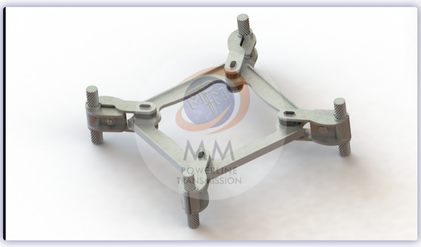
Spacer Damper (Quad)

Spacer Damper (Quad)

Download Product details



MM Powerline Transmission specializes in providing premium accessories designed to optimize the performance and safety of electrical conductors across diverse applications. Our extensive range of products is engineered with precision to meet industry standards and exceed the expectations of our customers.

Quad Spacer Damper

Quad spacer dampers (quadruple) are crucial components used in extra-high voltage (EHV) and ultra-high voltage (UHV) transmission lines. These dampers are installed in bundled conductors to maintain specific distances between each conductor, preventing collisions and mitigating wind-induced vibrations. Typically positioned at intervals of 50-60 meters along the span, quad spacer dampers play a pivotal role in enhancing the stability and reliability of transmission lines.

Importance in High Voltage Lines

1. **Vibration Control:** High voltage lines are vulnerable to oscillations caused by wind, ice accumulation, and electromagnetic forces. Uncontrolled vibrations can lead to fatigue and failure of conductors and supporting structures. Quad spacer dampers effectively absorb kinetic energy, reducing oscillation amplitudes and ensuring line stability.
2. **Enhanced Reliability:** By minimizing vibrations, quad spacer dampers prevent issues like conductor galloping and aeolian vibration, which are major contributors to power outages and equipment damage. This enhanced reliability ensures continuous electricity supply critical for industrial operations and community services.
3. **Structural Integrity:** Strategically placed along transmission lines, quad spacer dampers mitigate dynamic forces and stress concentrations, thereby extending the lifespan of structural components. The design allows for adjustments in damping characteristics to optimize performance under varying environmental conditions.

Design and Functionality

- **Multiple Damping Units:** Quad spacer dampers feature four damping units spaced along the line. Each unit independently absorbs and dissipates vibrational energy, providing comprehensive vibration control across the entire span.
- **Spacer Configuration:** Spacers between damping units allow engineers to fine-tune the damper's natural frequency, optimizing performance based on specific operational and environmental variables such as wind speed and temperature.
- **Materials and Durability:** Constructed from durable materials resistant to corrosion, UV radiation, and mechanical stress, quad spacer dampers ensure long-term performance integrity in harsh transmission environments.

Applications and Benefits

- **Long-span Lines:** Ideal for EHV and UHV transmission networks with extended spans between towers, where vibrations pose significant operational challenges.
- **Environmental Adaptability:** Effective in diverse climates and terrains, from coastal regions prone to high winds to mountainous areas experiencing variable weather conditions.
- **Cost Efficiency:** While initial installation costs are higher compared to traditional methods, the long-term benefits include reduced maintenance and repair expenses, as well as improved system reliability and longevity.

At MM Powerline Transmission, we are committed to delivering advanced solutions that safeguard infrastructure and optimize electrical transmission efficiency. Contact us to learn more about how our quad spacer dampers and other conductor accessories can benefit your next project.

BOQ

SL. NO	DESCRIPTION	MATERIAL	QTY./SET
1	CENTRAL BODY	ALUMINIUM ALLOY	1 NOS
2	CLAMP BODY	ALUMINIUM ALLOY	4 NOS
3	CLAMP KEEPER	ALUMINIUM ALLOY	4 NOS
4	OVAL TUBE	ALUMINIUM ALLOY	4 NOS
5	BUSH	ELASTOMER RUBBER	8 NOS
6	HEX BOLT & NUT M12	MILD STEEL, HDG	4 NOS
7	PLAIN WASHER M12	MILD STEEL, HDG	4 NOS
8	SPRING WASHER M12	SPRING STEEL, HDG	4 NOS

TECHNICAL DATA

1. GENERAL TOLERANCE: ±5% UNLESS OTHERWISE SPECIFIED.
2. MIN. CORONA EXTINCTION VOLTAGE (DRY) : 320 KV. (RMS.)
3. RIV AT 1 MHZ 305 KV (RMS) BELOW 1000 MICROVOLTS.
4. COMPRESSION LOAD : 15KN & TENSION LOAD : 7.5 KN.
5. CLAMP SLIP STRENGTH
6. BEFORE FATIGUE TEST : 6.5 KN.
7. AFTER FATIGUE TEST : 5.2 KN.
8. MAGNETIC POWER LOSS PER SPACER AT 800 AMP. 50 Hz MAX. 1 WATT.
9. INSTALLATION TORQUE : 45Nm.

Other Product Quick Link

- Lorem ipsum dolor sit amet,
- Lorem ipsum dolor sit amet,
- Lorem ipsum dolor sit amet,
- Lorem ipsum dolor sit amet,

Our Brands