



PowerSafe[®]

V-FT Performance Specifications

Features and Benefits

- Thin Plate Pure Lead (TPPL) technology for superior energy density and long life
- Capacity range 31 - 190Ah
- Front terminal connections for fast and easy installation and maintenance
- Suitable for 19" and 23" racking
- UL94 V-0 flame retardant case and lid
- High reliability
- One year shelf life

Construction

- Positive plates designed to prolong service life and enhance corrosion resistance
- Separators in low resistance microporous glass fiber. The electrolyte is absorbed within this material, preventing acid spills in case of accidental damage
- Container and cover in flame retardant ABS UL94 V-0 material, highly resistant to shock and vibration
- Terminal with brass insert for maximum conductivity and with high compression grommet for long life
- Self-regulating one way pressure relief valves prevent ingress of atmospheric oxygen
- Flame arrestors built into each bloc for increased operational safety

Installation and Operation

- Designed for safer installation and easy maintenance in cabinets or on stands, close to the point of use. A separate battery room is not necessary
- It is recommended that PowerSafe® V Front Terminal batteries are installed upright
- Recommended float charge voltage:
2.280Vpc at 68°F (20°C)
2.265Vpc at 77°F (25°C)
- Reduced maintenance:
no water addition required

Standards

- Designed to meet Telcordia® SR-4228 requirements
- UL recognized component
- UL File Numbers MH15470 and MH18697
- Approved as non-hazardous cargo for ground, sea and air transportation in accordance with US DOT Regulation 49 CFR and ICAO and IATA Packing Instruction 806. Please see our SDS for complete details at www.enersys.com
- The management system governing the manufacture of this product is ISO 9001-2015 certified*

* 12V101F-FT and 12V125F are ISO 9001

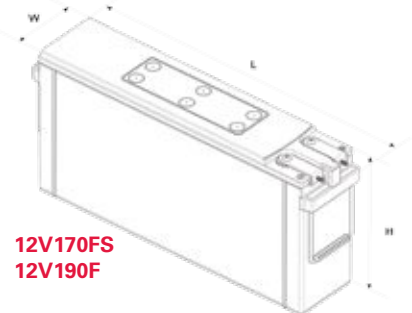
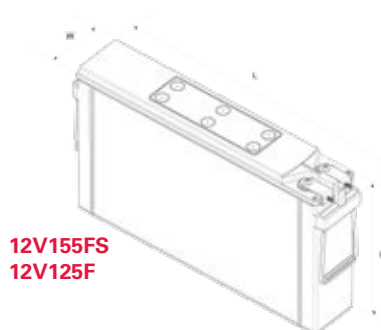
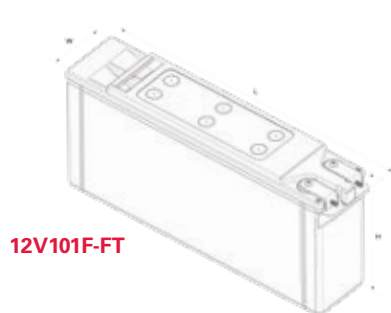
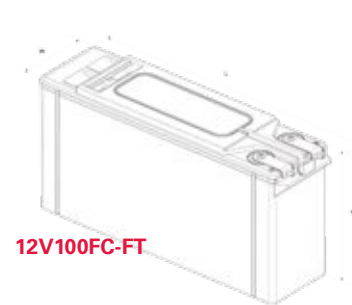
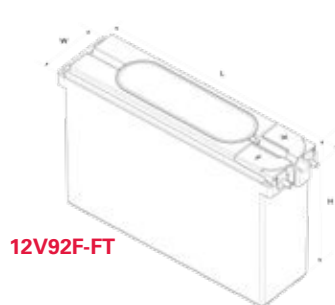
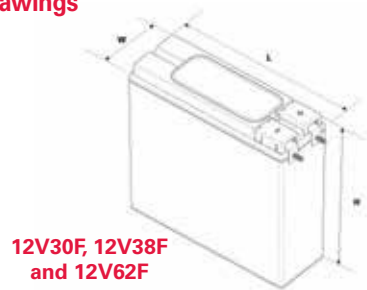
General Specifications

