

## Transmission Voltage Cable Terminations For Self-Contained and Pipe Type Fluid or Gas Insulated Cables

High voltage ATA/ATL type terminations are designed for single conductor, low and high pressure fluid and gas filled cables on transmission systems rated 69 through 800kV. Terminations are available for indoor, outdoor and equipment applications including horizontal or inverted mounted. For equipment installations the terminations are immersed in fluid.

### APPLICATION

Type ATA-N terminations are used to terminate high pressure fluid or gas filled cables. Conventional stress control designs are applicable up to 161kV on cables with nominal pressure ratings of 200 psi and higher.

Type ATL-N terminations are used for low pressure, self-contained, fluid filled cables. Conventional stress control designs applicable up to 161 kV for maximum conductor sizes through 3000 kcmil (1500mm<sup>2</sup>) with nominal pressure ratings of 15 psi and higher.

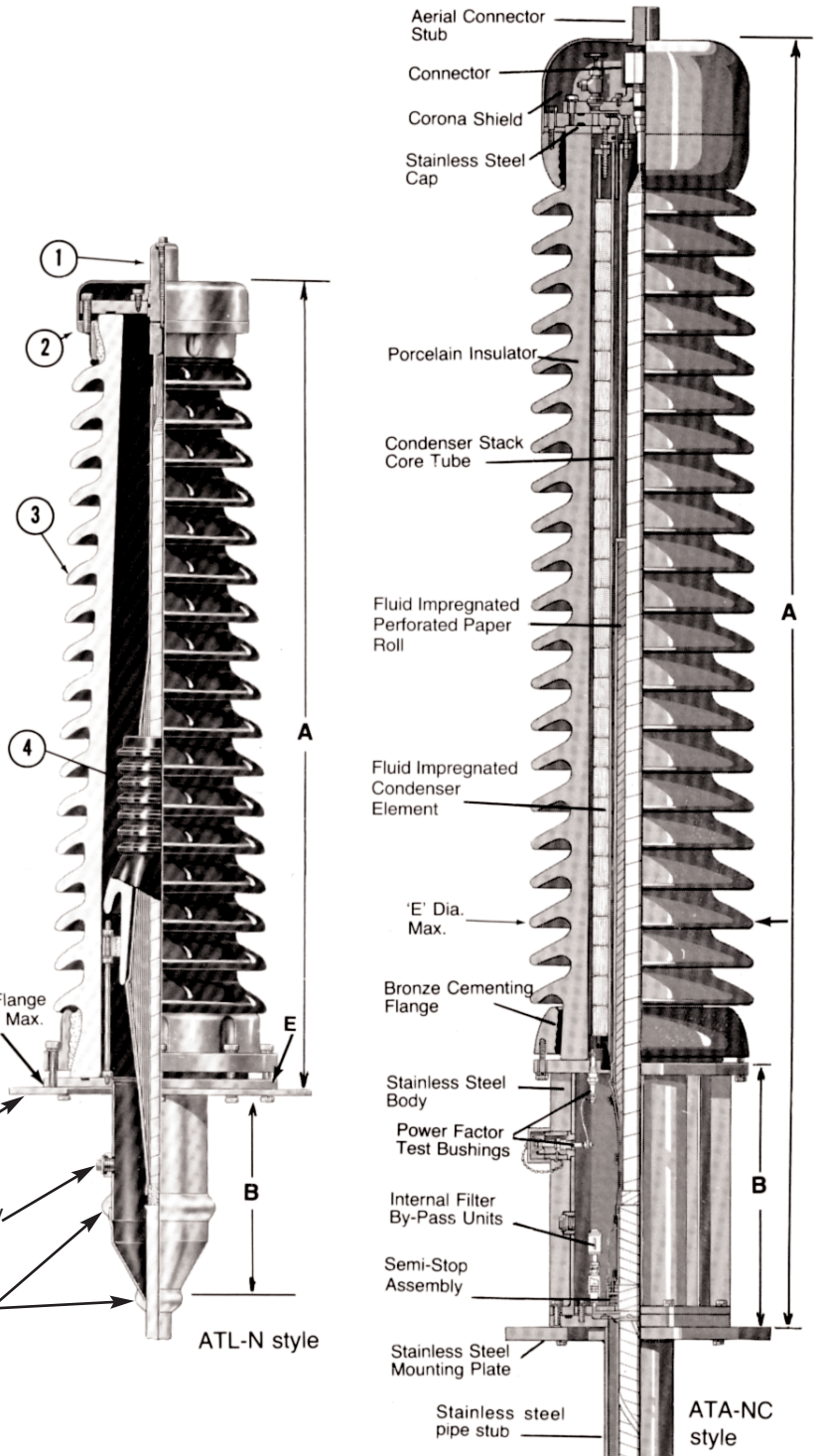
Capacitor graded stress control designs are available for both ATA and ATL style terminations for 230 through 800kV liquid impregnated cables with a 3000 kcmil (1500mm<sup>2</sup>) maximum conductor size.

