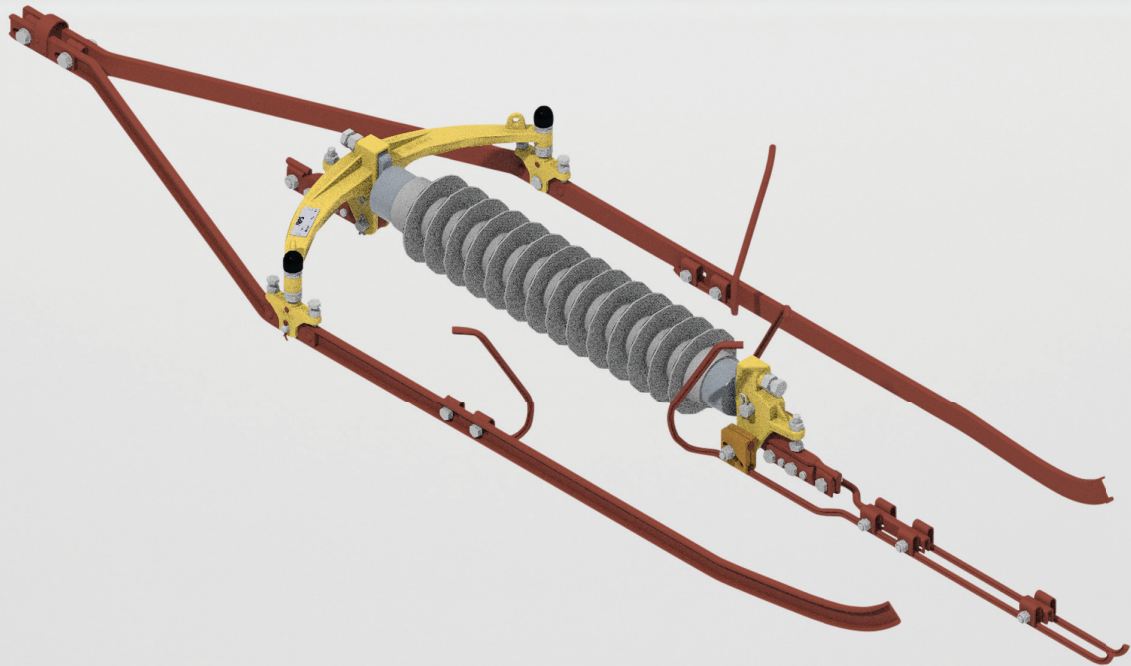


# TracFeed<sup>®</sup> STR

Section insulator



# TracFeed® STR

## Section insulator

**The TracFeed® section insulator family developed by Rail Power Systems offers a wide range of application options thanks to its standardised design. It can therefore cover almost every overhead contact line application.**

Section insulators enable the segregation of contact line feed sections in electrical railway systems. In general, section insulators are used in stations and for points connections.

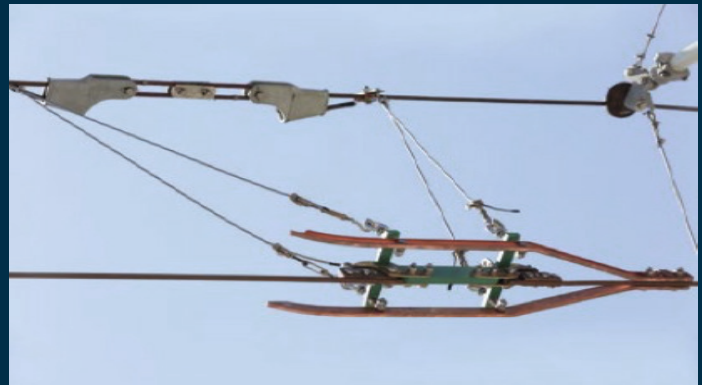
Section insulators are also installed during structural alteration works to contact line installations. Existing feeding groups can be separated by installing the insulators in individual sections. For assembly work and for states of construction, the separated sections can then be switched off individually or for longer periods.

TracFeed® STR section insulators can be installed directly in the contact line in a short space of time. The suspension makes it easy to regulate the installation position.

