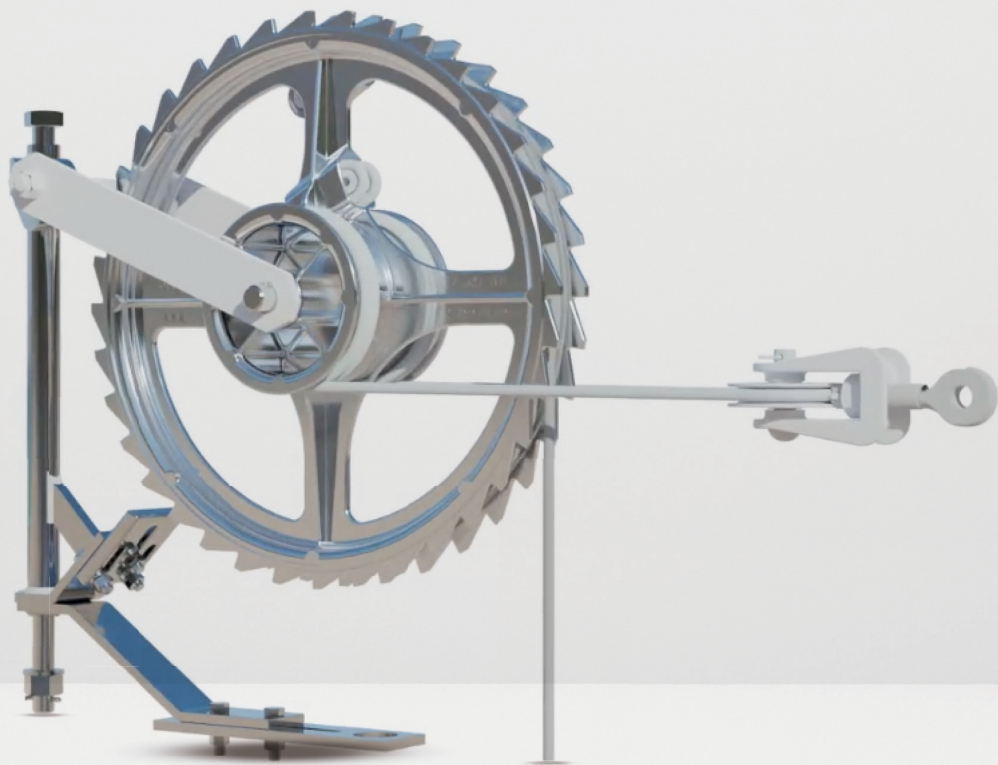


TracFeed[®] NSV

Tensioning device for mass transit
and mainline railroads



TracFeed® NSV

Tensioning devices

Our passion: consistent, project and solution-oriented development, testing and production of components for all areas of railway applications, resulting in “turnkey” contact line systems.

When the lengths of the catenary wire and contact wire alter due to temperature fluctuations, the tensioning devices with TracFeed® NSV keep the tensile forces in the contact line constant, which keeps the sag of the contact wire as consistent as possible.

The TracFeed® NSV tensioning devices developed by Rail Power Systems offer the ideal design for all ambient conditions and customer requirements.

Three types of TracFeed® NSV tensioning devices are available for selection depending on requirements of the installation location, the tensioning forces, and the elongation change to be compensated.

Design portfolio:

- TracFeed® NSV tensioning wheel assembly
- TracFeed® NSV spring tensioning mechanism
- TracFeed® NSV integrated tensioning wheel assembly

TracFeed® NSV tensioning wheel assembly

- Ambient temperature -40°C - +60°C
- Elongation compensation up to 2 m
- Tensioning force up to 30 kN

TracFeed® NSV integrated tensioning wheel assembly

- Ambient temperature -40°C - +60°C
- Elongation compensation up to 1.2 m
- Tensioning force up to 10 kN

