



BTX 12-17LS

12V - 17 Ah (High Rate)
490W @ 15 minutes



Electrical specifications

| | | |
|-------------------------|--------------------|--------------------|
| Nominal Voltage | 12 V | |
| Capacity 25°C to 1,8V/c | 20 hour rate | 16,8 Ah |
| | 10 hour rate | 16,1 Ah |
| | 8 hour rate | 15,9 Ah |
| | 3 hour rate | 14,9 Ah |
| | 1 hour rate | 13,1 Ah |
| Self discharge @ 25°C | per month | 2 - 2,5 % |
| Internal Resistance | fully charged | approx 15 mΩ |
| Maximum current @ 25°C | charging | 5,1 A |
| Short Circuit @ 25°C | 900 A | |
| Charge Voltage @25°C | Float (-3mV/°C/c) | 2,27 - 2,29 V/Cell |
| Charge Voltage @25°C | Cyclic (-5mV/°C/c) | 2,38 - 2,40 V/Cell |

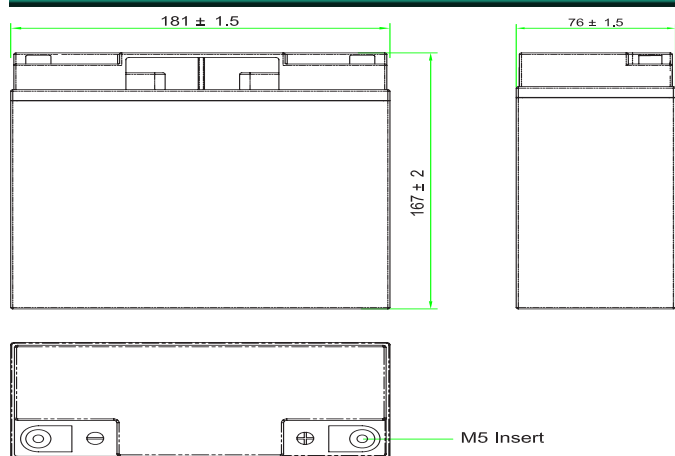
Other specifications

| | | |
|---------------------------------|--------------------------|--|
| Design Floating Life @ 20°C | 12 Years | |
| Dimensions LxWxH (± 1mm) | 181x76x167 mm | |
| Total height | 175 mm | |
| Operating Temperature (storage) | -20 to +50 °C | |
| Separator | Absorbent Glass Mat | |
| Grid alloy | Calcium / Tin lead alloy | |
| Case and cover | ABS | |
| Electrolyte | Sulphuric Acid | |
| Terminal / Length | M5 insert | |
| Optional terminal types | none | |
| Torque setting | 5 - 7 Nm | |
| Weight | 5,9 (±5%) kg | |

Innovative Features

- Longlife 12 year design
- High Discharge Rate
- Lead-Calcium casted grids
- AGM separators for improved electrolyte distribution
- BTX-LS Capacity range: 17-200Ah
- Designed in conformance with the DIN EN 60896-2:1997 standard
- Extremely low gassing
- Reduced self discharge
- 100% recyclable
- No limitations for transport via road, rail, boat or air
- BTX-LS batteries are maintenance free

Dimensions



Constant Amps Discharge - Amps at 25°C

| V/Cell | 5m | 10m | 15m | 20m | 25m | 30m | 35m | 40m | 45m | 50m | 55m | 60m | 90m | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 12h | 20h |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,80 | 69,9 | 49,6 | 39,2 | 30,8 | 25,8 | 22,4 | 19,8 | 17,9 | 16,4 | 15,1 | 14,0 | 13,1 | 9,04 | 7,00 | 4,97 | 3,84 | 3,16 | 2,64 | 2,27 | 1,99 | 1,78 | 1,61 | 1,36 | 0,84 |
| 1,75 | 73,0 | 51,5 | 40,6 | 31,8 | 26,5 | 23,0 | 20,3 | 18,4 | 16,8 | 15,4 | 14,3 | 13,4 | 9,24 | 7,15 | 5,07 | 3,91 | 3,22 | 2,69 | 2,31 | 2,03 | 1,81 | 1,63 | 1,38 | 0,85 |
| 1,70 | 78,3 | 54,8 | 43,1 | 33,8 | 28,1 | 24,4 | 21,6 | 19,4 | 17,8 | 16,3 | 15,1 | 14,1 | 9,70 | 7,52 | 5,32 | 4,10 | 3,37 | 2,81 | 2,42 | 2,12 | 1,89 | 1,72 | 1,44 | 0,89 |
| 1,65 | 83,6 | 58,2 | 45,6 | 35,7 | 29,8 | 25,8 | 22,8 | 20,5 | 18,7 | 17,2 | 15,9 | 14,8 | 10,2 | 7,89 | 5,57 | 4,29 | 3,51 | 2,93 | 2,52 | 2,21 | 1,98 | 1,79 | 1,50 | 0,90 |
| 1,60 | 88,9 | 61,5 | 48,1 | 37,7 | 31,4 | 27,2 | 24,0 | 21,6 | 19,7 | 18,0 | 16,7 | 15,6 | 10,7 | 8,25 | 5,82 | 4,47 | 3,65 | 3,05 | 2,62 | 2,30 | 2,06 | 1,86 | 1,56 | 0,91 |

Constant Power Discharge - Watts per Cell at 25°C

| V/Cell | 5m | 10m | 15m | 20m | 25m | 30m | 35m | 40m | 45m | 50m | 55m | 60m | 90m | 2h | 3h | 4h | 5h | 6h | 7h | 8h | 9h | 10h | 12h | 20h |
|--------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,80 | 126 | 89,3 | 70,4 | 55,2 | 46,1 | 40,0 | 35,6 | 32,3 | 29,7 | 27,6 | 25,9 | 24,4 | 17,0 | 13,3 | 9,54 | 7,32 | 5,99 | 5,04 | 4,37 | 3,86 | 3,47 | 3,15 | 2,72 | 1,75 |
| 1,75 | 133 | 93,2 | 73,3 | 57,4 | 47,9 | 41,5 | 36,9 | 33,4 | 30,7 | 28,5 | 26,7 | 25,2 | 17,5 | 13,6 | 9,81 | 7,51 | 6,14 | 5,17 | 4,47 | 3,95 | 3,54 | 3,22 | 2,77 | 1,77 |
| 1,70 | 139 | 97,2 | 76,1 | 59,6 | 49,6 | 43,0 | 38,2 | 34,5 | 31,7 | 29,4 | 27,5 | 25,9 | 18,0 | 14,0 | 10,1 | 7,70 | 6,29 | 5,29 | 4,57 | 4,04 | 3,62 | 3,29 | 2,83 | 1,78 |
| 1,65 | 146 | 101 | 79,0 | 61,7 | 51,4 | 44,5 | 39,5 | 35,7 | 32,7 | 30,3 | 28,3 | 26,7 | 18,5 | 14,4 | 10,3 | 7,90 | 6,43 | 5,41 | 4,67 | 4,12 | 3,70 | 3,35 | 2,88 | 1,80 |
| 1,60 | 152 | 105 | 81,9 | 63,9 | 53,2 | 46,0 | 40,7 | 36,8 | 33,7 | 31,2 | 29,1 | 27,4 | 19,0 | 14,8 | 10,6 | 8,09 | 6,58 | 5,53 | 4,77 | 4,21 | 3,77 | 3,42 | 2,93 | 1,82 |

Revision: 201603-1



BTX 12-24 LS

12V-23,2Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 23,2 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 20,9 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 124 Watts |

Dimensions

| | |
|-------------------------------------|--------|
| Length | 166 mm |
| Width | 175 mm |
| Height | 125 mm |
| Height over terminals | 130 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 8,6 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 5 mm |
| Torque | 6,2 Nm |

Internal Resistance

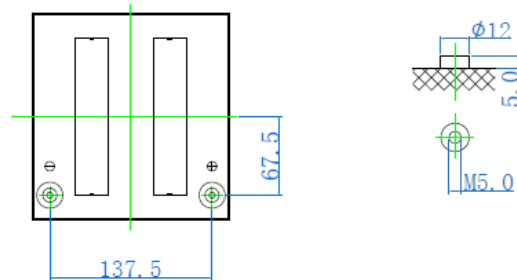
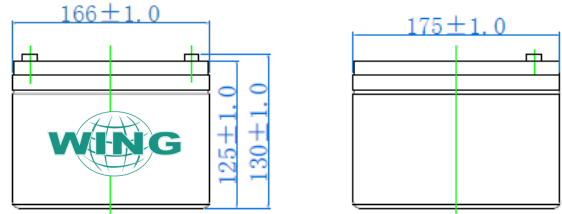
| | |
|---------------------------|-------|
| Impedance (fully charged) | 12 mΩ |
|---------------------------|-------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 7,2 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|------------------------------|
| Standard option | Top cover UL94:V0 / ABS / HB |
|-----------------|------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 300 A (5 s) |
| 1 Minute | 102 A |
| Short Circuit Current | 1750 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-24 LS

