

Spacer Dampers with Elastomer Bushed Clamps—280000 Series



Spacer dampers were originally developed to suppress bundle conductor subspan oscillations that could cause damage to multi-conductor bundle systems. Later, it was determined that they could be used to control aeolian vibration as well as wake-induced oscillation. The spacer damper is designed to maintain the original geometry of the bundle system against loads. It must also restore the bundle to normal posture after experiencing severe loads due to short-circuit currents, ice and wind.

The AFL Spacer Damper combines the function of a spacer in maintaining conductor separation and the function of a damper in controlling aeolian vibration. The viscoelastic bushings firmly grip the conductor. AFL has developed spacer damper designs to meet various bundle configurations and installation requirements.

Features

Controls Oscillation and Aeolian Vibration

The Spacer Damper is the most efficient way to extend the life span of the transmission line. It is designed to dissipate the damaging vibrations caused by wind.

No Special Tools Needed with Breakaway Bolt Option

With the breakaway bolt, no special tools nor torque wrench are needed. Simply tighten the bolt until the head shears off, indicating proper torque has been achieved.

Customized Designs

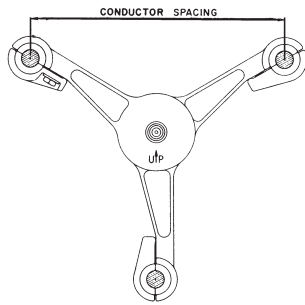
AFL can engineer a line protection system for any particular project. The Spacer Dampers are available for 3 and 4 conductor bundles. Standard spacing is 18 inches. For alternate spacing and bundle design, contact AFL Technical Support Team.

Vibrec® Damper Recommendation Program

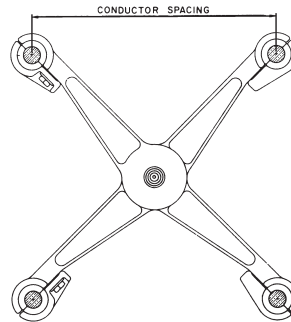
The Vibrec damper recommendation program assists in spacer damper requirements for transmission lines. For more information visit www.Vibrec.com or contact the AFL Technical Support Team at 1.800.866.7385.

Vibration Recommendation Form can be found on page 403.

Spacer Dampers with Elastomer Bushed Clamps—280000 Series (cont.)



3 Conductor Bundle Bolted Type Clamp



4 Conductor Bundle Bolted Type Clamp

Ordering Instructions

Step 1: Select Bundle and Clamp Type Catalog Number

Determine conductor bundle and clamp type to get first part of catalog number from Table 1.

Step 2: Select Clamp Size Catalog Number

Determine clamp size by diameter of conductor to get second part of catalog number from Table 2. For conductor diameter, see pages 387-392.

Step 3: Create Catalog Number

Clamp Type Number + Clamp Size Number

Example:

For a Spacer Damper with bolted clamps for 3 Conductor Bundle of 795 Drake ACSR conductor, the complete Catalog Number is:

283457.287

Table 1: Bundle & Clamp Type Selection

SYMMETRIC BUNDLE GEOMETRY			PARTIAL AFL NO. CLAMP TYPE
CONDUCTOR SPACING		NUMBER OF CONDUCTORS	
IN	MM		
18	457	3	283457
		4	284457

Table 2: Clamp Size Selection

PARTIAL AFL NO.	CONDUCTOR DIAMETER RANGE		DIMENSION		WEIGHT (BASED ON 18.00 IN (457 MM) CONDUCTOR SPACING)							
					3 CONDUCTOR				4 CONDUCTOR			
	IN	MM	IN	MM	ALUM	TOTAL	ALUM	TOTAL	ALUM	TOTAL	ALUM	TOTAL
.267	.976-1.051	24.79-26.71	2.00	51	8.1	3.67	9.1	4.13	9.7	4.40	11.7	5.31
.287	1.052-1.131	26.72-28.74	2.00	51	8.1	3.67	9.1	4.13	9.7	4.40	11.7	5.31
.310	1.132-1.220	28.75-31.00	2.00	51	8.1	3.67	9.0	4.08	9.7	4.40	11.7	5.31
.320	1.221-1.257	31.01-31.94	2.00	51	8.4	3.81	9.5	4.31	10.1	4.58	12.1	5.49
.342	1.258-1.345	31.95-34.17	2.00	51	8.4	3.81	9.5	4.31	10.1	4.58	12.1	5.49
.371	1.346-1.460	34.18-37.09	2.00	51	9.6	4.35	10.9	4.94	11.5	5.22	13.5	6.12
.394	1.461-1.550	37.10-39.38	2.00	51	9.6	4.35	10.8	4.90	11.5	5.22	13.5	6.12
.417	1.551-1.640	39.39-41.67	2.00	51	9.6	4.35	10.8	4.90	11.5	5.22	13.5	6.12
.437	1.641-1.720	41.68-43.70	2.20	56	10.2	4.63	11.3	5.13	12.2	5.53	14.2	6.44
.465	1.721-1.830	43.71-46.49	2.20	56	10.2	4.63	11.3	5.13	12.2	5.53	14.2	6.44
.488	1.831-1.920	46.50-48.78	2.20	56	10.2	4.63	11.2	5.08	12.2	5.53	14.2	6.44

Note:

Installation instructions for dampers start on page 393.