



T40 Pro

40 Ah | 12 V | 100 h

Specifications

| | |
|----------------------------|---|
| Voltage | 12 V |
| Nominal Capacity | 40 Ah @ 100 hour-rate |
| Number of Cells | 6 |
| Internal Resistance | Approx. 9.0 mΩ |
| Cold Cranking Ampere (CCA) | 230 A |
| Self Discharge | Monthly rate < 3% @ 25 °C Recharge after 6 months Charge before using |

Temperature Ranges

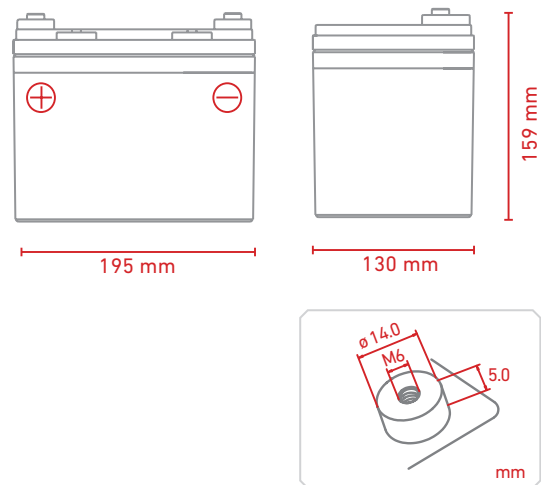
| | |
|------------------|-----------------|
| Normal Operation | 25 °C ± 5 °C |
| Discharging | -20 °C to 60 °C |
| Charging | -10 °C to 50 °C |
| Storage | -20 °C to 60 °C |

Charging & Discharging

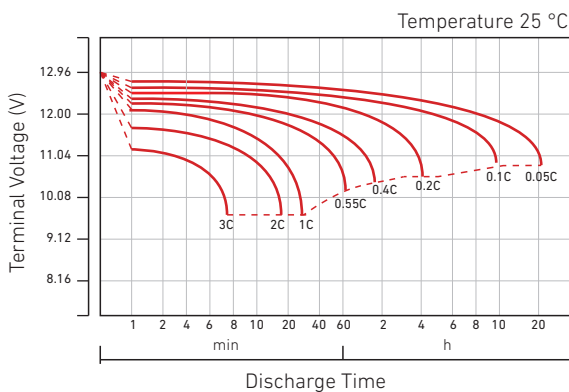
| | |
|------------------------|---|
| Max. Charging Current | 9.9 A |
| Max. Discharge Current | 330 A (5 sec) |
| Float Charging Voltage | 13.6 V to 13.8 V @ 25 °C Temperature Compensation: -3mV/°C/Cell |
| Cycle Use Voltage | 14.6 V to 14.8 V @ 25 °C Temperature Compensation: -4mV/°C/Cell |
| Reference Capacity | C3 26 Ah C5 29 Ah C10 33 Ah C20 36 Ah C100 40 Ah |

Mechanical Specifications

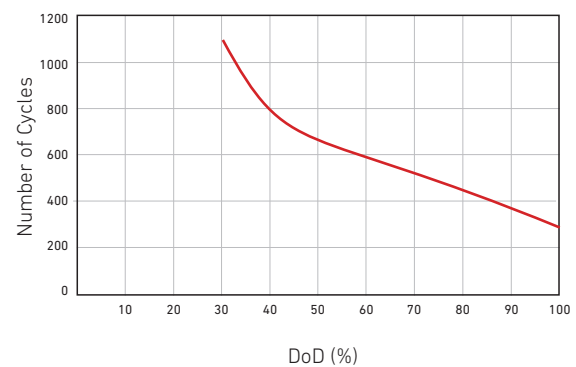
| | |
|--------------------------|-------------------------------------|
| Measurements (L x W x H) | 195 x 130 x 159 mm |
| Weight | Approx. 10.2 kg |
| Terminals | F11 |
| Case material | A.B.S. UL94-HB, UL94-V0 Optional |