12V-23,2Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 102 | 72,9 | 56,7 | 45 | 38,4 | 33,7 | 29,4 | 26,4 | 23,9 | 21,9 | 20 | 18,6 | 13,5 |
| 1,63 | 98,1 | 70,8 | 55,2 | 43,8 | 37,3 | 32,8 | 28,7 | 25,7 | 23,4 | 21,3 | 19,6 | 18,1 | 13,2 |
| 1,65 | 95,4 | 68,9 | 53,8 | 42,7 | 36,4 | 32 | 27,9 | 25 | 22,8 | 20,8 | 19,1 | 17,8 | 12,9 |
| 1,7 | 89,6 | 65 | 50,8 | 40,4 | 34,4 | 30,2 | 26,4 | 23,7 | 21,6 | 19,8 | 18,1 | 16,9 | 12,2 |
| 1,75 | 83,6 | 61 | 47,9 | 38 | 32,4 | 28,5 | 24,9 | 22,4 | 20,4 | 18,7 | 17,2 | 16,1 | 11,7 |
| 1,8 | 80 | 58,7 | 46,2 | 36,8 | 31,5 | 27,7 | 24,3 | 21,8 | 20 | 18,2 | 16,8 | 15,7 | 11,4 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 10,6 | 7,33 | 5,7 | 4,66 | 3,9 | 3,39 | 3,01 | 2,7 | 2,47 | 2,1 | 1,31 |
| 1,63 | 10,3 | 7,15 | 5,56 | 4,54 | 3,8 | 3,3 | 2,93 | 2,63 | 2,41 | 2,04 | 1,28 |
| 1,65 | 10,1 | 7 | 5,44 | 4,44 | 3,72 | 3,23 | 2,86 | 2,58 | 2,36 | 2 | 1,26 |
| 1,7 | 9,57 | 6,66 | 5,18 | 4,23 | 3,54 | 3,07 | 2,73 | 2,45 | 2,24 | 1,9 | 1,21 |
| 1,75 | 9,08 | 6,33 | 4,92 | 4,02 | 3,36 | 2,92 | 2,59 | 2,33 | 2,13 | 1,8 | 1,16 |
| 1,8 | 8,87 | 6,18 | 4,8 | 3,92 | 3,28 | 2,85 | 2,53 | 2,27 | 2,09 | 1,77 | 1,13 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 176 | 124 | 96,7 | 77,1 | 66 | 58 | 51,2 | 46,4 | 42,7 | 39,1 | 36,2 | 33,8 | 23,8 |
| 1,63 | 171 | 121 | 94,9 | 75,6 | 64,8 | 57 | 50,4 | 45,6 | 42 | 38,6 | 35,7 | 33,3 | 23,5 |
| 1,65 | 167 | 120 | 93 | 74,4 | 63,7 | 56,1 | 49,6 | 45 | 41,4 | 38 | 35,2 | 32,9 | 23,1 |
| 1,7 | 160 | 115 | 89,9 | 71,8 | 61,6 | 54,2 | 48 | 43,6 | 40,1 | 36,9 | 34,2 | 32 | 22,5 |
| 1,75 | 152 | 110 | 86,6 | 69,2 | 59,4 | 52,4 | 46,3 | 42,1 | 38,9 | 35,7 | 33,2 | 31,1 | 21,9 |
| 1,8 | 145 | 106 | 83,1 | 66,6 | 57,2 | 50,5 | 44,7 | 40,7 | 37,5 | 34,6 | 32,1 | 30,1 | 21,2 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 18,6 | 13,4 | 10,6 | 8,79 | 7,44 | 6,47 | 5,75 | 5,19 | 4,74 | 4,05 | 2,41 |
| 1,63 | 18,3 | 13,2 | 10,4 | 8,68 | 7,35 | 6,4 | 5,69 | 5,13 | 4,69 | 4,01 | 2,38 |
| 1,65 | 18,1 | 13,1 | 10,3 | 8,58 | 7,28 | 6,33 | 5,64 | 5,08 | 4,65 | 3,96 | 2,36 |
| 1,7 | 17,7 | 12,8 | 10,1 | 8,39 | 7,11 | 6,2 | 5,51 | 4,98 | 4,55 | 3,86 | 2,31 |
| 1,75 | 17,2 | 12,4 | 9,8 | 8,19 | 6,95 | 6,06 | 5,39 | 4,87 | 4,46 | 3,77 | 2,26 |
| 1,8 | 16,7 | 12,1 | 9,58 | 7,99 | 6,78 | 5,92 | 5,28 | 4,77 | 4,37 | 3,69 | 2,21 |



BTX 12-28 LS

12V-27,2Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 27,2 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 26,2 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 143 Watts |

Dimensions

| | |
|-------------------------------------|--------|
| Length | 165 mm |
| Width | 125 mm |
| Height | 175 mm |
| Height over terminals | 175 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 9,5 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 5 mm |
| Torque | 6,2 Nm |

Internal Resistance

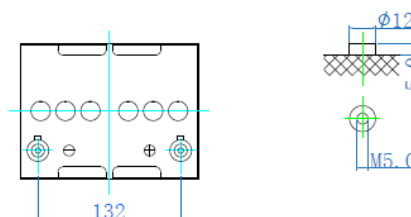
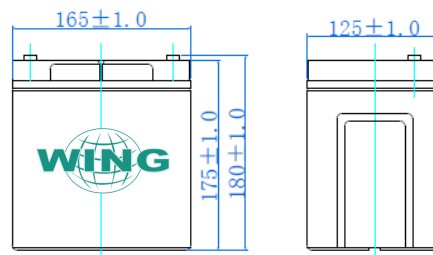
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|---------------------------|------|
| Impedance (fully charged) | 8 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 8,4 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 310 A (5 s) |
| 1 Minute | 113 A |
| Short Circuit Current | 1800 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-28 LS

12V-27,2Ah

Constant Current Discharge - Amps at 20°C (In MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 113 | 80,5 | 62,6 | 50,7 | 44 | 39,2 | 34,3 | 30,8 | 28,1 | 25,8 | 23,9 | 22,3 | 16,1 |
| 1,63 | 109 | 78,3 | 60,9 | 49,2 | 42,9 | 38,2 | 33,5 | 30,1 | 27,4 | 25,2 | 23,4 | 21,8 | 15,8 |
| 1,65 | 105 | 76,1 | 59,3 | 48,1 | 41,7 | 37,2 | 32,6 | 29,3 | 26,7 | 24,6 | 22,8 | 21,3 | 15,4 |
| 1,7 | 99 | 71,8 | 56,1 | 45,5 | 39,5 | 35,2 | 30,8 | 27,8 | 25,4 | 23,4 | 21,7 | 20,3 | 14,7 |
| 1,75 | 92,7 | 67,3 | 52,8 | 42,9 | 37,2 | 33,2 | 29,1 | 26,3 | 24 | 22,1 | 20,5 | 19,3 | 13,9 |
| 1,8 | 88,4 | 64,9 | 51 | 41,5 | 36,2 | 32,3 | 28,4 | 25,6 | 23,5 | 21,6 | 20 | 18,8 | 13,7 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 12,7 | 8,8 | 6,84 | 5,59 | 4,7 | 4,09 | 3,63 | 3,26 | 2,95 | 2,46 | 1,47 |
| 1,63 | 12,3 | 8,57 | 6,66 | 5,44 | 4,62 | 4,02 | 3,56 | 3,21 | 2,9 | 2,43 | 1,46 |
| 1,65 | 12 | 8,39 | 6,52 | 5,33 | 4,53 | 3,95 | 3,5 | 3,16 | 2,86 | 2,39 | 1,44 |
| 1,7 | 11,5 | 8,02 | 6,23 | 5,08 | 4,36 | 3,8 | 3,39 | 3,07 | 2,77 | 2,31 | 1,4 |
| 1,75 | 10,9 | 7,6 | 5,91 | 4,82 | 4,18 | 3,66 | 3,27 | 2,97 | 2,7 | 2,24 | 1,36 |
| 1,8 | 10,7 | 7,41 | 5,76 | 4,7 | 4,01 | 3,52 | 3,15 | 2,87 | 2,62 | 2,17 | 1,34 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 206 | 143 | 110 | 88,6 | 76,8 | 68,2 | 60,7 | 55,4 | 51,2 | 47,2 | 44 | 41,3 | 29,1 |
| 1,63 | 202 | 140 | 108 | 87,1 | 75,5 | 67,1 | 59,8 | 54,5 | 50,4 | 46,6 | 43,3 | 40,8 | 28,7 |
| 1,65 | 197 | 137 | 106 | 85,7 | 74,3 | 66,1 | 58,8 | 53,7 | 49,7 | 45,9 | 42,8 | 40,2 | 28,3 |
| 1,7 | 189 | 132 | 102 | 82,8 | 71,7 | 63,8 | 56,9 | 52 | 48,2 | 44,5 | 41,5 | 39 | 27,5 |
| 1,75 | 180 | 127 | 98,6 | 79,8 | 69,2 | 61,7 | 55 | 50,3 | 46,6 | 43,1 | 40,3 | 37,9 | 26,6 |
| 1,8 | 171 | 121 | 94,9 | 76,8 | 66,7 | 59,4 | 53 | 48,6 | 45 | 41,7 | 39 | 36,8 | 25,9 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 23,1 | 16,9 | 13,3 | 11,1 | 9,35 | 8,14 | 7,23 | 6,52 | 5,95 | 4,98 | 2,91 |
| 1,63 | 22,8 | 16,7 | 13,1 | 11 | 9,25 | 8,05 | 7,15 | 6,45 | 5,89 | 4,92 | 2,88 |
| 1,65 | 22,5 | 16,5 | 13 | 10,9 | 9,16 | 7,96 | 7,07 | 6,38 | 5,83 | 4,86 | 2,85 |
| 1,7 | 21,9 | 16 | 12,7 | 10,6 | 8,95 | 7,79 | 6,93 | 6,25 | 5,71 | 4,74 | 2,79 |
| 1,75 | 21,3 | 15,6 | 12,4 | 10,4 | 8,75 | 7,62 | 6,78 | 6,12 | 5,59 | 4,63 | 2,74 |
| 1,8 | 20,6 | 15,2 | 12 | 10,1 | 8,55 | 7,45 | 6,63 | 5,98 | 5,47 | 4,51 | 2,68 |



BTX 12-33 LS

12V-33Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 33 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 32 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 152 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 195 mm |
| Width | 130 mm |
| Height | 155 mm |
| Height over terminals | 160 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 11,1 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

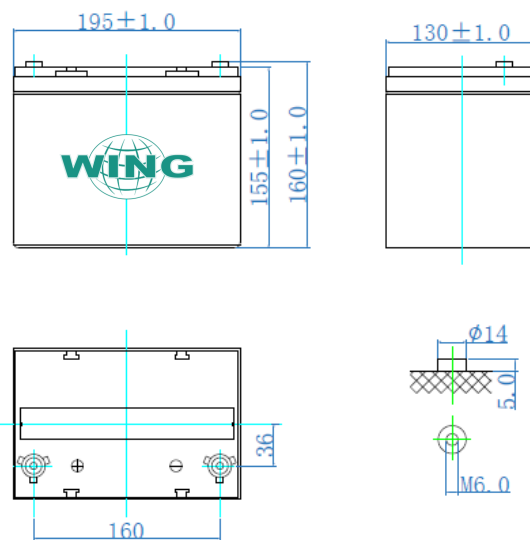
| | |
|---------------------------|------|
| Impedance (fully charged) | 7 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 9,9 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 330 A (5 s) |
| 1 Minute | 122 A |
| Short Circuit Current | 1850 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-33 LS