| Battery Type | Number of Cells | Nominal Voltage (V) | Nominal Capacity (ah) | | Nominal Dimensions | | | | | | Typical Weight | | Short Circuit Current (A) | Internal Resistance** (mΩ) | Terminals | Electrolyte (1.300 S.G.) | | | | Pure Acid (H ₂ SO ₄) Acid | | | | Lead Weight | |
|--------------|-----------------|---------------------|-------------------------|--------------------------|--------------------|-----|-------|-----|--------|-----|----------------|------|---------------------------|----------------------------|-----------|--------------------------|------|--------|------|--------------------------------------------------|------|--------|------|-------------|------|
| | | | 8hr. Rate 1.75Vpc @77°F | 10hr. Rate 1.80Vpc @68°F | Length | | Width | | Height | | lb | kg | | | | Volume | | Weight | | Volume | | Weight | | lb | kg |
| | | | in | mm | in | mm | in | mm | in | mm | gal | L | | | | lb | kg | gal | L | lb | kg | lb | kg | | |
| 12V30F-FT | 6 | 12 | 31 | 31 | 11.0 | 280 | 3.8 | 97 | 6.3 | 159 | 23.8 | 10.8 | 1327 | 9.87 | M8 F | 0.37 | 1.41 | 3.96 | 1.80 | 0.16 | 0.60 | 1.68 | 0.76 | 16.8 | 7.61 |
| 12V38F-FT | 6 | 12 | 38 | 38 | 11.0 | 280 | 3.8 | 97 | 7.2 | 184 | 27.6 | 12.5 | 1500 | 8.53 | M8 F | 0.48 | 1.81 | 5.10 | 2.31 | 0.20 | 0.77 | 2.17 | 0.98 | 19.8 | 8.99 |
| 12V62F-FT | 6 | 12 | 62 | 62 | 11.0 | 280 | 3.8 | 97 | 10.4 | 264 | 42.3 | 19.2 | 2080 | 5.98 | M8 F | 0.77 | 2.91 | 8.20 | 3.72 | 0.33 | 1.23 | 3.48 | 1.58 | 29.6 | 13.4 |
| 12V92F-FT | 6 | 12 | 92 | 92 | 15.6 | 395 | 4.1 | 105 | 10.4 | 264 | 60.8 | 27.6 | 2410 | 5.19 | M8 F | 1.12 | 4.25 | 12.0 | 5.44 | 0.48 | 1.81 | 5.09 | 2.31 | 43.3 | 19.7 |
| 12V100FC-FT | 6 | 12 | 100 | 100 | 15.6 | 395 | 4.3 | 108 | 11.3 | 287 | 68.3 | 31.0 | 1930 | 6.46 | M8 F | 1.34 | 5.06 | 14.3 | 6.48 | 0.57 | 2.15 | 6.07 | 2.75 | 46.6 | 21.1 |
| 12V101F-FT | 6 | 12 | 101 | 100 | 20.1 | 510 | 4.3 | 110 | 9.3 | 235 | 73.9 | 33.5 | 2108 | 5.92 | M8 F | 1.19 | 4.52 | 12.8 | 5.79 | 0.47 | 1.76 | 4.98 | 2.26 | 50.0 | 22.7 |
| 12V125F | 6 | 12 | 126 | 125 | 22.1 | 561 | 4.1 | 105 | 12.4 | 316 | 98.1 | 44.5 | 2355 | 5.30 | M6 M | 1.98 | 7.48 | 21.1 | 9.57 | 0.89 | 3.37 | 9.50 | 4.31 | 62.7 | 28.5 |
| 12V155FS | 6 | 12 | 155 | 150 | 22.1 | 561 | 4.9 | 125 | 11.1 | 283 | 106.9 | 48.5 | 3325 | 3.80 | M6 M | 2.16 | 8.16 | 23.0 | 10.4 | 0.92 | 3.47 | 9.79 | 4.44 | 70.4 | 31.9 |
| 12V170FS | 6 | 12 | 170 | 170 | 22.1 | 561 | 4.9 | 125 | 11.1 | 283 | 112.0 | 50.8 | 3360 | 3.75 | M6 M | 2.12 | 8.01 | 22.6 | 10.3 | 0.90 | 3.40 | 9.61 | 4.36 | 77.3 | 35.1 |
| 12V190F | 6 | 12 | 190 | 190 | 22.1 | 561 | 4.9 | 125 | 12.4 | 316 | 126.3 | 57.3 | 3625 | 3.50 | M6 M | 2.42 | 9.17 | 25.9 | 11.7 | 1.03 | 3.90 | 11.0 | 4.99 | 89.4 | 40.6 |

