

Motioneering Cable Damper

Modular Damping System for Bridges

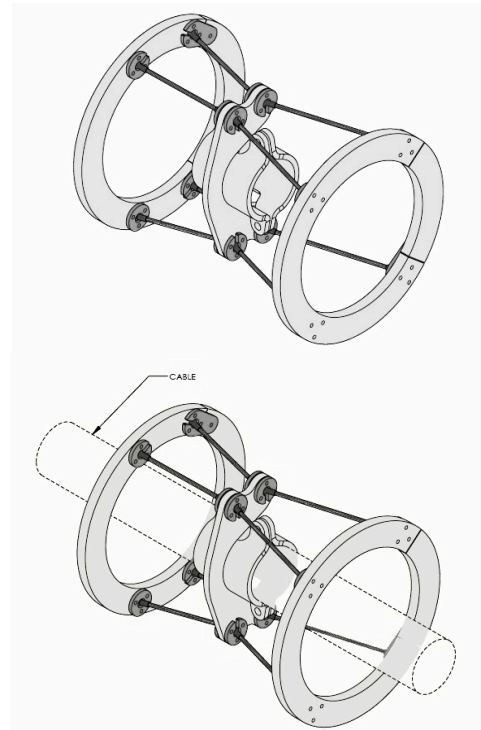


Novel Configuration

The Motioneering Cable Damper is a modular damping system composed of steel rings fixtured to wire ropes. The damper can be mounted to existing bridge stay and/or hanger cables to reduce wind- and rain-induced vibrations and the associated fatigue damage at the cables' connections.

This damper's novel configuration allows it to be mounted around an existing cable resulting in an aesthetically pleasing damping solution.

Moreover, the damper's low mass, modular design, and standardized connection details allow for simple installation with minimal time onsite during commissioning.



Technical Specifications

Dynamic Mass (kg)	Total Installed Mass (kg)	Frequency Bandwidth (Hz)	Power Dissipation ¹	Cable Diameter Range (mm)	Assembly Diameter (mm)	Assembly Length (mm)	Notes
15	20	2 - 10	1 - 5	20 - 85	380	475	Prototype unit undergoing validation tests
15	20	10 - 40	1 - 5	13 - 30	380	275	Validation testing anticipated late 2025

¹ Energy dissipation per Forced Excitation method of IEEE Standard 664

Proven Performance

Motioneering has over 25 years of experience designing and building tuned mass dampers. Our solutions are always performance tested and proven to perform in the as-built structure with 100% reliability.

