AR Products

Solutions for Galloping and Vibration C

AR MOD2 SPACER DAMPER

How it works…

MOD2S PROTECT THE BUNDLED LINE FROM GALLOPING & VIBRATION

Features

- **Controls Aeolian vibration while not damaging the conductor**
- **Resists both galloping and sub-conductor oscillation from both lateral and longitudinal forces**
- **Establishes a stable torque stiffness to resist bundle rotation**
- **Withstands environmental exposure for 20 years or more**
- **Survives a strong short circuit current.**

Performance

Twisting the sub conductors independently – Twisting is achieved by installing the damper in a "Z" between the bundle. This offset to the bundle enables modulation of the conductor stiffness and independent twisting action.

Eccentric weight – the articulating clamps act as offset weight as a secondary galloping control feature. The 90° range of motion by the clamp at the attachment point helps change the wind angle of attack during a galloping event by causing variation in stiffness of the sub conductor. Changing the wind angle of attack is a long-accepted principle for galloping control.

Increased arc of separation between the bundles. Motion by the articulating clamps causes independence in sub conductor motion in 3 degrees, thereby maintaining greater separation between the bundle over longer sections of the span. This arc of separation is equivalent to 23" of spacing, which effectively increases the critical wind speed at which galloping commences.

Impact damper – at the start of conductor motion, the impact among the steel hoop, metal springs, and clamps helps dissipate energy from both low frequency (galloping) and high frequency (vibration).

Installation application – installed at the 1/3rd and 2/3rd points the dampers put a node in the span. This placement transforms a single and double loop gallop into a harmless 3 loop sine wave.

Once the MOD2 Spacer Dampers are installed, here's what to expect.

- **Set in a Z formation between the bundle, each sub conductor is free to twist independently as opposed to traditional rigid spacers which cause the bundle to move in synchrony.** When galloping conditions occur, Newton's Law comes into effect. Motion up and down, combined with twisting about the conductor, serves to interrupt the galloping before it reaches high amplitudes.
- **No maintenance is required.** So long as the MOD2s are installed with 50-55 ft. lbs. of torque over aluminum line guards, the dampers will remain secure as will the installation.
- **Service life.** MOD2s have been in the field for more than 20 years. Rarely have any of the more than 100,000 units installed experienced a materials or performance issue.