ECOANODE

TECHNICAL DATA SHEET

FLUSH-MOUNTED ALUMINUM SLENDER ANODES

ECOANODE's aluminum marine anodes are precision-engineered to deliver unparalleled longevity and performance in demanding saline environments. A defining feature of their design is their strategic elevation from the structures they protect. This critical stand-off configuration minimizes the detrimental effects of current shielding, a common issue with flush-mounted anodes, and promotes a uniform current distribution. This results in an exceptional utilization factor of 90%, ensuring nearly all the anode material is consumed productively, thereby maximizing value and extending service intervals.

Cast from high-performance aluminum alloys, these anodes provide a consistent, reliable protective current and are indispensable for safeguarding critical assets like offshore platforms and ship hulls. The product range is tailored for diverse applications, featuring variants such as the stand-off anode with a double-cranked flat bar insert for robust mounting, the stand-off anode with a cow horn tubular insert for enhanced water flow and performance, the flush-mounted platform anode with a straight tubular insert for low-clearance areas, and anodes with solid rod inserts for superior mechanical strength. Their proven efficiency and design adaptability make them a fundamental component in any robust marine cathodic protection system.

CHEMICAL COMPOSITION

Element Content	GALVALUM III	DNV-RP-B401-2011	GS EP COR 201
Zinc (Zn)	2% ~ 6%	2.5% ~ 5.75%	4.75% ~ 5.75%
Indium (In)	0.01% ~ 0.02%	0.015% ~ 0.04%	0.015% ~ 0.02%
Silicon (Si)	0.08% ~ 0.2%	0.12% max.	0.06% ~ 0.12%
Iron (Fe)	0.13% max.	0.09% max.	0.12% max.
Copper (Cu)	0.006% max.	0.003% max.	0.003% max.
Cadmium (Cd)	—	0.002% max.	0.002% max.
Other Impurities	0.1% max.	0.1% max.	0.1% max.
Aluminum (Al)	Remainder	Remainder	Remainder

ELECTROCHEMICAL PROPERTIES

Technical Measurement	Performance
Open Circuit Voltage (min.)	-1.10 Volts
Closed Circuit Voltage (min.)	-1.05 Volts
Current Capacity	2500 A.h/kg (1135 A.h/lbs)
Current Efficiency (min.)	90%
Consumption Rate	3.4 kg/A.y (7.6 lbs/A.y)



ECOANODE SOLUTIONS SDN. BHD

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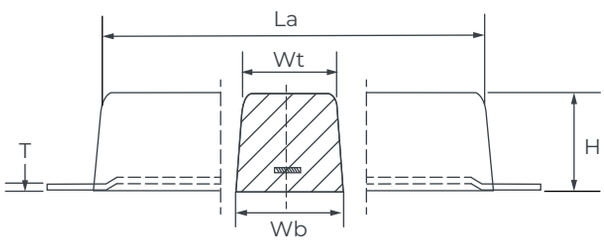
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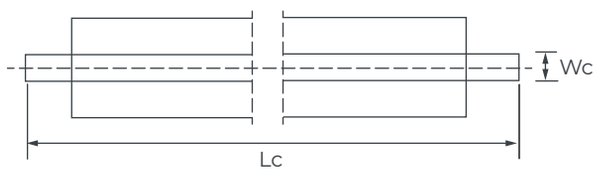
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SPECIFICATIONS

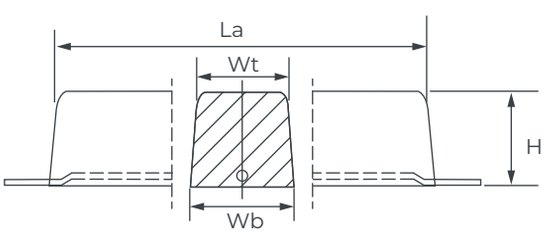
Flush-Mounted Aluminum Anode With Flat Bar Insert

