

VORTX™ Vibration Damper



Weight: 0.00kg

Dimensions: 0.00cm x 0.00cm x 0.00cm

Description

VORTX Dampers respond to wind induced line vibration that is characterized by high frequency, low amplitude motion a.k.a. aeolian vibration. The VORTX damper with Large and Small weights can achieve greater power dissipation and frequency response performance than “symmetrical weight” Stockbridge damper designs. Wider frequency coverage translates into better protection as energy is more effectively dissipated over the entire range of conductor/cable frequencies.

[VORTX Damper Placement Program](#)

Features

- **Contoured Clamp** – Aluminum alloy extrusion offers a “precision” fit to evenly capture the conductor and uniformly distribute pressure along the conductor surface.
- **Clamp Profile** – During installation, the damper clamp will hang from the conductor in accordance with IEC standards. Hands are free to tighten the bolt to the proper torque.
- **Messenger Strand** – Precision manufactured galvanized steel messenger strand efficiently absorbs vibration energy.
- **Weight** – Open galvanized ductile iron weights do not enclose the messenger, reducing the possibility of corrosion.
- **Weight Attachment** – PLP’s novel weight attachment system exceeds the pull-off strength requirements of the IEC standards without changing the properties of the adjoining messenger. In contrast, heat from casting or welding attachment methods can alter the messenger strand and reduce performance.

- Breakaway Bolt Option – The VORTX Vibration Damper can also be ordered with a breakaway bolt. When tightened to the recommended torque level, the top head of this bolt will shear off, ensuring that the clamp is neither over, nor undertightened.
- May be installed on either energized (hot) or unenergized (cold) lines. Application instructions are supplied with each order which include the recommended installation procedure and bolt torque.
- VORTX Dampers are tested in accordance with IEC 61897: Overhead Lines – Requirements and Tests for Stockbridge Type Aeolian Vibration Dampers.
- PLP has developed a proprietary computer program known as the VORTX Vibration Damper Placement Software or VORTX VDP for short. This software is based upon data gathered from laboratory testing, field studies, CAD research, and PLP's 60+ year knowledge base on vibration.

Documentation

Application Procedures

[VORTX Vibration Damper User Instructions](#)

Catalog Pages

[VORTX Vibration Damper - Distribution Catalog](#)

[VORTX Vibration Damper - Transmission Catalog](#)

Sales Materials

[VORTX Vibration Damper - Sell Sheet](#)

Reports & Manuals

[Aeolian Vibration Basics](#)

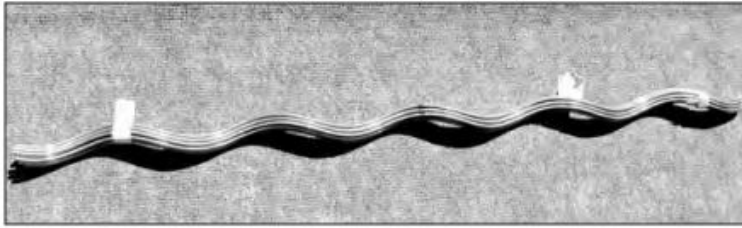
[Overhead Distribution Line Repair Manual](#)

Part Tables

DAMPER CAT. NO.	ATTACHMENT ROD CAT. NO.	CONDUCTOR NAME	CONDUCTOR RANGE (mm)	ATTACHMENT RODS			MASS (kg)
				COLOUR CODE	SHOP LENGTH (mm)	WIRE DIAMETER (mm)	
VSD-128	MRSDRD 390-413	HAZEL, RABBIT, FLY	9.91-10.49	YELLOW	560	4.47 ^{+0.00} _{-0.08}	1.5
	MRSDRD 414-436	PINE, BLUEBOTTLE, MINK	10.52-11.07	RED	560	4.47 ^{+0.00} _{-0.08}	1.5
	MRSDRD 437-463	EARWIG	11.10-11.76	BLUE	560	4.47 ^{+0.00} _{-0.08}	1.5
	MRSDRD 464-490	WILLOW, RACOON	11.79-12.45	GREEN	584	4.47 ^{+0.00} _{-0.08}	1.5
	MRSDRD 491-521	SKUNK	12.47-13.23	ORANGE	600	5.18 ^{+0.00} _{-0.08}	1.5
	MRSDRD 522-558	OAK, DOG, HARE	13.26-14.17	BROWN	600	5.18 ^{+0.00} _{-0.08}	1.5
	MRSDRD 559-585	-	14.20-14.86	WHITE	737	6.35 ^{+0.00} _{-0.08}	1.5
	MRSDRD 586-606	-	14.88-15.39	BLUE	800	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 607-630	MULBERRY	15.42-16.00	ORANGE	800	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 631-655	HORNET, TIGER	16.03-16.64	RED	788	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 656-679	-	16.66-17.25	BLACK	845	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 680-703	ASH	17.27-17.86	YELLOW	864	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 704-739	WOLF	17.88-18.77	WHITE	889	6.35 ^{+0.00} _{-0.08}	1.6
VSD-177	MRSDRD 740-782	ELM, CHICADEE	18.80-19.86	RED	959	6.35 ^{+0.00} _{-0.08}	1.6
	MRSDRD 783-814	LARK, IBIS	19.89-20.68	GREEN	991	6.35 ^{+0.00} _{-0.08}	2
	MRSDRD 815-845	PELICAN, LEMON	20.7-21.46	BROWN	959	6.35 ^{+0.00} _{-0.08}	2
VSD-271	DVDRD 846-907	FLICKER, HAWK, SYCAMORE	21.49-23.04	YELLOW	820	6.35 ^{+0.00} _{-0.08}	2
	DVDRD 908-942	BEAR, KINGBIRD	23.06-23.93	ORANGE	891	6.35 ^{+0.00} _{-0.08}	2
	DVDRD 943-976	UPAS	23.95-24.79	GREEN	918	7.62 ^{+0.00} _{-0.08}	2

