



## Battery Range Summary

PowerSafe<sup>®</sup> DSG batteries have been carefully engineered to take on the demanding power needs of the utility market. The multi-cell design with individual post utilizes less floor space while allowing for integration of battery monitoring and test equipment used in routine maintenance. The 0.25" thick positive plate makes DSG batteries ideally suited for the long duration and complex duty cycle requirements inherent to today's switchgear, utility and control applications.

PowerSafe DSG series batteries employ a Slide-Lock<sup>™</sup> post seal that allows for natural plate growth over time for maximum reliability and reduced maintenance. The innovative tongue-and-groove jar-to-cover seal provides a robust airtight seal.

Multi-cell construction requires fewer units, resulting in lower installation costs. All battery systems are rated at 100% capacity at initial discharge and offer 20-year life expectancy in float service at 77°F (25°C) ambient temperature.

### Features and Benefits

- Capacity range 295 - 1600 Ah at the 8 hour rate to 1.75vpc at 77°F (25°C)
- 100% initial capacity
- 12 multi-cell units, six 8v units and six 4v units reduces linear footprint
- Individual (or dual) terminals per cell to allow individual cell monitoring
- Plated copper terminals, single hole for 5 and 7 plate models, dual hole for remainder of models
- Thick grids for excellent long duration discharge and long life

## Construction

- 0.25" thick positive plates provide excellent long discharge rates for complex load profiles
- Separator - microporous phenolic resin with glass fiber retainers
- Standard jar material is Styrene Acrylonitrile (SAN) with flame retardant PVC cover. Optional PC flame retardant jar with flame retardant PVC cover (5-13 plate) or flame retardant PC cover (15-27 plate)
- Electrolyte - dilute sulfuric acid with specific gravity of 1.215
- Slide-Lock™ post seal design
- Flame arrestors - included for increased operational safety

## Installation and Operation

- Tin-plated copper inter-cell connections standard; lead-plated optional
- Lead-plated copper posts DSG-05 to DSG-19 - one positive and one negative post per cell; DSG-21 to DSG-27 - two positive posts and two negative posts per cell
- Optimized for long duration discharge and complex duty cycle required for switchgear application
- 20-year life expectancy in float service at 77°F (25°C)
- Operating temperature: 32°F (0°C) to 104°F (40°C)  
Recommended temperature: 68°F (20°C) to 86°F (30°C)

## Standards

- The management systems governing manufacturing of this product are ISO-9001 and ISO-14001 certified
- Optional IEEE 450 or customer specific testing available

## General Specifications

Battery Type*	Nominal Capacity (Ah) 8 hr rate to 1.75Vpc @ 25°C/77°F	Cells per Container	Nominal Dimensions								Weights - Volumes							
			Length**		Width		Height		Height to top of terminal plate		Unpacked Container		Domestic Packed Container		Electrolyte Only / 1.215 S.G. per cell			
			in	mm	in	mm	in	mm	in	mm	lbs	kg	lbs	kg	gallon	liter	lbs	kg
<b>4DSG-05</b>	295	4	9.5	241	16.0	406	22.0	559	26.2	665	267	121	276	125	6.3	23.8	64.0	29.0
<b>4DSG-07</b>	375										328	149	337	153	5.8	22.0	59.2	26.8
<b>4DSG-09</b>	595										494	224	509	231	13.2	49.8	134	60.6
<b>4DSG-11</b>	680										555	252	570	259	12.2	46.0	124	56.0
<b>4DSG-13</b>	745	4	16.7	424	16.0	406	22.7	576	28.8	731	617	280	632	287	11.1	42.1	113	51.3
<b>4DSG-15</b>	885										756	343	775	352	11.0	41.6	112	50.7
<b>2DSG-17</b>	1053										435	197	450	204	6.6	25.1	67.5	30.6
<b>2DSG-19</b>	1132										451	205	466	211	6.0	22.5	60.5	27.4
<b>2DSG-21</b>	1373	2	12.1	308	16.0	406	22.7	576	30.0	763	546	248	565	256	10.2	38.6	104	47.0
<b>2DSG-23</b>	1449										580	263	599	272	9.8	37.1	99.5	45.1
<b>2DSG-25</b>	1524										615	279	634	288	9.4	35.5	95.3	43.2
<b>2DSG-27</b>	1600										650	295	669	303	9.2	34.8	93.4	42.4

\* Prefix number indicates cells per unit. Suffix number indicates total plates per cell.

\*\* 0.25" must be added between units for spacing purposes when calculating total battery length.

