

Deep cycling with full recovery from deep discharge.

The RDG12-90 is a 12 V, 90 Ah (10-hour rate) GEL Deep Cycle lead-acid battery from the Rekoser Deep Gel series. It measures 306 × 169 × 208 mm and weighs 26.5 kg, with F14 terminals. It stores 1.08 kWh and delivers up to 720 A. Deep cycling with full recovery from deep discharge. Typical applications: Solar/Wind Energy Systems, Electrical Substations, Telecommunications and Base Stations and UPS and Data Centers.

Formerly **RKG12-90**.

Nominal Voltage	12 V
Capacity (25°C)	90 Ah (C10)
Energy	1080 Wh
Weight	26.5 kg
Terminal	F14
Dimensions	306 × 169 × 208 mm

MAIN ADVANTAGES

- ✓ **Recovery:** Superior performance after deep discharges
- ✓ **Stable:** Low electrolyte stratification
- ✓ **Longevity:** Excellent cycle life in harsh conditions
- ✓ **Gel Tech:** Thixotropic gel electrolyte

12
YEARS

LONG LIFE DESIGN

* EUROBAT CLASSIFICATION: 10-12 Years (High Performance).

2
YEARS

WARRANTY

* Subject to charge and temperature parameters stipulated in this datasheet.

MAIN APPLICATIONS



**SOLAR/WIND ENERGY
SYSTEMS**



ELECTRICAL SUBSTATIONS



**TELECOMMUNICATIONS
AND BASE STATIONS**



UPS AND DATA CENTERS

QUALITY STANDARDS

CE CERTIFIED

ISO 9001 / 14001

IEC61427

IEC 60896-21/22

YD/T1360

BS6290 part 4

GRAPHICS (25°C)

Constant Discharge Ratings (A) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	142A	127A	116A	81.2A	52.4A	23.3A	15.6A	8.77A	4.61A
10.80 V	165A	141A	127A	86A	54.8A	24A	16A	9A	4.72A
10.50 V	187A	155A	136A	90A	56.7A	24.5A	16.4A	9.18A	4.82A
10.20 V	215A	167A	146A	93.2A	57.9A	24.9A	16.6A	9.31A	4.91A
10.02 V	241A	184A	155A	96.8A	59.2A	25.2A	16.7A	9.42A	5.02A
9.60 V	270A	199A	165A	101A	60.8A	25.5A	16.9A	9.55A	5.14A

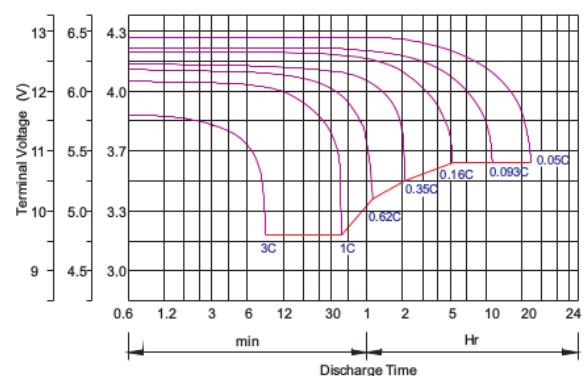
Constant Discharge Ratings (W) at 25°C

F.V / Time	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
11.10 V	267W	241W	221W	156W	102W	45.7W	30.8W	17.5W	9.27W
10.80 V	306W	264W	240W	164W	105W	46.8W	31.3W	17.9W	9.43W
10.50 V	342W	288W	255W	170W	108W	47.3W	31.8W	18.1W	9.55W
10.20 V	388W	306W	272W	175W	109W	47.7W	32W	18.2W	9.67W
10.02 V	430W	333W	285W	180W	111W	47.9W	32.1W	18.3W	9.82W
9.60 V	475W	358W	300W	187W	113W	48.1W	32.2W	18.4W	10W