Accessories

Protector Rods



**Thermal Rating (Continuous)
250°C**

Protector Rods for VORTX Damper on OPGW or Special Conductors:

Protector Rods provide a layer of mechanical protection and reinforcement for accessory items such as VORTX Dampers that clamp onto a cable. This product is not designed for protection at clamp type supports or suspensions. Protector Rods are not to be used as a repair product as they are not

designed to restore conductance or tensile strength to a cable or conductor. Standard Protector Rods are designed for line voltages of 230 kV and lower. For higher voltage applications, Parrot Bill rod end treatment can be provided – contact PLP for details.

PLP Protector Rods										
Catalog Number*	Cable Diameter Range				Rod Length		Wire Size Inches (mm)	Color Code	Units Per Carton	Weight/ Carton Pounds (Kg)
	Inches		mm							
	Min.	Max.	Min.	Max.	Inches	mm				
PR-0135	0.378	0.423	9.6	10.7	12	304	0.121 (3.1)	Yellow	50	10 (4.5)
PR-0137	0.424	0.475	10.8	12.1	12	304	0.121 (3.1)	Brown	50	10 (4.5)
PR-0139	0.476	0.533	12.1	13.5	16	406	0.121 (3.1)	Blue	50	14 (6.4)
PR-0141	0.534	0.585	13.6	14.8	16	406	0.121 (3.1)	Green	50	14 (6.4)
PR-0142	0.586	0.618	14.9	15.6	16	406	0.146 (3.7)	Orange	50	21 (9.5)
PR-0144	0.619	0.667	15.7	16.9	16	508	0.146 (3.7)	Purple	50	21 (9.5)
PR-0146	0.668	0.722	17.0	18.3	20	508	0.146 (3.7)	Red	50	29 (13.1)
PR-0148	0.723	0.816	18.4	20.3	20	508	0.146 (3.7)	Black	50	29 (13.1)
PR-0150	0.817	0.898	20.8	22.7	20	508	0.146 (3.7)	White	50	31 (14.1)
PR-0151	0.899	0.954	22.8	24.2	24	610	0.167 (4.2)	Yellow	50	47 (21.3)
PR-0152	0.955	1.019	24.3	25.8	24	610	0.182 (4.6)	Brown	25	29 (13.1)
PR-0154	1.020	1.064	25.9	27.0	24	610	0.182 (4.6)	Blue	25	29 (16.1)
PR-0155	1.065	1.098	27.1	27.8	26	660	0.204 (5.2)	Green	25	36 (16.3)
PR-0156	1.099	1.181	27.9	29.9	26	660	0.250 (6.4)	Orange	25	48 (21.7)
PR-0158	1.182	1.298	30.0	32.9	26	660	0.250 (6.4)	Purple	25	51 (23.1)
PR-0160	1.299	1.415	33.0	35.9	26	660	0.250 (6.4)	Blue	20	44 (19.9)
PR-0162	1.416	1.543	36.0	39.2	26	660	0.250 (6.4)	Yellow	20	48 (21.7)
PR-0163	1.544	1.685	39.2	42.8	26	660	0.250 (6.4)	Brown	15	40 (18.1)
PR-0164	1.686	1.840	42.8	46.7	26	660	0.250 (6.4)	Blue	15	42 (19.0)