



RIBE® Electrical Fittings – Tension wheel with integrated cable brake

# TENSION WHEEL WITH INTEGRATED CABLE BRAKE



**RIBE**<sup>®</sup>  
ELECTRICAL FITTINGS

# INNOVATIVE SOLUTION

## RIBE® TENSION WHEEL

Tension wheels are used in the catenary lines of electric railways to keep the height of the contact wire constant. In the event of breakage of the catenary wire or contact wire, the tension wheel prevents the concrete or steel weights contacting the ground, which avoids further deformation of the catenary system.

The innovative design of the tension wheel with integrated cable brake permits immediate braking of the weight cable in the guide channel. The braking avoids distortions of the catenary system, which proceed, if the weights contact the ground. The usual jerk occurring at conventional tension wheels, where also the teeth of the wheels can be damaged, is eliminated.



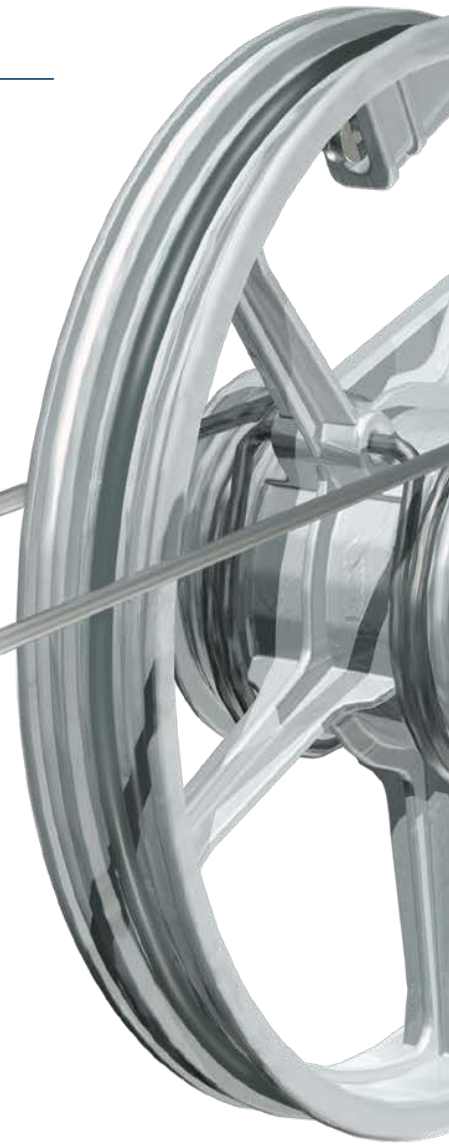
### › DESIGN

- The catenary line, which has to be retensioned, is connected to both outsides of the wheel (small wheel). The weight of the tensioning masses acts on the large wheel.
- The large wheel has an additional braking channel.
- The maintenance-free bearing of the tension wheel ensures high efficiency.



### › LEADING TECHNOLOGY

The innovative technology of RIBE® tension wheels with integrated cable brake is currently unrivalled on the market and acts as the future standard in the electrical fittings sector.

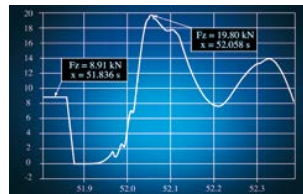






## › METHOD OF OPERATION

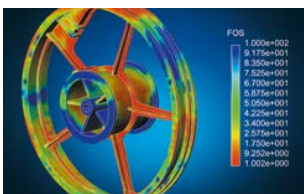
- If damage occurs, the weight acting on the large wheel initiates the braking operation.
- The tension wheel is drawn downwards. The braking cable fixed in the upper position brings the tension wheel to a halt by cable friction.
- The weights drop a max. of 6 - 10 cm.
- The system can be quickly restored to operation.



## › INNOVATION FROM RIBE®

RIBE® performed a test of RIBE® tension wheels with integrated cable brake in cooperation with German Railway to determine the impact factor.

The impact factor is a measure of the mechanical load on the system in the event of damage. The higher the impact factor, the higher the load. The impact factor was determined as max. 2.7, which is far below the figures for tension wheels based on the previous technology (up to 7). This ensures an appreciably easier load on the system.



## › PROVEN QUALITY

The pioneering RIBE® solution is based on decades of experience in the field of electrical fittings, which is one of the reasons why customers trust innovative and reliable products from RIBE® that set the standards in the electrical fittings market.

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COMPETENCE CONNECTS

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