

Technical Data

Powerstock Calorifiers and Storage Tanks Performance and General Data

| Calorifier Model | | PS160 | PS200 | PS300 | PS400 | PS500 | PS750 | PS1000 | |
|---|---|----------------|-------|-------|-------|-------|-------|--------|-------|
| General Data | Storage capacity | l | 160 | 200 | 292 | 380 | 470 | 750 | 995 |
| | | gal | 35 | 44 | 64 | 83 | 103 | 165 | 219 |
| | Top coil surface area | m ² | N/A | N/A | 0.8 | 1.05 | 1.3 | 1.17 | 1.12 |
| | Top coil volume | l | N/A | N/A | 6.6 | 7.0 | 8.9 | 8.2 | 7.9 |
| | | gal | N/A | N/A | 1.4 | 1.5 | 2.0 | 1.8 | 1.7 |
| | Bottom coil surface area | m ² | 0.75 | 0.95 | 1.55 | 1.8 | 1.9 | 1.93 | 2.45 |
| | Bottom coil volume | l | 4.9 | 6.2 | 10.4 | 12.2 | 13.2 | 13.5 | 17.1 |
| | | gal | 1.1 | 1.4 | 2.3 | 2.7 | 2.9 | 3.0 | 3.8 |
| | Maximum operating pressure (primary - coil) | bar | 10 | | | | | | |
| | Maximum operating pressure (secondary - storage) | bar | 10 | | | | | | |
| | Maximum operating temperature (primary - coil) | °C | 110 | | | | | | |
| | Maximum operating temperature (secondary - storage) | °C | 70 | | | | | | |
| | Weight empty | kg | 70 | 80 | 130 | 185 | 215 | 217 | 275 |
| | Standby losses | kW/h | 0.06 | 0.08 | 0.10 | 0.12 | 0.13 | 0.15 | 0.20 |
| Bottom Coil Only in Operation | Continuous output* | l/h | 501 | 600 | 816 | 976 | 1109 | 1062 | 1281 |
| | | UK gal /h | 110 | 132 | 179 | 215 | 244 | 233 | 282 |
| | Heat input | kW | 29.2 | 35.6 | 48.4 | 57.9 | 65.7 | 63.0 | 76.0 |
| | | Btu x 1000 | 99.6 | 121.5 | 165.1 | 197.6 | 224.2 | 214.9 | 259.3 |
| 10 min peak output* | l | 250 | 362 | 448 | 615 | 771 | 1100 | 1197 | |
| | UK gal | 55 | 80 | 99 | 135 | 170 | 242 | 263 | |
| Recovery time | min | 20 | 20 | 22 | 24 | 26 | 42 | 46 | |
| Top and Bottom Coil Connected in Series | Continuous output* | l/h | N/A | N/A | 1032 | 1285 | 1549 | 1432 | 1635 |
| | | UK gal/h | N/A | N/A | 227 | 283 | 341 | 315 | 360 |
| | Heat input | kW | N/A | N/A | 61.2 | 76.2 | 91.8 | 85 | 97 |
| | | Btu x 1000 | N/A | N/A | 208.8 | 260.0 | 313.2 | 290.0 | 331.0 |
| 10 min peak output* | l | N/A | N/A | 567 | 889 | 1077 | 1319 | 1483 | |
| | UK gal | N/A | N/A | 125 | 196 | 237 | 290 | 326 | |
| Recovery time | min | N/A | N/A | 17 | 18 | 18 | 31 | 36 | |

*Calorifier performance is based on a DHW flow temperature of 60°C, with a cold water inlet temperature of 10°C, and a primary inlet temperature of 80°C.

| Storage Tank Model | | ST300 | ST500 | ST750 | ST1000 | |
|--------------------|-------------------------------|-------|-------|-------|--------|-----|
| General Data | Storage capacity | l | 300 | 502 | 750 | 990 |
| | | gal | 66 | 110 | 165 | 218 |
| | Maximum operating pressure | bar | 10 | 10 | 10 | 10 |
| | Maximum operating temperature | °C | 95 | 95 | 95 | 95 |
| | Weight empty | kg | 87 | 111 | 195 | 248 |
| Standby losses | kW/h | 0.10 | 0.13 | 0.15 | 0.2 | |



