

## Absorbed Glass Mat VRLA Industrial Battery Block

Discover® Clean & Green™ Series EV Traction Dry Cell Industrial Batteries provide superior high integrity and reliability for environmentally sensitive areas, commercial, industrial and private applications. The maintenance-free, valve regulated lead acid (VRLA) construction makes Discover® EV Traction Batteries the definitive choice for Mobility and Home Medical Equipment (HME); Broadband and Cable TV (CATV); Uninterruptible Power Supplies (UPS); Telecommunication; Photovoltaic, Solar and Renewable Energy Storage; Electronic and Security; Marine and RV; Golf and Electric Vehicle; Aerial Lifts and Fork Lifts; Floor Machines and Robotics.

### Features & Benefits

### EV Traction Dry Cell

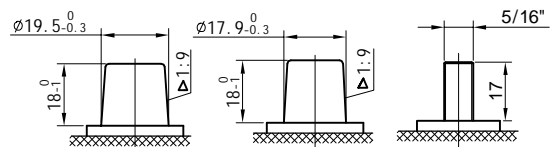
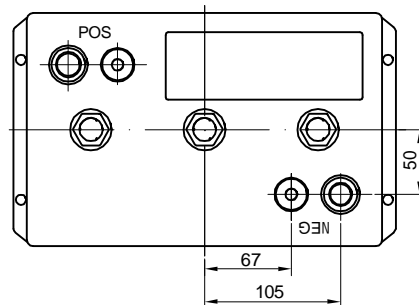
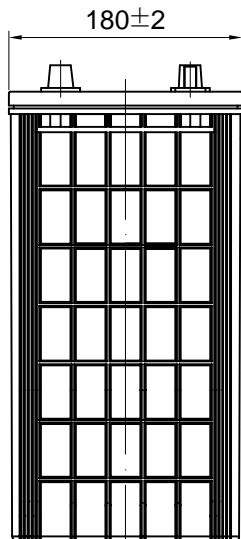
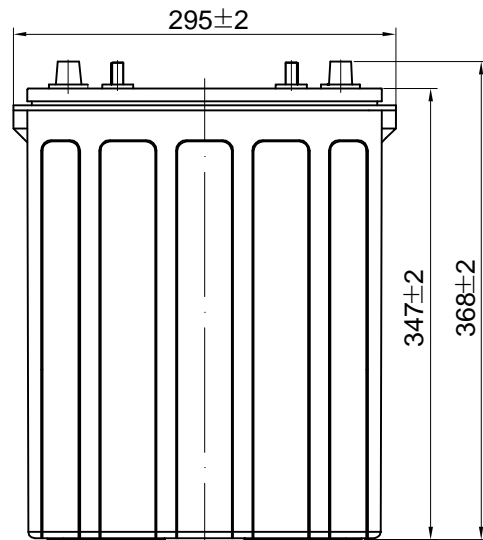
- Completely sealed valve regulated construction.
- Flame arresting pressure regulated safety sealing valves for safety, operating pressure management and protection against atmospheric contamination (excess oxygen being absorbed by negative plates).
- Computer-aided 99.994% pure heavy-duty lead calcium grid designs.
- Tank formed plates guarantees evenly formed and capacity matched plates.
- Discover® proprietary Vision Max® Paste Formula.
- Anchored plate groups to guard against vibration.
- Double insulating Micro porous glass fiber separators.
- Measured and Immobilized electrolyte.
- Vacuum filling and weighing processes.
- Advanced technology for efficient gas recombination of up to 99.9% and freedom from electrolyte maintenance.
- Wide range of operating temperatures (-40°C to 60°C).
- Low self discharge rates (Approx. 1%-3% monthly at 20 °C-25°C / 68°F-77°F).
- High impact reinforced strength copolymer polypropylene cases and flat top designed covers that are rugged and vibration resistant.
- Thermally welded case to cover bonds that eliminate leakage.
- Copper and stainless steel alloy terminals and hardware.
- Multi-terminal options.
- Terminal protectors.
- Removable carry handles.
- Industry leading size and performance options.
- Classified as “NON-SPILLABLE BATTERY” Not restricted for Air (IATA/ICAO) Provision 67, Surface (DOT-CFR-HMR49) or Water (Classified as non-hazardous per IMDG amendment 27) transportation.
- Can be used in multiple orientations (upside down is not recommended).
- Compatible with sensitive electronic equipment.
- Quality Assurance processes with ISO (4400/992579), QS and TUV Certification EMC tested, CE, ETTS Germany (G4M19906-9202-E-16). UL recognized and approved components (MH29050).
- Tellcordia and Bellcore compliant.



Complies with DOT provisions listed in 49CFR173.159 (d). Special provision A67

## Mechanical Characteristics

Industry Type No.	Volts	Standard (optional) Terminals	Dimensions in Inches (mm)				Approx. Weight in Lbs (Kgs)
			L in(mm)	W in(mm)	H in(mm)	TH in(mm)	
305	6	AM	11.6 (295)	7.1 (180)	13.7 (347)	14.5 (368)	107.8 (48.9)



## Electrical Specifications

Ampere Hour Capacity			Minutes of Discharge					R/C	Cranking Amps	
20HR	10HR	5HR	@25A	@56A	@75A	@85A	@100A	@25A	32°F/ 0°C	0°F/ -18°C
* - Performance averages after 25 cycles										
312	288	271	736	295	208	177	142	660	1400	1050

Constant current discharge ratings-amperes at 20°C (68°F)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	--	--	--	--	212	179	84.8	55.7	29.6
1.65V	--	--	--	--	203	172	83.6	55.2	29.4
1.70V	--	--	--	--	194	165	82.3	54.7	29.1
1.75V	--	--	--	--	184	158	81.0	54.2	28.8
1.80V	--	--	--	--	174	150	79.7	53.7	28.5

Constant power discharge ratings-watts per cell at 20°C (68°F)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	--	--	--	--	405	343	215	158	108
1.65V	--	--	--	--	389	330	211	156	107
1.70V	--	--	--	--	372	317	207	154	106
1.75V	--	--	--	--	355	304	203	152	105
1.80V	--	--	--	--	338	290	199	150	104

Internal resistance	Fully charged at 20°C: 2.4 mOhms		
Self discharge	<3% of capacity per month at 20°C		
Operating temperature range	Discharge	Charge	Storage
	-20~60°C	-10~50°C	-20~60°C
Short circuit current (20°C)	2500A		

CHARGE METHODS: Constant voltage charge at 20°C (68°F)	Charge voltage	Temperature compensation	Maximum Current	Peak 5 seconds	Peak 10 seconds	Maximum continuous	Recommended maximum continuous
Standby use	6.8-6.9V	-10mV/°C	Maximum charge current	1C10A	0.75C10A	0.5C10A	0.3C10A
Cyclic use	7.2-7.35V	-15mV/°C	Maximum discharge current	2C10A	1.5C10A	1C10A	0.5C10A

Contact Discover Engineering for OEM specific charging algorithms!

## Charge / Discharge Tables & Graphs

