

# GEL-Power always energy to spare

Marine • Mobile • Land based • Solar • Industrial • Back-up



Datasheet



## 12 V

**100 Ah • 145 Ah • 180 Ah • 225 Ah**

- Deep cycle "long life" battery
- For heavy duty service
- Maintenance free, recombination (VRLA) type
- Shock resistant, heavy duty casing
- Limited ventilation needed
- Transportation by air approved
- For extended cycle life



smart energy solutions

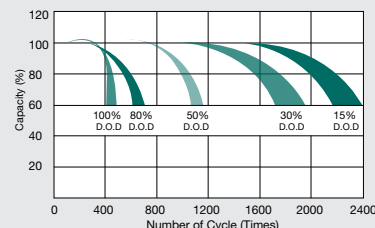


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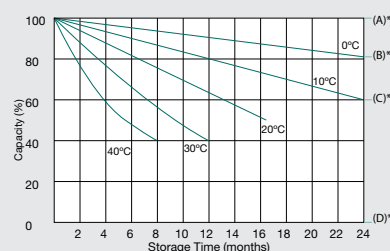


GEL Power	Part #	40290070	40290071	40290072	40290073
<b>Specifications</b>					
Nominal capacity (C20)		100 Ah	145 Ah	180 Ah	225 Ah
Nominal voltage		12.0 V-DC	12.0 V-DC	12.0 V-DC	12.0 V-DC
Type		Deep cycle GEL battery with 12 years floating design life. Superior design for frequent cyclic discharge applications under extreme temperatures. Strong grid construction to ensure reliability under frequent deep discharge use. Over 400 cycles possible at 100% DOD. Extra durable cyclic performance, high efficiency of recovery, therefore most suitable for solar, mobility, marine and deep discharge UPS installations.			
Weight +/- 10%		30.0 Kg	44.0 Kg	53.0 Kg	65.0 Kg
Dimensions l*w*h [mm] (excl. terminals)		328*172*222	340*173*280	530*209*214	522*240*219
Terminal type		M8 stainless steel			
Number of cells		6	6	6	6
<b>Charge/discharge parameters</b>					
Constant voltage Charging (IU, float)		13.60 to 13.80 V-DC @ 25C			
Cyclic Charging (IUU, absorption)		14.25 to 14.60 V-DC @ 25 C			
Recommended charging current limit (higher possible)		20.0 A	29.0 A	36.0 A	45.0 A
Temperature cut-off ratio		4mv/cell/°C			
Discharge cut off voltage		1.75 V @ (A) <= 0.2 C			
100% depth of discharge d.o.d.		1.70 V @ 0.2 C (A) <= 1.0 C			
		1.65 V @ (A) >= 1.0 C			
<b>Rated Capacity @ 25°C</b>					
		rate to 1.75 V per cell	rate to 1.75 V per cell	rate to 1.80 V per cell	rate to 1.80 V per cell
20 hrs discharge		100.0 Ah	145.0 Ah	180.0 Ah	225.0 Ah
10 hrs discharge		95.0 Ah	136.0 Ah	169.0 Ah	209.0 Ah
5 hrs discharge		84.0 Ah	117.0 Ah	146.0 Ah	181.0 Ah
Peukert Coefficient		1.21 <P < 1.24	1.21 <P < 1.24	1.21 <P < 1.24	1.21 <P < 1.24
Time reserve minutes		165 minutes	261 minutes	341 minutes	450 minutes
25 amps discharge		165 minutes	261 minutes	341 minutes	450 minutes
Self discharge		less than 3% per month @ 25°C			
Storage time		GEL-power batteries can be stored for maximum 6 months at 25°C, Charging recommended before using.			
<b>Battery parameters</b>					
Cranking amps @ 25°C (5 sec)		1000 A	1450 A	1800 A	2250 A
Cycle life at 80% of D.O.D		600	600	600	600
Internal resistance Approx.		7.5 MΩ	5.0 MΩ	6.0 MΩ	4.0 MΩ

**Life characteristics of cyclic use**



**Storage characteristics**



- \*(A) Supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)
- \*(B) Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible
- \*(C) Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

**Discharge characteristics curve**

