



PREFORMED LINE PRODUCTS
The connection you can count on.


Designed for Maximum
Protection and Long Life


CUSHION-GRIP® SPACER DAMPER



 COMMUNICATIONS

 ENERGY

 SPECIAL INDUSTRIES

 SOLAR

CUSHION-GRIP® SPACER DAMPER

Unique design minimizes stress on damping elements



Type "B" Damping Element

Unique Patented Designs

The CUSHION-GRIP® Spacer Damper is available in two distinct designs: Type "B" and Type "C".

The Type "B" design was developed with collaboration between PLP-USA and the Engineering Team at PLP-Brazil to meet the demanding requirements of IEC specification 61854, while maintaining a light overall weight and effective performance.

The patented star shaped damping elements combined with the unique two-piece frame design enable the elastomer to be in compression, regardless of the type of conductor motion.



Type "C" Damping Element

In contrast, the Type "C" design was cooperatively developed by PLP-USA and the Engineers at PLP- U.K. to exceed the extremely difficult performance requirements specified by the National Grid Company in the early 1990's.

As such, the Type "C" design is heavier and more robust than the equivalent Type "B" unit. It is well suited for areas where traditional spacer dampers have experienced premature performance problems or failures.

The patented damping element in the Type "C" Spacer Damper consists of a number of elastomer cylinders that work with the pockets in each hub in the frame assembly to enable the elastomer to be in compression. Eliminating shear loads on the elastomer damping elements maximizes service life.

Field Proven

Both the Type "B" and Type "C" Spacer Dampers have been used extensively throughout Europe and Brazil since their introduction in the early 1990's.

Lab Tested

The CUSHION-GRIP Spacer Damper has been subjected to demanding laboratory testing in accordance with both industry standards (e.g., IEC 61854) and customer specifications (e.g., National Grid Company).

Laboratory tests are designed to ensure that the Spacer Damper will provide the necessary damping of aeolian vibration within the span and at the supporting structures while delivering the design that is rugged enough to withstand forces associated with sub-conductor oscillations and fault currents.



Aeolian Vibration Fatigue Test

Clamp Fastener Enables Proper Installation

A high strength 1/4-turn forged fastener in the elastomer-lined conductor clamp is designed to enable proper installation. This feature is designed to provide consistent compression of the elastomer liners without relying on specific bolt torque values, or bolts with break-away heads.

Proper compression prevents possible loosening of the clamp which can result in severe conductor damage.

Placement is the Key to Performance

PLP's extensive experience and field testing allow us to provide you with placement recommendations that are designed to minimize the motion of conductor bundles and maximize the longevity of the Spacer Damper.

Thermal Rating

The standard CUSHION-GRIP® Spacer Damper is designed for up to 125°C continuous conductor temperature (150°C two hour emergency). The high temperature version (HT) is rated for 200°C continuous conductor temperature (225°C two hour emergency).

Note: For high temperature (HT) version, add HT to the catalog number. (Example CGSDB-34529 HT)



Lined Conductor Clamp with 1/4-turn Fasteners

Ordering Information

For standard 18" (457 mm) sub-conductor spacings, the Catalog Numbers are:
CGSDT - X45 YZ

Where **T** is B for Type "B" or C for Type "C"

X is 2 for Twin, 3 for Tri, 4 for Quad and 6 for Hex

YZ is for the conductor range table below

Example:

CGSDB-34529 is a Tri Spacer Damper (Type "B") for use on a conductor range between 1.107" and 1.146" (28-29 mm)

YZ	Conductor Range inches (mm)	YZ	Conductor Range inches (mm)
18	0.673-0.713 (17-18)	32	1.225-1.264 (31-32)
19	0.714-0.752 (18-19)	33	1.265-1.303 (32-33)
20	0.753-0.791 (19-20)	34	1.304-1.345 (33-34)
21	0.792-0.831 (20-21)	35	1.346-1.382 (34-35)
22	0.832-0.870 (21-22)	36	1.383-1.421 (35-36)
23	0.871-0.909 (22-23)	37	1.422-1.461 (36-37)
24	0.910-0.949 (23-24)	38	1.462-1.500 (37-38)
25	0.950-0.988 (24-25)	39	1.501-1.539 (38-39)
26	0.989-1.028 (25-26)	40	1.540-1.579 (39-40)
27	1.029-1.067 (26-27)	41	1.580-1.618 (40-41)
28	1.068-1.106 (27-28)	42	1.619-1.657 (41-42)
29	1.107-1.146 (28-29)	43	1.658-1.697 (42-43)
30	1.147-1.185 (29-30)	44	1.698-1.736 (43-44)
31	1.186-1.224 (30-31)	45	1.737-1.776 (44-45)



CUSHION-GRIP Spacer Damper Installation Tool
Catalog No. 00071004

Consult PLP for other sub-conductor spacings, configurations and fasteners.



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