

# Spool Insulators ANSI 53-2

Spool Insulators | Datasheet | Pingxiang Huahao Insulator Co., Ltd.



A porcelain spool insulator to ANSI 53-2 with a cylindrical body and two metal fittings, used in overhead transmission and distribution lines for mechanical support and electrical insulation. The design provides a compact solution for low to medium voltage applications where space is limited. Transverse strength is 3,000 pounds (13.6kN) with a dry flashover voltage of 25kV and wet flashover voltages of 12kV (vertical) and 15kV (horizontal).

## Specifications

| Parameter                                      | Value                 |
|------------------------------------------------|-----------------------|
| ANSI Class                                     | 53-2                  |
| Diameter (D)                                   | 3 1/8 inches (79mm)   |
| Height (H)                                     | 3 inches (76mm)       |
| Transverse Strength                            | 3,000 pounds (13.6kN) |
| Low Frequency Dry Flashover Voltage            | 25kV                  |
| Low Frequency Wet Flashover Voltage Vertical   | 12kV                  |
| Low Frequency Wet Flashover Voltage Horizontal | 15kV                  |

## Key Benefits

- Compact cylindrical design fits in tight spaces on poles and towers
- Transverse strength of 3,000 pounds (13.6kN) supports line tension under wind and ice loading
- Dry flashover voltage of 25kV ensures reliable insulation under dry conditions
- Wet flashover voltage of 15kV (horizontal) provides performance in wet environments
- Glazed porcelain body resists tracking and erosion from moisture and pollution
- Standard ANSI 53-2 dimensions allow compatibility with existing hardware

## Application Scenarios

- Supporting overhead conductors on distribution poles in urban or suburban areas with limited clearance
- Installing on transmission lines where mechanical load is moderate and space is constrained
- Replacements in existing systems where ANSI 53-2 is already specified and used
- Use in areas with moderate pollution levels where wet flashover performance is critical
- Applications requiring a compact insulator with predictable electrical and mechanical ratings

## Materials

- Glazed electrical porcelain dielectric body
- Galvanized malleable iron or forged steel metal fittings
- Portland cement bonding the fittings to the porcelain

## Use Guide

- Verify the system voltage and pollution level before selecting the insulator

- Ensure the mounting hardware matches the ANSI 53-2 dimensions to avoid fit issues
- Do not exceed the transverse strength of 3,000 pounds (13.6kN) under wind and ice loading
- Inspect for glaze cracks and cement bonding damage before installation
- Handle by the metal fittings to avoid porcelain damage during handling

Certification: ISO 9001:2008 | Standards: GB ANSI BS DIN AS IEC | Design capability up to 500kV AC and 400kV DC. For a quotation email [admin@huahaoinsulator.com](mailto:admin@huahaoinsulator.com) with the class, coupling type, quantity and destination.