# **5** Aeolian Vibration Damper

# Aeolian Vibration Damper

## HELIX/Hydro-Québec

Licensed Technology





### **GENERAL INFORMATION**

The HELIX/Hydro Québec Vibration Damper has been developed to increase durability while providing a damping performance equivalent to the best 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 (mm)	Weight per unit (kg)				
	2.0	3.2	5.1	7.3	8.9
9.0-15.0	87422	85222			
15.1-20.0	87423	85223	85323	85523	
20.1-25.0		85244	85344	85544	
25.1-30.0			85345	85545	85845
30.1-35.0			85366	85566	85866
35.1-40.0				85567	85888
40.1-45.0					85889
45.1-50.0					85880
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 allows the installation 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 superior performance 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.