

**RSM/RCS Series Single-Acting Low Profile
Cylinder**

Operation Instructions



Please read these instructions carefully before operating. And keep instructions properly for future reference.



I. Features

- [Single-acting and spring return for](#) convenient operations.
- [Low profile design for fitting in narrow application area](#)
- [Enhanced corrosion resistance with powder coating.](#)
- [Mounting hole design for easy fixing](#)
- [Easy carrying with handles on some models](#)
- [Reduced pollution and extended cylinder life with dust ring](#)

II. Application and Scope

Featuring lightweight, high flexibility, small volume, and high lifting force, this product is extensively applicable for the electric power, chemical, steel, bridge, and machinery operations and can play the unlimited advantages in the repair and disassembling/assembling of the equipment.

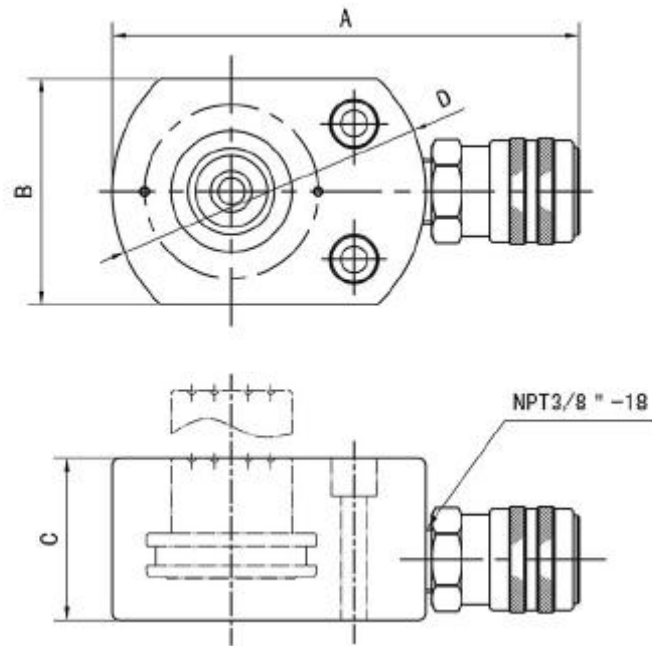
III. Operation Method

1. Before operations, ensure to check all parts for normal functioning.
2. During operations, strictly abide by the provisions in the main specification and eliminate the over-height and overload, in order to prevent the serious oil leakage on top of cylinder and the occurrence of accident.
3. If the oil volume in the [hand pump](#) is insufficient, firstly add a sufficient volume of filtered N32# hydraulic oil before operations.
4. Please refer to the operation [instructions](#) of electric pump for the electric pump.
5. Choose appropriate gravity center for the weight. Appropriately select the support point of the cylinder and cushion its bottom face levelly and stably to prevent sinkage and inclination (The hardness of the ground shall be taken into consideration to determine the necessity of cushioning with tough wood boards).
6. While lifting a weight by the cylinder, timely support the weight securely by supports and never use the cylinder as the supports. If the long-term support of the weight by this cylinder is required, please select SSL self-locking cylinder.
7. If the simultaneous use of multiple cylinders is required for lifting, besides the correct placement of the cylinders, use a multi-lifting distributor valve, ensure the uniform load among cylinders, and maintain the synchronized lifting speed. In addition, the possible sinkage of the ground due to non-uniform weight must be taken into consideration to prevent the inclination of lifted weight from causing danger.
8. During the operations, connect the quick coupling of [hand pump](#) with the cylinder, select the proper position, and tighten the drainage screw on the oil pump to start the operations. To lower the piston rod, slightly

loosen the hand wheel of the hand pump counter-clockwise to unload the cylinder and gradually lower the piston rod. Under loaded condition, avoid the rapid lowering to prevent occurrence of danger.

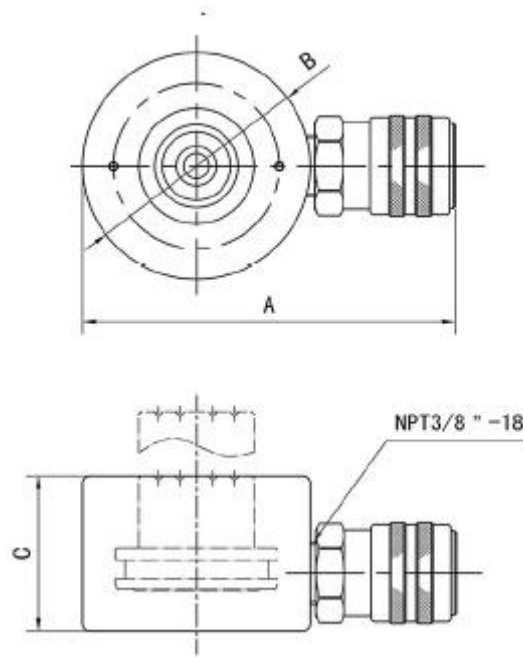
9. At completion of the lifting, this series cylinder can be taken away rapidly. However, do not drag the cylinder by connected hoses.
10. Due to limited lifting stroke of the cylinder, the user is absolutely prohibited to forcibly lift under overloaded condition, in order to prevent damaging the cylinder.
11. Avoid the strong vibration during operations of the cylinder.
12. Do not use in any working site with acidic, alkaline, or corrosive gas.
13. Fulfill the periodic checking and maintenances depending on the working condition.

