With over 100 years of experience in design and manufacturing, EnerSys® combines the well proven PowerSafe® NiCd pocket plate construction with the VGL battery concept. PowerSafe VGL batteries provide an exceptionally long lifetime and are the ideal solution for applications requiring absolute reliability with the minimum of routine maintenance.

PowerSafe VGL batteries provide a service lifetime of over 20 years. The special single cell design and the valve regulated venting system eliminate the need to add water during a normal service life. With a recombination rate of up to 90%, depending on the float voltage and ambient conditions, PowerSafe batteries lead the market in low maintenance standards.

The PowerSafe VGL battery provides all the advantages of the pocket plate design. It has been especially designed for "mixed loads" that include a mixture of high and low rates of discharge. It is used for frequent and infrequent discharges with the recommended discharge time of 1 hr to 100 hr.

PowerSafe VGL

BATTERY RANGE SUMMARY

Features & Benefits

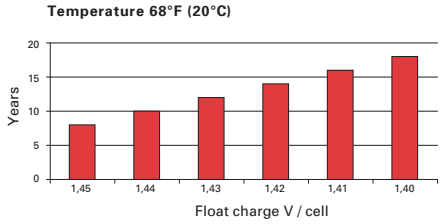
- **Capacity range: 12Ah - 1390Ah**
- **Recommended discharge time: 1 hour to 100 hours**
- **No need to add water during the lifetime but possible if required**
- **Translucent plastic cases for visible electrolyte level**
- **Conforms to IEC 62259**

Advantages of PowerSafe® VGL Batteries

- **Excellent resistance against electrical and mechanical load**
- **No risk of terminal decomposition or catastrophic failure due to plate construction**
- **Proven long service life; 20 years in stationary cycling operations**
- **Robust construction - tolerant minimal maintenance**

Temperature Performance

- **The VGL battery's continuous operational temperature is 32°F (0°C) to 104°F (40°C)**
- **Short term temperature fluctuations from -58°F (-50°C) to 158°F (70°C) can be tolerated**



Effect of charging voltage on water consumption. Time in years to reach the warning electrolyte level "MIN".

Field of Application

UPS systems, emergency lighting, process control, telecommunication, power and substations, oil and gas refineries and railroad signaling

