

stored energy solutions for a demanding world

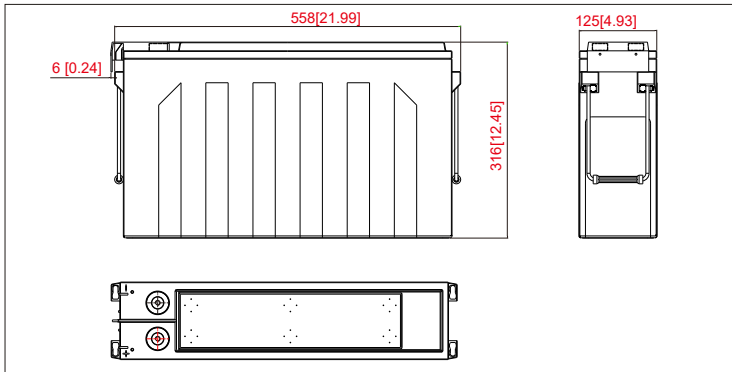


## Model: 12HRL700

## 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

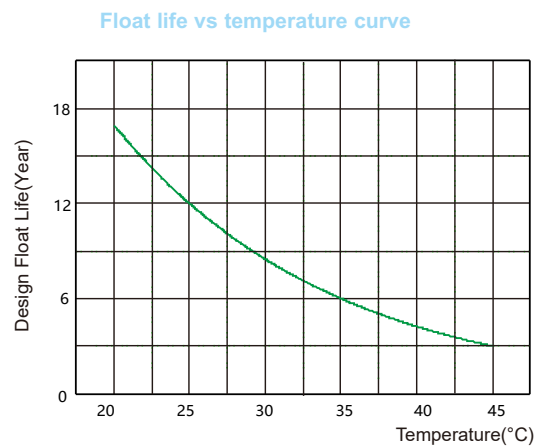
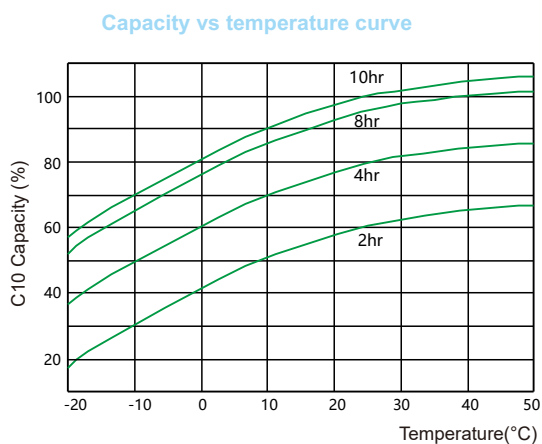
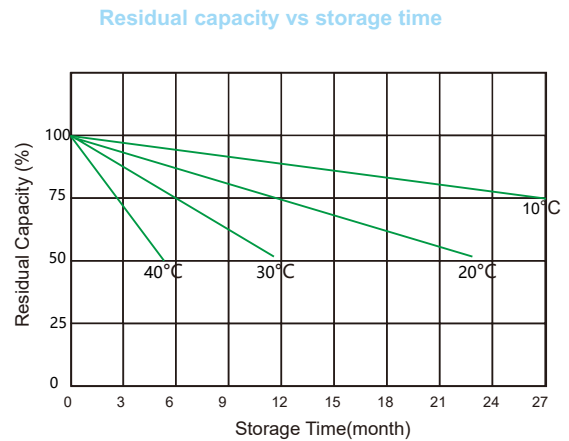
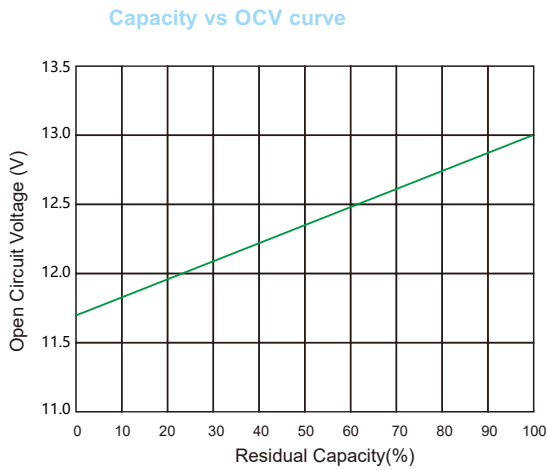
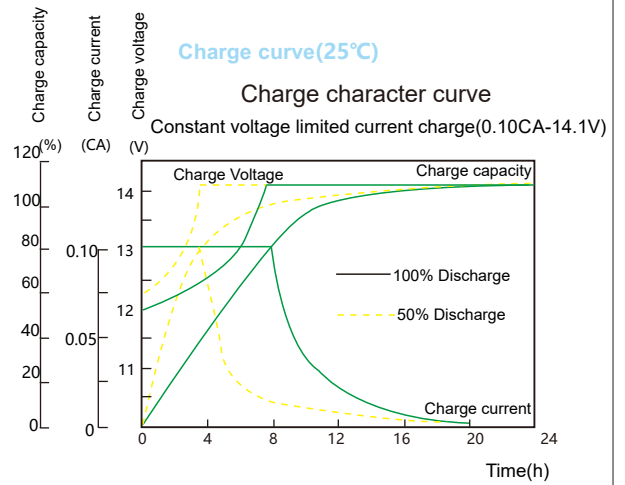
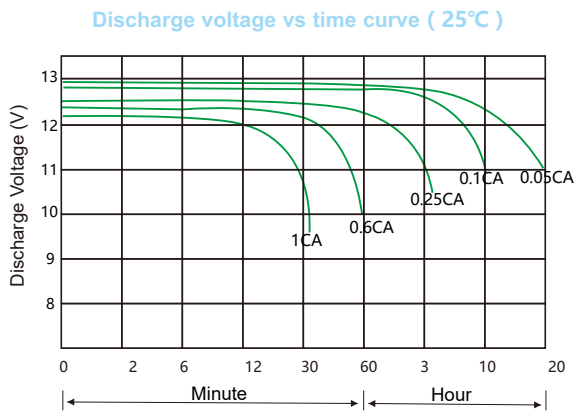
Battery Model	12HRL700
Nominal Voltage	12V
Rated Capacity	700 W/cell(15 minute rate, 1.67 V/cell) and 180Ah(10 hr to 1.80V/cell) @25°C(77°F)
Typical Weight	60kg
Internal Resistance	Approx 2.90mΩ
Temperature Ranges	Operation (maximum): -40°C to 55°C(-40°F to 131°F)
	Operation (recommended): 15°C to 25°C(59°F 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	45A
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	M8 female on battery and M6 female on adaptor
Terminal Hardware Torque	10±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	1154	906	753	605	453	369	312	271	152.5
1.67V	1106	877	730	585	447	365	309	269	152.2
1.70V	1083	853	704	574	442	361	307	267	151.2
1.75V	967	802	668	549	426	351	300	262	150.4
1.80V	930	718	593	509	401	334	287	252	149
1.83V	846	663	556	484	388	327	283	249	146
1.85V	792	631	535	468	378	319	276	244	143

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

End Voltage per cell	5min	10min	15min	20min	30min	40min	50min	1h	2h	3h	5h	8h	10h
1.60V	832	531	401	327	242	195	164	142	80.5	57.1	36.6	24.1	19.7
1.67V	696	485	380	315	238	192	162	141	80.1	56.7	36.3	23.9	19.5
1.70V	632	461	368	308	235	191	161	140	79.8	56.4	36.1	23.8	19.5
1.75V	543	421	344	292	226	186	158	138	78.9	55.9	35.8	23.6	19.3
1.80V	476	378	314	270	212	176	150	132	76.9	54.9	35.2	23.2	18.9
1.83V	441	349	291	251	199	166	143	126	75.0	53.9	34.7	22.7	18.5
1.85V	414	319	266	231	186	157	137	121	74.1	53.7	34.6	22.2	17.8



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