

LG 18650 HG2 3000mAh (Brown)

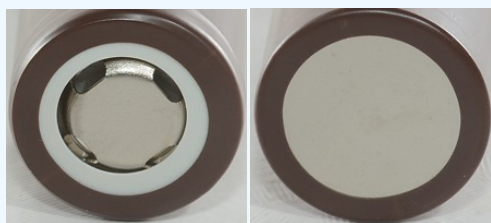


Official specifications:

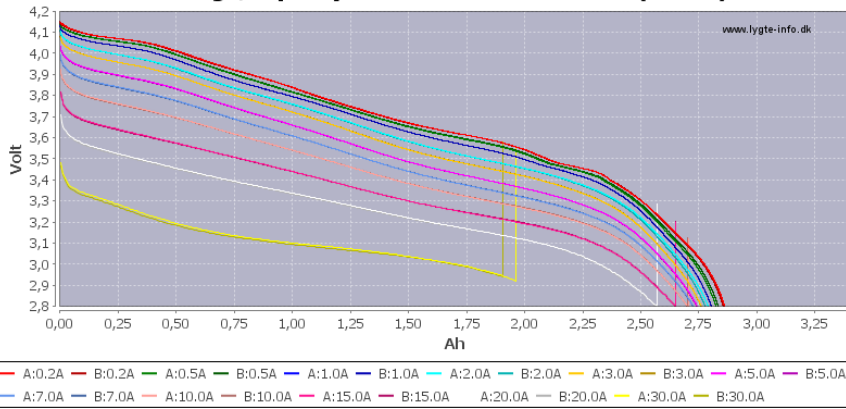
- Nominal Capacity: 3000mAh
- Nominal voltage: 3.50V
- Standard charge: 1500mA, 4.2V, 50mA
- Max. charge voltage: 4.20V +/- 0.05V
- Max. charge current: 4000mA
- Standard discharge: 600mA down to 2.5V
- Fast discharge: 10000mA, 20000mA down to 2.5V
- Max. continuous discharge: 20000mA
- Cycle life: 300 at 10A, 200 at 20A both with 4A charge, remaining capacity minimum 70%
- Weight: 47.0g
- Operating temperature: charge 0°C ~ 50°C, discharge: -20°C ~ 75°C
- Storage temperature: 1 month: -20°C ~ 60°C, 3 month: -20°C ~ 45°C, 1 year: -20°C ~ 20°C

Name	LG 18650 HG2 3000mAh (Brown)					
Cell	LGDBHG21865					
Supplier	eu.nkon.nl					
Size	Weight:	45.1 g	Length:	65 mm	Diameter:	18.3 mm
Info	Top:	flat	Bottom:	metal	Rated A:	20
Test condition	Charge voltage:		4,2	Termination current:		0,1
Test current (A)	0,2	0,5	1	2	3	5
Measured capacity (Ah)	2,858	2,829	2,804	2,784	2,761	2,743
Measured energy (Wh)	10,499	10,363	10,221	10,052	9,883	9,676
PCB protection trip current (A)	NA					
Calculated internal resistance (ohm)	0,05					

A high current and high capacity cell, that is rated for high current use.

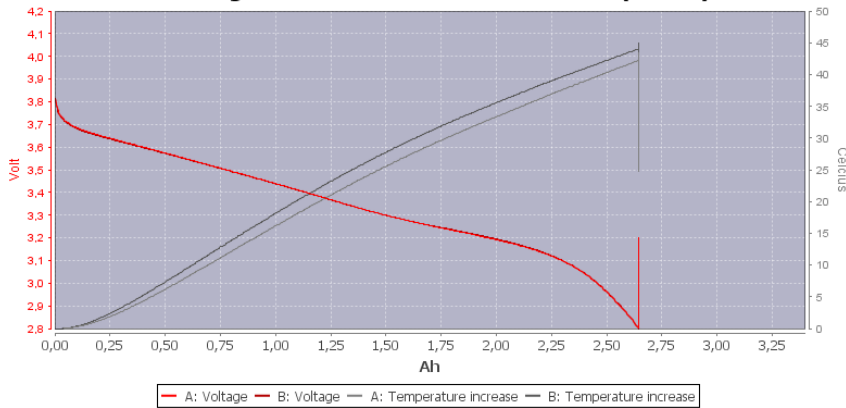


Discharge, capacity: LG 18650 HG2 3000mAh (Brown)

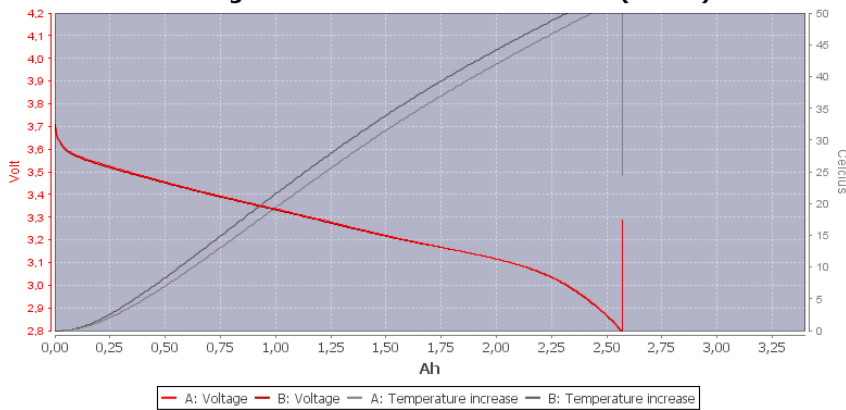


The discharge curves tracks perfectly.