12V-33Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 122 | 87,9 | 68,4 | 55,3 | 48 | 42,8 | 37,8 | 34,2 | 31,4 | 28,7 | 26,4 | 24,5 | 18 |
| 1,63 | 118 | 85,5 | 66,6 | 53,8 | 46,8 | 41,6 | 36,8 | 33,4 | 30,7 | 27,9 | 25,7 | 23,9 | 17,6 |
| 1,65 | 114 | 83,1 | 64,8 | 52,5 | 45,6 | 40,6 | 35,9 | 32,5 | 29,9 | 27,3 | 25,2 | 23,4 | 17,2 |
| 1,7 | 107 | 78,3 | 61,2 | 49,6 | 43,1 | 38,4 | 34 | 30,8 | 28,4 | 25,9 | 23,9 | 22,2 | 16,3 |
| 1,75 | 99,9 | 73,5 | 57,7 | 46,8 | 40,6 | 36,2 | 32,1 | 29,1 | 26,9 | 24,5 | 22,7 | 21,1 | 15,5 |
| 1,8 | 95,4 | 70,7 | 55,6 | 45,3 | 39,5 | 35,3 | 31,3 | 28,4 | 26,2 | 23,9 | 22,1 | 20,6 | 15,1 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 14,4 | 10,4 | 8,51 | 7,13 | 6,13 | 5,34 | 4,7 | 4,2 | 3,78 | 3,12 | 1,79 |
| 1,63 | 14 | 10,2 | 8,31 | 6,96 | 5,98 | 5,21 | 4,6 | 4,1 | 3,71 | 3,07 | 1,77 |
| 1,65 | 13,7 | 9,89 | 8,11 | 6,8 | 5,85 | 5,08 | 4,48 | 4,01 | 3,64 | 3,02 | 1,75 |
| 1,7 | 13,1 | 9,44 | 7,72 | 6,47 | 5,56 | 4,83 | 4,27 | 3,81 | 3,49 | 2,91 | 1,7 |
| 1,75 | 12,4 | 8,95 | 7,32 | 6,14 | 5,28 | 4,59 | 4,04 | 3,62 | 3,35 | 2,8 | 1,65 |
| 1,8 | 12,1 | 8,75 | 7,16 | 5,99 | 5,16 | 4,48 | 3,96 | 3,54 | 3,2 | 2,7 | 1,61 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 222 | 152 | 116 | 93,9 | 81,8 | 72,9 | 64,9 | 59,2 | 54,6 | 50,5 | 47,2 | 44,5 | 31,3 |
| 1,63 | 218 | 149 | 113 | 92,5 | 80,4 | 71,7 | 63,8 | 58,2 | 53,8 | 49,8 | 46,6 | 43,8 | 30,8 |
| 1,65 | 213 | 146 | 112 | 91,1 | 79,1 | 70,6 | 62,8 | 57,3 | 53 | 49,1 | 45,9 | 43,2 | 30,5 |
| 1,7 | 203 | 141 | 108 | 87,6 | 76,3 | 68,2 | 60,7 | 55,5 | 51,4 | 47,6 | 44,6 | 42,1 | 29,6 |
| 1,75 | 194 | 134 | 103 | 84,4 | 73,6 | 65,8 | 58,8 | 53,7 | 49,7 | 46,2 | 43,2 | 40,9 | 28,7 |
| 1,8 | 185 | 129 | 99,5 | 81,2 | 70,9 | 63,5 | 56,7 | 51,8 | 48,1 | 44,7 | 41,9 | 39,6 | 27,9 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 25,6 | 19,2 | 15 | 12,4 | 10,6 | 9,28 | 8,3 | 7,54 | 6,93 | 5,81 | 3,54 |
| 1,63 | 25,2 | 18,9 | 14,8 | 12,2 | 10,5 | 9,19 | 8,22 | 7,46 | 6,86 | 5,74 | 3,5 |
| 1,65 | 25 | 18,7 | 14,7 | 12,1 | 10,4 | 9,09 | 8,13 | 7,38 | 6,79 | 5,67 | 3,47 |
| 1,7 | 24,3 | 18,2 | 14,4 | 11,9 | 10,2 | 8,89 | 7,96 | 7,24 | 6,65 | 5,55 | 3,4 |
| 1,75 | 23,6 | 17,8 | 14 | 11,6 | 9,89 | 8,7 | 7,79 | 7,08 | 6,51 | 5,42 | 3,34 |
| 1,8 | 22,9 | 17,3 | 13,7 | 11,3 | 9,7 | 8,51 | 7,61 | 6,93 | 6,37 | 5,3 | 3,28 |



BTX 12-45 LS

12V-45,2Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 45,2 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 43,7 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 194 Watts |

Dimensions

| | |
|-------------------------------------|----------|
| Length | 197,5 mm |
| Width | 165,5 mm |
| Height | 170 mm |
| Height over terminals | 170 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 14,8 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

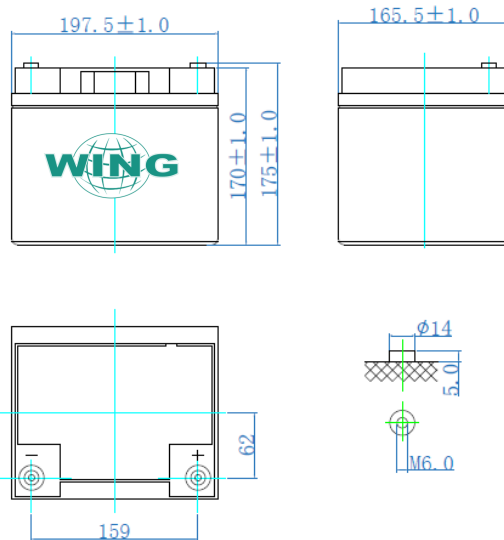
| | |
|---------------------------|--------|
| Impedance (fully charged) | 6,1 mΩ |
|---------------------------|--------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 13,5 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 450 A (5 s) |
| 1 Minute | 158 A |
| Short Circuit Current | 1920 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-45 LS

12V-45,2Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 158 | 111 | 87,8 | 70,2 | 60,3 | 53,1 | 47,2 | 43 | 39,8 | 36,3 | 33,4 | 31 | 22,7 |
| 1,63 | 153 | 108 | 85,5 | 68,4 | 58,7 | 51,7 | 46 | 42 | 38,8 | 35,4 | 32,6 | 30,2 | 22,2 |
| 1,65 | 149 | 105 | 83,2 | 66,5 | 57,2 | 50,4 | 44,8 | 40,9 | 37,8 | 34,6 | 31,8 | 29,5 | 21,7 |
| 1,7 | 140 | 98,4 | 78,7 | 62,9 | 54 | 47,7 | 42,4 | 38,7 | 35,9 | 32,8 | 30,3 | 28,1 | 20,6 |
| 1,75 | 130 | 92,9 | 74,1 | 59,2 | 50,9 | 44,9 | 40 | 36,7 | 34 | 31,1 | 28,7 | 26,7 | 19,6 |
| 1,8 | 124 | 89,3 | 71,5 | 57,4 | 49,4 | 43,7 | 39 | 35,7 | 33,2 | 30,3 | 28 | 26,1 | 19,2 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 18,1 | 13,2 | 10,8 | 9,17 | 8,06 | 7,12 | 6,32 | 5,69 | 5,12 | 4,26 | 2,43 |
| 1,63 | 17,7 | 12,9 | 10,5 | 8,94 | 7,87 | 6,95 | 6,17 | 5,55 | 5,02 | 4,18 | 2,41 |
| 1,65 | 17,3 | 12,6 | 10,3 | 8,75 | 7,69 | 6,79 | 6,03 | 5,43 | 4,93 | 4,11 | 2,38 |
| 1,7 | 16,5 | 11,9 | 9,8 | 8,32 | 7,32 | 6,46 | 5,74 | 5,17 | 4,73 | 3,97 | 2,32 |
| 1,75 | 15,6 | 11,3 | 9,26 | 7,91 | 6,95 | 6,13 | 5,45 | 4,91 | 4,55 | 3,82 | 2,26 |
| 1,8 | 15,4 | 11,1 | 9,07 | 7,74 | 6,8 | 6 | 5,34 | 4,8 | 4,37 | 3,69 | 2,21 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| 1,6 | 281 | 194 | 156 | 125 | 106 | 93,3 | 82,4 | 74,6 | 68,5 | 63,2 | 58,8 | 55,1 | 38,8 |
| 1,63 | 275 | 190 | 153 | 122 | 104 | 91,8 | 81,1 | 73,4 | 67,5 | 62,2 | 58 | 54,3 | 38,2 |
| 1,65 | 269 | 187 | 152 | 120 | 102 | 90,3 | 79,8 | 72,3 | 66,5 | 61,3 | 57,1 | 53,6 | 37,7 |
| 1,7 | 257 | 179 | 146 | 116 | 99,6 | 87,3 | 77,2 | 70 | 64,4 | 59,5 | 55,5 | 52,1 | 36,7 |
| 1,75 | 245 | 172 | 140 | 112 | 95,9 | 84,2 | 74,6 | 67,8 | 62,4 | 57,7 | 53,8 | 50,5 | 35,5 |
| 1,8 | 233 | 165 | 135 | 108 | 92,2 | 81,2 | 72 | 65,4 | 60,3 | 55,8 | 52,2 | 49 | 34,5 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 32 | 24,1 | 19,4 | 16,5 | 14,2 | 12,4 | 11,2 | 10,1 | 9,33 | 8,07 | 5,26 |
| 1,63 | 31,5 | 23,8 | 19,2 | 16,3 | 14 | 12,2 | 11 | 9,99 | 9,23 | 7,98 | 5,2 |
| 1,65 | 31,1 | 23,5 | 19 | 16,1 | 13,8 | 12,1 | 10,9 | 9,89 | 9,15 | 7,91 | 5,14 |
| 1,7 | 30,3 | 22,8 | 18,5 | 15,8 | 13,5 | 11,8 | 10,7 | 9,7 | 8,95 | 7,74 | 5,02 |
| 1,75 | 29,5 | 22,3 | 18 | 15,4 | 13,2 | 11,6 | 10,5 | 9,51 | 8,77 | 7,58 | 4,92 |
| 1,8 | 28,7 | 21,7 | 17,7 | 15 | 12,9 | 11,3 | 10,2 | 9,3 | 8,58 | 7,42 | 4,81 |



BTX 12-55 LS

12V-56,26Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 56,26 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 53,35 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 239 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 229 mm |
| Width | 138 mm |
| Height | 208 mm |
| Height over terminals | 213 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 17,2 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

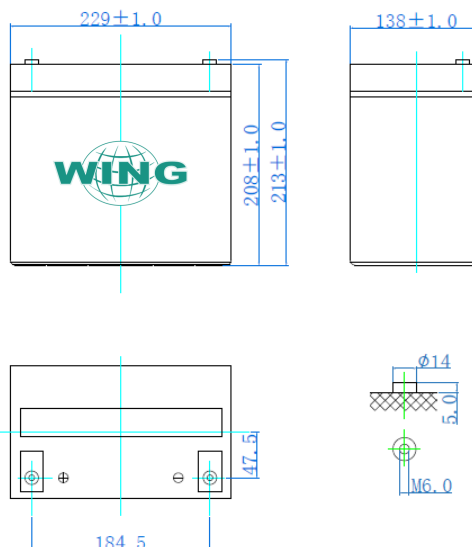
| | |
|---------------------------|--------|
| Impedance (fully charged) | 5,8 mΩ |
|---------------------------|--------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 16,5 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 550 A (5 s) |
| 1 Minute | 170 A |
| Short Circuit Current | 2050 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-55 LS