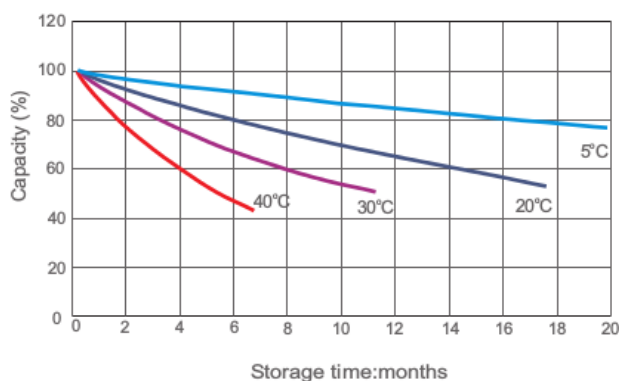
CHARGE CHARACTERISTICS



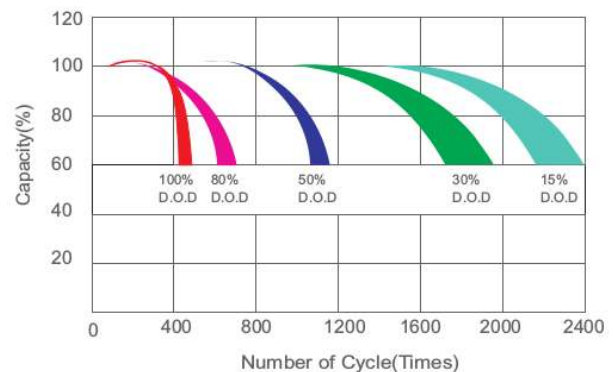
DISCHARGE CHARACTERISTIC 25oC



SELF DISCHARGE CHARACTERISTICS



LIFE CHARACTERISTIC OF CYCLIC USE



SPECIFICATIONS

Nominal Voltage	12 V
Capacity (25°C)	90 Ah (C10), 94.4 Ah (C20)
Energy	1080 Wh
Cell number	6
Charge Voltage (25°C)	Cycle use: 14.6-14.8V (-30mV/C), max. Current 2.1A Float use: 13.6-13.8V (-20mV/C)
Max. Charge Current	22.5 A
Max. Discharge Current	720 A
Internal Resistance	25 mΩ
Self Discharge	3 % of capacity per month at 20 °C
Capacity Affected by Temperature	40 °C: 102 %, 25 °C: 100 %, 0 °C: 85 %, -15 °C: 65 %

CONSTRUCTION

Component	Material
Container	ABS (Flame Retardant Optional)
Cover	ABS (Flame Retardant Optional)
Electrolyte	Sulphuric acid
Negative	Lead
Positive	Lead dioxide
Safety Valve	Rubber
Sealant	Epoxy Resin
Separator	Fibre Glass
Terminal	Copper

QUICK INSTALLATION GUIDE

To ensure optimal performance and maximize the lifespan of your **REKOSER RDG12-90** battery, follow these assembly and connection guidelines.

1. SPACE AND DIMENSION VERIFICATION

Before proceeding, ensure the receptacle or cabinet of your equipment complies with the unit's physical measurements:

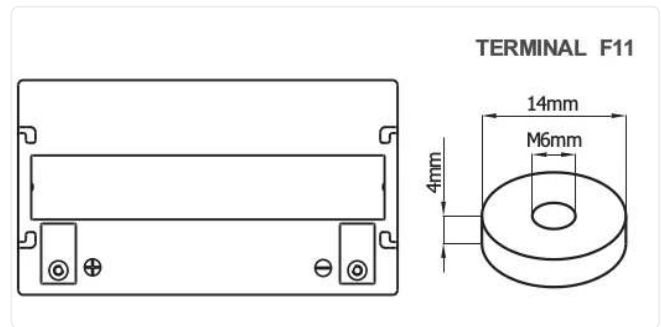
Length: 306 mm

Width: 169 mm

Height: 208 mm

Total Height: 212 mm

Weight: 26.5 kg



2. TERMINAL CONFIGURATION (F14)

Terminals: Ensure your system's connectors match the F14 type to prevent electrical arcing.

Polarity: Check the positive and negative markings on the battery before connecting, to prevent short circuits.

3. CHARGE PARAMETERS

Cycle use: 14.6-14.8V (-30mV/C), max. Current 2.1A

Float use: 13.6-13.8V (-20mV/C)

Maximum Current: Do not exceed 22.5 A of charge.

4. SAFETY AND STORAGE

Maintenance: Sealed gel battery, maintenance-free and leak-proof.

Charging: Keep to the stated charge voltage: gel is sensitive to overcharging.

Cycling: Recharge fully after every discharge; never leave it discharged.

Storage: Store charged, in a cool and dry place, and recharge periodically.

NEARBY MODELS

RDG12-80 (12 V · 80 Ah) · **RDG12-100** (12 V · 100 Ah) · [See all RDG series models](#)

Specialized Technical Support
<https://rekoser.com> | +34 958 04 29 73