



# PowerSafe® VGL

Renewables, Telecommunications and Utility

## Battery Range Summary

The pocket plate design, combined with the Nickel-cadmium (Ni-Cd) chemistry and valve regulated technology places the PowerSafe® VGL in the lead among low maintenance batteries. The Ni-Cd technology provides exceptionally long life at extreme temperatures while inherent extremely low maintenance is enhanced by the valve regulated design - qualities which unquestionably make the Ni-Cd series of batteries an ideal choice for low rates of discharge over long periods.

The robust design provides excellent resistance against electrical and mechanical stress, low risk of terminal degradation and a proven 20 plus year life. This combination along with proven use in service make the PowerSafe VGL battery the right choice for industrial applications, proven reliability and the highest safety integrity. The PowerSafe VGL battery series covers discharges of 1 hour to 100 hours.



### Features and Benefits

- Capacity range 12-1570Ah
- Single one piece container construction
- Ni-Cd pocket plate design
- Long storage and shelf life
- Wide operating temperature
- Low risk of terminal degradation
- Translucent plastic case for visible electrolyte level monitoring
- Proven 20 plus year service life

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## Construction

- Robust construction means low risk of terminal degradation
- Plate lugs are connected to post by bolting or welding
- Diluted potassium hydroxide electrolyte
- Felt separators insulate plates and improve recombination rates
- Dual post seal design minimizes carbon formation
- Single one piece container construction
- Flame arresting low Pressure Relief Valve (PRV)

## Installation and Operation

- Extremely low watering requirements over normal service lifetime
- Low maintenance technology with recombination rates up to 90%
- Cells can be stored for long durations without damage
- Translucent case allows for electrolyte level verification
- Proven long service life with 20 plus years in stationary cycling operations

- Continual operating temperature: 32°F (0°C) to 104°F (40°C)  
Recommended temperature: 50°F (10°C) to 86°F (30°C)

## Standards

- Conforms to IEC 62259
- The management systems governing the manufacture of this product are ISO 9001:2008 and ISO 14001:2004 certified