12V-56,26Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 170 | 132 | 105 | 89,8 | 78,6 | 68,7 | 61,6 | 55,9 | 51,3 | 47,6 | 44,2 | 41,3 | 29,7 |
| 1,63 | 165 | 129 | 102 | 87,5 | 76,6 | 66,7 | 60,1 | 54,7 | 49,9 | 46,5 | 43,1 | 40,1 | 29,1 |
| 1,65 | 160 | 125 | 99,5 | 85,6 | 74,9 | 65,1 | 59,0 | 53,6 | 48,8 | 45,5 | 42,3 | 39,4 | 28,6 |
| 1,7 | 150 | 118 | 94,9 | 81,4 | 71,3 | 61,7 | 56,3 | 51,2 | 46,4 | 43,5 | 40,5 | 37,5 | 27,5 |
| 1,75 | 140 | 110 | 89,2 | 77,2 | 67,6 | 58,1 | 53,8 | 48,9 | 43,9 | 41,5 | 38,7 | 35,6 | 26,5 |
| 1,8 | 134 | 106 | 86,1 | 73,0 | 64,0 | 56,6 | 51,2 | 46,6 | 42,8 | 39,5 | 36,9 | 34,8 | 25,5 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 23,4 | 16,6 | 13,0 | 10,7 | 9,18 | 8,08 | 7,18 | 6,44 | 5,89 | 4,95 | 3,02 |
| 1,63 | 22,9 | 16,3 | 12,8 | 10,5 | 9,06 | 7,96 | 7,08 | 6,35 | 5,81 | 4,88 | 2,98 |
| 1,65 | 22,6 | 16,1 | 12,6 | 10,4 | 8,96 | 7,86 | 7,00 | 6,29 | 5,75 | 4,83 | 2,95 |
| 1,7 | 21,8 | 15,6 | 12,2 | 10,2 | 8,74 | 7,65 | 6,82 | 6,14 | 5,61 | 4,72 | 2,88 |
| 1,75 | 21,0 | 15,1 | 11,8 | 9,90 | 8,53 | 7,44 | 6,64 | 5,99 | 5,47 | 4,61 | 2,81 |
| 1,8 | 20,3 | 14,6 | 11,5 | 9,64 | 8,32 | 7,23 | 6,47 | 5,85 | 5,34 | 4,50 | 2,75 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 1,6 | 317 | 239 | 188 | 154 | 134 | 117 | 105 | 96,4 | 89,6 | 83,4 | 77,5 | 72,7 | 53,1 |
| 1,63 | 310 | 234 | 183 | 151 | 131 | 115 | 103 | 94,5 | 88,0 | 82,1 | 76,3 | 71,6 | 52,3 |
| 1,65 | 303 | 230 | 180 | 149 | 129 | 113 | 101 | 93,6 | 86,5 | 80,8 | 75,2 | 70,7 | 51,6 |
| 1,7 | 290 | 222 | 174 | 143 | 124 | 109 | 98,3 | 90,8 | 84,2 | 78,4 | 73,0 | 68,7 | 50,2 |
| 1,75 | 276 | 213 | 167 | 138 | 119 | 105 | 95,4 | 88,1 | 81,0 | 75,9 | 70,8 | 66,7 | 48,9 |
| 1,8 | 263 | 203 | 161 | 133 | 116 | 102 | 93,1 | 85,3 | 78,8 | 73,4 | 68,6 | 64,7 | 47,6 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 41,4 | 29,7 | 23,2 | 19,1 | 16,3 | 14,2 | 12,7 | 11,4 | 10,4 | 8,92 | 5,58 |
| 1,63 | 40,8 | 29,3 | 22,9 | 18,9 | 16,1 | 14,0 | 12,5 | 11,3 | 10,3 | 8,83 | 5,50 |
| 1,65 | 40,4 | 29,0 | 22,6 | 18,7 | 15,9 | 13,9 | 12,4 | 11,2 | 10,2 | 8,75 | 5,45 |
| 1,7 | 39,5 | 28,3 | 22,1 | 18,3 | 15,6 | 13,6 | 12,1 | 11,0 | 10,1 | 8,58 | 5,31 |
| 1,75 | 38,6 | 27,6 | 21,6 | 17,9 | 15,3 | 13,4 | 11,9 | 10,8 | 9,89 | 8,42 | 5,17 |
| 1,8 | 37,7 | 26,9 | 21,1 | 17,5 | 15,0 | 13,2 | 11,7 | 10,6 | 9,73 | 8,26 | 5,07 |



BTX 12-75 LS

12V-74,6Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 74,6 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 72,8 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 294 Watts |

Dimensions

| | |
|-------------------------------------|--------|
| Length | 258 mm |
| Width | 166 mm |
| Height | 206 mm |
| Height over terminals | 211 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 23 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

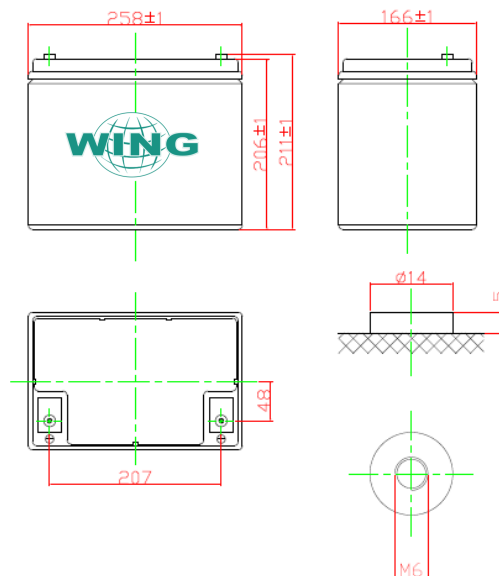
| | |
|---------------------------|--------|
| Impedance (fully charged) | 5,5 mΩ |
|---------------------------|--------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 22,5 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 700 A (5 s) |
| 1 Minute | 210 A |
| Short Circuit Current | 2400 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-75 LS

12V-74,6Ah

Constant Current Discharge - Amps at 20°C (In MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 210 | 163 | 129 | 107 | 94 | 84,6 | 74,4 | 66,2 | 59,6 | 52,8 | 47,8 | 44,2 | 34,2 |
| 1,63 | 203 | 158 | 126 | 104 | 92 | 82,3 | 72,8 | 64,6 | 57 | 51,9 | 47 | 43,8 | 33,9 |
| 1,65 | 197 | 154 | 123 | 101 | 90,1 | 80,2 | 71,1 | 63,2 | 54,5 | 50,9 | 46,4 | 43,5 | 33,7 |
| 1,7 | 185 | 144 | 116 | 95,8 | 86,1 | 75,9 | 67,7 | 60,3 | 53,2 | 49 | 45 | 42,8 | 33,1 |
| 1,75 | 172 | 136 | 110 | 90 | 82,2 | 71,5 | 64,3 | 57,4 | 51,8 | 47,1 | 43,7 | 41,9 | 32,5 |
| 1,8 | 165 | 131 | 106 | 87,2 | 78,2 | 69,7 | 61 | 54,4 | 48,9 | 45,2 | 42,4 | 40,3 | 31,1 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 27,3 | 20,5 | 16,7 | 14 | 11,9 | 10,6 | 9,48 | 8,66 | 7,9 | 6,66 | 4 |
| 1,63 | 27 | 20,4 | 16,6 | 13,9 | 11,8 | 10,5 | 9,39 | 8,58 | 7,83 | 6,58 | 3,95 |
| 1,65 | 26,8 | 20,3 | 16,4 | 13,8 | 11,7 | 10,5 | 9,33 | 8,53 | 7,78 | 6,5 | 3,91 |
| 1,7 | 26,4 | 19,9 | 16,2 | 13,6 | 11,5 | 10,3 | 9,17 | 8,38 | 7,64 | 6,33 | 3,82 |
| 1,75 | 25,8 | 19,5 | 15,8 | 13,3 | 11,3 | 10,1 | 8,98 | 8,22 | 7,49 | 6,17 | 3,73 |
| 1,8 | 24,9 | 18,7 | 15,2 | 12,7 | 10,9 | 9,66 | 8,63 | 7,9 | 7,28 | 6,01 | 3,65 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1,6 | 390 | 294 | 231 | 186 | 162 | 144 | 129 | 118 | 110 | 102 | 95 | 89,4 | 65,6 |
| 1,63 | 382 | 289 | 226 | 183 | 159 | 141 | 127 | 116 | 108 | 99,8 | 93,7 | 88,2 | 64,7 |
| 1,65 | 374 | 283 | 222 | 180 | 156 | 139 | 125 | 114 | 106 | 98,8 | 92,3 | 86,9 | 63,8 |
| 1,7 | 356 | 272 | 214 | 174 | 151 | 134 | 120 | 111 | 104 | 96 | 89,7 | 84,5 | 62 |
| 1,75 | 340 | 261 | 206 | 167 | 146 | 130 | 117 | 108 | 99,8 | 92,9 | 87 | 82 | 60,2 |
| 1,8 | 323 | 250 | 198 | 161 | 140 | 125 | 113 | 104 | 96,9 | 90 | 84,4 | 79,5 | 58,4 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 52,3 | 39,5 | 32 | 27,3 | 23,6 | 21 | 19 | 17,6 | 16,3 | 13,8 | 8,69 |
| 1,63 | 51,6 | 39 | 31,6 | 27 | 23,3 | 20,8 | 18,8 | 17,4 | 16,1 | 13,6 | 8,62 |
| 1,65 | 50,9 | 38,6 | 31,3 | 26,7 | 23,1 | 20,6 | 18,6 | 17,2 | 15,9 | 13,5 | 8,56 |
| 1,7 | 49,5 | 37,5 | 30,6 | 26,1 | 22,6 | 20,1 | 18,2 | 16,8 | 15,6 | 13,2 | 8,42 |
| 1,75 | 48,2 | 36,5 | 29,8 | 25,4 | 22 | 19,6 | 17,8 | 16,4 | 15,3 | 12,9 | 8,28 |
| 1,8 | 46,8 | 35,5 | 29 | 24,8 | 21,5 | 19,2 | 17,5 | 16 | 14,9 | 12,7 | 8,16 |