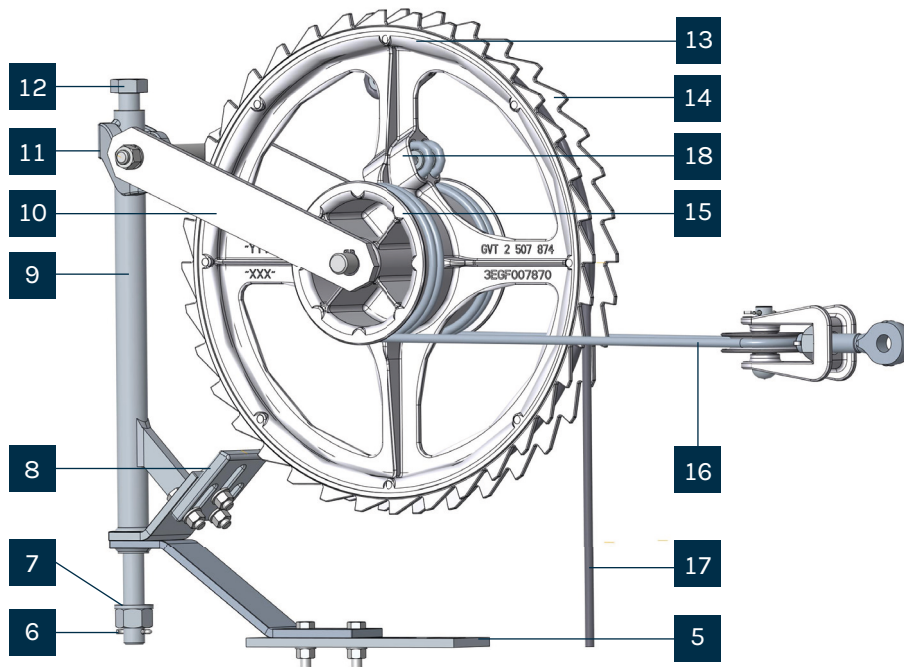
TracFeed® NSV spring tensioning mechanism

- Ambient temperature -40°C - +60°C
- Elongation compensation up to 300 mm
- Tensioning force up to 6 kN



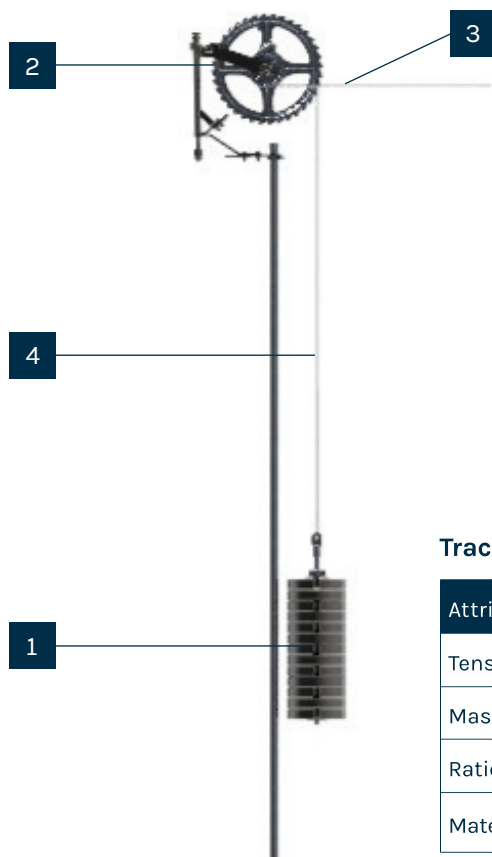
Application

Design and overview- Basic components of the TracFeed® NSV Tensioning wheel assembly



TracFeed® NSV Wheel tensioner

- 5. Link plate for guide tube
- 6. Split pin
- 7. Lock nut
- 8. Catch plate
- 9. Rotating axis
- 10. Suspension rocker
- 11. Shackle
- 12. Pivot pin
- 13. Large cable drum for tensioning wheel wire for balance weight set
- 14. Tensioning wheel assembly cog
- 15. Small cable drum for tensioning wheel wire, contact wire/catenary wire
- 16. Tensioning wheel wire for contact wire/catenary wire
- 17. Tensioning wheel wire for balance weight set
- 18. Wheel body, wedge-shaped openings



