

RID XTREME

-40°C up to 55°C



The RID | Xtreme pure lead battery can also be used in applications with frequent charging and discharging cycles and display its specific advantages. The potential of this technology is to maximize the number of electrodes installed, also known as thin plate technology. The resulting increase in the electrochemical reaction surface for a given volume allows the use of active masses, which are generally reserved for cycle-resistant and long-life batteries. RID | Xtreme batteries are therefore not only extremely powerful, but also characterized by a long cycle life.

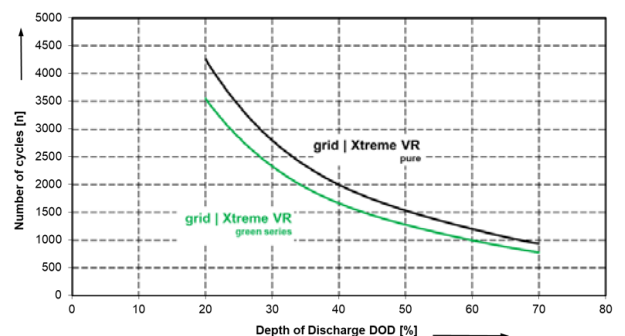
The charging and discharging processes that occur permanently in cyclic applications and the associated transformation of the active masses usually lead to electrolyte stratification in AGM batteries and also place maximum stress on the battery housing material due to volume change.

A reduced performance of the battery system with aging and the impairment of the electrochemical behavior of the outer cells affected by the deformation of the battery vessel are the consequences. grid | Xtreme VR pure lead batteries were therefore equipped with the ESS

technology (Enhanced Stability Standard). The risk of electrolyte stratification in cyclic applications and the associated reduction in discharge performance and cycle life could thus be safely counteracted.

Furthermore, the patented and innovative Safeguard-Tec for Top Terminal variants (optionally available) offers optimum dimensional stability over the entire service life of the battery. Inhomogeneities in the cell compound of a battery block, which can occur particularly under cyclic load and/or at elevated ambient temperatures and impair performance, are eliminated. This increases the reliability of the entire battery system and also leads to a longer cycle life.

Service life in cycles and Depth of Discharge



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PERFORMANCE FEATURES FOR CYCLIC APPLICATIONS:

PERFORMANCE FEATURES		RID XTREME <i>pure</i>	RID XTREME <i>green series</i>	CUSTOMER BENEFITS
Design		Top- and Frontterminal	Top- and Frontterminal	High flexibility and compact installation
Temperature range		-40°C up to 55°C	-35°C up to 50°C	Suitable for high temperature applications
Shelf life @ 20°C		up to 24 months	up to 24 months	Easy storage
Design Life	20°C	15 years	15 years	---
	30°C	10 years	8 years	Lower TCO's
Charging current		5 – 40 A/100Ah (fast charging capability)	5 – 40 A/100Ah (fast charging capability)	Fast charging capability
Float charge voltage		2.3 Vpc (+/-1%)	2.3 Vpc (+/-1%)	---
Boost charge voltage		2.40 Vpc	2.40 Vpc	
Cycle ability	30% DOD	2800	2330	
	50% DOD	1500	1300	
	70% DOD	940	780	
Max. depth of discharge in cyclic applications		70% DOD	70% DOD	---
Energy density (E10 – 1.80 Vpc, 20°C)		≥ 95 Wh/ltr.	≥ 93 Wh/ltr.	Low space requirement
Power density (P10min – 1.60 Vpc, 20°C)		≥ 220 W/ltr.	≥ 215 W/ltr	Low space requirement
Safeguard-Tec		Optional for TT batteries	Optional for TT batteries	High dimensional stability throughout battery life and improvement of electrical performance, especially under elevated temperature and cyclic load conditions.*
Fully automated, digitized manufacturing processes		Yes	Yes	More flexibility and common parts due to parallel connection (up to 10 strings at 48V)
Flammability class acc. UL 94		V0	V0	More safety due to higher fire classification
Measuring point for impedance measurements		Available	Available	Simple and precise condition determination after installation and regular maintenance

All of our cells and batteries should be installed, commissioned and operated in accordance with:

- International Standard IEC 62485-2 Safety requirements for secondary batteries and battery installations
- Regional / National / Local Standards for the Environment

Optimal environmental compatibility - closed material cycle in certified recycling system



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TOP TERMINAL - CAPACITY, DIMENSIONS AND WEIGHTS

Type	C _{10 min.} /1,8 Vpc @20°C (68°F)	C _{8 min.} /1,75 Vpc @25°C (77°F)	P _{15 min.} /1,6 Vpc @25°C (77°F)	P _{5 min.} /1,6 Vpc @25°C (77°F)	Length	Width	Height	Weight	Terminal	Fig.
RID Xtreme 12-85	85 Ah	87 Ah	390 Wpc	714 Wpc	254 mm	174 mm	233 mm	~ 25.5 kg	M8 female	A
RID Xtreme 12-110	110 Ah	113 Ah	518 Wpc	948 Wpc	320 mm	174 mm	233 mm	~ 32.4 kg	M8 female	A
RID Xtreme 12-130	134 Ah	138 Ah	640 Wpc	1042 Wpc	320 mm	174 mm	283 mm	~ 42.7 kg	M8 female	A
RID Xtreme 12-150	159 Ah	166 Ah	720 Wpc	1172 Wpc	359 mm	174 mm	283 mm	~ 46.3 kg	M8 female	A
RID Xtreme 12-170	180 Ah	187 Ah	827 Wpc	1380 Wpc	498 mm	174 mm	233 mm	~ 51.4 kg	M8 female	A

FRONT TERMINAL - CAPACITY, DIMENSIONS AND WEIGHTS

Type	C ₁₀ /1,8 Vpc @20°C (68°F)	C ₈ /1,75 Vpc @25°C (77°F)	C ₃ /1,7 Vpc @25°C (77°F)	C ₁ /1,7 Vpc @25°C (77°F)	Length	Width	Height	Weight	Terminal	Fig.
RID Xtreme 12-100 FT 19"	100 Ah	104 Ah	91 Ah	77 Ah	404 mm	110 mm	264 mm	~ 30.2 kg	M8 female	B
RID Xtreme 12-100 FT 23"	105 Ah	109 Ah	99 Ah	85 Ah	563 mm	125 mm	200 mm	~ 33.9 kg	M8 female	B
RID Xtreme 12-150 FT	165 Ah	172 Ah	155 Ah	131 Ah	563 mm	110 mm	307 mm	~ 50.2 kg	M8 female	B
RID Xtreme 12-180 FT	185 Ah	194 Ah	174 Ah	147 Ah	563 mm	125 mm	307 mm	~ 57.4 kg	M8 female	B
RID Xtreme 12-200 FT	201 Ah	209 Ah	190 Ah	158 Ah	563 mm	125 mm	324 mm	~ 61.2 kg	M8 female	B

Fig. A

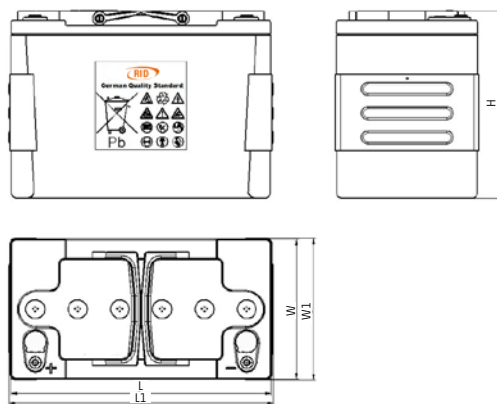


Fig. B

