

Product design features:

- EUROBAT specification Long Life
- Extremely high float life performance
- Low self discharge rates
- Low internal resistance
- Wide range of operating temperature -20°C to +55°C
- Compact design with high energy density
- ETSI Rack integration
- One-way valve regulated system with flame-arrestor
- Internal gas recombination efficiency 98% - 99%
- Low installation cost, maintenance free product
- Delivered ready for use
- Shock resistant ABS flame retardant container and lid
- Sealed for leak-free operation, inline automatic tested
- Female M8 brass terminals with no need for retightening
- Non-hazardous cargo for ground, sea and air transport
- Fully recyclable product

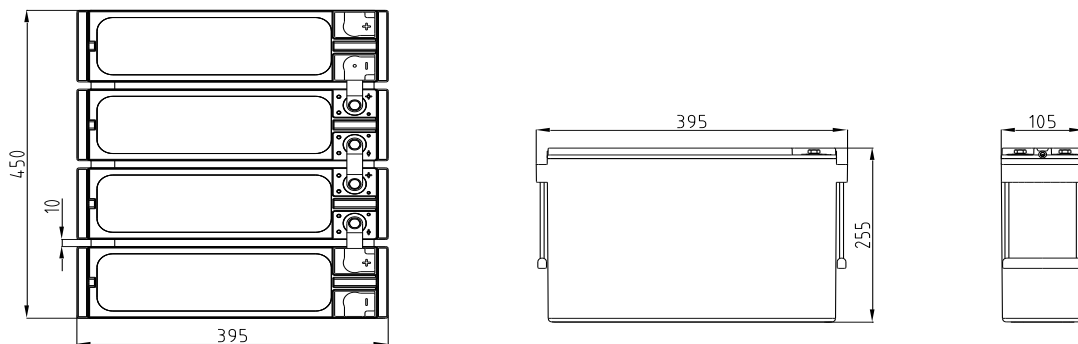
ISO 9001, ISO 14001, OHSAS 18001, AQAP 2110



All VRLA batteries are fully compliant with IEC 60 896 - 21/22, EN 60 896 - part 2, BS 6290 - part 4

Specifications:

- Nominal Voltage: 12V
- Terminal type: Front
- Grid alloy: Calcium/Tin lead alloy
- Plates: Flat Pasted
- Separators: AGM
- Active material: Very high purity lead
- Case and cover: ABS F.R. class V0
- Carrying Handles: Yes
- Terminal torque: 8 Nm
- Electrolyte: Sulphuric acid, Analytical grade purity
- Venting Valve: One way, self resealing,
  - Opening pressure 120 mBar
  - Resealing pressure 105 mBar
- Central degassing system: Available
- Terminal sealing: Mechanical + epoxy double sealing
- Connectors: Supplied as standard
- Shelf life: Up to 1 year



**Mechanical Characteristics**

	SI Units	US Units
<b>Length</b>	395 mm	15.55 inches
<b>Width</b>	105 mm	4.13 inches
<b>Height</b>	255 mm	10.04 inches
<b>Typical Weight</b>	25.2 kg	55.56 lbs
<b>Terminal Torque</b>	8.0 Nm	70.8 in.lbs

Performance characteristics:

- Charging voltage: Float 2.27 – 2.29 Vpc at 20°C  
Boost charge 2.40 Vpc at 20°C
- Temperature compensation: -3mV/°C
- Short Circuit Current: 1940 A (IEC 60 896 -21/22)
- Internal resistance: 6.59 mOhms (IEC 60 896 -21/22)
- Recommended End of Discharge voltage:
  - From 5 min to 1 hour: 1.65 Vpc
  - From 1 to 5 hours: 1.70 Vpc
  - From 5 to 8 hours: 1.75 Vpc
  - From 8 to 20 hours: 1.80 Vpc
- Self discharge: Less than 2.5% per month at 20°C
- Storability without recharging: Up to 6 months at 20°C

**Performance and characteristics at different temperatures (capacity correction)**

Discharge time	0 °C	5 °C	10 °C	15 °C	20 °C	25 °C	30 °C	35 °C	40 °C
From 5 to 59 minutes	0.77	0.83	0.87	0.92	0.96	1	1.02	1.05	1.06
From 1 to 24 hours	0.83	0.87	0.91	0.94	0.97	1	1.02	1.03	1.04

**Battery capacity at constant current discharge (Ah) for battery 12MVR80TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.60	20.1	36.1	45.1	54.0	64.4	69.5	73.6	76.3	78.9	83.1	84.6	87.8
1.65	19.3	35.0	44.3	52.5	63.1	68.3	72.6	75.6	78.3	82.5	83.9	87.1
1.70	17.9	33.6	42.6	51.3	61.9	67.2	71.7	74.5	77.3	81.8	83.3	86.3
1.75	15.9	31.7	40.2	50.0	60.4	66.1	70.3	73.1	76.3	81.0	82.9	85.4
1.80	13.7	29.5	36.9	48.4	59.0	64.8	69.3	72.2	75.0	80.0	82.0	84.7
1.85	12.1	26.0	34.8	46.7	58.3	63.8	68.2	71.0	73.8	78.7	81.0	84.1

**Discharge performance at constant current discharge (A) for battery 12MVR80TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.60	240.9	144.3	90.2	54.0	32.2	23.2	18.4	15.3	13.1	10.4	8.5	4.4
1.65	231.3	140.1	88.6	52.5	31.6	22.8	18.1	15.1	13.1	10.3	8.4	4.4
1.70	214.2	134.5	85.3	51.3	31.0	22.4	17.9	14.9	12.9	10.2	8.3	4.3
1.75	190.4	126.9	80.4	50.0	30.2	22.0	17.6	14.6	12.7	10.1	8.3	4.3
1.80	164.6	118.1	73.8	48.4	29.5	21.6	17.3	14.4	12.5	10.0	8.2	4.2
1.85	144.9	104.0	69.5	46.7	29.1	21.3	17.1	14.2	12.3	9.8	8.1	4.2

**Discharge performance at constant power discharge (W per cell) for battery 12MVR80TA at 25°C**

Uf, Vpc	5 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.60	435.9	272.5	173.4	105.2	63.8	46.0	36.7	30.6	26.3	20.9	17.1	8.9
1.65	417.2	264.3	170.1	102.1	62.3	45.2	36.0	30.1	26.2	20.7	16.9	8.8
1.70	384.2	252.9	163.3	99.5	61.0	44.3	35.6	29.7	25.8	20.5	16.7	8.7
1.75	338.5	237.6	159.2	96.8	59.3	43.5	34.9	29.1	25.4	20.2	16.6	8.6
1.80	289.4	219.9	139.7	93.5	57.8	42.6	34.3	28.6	24.9	20.0	16.4	8.4
1.85	252.4	191.8	131.0	90.0	57.0	42.0	32.4	28.2	24.5	19.6	16.2	8.3