

Air Flow Spoiler



Thermal Rating (Continuous) 125°C

NOMENCLATURE

- **Gripping Section:** Grips cable. Consists of several pitches (360° wraps around the cable) and holds the Air Flow Spoiler firmly in position.
- **Spoiling Section:** Disrupts aerodynamic lift. The spoiling section is wrapped around the cable in a manner which presents a constantly changing profile to wind flow and cancels lift forces which cause galloping. The spoiling section is wrapped around the cable either two or three times, depending on cable diameter.
- Application Support Helix: Supports Spoiler. Air Flow Spoilers range in length from 14 to 16 feet. The Application Support Helix on one end keeps the Air Flow Spoiler from hanging down, while the gripping section on the opposite end is applied.

Air Flow Spoilers for EHV applications have a co-extruded semi-conductive outer layer of material which resists the surface effects of high electrical gradients and minimizes the possible generation of radio interference (RI).

GENERAL RECOMMENDATIONS

Several Air Flow Spoilers are required in each span to offset the aerodynamic lift forces which cause galloping. Each cable, conductor or phase, and neutral need to be treated in each span.

The number and placement of Air Flow Spoilers in each span can be determined by using the General Placement guidelines that follow or by submitting the Air Flow Spoiler Placement Request form. The information submitted on this form is input into a computer program for the determination of the exact placement of the Air Flow Spoilers in each span. The program also supplies the increased wind loading on each span as a percentage increase.

When using the Air Flow Spoiler Placement Request form, the information should be completed and returned to Preformed Line Products prior to installation of Air Flow Spoilers. The placement scheme will be returned giving the placement of Air Flow Spoilers in each span.

Please advise whether the cables contain optical fibers or if the Air Flow Spoilers are to be installed on Figure 8/ Lashed Messenger cables. This may influence the Air Flow Spoiler selection and/or quantity.

GENERAL PLACEMENT GUIDELINES

Extensive laboratory and field research has shown that Air Flow Spoilers are most effective when they are placed on 25% of the span length (based on the 12' spoiling section). For example, a 600' span would require 13 Air Flow Spoilers [(.25x600)/12]. The Air Flow Spoilers are grouped in the middle 50% of the span by leaving a blank space equal to an Air Flow Spoiler length between adjacent units.

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Air Flow Spoiler



Catalog	EHV Catalog Number	Diameter Range (Inches)				
Number		Min.	Max.	Length (Feet)	Wt./Unit Lbs.	Color Code
5058100	N/A	0.250	0.326	13-1/2	1.00	Red
5058101	N/A	0.327	0.461	13-1/2	1.00	White
5058102	N/A	0.462	0.563	14	2.25	Orange
5058103	N/A	0.564	0.76	14-1/2	2.40	Yellow
5058104	N/A	0.761	0.926	15	4.25	Blue
5058105	5058200	0.927	1.019	15-1/4	4.50	Black
5058106	5058201	1.020	1.165	15-3/4	5.50	Purple
5058107	5058202	1.166	1.469	16	5.75	Brown
5058108	5058203	1.470	1.602	17	9.50	Green
5058109	5058204	1.603	1.762	17-1/2	9.75	Pink
5058110	5058205	1.763	1.922	18	10.50	Red

EXPLANATORY NOTES:

(1) For installation on Figure 8 and Lashed Messenger cables, consult $\mathsf{PLP}^{\circledast}$.

(2) Obtain the Air Flow Spoiler Placement Request form from your local PLP® representative or direct from PLP®.



Air Flow Spoiler

High Temperature Air Flow Spoilers

GENERAL INFORMATION

The high temperature Air Flow Spoiler is constructed of aluminum alloy wires that enable the product to handle temperatures up to 250°C. By subsetting multiple helical rods and cabling (twisting) the center section, the high temperature Air Flow Spoiler functions in the same manner as the standard Air Flow Spoiler. Thermal Rating (Continuous) 250°C

Contact PLP for details regarding applications above 230KV.



Catalog	Diameter Range (Inches)				
Number	Min.	Max.	Length (Feet)	Wt./Unit Lbs.	Color Code
5059017	0.761	0.808	15-1/2	5.66	Brown
5059018	0.809	0.856	16	5.81	Purple
5059019	0.857	0.907	16	5.81	Orange
5059020	0.908	0.962	16	5.87	Black
5059021	0.963	1.019	16	5.93	Red
5059022	1.020	1.078	16-3/4	10.93	Blue
5059023	1.079	1.138	16-3/4	11.03	Yellow
5059024	1.139	1.199	16-3/4	11.25	Green
5059025	1.200	1.263	17-1/2	11.48	Pink
5059026	1.264	1.330	17-3/4	11.68	Brown
5059027	1.331	1.399	18-1/2	12.18	Purple
5059028	1.400	1.469	19-1/4	12.61	Orange
5059029	1.470	1.549	21-1/2	20.22	Black
5059030	1.550	1.629	22	20.86	Red
5059031	1.630	1.714	22-1/2	21.17	Blue
5059032	1.715	1.805	23-1/2	22.03	Yellow

EXPLANATORY NOTES:

(1) Obtain the Air Flow Spoiler Placement Request form from your local PLP® representative or direct from PLP®.