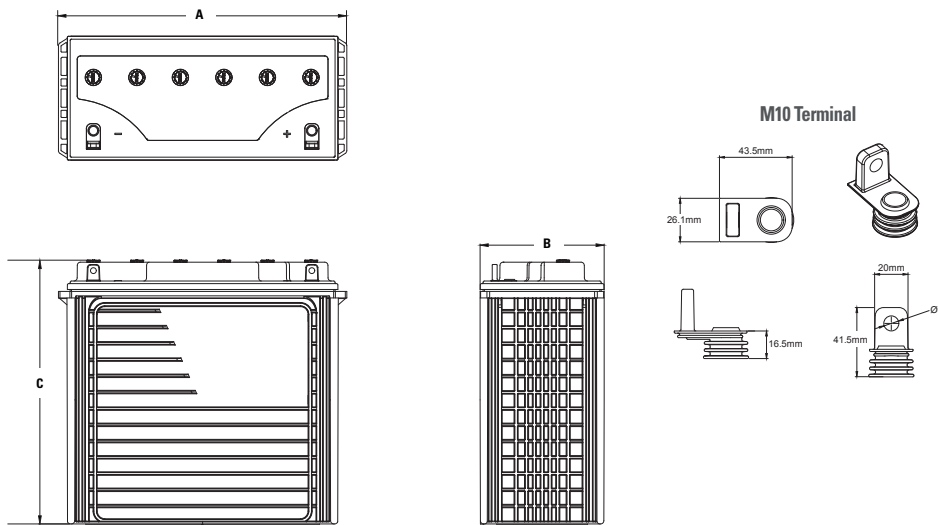


## Tubular Gel SOPzV Block

Discover<sup>®</sup> Tubular Gel SOPzV batteries are maintenance-free and provide superior deep cycling performance and reliability for demanding commercial, industrial and residential applications. Providing reliable energy storage for Stationary Backup and Telecom Networks, and Renewable Energy applications with its Advanced Tubular Plate Technology to deliver long service life. Discover<sup>®</sup> Tubular Gel SOPzV batteries provide maximum efficiency per discharge-charge cycle, and proven reliability in remote, high temperature, or unstable power network installations.

### MECHANICAL DRAWINGS



### MECHANICAL SPECIFICATIONS

Industry Reference	Tubular Gel SOPzV	
Length (A)	17.5 in	445 mm
Width (B)	7.5 in	190 mm
Height	-	-
Total Height (C)	16.1 in	410 mm
Weight	143 lbs	65 kgs
Terminal	M10	
Poles	2	
Cell(s)	6	
Container	PP	

### ELECTRICAL SPECIFICATIONS

Voltage	12	
Reference LVD / I10	20% DOD	12.5 V
	50% DOD	12.1 V
	80% DOD	11.6 V
Cycle Life	20% DOD	5000
	50% DOD	2500
	80% DOD	1500
Short Circuit	1720 A	
Self Discharge	5% per month	
Maximum Operating Temperature	-20°C / -4°F   45°C / 113°F	
Recommended Operating Temperature	15°C / 59°F   35°C / 95°F	
Electrolyte	Gel	

### ELECTRICAL SPECIFICATIONS

240 HR	120 HR	100 HR	20 HR	10 HR
1.85 Volts Per Cell (VPC)			1.75 Volts Per Cell (VPC)	
272 AH	270 AH	265 AH	230 AH	200 AH

NOTE: All Electrical Specifications are based on 20°C / 68°F temperature.

### BENEFITS & FEATURES

#### Long Service Life

Tubular positive plates with polyester gauntlets are designed to prevent active material plate shedding and provide the highest cycling expectancy amongst lead acid technologies, particularly in PSoC (Partial State of Charge) operation.

High energy density tubular plates in combination with lead calcium alloy reduces self discharge and charge current requirements during float operation and extends battery service life.

#### Performance and Reliability

Battery containers are made of Polypropylene (PP) to endure high impact and heat environments.

#### Maintenance and Optimization

SOPzV Gel batteries are valve-regulated, non-spillable and completely maintenance-free and available with the option to be horizontally mounted.

#### Safety

All products are tested and certified to multiple international safety standards for use in Photovoltaic and Stationary applications.

#### Lowest Total Cost of Ownership

SOPzV Tubular batteries provide the Lowest Total Cost of Ownership (TCO) amongst lead acid technologies. Further savings can be achieved in Hybrid systems through diesel abatement and peak shaving.

