36        |
|                           | p2    | mm   | 30        | 30        | 30        | 30        | 30        | 30        | 30        | 30        | 30        |
|                           | q     | mm   | 30        | 30        | 30        | 30        | 30        | 30        | 30        | 30        | 30        |
|                           | r     | mm   | M5        | M5        | M5        | M5        | M5        | M5        | M5        | M5        | M5        |
|                           | s H8  | mm   | 20        | 20        | 20        | 20        | 20        | 20        | 20        | 20        | 20        |
|                           | t     | mm   | 6         | 6         | 6         | 6         | 6         | 6         | 6         | 6         | 6         |