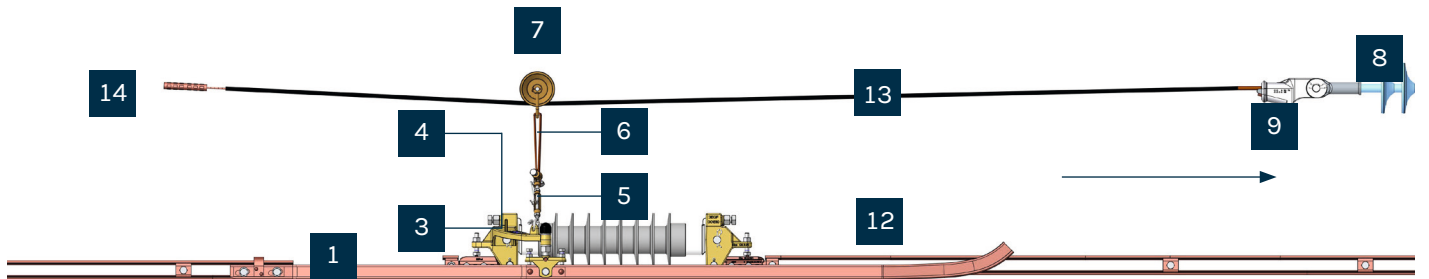
Not least because of the solid construction method and the materials used, TracFeed® STR section insulators from Rail Power Systems have a very long life expectancy with low maintenance requirements.



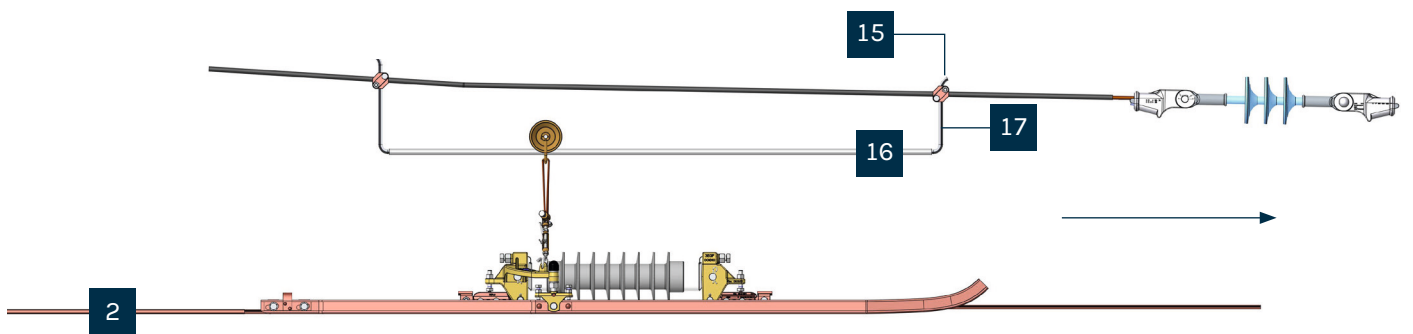
Section insulator arrangement in Denver/USA



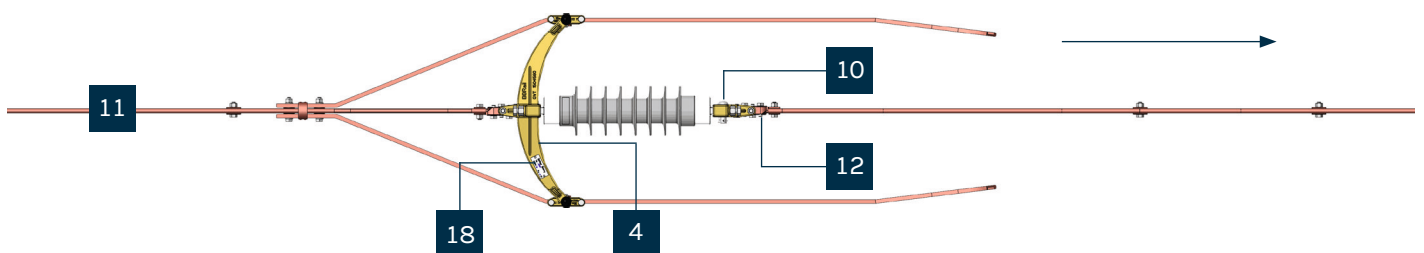
# Design and component overview



Composite STR, side view



Composite STR, suspension with pulley, side view



Composite STR, top view

## General view of section insulator

- |  |   |
|--|---|
| 1. Bolt  | 11. Contact wire reinforcement, approx. 2 m         |
| 2. Contact wire reinforcement (integrated)         | 12. Contact wire end clips                          |
| 3. Adjustment bolts on swivel assembly with clevis | 13. Shrink hose or incised, insulated catenary wire |
| 4. Swivel assembly with clevis with arms           | 14. Catenary wire compression splice                |
| 5. Turnbuckle with wire clamp                      | 15. Cross clamp                                     |
| 6. Suspension wire (copper binding wire)           | 16. Steel tube                                      |
| 7. Wire pulley with shackle                        | 17. Contact wire                                    |
| 8. Catenary wire insulator (composite or ceramic)  | 18. Plate   |
| 9. Anchor clamp                                    | Main direction of travel →                          |
| 10. Parallel groove clamp                          |   |