IV. Basic specification (RSM series)



| Model | Cylinder capacity (T) | Stroke (mm) | Overall dimensions AxBxCxD(mm) | Cylinder bore diameter (mm) | Rod diameter (mm) | Required oil volume (ml) | Weight (Kg) |
|------------------|-----------------------|-------------|--------------------------------|-----------------------------|-------------------|--------------------------|-------------|
| SRSM-100 | 10 | 11 | 130x60x44x83 | ø45 | ø35 | 18 | 1.3 |
| SRSM-200 | 20 | 12 | 149x80x52x102 | ø63 | ø50 | 32 | 3.0 |
| SRSM-300 | 30 | 13 | 167x95x58x117 | ø76 | ø60 | 55 | 4.6 |
| SRSM-500 | 50 | 16 | 197x125x67x150 | ø100 | ø80 | 99 | 6.6 |
| SRSM-750 | 75 | 16 | 227x152x79x177 | ø122 | ø100 | 164 | 11.6 |
| SRSM-1000 | 100 | 16 | 250x179x87x203 | ø140 | ø112 | 203 | 14.2 |
| SRSM-1500 | 150 | 16 | 285x212x95x236 | ø172 | ø145 | 317 | 25.6 |

V. Basic specification (RCS series)



| Model | Cylinder capacity (T) | Stroke (mm) | Overall dimensions AxBxCxD(mm) | Cylinder bore diameter (mm) | Rod diameter (mm) | Required oil volume (ml) | Weight (Kg) |
|-----------------|-----------------------|-------------|--------------------------------|-----------------------------|-------------------|--------------------------|-------------|
| RCS-101 | 10 | 38 | 116x72x88 | ø45 | ø35 | 55 | 4.6 |
| RCS-201 | 20 | 45 | 139x92x97 | ø63 | ø50 | 139 | 5.4 |
| RCS-302 | 30 | 64 | 148x105x118 | ø76 | ø60 | 290 | 6.6 |
| RCS-502 | 50 | 60 | 171x129x120 | ø100 | ø80 | 471 | 10.2 |
| RCS-751 | 100 | 50 | 212x176x134 | ø140 | ø112 | 877 | 24.5 |
| RCS-1002 | 150 | 57 | 252x215x141 | ø172 | ø145 | 1185 | 42.1 |

VI. Precautions

- In event of empty pumping during operations, firstly loosen the drainage plug on the pump body, place the pump vertically downward and perform empty pumping for several times, and then tighten the drainage plug to continue the use.
- During the operations, do not offset the load or overload, in order to prevent damaging cylinder and causing danger. Under loaded condition, never disassemble the quick couplings, in order to prevent causing accidents and damaging parts.
- This pump utilizes the hydraulic oil as the medium. Therefore, fulfill the maintenances for the oil and this pump, in order to prevent oil silting and leakage and impair the operating performance.
- For a new or long-term unused cylinder, due to excessive air content in the cylinder, the piston rod may have slight bouncing symptom at the start of operations. In such case, reciprocate the oil cylinder for 2~3 times to bleed the air from the chambers. As the seals are vulnerable to aging under long-term non-use condition,

during long-term non-use, reciprocate the oil cylinder for 2~3 times under non-load condition non-periodically.

- The high pressure oil hoses passed the 105MPa (1050Kgf/cm²) test before delivery. However, the hoses are vulnerable to aging, the user shall check frequently, once every 6 months generally or once every 3 months under frequent condition. **Before use**, test by 87.5Mpa (875kgf/cm²) pressure. Upon detection of burst, bulge, or leakage, timely replace.
- During operations, strictly abide by the technical specification. The user shall fulfill the periodic checking and **maintenance** depending on working condition.

Ningbo Saivs Machinery Co., Ltd.

Postal code: 315135

Tel.: +86-574-88067629

+86-574-88344911

Fax: +86-574-88345368

Website: www.saivs-industrial.com

www.saivstool.com