Notes:

** Resistance values are for reference only and not intended to represent an Ohmic Value or Baseline measurement

Outline Drawings





Constant Current Discharge Performance Data

Discharge Currents (Amperes) to 1.75Vpc at 77°F (25°C)

| Battery Type | Standby Time (Minutes) | | | Standby Time (Hours) | | | | | | | | | | | |
|--------------|------------------------|-------|-------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 15 | 30 | 45 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 24 | |
| 12V30F | 65.45 | 39.22 | 28.56 | 22.71 | 12.77 | 9.015 | 7.044 | 5.829 | 4.989 | 4.372 | 3.896 | 3.21 | 2.741 | 1.499 | |
| 12V38F | 79.7 | 47.49 | 34.29 | 27.06 | 15.1 | 10.64 | 8.341 | 6.916 | 5.943 | 5.235 | 4.694 | 3.914 | 3.372 | 1.884 | |
| 12V62F-FT | 122.8 | 76.13 | 56.39 | 45.14 | 25.7 | 18.25 | 14.26 | 11.77 | 10.07 | 8.808 | 7.824 | 6.389 | 5.429 | 2.939 | |
| 12V92F-FT | 161 | 106.7 | 80.25 | 64.71 | 37.09 | 26.43 | 20.63 | 17.01 | 14.56 | 12.78 | 11.43 | 9.49 | 8.158 | 4.515 | |
| 8V100F | 169.3 | 110.8 | 83.34 | 67.27 | 39.37 | 28.44 | 22.48 | 18.68 | 16.05 | 14.1 | 12.59 | 10.39 | 8.82 | 4.787 | |
| 12V100F | 169.3 | 110.8 | 83.34 | 67.27 | 39.37 | 28.44 | 22.48 | 18.68 | 16.05 | 14.1 | 12.59 | 10.39 | 8.82 | 4.787 | |
| 12V100FC | 175.8 | 118.1 | 90.09 | 73.48 | 43.23 | 30.97 | 24.18 | 19.86 | 16.85 | 14.62 | 12.94 | 10.59 | 9.048 | 4.777 | |
| 12V101F | 160.1 | 107.8 | 83.11 | 67.68 | 39.74 | 28.62 | 22.59 | 18.76 | 16.11 | 14.21 | 12.72 | 10.52 | 8.789 | 4.423 | |
| 12V125F | 189.1 | 137.3 | 105 | 85.06 | 50.03 | 35.83 | 28.29 | 23.54 | 20.12 | 17.58 | 15.63 | 12.88 | 10.73 | 5.481 | |
| 12V155FS | 253.1 | 174.1 | 133.5 | 108.8 | 62.9 | 45.02 | 35.34 | 29.24 | 25.01 | 21.9 | 19.49 | 16.01 | 13.56 | 7.234 | |
| 12V170FS | 287.5 | 203.9 | 153.8 | 124.1 | 71.82 | 51.13 | 39.9 | 32.81 | 27.91 | 24.33 | 21.57 | 17.66 | 15.04 | 8.107 | |
| 12V190F | 299.3 | 212.6 | 165.5 | 136.3 | 80.03 | 57.17 | 44.71 | 36.79 | 31.28 | 27.24 | 24.19 | 19.84 | 16.91 | 9.082 | |

Discharge Currents (Amperes) to 1.80Vpc at 77°F (25°C)

