

# Spiral Vibration Damper High Impact PVC



## General Recommendations

Damping devices are designed for the single purpose of reducing vibration. This single function is entirely different from that of protecting against (1) stress concentrations, (2) fretting or abrasion, and (3) arc-over burning. Because of this, damping devices should be considered only as supplemental to Wraplock Tie, Armour Rod, Side Tie, Spool Tie, or other hardware at tangent supports. Dampers are also used as supplemental protection at dead-ends.

The degree of protection needed on a specific line depends upon a number of factors such as line design, temperature, tension, exposure to wind flow, and vibration history on similar construction in the same area. As a general guide, the following recommendations may be adapted to the specific conditions.

Spiral Vibration Dampers should be given serious consideration when distribution spans exceed 115M and/or 15% tension at 16°C. Spiral Vibration Dampers should be used on conductors between 4,4mm and 19,3mm outside diameter in areas experiencing or having a history of vibration.

Two Spiral Vibration Dampers are recommended to be installed one hand's width apart, each side of the support, where spans exceed 244 M.

In spans 244 to 488 M: 2 SVD's on each side of support point i.e. 4 per span.

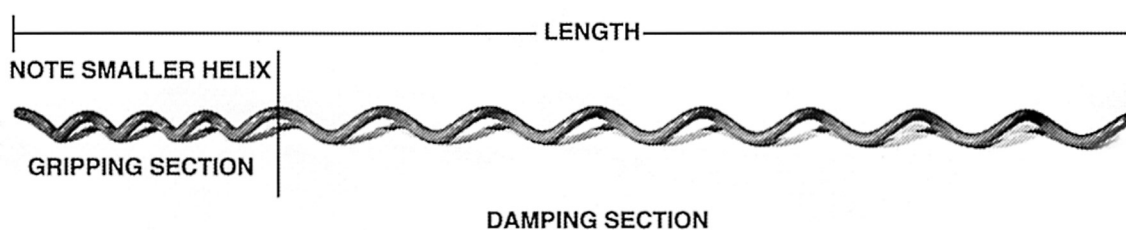
**Material:** The solid polyvinyl chloride helical rod will stand up under ambient temperatures ranging from 24°C below zero to 48°C above zero. Its flow temperature is about 76°C. The material is non-corrosive, has a surface hardness which does not abrade the conductor, and is formulated to resist ultra-violet rays.

**Length:** Assists in identification of conductor size, corresponding to tabular information.

**Damping Section:** Helically scaled for interplay of damper and conductor, to provide the action/reaction motion that opposes the natural vibration wave.

**Gripping Section:** Has a smaller helix designed to grip conductor.

**Catalogue No.:** SVD



## RIGHT HAND LAY STANDARD.

CATALOGUE NO. SVD	CONDUCTOR DIAMETER (mm)	DAMPING LENGTH (mm)	TOTAL LENGTH (mm)
32	4,35 – 6,32	940	1200
34	6,33 – 8,28	990	1250
36	8,29 – 11,71	1040	1300
38	11,72 – 14,30	1070	1350
40	14,31 – 19,30	1150	1530



# Spiral Vibration Damper High Impact PVC

## Selection and Placement Guide

### 1. METAL FREE SELF SUPPORTING FIBRE OPTIC CABLE APPLICATIONS

SPAN LENGTH	NUMBER OF DAMPERS
Up to 150 metres	2 dampers per span
150 metres to 350 metres	4 dampers per span (2 subsets of 2)
350 metres to 550 metres	6 dampers per span (2 subsets of 3)
*550 metres to 1 000 metres	9 dampers per span (3 subsets of 3)
*1 000 metres to 1 450 metres	12 dampers per span (4 subsets of 3)

### 2. OPGW AND METALLIC CONDUCTORS (I.E. AL. BASED DISTRIBUTION CONDUCTORS)

SPAN LENGTH	NUMBER OF DAMPERS
Up to 250 metres	2 dampers per span
250 metres to 500 metres	4 dampers per span (2 subsets of 2)
500 metres to 750 metres	6 dampers per span (2 subsets of 3)
*750 metres to 1 125 metres	9 dampers per span (3 subsets of 3)
*1 125 metres to 1 500 metres	12 dampers per span (4 subsets of 3)

**Application and Inspection:** The Gripping Section should be installed approximately one hand's width from the ends of Armor Rod or other hardware.

It is not necessary to make engineering calculations as to placement.

Installation may be made with hot-sticks at selected locations, after vibration experience has been obtained through line inspections.

**Application Instructions:** The SPIRAL VIBRATION DAMPER has a large damping helix at one end and a smaller conductor gripping helix at the other. Determine which end has the small gripping helix.

Take the small gripping helix in one hand and rotate the other large damping end around the conductor feeding it into the span.

When all the large coils or pitches have been applied over the conductor position the smaller gripping pitches so this end of the section is approximately 100mm. or one hands width away from the dead-end, or intermediate support/suspension.

The gripping pitches can now be applied to the conductor which completes the application.

**Additional Information:** PREFORMED™ SPIRAL VIBRATION DAMPERS are precision devices and should be handled carefully to prevent distortion and damage.

They should be stored in cartons under cover – preferably shelf storage until used. Tools should not be used to snap the ends into position during hand application. Ensure that the correct size fitting is used.