Discharge 15.0A: LG 18650 HG2 3000mAh (Brown)

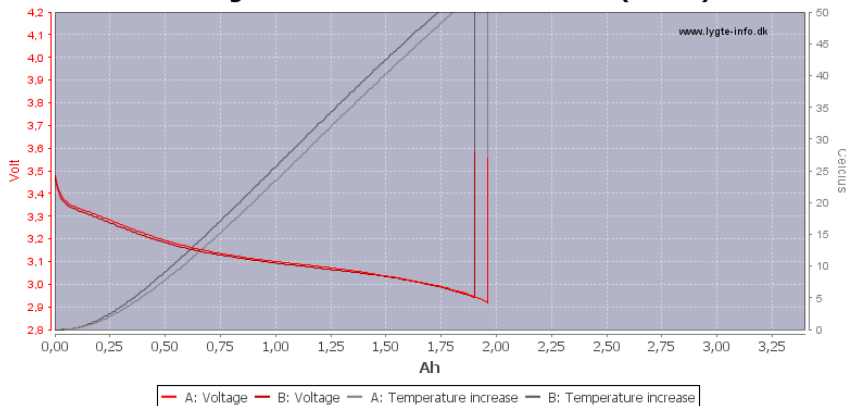


Discharge 20.0A: LG 18650 HG2 3000mAh (Brown)



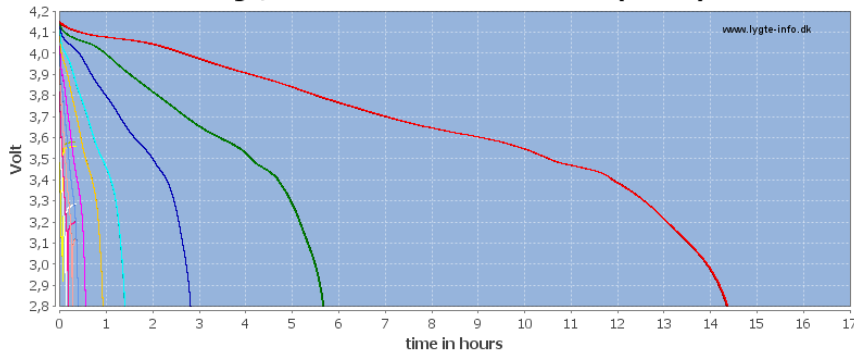
At 20A the cell reaches 81°C, but first after discharge has terminated.

Discharge 30.0A: LG 18650 HG2 3000mAh (Brown)



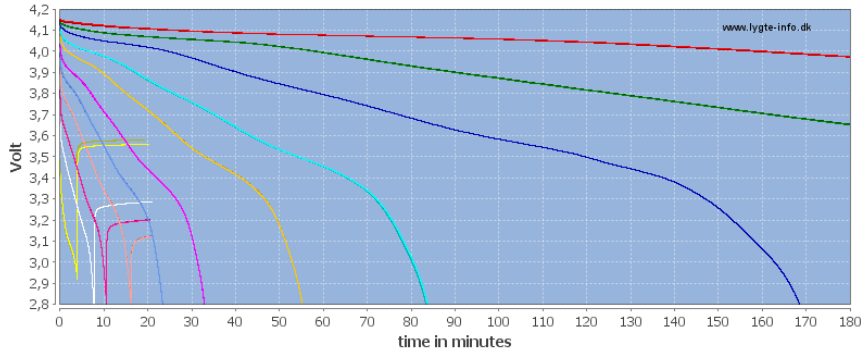
At 30A I terminated due to temperature, but the cell do reach 90°C after termination.

Discharge, time: LG 18650 HG2 3000mAh (Brown)



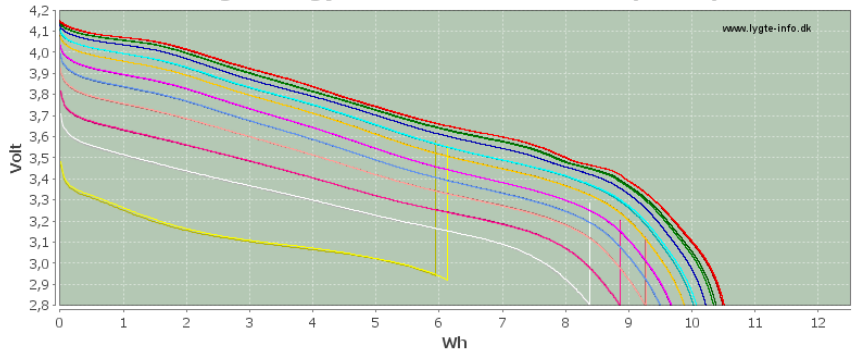
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

