CATEGORY: SECTION INSULATOR

FYFH-1.6AT-E Enhanced Section Insulator (25kV)

Reference URL: https://en.chuangwit.com/sectioning-insulator/fyfh-16at-e.html

1. Product Overview

Enhanced-insulation section insulator with reinforced creepage for severe-service 25kV AC OCS (high altitude, heavy pollution), up to 160 km/h. Download Technical Datasheet (PDF) Technical Specifications | The FYFH-1.6AT-E enhanced-insulation section insulator is designed and manufactured per TB/T 3036-2016 for in-phase electrical sectioning of 25kV AC electrified railway overhead contact systems in severe-service environments. Compared with the standard FYFH-1.6AT-S, the -E variant enlarges the air insulation gap to >=430mm and reinforces creepage distance for high-altitude lines (2000-4000m) and heavy-pollution / coastal / tunnel sections. | A high-strength aluminum alloy body carries the contact wire tensile load; arc-resistant insulating elements (silicone rubber or porcelain) with extended creepage provide reliable in-phase separation. Rated for 27.5kV systems, line speeds up to 160 km/h, -40 deg C to +70 deg C operating temperature and altitudes up to 4,000 m. | Typical applications include high-altitude electrified railways (e.g. Lanzhou-Urumqi, Sichuan-Tibet

2. Published Technical Specifications & Parameters

Parameter	Published Value / Specification
Model	FYFH-1.6AT-E
Drawing No.	CWLFD1.6AT-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; arc-resistant insulating elements (silicone rubber / porcelain); reinforced creepage
Installation	In-line series suspension on the contact wire; both ends mechanically connected to the contact wire
Nominal Voltage	27.5kV (System Voltage 25kV AC)
Air Clearance	>=430mm (Reinforced)
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)

3. Operating Conditions

Designed for severe-service outdoor railway environments: high altitude (2000-4000m), coastal/salt-fog, heavy-pollution industrial corridors, long tunnels.

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4. Mechanical Performance

Same mechanical envelope as standard FYFH-1.6AT-S; aluminum alloy body carries full contact wire tension with reinforced insulation geometry.

5. Electrical Performance

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

6. Typical Applications

High-Altitude Lines | Lines at 2000-4000m altitude where standard 300mm gap is insufficient. | Coastal & Salt-Fog Regions | Reinforced creepage withstands salt pollution. | Heavy-Pollution Corridors | Industrial zones with high pollution severity class. | Long Tunnels | Tunnel environments with concentrated contamination and condensation.

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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