



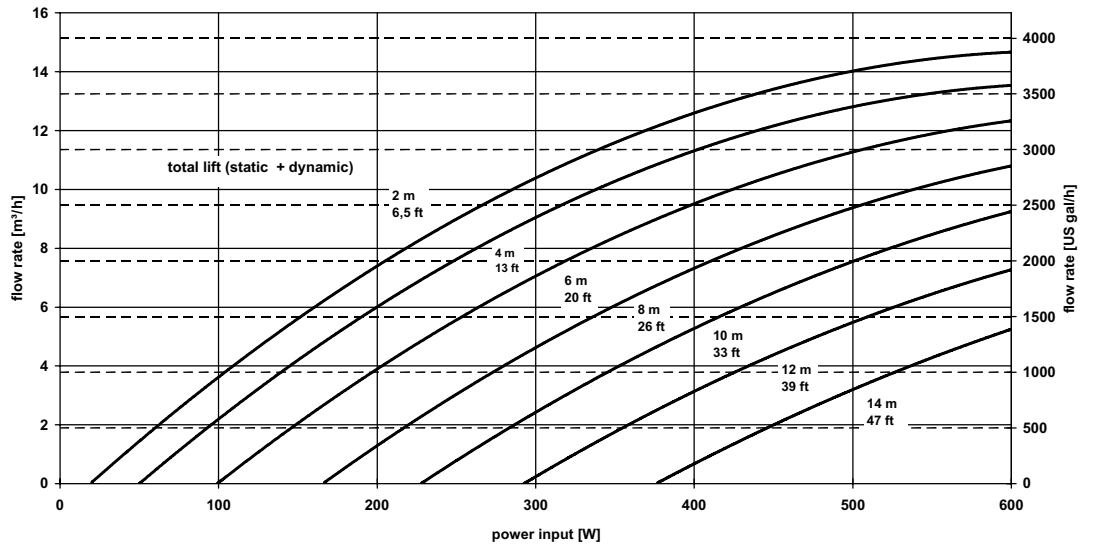
**System Sizing Table
Solar Operation**

solar generator: nominal voltage 48-
72 V DC, open circuit voltage max.
150 V DC

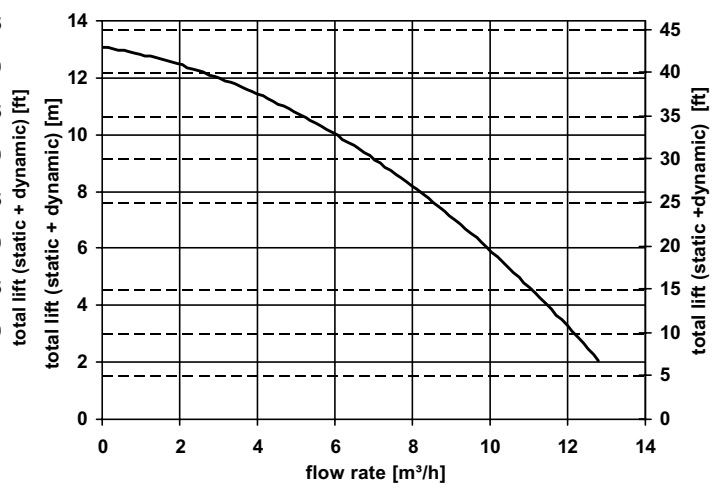
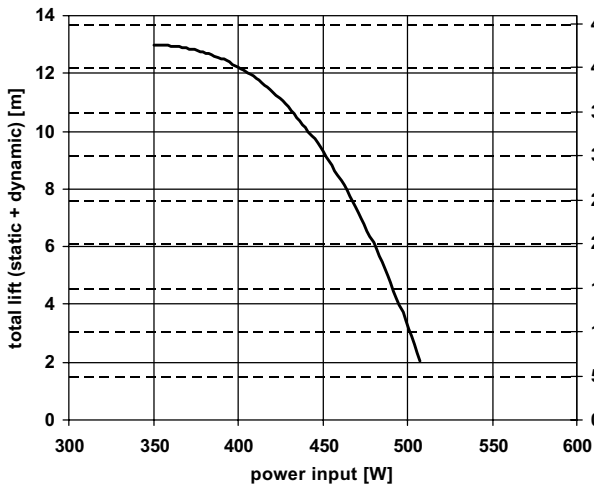
Basis Of Calculation: The power output of the solar generator is reduced by 17 % (degradation caused by ageing, dust, temperature influences etc. is taken into account). 10 sun hours per day