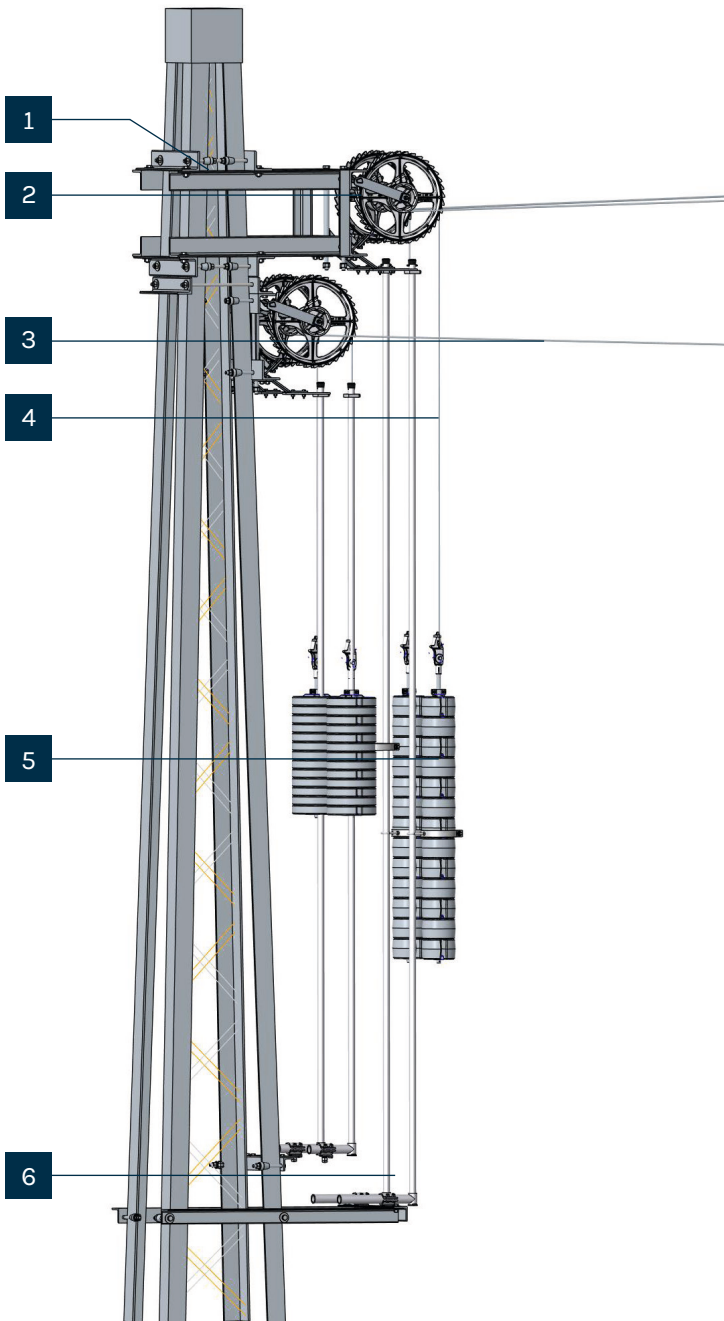
Overview of tensioning devices with TracFeed® NSV tensioning wheel assembly

- 1. Balance weight set and weight guide
- 2. Tensioning wheel assembly
- 3. Tensioning wheel wire for contact wire and catenary wire
- 4. Tensioning wheel wire for balance weight set