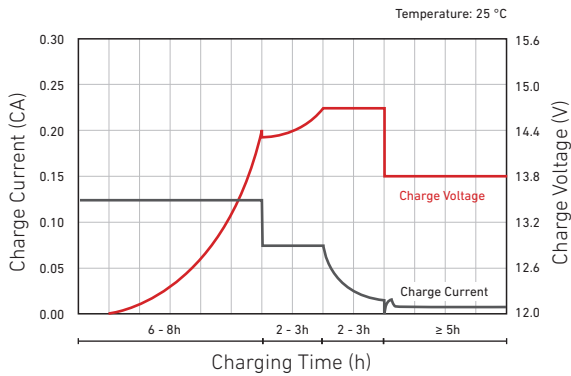
Discharge Characteristics Curve



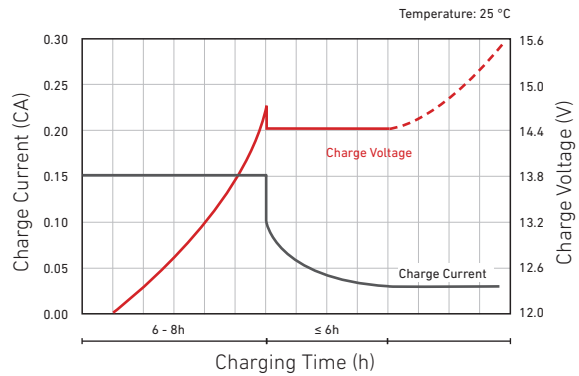
Cycle Life in Relation to Depth of Discharge



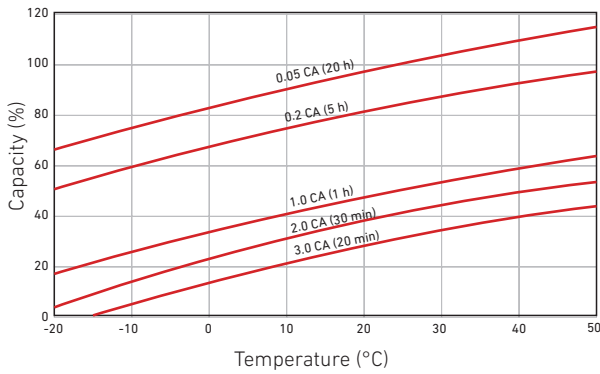
Charge Characteristic Curve for Cycle Use (IIUU)



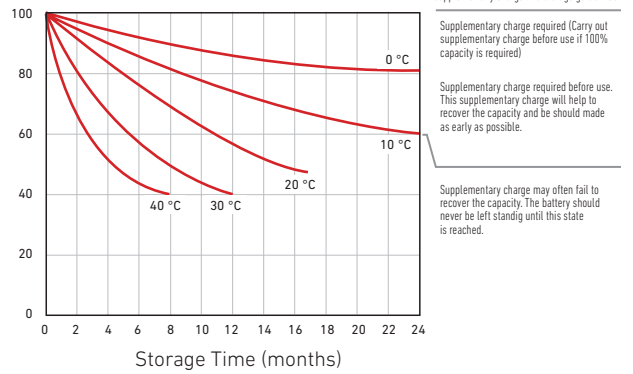
Charge Characteristic Curve for Cycle Use (IUI)



