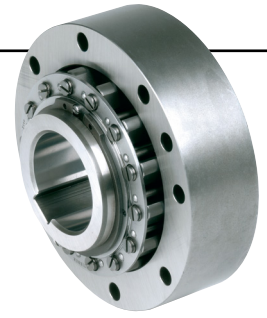


## Centrifugally Lift Off Sprags Freewheels

# RSCI 180-300



### TYPE



Type RSCI is a centrifugal lift off sprag type freewheel with the inner race rotating. Only the inner race is designed for freewheeling.

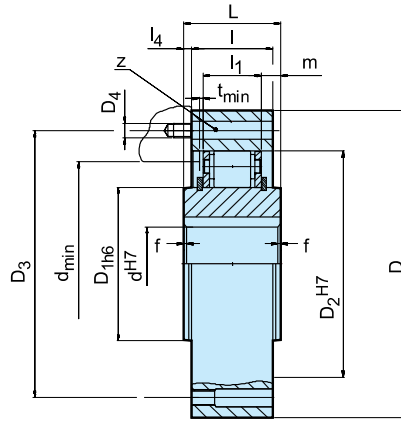
Primarily designed as a backstop, this type can be also used as an overrunning clutch in crawl drives, where the overrunning speed is high but the driving speed is low and does not exceed the maximum driving speed shown in the table.

Centering of the outer race must use the inner bore. The centering spigot must not contact the sprag cage. Please refer to page 72 (RSCI 20-130) for further information.