TracFeed® NSV tensioning wheel assembly variants

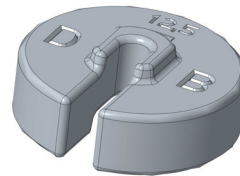
Attribute	3EGF020516	3EGF021359	3EGF021357	3EGF021362
Tension force (kN)	20	30	30	30
Mass (kg)	25	27	28	27
Ratio	1:3	1:3	1:3	1:3
Material support	ST tZn	A2	ST tZn	A2

Design and overview- Basic components of the TracFeed[®] NSV Tensioning wheel assembly

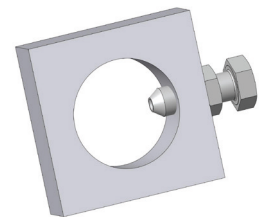


1. Fastening for tensioning wheel assembly
2. Tensioning wheel assembly
3. Tensioning wheel wire for contact wire and catenary wire
4. Tensioning wheel wire for balance weight set
5. Balance weight sets
6. Fastening for weight guide

Rail Power Systems GmbH also supplies customfit and high-quality accessories



Weight plate
3EGF019530



Adjusting ring for weight guide
3EGF001786



Weight guide clip
3EGF011340

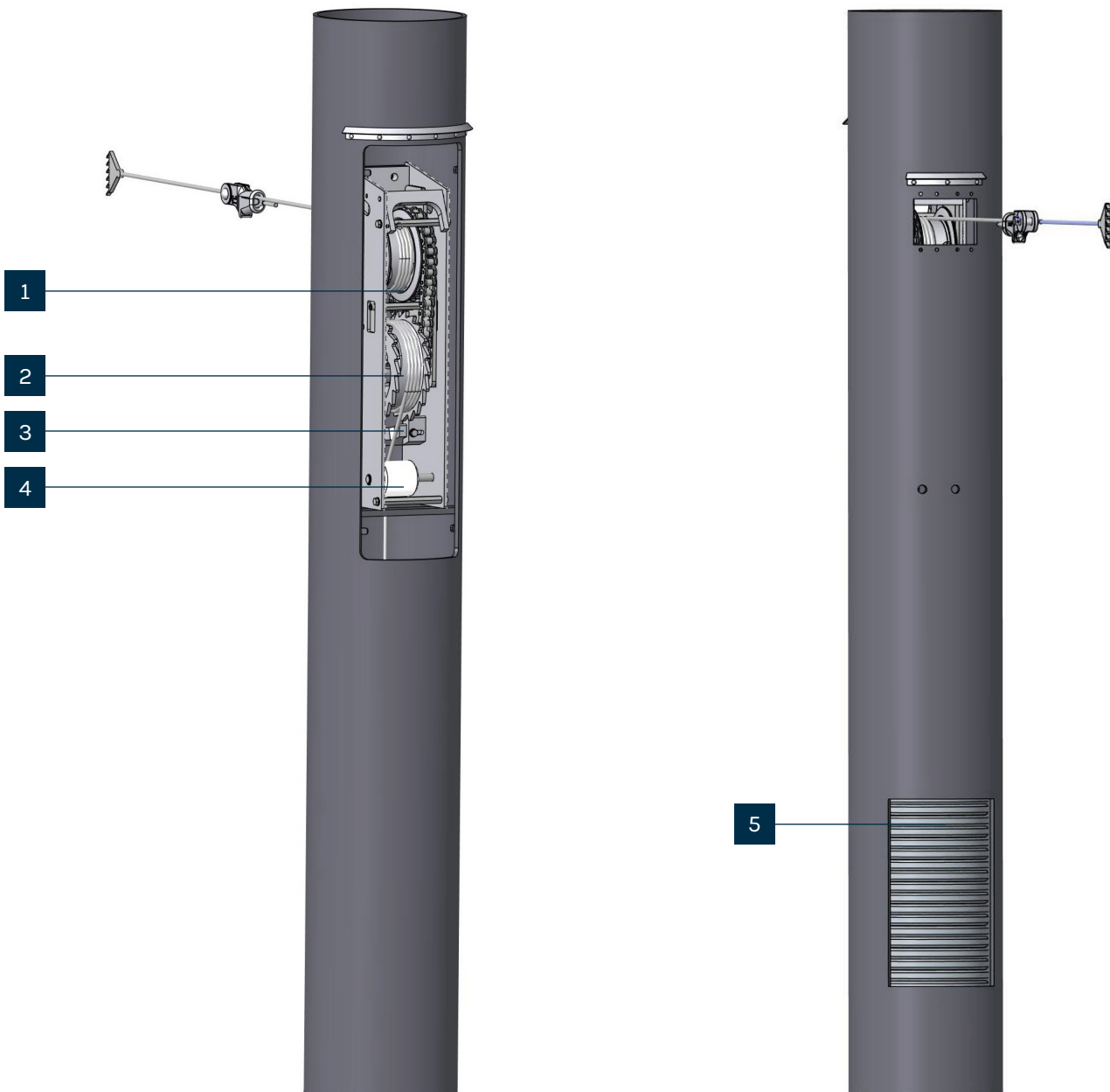


Balance weight set carrier
3EGF019563



Tube holder for weight guide rod
3EGF003098

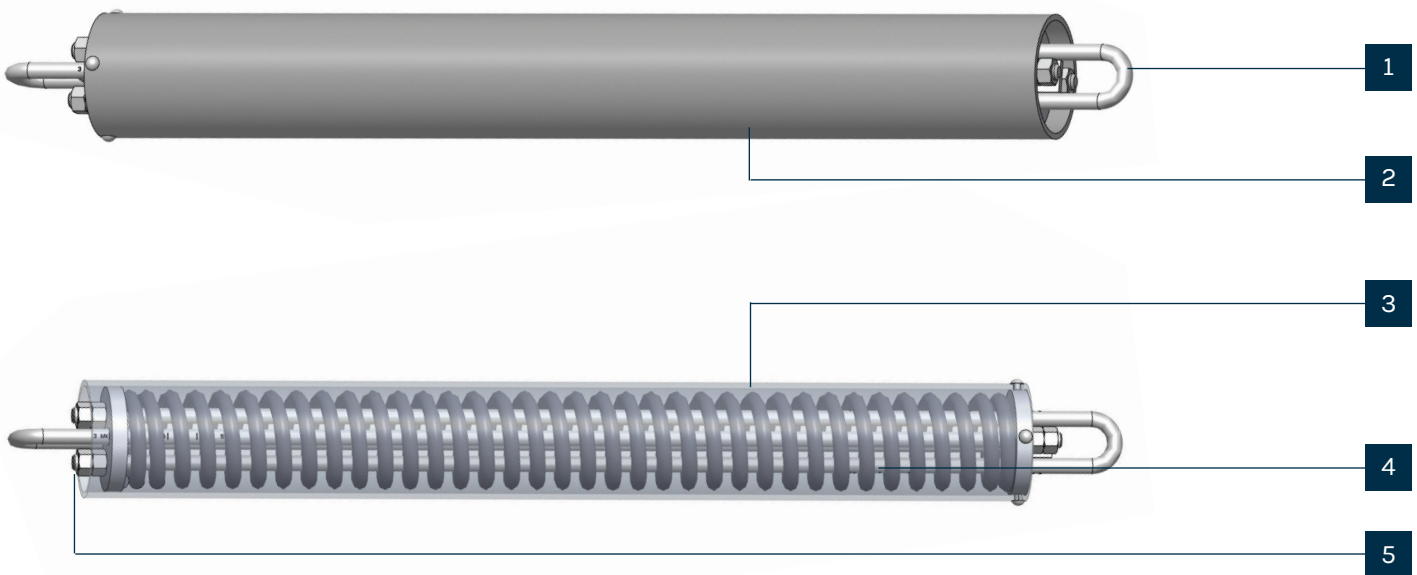
Design and overview- Basic components of the TracFeed® integrated Tensioning wheel assembly