- 1 Press type connector with "O" ring seal and venting passage.
- 2 Non-magnetic, stainless steel plate with aluminum corona shield.
- 3 High grade, wet process porcelain insulation.
- 4 Inner stress control with external conductive glaze. Contact springs assure positive ground connection.

Stainless steel support flange. Stand off insulators available.

Tinned spun copper body with stainless steel flange.

Lead wiped sealing joint.

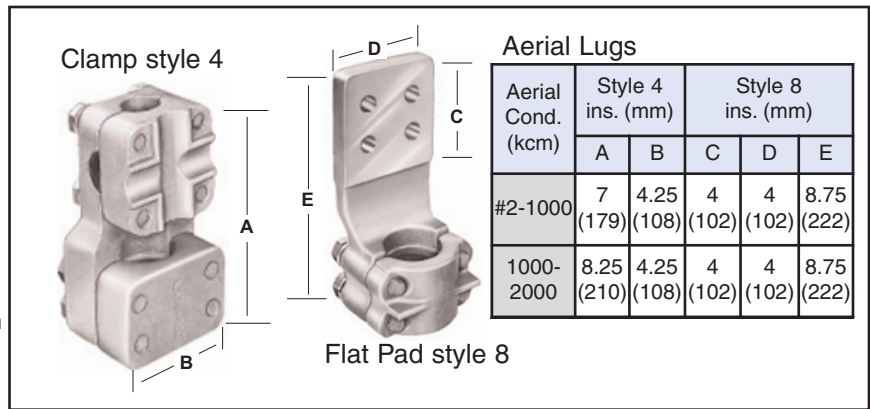


*Dimensions approximate - Do not use for construction*

## ORDERING INFORMATION

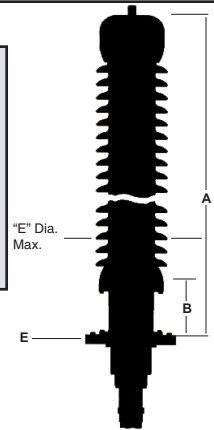
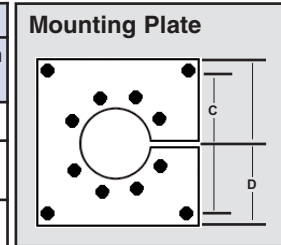
Catalog number includes porcelain termination, connector, aerial lug, stress cone and paper roll assembly kit, top corona shield, inner stress control porcelain (for oil filled only), stainless steel body / flange (copper for ATL) and base plate, check-plate and pipe stub assembly (for ATA).

Options include valves, high strength designs (up to 400 psi nominal), connectors for aluminum cable, diffusion chambers, and base plate insulators.



## INTERNAL PRESSURE CHARACTERISTICS

Item	ATA Design			ATL Design		
	STD	High Strength	Extra High Strength	STD	High Strength	Extra High Strength
Nom. Operating Pressure - psi	200	300	400	15	40	100
Max. Continuous Operating Pressure (over 10 hr.) - psi	275	410	750	22	55	138
Max. Transient Pressure (up to 10 hr.) - psi	300	450	840 (Up to 6 hrs)	24	60	150
Max. Peak Transient - psi	400	600	-	32	80	200
Max. Field (proof) - psi	350	525	-	28	70	175
Factory Test (1 hr.) - psi	500	750	1000	40	100	250



Voltage (kV)	Catalog* Code	BIL (kV)	Max. Conductor (kcmil)	Creepage ins. (mm)	Strike ins. (mm)	Shpg. Wt. lbs (kg)	Approximate Dimensions ins. (mm)					Approx. Oil Volume Gal. (L)
							A	B	C	D	E **	

