



ES 40-12

12V-42,2Ah



Features

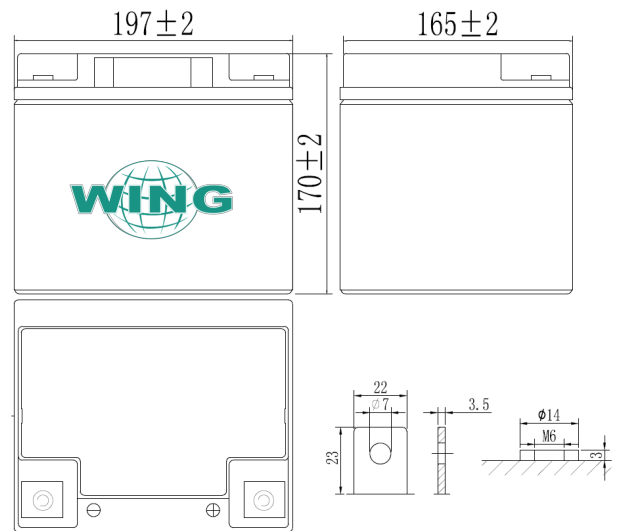
- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

Nominal Voltage	12V
20-hr rate Capacity to 1.8V/cell at 20°C	42,2 Ah
10-hr rate Capacity to 1.8V/cell at 20°C	40 Ah
10-min rate Constant Power 1.6V/cell at 20°C	151 Watts

Dimensions

Lenght	197 mm
Width	165 mm
Height	170 mm
Height over terminals	170 mm
Min height required above terminals	170 mm
Weight (typical)	12,5 kg



Terminal Type

Female threaded terminal	T9/T4 mm
Torque	8,5 Nm

Internal Resistance

Impedance (fully charged)	9,5 mΩ
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Charge Voltage

Float charge voltage at 20°C	2.25~2.30 V/cell
Float charge voltage temperature correction factor <i>(for variations from standard 20°C)</i>	±3 mV/Cell/°C
Cyclic (or Boost) charge voltage at 20°C	2.42~2.49 V/cell
Cyclic charge voltage temperature correction factor <i>(for variations from standard 20°C)</i>	±4 mV/Cell/°C
Charge Current	
Maximum charge current limit	12 A
Remote Degassing Facility	-
Degassing Tube Diameter	-

Operating Temperature Range

Storage (fully charged condition)	-20 °C to 50 °C
Charge	-10 °C to 50 °C
Discharge	-15 °C to 50 °C

Storage

Capacity loss in storage at 20°C / month	<3 %
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Case Material

Standard option	ABS (UL94:V0 / HB)
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Design Life

EUROBAT Classification (High Performance)	6 - 9 years at 20 °C
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Maximum Discharge Current

1 Second	200 A
1 Minute	130 A
Short Circuit Current	540 A

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



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Constant Current Discharge - Amps at 20°C (In MINUTES)

V/cell	5	10	15	20	25	30	35	40	45	50	55	60	90
1,6	126	84,0	66,0	54,0	45,6	40,0	36,7	33,0	30,0	28,1	26,3	24,8	18,4
1,63	124	83,2	65,3	53,6	45,2	39,7	36,4	32,7	29,8	27,9	26,1	24,6	18,4
1,65	122	81,5	64,4	52,7	44,5	39,2	35,9	32,3	29,4	27,5	25,8	24,4	18,3
1,7	117	78,1	62,0	50,8	42,9	38,0	34,8	31,4	28,5	26,7	25,0	23,8	18,1
1,75	112	74,8	59,9	49,0	41,4	37,1	34,0	30,6	27,8	26,0	24,4	23,3	17,8
1,8	106	70,6	56,8	46,4	39,2	35,7	32,8	29,5	26,8	25,1	23,5	22,6	17,7

Constant Current Discharge - Amps at 20°C (in HOURS)

V/cell	2	3	4	5	6	7	8	9	10	12	20
1,6	14,6	10,2	8,36	7,14	6,24	5,47	4,90	4,44	4,07	3,46	2,14
1,63	14,6	10,2	8,34	7,12	6,22	5,49	4,88	4,43	4,06	3,45	2,13
1,65	14,5	10,1	8,31	7,10	6,21	5,46	4,87	4,41	4,06	3,45	2,13
1,7	14,4	10,1	8,26	7,05	6,16	5,43	4,83	4,39	4,05	3,44	2,13
1,75	14,2	10,0	8,20	7,00	6,12	5,40	4,80	4,37	4,03	3,42	2,11
1,8	13,8	9,7	7,95	6,79	5,94	5,29	4,66	4,36	4,00	3,40	2,10

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

V/cell	5	10	15	20	25	30	35	40	45	50	55	60	90
1,6	221	151	121	98,8	84,4	74,8	68,6	61,7	56,1	52,8	49,7	47,1	35,0
1,63	217	150	120	98,0	83,7	74,2	68,0	61,2	55,7	52,4	49,3	46,7	34,9
1,65	214	147	118	96,4	82,3	73,3	67,2	60,5	55,0	51,7	48,7	46,4	34,7
1,7	205	141	114	92,9	79,3	71,1	65,2	58,6	53,3	50,2	47,3	45,2	34,4
1,75	196	135	110	89,7	76,6	69,3	63,6	57,2	52,0	48,9	46,1	44,3	33,9
1,8	185	127	104	85,0	72,5	66,8	61,3	55,1	50,1	47,1	44,4	43,0	33,6

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

V/cell	2	3	4	5	6	7	8	9	10	12	20
1,6	28,2	20,0	16,4	14,1	12,3	10,8	9,69	8,80	8,10	6,89	4,28
1,63	28,2	19,9	16,3	14,0	12,3	10,8	9,67	8,76	8,09	6,87	4,27
1,65	28,0	19,9	16,3	14,0	12,2	10,8	9,64	8,73	8,09	6,87	4,27
1,7	27,8	19,7	16,2	13,9	12,1	10,7	9,57	8,69	8,06	6,85	4,25
1,75	27,4	19,6	16,1	13,8	12,1	10,6	9,50	8,66	8,02	6,81	4,23
1,8	26,7	19,0	15,6	13,4	11,7	10,4	9,22	8,62	7,96	6,77	4,20