BTX 12-80 LS

12V-77,6Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 77,6 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 73,7 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 340 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 350 mm |
| Width | 167 mm |
| Height | 179 mm |
| Height over terminals | 179 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 26,2 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

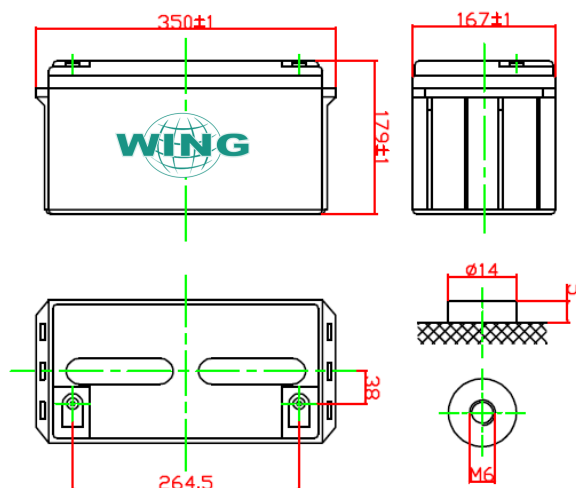
| | |
|---------------------------|--------|
| Impedance (fully charged) | 4,7 mΩ |
|---------------------------|--------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 24 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|----------------------------------|
| Standard option | Top cover UL94:V0 / container HB |
|-----------------|----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 720 A (5 s) |
| 1 Minute | 242 A |
| Short Circuit Current | 2800 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-80 LS

12V-77,6Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|
| 1,6 | 242 | 191 | 155 | 126 | 110 | 97,8 | 86,5 | 78,2 | 71,8 | 66,7 | 62,5 | 59 | 45,1 |
| 1,63 | 235 | 186 | 152 | 123 | 107 | 94,9 | 84,4 | 76,3 | 70 | 65,1 | 61 | 57,6 | 44 |
| 1,65 | 228 | 181 | 148 | 120 | 104 | 93,1 | 82,2 | 74,4 | 68,3 | 63,5 | 59,6 | 56,2 | 43 |
| 1,7 | 213 | 171 | 140 | 113 | 98,7 | 88,1 | 77,8 | 70,5 | 64,8 | 60,3 | 56,6 | 53,6 | 41 |
| 1,75 | 199 | 160 | 131 | 107 | 93 | 83 | 73,4 | 66,6 | 61,4 | 57,1 | 53,7 | 50,8 | 38,9 |
| 1,8 | 191 | 155 | 126 | 103 | 90,2 | 80,8 | 71,5 | 65 | 59,9 | 55,8 | 52,4 | 49,7 | 37,9 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 36,4 | 26,2 | 21 | 17,2 | 14,5 | 12,3 | 10,9 | 9,64 | 8,73 | 7,23 | 4,32 |
| 1,63 | 35,5 | 25,6 | 20,6 | 16,8 | 14,1 | 12 | 10,6 | 9,41 | 8,56 | 7,07 | 4,24 |
| 1,65 | 34,7 | 25 | 20,1 | 16,4 | 13,8 | 11,7 | 10,4 | 9,19 | 8,39 | 6,94 | 4,17 |
| 1,7 | 33 | 23,8 | 19,1 | 15,6 | 13,1 | 11,3 | 9,89 | 8,75 | 8,05 | 6,65 | 4,03 |
| 1,75 | 31,3 | 22,6 | 18,1 | 14,7 | 12,4 | 10,7 | 9,34 | 8,3 | 7,71 | 6,37 | 3,88 |
| 1,8 | 30,6 | 22,1 | 17,8 | 14,5 | 12,2 | 10,4 | 9,13 | 8,12 | 7,37 | 6,09 | 3,73 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1,6 | 448 | 340 | 267 | 217 | 188 | 167 | 149 | 136 | 126 | 116 | 108 | 101 | 73,9 |
| 1,63 | 438 | 334 | 262 | 213 | 184 | 165 | 147 | 134 | 124 | 114 | 106 | 98,8 | 72,5 |
| 1,65 | 429 | 328 | 258 | 209 | 181 | 162 | 145 | 132 | 123 | 113 | 105 | 97,9 | 71,8 |
| 1,7 | 410 | 316 | 248 | 202 | 176 | 157 | 140 | 128 | 119 | 109 | 102 | 95 | 69,7 |
| 1,75 | 391 | 303 | 239 | 194 | 169 | 151 | 135 | 124 | 115 | 106 | 98,8 | 92,5 | 67,9 |
| 1,8 | 372 | 290 | 230 | 187 | 163 | 146 | 131 | 120 | 111 | 103 | 96 | 89,8 | 65,9 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 58,5 | 44 | 35,3 | 29,9 | 25,7 | 22,8 | 20,7 | 18,7 | 17,2 | 14,5 | 9,1 |
| 1,63 | 57,7 | 43,4 | 34,8 | 29,5 | 25,4 | 22,5 | 20,4 | 18,5 | 17 | 14,3 | 9,01 |
| 1,65 | 56,9 | 42,9 | 34,4 | 29,2 | 25,2 | 22,3 | 20,2 | 18,3 | 16,8 | 14,1 | 8,92 |
| 1,7 | 55,4 | 41,8 | 33,7 | 28,5 | 24,6 | 21,8 | 19,8 | 17,9 | 16,4 | 13,7 | 8,75 |
| 1,75 | 53,9 | 40,7 | 32,8 | 27,8 | 24,1 | 21,3 | 19,4 | 17,6 | 16 | 13,4 | 8,57 |
| 1,8 | 52,3 | 39,6 | 32 | 27,2 | 23,5 | 20,9 | 18,9 | 17,2 | 15,6 | 13,1 | 8,4 |



BTX 12-90 LS

12V-91,4Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 91,4 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 87,3 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 386 Watts |

Dimensions

| | |
|-------------------------------------|--------|
| Length | 306 mm |
| Width | 169 mm |
| Height | 210 mm |
| Height over terminals | 215 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 28 kg |

Terminal Type

| | |
|--------------------------|--------|
| Female threaded terminal | 6 mm |
| Torque | 8,5 Nm |

Internal Resistance

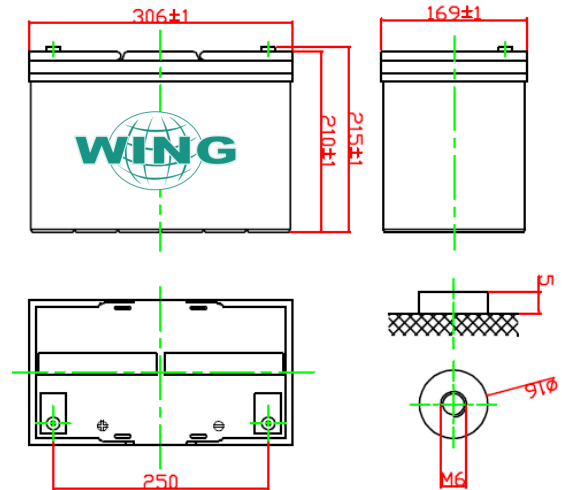
| | |
|---------------------------|------|
| Impedance (fully charged) | 5 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 27 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|--------------------------------|
| Standard option | Top Cover - UL94:V0 / ABS / HB |
|-----------------|--------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 800 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 2900 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-90 LS

12V-91,4Ah

Constant Current Discharge - Amps at 20°C (In MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 1,6 | / | 216 | 179 | 144 | 125 | 111 | 98,7 | 90 | 83,1 | 75,7 | 69,6 | 64,6 | 49,4 |
| 1,63 | / | 211 | 174 | 140 | 121 | 108 | 95,9 | 87,7 | 81,1 | 73,9 | 68 | 63,1 | 48,2 |
| 1,65 | / | 205 | 169 | 137 | 118 | 105 | 94 | 85,5 | 79,1 | 72,1 | 66,4 | 61,7 | 47,1 |
| 1,7 | / | 193 | 160 | 129 | 112 | 99,6 | 88,8 | 81,1 | 75,1 | 68,5 | 63,1 | 58,6 | 44,8 |
| 1,75 | / | 181 | 151 | 122 | 105 | 94 | 83,8 | 76,6 | 71 | 64,9 | 59,9 | 55,7 | 42,5 |
| 1,8 | / | 175 | 145 | 118 | 102 | 91,6 | 81,7 | 74,7 | 69,4 | 63,4 | 58,5 | 54,4 | 41,5 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 39,8 | 28,7 | 23,1 | 19,5 | 16,5 | 14,6 | 12,9 | 11,5 | 10,4 | 8,71 | 5,09 |
| 1,63 | 38,9 | 28 | 22,5 | 19 | 16,1 | 14,2 | 12,5 | 11,3 | 10,1 | 8,5 | 5,01 |
| 1,65 | 38 | 27,5 | 22 | 18,5 | 15,7 | 13,9 | 12,3 | 11,1 | 9,89 | 8,31 | 4,92 |
| 1,7 | 36,1 | 26 | 21 | 17,7 | 14,9 | 13,2 | 11,6 | 10,5 | 9,48 | 7,9 | 4,74 |
| 1,75 | 34,3 | 24,8 | 19,9 | 16,8 | 14,3 | 12,5 | 11,1 | 9,99 | 9,1 | 7,51 | 4,57 |
| 1,8 | 33,6 | 24,2 | 19,5 | 16,4 | 13,9 | 12,2 | 10,9 | 9,7 | 8,73 | 7,33 | 4,39 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1,6 | / | 386 | 310 | 253 | 221 | 197 | 175 | 159 | 146 | 134 | 124 | 115 | 84,3 |
| 1,63 | / | 379 | 304 | 248 | 217 | 195 | 172 | 156 | 144 | 132 | 122 | 113 | 83 |
| 1,65 | / | 372 | 299 | 244 | 213 | 192 | 169 | 154 | 143 | 130 | 120 | 112 | 82,2 |
| 1,7 | / | 358 | 287 | 235 | 206 | 185 | 165 | 149 | 138 | 126 | 117 | 109 | 80,2 |
| 1,75 | / | 343 | 277 | 227 | 198 | 179 | 159 | 145 | 134 | 123 | 113 | 105 | 77,4 |
| 1,8 | / | 328 | 266 | 219 | 192 | 172 | 153 | 140 | 129 | 119 | 110 | 103 | 75,3 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 65,4 | 48,4 | 38,8 | 32,8 | 28,3 | 25,1 | 22,7 | 20,8 | 19,3 | 16,7 | 10,8 |
| 1,63 | 64,5 | 47,8 | 38,3 | 32,4 | 27,9 | 24,8 | 22,4 | 20,6 | 19,1 | 16,5 | 10,6 |
| 1,65 | 63,6 | 47,2 | 37,9 | 32,1 | 27,6 | 24,5 | 22,2 | 20,4 | 18,9 | 16,3 | 10,5 |
| 1,7 | 62 | 46 | 37,1 | 31,3 | 27,1 | 24,1 | 21,7 | 20 | 18,5 | 15,9 | 10,3 |
| 1,75 | 60,3 | 44,8 | 36,1 | 30,7 | 26,5 | 23,5 | 21,2 | 19,5 | 18,1 | 15,5 | 10,1 |
| 1,8 | 58,7 | 43,6 | 35,2 | 29,9 | 25,8 | 23 | 20,8 | 19,1 | 17,8 | 15,2 | 9,89 |