Technical Data

Powerstock Calorifiers
Pressure Loss and Flow Rates

Powerstock PS160 – Single Coil Calorifier

| Coil Δt °C | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
|--------------------|---------------|-----------------|-------------------------|
| 11 | 29.2 | 0.64 | 27 |
| 15 | 29.2 | 0.47 | 15 |
| 20 | 29.2 | 0.35 | 8 |

Powerstock PS200 – Single Coil Calorifier

| Coil Δt °C | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
|--------------------|---------------|-----------------|-------------------------|
| 11 | 35.6 | 0.77 | 51 |
| 15 | 35.6 | 0.57 | 28 |
| 20 | 35.6 | 0.43 | 16 |

Powerstock PS500 – Twin Coil Calorifier

| Coil Δt °C | Bottom Coil Only | | | Top Coil Only | | | Top & Bottom Coil | | |
|--------------------|------------------|-----------------|-------------------------|---------------|-----------------|-------------------------|-------------------|-----------------|-------------------------|
| | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
| 11 | 48.4 | 1.05 | 151 | 12.8 | 0.28 | 6 | 61.2 | 1.33 | 375 |
| 15 | 48.4 | 0.77 | 81 | 12.8 | 0.20 | 3 | 61.2 | 0.98 | 201 |
| 20 | 48.4 | 0.58 | 46 | 12.8 | 0.15 | 2 | 61.2 | 0.73 | 113 |

Powerstock PS400 – Twin Coil Calorifier

| Coil Δt °C | Bottom Coil Only | | | Top Coil Only | | | Top & Bottom Coil | | |
|--------------------|------------------|-----------------|-------------------------|---------------|-----------------|-------------------------|-------------------|-----------------|-------------------------|
| | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
| 11 | 57.9 | 1.26 | 247 | 18.3 | 0.40 | 14 | 76.2 | 1.66 | 672 |
| 15 | 57.9 | 0.92 | 133 | 18.3 | 0.29 | 8 | 76.2 | 1.22 | 361 |
| 20 | 57.9 | 0.69 | 75 | 18.3 | 0.22 | 4 | 76.2 | 0.91 | 203 |

Powerstock PS500 – Twin Coil Calorifier

| Coil Δt °C | Bottom Coil Only | | | Top Coil Only | | | Top & Bottom Coil | | |
|--------------------|------------------|-----------------|-------------------------|---------------|-----------------|-------------------------|-------------------|-----------------|-------------------------|
| | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
| 11 | 65.7 | 1.43 | 342 | 26.1 | 0.57 | 37 | 91.8 | 2.00 | 1121 |
| 15 | 65.7 | 1.05 | 184 | 26.1 | 0.42 | 20 | 91.8 | 1.46 | 603 |
| 20 | 65.7 | 0.79 | 104 | 26.1 | 0.31 | 11 | 91.8 | 1.10 | 339 |

Powerstock PS750 – Twin Coil Calorifier

| Coil Δt °C | Bottom Coil Only | | | Top Coil Only | | | Top & Bottom Coil | | |
|--------------------|------------------|-----------------|-------------------------|---------------|-----------------|-------------------------|-------------------|-----------------|-------------------------|
| | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
| 11 | 63.0 | 1.37 | 301 | 22.0 | 0.48 | 22 | 85.0 | 1.85 | 880 |
| 15 | 63.0 | 1.00 | 162 | 22.0 | 0.35 | 12 | 85.0 | 1.36 | 473 |
| 20 | 63.0 | 0.75 | 91 | 22.0 | 0.26 | 7 | 85.0 | 1.02 | 266 |

Powerstock PS1000 – Twin Coil Calorifier

| Coil Δt °C | Bottom Coil Only | | | Top Coil Only | | | Top & Bottom Coil | | |
|--------------------|------------------|-----------------|-------------------------|---------------|-----------------|-------------------------|-------------------|-----------------|-------------------------|
| | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar | Heat Input kW | Flow Rate l/sec | Coil Pressure Loss mbar |
| 11 | 76.0 | 1.65 | 533 | 21.0 | 0.46 | 19 | 97.0 | 2.11 | 1276 |
| 15 | 76.0 | 1.21 | 287 | 21.0 | 0.33 | 10 | 97.0 | 1.55 | 686 |
| 20 | 76.0 | 0.91 | 161 | 21.0 | 0.25 | 6 | 97.0 | 1.16 | 386 |