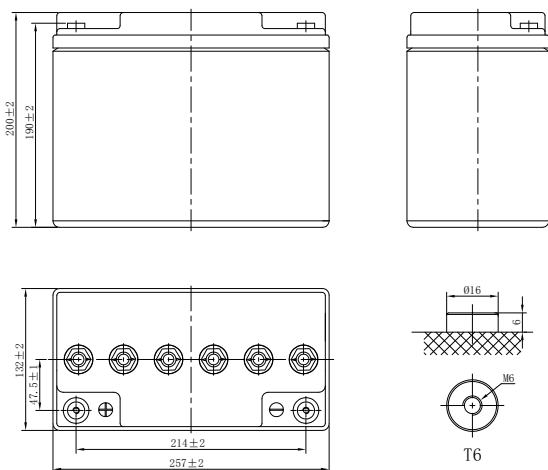


DSG SERIES -GELL BATTERY

DSG12-45 (12V-45AH)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	12V	
Nominal Capacity (25°C)	C ₂₀ , 1.80V/cell	45Ah
Dimension	Length	257mm (10.1inches)
	Width	132mm (5.20inches)
	Container Height	200mm (7.87inches)
	Total Height	200mm (7.87inches)
Approx Weight	15.5kg (34.2lbs)	
Terminal	T6(M6)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	1035A	
Internal Resistance (25°C)	Approx 13 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~60°C (-4~140°F)
	Charge	-20~40°C (-4~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.25C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.23-2.27V/cell	2.35-2.40V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤2.5% per month at 25°C (77°F). DSG series batteries may be stored up to 9 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)																
F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	
1.85V/cell	52.6	45.6	34.9	29.9	22.8	19.1	14.7	12.1	9.23	7.64	6.60	5.69	4.55	3.75	2.16	
1.80V/cell	59.8	51.7	40.6	33.4	25.1	21.1	15.9	13.1	9.89	8.10	6.93	5.98	4.76	4.00	2.25	
1.75V/cell	64.8	56.0	43.8	36.7	27.2	22.5	16.7	13.9	10.4	8.48	7.20	6.19	4.92	4.09	2.30	
1.70V/cell	67.8	58.8	45.1	39.8	29.3	24.3	17.8	14.8	11.0	8.84	7.47	6.42	5.10	4.18	2.33	
1.67V/cell	71.3	61.2	46.7	40.9	29.9	24.8	18.2	15.1	11.2	8.98	7.58	6.51	5.14	4.22	2.35	
1.60V/cell	73.7	63.1	48.9	43.7	32.1	26.3	18.9	15.7	11.7	9.32	7.81	6.67	5.25	4.28	2.38	
Constant Power Discharge (Watts/cell) at 25°C (77°F)																
F.V/Time	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h	
1.85V/cell	99.0	86.4	68.3	57.6	44.2	37.1	28.6	23.7	18.1	15.0	13.0	11.3	9.04	7.49	4.31	
1.80V/cell	110.8	96.7	76.4	63.7	48.4	40.8	30.8	25.5	19.3	15.9	13.6	11.8	9.45	7.95	4.48	
1.75V/cell	118.2	103.2	81.5	69.5	51.9	43.4	32.3	26.9	20.3	16.6	14.1	12.2	9.73	8.13	4.57	
1.70V/cell	121.5	106.9	84.7	74.2	55.5	46.3	34.0	28.5	21.4	17.2	14.6	12.5	10.0	8.29	4.63	
1.67V/cell	126.3	110.2	87.1	75.8	56.3	47.1	34.6	29.0	21.7	17.4	14.8	12.7	10.1	8.36	4.66	
1.60V/cell	128.1	111.8	88.3	80.4	60.0	49.8	35.9	30.0	22.5	18.0	15.2	13.0	10.3	8.43	4.72	

DSG SERIES -GELL BATTERY

DSG12-45 (12V-45AH)



APPLICATIONS

- Telecommunications
- Solar system
- Wind power system
- Engine starting
- Wheelchair, Floor cleaning machines, Golf trolley, Boats

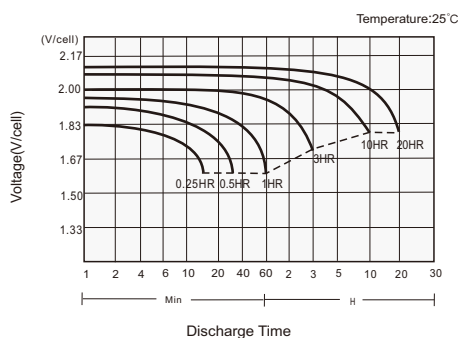
GENERAL FEATURES

- 12 years design life (25°C)
- Gelled electrolyte for superior thermal management, long float life
- Efficient gas recombination decreases gassing/water and extends battery life
- Robust design - resilient in harsh conditions
- Proof against deep discharge - greater long-term energy delivery and cycle life

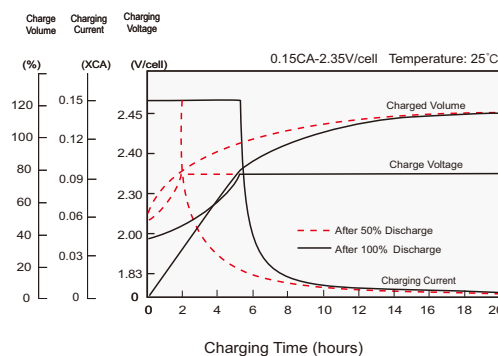
STANDARDS

- IEC60896 Certified
- Classified as "Long Life" according to Eurobat
- UL, CE Approved
- Manufactured in DESA, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

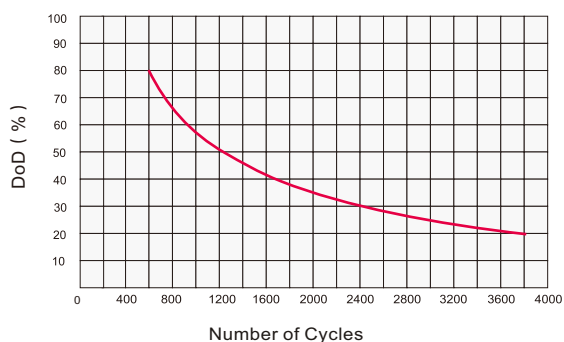
Discharge Characteristics



Charging Characteristics



Cycle Life in Relation to DoD



Self Discharge Characteristics

