

### ⚡ Specifications

#### Nominal Voltage(V)

12V

#### Nominal Capacity

|              |                   |         |
|--------------|-------------------|---------|
| 20 hour rate | (9.5A to 10.50V)  | 190Ah   |
| 10 hour rate | (19A to 10.80V)   | 190Ah   |
| 5 hour rate  | (32.3A to 10.50V) | 161.5Ah |
| 1 hour rate  | (114A to 9.60V)   | 114Ah   |

#### Weight

Approx. 59.5kg(131Lbs.)

#### Internal Resistance (at 20°C)

Approx. 3.5 mΩ

#### Maximum Discharge Current for (at 20°C)

5 seconds: 1615A

#### Short Circuit Current (A) IEC60896-21-22

3400 A

#### Charging Methods at 25°C(77°F)

|                            |                 |
|----------------------------|-----------------|
| Maximum Charging Current : | 57A             |
| Boost Charging Voltage     | 14.10 to 14.40V |
| Boost Charge Time          | 8-9Hr           |
| Float Charging Voltage     | 13.38 to 13.65V |
| Coefficient                | -3.0mV/°C/cell  |

#### Operating Temperature Range

|           |                             |
|-----------|-----------------------------|
| Charge    | -10°C(14°F) to 60°C(140°F)  |
| Discharge | -20°C(-44°F) to 60°C(140°F) |
| Storage   | -20°C(-4°F) to 60°C(140°F)  |

#### Charge Retention (shelf life) at 20°C(68°F)

|         |     |
|---------|-----|
| 1 month | 98% |
| 3 month | 94% |
| 6 month | 85% |

#### Case Material

ABS UL94 HB  
Option: Flammability resistance of (UL94 V-0)

#### Design Life

EUROBAT(20°C) : > 12 YEARS VERY LONG LIFE

#### Terminal

F18

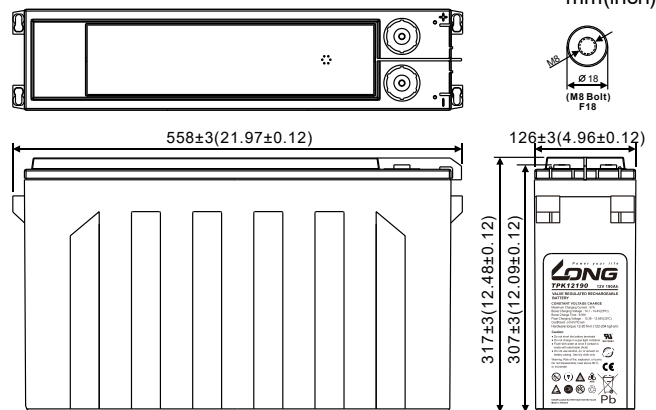


### ⚡ Dimensions

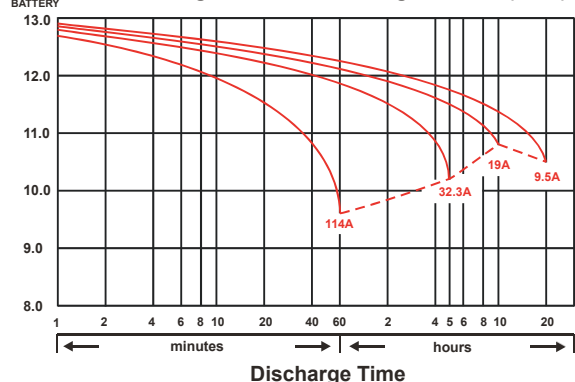
|                     |                    |
|---------------------|--------------------|
| Length (L)          | 558±3 (21.97±0.12) |
| Width (W)           | 126±3 (4.96±0.12)  |
| Height (H)          | 317±3 (12.48±0.12) |
| Overall Height (HT) | 317±3 (12.48±0.12) |