# Centrifugally Lift Off Sprags Freewheels

RSCI 180-300

RSCI



| Type     | Size             | Torque                | Speeds                                 |  |   | Number           |                   |                    |               |       |     |             |             |               |               | Weight                      |                   |             |                   |      |
|----------|------------------|-----------------------|--|--|---|------------------|-------------------|--------------------|---------------|-------|-----|-------------|-------------|---------------|---------------|-----------------------------|-------------------|-------------|-------------------|------|
|          | $d^{H7}$<br>[mm] | $T_{KN}^{1)}$<br>[Nm] | $n_{max}^{2)}$<br>[min <sup>-1</sup> ] | $n_{min}^{3)}$<br>[min <sup>-1</sup> ] | $n_{imax}^{4)}$<br>[min <sup>-1</sup> ] | $D^{5)}$<br>[mm] | $D_{1h6}$<br>[mm] | $D_2^{H7}$<br>[mm] | $D_3$<br>[mm] | $D_4$ | $z$ | $L$<br>[mm] | $l$<br>[mm] | $l_1$<br>[mm] | $l_4$<br>[mm] | $f \times 45^\circ$<br>[mm] | $d_{min}$<br>[mm] | $m$<br>[mm] | $t_{min}$<br>[mm] | [kg] |
| RSCI     | 180              | 31500                 | 115                                    | 285                                    | 1300                                    | 412              | 240               | 310                | 360           | M20   | 12  | 90          | 80          | 53            | 5             | 3,5                         | 280               | 18,6        | 3                 | 59   |
|          | 180 M            | 50000                 | 90                                     | 220                                    | 1300                                    | 422              | 240               | 310                | 370           | M20   | 18  | 120         | 120         | 83            | 0             | 4                           | 280               | 18,5        | 2                 | 92   |
|          | 180 II           | 63000                 | 115                                    | 285                                    | 1300                                    | 412              | 240               | 310                | 360           | M20   | 24  | 160         | 160         | 118           | 0             | 3,5                         | 280               | 22          | 3                 | 116  |
|          | 180 II-M         | 100000                | 90                                     | 220                                    | 1300                                    | 425              | 240               | 310                | 370           | M24   | 24  | 240         | 240         | 176           | 0             | 4                           | 280               | 31          | 3                 | 190  |
|          | 220              | 42500                 | 110                                    | 265                                    | 1100                                    | 470              | 290               | 360                | 410           | M20   | 16  | 105         | 80          | 60            | 12,5          | 4                           | 330               | 23,5        | 3                 | 90   |
|          | 220 M            | 68000                 | 85                                     | 205                                    | 1100                                    | 480              | 290               | 360                | 410           | M24   | 16  | 120         | 120         | 83            | 0             | 4                           | 330               | 18,5        | 2                 | 109  |
|          | 220 II           | 85000                 | 110                                    | 265                                    | 1100                                    | 480              | 290               | 360                | 430           | M24   | 18  | 160         | 160         | 130           | 0             | 4                           | 330               | 15          | 3                 | 159  |
|          | 220 II-M         | 136000                | 85                                     | 205                                    | 1100                                    | 490              | 290               | 360                | 425           | M30   | 20  | 240         | 240         | 176           | 0             | 4                           | 330               | 32          | 2                 | 249  |
|          | 240              | 52000                 | 105                                    | 250                                    | 1100                                    | 500              | 320               | 390                | 440           | M20   | 16  | 105         | 90          | 60            | 7,5           | 4                           | 360               | 15          | 2                 | 95   |
|          | 240 M            | 83000                 | 80                                     | 195                                    | 1100                                    | 520              | 320               | 390                | 440           | M24   | 16  | 120         | 120         | 83            | 0             | 4                           | 360               | 18,5        | 2                 | 137  |
|          | 240 II           | 104000                | 105                                    | 250                                    | 1100                                    | 520              | 320               | 390                | 440           | M24   | 24  | 180         | 180         | 132           | 0             | 4                           | 360               | 24          | 2                 | 191  |
|          | 240 II-M         | 166000                | 80                                     | 195                                    | 1100                                    | 530              | 320               | 390                | 455           | M30   | 24  | 240         | 240         | 181           | 0             | 4                           | 360               | 32          | 2                 | 250  |
|          | 260              | 65000                 | 100                                    | 240                                    | 1000                                    | 550              | 360               | 430                | 500           | M24   | 16  | 105         | 105         | 60            | 0             | 4                           | 400               | 22,5        | 2                 | 130  |
|          | 260 M            | 100000                | 75                                     | 185                                    | 1000                                    | 580              | 360               | 430                | 500           | M24   | 24  | 125         | 125         | 83            | 0             | 4                           | 400               | 21          | 2                 | 183  |
|          | 260 II           | 130000                | 100                                    | 240                                    | 1000                                    | 580              | 360               | 430                | 500           | M24   | 24  | 210         | 210         | 132           | 0             | 4                           | 400               | 39          | 2                 | 262  |
|          | 260 II-M         | 200000                | 75                                     | 185                                    | 1000                                    | 580              | 360               | 430                | 500           | M30   | 24  | 250         | 250         | 176           | 0             | 4                           | 400               | 37          | 2                 | 369  |
|          | 300              | 78000                 | 90                                     | 225                                    | 1000                                    | 630              | 410               | 480                | 560           | M24   | 24  | 105         | 105         | 60            | 0             | 4                           | 460               | 22,5        | 3                 | 174  |
|          | 300 M            | 125000                | 70                                     | 175                                    | 1000                                    | 630              | 410               | 480                | 560           | M24   | 24  | 125         | 125         | 83            | 0             | 4                           | 460               | 21          | 3                 | 210  |
| 300 II   | 156000           | 90                    | 225                                    | 1000                                   | 630                                     | 410              | 480               | 560                | M24           | 24    | 210 | 210         | 134         | 0             | 4             | 460                         | 38                | 3           | 351               |      |
| 300 II-M | 250000           | 70                    | 175                                    | 1000                                   | 630                                     | 410              | 480               | 560                | M30           | 24    | 250 | 250         | 182,6       | 0             | 4             | 460                         | 33,7              | 3           | 457               |      |

## NOTES

- $T_{max} = 2 \times T_{KN}$   
» Refer to Selection page 7 to 11
- This maximum allowable torque transmission speed  $n_{max}$  must not be exceeded when transmitting torque
- This minimum allowable overrunning speed  $n_{min}$  should not be reduced under continuous operation.  
Possible reduction of this minimum speed on request
- Inner race overruns  
Keyway to DIN 6885.1
- Tolerance +1

Cover F8 must be ordered separately  
» Refer to mounting and maintenance instructions page 12 to 13

Other bore diameters on request

## MOUNTING EXAMPLE

