

# Centrifugally Lift Off Sprags Freewheels

**RSRV**  
**RSRT**



## TYPE



The types RSRV and RSRT are centrifugally lift-off sprag type high speed backstops with integral torque limiter. Please refer to the RSCI design on catalogue pages 72 to 75 for complementary information on Stieber centrifugally lift-off sprag type backstops.

The high quality oil through-impregnated friction linings ensure a consistent and reliable slip torque even when not in operation for a long length of time. The slip torque is factory pre-set to the application requirements.

These assemblies are primarily intended for installation on multiple drives where two or more backstops share the reverse load, such as on large inclined conveyors.

The RSRV is the pure load-sharing version. No maintenance and adjustments are necessary.

In addition, the RSRT can be progressively released under load by a mechanical device. Alternatively we can offer a hydraulic release solution for a fully controlled safe release procedure.

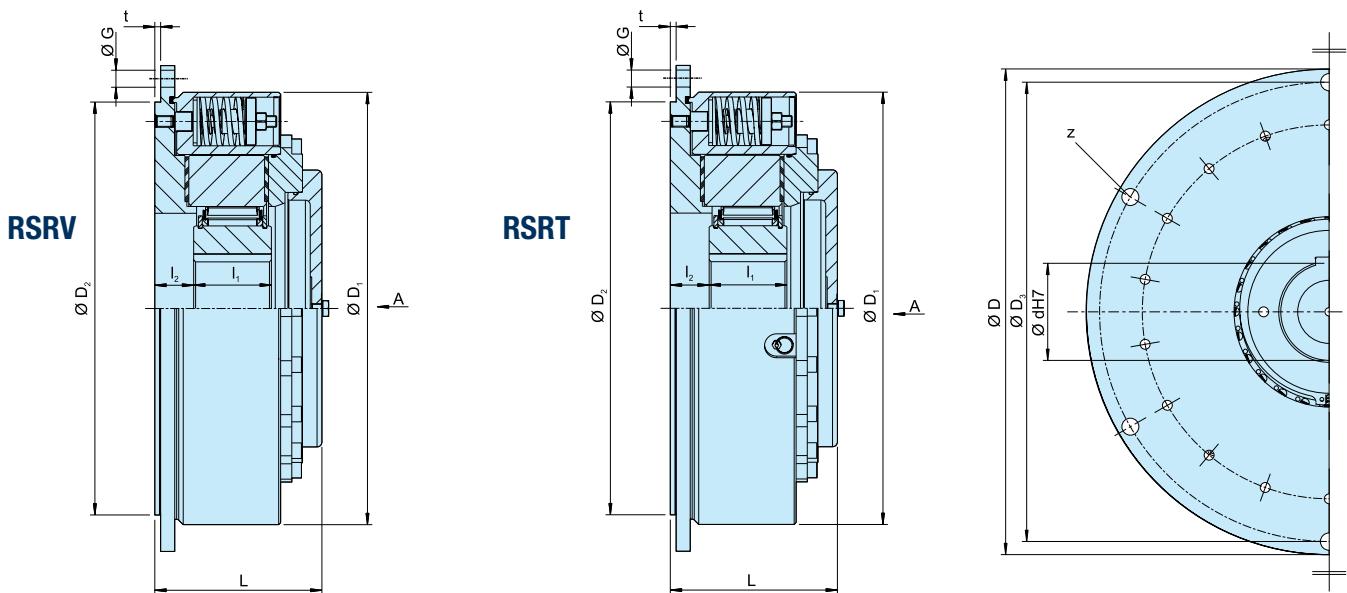
The slip torque should be set 20% higher than the maximum static return torque including overload conditions.

These units are not bearing supported internally. The outer member must be centred on the machine housing.

Concentricity and run-out limits must be observed.

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RSRV, RSRT



| Type         | Size | $\text{d}^{h7}$<br>[mm] | $T^1)$<br>[Nm] | $n_{\min}^2)$<br>[min <sup>-1</sup> ] | $n_{\max}^3)$<br>[min <sup>-1</sup> ] | $D$<br>[mm] | $D_1$<br>[mm] | $D_{2\text{ h7}}$<br>[mm] | $D_3$<br>[mm] | $t$<br>[mm] | $z$ | $L$<br>[mm] | $I_1$<br>[mm] | $I_2^4)$<br>[mm] | $G$ | Weight<br>[kg] |
|--------------|------|-------------------------|----------------|---------------------------------------|---------------------------------------|-------------|---------------|---------------------------|---------------|-------------|-----|-------------|---------------|------------------|-----|----------------|
| RSRV<br>RSRT | 85   | 50, 60                  | 1400           | 490                                   | 5300                                  | 330         | 286           | 280                       | 308           | 6           | 6   | 135         | 60            | 29               | M12 | 50             |
|              | 100  | 60, 70                  | 2300           | 480                                   | 4100                                  | 350         | 308           | 300                       | 328           | 6           | 6   | 140         | 60            | 31               | M12 | 60             |
|              | 120  | 70, 80                  | 3400           | 370                                   | 3600                                  | 400         | 345           | 340                       | 373           | 6           | 6   | 150         | 70            | 31               | M16 | 80             |
|              | 140  | 65, 90                  | 4500           | 420                                   | 2700                                  | 430         | 375           | 375                       | 403           | 6           | 6   | 150         | 70            | 31               | M16 | 95             |
|              | 170  | 90, 100                 | 8000           | 400                                   | 2400                                  | 500         | 445           | 425                       | 473           | 6           | 6   | 170         | 80            | 40               | M16 | 150            |
|              | 200  | 130, 150                | 12500          | 370                                   | 2400                                  | 555         | 500           | 495                       | 528           | 6           | 6   | 170         | 80            | 40               | M16 | 180            |
|              | 240  | 150, 180                | 21500          | 310                                   | 1300                                  | 710         | 630           | 630                       | 670           | 8           | 12  | 185         | 90            | 50               | M20 | 350            |
|              | 260  | 150, 190                | 30000          | 275                                   | 1000                                  | 750         | 670           | 670                       | 710           | 8           | 12  | 205         | 105           | 50               | M20 | 420            |

## NOTES

- 1) Maximal slipping torque.  
A lower slipping torque can be set.
- 2) This minimum allowable overrunning speed  $n_{\min}$  should not be reduced under continuous operation. Possible reduction of this minimum speed on request.
- 3) Maximal speed, inner race overruns  
Keyway to DIN 6885.1
- 4) Tolerance +2

When ordering, please specify direction of rotating seen from arrow »A«.

»R« Inner race overruns in clockwise direction.  
»L« Inner race overruns in counterclockwise direction.

» Refer to mounting and maintenance instructions  
pages 12 to 13

## MOUNTING EXAMPLE

