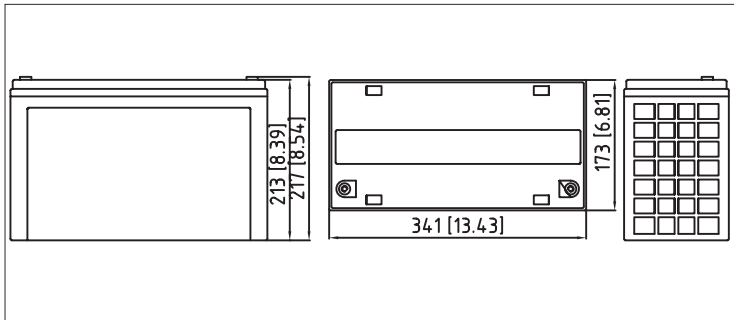


Model: **HR12V370**

HR Series

The HR range of VRLA batteries is perfectly suited to any application which requires a high rate current over a short period. In particular they are ideal for UPS systems thanks to their optimized performance and a patented post seal design. The rugged ABS container and flexible handles ensure that installation is also easily performed and trouble-free. A design life of 10 years completes the package.

Dimensions-mm [inch]



Specifications

Battery Model	HR12V370
Nominal Voltage	12V
Rated Capacity	370 Watts per cell at the 15 minute rate to 1.67 volts per cell @25°C(77°F)
Typical Weight	36kg
Internal Resistance	Approx 5.22mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C(-40°F to 131°F)
	Operation (recommended): 15°C to 25°C(59°F to 77°F)
	Storage: -20°C to 40°C(-4°F to 104°F)
Float Voltage	2.27V/cell@25°C(77°F)
Recommended Maximum Charging Current Limit	30A
Equalize and Cycle Service	2.35V~2.40V@25°C(77°F)
Self Discharge	The residual capacity is above 87% after 90 days storage(25°C/77°F)
Terminal	M8 Female
Terminal Hardware Torque	10 ± 1.0Nm
Container Material	ABS (V0 optional)

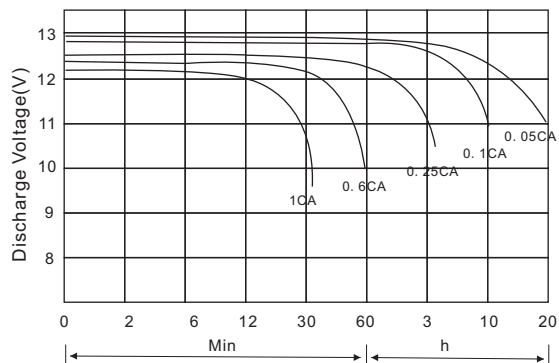
Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End voltage per cell	5min	10min	15min	20min	30min	40min	50min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	418	297	210	184	128	96.9	79.1	66.5	38.6	26.0	21.1	17.7	15.2	11.6	9.63
1.67V	395	282	199	179	125	94.9	76.7	65.9	38.2	25.7	20.9	17.6	15.1	11.4	9.52
1.70V	384	272	193	175	123	93.0	75.2	65.2	37.9	25.5	20.8	17.4	15.0	11.3	9.46
1.75V	318	232	180	169	116	91.1	73.6	64.6	37.5	25.2	20.6	17.2	14.7	11.1	9.33
1.80V	274	211	167	157	110	89.1	72.9	62.0	36.8	24.8	19.9	16.6	14.5	11.0	9.04
1.85V	230	185	151	145	102	87.7	71.3	60.6	34.9	24.3	19.4	15.8	13.7	10.5	8.65
1.90V	185	142	128	116	89.8	72.7	62.0	54.9	33.1	22.4	17.4	14.6	12.4	9.82	8.06

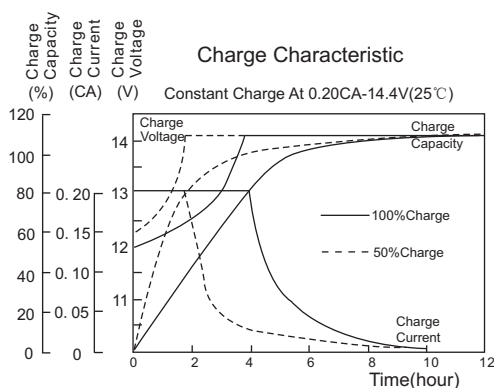
Discharge Data with Constant Power Units: Watts per cell (25°C, 77°F)

End voltage per cell	5min	10min	15min	20min	30min	40min	50min	1h	2h	3h	4h	5h	6h	8h	10h
1.60V	739	532	387	339	237	177	145	123	72.8	49.4	40.6	34.2	29.6	22.6	18.9
1.67V	705	511	370	334	235	175	143	123	72.4	49.2	40.2	34.2	29.4	22.3	18.8
1.70V	692	498	362	329	232	173	141	123	71.9	48.9	40.1	33.8	29.4	22.3	18.7
1.75V	582	431	336	320	221	171	139	123	72.8	49.3	40.1	33.7	29.0	22.0	18.6
1.80V	510	400	319	298	210	171	140	120	71.7	48.2	38.7	32.7	28.6	21.8	18.0
1.85V	437	354	290	280	196	169	138	118	68.1	47.6	38.3	31.3	27.1	20.9	17.3
1.90V	352	272	247	224	174	141	121	108	64.9	44.2	34.3	29.0	24.6	19.6	16.3

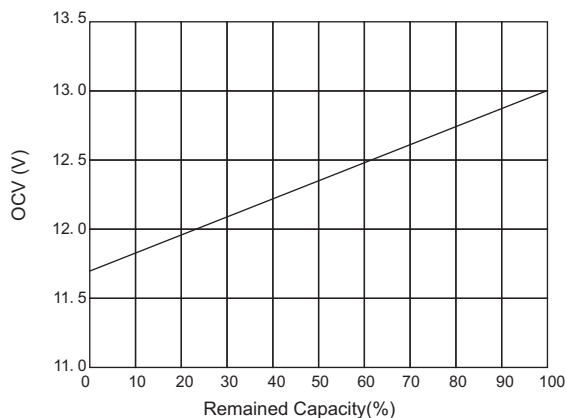
Terminal Voltage(V) Vs. Discharge Time (25°C, 77°F)



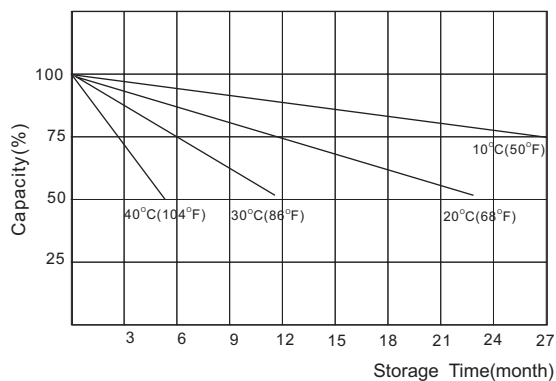
Battery Voltage Vs. Charge Time



Relationship of OCV Vs. State of Charge



Capacity Retention Characteristic



Charging Procedures

Application	Charge Voltage (V/Cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle	25°C	2.40	2.35~2.45	25A
Standby	25°C	2.27	2.23~2.27	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.80	1.70	1.55	1.30
Discharge Current (A)	20A ≥ I	20A < I < 50A	50A < I < 100A	I > 100A

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