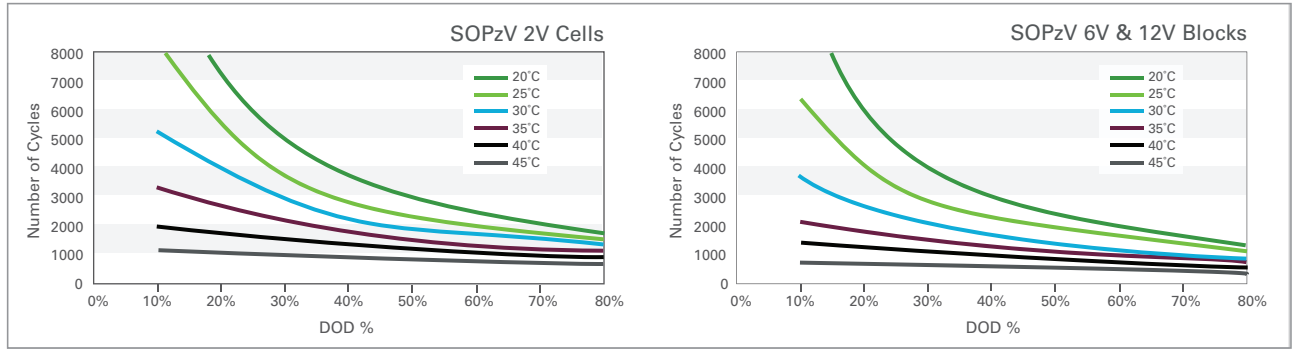
### CERTIFIED QUALITY

Discover and its manufacturing facilities are fully certified to ISO 9001/14001 and OSHA 18001 standards. OPzS and OPzV Tubular products are also tested in compliance to multiple international standards:

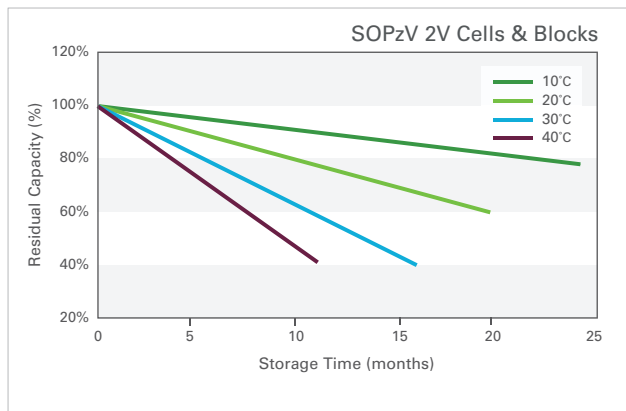
- Eurobat "Long Life" classification
- IEC 60896-21/22 (OPzV) and IEC60896-11 (OPzS) test standard for stationary applications
- IEC 61427 test standard for photovoltaic energy systems
- EN50272-1 and EN50272-2 safety requirements
- DIN 40742 (OPzV) and DIN 40736 (OPzS) standard for stationary tubular plate cells
- UN 2800 (US DOT Compliance)



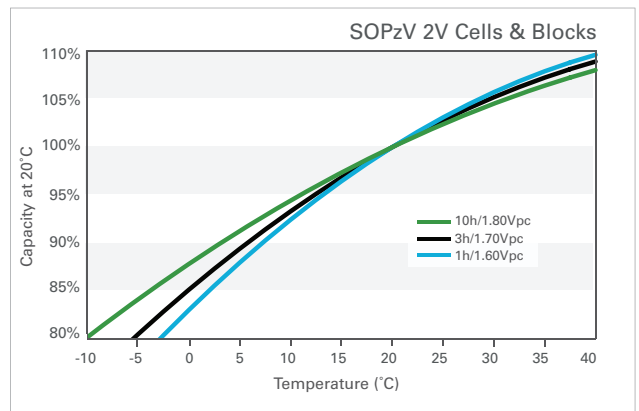
## EXPECTED NUMBER OF CYCLES IN RELATION TO THE DEPTH OF DISCHARGE



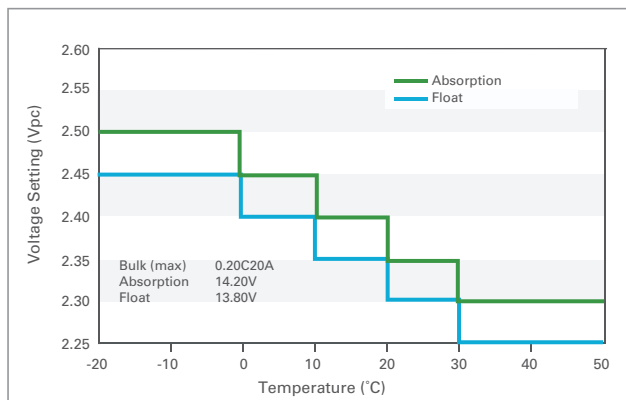
## SELF-DISCHARGE CHARACTERISTICS



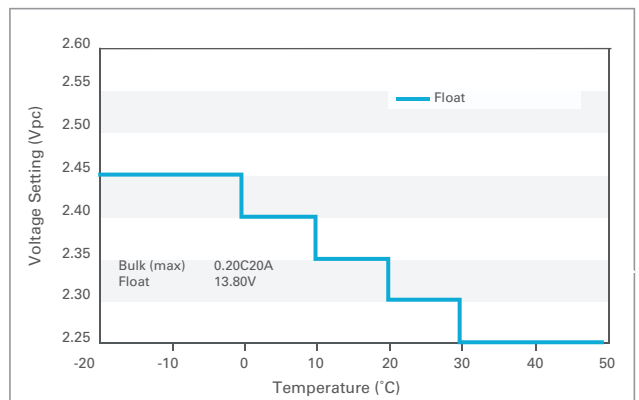
## CAPACITY VS. TEMPERATURE



## CHARGE SETTINGS FOR CYCLIC USE (25°C)



## CHARGE SETTINGS FOR STANDBY USE (25°C)



Discover® attempts to ensure the correctness of the product description and data contained herein. We reserve the right to change designs, specifications and pricing at any time without notice or obligation. It is the responsibility of the reader of this information to verify any and all information presented herein.