## General Specifications

PowerSafe® VGL Battery	Nominal Voltage (V)	Nominal Capacity (Ah) 5hr. Rate to 1.00 Vpc @ 68°F	Nominal Dimensions								Typical Weight Unpacked		Short Circuit Current (Amps)	Internal* Resistance Milli-Ohms
			Length		Width		Height		Height 1					
			in	mm	in	mm	in	mm	in	mm	lbs	kg		
VGL 12	1.2	12	1.81	46	3.35	85	6.57	167	7.60	193	2.20	1.00	42	27.4
VGL 20	1.2	20	1.81	46	3.35	85	6.57	237	10.4	263	3.09	1.40	70	16.4
VGL 25	1.2	25	1.81	46	3.35	85	6.57	237	10.4	263	3.31	1.50	88	13.1
VGL 35	1.2	35	1.81	46	3.35	85	6.57	237	10.4	263	3.53	1.60	123	9.30
VGL 45	1.2	45	3.35	85	3.35	85	6.57	237	10.4	263	5.95	2.70	158	7.30
VGL 50	1.2	50	3.35	85	3.35	85	6.57	237	10.4	263	6.17	2.80	175	6.60
VGL 60	1.2	60	3.35	85	3.35	85	6.57	237	10.4	263	6.39	2.90	210	5.50
VGL 70	1.2	70	2.09	53	5.28	134	14.3	364	15.5	394	10.8	4.90	245	4.70
VGL 80	1.2	80	2.09	53	5.28	134	14.3	364	15.5	394	11.0	5.00	280	4.10
VGL 100	1.2	100	2.72	69	5.28	134	14.3	364	15.5	394	13.2	6.00	350	3.30
VGL 120	1.2	120	2.72	69	5.28	134	14.3	364	15.5	394	13.9	6.30	420	2.70
VGL 135	1.2	135	2.76	70	6.46	164	14.3	364	15.5	394	17.0	7.70	473	2.40
VGL 155	1.2	155	2.76	70	6.46	164	14.3	364	15.5	394	17.2	7.80	543	2.10
VGL 175	1.2	175	4.25	108	6.46	164	14.3	364	15.5	394	22.9	10.4	613	1.90
VGL 205	1.2	205	4.25	108	6.46	164	14.3	364	15.5	394	23.8	10.8	718	1.60
VGL 225	1.2	225	4.25	108	6.46	164	14.3	364	15.5	394	24.5	11.1	788	1.46
VGL 245	1.2	245	4.25	108	6.46	164	14.3	364	15.5	394	25.6	11.6	858	1.34
VGL 275	1.2	275	4.25	108	6.46	164	14.3	364	15.5	394	26.9	12.2	963	1.19
VGL 300	1.2	300	6.46	164	6.22	158	14.3	364	15.5	394	35.7	16.2	1050	1.10
VGL 330	1.2	330	6.46	164	6.22	158	14.3	364	15.5	394	36.4	16.5	1155	1.00
VGL 350	1.2	350	6.46	164	6.22	158	14.3	364	15.5	394	37.5	17.0	1225	0.94
VGL 375	1.2	375	6.46	164	6.22	158	14.3	364	15.5	394	38.6	17.5	1313	0.88
VGL 390	1.2	390	6.46	164	6.22	158	14.3	364	15.5	394	39.7	18.0	1365	0.84
VGL 420	1.2	420	6.46	164	6.22	158	14.3	364	15.5	394	40.8	18.5	1470	0.78
VGL 440	1.2	440	6.46	164	6.22	158	14.3	364	15.5	394	41.7	18.9	1540	0.75
VGL 500	1.2	500	6.93	176	9.69	246	15.1	382	16.1	410	60.2	27.3	1750	0.66
VGL 555	1.2	555	6.93	176	9.69	246	15.1	382	16.1	410	62.4	28.3	1943	0.59
VGL 585	1.2	585	6.93	176	9.69	246	15.1	382	16.1	410	63.3	28.7	2048	0.56
VGL 610	1.2	610	6.93	176	9.69	246	15.1	382	16.1	410	64.6	29.3	2135	0.54
VGL 645	1.2	645	6.93	176	9.69	246	15.1	382	16.1	410	65.7	29.8	2258	0.51
VGL 665	1.2	665	6.93	176	14.49	368	15.1	382	16.5	420	89.7	40.7	2328	0.49
VGL 705	1.2	705	6.93	176	14.49	368	15.1	382	16.5	420	91.2	41.4	2468	0.47
VGL 750	1.2	750	6.93	176	14.49	368	15.1	382	16.5	420	92.3	41.9	2625	0.44
VGL 795	1.2	795	6.93	176	14.49	368	15.1	382	16.5	420	93.9	42.6	2783	0.42
VGL 835	1.2	835	6.93	176	14.49	368	15.1	382	16.5	420	95.0	43.1	2923	0.39
VGL 890	1.2	890	6.93	176	17.64	448	15.1	382	16.5	420	108	49.2	3115	0.37
VGL 990	1.2	990	6.93	176	17.64	448	15.1	382	16.5	420	118	53.7	3465	0.33
VGL 1110	1.2	1110	6.93	176	17.64	448	15.1	382	16.5	420	123	56.0	3885	0.30
VGL 1260	1.2	1260	6.93	176	22.0	558	15.1	382	16.5	420	141	63.8	4410	0.26
VGL 1320	1.2	1320	6.93	176	22.0	558	15.1	382	16.5	420	145	65.8	4620	0.25
VGL 1390	1.2	1390	6.93	176	22.0	558	15.1	382	16.5	420	149	67.8	4865	0.24
VGL 1460	1.2	1460	6.93	176	22.0	558	15.1	382	16.5	420	153	69.4	5110	0.23
VGL 1570	1.2	1570	6.93	176	22.0	558	15.1	382	16.5	420	156	70.6	5495	0.21

\*Resistance Values are for reference only and not intended to represent an ohmic or baseline measurements.