# Section insulator 25 kV



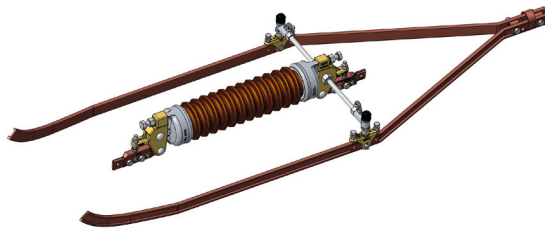
3EGF020748



3EGF021651

Order number	3EGF020748	3EGF021651
Insulators	25000	25000
Isolatoren	Composite	Composite
Air gap	190	190
Minimum creepage distance	1450	1450
Arcing horns	no	yes
Impulse withstand voltage measurement	150	150
Power frequency withstand voltage, wet	80	80
Contact wire cross-section	80-150	80-150
Screens	14	14
Distance insulator eye-eye	790	790
Total length +/- 10	2012	2012
Weight	27	31
Max. operating force	30	30
Minimum collapse load with 80 mm additional lever	88	88
Max. travel speed	160	160
Number of pantograph passes without maintenance	2	2

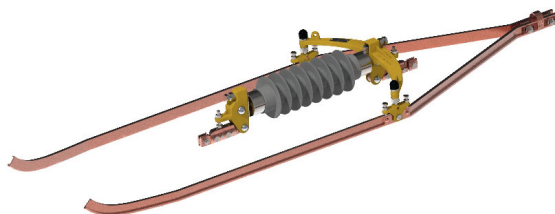
# Section insulator 25 kV (Rod construction)



3EGF007541

Order number	3EGF007541	3EGF007542
Rated voltage	25	25
Insulators	Composite	Composite
Minimum creepage distance	725	725
Air gap	190	285
Impulse withstand voltage measurement	160	260
Power frequency withstand voltage, wet	130	130
Contact wire cross-section	80-150	80-150
Screens	12	12
Distance insulator eye-eye	597	790
Total length +/- 10	1810	2100
Weight	32	38,5
Max. operating force	30	30
Minimum collapse load with 80 mm additional lever	88	88
Max. travel speed	160	160
Anzahl Pantographdurchgänge ohne Wartung (Mio.)	2	2
Reference insert	United Kingdom: Network Rail	Finnland: VR Track

# Section insulator 15 KV



3GEF020747

Order number	3EGF010628	3EGF007890	3EGF020747	3EGF001831	3EGF001832
Rated voltage	15	15	15	15	15
Insulators	Composite	Composite	Composite	Composite	
Minimum creepage distance	615	540	615	420	-
Air gap	115	105	105	105	-
Impulse withstand voltage measurement	100	93	140	93	-
Power frequency withstand voltage, wet	50	47	70	47	-
Contact wire cross-section	80-150	80-150	80-150	80-150	80-150
Anzahl Fahrdrähte	2	1	1	1	1
Screens	6	9	6	12	
Distance insulator eye-eye	535	500	535	436	500
Total length +/- 10	1840	1600			
Weight	29	16,5 + 12,2	26,5	28	28
Max. operating force	2x10	30	30	30	30
Minimum collapse load with 80 mm additional lever	88	88	88	88	88
Max. travel speed	120	120	160	160	160
Reference insert	Germany/ DB AG	Germany/ DB AG	Germany/ DB AG	Germany/ DB AG	Germany/ DB AG

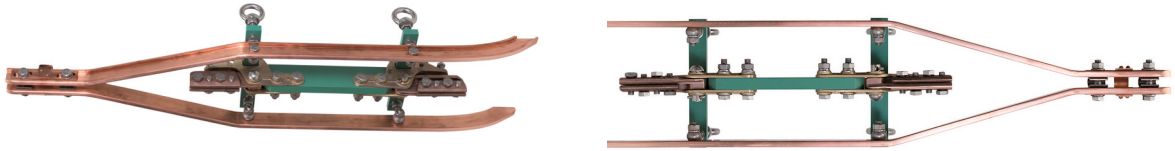
# Section insulator 3 KV



3EGF021386

Order number	3EGF021386	3EGF021387
Rated voltage	3000	3000
Insulators	Composite	Composite
Minimum creepage distance	444	444
Impulse withstand voltage measurement	30	30
Power frequency withstand voltage, wet	14	14
Contact wire cross-section	2x (80-150)	1x (80-150)
Screens	4	4
Distance insulator eye-eye	380	380
Total length +/- 10)	1840	1595
Weight	27	22
Max. operating force	30	30
Minimum collapse load with 80 mm additional lever	88	88
Max. travel speed	160	160
Reference insert		Ireland/ Irish Rail