1. Cable drum for contact wire/catenary wire
2. Cable drum for balance weight set
3. Detent and blocking device
4. Wire guiding pulley for balance weight set
5. Balance weight set

Design and overview-

Basic components of the TracFeed[®] NSV Springs



Spring	3EGF002272	3EGF006315	3EGF006367
Material	nrST	nrST	nrST
Mass (kg)	8,5	3	5
Length (mm)	859	374	550
Stroke (mm)	135	50	100
Force (kN)	2-3	3	2-3

1. Clevis end
2. Tube
3. Spring
4. Clevises
5. Fastening nut

With Precision: Always on the move - We've got the right contact wire to keep our customers moving

Rail Power Systems has been developing and producing TracFeed® contact line products in close collaboration with customers and partners for decades.

TracFeed® products are approved for use in numerous countries by system operators in intercity and local transport and have proved themselves over many years of use under wide-ranging conditions. You are also assured of some impressive advantages with our entire product portfolio.

The contact line components are suitable for standard solutions and for tailored, completely customer-specific operating concepts for local and intercity transport.

Whether you are purchasing clamps for ropes and wires, aluminium components for cantilevers, tensioning wheel assemblies or section insulators from Rail Power Systems: all our contact line elements offer you different advantages.

Your advantages:

- Long service life
- High reliability
- Low life-cycle costs
- Excellent quality
- Can be used under various climatic and operating conditions

Get in touch with us if you have complex technical questions about our products. We will also be happy to provide you with in-depth information and, on request, present our complete product range featuring all product lines for TracFeed® contact line components, such as TracFeed® ALU 1000, 2000, 3000, TracFeed® OSS overhead conductor rails and TracFeed® STS conductor rail systems.

Measurable increase in performance



MANAGEMENT SYSTEM ZERTIFIKAT




Zertifikat-Nr.: 10000408655-MSC-RvA-DEU	Datum der Eratzertifizierung: 08. Januar 2004	Gültig: 17. Dezember 2021 – 31. Oktober 2024 Ablaufdatum des letzten Zertifizierungszyklus: 31. Oktober 2021 Datum der letzten Rezertifizierung: 16. Oktober 2021
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Hiermit wird bescheinigt, dass das Unternehmen
Rail Power Systems GmbH
Garmischer Straße 35, 81373 München, Deutschland
sowie die im Anhang aufgeführten Standorte

ein Umwelt-Managementsystem in Übereinstimmung mit dem folgenden Standard eingeführt hat und anwendet:
ISO Muster:2015

Dieses Zertifikat ist gültig für die folgenden Produkt- oder Dienstleistungsbereiche:
Vertrieb, Beratung, Fertigung von Komponenten, Entwicklung, Planung und Montage von Fahrleitungs- und Bahnenergieversorgungssystemen / Netzleittechnik / 50-Hz Anlagen / Signaltechnik inklusive Wartung und Service (Instandhaltung) und Gesamtprojekte

Ort und Datum: Barendrecht, 17. Dezember 2021	Zertifizierungsstelle: DNV - Business Assurance Zwolleweg 1, 2994 LB Barendrecht, Netherlands
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Eerie Koek
Vertreter des Managements

Bei Verstöß gegen die im Zertifizierungsvertrag genannten Bedingungen kann das Zertifikat seine Gültigkeit verlieren.
AKKREDITIERTE STELLE: DNV Business Assurance B.V., Zwolleweg 1, 2994 LB, Barendrecht, Netherlands - TEL: +31(0)102922689, www.dnv.com/assurance

Quality: ISO 9001
Environment: ISO 14001
Energy: ISO 50001
Health: ISO 45001



RPS/EN/418/0824

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The specifications set out in this document apply to conventional applications. They do not represent performance limits.

This means that divergent specifications may be attained in specific applications. The contractually agreed specifications alone shall apply. We reserve the right to effect technical modifications.

TracFeed® is a registered trademark of Rail Power Systems GmbH.

Rail Power Systems GmbH

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