AEOLIAN VIBRATION DAMPER

Series 85000

GENERAL DESCRIPTION

A new type of vibration damper has been developed to increase durability while providing a damping capacity equivalent to the best Stockbridge dampers available. To reach this objective, a method based on the same successful approach used in the development of the Hydro-Québec spacer damper has been used. In the course of its development, the HQ vibration damper was optimized through intensive laboratory tests, analytical studies, trials on the IREQ experimental test line and actual field tests.

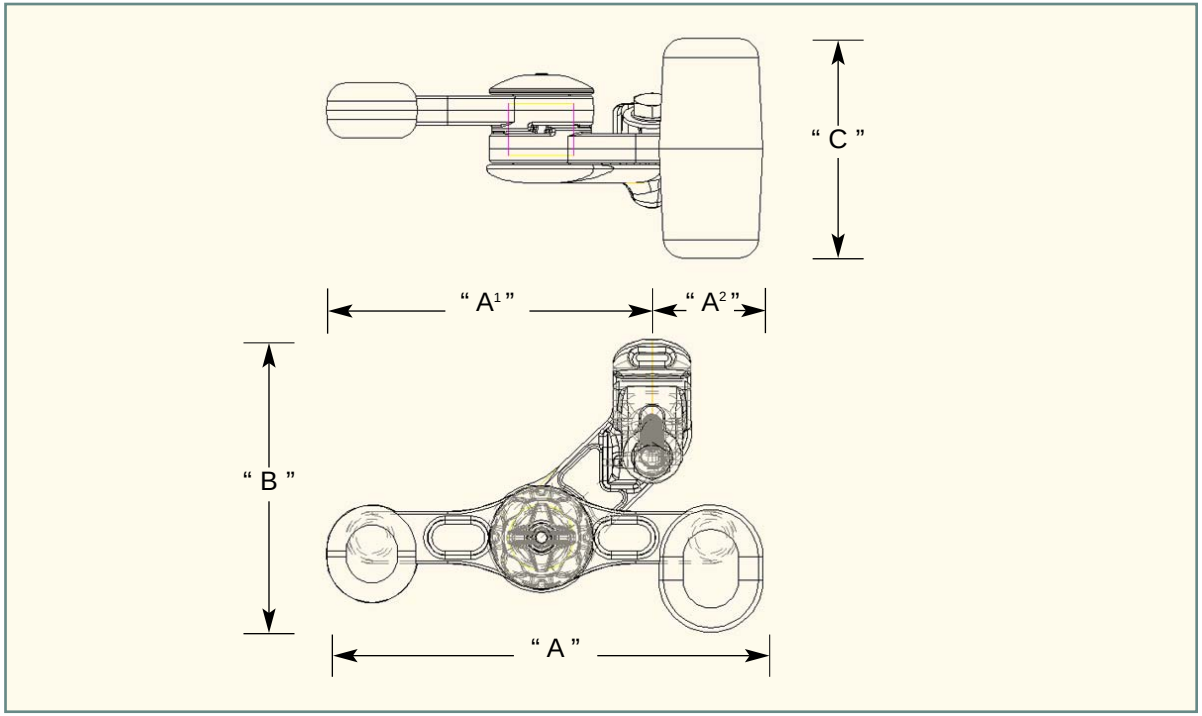
DAMPING MECHANISM

Since the durability of the aeolian vibration damper is a main requirement, its design is based on a proven technology: to replace the messenger wires as a flexible and dissipating element. The dissipating element consists of elastomer cylinders. This design has proven its superior performance and longevity in more than 800,000 Hydro-Quebec spacer dampers actually in service around the world. Longevity of the elastomer cylinders is ensured by the fact that they work mainly in compression, with very low shear stress levels. Furthermore, the design mechanism allows the installation of protection caps and stoppers, which completely protects the articulation under severe ice storm or sandstorm conditions. Elimination of the messenger strands greatly improves the corrosion resistance.

MAIN FEATURES

Due to its inherent design features the Hydro-Quebec Vibration Damper is particularly suited to applications in areas where dependability and long life are important (OPGW installations) and where high corrosion resistance is required (coastal areas).

HQ VIBRATION DAMPERS



Catalog Number	Conductor Range (mm)		Dimensions (mm)					Bolt Size UNC (inches)	Min. Bolt Torque (N.m)	Total Mass (kg)
	Minimum	Maximum	" A "	" A¹ "	" A² "	" B "	" C "			
85222	9.0	15.0	315	235	80	180	90	1/2	50	3.2
85223	15.1	20.0	315	235	80	180	90	1/2	50	3.2
85323	15.1	20.0	324	240	84	194	120	1/2	50	5.0
85523	15.1	20.0	336	250	86	207	175	1/2	50	7.1
85144	20.1	25.0	320	240	80	207	100	1/2	60	2.8

HQ VIBRATION DAMPERS

Catalog Number	Conductor Range (mm)		Dimensions (mm)					Bolt Size UNC (inches)	Min. Bolt Torque (N.m)	Total Mass (kg)
	Minimum	Maximum	" A "	" A^1 "	" A^2 "	" B "	" C "			
85244	20.1	25.0	320	240	80	191	90	1/2	60	3.3
85344	20.1	25.0	324	240	84	207	120	1/2	60	5.1
85544	20.1	25.0	336	250	86	216	175	1/2	60	7.4
85345	25.1	30.0	324	240	84	207	120	1/2	60	5.4
85545	25.1	30.0	336	250	86	216	175	1/2	60	7.4
85845	25.1	30.0	336	250	86	225	193	1/2	60	8.7
85366	30.1	35.0	324	240	84	216	120	5/8	60	5.4
85566	30.1	35.0	336	250	86	225	175	5/8	60	7.4
85866	30.1	35.0	336	250	86	225	193	5/8	60	8.8
85567	35.1	40.0	336	250	86	225	175	5/8	60	7.4
85867	35.1	40.0	336	250	86	225	193	5/8	60	8.8
85888	40.1	45.0	336	250	86	237	193	5/8	60	8.9
85589	45.1	50.0	336	250	86	237	175	5/8	60	7.4
85889	45.1	50.0	336	250	86	237	193	5/8	60	8.9
85880	50.0	55.0	336	250	86	237	193	5/8	60	8.9