BTX 12-100 LS

12V-101,8Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 101,8 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 97 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 432 Watts |

Dimensions

| | |
|-------------------------------------|--------|
| Length | 330 mm |
| Width | 171 mm |
| Height | 215 mm |
| Height over terminals | 220 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 33 kg |

Terminal Type

| | |
|--------------------------|---------|
| Female threaded terminal | 8 mm |
| Torque | 12,4 Nm |

Internal Resistance

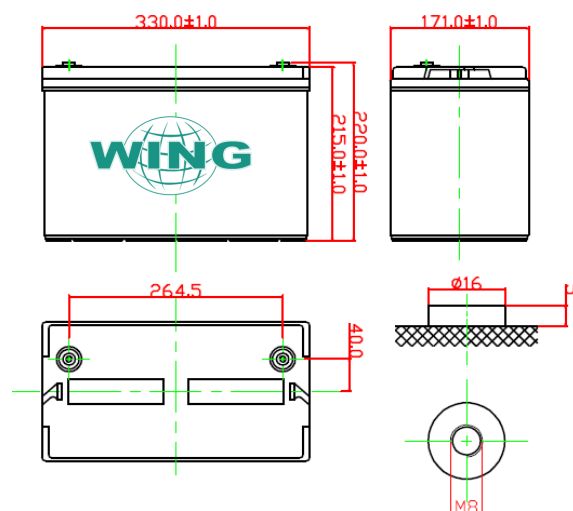
| | |
|---------------------------|------|
| Impedance (fully charged) | 4 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 30 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|--------------------------------|
| Standard option | Top Cover - UL94:V0 / ABS / HB |
|-----------------|--------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 900 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 3300 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-100 LS

12V-101,8Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 1,6 | / | 249 | 206 | 167 | 146 | 130 | 116 | 105 | 96 | 87,6 | 80,6 | 74,8 | 54,1 |
| 1,63 | / | 242 | 201 | 163 | 142 | 126 | 112 | 102 | 93,7 | 85,5 | 78,7 | 73,1 | 52,9 |
| 1,65 | / | 236 | 196 | 159 | 138 | 123 | 109 | 99,2 | 91,4 | 83,4 | 76,8 | 71,3 | 51,7 |
| 1,7 | / | 223 | 185 | 151 | 131 | 117 | 103 | 94,5 | 86,7 | 79,2 | 73,1 | 67,8 | 49,1 |
| 1,75 | / | 209 | 175 | 141 | 123 | 110 | 97,8 | 88,9 | 82,1 | 75,1 | 69,3 | 64,4 | 46,6 |
| 1,8 | / | 201 | 168 | 138 | 119 | 107 | 94,9 | 86,8 | 80,1 | 73,2 | 67,6 | 63 | 45,6 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 42,3 | 30,2 | 24,4 | 20,3 | 17,2 | 15,2 | 13,6 | 12,2 | 11,1 | 9,29 | 5,51 |
| 1,63 | 41,4 | 29,6 | 23,9 | 19,8 | 16,8 | 14,9 | 13,3 | 11,9 | 10,9 | 9,17 | 5,43 |
| 1,65 | 40,4 | 28,8 | 23,3 | 19,3 | 16,4 | 14,6 | 13 | 11,7 | 10,7 | 9,04 | 5,36 |
| 1,7 | 38,4 | 27,5 | 22,1 | 18,3 | 15,6 | 13,9 | 12,5 | 11,3 | 10,3 | 8,79 | 5,23 |
| 1,75 | 36,5 | 26 | 21 | 17,5 | 14,8 | 13,2 | 12 | 11 | 9,99 | 8,54 | 5,09 |
| 1,8 | 35,6 | 25,4 | 20,6 | 17,1 | 14,5 | 12,9 | 11,5 | 10,6 | 9,7 | 8,28 | 4,97 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1,6 | / | 432 | 352 | 288 | 254 | 228 | 203 | 185 | 171 | 156 | 143 | 133 | 97,4 |
| 1,63 | / | 429 | 345 | 284 | 249 | 225 | 199 | 182 | 168 | 153 | 142 | 131 | 96,5 |
| 1,65 | / | 417 | 339 | 279 | 245 | 221 | 196 | 180 | 166 | 151 | 140 | 129 | 94,8 |
| 1,7 | / | 400 | 326 | 269 | 237 | 213 | 190 | 174 | 161 | 146 | 136 | 126 | 92,7 |
| 1,75 | / | 385 | 314 | 259 | 228 | 206 | 183 | 167 | 156 | 143 | 131 | 123 | 90 |
| 1,8 | / | 368 | 302 | 249 | 220 | 198 | 177 | 162 | 150 | 138 | 127 | 119 | 87,2 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 77,2 | 58,1 | 46,3 | 38,8 | 33,2 | 29,2 | 26,2 | 23,8 | 21,9 | 19 | 11,5 |
| 1,63 | 76,1 | 57,3 | 45,7 | 38,3 | 32,8 | 28,8 | 25,9 | 23,5 | 21,7 | 18,7 | 11,3 |
| 1,65 | 75,2 | 56,6 | 45,2 | 37,9 | 32,5 | 28,5 | 25,6 | 23,3 | 21,5 | 18,5 | 11,3 |
| 1,7 | 73,2 | 55,2 | 44 | 37,1 | 31,7 | 27,9 | 25 | 22,8 | 21 | 18 | 11 |
| 1,75 | 71,2 | 53,8 | 43 | 36,2 | 31 | 27,3 | 24,5 | 22,3 | 20,7 | 17,7 | 10,8 |
| 1,8 | 69,2 | 52,3 | 41,9 | 35,3 | 30,3 | 26,7 | 24 | 21,8 | 20,2 | 17,3 | 10,6 |



BTX 12-120 LS

12V-127,4Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 127,4 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 116 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 515 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 410 mm |
| Width | 176 mm |
| Height | 224 mm |
| Height over terminals | 224 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 37,7 kg |

Terminal Type

| | |
|--------------------------|---------|
| Female threaded terminal | 8 mm |
| Torque | 12,4 Nm |

Internal Resistance

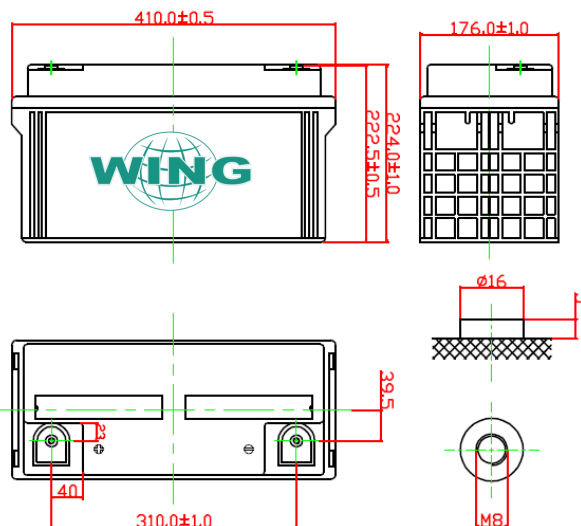
| | |
|---------------------------|------|
| Impedance (fully charged) | 4 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 36 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|--------------------------------|
| Standard option | Top Cover - UL94:V0 / ABS / HB |
|-----------------|--------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 950 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 3200 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-120 LS

12V-127,4Ah

Constant Current Discharge - Amps at 20°C (In MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1,6 | / | 289 | 242 | 197 | 173 | 155 | 135 | 122 | 111 | 102 | 93,5 | 87 | 63,9 |
| 1,63 | / | 281 | 235 | 192 | 168 | 151 | 132 | 118 | 108 | 98,8 | 91,3 | 85 | 62,4 |
| 1,65 | / | 273 | 229 | 187 | 165 | 148 | 129 | 115 | 105 | 96 | 89,1 | 83 | 60,9 |
| 1,7 | / | 258 | 217 | 177 | 155 | 139 | 122 | 110 | 99,8 | 91,5 | 84,7 | 79 | 58 |
| 1,75 | / | 242 | 204 | 166 | 147 | 132 | 115 | 104 | 94,5 | 86,7 | 80,4 | 75,1 | 55,1 |
| 1,8 | / | 233 | 196 | 162 | 142 | 128 | 112 | 101 | 92,2 | 84,6 | 78,5 | 73,3 | 53,9 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 51 | 37 | 29,8 | 24,8 | 21,3 | 18,6 | 16,9 | 15,1 | 13,7 | 11,3 | 6,94 |
| 1,63 | 49,8 | 36,1 | 29,1 | 24,3 | 20,9 | 18,2 | 16,5 | 14,8 | 13,4 | 11,2 | 6,84 |
| 1,65 | 48,7 | 35,2 | 28,4 | 23,8 | 20,4 | 17,8 | 16,1 | 14,6 | 13,1 | 11 | 6,75 |
| 1,7 | 46,4 | 33,5 | 27,1 | 22,6 | 19,4 | 17 | 15,3 | 14 | 12,6 | 10,6 | 6,56 |
| 1,75 | 44 | 31,9 | 25,7 | 21,4 | 18,4 | 16,1 | 14,6 | 13,4 | 12,1 | 10,3 | 6,37 |
| 1,8 | 43 | 31,1 | 25,1 | 21 | 17,9 | 15,7 | 14,3 | 12,8 | 11,6 | 9,99 | 6,17 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1,6 | / | 515 | 428 | 350 | 306 | 274 | 243 | 219 | 201 | 185 | 172 | 161 | 117 |
| 1,63 | / | 505 | 420 | 343 | 301 | 270 | 239 | 215 | 199 | 182 | 169 | 158 | 116 |
| 1,65 | / | 496 | 413 | 338 | 296 | 266 | 235 | 213 | 196 | 180 | 167 | 156 | 115 |
| 1,7 | / | 477 | 398 | 326 | 286 | 257 | 227 | 206 | 190 | 175 | 162 | 152 | 112 |
| 1,75 | / | 457 | 383 | 314 | 275 | 248 | 219 | 199 | 183 | 169 | 157 | 147 | 108 |
| 1,8 | / | 438 | 368 | 302 | 265 | 239 | 212 | 193 | 178 | 163 | 152 | 143 | 105 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 91,4 | 67,8 | 53,9 | 45,2 | 39,1 | 34,7 | 31,4 | 28,9 | 26,9 | 23,3 | 14,8 |
| 1,63 | 90,1 | 66,9 | 53,3 | 43,7 | 38,6 | 34,3 | 31 | 28,6 | 26,6 | 23 | 14,6 |
| 1,65 | 89 | 66,1 | 52,7 | 44,1 | 38,2 | 34 | 30,7 | 28,3 | 26,3 | 22,8 | 14,5 |
| 1,7 | 86,6 | 64,4 | 51,4 | 43,2 | 37,3 | 33,3 | 30,2 | 27,7 | 25,8 | 22,3 | 14,2 |
| 1,75 | 84,2 | 62,8 | 50,1 | 42,1 | 36,5 | 32,5 | 29,5 | 27,2 | 25,2 | 21,8 | 13,9 |
| 1,8 | 81,8 | 61,1 | 48,9 | 41,1 | 35,7 | 31,7 | 28,8 | 26,6 | 24,7 | 21,4 | 13,6 |