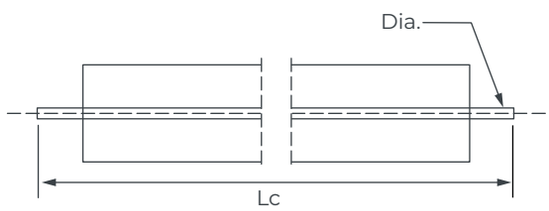




Item No.	Anode Dimensions				Core Size			Weight	
	Wt	Wb	H	La	Wc	T	Lc	N.W	G.W
EA-AL-TF1	148 mm (5.8")	178 mm (7.0")	170 mm (6.7")	1500 mm (59.1")	50 mm (1.97")	8 mm (0.31")	1800 mm (70.9")	110 kg (242.5 lbs)	116.8 kg (257.5 lbs)
EA-AL-TF2	180 mm (7.1")	220 mm (8.7")	180 mm (7.1")	850 mm (33.5")	60 mm (2.4")	8 mm (0.31")	1100 mm (43.3")	81.5 kg (179.7 lbs)	85.5 kg (188.5 lbs)
EA-AL-TF3	200 mm (7.9")	280 mm (11.0")	150 mm (5.9")	800 mm (31.5")	60 mm (2.4")	8 mm (0.31")	1050 mm (41.3")	76.5 kg (168.7 lbs)	80.5 kg (177.5 lbs)
EA-AL-TF4	160 mm (6.3")	220 mm (8.7")	180 mm (7.1")	700 mm (27.6")	60 mm (2.4")	8 mm (0.31")	950 mm (37.4")	63.9 kg (140.9 lbs)	66.5 kg (146.6 lbs)
EA-AL-TF5	115 mm (4.5")	135 mm (5.3")	130 mm (5.1")	1250 mm (49.2")	40 mm (1.6")	8 mm (0.31")	1500 mm (59.1")	54.0 kg (119.0 lbs)	56.9 kg (125.4 lbs)
EA-AL-TF6	115 mm (4.5")	135 mm (5.3")	130 mm (5.1")	1000 mm (39.4")	40 mm (1.6")	8 mm (0.31")	1250 mm (49.2")	43.2 kg (95.2 lbs)	45.6 kg (100.5 lbs)

Flush-Mounted Aluminum Anode With Solid Rod Insert





Item No.	Anode Dimensions				Core Size		Weight	
	Wt	Wb	H	La	Dia.	Lc	N.W	G.W
EA-AL-TR1	148 mm (5.8")	178 mm (7.0")	170 mm (6.7")	1500 mm (59.1")	25 mm (0.98")	1800 mm (70.9")	110 kg (242.5 lbs)	116.8 kg (257.5 lbs)
EA-AL-TR2	180 mm (7.1")	220 mm (8.7")	180 mm (7.1")	850 mm (33.5")	25 mm (0.98")	1100 mm (43.3")	81.5 kg (179.7 lbs)	85.5 kg (188.5 lbs)
EA-AL-TR3	200 mm (7.9")	280 mm (11.0")	150 mm (5.9")	800 mm (31.5")	25 mm (0.98")	1050 mm (41.3")	76.5 kg (168.7 lbs)	80.5 kg (177.5 lbs)
EA-AL-TR4	160 mm (6.3")	220 mm (8.7")	180 mm (7.1")	700 mm (27.6")	22 mm (0.87")	950 mm (37.4")	63.9 kg (140.9 lbs)	66.5 kg (146.6 lbs)
EA-AL-TR5	115 mm (4.5")	135 mm (5.3")	130 mm (5.1")	1250 mm (49.2")	18 mm (0.71")	1500 mm (59.1")	54.0 kg (119.0 lbs)	56.9 kg (125.4 lbs)
EA-AL-TR6	115 mm (4.5")	135 mm (5.3")	130 mm (5.1")	1000 mm (39.4")	18 mm (0.71")	1250 mm (49.2")	43.2 kg (95.2 lbs)	45.6 kg (100.5 lbs)

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