### ATA-N Terminations (HPFF/PPP/PPL Cables)

69	ATA 119N	350	1500	52 (1321)	25.88 (656)	600 (272)	50 (1270)	16 (406)	6.7 (170)	7.7 (196)	12 (305)	2 (7.6)
69	ATA 110N	350	3000	61 (1549)	28 (711)	650 (295)	53 (1346)	15 (381)	6.7 (170)	7.7 (196)	16.3 (414)	7 (27)
115	ATA 139N	550	1500	80 (2032)	37 (940)	800 (363)	62 (1575)	15 (381)	6.7 (170)	7.7 (196)	16.3 (414)	8 (30)
115	ATA 130N	550	3000	98 (2489)	42 (1067)	900 (408)	68 (1727)	15 (381)	6.7 (170)	7.7 (196)	16.3 (414)	8 (30)
138	ATA 149N	650	1500	98 (2489)	42 (1067)	900 (408)	68 (1727)	15 (381)	6.7 (170)	7.7 (196)	16.3 (414)	11 (42)
138	ATA 140N	650	3000	120 (3048)	52 (1321)	1100 (499)	78 (1981)	16 (406)	7.5 (190)	9 (229)	17.8 (452)	15 (57)
161	ATA 159N	750	1500	120 (3048)	52 (1321)	1100 (499)	78 (1981)	16 (406)	7.5 (190)	9 (229)	17.8 (452)	15 (57)
161	ATA 150N	750	3000	138 (3505)	58 (1473)	1250 (567)	84 (2134)	16 (406)	7.5 (190)	9 (229)	17.8 (452)	15 (57)
230	ATA 160NC	1050	3000	193 (4902)	77.5 (1968)	2200 (998)	115 (2921)	21 (533)	9.5 (241)	11 (279)	18.8 (478)	40 (152)
345	ATA 180NC	1300	3000	237 (6020)	98 (2489)	3500 (1589)	145 (3683)	29 (737)	10 (254)	11 (279)	21.9 (556)	50 (190)
500	ATA 199NC	1675	3000	352 (8941)	140 (3556)	5000 (2265)	196 (4978)	29 (737)	10.5 (267)	12.5 (317)	24.3 (617)	65 (246)
800	ATA 209NC	2450	3000	425 (10795)	163 (4140)	8000 (3632)	222 (5639)	42 (1067)	10.5 (267)	12.5 (317)	-	82 (311)

### ATA-NG Terminations (HPGF Cables)

69	ATA 119NG	350	1250	52 (1321)	25.88 (656)	650 (295)	56 (1422)	22 (559)	6.7 (170)	7.7 (196)	12 (305)	-
69	ATA 110NG	350	2500	61 (1549)	28 (711)	700 (317)	63 (1600)	25 (635)	6.7 (170)	7.7 (196)	16.3 (414)	-
115	ATA 139NG	550	1250	98 (2489)	42.5 (1079)	900 (408)	81 (2057)	28 (711)	6.7 (170)	7.7 (196)	16.3 (414)	-
115	ATA 130NG	550	2500	120 (3048)	52 (1321)	1050 (476)	90 (2286)	28 (711)	7.5 (190)	9 (229)	17.8 (452)	-
138	ATA 149NG	650	1250	120 (3048)	52 (1321)	1200 (544)	90 (2286)	28 (711)	7.5 (190)	9 (229)	17.8 (452)	-
138	ATA 140NG	650	2500	138 (3505)	58 (1473)	1300 (590)	96 (2438)	28 (711)	7.5 (190)	9 (229)	17.8 (452)	-

### ATL Terminations (LPFF Cables)

69	ATA 119N	350	1250	52 (1321)	25.88 (656)	450 (205)	35 (889)	10 (254)	8 (203)	9 (229)	12 (305)	2 (7.6)
69	ATA 110N	350	3000	61 (1549)	28 (711)	600 (272)	39 (991)	17 (432)	10 (254)	11 (279)	16.3 (414)	5 (19)
115	ATA 139N	550	1250	80 (2032)	37 (940)	750 (350)	48 (1219)	17 (432)	10 (254)	11 (279)	16.3 (414)	7 (27)
115	ATA 130N	550	3000	98 (2489)	42 (1067)	800 (363)	54 (1372)	17 (432)	10 (254)	11 (279)	16.3 (414)	7 (27)
138	ATA 149N	650	1250	98 (2489)	42 (1067)	800 (363)	54 (1372)	17 (432)	10 (254)	11 (279)	16.3 (414)	10 (38)
138	ATA 140N	650	3000	120 (3048)	52 (1321)	1050 (476)	63 (1600)	17 (432)	11.5 (292)	12.5 (317)	17.8 (452)	11 (42)
161	ATA 159N	750	1250	120 (3048)	52 (1321)	1050 (476)	63 (1600)	17 (432)	11.5 (292)	12.5 (317)	17.8 (452)	11 (42)
161	ATA 150N	750	3000	138 (3505)	58 (1473)	1100 (499)	69 (1753)	17 (432)	11.5 (292)	12.5 (317)	17.8 (452)	15 (57)
230	ATA 160NC	1050	2500	193 (4902)	77.5 (1968)	1600 (726)	109 (2769)	24 (610)	12 (305)	13 (330)	18.8 (478)	30 (114)

\* Low and High pressure fluid filled terminations are also available for fluid filled equipment mounted applications up to 230 kV.

\*\* "E" dimension is flange diameter except for NC styles which are porcelain diameter.