BTX 12-134 LS

12V-139,6Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 139,6 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 130 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 552 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 341 mm |
| Width | 173 mm |
| Height | 283 mm |
| Height over terminals | 287 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 41,5 kg |

Terminal Type

| | |
|--------------------------|---------|
| Female threaded terminal | 8 mm |
| Torque | 12,4 Nm |

Internal Resistance

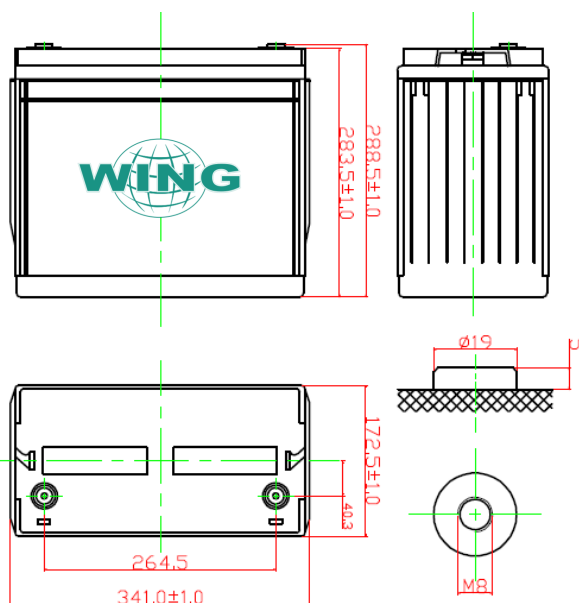
| | |
|---------------------------|------|
| Impedance (fully charged) | 4 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 40,2 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|--------------------------------|
| Standard option | Top Cover - UL94:V0 / ABS / HB |
|-----------------|--------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|-------------|
| 1 Second | 950 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 3300 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-134 LS

12V-139,6Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|
| 1,6 | / | 303 | 251 | 211 | 187 | 169 | 149 | 133 | 123 | 111 | 103 | 95 | 69,7 |
| 1,63 | / | 294 | 245 | 206 | 182 | 165 | 145 | 129 | 119 | 108 | 99,8 | 92,9 | 68,2 |
| 1,65 | / | 287 | 238 | 200 | 178 | 161 | 141 | 127 | 116 | 105 | 97,9 | 90,9 | 66,8 |
| 1,7 | / | 270 | 223 | 190 | 167 | 152 | 133 | 120 | 109 | 101 | 92,7 | 86,7 | 63,6 |
| 1,75 | / | 254 | 211 | 179 | 158 | 144 | 126 | 113 | 104 | 95 | 88,3 | 82,2 | 60,3 |
| 1,8 | / | 244 | 203 | 173 | 153 | 139 | 122 | 111 | 102 | 93,1 | 86 | 80,3 | 58,9 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 55,7 | 40,3 | 32,5 | 27,2 | 23,3 | 20,4 | 18,4 | 16,7 | 15,1 | 12,7 | 7,44 |
| 1,63 | 54,4 | 39,5 | 31,8 | 26,6 | 22,8 | 19,9 | 18 | 16,3 | 14,8 | 12,4 | 7,36 |
| 1,65 | 53,3 | 38,6 | 31,1 | 26 | 22,3 | 19,5 | 17,7 | 16 | 14,6 | 12,2 | 7,28 |
| 1,7 | 50,9 | 36,8 | 29,7 | 24,8 | 21,2 | 18,6 | 16,8 | 15,2 | 14 | 11,8 | 7,13 |
| 1,75 | 48,2 | 34,8 | 28,1 | 23,5 | 20,2 | 17,7 | 15,9 | 14,5 | 13,5 | 11,4 | 6,98 |
| 1,8 | 47 | 34,1 | 27,5 | 23 | 19,7 | 17,2 | 15,6 | 14,1 | 13 | 11,1 | 6,84 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1,6 | / | 552 | 456 | 376 | 332 | 300 | 265 | 241 | 222 | 201 | 185 | 171 | 126 |
| 1,63 | / | 542 | 447 | 369 | 326 | 294 | 261 | 237 | 219 | 199 | 182 | 169 | 124 |
| 1,65 | / | 532 | 439 | 363 | 321 | 290 | 258 | 233 | 216 | 197 | 181 | 168 | 123 |
| 1,7 | / | 510 | 423 | 351 | 310 | 280 | 249 | 227 | 209 | 191 | 177 | 164 | 120 |
| 1,75 | / | 484 | 407 | 338 | 299 | 271 | 241 | 219 | 202 | 186 | 172 | 161 | 117 |
| 1,8 | / | 464 | 392 | 326 | 288 | 260 | 232 | 212 | 196 | 180 | 167 | 157 | 115 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 102 | 73,7 | 59,5 | 50,4 | 43,4 | 38,2 | 34,4 | 31,4 | 29 | 24,8 | 16,1 |
| 1,63 | 101 | 72,8 | 58,7 | 49,9 | 42,9 | 37,8 | 34 | 31 | 28,7 | 24,5 | 15,9 |
| 1,65 | 99,8 | 71,9 | 58 | 49,3 | 42,4 | 37,4 | 33,7 | 30,7 | 28,4 | 24,3 | 15,7 |
| 1,7 | 97 | 70 | 56,6 | 48,2 | 41,4 | 36,6 | 33 | 30,2 | 27,9 | 23,7 | 15,3 |
| 1,75 | 94,1 | 68,3 | 55,3 | 47 | 40,4 | 35,8 | 32,2 | 29,5 | 27,3 | 23,2 | 15 |
| 1,8 | 90,9 | 66,3 | 53,8 | 45,9 | 39,5 | 34,9 | 31,5 | 28,9 | 26,7 | 22,7 | 14,7 |



BTX 12-150 LS

12V-152,4Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 152,4 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 146 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 598 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 482 mm |
| Width | 170 mm |
| Height | 240 mm |
| Height over terminals | 240 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 46,4 kg |

Terminal Type

| | |
|--------------------------|---------|
| Female threaded terminal | 8 mm |
| Torque | 12,4 Nm |

Internal Resistance

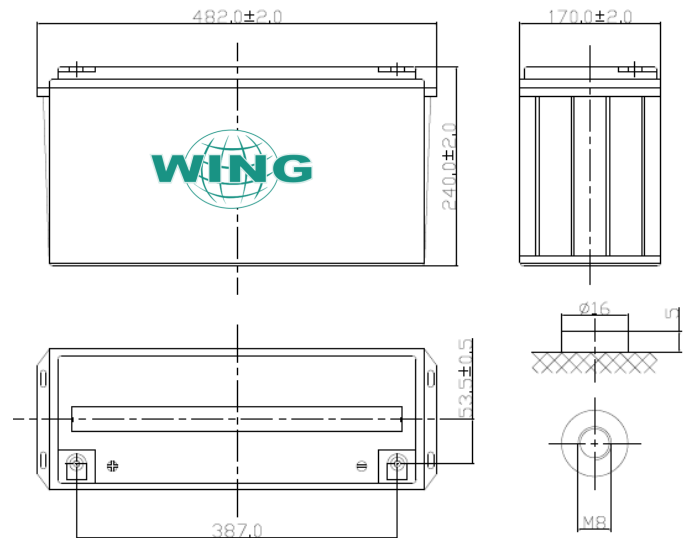
| | |
|---------------------------|------|
| Impedance (fully charged) | 4 mΩ |
|---------------------------|------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 45 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|-----------------------------------|
| Standard option | Container HB - UL94:V0 / ABS / HB |
|-----------------|-----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|--------------|
| 1 Second | 1000 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 3400 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-150 LS

