CATEGORY: SECTION INSULATOR

FYFH-2.0AT-E Heavy-Duty Section Insulator (25kV)

Reference URL: https://en.chuangwit.com/sectioning-insulator/fyfh-20at-e.html

1. Product Overview

Enhanced-insulation heavy-tension section insulator for 20kN contact wire systems on 25kV AC OCS, up to 160 km/h. Download Technical Datasheet (PDF) Technical Specifications | The FYFH-2.0AT-E is the heavy-tension variant of the FYFH enhanced-insulation family, designed and manufactured per TB/T 3036-2016 for in-phase electrical sectioning of 25kV AC electrified railway overhead contact systems where the contact wire is rated at 20kN working tension. The -E enhancement adds air gap >=430mm and reinforced creepage for severe-service environments. | The 20kN tension rating suits high-speed mainlines, heavy-haul freight corridors and mainline passenger railways with high contact wire tension. A high-strength aluminum alloy body carries the 20kN tensile load; arc-resistant insulating elements with reinforced creepage provide in-phase separation. | Rated for 27.5kV systems, line speeds up to 160 km/h, -40 deg C to +70 deg C and altitudes up to 4,000 m. Suitable for high-altitude lines, coastal and salt-fog regions, and heavy-pollution corridors where the standard 300mm gap is insufficient. | Henan

2. Published Technical Specifications & Parameters

Parameter	Published Value / Specification
Model	FYFH-2.0AT-E
Drawing No.	CWLFD2.0AT-E-00
Standard	TB/T 3036-2016 Section Insulators for Electrified Railway OCS
Rated Voltage	27.5kV rated (25kV AC 50Hz single-phase traction supply)
Design Speed	Up to 160 km/h (designed to TB/T 3036-2016)
Operating Temperature	-40 deg C to +70 deg C
Altitude	<= 4,000 m (designed for 2000-4000m high-altitude service)
Materials	High-strength aluminum alloy body for 20kN tension class; arc-resistant insulating elements; reinforced creepage; enlarged air gap geometry
Installation	In-line series suspension on the contact wire; both ends mechanically connected to the contact wire; verify tensioner compatibility for 20kN class
Nominal Voltage	27.5kV (System Voltage 25kV AC)
Air Clearance	>=430mm (Reinforced)
Contact Wire Working Tension	20kN Class
Altitude	<=4000m (applicable for 2000-4000m high altitude)
Ambient Temperature	-40 deg C~+70 deg C
Max. Design Speed	<=160km/h (designed per TB/T 3036-2016)
Applicable Standard	TB/T 3036-2016 (Section Insulators for Electrified Railway Catenary)

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3. Operating Conditions

Designed for severe-service outdoor railway environments with 20kN contact wire tension: heavy-haul lines, high-tension mainline passenger railways, high-speed mainlines.

4. Mechanical Performance

Aluminum alloy body rated for 20kN contact wire working tension; reinforced insulation geometry supports enlarged air gap.

5. Electrical Performance

Enhanced arc-resistant insulation with air gap >=430mm and extended creepage provides in-phase separation per TB/T 3036-2016 for 27.5kV systems in heavy-tension severe-service applications.

6. Typical Applications

Heavy-Haul Freight | 20kN contact wire tension on heavy-haul freight corridors. | High-Tension Mainlines | High-tension mainline passenger railways with 20kN contact wire. | Coastal & Salt-Fog | Severe-service coastal and salt-fog environments at 20kN tension. | Heavy-Pollution Corridors | Industrial zones with high pollution severity class at 20kN tension.

Engineering & Quality Compliance Notice

Manufactured under ISO 9001 and CRCC product certification rules where applicable. All values mirror published site specifications.
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