

stored energy solutions for a demanding world

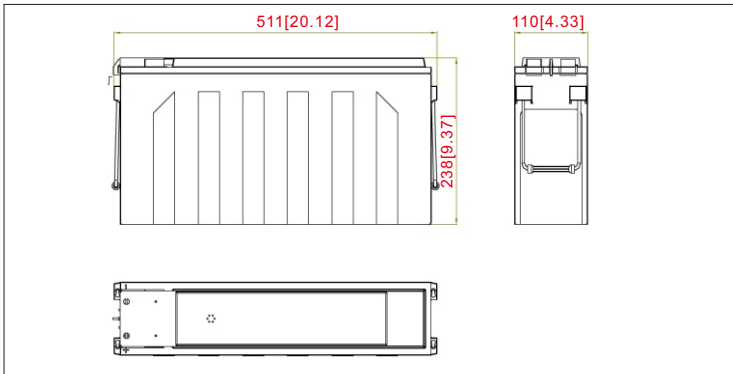
Narada

Model: **12HRL390**

HRL Series

The HRL range of VRLA batteries with 12+ years design life is perfectly suited to any application which requires a high rate current over a short period. In particular they are ideal for IDC and UPS systems thanks to their optimized performance and a patented post seal design. Meanwhile with excellent uniform battery performance, long design life wide usage temperature range, HRL series are suit for high ambient temperature.

Dimensions—mm [inch]



Specifications

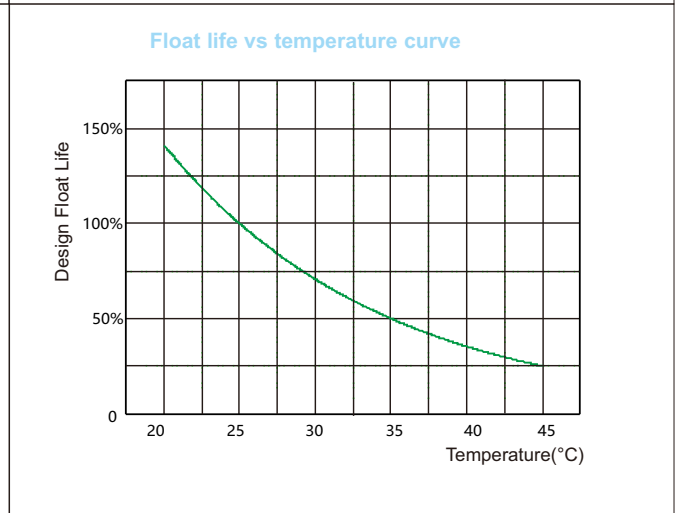
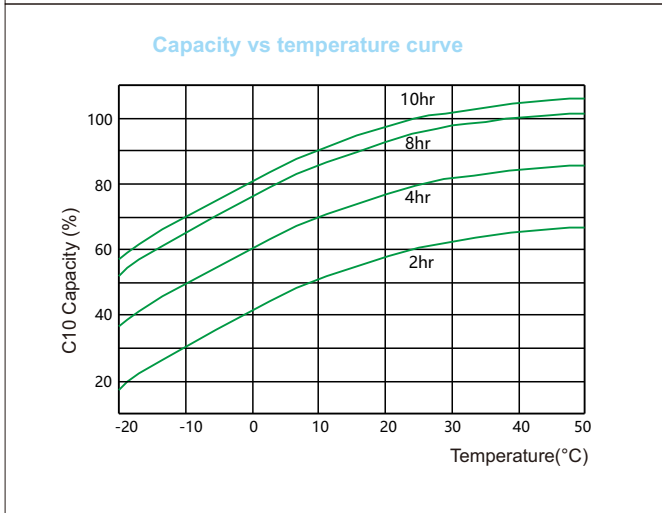
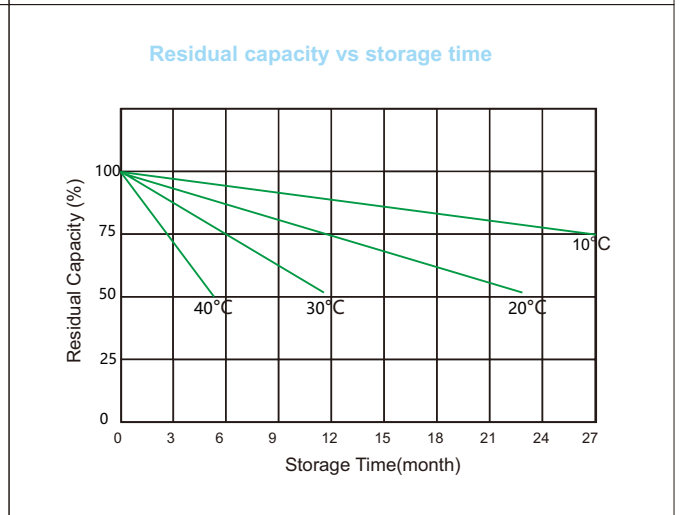
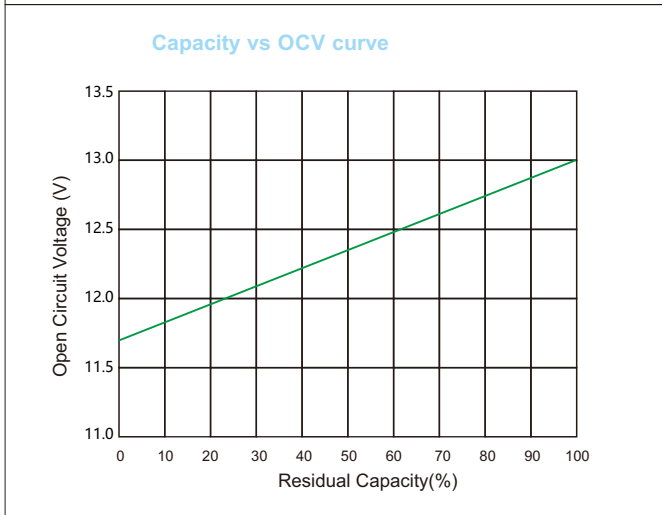
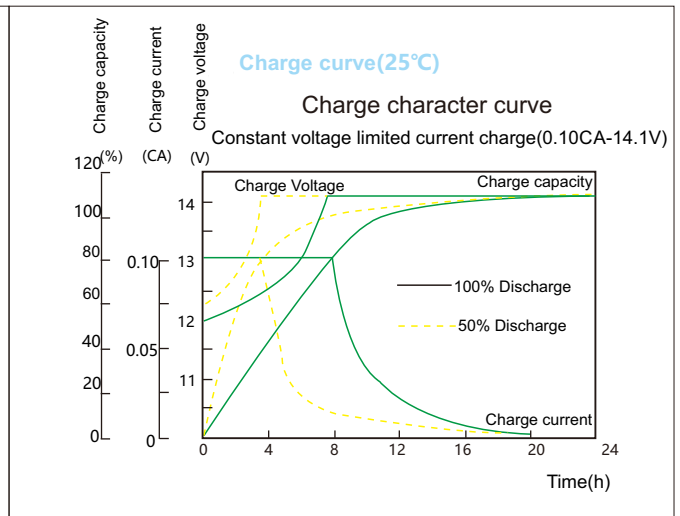
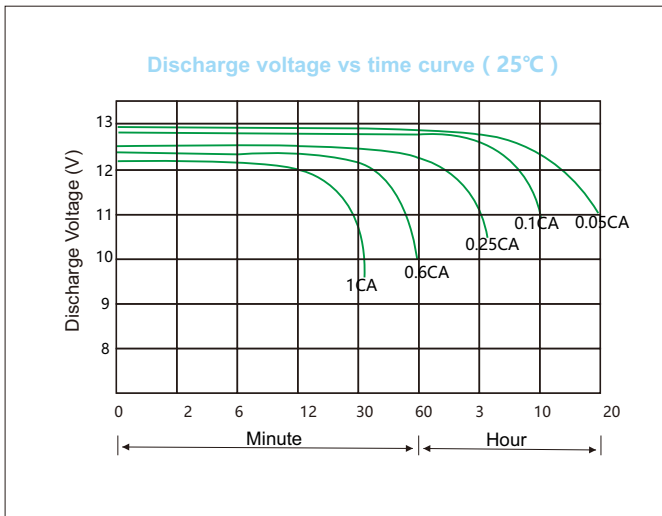
Battery Model	12HRL390
Nominal Voltage	12V
Rated Capacity	390 W/cell(15 minute rate, 1.67 V/cell) and 95Ah(10 hr to 1.80V/cell) @25°C(77°F)
Typical Weight	34kg
Internal Resistance	Approx 4.25mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C(-40°F to 131°F)
	Operation (recommended): 15°C to 25°C(59°F 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	25A
Equalize and Cycle Service	2.35V~2.40V@25°C(77°F)
Self Discharge	The residual capacity is above 94% after 90 days storage(25°C/77°F)
Terminal	M6 Female
Terminal Hardware Torque	8±1.0Nm
Container Material	ABS (V0 optional)