| Battery Type | Standby Time (Minutes) | | | Standby Time (Hours) | | | | | | | | | | | |
|--------------|------------------------|-------|-------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 15 | 30 | 45 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 24 | |
| 12V30F | 63.3 | 37.89 | 27.67 | 22.07 | 12.5 | 8.861 | 6.94 | 5.747 | 4.921 | 4.313 | 3.845 | 3.168 | 2.706 | 1.481 | |
| 12V38F | 77.32 | 46.76 | 33.92 | 26.81 | 14.95 | 10.55 | 8.305 | 6.89 | 5.921 | 5.216 | 4.677 | 3.9 | 3.36 | 1.877 | |
| 12V62F-FT | 115.4 | 72.74 | 54.3 | 43.69 | 25.13 | 17.96 | 14.1 | 11.66 | 9.995 | 8.763 | 7.787 | 6.362 | 5.404 | 2.933 | |
| 12V92F-FT | 147.4 | 100.7 | 77.11 | 62.76 | 36.52 | 26.18 | 20.48 | 16.9 | 14.45 | 12.68 | 11.34 | 9.421 | 8.119 | 4.5 | |
| 8V100F | 158.7 | 106.7 | 81.06 | 65.62 | 38.56 | 27.88 | 22.05 | 18.33 | 15.75 | 13.83 | 12.35 | 10.19 | 8.67 | 4.762 | |
| 12V100F | 158.7 | 106.7 | 81.06 | 65.62 | 38.56 | 27.88 | 22.05 | 18.33 | 15.75 | 13.83 | 12.35 | 10.19 | 8.67 | 4.762 | |
| 12V100FC | 160.8 | 110.3 | 85.17 | 70.02 | 41.81 | 30.16 | 23.65 | 19.48 | 16.55 | 14.37 | 12.73 | 10.45 | 8.935 | 4.736 | |
| 12V101F | 150 | 103.2 | 79.91 | 65.2 | 38.45 | 27.78 | 21.98 | 18.33 | 15.78 | 13.91 | 12.43 | 10.29 | 8.558 | 4.406 | |
| 12V125F | 171.4 | 127.7 | 98.49 | 79.53 | 47.86 | 34.47 | 27.43 | 22.93 | 19.68 | 17.21 | 15.4 | 12.78 | 10.68 | 5.481 | |
| 12V155FS | 237 | 165.9 | 127.9 | 104.9 | 60.72 | 43.52 | 34.18 | 28.28 | 24.2 | 21.19 | 18.86 | 15.48 | 13.12 | 7.026 | |
| 12V170FS | 267.5 | 194.2 | 148.1 | 120.1 | 70.15 | 50.14 | 39.16 | 32.24 | 27.45 | 23.93 | 21.23 | 17.4 | 14.83 | 7.985 | |
| 12V190F | 278.3 | 203.9 | 160 | 132.1 | 78.11 | 56.07 | 43.87 | 36.14 | 30.74 | 26.77 | 23.77 | 19.5 | 16.62 | 8.931 | |

Discharge Currents (Amperes) to 1.85Vpc at 77°F (25°C)

| Battery Type | Standby Time (Minutes) | | | Standby Time (Hours) | | | | | | | | | | | |
|--------------|------------------------|-------|-------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
| | 15 | 30 | 45 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 24 | |
| 12V30F | 60.25 | 36.23 | 26.46 | 21.13 | 12.11 | 8.612 | 6.797 | 5.634 | 4.83 | 4.24 | 3.788 | 3.132 | 2.675 | 1.462 | |
| 12V38F | 73.91 | 45.6 | 33.29 | 26.22 | 14.58 | 10.28 | 8.052 | 6.682 | 5.746 | 5.065 | 4.543 | 3.789 | 3.265 | 1.831 | |
| 12V62F-FT | 106.5 | 68.17 | 51.37 | 41.54 | 24.26 | 17.44 | 13.79 | 11.46 | 9.808 | 8.611 | 7.678 | 6.336 | 5.377 | 2.91 | |
| 12V92F-FT | 132 | 92.86 | 72.7 | 60.04 | 35.49 | 25.8 | 20.17 | 16.79 | 14.35 | 12.59 | 11.25 | 9.34 | 8.021 | 4.485 | |
| 8V100F | 144.4 | 98.83 | 76.32 | 61.86 | 36.8 | 26.62 | 21.04 | 17.5 | 15.04 | 13.22 | 11.83 | 9.829 | 8.38 | 4.653 | |
| 12V100F | 144.4 | 98.83 | 76.32 | 61.86 | 36.8 | 26.62 | 21.04 | 17.5 | 15.04 | 13.22 | 11.83 | 9.829 | 8.38 | 4.653 | |
| 12V100FC | 145.2 | 101.5 | 79 | 65.18 | 39.57 | 28.89 | 22.71 | 18.75 | 15.99 | 13.9 | 12.31 | 10.15 | 8.683 | 4.658 | |
| 12V101F | 136 | 95.42 | 74.48 | 60.86 | 36.13 | 26.08 | 20.73 | 17.32 | 14.92 | 13.14 | 11.75 | 9.769 | 8.114 | 4.329 | |
| 12V125F | 151.3 | 112.5 | 86.87 | 70.55 | 43.16 | 31.25 | 25.06 | 20.98 | 18.06 | 15.85 | 14.18 | 11.88 | 9.855 | 5.463 | |
| 12V155FS | 215.3 | 153.5 | 119 | 98.27 | 57.17 | 40.88 | 32.09 | 26.56 | 22.73 | 19.9 | 17.73 | 14.57 | 12.35 | 6.642 | |
| 12V170FS | 243.1 | 179.7 | 138.9 | 113.4 | 66.98 | 48.02 | 37.66 | 30.97 | 26.34 | 22.95 | 20.35 | 16.68 | 14.22 | 7.702 | |
| 12V190F | 259.4 | 193 | 151.8 | 125.2 | 74.57 | 53.77 | 42.24 | 34.76 | 29.55 | 25.75 | 22.86 | 18.78 | 16.03 | 8.691 | |