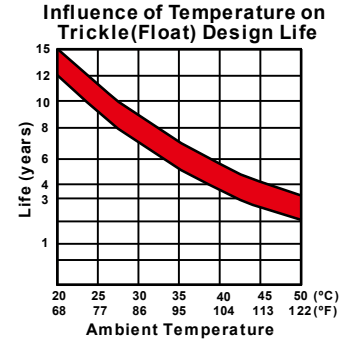
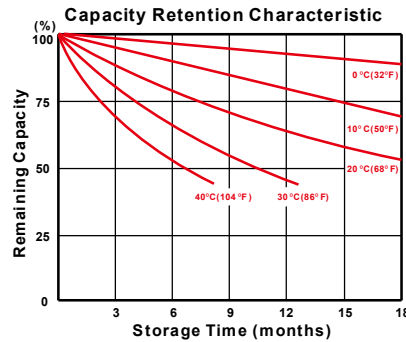
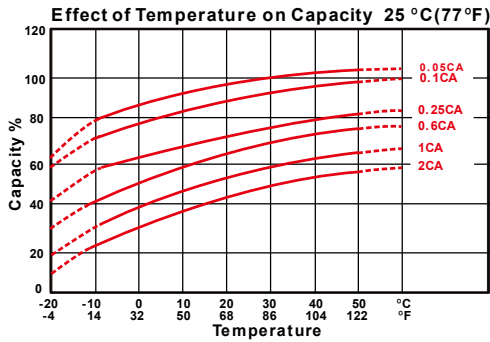
#### Description of torque value of hardware for the terminals:

|                                |                        |
|--------------------------------|------------------------|
| Recommended torque value       | M8: 12N-m (122 kgf-cm) |
| Maximum allowable torque value | M8: 20N-m (204 kgf-cm) |



Discharge Time VS. Discharge Current (25°C)





### - PERFORMANCE DATA

#### Discharge Rates in Watts to Various End Voltages at 25°C (77°F)

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| 10          | min | 644   | 710   | 769   | 819   | 851   | 869   | 883   |
| 15          | min | 574   | 629   | 673   | 693   | 703   | 713   | 718   |
| 30          | min | 396   | 420   | 440   | 448   | 453   | 456   | 458   |
| 60          | min | 208   | 215   | 219   | 222   | 224   | 225   | 226   |
| 120         | min | 119   | 126   | 130   | 133   | 135   | 137   | 137   |
| 180         | min | 86.6  | 90.0  | 92.5  | 94.0  | 94.8  | 95.3  | 95.5  |
| 240         | min | 69.7  | 72.1  | 73.9  | 74.9  | 75.4  | 75.6  | 75.7  |
| 300         | min | 59.2  | 61.1  | 62.4  | 63.2  | 63.6  | 63.9  | 64.0  |
| 480         | min | 39.3  | 41.8  | 43.6  | 44.4  | 44.9  | 45.1  | 45.3  |
| 600         | min | 34.8  | 36.3  | 37.0  | 37.4  | 37.6  | 37.7  | 37.8  |
| 1200        | min | 17.9  | 18.7  | 19.1  | 19.3  | 19.4  | 19.4  | 19.5  |

#### - Discharge Rates in Amperes to Various End Voltages at 25°C (77°F)

| End Voltage |     | 1.85V | 1.80V | 1.75V | 1.70V | 1.67V | 1.65V | 1.60V |
|-------------|-----|-------|-------|-------|-------|-------|-------|-------|
| 10          | min | 337   | 386   | 426   | 458   | 483   | 500   | 515   |
| 15          | min | 297   | 342   | 376   | 396   | 406   | 413   | 416   |
| 30          | min | 203   | 223   | 238   | 246   | 251   | 254   | 257   |
| 60          | min | 109   | 115   | 119   | 122   | 124   | 126   | 127   |
| 120         | min | 60.0  | 64.6  | 68.7  | 71.6  | 73.8  | 75.0  | 75.8  |
| 180         | min | 44.3  | 46.8  | 48.8  | 49.8  | 50.4  | 50.8  | 51.1  |
| 240         | min | 35.6  | 37.4  | 39.0  | 40.1  | 40.5  | 40.7  | 40.8  |
| 300         | min | 28.9  | 31.0  | 32.8  | 33.3  | 33.5  | 33.7  | 33.8  |
| 480         | min | 20.1  | 22.2  | 22.8  | 23.1  | 23.3  | 23.4  | 23.5  |
| 600         | min | 18.0  | 19.0  | 19.1  | 19.2  | 19.2  | 19.2  | 19.3  |
| 1200        | min | 9.10  | 9.57  | 9.64  | 9.67  | 9.69  | 9.71  | 9.72  |

All data on the spec. sheet is an average value:

The tolerance range : X<6min(+15%~-15%), 6min ≤ X<10min(+12%~-12%), 10min ≤ X < 60min(+8%~-8%), X ≥ 60min(+5%~-5%)

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