DELTA DTX Series Lead Acid Batteries are designed for use in renewable energy-based power systems, including solar and wind energy, autonomous energy supply systems. The batteries are sealed and maintenance-free, with a service life of 10 years in a buffer mode. Manufactured by using GEL technology: during the production process(a gel solution of sulfuric acid gelled in a gel) is used as an electrolyte, which ensures high battery resistance to deep discharges (optimal when operating in a cyclic mode) and stable operation under conditions of ambient temperature changes.

Battery construction

Element	Positive plate	Negative plate	Case	Lid	Valve	Terminal	Separator	Electrolyte
Material	Lead dioxide	Lead	ABS		Rubber	Copper	Fiberglass	Acid

Specifications

Nominal voltage.....12 V
Cell.....6
Design life.....10 years
Nominal capacity (25°C)
20 hours rate (5 A; 1,75 V/cell).....100 Ah
10 hours rate (9,71 A; 1,75 V/cell).....97 Ah
5 hours rate (18,1 A; 1,70 V/cell).....90,5 Ah
Self-discharge.....3% capacity per month 20°C

Internal resistance (25°C).....5 mΩ

Operating temperature range

Discharge..... -10÷40°C
Charge..... -20÷60°C
Storage..... -20÷60°C
Maximum dischsrge current (25°C).....900A (5s)
Cycle mode (2,35÷2,4 V/cell)
Max.charge current.....20 A
Temperature correction factor.....30 mV/°C
Standby mode (2,25÷2,3 V/cell)
Temperature correction factor.....20 mV/°C

Application

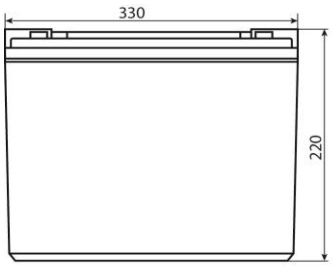
- Uninterruptable power supply
- Back up power supply
- Communication system
- Renewable energy system
- Autonomous power supply systems

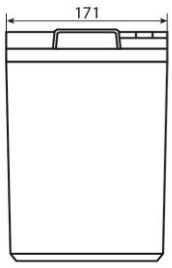
Performance & characteristics

- AGM technology allows to recombinate 99% of the generated gas;
- No restrictions on air transportation;
- Compliance with the UL requirements;
- Lead plates, alloyed by calcium, provide high energy density;
- Maintenance-free. Do not require distillate topping;
- Long service life;
- The battery case is made of flame-retardant ABS

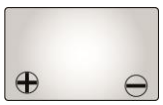
Dimensions (±2mm)

Length, mm.....330
Width, mm.....171
Height, mm.....215
Height over terminals, mm.....220
Weight (±3%), kg.....30

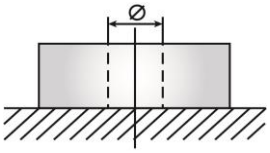


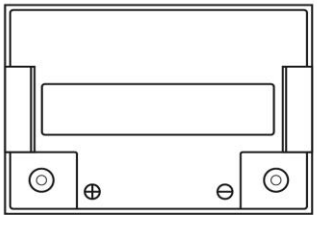


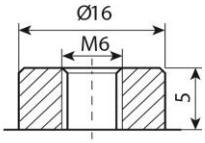
Layout
B



Terminal type
Insert Ø6







Discharge Constant Current, A (25°C)

V/cell	5 min	10 min	15 min	30 min	1 h	3 h	5 h	10 h	20 h
1,60	321	227	181	113	65,0	27,7	18,3	9,99	5,29
1,65	311	216	178	111	64,7	27,6	18,2	9,90	5,19
1,70	302	208	175	110	64,1	27,4	18,1	9,80	5,10
1,75	271	192	167	107	63,5	27,3	17,9	9,71	5,00
1,80	245	175	154	102	62,0	26,5	17,6	9,61	4,90

Discharge Constant Power, W/cell (25°C)

V/cell	5 min	10 min	15 min	30 min	1 h	3 h	5 h	10 h	20 h
1,60	553	403	333	214	125	55,2	36,4	19,9	10,6
1,65	542	390	327	212	125	55,0	36,3	19,8	10,4
1,70	536	380	324	210	124	54,7	36,2	19,6	10,2
1,75	488	354	309	205	123	54,5	35,8	19,4	10,0
1,80	444	326	285	197	121	53,0	35,1	19,2	9,81