Discharge, time: LG 18650 HG2 3000mAh (Brown)



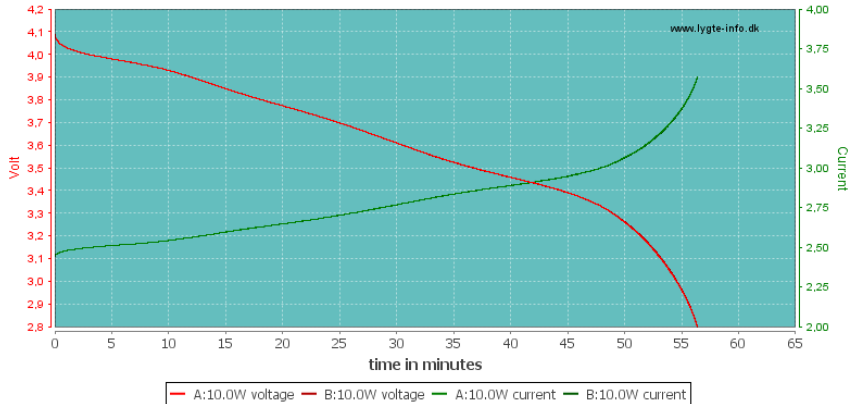
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

Discharge, energy: LG 18650 HG2 3000mAh (Brown)



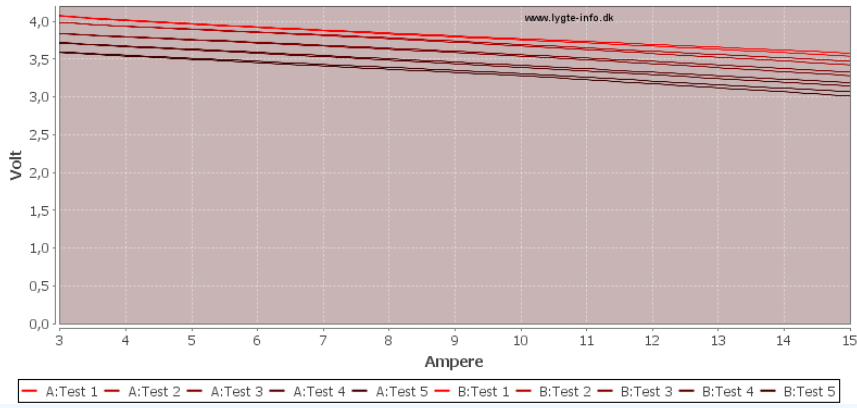
— A:0.2A — B:0.2A — A:0.5A — B:0.5A — A:1.0A — B:1.0A — A:2.0A — B:2.0A — A:3.0A — B:3.0A — A:5.0A — B:5.0A
— A:7.0A — B:7.0A — A:10.0A — B:10.0A — A:15.0A — B:15.0A — A:20.0A — B:20.0A — A:30.0A — B:30.0A

Discharge, power: LG 18650 HG2 3000mAh (Brown)

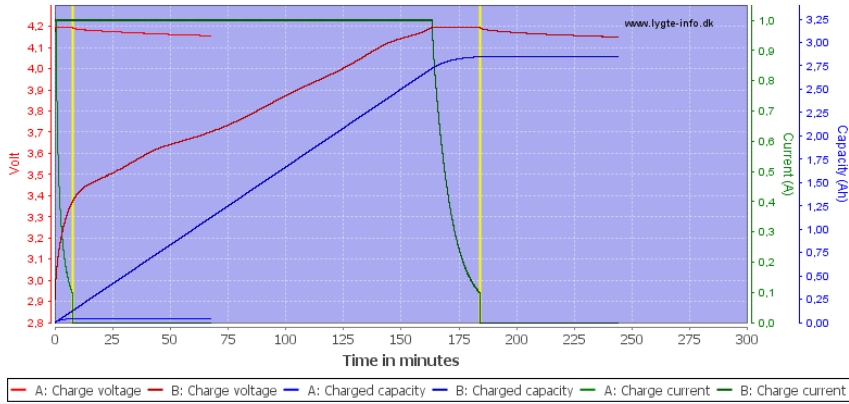


— A:10.0W voltage — B:10.0W voltage — A:10.0W current — B:10.0W current

Protection test: LG 18650 HG2 3000mAh (Brown)



Charging: LG 18650 HG2 3000mAh (Brown)



Ignore the A charge curve, there was a glitch on my equipment.

Conclusion

This is a very good high current cell and it is rated to be used at high charge/discharge rates.

Notes and links

- [How is the test done and how to read the charts](#)
- [How is a protected Lilon battery constructed](#)
- [More about button top and flat top batteries](#)
- [Compare to 18650 and other batteries](#)