

WING ESL 40-12xHT

ENERGY SOLUTIONS



WING BATTERIES – ESL 40-12xHT

Stationary, maintenance-free, sealed lead battery 12V - 40Ah

WING ESL-High Temperature Batteries are based on the use of grid plates and fixation of the electrolyte in glass fiber mats (AGM). The features of the ESL-40-12x HT make them versatile and very equipped for use at higher ambient temperatures, without shortening the lifespan like normal lead acid batteries. The features of the ESL make them extremely versatile and can be used in the fields of security lighting, UPS systems, IT / data centers, telecommunications applications etc.

Designlife

12 Years

Electrical Specifications

Nominal Voltage:	12 V
Capacity 25°C to 1.8V/C (20 h):	41,8 Ah
Capacity 25°C to 1.8V/C (10 h):	39,9 Ah
Capacity 25°C to 1.8V/C (8 h):	38,9 Ah
Capacity 25°C to 1.8V/C (3 h):	34,2 Ah
Capacity 25°C to 1.8V/C (1 h):	27,3 Ah
Self discharge @ 25°C per month:	2,5 - 3%
Internal Resistance fully charged:	≈ 7 mΩ
Short circuit current @ 20°C:	1300 A
Charge Voltage (Float) @ 20-25°C (-3mV/°C/c):	2,27-2,29 V/Z
Charge Voltage (Cyclic) @ 20-25°C (-5mV/°C/c):	2,35-2,40 V/Z

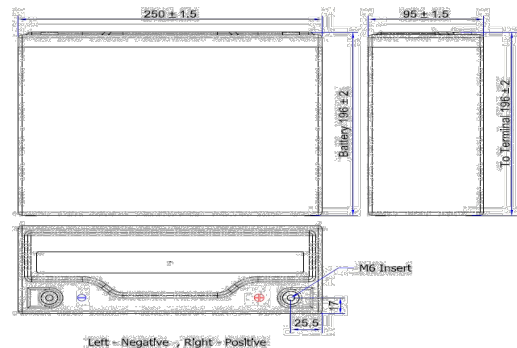
Other specifications

Float Design Life @ 35°C:	12 Years
Dimensions LxWxH (mm):	250x95x196
Total Height (mm):	196 mm
Operating Temperature:	-20 to 50°C
Separator:	AGM
Grid alloy:	Calcium / Tin lead alloy
Case and lid material:	ABS
Electrolyte:	Sulphuric Acid
Terminal / Length:	M6 Insert
Optional terminal types:	none
Torque setting:	5-7 Nm
Weight:	13,3 kg (±5%)

Design Features

- 12 years by 35°C long life design
- High rate discharge optimised
- Advanced Lead-calcium cast grid design
- Enhanced AGM separators for improved electrolyte distribution
- ESL Capacity range: 7Ah to 400Ah
- Designed to comply with standards: DIN EN 60896-2, DIN 43534, BS 6290, IEC 60896-21/22, IEC 61056
- Extremely low gassing
- Reduced self discharge
- 100% recyclable
- No transportation restrictions
- Extremely low gassing

Dimensions



Performance – Current(A) @ 25°C

V/Z	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m	55m	60m	90m	2h	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h
1,80	164	103	78,0	63,3	53,7	46,7	41,3	37,3	34,2	31,4	29,5	27,3	20,2	16,0	11,4	8,90	7,33	6,27	5,46	4,86	4,41	3,99	3,37	2,09
1,75	174	109	83,0	67,3	57,1	49,7	43,9	39,7	36,4	33,9	31,3	29,0	21,4	17,0	12,1	9,44	7,79	6,67	5,82	5,17	4,65	4,24	3,58	2,22
1,70	178	112	85,0	68,8	58,4	50,8	44,9	40,5	37,2	34,6	32,0	29,6	21,9	17,3	12,4	9,65	7,97	6,81	6,03	5,28	4,77	4,33	3,66	2,27
1,65	180	113	86,0	69,7	59,1	51,5	45,4	41,1	37,6	34,9	32,3	30,0	22,2	17,6	12,5	9,77	-	-	-	-	-	-	-	-
1,60	182	114	87,0	70,3	59,7	52,0	45,9	41,5	38,0	35,3	32,6	30,3	22,4	17,7	12,7	9,86	-	-	-	-	-	-	-	-

Performance – Watt per Cell (W/C) @ 25°C

V/Z	5m	10m	15m	20m	25m	30m	35m	40m	45m	50m	55m	60m	90m	2h	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h
1,80	283	193	148	120	102	89,1	79,2	72,4	66,7	61,1	57,3	53,7	39,4	30,9	22,0	17,2	14,2	12,2	10,7	9,56	8,67	7,89	6,70	4,10
1,75	301	205	158	128	108	94,8	84,2	77,0	71,0	65,6	61,1	57,1	41,9	32,9	23,4	18,3	15,1	13,0	11,4	10,2	9,20	8,40	7,13	4,36
1,70	308	210	161	130	110	96,8	86,1	78,7	72,5	66,6	62,1	58,4	42,9	33,6	23,9	18,7	15,5	13,3	11,7	10,4	9,34	8,58	7,29	4,46
1,65	311	212	163	132	112	98,1	87,2	79,7	73,5	67,6	63,1	59,1	43,4	34,1	24,2	18,9	-	-	-	-	-	-	-	-
1,60	314	214	165	133	113	99,0	88,0	80,4	74,2	68,7	64,3	59,7	43,8	34,4	24,4	19,1	-	-	-	-	-	-	-	-