



# ESL 180-12FT



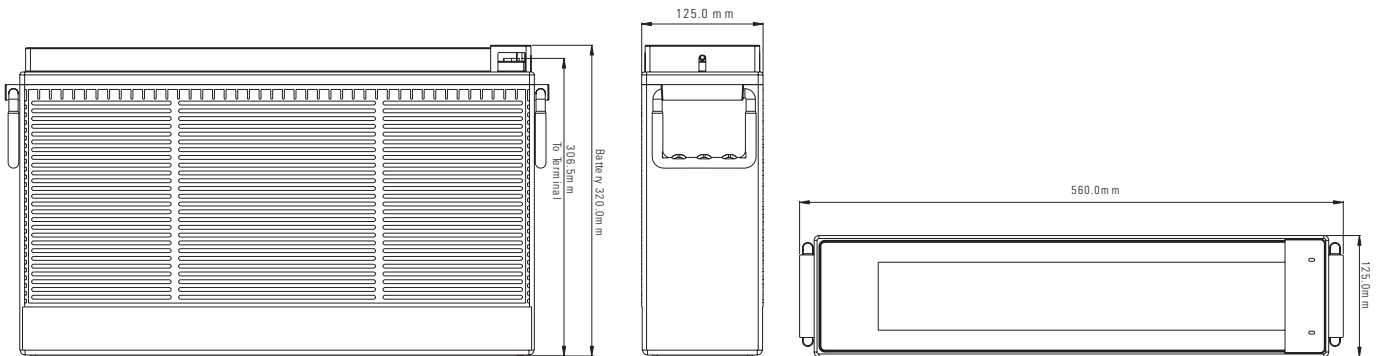
## Features

- Compactness
- ETSI / 19" / 23" Integration
- Modularity
- Rackable Standard component
- Long life
- Use under extreme conditions
- High power volume ratio
- Maintenance free utilising VRLA technology
- Low Installation costs
- Front Connections and terminal access
- Long Design Life - 12 years
- Integral plastic handles
- Central gassing system and hinged front cover
- Integral flame arrestor
- Low Internal resistance
- Recyclable lead and plastics
- Designed to meet BELLCORE, BS6290 Pt4, IEC 896-2 recommendations
- Excellent Cycling ability
- Low self discharge rates
- Compression plate absorbs grid expansion

## Specifications

- Nominal Voltage.....12 Volts
- Design Life .....12 Years
- Operating Temperature...-20 °C to 50 °C
- Grid alloy.....Calcium /Tin lead alloy
- Plates.....Flat Pasted
- Separator.....AGM - Absorbant Glass Mat
- Active material.....Very high purity lead
- Case and cover.....ABS (VO on request)
- Charge Voltage .....Float 2.27 - 2.30 VPC @25 °C  
Cycling 2.35 @25 °C  
Max. 2.4 VPC Max ripple 0.05C (A)
- Electrolyte .....Sulphuric acid Analytical grade purity
- Venting Valve .....EPDM Rubber 1.5 to 2 psi (10.5 - 14 KPa) release pressure. Resealing at 1 psi (7 KPa)
- Terminal.....Epoxy sealed by extended mechanical paths
- Torque setting.....The recommended torque value for all types is 5-7 Nm
- Connectors.....Supplied as standard

## Terminal Dimensions



## Specifications

Nominal Voltage	12V		
Nominal Capacity	180 Ah C10		
Dimensions	Total Height - (Inc. terminal s)	319,5 mm - n/a mm	12,58 inches - n/a inches
	Length - Width	530 mm - 125 mm	20,87 inches - 4,92 inches
Weight 59 Kg - 130,39 lbs			

## Characteristics

Capacity 20 °C (68 °F) To 1.7 volts	20 hour rate 10 hour rate 5 hour rate 1 hour rate 15 min rate Internal Resistance Impedance	200 Ah 187,4 Ah 165,6 Ah 127,8 Ah 77,7 Ah 3,1 mOhms 1700 S
Capacity correction for Temperature Variations (C20)	40 °C (104 °F) 20 °C (68 °F) 0 °C (32 °F) -15 °C (5 °F)	102% 100% 85% 65%
Self-Discharge 20 °C (68 °F)	Capacity after 1 months storage Capacity after 3 months storage Capacity after 6 months storage	98% 94% 86%
Short Circuit Current 20 °C (68 °F)		
Terminal	Standard Optional	16mm Insert M6 thread
Charging (Constant Voltage)	Cyclic Float	2.40 VPC (15-25 °C) 2.27 - 2.30 VPC (15-25 °C)

## Constant Power Discharge - Watts per Cell at 20°C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr
1.85	729	593	491	418	368	331	300	278	258	211	153	122	87.6	69.7
1.80	841	674	558	474	416	375	340	314	290	233	169	134	97.1	77.6
1.75	897	707	588	499	436	390	352	323	297	239	173	137	98.7	78.6
1.70	955	738	606	512	445	398	359	329	302	242	175	138	99.3	78.9
1.65	983	754	614	518	449	401	362	332	305	244	176	139	100	-
1.60	1020	766	624	524	454	405	365	334	308	245	176	140	100	-

## Constant Amps discharge - Amps at 20°C

End V per Cell	5 M	10 M	15 M	20 M	25 M	30 M	35 M	40 M	45 M	60 M	90 M	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	372	288	241	210	187	168	152	140	130	106	78.7	62.7	44.8	35.4	29.4	20.0	16.6	14.2	8.8
1.80	439	337	281	242	215	195	176	161	150	122	87.6	68.6	49.0	38.7	32.2	21.9	18.2	15.5	9.7
1.75	490	365	299	258	227	204	184	169	157	126	90.5	70.8	50.2	39.6	32.9	22.3	18.5	15.8	9.9
1.70	518	378	311	266	234	208	189	173	159	128	91.3	71.4	50.7	40.0	33.1	22.4	18.7	16.0	10.0
1.65	544	392	320	273	239	213	193	176	162	129	92.2	71.7	50.9	-	-	-	-	-	-
1.60	578	403	328	278	242	215	195	178	163	130	92.7	72.1	51.2	-	-	-	-	-	-

## Ampere Hour at 20 °C

End V per Cell	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	125	134	142	147	160	166	170	176
1.80	137	147	155	161	175	182	186	194
1.75	142	151	159	165	178	185	190	197
1.70	143	152	160	166	180	187	192	200
1.65	143	153	-	-	-	-	-	-
1.60	144	154	-	-	-	-	-	-