

# Datasheet gel type VRLA batteries

## 12V 40 Ah

### 1. Physical data

#### Box data

Battery			CHG cond.	Ter- minal	Lid colour	Length max.	Length basic	Width max.	Width basic	Lid height	Height max.	Weight
type	V	C <sub>5</sub>	series		box	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]
GF	12	040	Y			242	242	175	175	190	190	16,0

Tightening torque values of connectors to terminal conical terminal according EN 60095-2

8 ± 1Nm

### 2. Performance data

Discharge rate	Capacity	End Of DCH voltage DOD		Effective DCH time DOD		Energy density		Power density	
		60%	80%	60%	80%	[Wh/L]	[Wh/kg]	[W/L]	[W/kg]
[h]	[Ah]	[V]		[h]		[Wh/L]	[Wh/kg]	[W/L]	[W/kg]
20,0	48,0	2,01	1,98	10,0	13,3	77,2	36,2	3,9	1,8
10,0	43,5	2,00	1,97	5,5	7,4	69,6	32,6	7,0	3,3
<b>5,0</b>	<b>40,0</b>	<b>1,98</b>	<b>1,93</b>	<b>3,0</b>	<b>4,0</b>	62,7	<b>29,4</b>	<b>12,5</b>	<b>5,9</b>
3,0	37,7	1,96	1,89	1,9	2,5	58,8	27,6	19,6	9,2
2,0	35,7	1,93	1,78	1,3	1,8	54,3	25,4	27,1	12,7
1,0	32,0	1,90	1,63	0,8	1,0	47,6	22,3	47,6	22,3
0,5	27,9	1,57	1,57	0,4	--	40,4	18,9	80,8	37,9
0,2	21,6	1,40	1,40	--	--	30,9	14,5	154,7	72,5

Typical values after 20 - 50 C<sub>5</sub> cycles at 30 °C

Recommended max. load \*) 80 A

\*) With appropriate counter contacts only

Cyclic endurance according IEC 254-1 450

Temperature regime (depending on DOD) -20 °C up to 50 °C

Typical operational temperature regime 5 °C up to 40 °C

### 3. Charging

Charging profile(s) IU1a

according GNB specification

Fast charge possible

We reserve the right to discontinue or change the specification at any time without notice or obligation