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
1.60V	698.9	514.7	398.6	327.1	242.9	185.7	155.5	135.0	75.6
1.67V	665.9	498.9	390.0	322.0	240.9	184.9	155.2	134.0	75.5
1.70V	646.1	487.9	383.6	318.1	239.2	184.2	154.0	133.0	75.3
1.75V	601.5	461.9	368.4	308.7	235.4	182.8	153.0	132.0	75.1
1.80V	537.6	426.3	348.0	296.3	230.5	180.9	152.0	131.0	73.5
1.83V	497.6	404.3	334.2	286.7	224.9	177.1	150.7	130.0	71.6
1.85V	472.6	389.0	323.5	278.6	219.4	173.1	147.3	128.1	69.7

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

End voltage per cell	5min	15min	30min	1h	2h	3h	4h	6h	10h
1.60V	407.3	212.8	127.7	70.4	39.5	27.9	21.7	15.3	9.7
1.67V	380.7	208.0	127.0	69.9	39.2	27.8	21.6	15.2	9.7
1.70V	364.4	205.0	125.6	69.8	39.1	27.6	21.5	15.1	9.7
1.75V	332.3	197.4	123.2	69.0	38.9	27.4	21.4	15.0	9.6
1.80V	298.1	185.2	118.1	67.2	38.2	27.1	21.1	14.8	9.5
1.83V	276.3	174.9	113.2	65.3	37.6	26.7	20.9	14.7	9.4
1.85V	261.2	166.1	108.6	63.4	36.8	26.3	20.5	14.4	9.1



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