

Vibration Control is Key SPIRAL VIBRATION DAMPER AND AIR FLOW SPOILER

for Guyed Tower Applications

COMMUNICATIONS

🚯 ENERGY

SPECIAL INDUSTRIES

is 😑 Solar





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









World Headquarters 660 Beta Drive Cleveland, Ohio 44143

Mailing Address: P.O. Box 91129 Cleveland, Ohio 44101

Telephone: 440.461.5200 Fax: 440.442.8816 Web Site: www.preformed.com E-mail: inquiries@preformed.com

© 2009 Preformed Line Products Printed in U.S.A. NU-SS-1044 02.09.2M

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

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

Diameter Range							Wt./	Wt./		
Catalog Number	Catalog Number	Min. in	Max. in	Min. mm	Max. mm	Length ft	Length m	Unit Ibs	Unit kg	Color Code
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

Standard SVD's for use on Guy Wires

Diameter Range							
Catalog Number	Min. in (mm)	Max. in (mm)	Units	Wt. Ibs (kg)	Length in (mm)		
5050102	.174 (4.41)	.249 (6.32)	50	29 (13.2)	46 (1168)		
5050103	.250 (6.35)	.326 (8.28)	50	31 (14.1)	49 (1245)		
5050104	.327 (8.31)	.461 (11.7)	50	34 (15.4)	51 (1295)		
5050105	.462 (11.73)	.563 (14.3)	50	36 (16.3)	53 (1346)		
5050106	.564 (14.33)	.760 (19.3)	25	50 (22.7)	65 (1651)		

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.

Diameter Range							
Catalog Number	Min. in (mm)	Max. in (mm)	Units	Wt. Ibs (kg)	Length in (mm)		
5050200	.250 (6.35)	.326 (8.28)	50	55 (24.9)	87 (2210)		
5050201	.327 (8.31)	.461 (11.7)	50	60 (27.2)	91 (2311)		
5050202	.462 (11.73)	.563 (14.3)	50	65 (29.5)	94 (2388)		