EnerSys® Power/Full Solutions

RESERVE POWER

Publication No: US-VGL-RS-001 - July 2012

Construction

1 Low pressure flame arresting valve

2 PowerSafe® battery safety terminal
Redundant leak protection minimizes carbonate formation

3 Electrode edge
Connected to terminal by screwing or welding providing high mechanical stability

4 Electrode frame
Consisting of electrode edge and side bars, seals the plates and works as a current collector

5 Horizontal pockets
Formed by perforated steel strips containing the active material

6 Felt separator
Special felt separator insulates the plates and improves the internal recombination

General Specifications

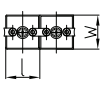
		Nominal Dimensions										Terminals	
PowerSafe® Battery Type	Rated Capacity C5Ah	Length mm	Length in	Width mm	Width in	Height mm	Height in	Height* mm	Height* in	Total Weight kg	Total Weight lbs	Type M - Male F - Female	Size
VGL 12	12	46	1.8	85	3.3	167	6.7	187	7.4	1.03	2.3	M	2 x M 10
VGL 20	20	46	1.8	85	3.3	237	9.3	257	10.1	1.48	3.3	M	2 x M 10
VGL 25	25	46	1.8	85	3.3	237	9.3	257	10.1	1.51	3.3	M	2 x M 10
VGL 35	35	46	1.8	85	3.3	237	9.3	257	10.1	1.64	3.6	M	2 x M 10
VGL 45	45	85	3.3	85	3.3	237	9.3	257	10.1	2.68	5.9	M	2 x M 10
VGL 50	50	85	3.3	85	3.3	237	9.3	257	10.1	2.82	6.2	M	2 x M 10
VGL 60	60	85	3.3	85	3.3	237	9.3	257	10.1	2.97	6.5	M	2 x M 10
VGL 70	70	53	2.1	134	5.3	364	14.3	392	15.4	4.85	10.7	F	2 x M 8
VGL 80	80	53	2.1	134	5.3	364	14.3	392	15.4	5.00	11.0	F	2 x M 8
VGL 100	100	69	2.7	134	5.3	364	14.3	392	15.4	6.18	13.6	F	2 x M 8
VGL 120	120	69	2.7	134	5.3	364	14.3	392	15.4	6.51	14.4	F	2 x M 8
VGL 135	135	70	2.8	164	6.5	364	14.3	392	15.4	7.67	16.9	F	2 x M 8
VGL 155	155	70	2.8	164	6.5	364	14.3	392	15.4	7.84	17.3	F	2 x M 8
VGL 175	175	108	4.3	164	6.5	364	14.3	392	15.4	10.61	23.4	F	2 x M 8
VGL 205	205	108	4.3	164	6.5	364	14.3	392	15.4	10.91	24.1	F	2 x M 8
VGL 225	225	108	4.3	164	6.5	364	14.3	392	15.4	11.17	24.6	F	2 x M 8
VGL 245	245	108	4.3	164	6.5	364	14.3	392	15.4	11.62	25.6	F	2 x M 8
VGL 255	255	108	4.3	164	6.5	364	14.3	392	15.4	11.70	25.8	F	2 x M 8
VGL 275	275	108	4.3	164	6.5	364	14.3	392	15.4	12.22	26.9	F	2 x M 10
VGL 300	300	164	6.5	158	6.2	364	14.3	392	15.4	16.30	35.9	F	2 x M 10
VGL 330	330	164	6.5	158	6.2	364	14.3	392	15.4	16.50	36.5	F	2 x M 10
VGL 350	350	164	6.5	158	6.2	364	14.3	392	15.4	17.00	37.5	F	2 x M 10
VGL 375	375	164	6.5	158	6.2	364	14.3	392	15.4	17.50	38.6	F	2 x M 10
VGL 390	390	164	6.5	158	6.2	364	14.3	392	15.4	18.00	39.7	F	2 x M 10
VGL 420	420	164	6.5	158	6.2	364	14.3	392	15.4	18.50	40.8	F	2 x M 10
VGL 440	440	164	6.5	158	6.2	364	14.3	392	15.4	18.90	41.7	F	4 x M 10
VGL 500	500	176	6.9	246	9.7	382	15.0	408	16.1	27.30	60.2	F	4 x M 10
VGL 555	555	176	6.9	246	9.7	382	15.0	408	16.1	28.30	62.4	F	4 x M 10
VGL 610	610	176	6.9	246	9.7	382	15.0	408	16.1	29.30	64.6	F	6 x M 10
VGL 665	665	176	6.9	368	14.5	382	15.0	408	16.1	40.70	89.7	F	6 x M 10
VGL 750	750	176	6.9	368	14.5	382	15.0	408	16.1	41.90	92.4	F	6 x M 10
VGL 835	835	176	6.9	368	14.5	382	15.0	408	16.1	43.10	95.0	F	8 x M 10
VGL 1110	1110	176	6.9	448	17.6	382	15.0	408	16.1	56.00	123.5	F	10 x M 10
VGL 1390	1390	176	6.9	558	22.0	382	15.0	408	16.1	68.90	151.9	F	10 x M 10

* Includes height over terminals

Battery Layout

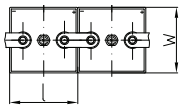
VGL 11 - VGL 30

VGL 40 - VGL 55

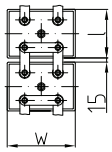


VGL 65 - VGL 250

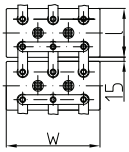
VGL 270 - VGL 400 (M10)



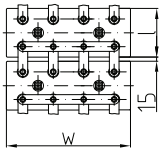
VGL 450 - VGM 550



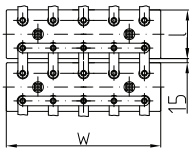
VGL 600 - VGL 750

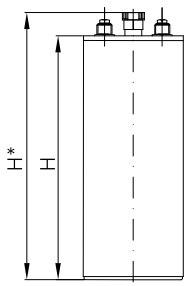


VGL 1000



VGL 1250





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