Constant Current Discharge Performance Data

Discharge Currents (Amperes) to 1.90Vpc at 77°F (25°C)

| Battery Type | Standby Time (Minutes) | | | Standby Time (Hours) | | | | | | | | | | |
|--------------|------------------------|-------|-------|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 15 | 30 | 45 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 24 |
| 12V30F | 52.45 | 31.33 | 22.98 | 18.37 | 10.48 | 7.486 | 5.894 | 4.887 | 4.188 | 3.67 | 3.272 | 2.702 | 2.311 | 1.294 |
| 12V38F | 65.88 | 39.98 | 28.89 | 22.7 | 12.55 | 8.873 | 6.967 | 5.789 | 4.985 | 4.397 | 3.944 | 3.287 | 2.828 | 1.607 |
| 12V62F-FT | 93.49 | 60.03 | 45.14 | 36.49 | 21.27 | 15.32 | 12.09 | 10.05 | 8.625 | 7.548 | 6.699 | 5.493 | 4.678 | 2.593 |
| 12V92F-FT | 116.4 | 82.37 | 64.03 | 52.26 | 30.93 | 22.2 | 17.4 | 14.4 | 12.36 | 10.88 | 9.746 | 8.104 | 6.961 | 3.928 |
| 8V100F | 121.4 | 81.92 | 62.06 | 50.54 | 29.53 | 21.32 | 16.86 | 13.98 | 12.05 | 10.63 | 9.485 | 7.822 | 6.699 | 3.829 |
| 12V100F | 121.4 | 81.92 | 62.06 | 50.54 | 29.53 | 21.32 | 16.86 | 13.98 | 12.05 | 10.63 | 9.485 | 7.822 | 6.699 | 3.829 |
| 12V100FC | 129.6 | 89.88 | 70.03 | 57.95 | 35.06 | 25.41 | 19.98 | 16.44 | 13.96 | 12.15 | 10.82 | 8.962 | 7.662 | 4.063 |
| 12V101F | 115.5 | 80.08 | 61.19 | 49.61 | 29.06 | 21.1 | 16.75 | 13.99 | 12.01 | 10.67 | 9.495 | 7.639 | 6.463 | 3.571 |
| 12V125F | 130.9 | 93 | 70.06 | 58.48 | 34.8 | 25.65 | 20.43 | 17.07 | 14.71 | 13.08 | 11.73 | 9.417 | 7.948 | 4.641 |
| 12V155FS | 194 | 136.7 | 105.9 | 85.55 | 49.42 | 35.35 | 27.75 | 22.96 | 19.63 | 17.18 | 15.27 | 12.49 | 10.59 | 5.797 |
| 12V170FS | 209.6 | 148.2 | 112.8 | 91.71 | 53.6 | 38.14 | 29.7 | 24.37 | 20.69 | 18.01 | 16.03 | 13.22 | 11.29 | 6.254 |
| 12V190F | 234.3 | 169.2 | 131.2 | 107.4 | 63.33 | 45.36 | 35.43 | 29.07 | 24.71 | 21.54 | 19.17 | 15.82 | 13.5 | 7.469 |

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