

# Aeolian Vibration Damper

## PLP-Helix/Hydro-Québec

Licensed Technology



### GENERAL INFORMATION

The PLP-Helix/Hydro Québec Vibration Damper has been developed to increase durability while providing a damping performance equivalent to Stockbridge dampers available on the market. To reach this objective, the use of a dissipative mechanism based on the same Hydro-Québec spacer damper articulation is preferred to the standard messenger

cable used with conventional dampers. In the course of its development, the HQ Vibration Damper was optimized through intensive laboratory tests, analytical studies, trials on the IREQ (Hydro-Québec Research Institute) experimental test line, and actual field tests.

Vibration Dampers Product Number					
Cable Diameter Range in. (mm)	Weight per unit lb. (kg)				
	4.4 (2.0)	7.1 (3.2)	11.2 (5.1)	16.1 (7.3)	19.6 (8.9)
0.354-0.594 (9.0-15.0)	87422	85222			
0.595-0.790 (15.1-20.0)	87423	85223	85323	85523	
0.791-0.987 (20.1-25.0)		85244	85344	85544	
0.988-1.184 (25.1-30.0)			85345	85545	85845
1.185-1.381 (30.1-35.0)			85366	85566	85866
1.382-1.578 (35.1-40.0)				85567	85888
1.579-1.775 (40.1-45.0)					85889
1.776-1.972 (45.1-50.0)					85880
1.973-2.169 (50.1-55.0)					

### FEATURES AND BENEFITS

Due to its inherent design features the Helix/Hydro-Québec Vibration Damper is particularly suited to applications in areas where dependability and long life are important and where high corrosion resistance is required, such as coastal areas and river or fjord crossings. These dampers have been successfully used in areas with known icing and galloping activities.

The dissipation mechanism design protects the damper under severe conditions, such as high-power vibration of iced conductors or low-frequency/high-amplitude conductor motions induced by galloping or ice shedding. Elimination of the messenger strand greatly improves the corrosion resistance of the damper. This design has proven its reliability and longevity since the first installation in 2002.

### TECHNICAL SUPPORT

Due to many parameters involved for optimum performance, PLP will provide complete support for model selection and specific placement.