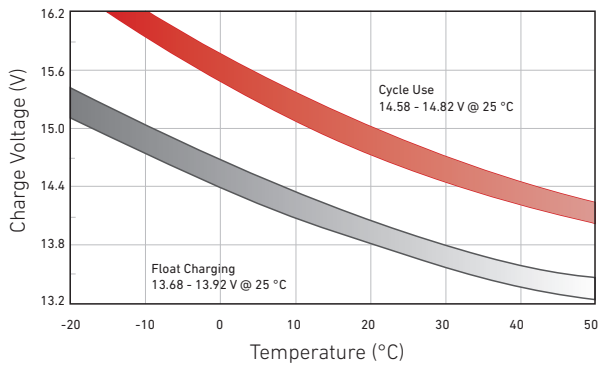
Temperature Effects on Capacity



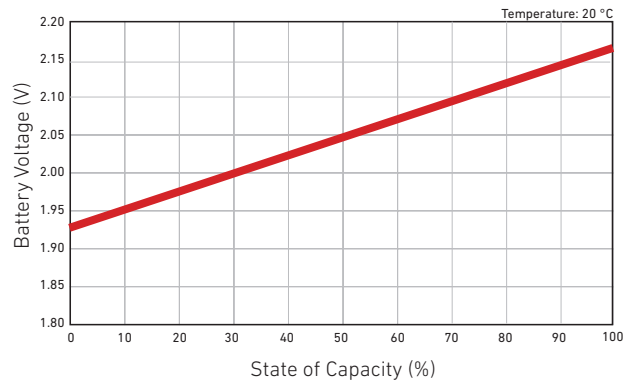
Storage Characteristics



Relationship Between Charging Voltage and Temperature



Relationship of OCV and State of Charge



Constant Current Discharge Characteristics: A (25 °C)

| F.V | Time | | | | | | | | | |
|--------|--------|-------|-------|------|------|------|------|------|------|-------|
| | 30 min | 1 h | 2 h | 3 h | 4 h | 5 h | 8 h | 10 h | 20 h | 100 h |
| 1.60 V | 35,32 | 20,41 | 12,08 | 9,19 | 7,23 | 6,12 | 4,06 | 3,36 | 1,71 | 0,37 |
| 1.65 V | 34,58 | 20,02 | 11,87 | 9,05 | 7,13 | 6,04 | 4,01 | 3,33 | 1,70 | 0,37 |
| 1.70 V | 33,60 | 19,51 | 11,60 | 8,86 | 7,00 | 5,94 | 3,95 | 3,29 | 1,68 | 0,36 |
| 1.75 V | 32,27 | 18,82 | 11,22 | 8,61 | 6,82 | 5,80 | 3,87 | 3,22 | 1,65 | 0,36 |
| 1.80 V | 30,44 | 17,86 | 10,71 | 8,25 | 6,56 | 5,61 | 3,75 | 3,14 | 1,61 | 0,35 |
| 1.85 V | 27,85 | 16,49 | 9,97 | 7,74 | 6,20 | 5,33 | 3,58 | 3,01 | 1,55 | 0,33 |

Constant Power Discharge Characteristics: WPC (25 °C)

| F.V | Time | | | | | | | | | |
|--------|--------|-------|-------|-------|-------|-------|------|------|------|-------|
| | 30 min | 1 h | 2 h | 3 h | 4 h | 5 h | 8 h | 10 h | 20 h | 100 h |
| 1.60 V | 64,16 | 38,16 | 22,89 | 17,55 | 13,89 | 11,80 | 7,92 | 6,61 | 3,38 | 0,73 |
| 1.65 V | 63,75 | 37,84 | 22,66 | 17,39 | 13,77 | 11,71 | 7,86 | 6,56 | 3,35 | 0,72 |
| 1.70 V | 62,29 | 37,00 | 22,21 | 17,07 | 13,54 | 11,54 | 7,75 | 6,48 | 3,31 | 0,71 |
| 1.75 V | 60,43 | 35,86 | 21,60 | 16,65 | 13,24 | 11,31 | 7,60 | 6,36 | 3,26 | 0,70 |
| 1.80 V | 57,58 | 34,19 | 20,71 | 16,02 | 12,79 | 10,97 | 7,39 | 6,20 | 3,19 | 0,69 |
| 1.85 V | 53,21 | 31,80 | 19,39 | 15,10 | 12,12 | 10,45 | 7,07 | 5,95 | 3,07 | 0,66 |