# RDBK
# RDBK-H



## TYPE



The type RDBK is a centrifugally lift-off sprag RSCI high speed backstop (Please refer to pages 72 to 75) equipped with integral torque limiter. The latter limits the backstop transmissible torque to a value that is factory set-up according to customer request.

This design will be used mostly as backstop in multi-drive systems, such as on large inclined conveyors, where two or more backstops share the reverse load.

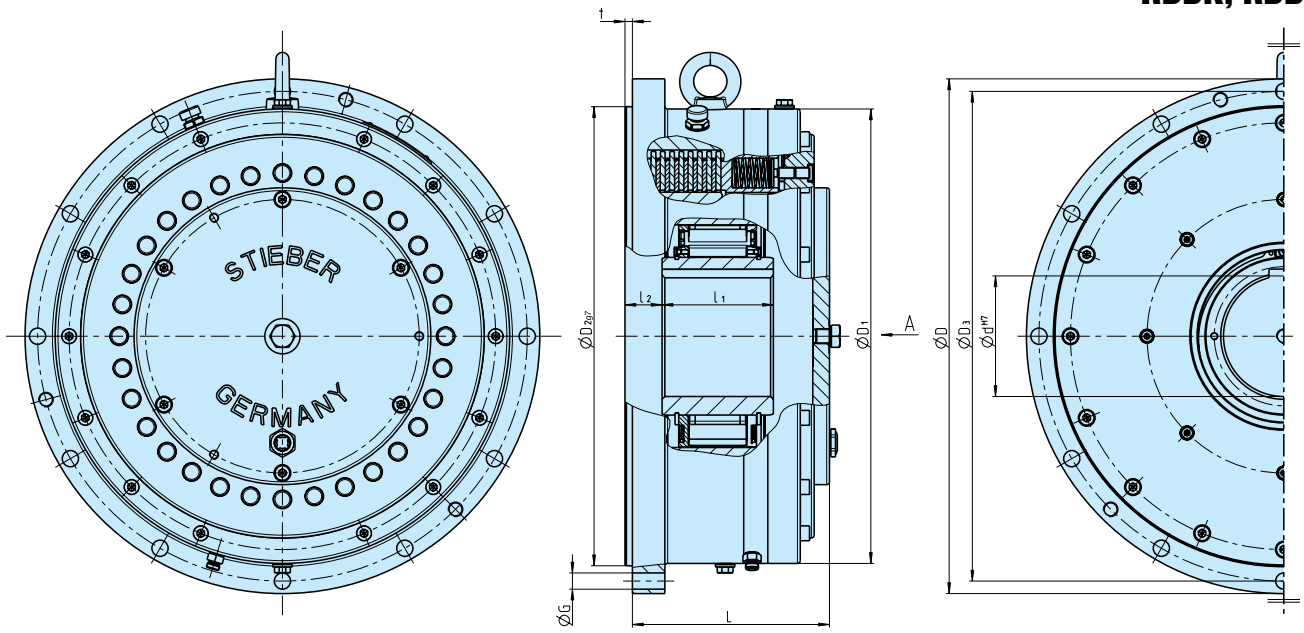
The torque limiting function is performed through a multi-disc brake working in oil. This solution provides not only for a high torque density of the complete unit, but also insures that the set slip torque remains constant over the working life time regardless of the environmental conditions.

The RDBK sub-assembly which rotate backwards under overload is fully bearing supported. The unit is capable of performing as many reverse rotations as may be required (within the limits of energy dissipation) to completely unload the conveyor prior to maintenance work being carried out. Within some time intervals this type can rotate regularly backwards damage free.

The option of a release function manually actuated is also available. A hydraulic solution is the preferred one, nevertheless a full mechanical one can be supplied. The release is performed using a simple hand pump to actuate the internal hydraulic cylinder; progressively releasing the backstop.

The backstop function is of the built-in design. The outer part must be centered and fixed on the machine housing. The run-out and squareness tolerances must be respected.

## RDBK, RDBK-H




| Type | Size | | | | | | | | | | | | | | Number | | Weight |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $d^{H7}_{max}$ [mm] | T[1)] [Nm] | $n_{min}$[2)] [min$^{-1}$] | $n_{max}$[3)] [min$^{-1}$] | $n_{rmax}$[4)] [min$^{-1}$] | D [mm] | $D_1$ [mm] | $D_{2g7}$ [mm] | $D_3$ [mm] | t [mm] | L [mm] | $l_1$ [mm] | $l_2$[5)] [mm] | Z | G [mm] | [kg] |
| RDBK RDBK..H | 110-28 | 60 | 2300 | 385 | 6500 | 290 | 300 | 225 | 260 | 278 | 6 | 136 | 40 | 40 | 6 | M10 | 43 |
| | 125-63 | 60 | 5500 | 360 | 6000 | 270 | 330 | 285 | 280 | 308 | 6 | 158 | 90 | 29 | 6 | M12 | 65 |
| | 160-58 | 90 | 9600 | 320 | 4000 | 240 | 400 | 345 | 340 | 373 | 6 | 165 | 80 | 31 | 6 | M16 | 93 |
| | 180-58 | 100 | 12500 | 290 | 3000 | 220 | 430 | 375 | 375 | 403 | 6 | 170 | 80 | 31 | 6 | M16 | 115 |
| | 210-63 | 130 | 19000 | 270 | 2400 | 205 | 500 | 438 | 425 | 473 | 6 | 190 | 90 | 40 | 6 | M16 | 170 |
| | 240-83 | 130 | 30000 | 260 | 2400 | 195 | 555 | 490 | 495 | 528 | 8 | 215 | 120 | 40 | 12 | M16 | 250 |
| | 280-83 | 150 | 40000 | 235 | 2000 | 175 | 660 | 580 | 580 | 620 | 8 | 230 | 120 | 40 | 12 | M20 | 380 |
| | 280-96 | 150 | 50000 | 220 | 2000 | 165 | 660 | 580 | 580 | 620 | 8 | 230 | 120 | 40 | 12 | M20 | 380 |
| | 310-83 | 180 | 60000 | 220 | 1300 | 165 | 710 | 630 | 630 | 670 | 8 | 235 | 120 | 40 | 12 | M20 | 450 |
| | 310-96 | 180 | 70000 | 210 | 1300 | 160 | 710 | 630 | 630 | 670 | 8 | 235 | 120 | 40 | 12 | M20 | 450 |
| | 360-83 | 230 | 82000 | 200 | 1100 | 150 | 780 | 700 | 700 | 740 | 8 | 245 | 120 | 40 | 16 | M20 | 570 |
| | 360-96 | 230 | 102000 | 190 | 1100 | 145 | 780 | 700 | 700 | 740 | 8 | 245 | 120 | 40 | 16 | M20 | 570 |
| | 460-96 | 300 | 180000 | 170 | 1000 | 130 | 975 | 870 | 850 | 925 | 10 | 275 | 120 | 63 | 16 | M30 | 950 |

### 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) Maximum speed rolling backwards, internal brake open

5) 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