12V-152,4Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| 1,6 | / | 336 | 285 | 238 | 212 | 194 | 170 | 153 | 141 | 128 | 118 | 109 | 80,2 |
| 1,63 | / | 327 | 277 | 232 | 207 | 189 | 165 | 149 | 137 | 124 | 115 | 106 | 78,1 |
| 1,65 | / | 318 | 270 | 226 | 202 | 184 | 162 | 146 | 133 | 122 | 112 | 105 | 76,7 |
| 1,7 | / | 300 | 255 | 214 | 191 | 174 | 153 | 138 | 126 | 116 | 106 | 99,8 | 73,2 |
| 1,75 | / | 282 | 240 | 201 | 180 | 165 | 145 | 130 | 120 | 109 | 102 | 94,3 | 69,2 |
| 1,8 | / | 270 | 232 | 195 | 175 | 160 | 141 | 128 | 117 | 107 | 98,8 | 92,2 | 67,7 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 64 | 46,4 | 37,3 | 31,2 | 26,8 | 23,5 | 21 | 18,6 | 16,9 | 14,2 | 8,27 |
| 1,63 | 62,4 | 45,1 | 36,4 | 30,5 | 26,1 | 22,8 | 20,5 | 18,2 | 16,6 | 13,9 | 8,16 |
| 1,65 | 61,2 | 44,4 | 35,8 | 29,9 | 25,6 | 22,4 | 20,1 | 17,8 | 16,3 | 13,7 | 8,05 |
| 1,7 | 58,5 | 42,3 | 34,1 | 28,5 | 24,4 | 21,4 | 19,1 | 17,2 | 15,7 | 13,2 | 7,84 |
| 1,75 | 55,3 | 40 | 32,3 | 27 | 23,1 | 20,3 | 18,1 | 16,5 | 15,1 | 12,7 | 7,62 |
| 1,8 | 54 | 39,2 | 31,5 | 26,4 | 22,6 | 19,8 | 17,8 | 15,8 | 14,6 | 12,2 | 7,41 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1,6 | / | 598 | 512 | 425 | 378 | 343 | 305 | 278 | 257 | 234 | 215 | 200 | 144 |
| 1,63 | / | 587 | 502 | 418 | 371 | 337 | 300 | 273 | 253 | 230 | 212 | 197 | 142 |
| 1,65 | / | 576 | 493 | 411 | 366 | 332 | 295 | 269 | 249 | 227 | 209 | 194 | 140 |
| 1,7 | / | 554 | 475 | 396 | 353 | 321 | 286 | 261 | 241 | 220 | 203 | 189 | 137 |
| 1,75 | / | 531 | 458 | 382 | 340 | 310 | 276 | 252 | 234 | 214 | 197 | 183 | 133 |
| 1,8 | / | 509 | 440 | 368 | 328 | 299 | 267 | 244 | 226 | 207 | 191 | 178 | 129 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|-----|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 113 | 84,2 | 68,7 | 58,9 | 50,2 | 44 | 39,5 | 35,9 | 33 | 28,5 | 17,8 |
| 1,63 | 111 | 83,1 | 67,8 | 58,2 | 49,7 | 43,6 | 39 | 35,5 | 32,6 | 28,1 | 17,7 |
| 1,65 | 110 | 82,1 | 67 | 57,5 | 49,2 | 43,2 | 38,6 | 35,1 | 32,3 | 27,7 | 17,5 |
| 1,7 | 108 | 80 | 65,5 | 56,2 | 48 | 42,2 | 37,8 | 34,4 | 31,7 | 27,1 | 17,1 |
| 1,75 | 105 | 77,9 | 63,8 | 54,9 | 46,9 | 41,2 | 37 | 33,7 | 31 | 26,4 | 16,7 |
| 1,8 | 102 | 75,7 | 62,2 | 53,5 | 45,8 | 40,3 | 36,2 | 33 | 30,4 | 25,7 | 16,3 |



BTX 12-200 LS

12V-210Ah



Features

- High purity lead calcium grid plates to prolong service life and enhance corrosion resistance
- Low resistance microporous glass fibre separators, AGM VRLA spill resistant design
- One way, self-regulating pressure relief valve allows gas to escape and prevents the ingress of oxygen
- High conductivity, leak resistant female terminal thread for ease of installation
- Heat sealed lid to box weld for superior integrity
- Flame arrestors for added safety

Electrical Specification

| | |
|----------------------------------------------|-----------|
| Nominal Voltage | 12V |
| 20-hr rate Capacity to 1.75V/cell at 20°C | 210 Ah |
| 10-hr rate Capacity to 1.75V/cell at 20°C | 194 Ah |
| 10-min rate Constant Power 1.6V/cell at 20°C | 819 Watts |

Dimensions

| | |
|-------------------------------------|---------|
| Length | 522 mm |
| Width | 238 mm |
| Height | 218 mm |
| Height over terminals | 223 mm |
| Min height required above terminals | 150 mm |
| Weight (typical) | 67,5 kg |

Terminal Type

| | |
|--------------------------|---------|
| Female threaded terminal | 8 mm |
| Torque | 12,4 Nm |

Internal Resistance

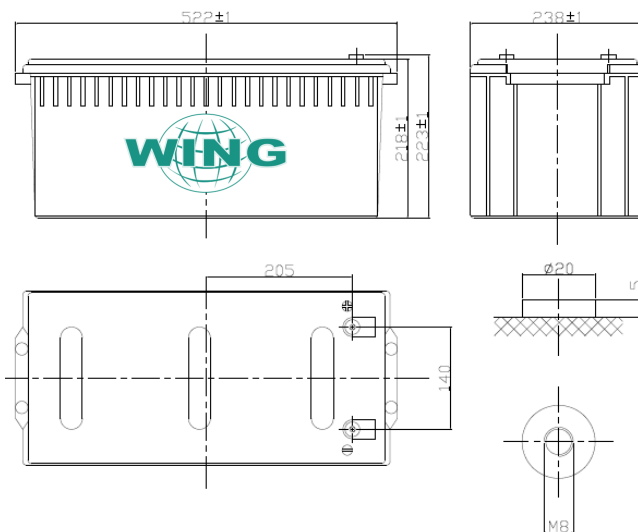
| | |
|---------------------------|--------|
| Impedance (fully charged) | 2,2 mΩ |
|---------------------------|--------|

Charge Voltage

| | |
|--------------------------------------------------------------------------------------------|--------------------|
| Float charge voltage at 20°C | 2.217~2.317 V/cell |
| Float charge voltage temperature correction factor (for variations from standard 20°C) | -3,3 mV/Cell/°C |
| Cyclic (or Boost) charge voltage at 20°C | 2.425~2.475V/cell |
| Cyclic charge voltage temperature correction factor (for variations from standard 20°C) | -5 mV/Cell/°C |
| Charge Current | |
| Maximum charge current limit | 55 A |
| Remote Degassing Facility | No |
| Degassing Tube Diameter | - mm |

Operating Temperature Range

| | |
|-----------------------------------|-----------------|
| Storage (fully charged condition) | -20 °C to 60 °C |
| Charge | -10 °C to 60 °C |
| Discharge | -20 °C to 60 °C |



Storage

| | |
|------------------------------------------|-----|
| Capacity loss in storage at 20°C / month | 3 % |
|------------------------------------------|-----|

Case Material

| | |
|-----------------|-----------------------------------|
| Standard option | Container HB - UL94:V0 / ABS / HB |
|-----------------|-----------------------------------|

Design Life

| | |
|-------------------------------------------|----------|
| EUROBAT Classification (High Performance) | 10 years |
|-------------------------------------------|----------|

Maximum Discharge Current

| | |
|-----------------------|--------------|
| 1 Second | 1300 A (5 s) |
| 1 Minute | - A |
| Short Circuit Current | 6000 A |

Manufactured in ISO9001, ISO14001, OHSAS 18001 certified facility



Standards

Compliant with:
BS 6290-4: 1997
BS EN 60896-21: 2004
BS EN 60896-22: 2004



BTX 12-200 LS

12V-210Ah

Constant Current Discharge - Amps at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1,6 | / | 481 | 401 | 332 | 293 | 266 | 235 | 214 | 197 | 179 | 165 | 153 | 113 |
| 1,63 | / | 467 | 390 | 323 | 286 | 259 | 229 | 208 | 192 | 174 | 161 | 149 | 110 |
| 1,65 | / | 454 | 379 | 314 | 278 | 252 | 224 | 203 | 187 | 170 | 157 | 146 | 107 |
| 1,7 | / | 429 | 359 | 298 | 263 | 239 | 212 | 192 | 178 | 162 | 149 | 139 | 102 |
| 1,75 | / | 402 | 339 | 280 | 248 | 225 | 199 | 181 | 167 | 153 | 142 | 132 | 96,5 |
| 1,8 | / | 387 | 326 | 272 | 242 | 219 | 195 | 177 | 163 | 150 | 139 | 129 | 94,8 |

Constant Current Discharge - Amps at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 1,6 | 89,7 | 64,9 | 51,9 | 43 | 36,7 | 32 | 28,6 | 25,6 | 23 | 19,2 | 11,2 |
| 1,63 | 87,5 | 63,3 | 50,5 | 41,9 | 35,8 | 31,2 | 27,8 | 24,9 | 22,5 | 18,8 | 11 |
| 1,65 | 85,7 | 62,1 | 49,6 | 41,1 | 35,1 | 30,7 | 27,4 | 24,5 | 22 | 18,5 | 10,9 |
| 1,7 | 81,3 | 58,8 | 47 | 39 | 33,3 | 29 | 25,9 | 23,2 | 21,1 | 17,8 | 10,7 |
| 1,75 | 77,4 | 56,1 | 44,7 | 37,1 | 31,7 | 27,6 | 24,6 | 22,1 | 20,3 | 17,2 | 10,5 |
| 1,8 | 75,7 | 54,8 | 43,8 | 36,3 | 31 | 27,1 | 24,2 | 21,6 | 19,4 | 16,5 | 10,2 |

Constant Power Discharge - Watts per Cell at 20°C (in MINUTES)

| V/cell | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 90 |
|--------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1,6 | / | 819 | 682 | 565 | 501 | 454 | 400 | 362 | 333 | 306 | 284 | 266 | 193 |
| 1,63 | / | 803 | 670 | 555 | 493 | 447 | 394 | 356 | 328 | 301 | 280 | 262 | 190 |
| 1,65 | / | 788 | 658 | 546 | 484 | 439 | 388 | 352 | 323 | 297 | 276 | 258 | 187 |
| 1,7 | / | 758 | 633 | 527 | 468 | 425 | 375 | 340 | 313 | 288 | 268 | 252 | 182 |
| 1,75 | / | 727 | 610 | 508 | 451 | 410 | 363 | 329 | 303 | 279 | 260 | 244 | 177 |
| 1,8 | / | 696 | 586 | 488 | 434 | 395 | 350 | 318 | 293 | 270 | 252 | 237 | 171 |

Constant Power Discharge - Watts per Cell at 20°C (in HOURS)

| V/cell | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 | 20 |
|--------|-----|-----|------|------|------|------|------|------|------|------|------|
| 1,6 | 156 | 118 | 94,3 | 79,2 | 67,5 | 59,2 | 52,9 | 48 | 44,1 | 37,8 | 23,9 |
| 1,63 | 154 | 116 | 92,6 | 78,3 | 66,7 | 58,5 | 52,3 | 47,5 | 43,7 | 37,3 | 23,6 |
| 1,65 | 152 | 115 | 92,1 | 77,4 | 66,1 | 57,9 | 51,8 | 47 | 43,3 | 37 | 23,3 |
| 1,7 | 148 | 112 | 89,8 | 75,7 | 64,6 | 56,6 | 50,7 | 46,1 | 42,4 | 36,1 | 22,8 |
| 1,75 | 144 | 109 | 87,6 | 73,8 | 63,1 | 55,4 | 49,6 | 45,1 | 41,5 | 35,2 | 22,3 |
| 1,8 | 140 | 107 | 85,5 | 72,1 | 61,6 | 54,1 | 48,5 | 44,1 | 40,6 | 34,3 | 21,8 |