# Section insulator 1,5 KV



3EGF011680

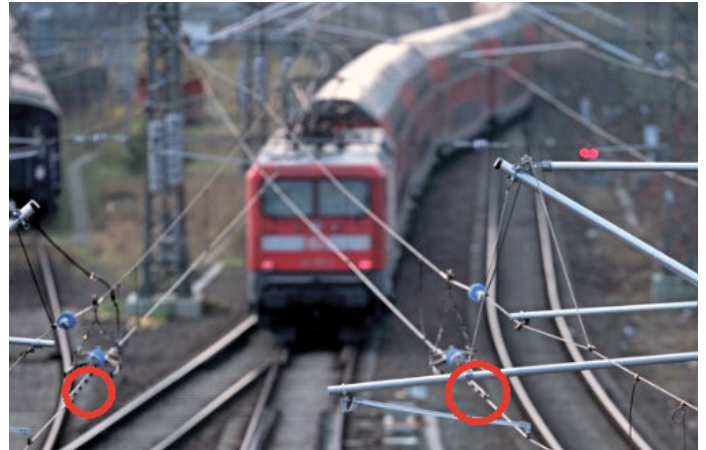
Order number	3EGF011680	3EGF015682	3EGF010289
Rated voltage	1,5	1,5	1,5
Insulators	Composite	Composite	Composite
Minimum creepage distance	60	500	450
Impulse withstand voltage measurement	15	85	66
Power frequency withstand voltage, wet	6,9	25	25
Contact wire cross-section	80-120	1x (80-150)	80-150
Screens	-	-	-
Distance insulator eye-eye	-	700	-
Total length +/- 10	1040	1500	1300
Weight	12,5	12,5	12,5
Max. operating force	15	15	25
Minimum collapse load with 80 mm additional lever	45	45	50
Max. travel speed	100	100	80
Reference insert	Turkey: Eskisehir, Istanbul, Germany: Karlsruhe, Saarbrücken, Dortmund		



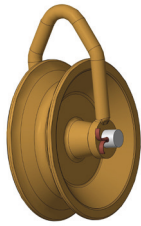
# Suspension and contact wire reinforcement for TracFeed® STR Familie 3 kV bis 25 kV

## Accessories:

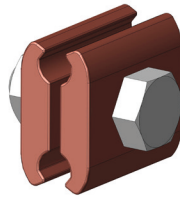
- Contact wire reinforcement
- Suspension on the catenary wire - fixed and moving for catenary wires from 35 mm<sup>2</sup> to 95 mm<sup>2</sup>
- Suspension on the linear guide - for catenary wires from 35 mm<sup>2</sup> to 253 mm<sup>2</sup>



# Accessories



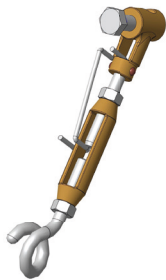
Wire pulley  
3EGF001828



Parallel groove clamp  
3EGF002798



Wedge-type dead end clamp/  
cone-type dead-end clamp



Turnbuckle  
3EGF001819



Tube  
3EGF001839



Wire  
3EGF002724

Part	Order number	BDescription	Material
1	3EGF001828	Wire pulley	Copper alloy
2	3EGF002724	Wire 4.0 CU DIN 46431	Copper
3	3EGF001819	Turnbuckle M8	Copper alloy
4	3EGF001834	Shrink hose	
5	3EGF002798	Parallel groove clamp	
6	As needed	Contact wire	
7	On request	Wedge-type dead end clamp/cone-type dead-end clamp	

# 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

The image shows a DNV Management System Certificate (MANAGEMENT SYSTEM ZERTIFIKAT) for Rail Power Systems GmbH. The certificate is issued for an ISO 9001:2015 quality management system. It covers the following areas: 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. The certificate is valid from 17 December 2021 to 31 October 2024. The certificate number is 1000046655-MSC-RvA-DEU. The certificate is issued by DNV Business Assurance, Zwolsseweg 1, 2994 LB Barendrecht, Netherlands. The certificate is signed by Eric Koek, Vertreter des Managements. The certificate is valid for the following product- or service areas: 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.

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



RPS/EN/416/0824

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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.

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