# Vibration Control is Key <br> SPIRAL VIBRATION DAMPER AND AIR FLOW SPOILER 

for Guyed Tower Applications



## Motion Control Products are specifically designed to minimize abrasion and fatigue to guy wires from wind vibration.

## Spiral Vibration Damper

## Description

PLP's Spiral Vibration Damper reduces Aeolian Vibration. Aeolian Vibration is a high frequency, low amplitude vibration caused by horizontal wind passing across the line. When conductors or cables are exposed to this wind, a phenomenon known as vortex shedding creates alternating pressure unbalance, inducing the guy wire to move up and down at right angles to the direction of air flow. These vibrations take the form of discrete standing waves that can cause support hardware breakdown, guy wire fatigue, abrasion and eventually guy wire failure.
The Spiral Vibration Damper is made of a solid thermal plastic that has been subjected to hundreds of field vibration studies. It is non-corrosive, effective in a broad range of frequencies and has no concentrated mass or clamping pressure that could damage guy wires.

## Features

- Provides impact-reactive damper protection with helically-formed plastic rods
- Reduces vibration on smaller diameter cables
- Easy to install

Standard SVD's for use on Guy Wires

| Diameter Range |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Catalog Number | Min. in (mm) | $\begin{aligned} & \text { Max. } \\ & \text { in } \\ & (m m) \end{aligned}$ | Units | Wt. lbs $(\mathrm{kg})$ | Length in (mm) |
| 5050102 | $\begin{gathered} .174 \\ (4.41) \end{gathered}$ | $\begin{gathered} .249 \\ (6.32) \end{gathered}$ | 50 | $\begin{gathered} 29 \\ (13.2) \end{gathered}$ | $\begin{gathered} 46 \\ (1168) \end{gathered}$ |
| 5050103 | $\begin{gathered} .250 \\ (6.35) \\ \hline \end{gathered}$ | $\begin{gathered} .326 \\ (8.28) \\ \hline \end{gathered}$ | 50 | $\begin{gathered} 31 \\ (14.1) \end{gathered}$ | $\begin{gathered} 49 \\ (1245) \end{gathered}$ |
| 5050104 | $\begin{gathered} .327 \\ (8.31) \end{gathered}$ | $\begin{gathered} .461 \\ (11.7) \end{gathered}$ | 50 | $\begin{gathered} 34 \\ (15.4) \end{gathered}$ | $\begin{gathered} 51 \\ (1295) \end{gathered}$ |
| 5050105 | $\begin{gathered} .462 \\ (11.73) \end{gathered}$ | $\begin{gathered} .563 \\ (14.3) \end{gathered}$ | 50 | $\begin{gathered} 36 \\ (16.3) \end{gathered}$ | $\begin{gathered} 53 \\ (1346) \end{gathered}$ |
| 5050106 | $\begin{gathered} .564 \\ (14.33) \end{gathered}$ | $\begin{gathered} .760 \\ (19.3) \end{gathered}$ | 25 | $\begin{gathered} 50 \\ (22.7) \end{gathered}$ | $\begin{gathered} 65 \\ (1651) \end{gathered}$ |

Hi Mass SVD's for use on Guy Wires One Hi Mass Spiral Vibration Damper (HMSVD) provides the effectiveness of two standard SVD's using fewer points of installation.

| Catalog Number | Diameter Range |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min. in (mm) | $\begin{aligned} & \text { Max. } \\ & \text { in } \\ & (\mathrm{mm}) \end{aligned}$ | Units | Wt. lbs (kg) | Length in (mm) |
| 5050200 | $\begin{gathered} .250 \\ (6.35) \end{gathered}$ | $\begin{gathered} .326 \\ (8.28) \end{gathered}$ | 50 | $\begin{gathered} 55 \\ (24.9) \end{gathered}$ | $\begin{gathered} 87 \\ (2210) \\ \hline \end{gathered}$ |
| 5050201 | $\begin{aligned} & .327 \\ & (8.31) \end{aligned}$ | $\begin{gathered} .461 \\ (11.7) \end{gathered}$ | 50 | $\begin{gathered} 60 \\ (27.2) \end{gathered}$ | $\begin{gathered} 91 \\ (2311) \end{gathered}$ |
| 5050202 | $\begin{gathered} .462 \\ (11.73) \end{gathered}$ | $\begin{gathered} .563 \\ (14.3) \end{gathered}$ | 50 | $\begin{gathered} 65 \\ (29.5) \end{gathered}$ | $\begin{gathered} 94 \\ (2388) \end{gathered}$ |
| 5050203 | $\begin{gathered} .564 \\ (14.33) \end{gathered}$ | $\begin{gathered} .760 \\ (19.3) \end{gathered}$ | 50 | $\begin{gathered} 55 \\ (24.9) \end{gathered}$ | $\begin{gathered} 97 \\ (2464) \end{gathered}$ |

## Air Flow Spoiler

## Description

PLP's Air Flow Spoiler is designed to offset the aerodynamic lift forces that cause galloping. Galloping is another wind-related phenomenon also known as dancing. It is a low frequency, high amplitude wind-induced motion that can cause cable damage, damage to supporting structures, and damage to support hardware at their point of connection.
The Air Flow Spoiler is made of a rigid nonmetalic, non-corrosive thermal plastic. PLP's
unique design maintains aerodynamic stability by providing a continually changing profile to the wind. This helps to dramatically reduce guy wire motion.

## Features

- Controls galloping by disrupting guy wire aerodynamic lift
- Extends support hardware and guy wire life

| Catalog <br> Number | Catalog Number | Min. | Diameter Range |  | Max. mm | $\begin{gathered} \text { Length } \\ \mathrm{ft} \end{gathered}$ | Length m | Wt./ Unit lbs | Wt./ Unit kg | Color Code |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Max. in | Min. mm |  |  |  |  |  |  |
| 5058100 | N/A | 0.250 | 0.326 | 6.35 | 8.28 | 13-1/2 | 4.11 | 1.00 | . 454 | Red |
| 5058101 | N/A | 0.327 | 0.461 | 8.31 | 11.70 | 13-1/2 | 4.11 | 1.00 | . 454 | White |
| 5058102 | N/A | 0.462 | 0.563 | 11.73 | 14.30 | 14 | 4.27 | 2.25 | 1.02 | Orange |
| 5058103 | N/A | 0.564 | 0.76 | 14.33 | 19.30 | 14-1/2 | 4.42 | 2.40 | 1.09 | Yellow |
| 5058104 | N/A | 0.761 | 0.926 | 19.33 | 23.52 | 15 | 4.57 | 4.25 | 1.93 | Blue |
| 5058105 | 5058200 | 0.927 | 1.019 | 23.55 | 25.88 | 15-1/4 | 4.65 | 4.50 | 2.04 | Black |
| 5058106 | 5058201 | 1.020 | 1.165 | 25.91 | 29.59 | 15-3/4 | 4.80 | 5.50 | 2.49 | Purple |
| 5058107 | 5058202 | 1.166 | 1.469 | 29.62 | 37.31 | 16 | 4.88 | 5.75 | 2.61 | Brown |
| 5058108 | 5058203 | 1.470 | 1.602 | 37.34 | 40.69 | 17 | 5.18 | 9.50 | 4.31 | Green |
| 5058109 | 5058204 | 1.603 | 1.762 | 40.72 | 44.75 | 17-1/2 | 5.33 | 9.75 | 4.42 | Pink |