| total lift (static+ dynamic) [m / ft] | Solar-Generator [Wp] | irradiation [KWh/m²/day] | Solar-Generator none tracked | | | | Solar-Generator singleaxis tracked | | |
|---|-------------------------|-----------------------------|------------------------------|---------------------|-----------------------|----------|------------------------------------|-----------------------|------|
| | | | flow rate | | flow rate | | flow rate | | |
| | | | [m²/day] | [US gal/day x 1000] | [Imp. gal/day x 1000] | [m³/day] | [US gal/day x 1000] | [Imp. gal/day x 1000] | |
| 2 / 6,5 | 340 | 4.5 | 54.0 | 14.3 | 11.9 | 76.7 | 20.3 | 16.9 | |
| | | 6.0 | 70.0 | 18.5 | 15.4 | 105.0 | 27.7 | 23.1 | |
| | | 7.5 | 82.0 | 21.7 | 18.0 | 131.2 | 34.7 | 28.9 | |
| | 400 | 4.5 | 61.0 | 16.1 | 13.4 | 86.6 | 22.9 | 19.1 | |
| | | 6.0 | 78.0 | 20.6 | 17.2 | 117.0 | 30.9 | 25.7 | |
| | | 7.5 | 92.0 | 24.3 | 20.2 | 147.2 | 38.9 | 32.4 | |
| | 480 | 4.5 | 71.0 | 18.8 | 15.6 | 100.8 | 26.6 | 22.2 | |
| | | 6.0 | 90.0 | 23.8 | 19.8 | 135.0 | 35.7 | 29.7 | |
| | | 7.5 | 105.0 | 27.7 | 23.1 | 168.0 | 44.4 | 37.0 | |
| | 600 | 4.5 | 85.0 | 22.5 | 18.7 | 120.7 | 31.9 | 26.6 | |
| | | 6.0 | 105.0 | 27.7 | 23.1 | 157.5 | 41.6 | 34.6 | |
| | | 7.5 | 120.0 | 31.7 | 26.4 | 192.0 | 50.7 | 42.2 | |
| | 720 | 4.5 | 95.0 | 25.1 | 20.9 | 134.9 | 35.6 | 29.7 | |
| | | 6.0 | 117.0 | 30.9 | 25.7 | 175.5 | 46.4 | 38.6 | |
| | | 7.5 | 129.0 | 34.1 | 28.4 | 206.4 | 54.5 | 45.4 | |
| | 4 / 13 | 340 | 4.5 | 27.0 | 7.1 | 5.9 | 38.3 | 10.1 | 8.4 |
| | | | 6.0 | 43.0 | 11.4 | 9.5 | 64.5 | 17.0 | 14.2 |
| | | | 7.5 | 56.0 | 14.8 | 12.3 | 89.6 | 23.7 | 19.7 |
| 400 | | 4.5 | 36.0 | 9.5 | 7.9 | 51.1 | 13.5 | 11.2 | |
| | | 6.0 | 52.0 | 13.7 | 11.4 | 78.0 | 20.6 | 17.2 | |
| | | 7.5 | 67.0 | 17.7 | 14.7 | 107.2 | 28.3 | 23.6 | |
| 480 | | 4.5 | 46.0 | 12.2 | 10.1 | 65.3 | 17.3 | 14.4 | |
| | | 6.0 | 65.0 | 17.2 | 14.3 | 97.5 | 25.8 | 21.4 | |
| | | 7.5 | 80.0 | 21.1 | 17.6 | 128.0 | 33.8 | 28.2 | |
| 600 | | 4.5 | 60.0 | 15.9 | 13.2 | 85.2 | 22.5 | 18.7 | |
| | | 6.0 | 80.0 | 21.1 | 17.6 | 120.0 | 31.7 | 26.4 | |
| | | 7.5 | 97.0 | 25.6 | 21.3 | 155.2 | 41.0 | 34.1 | |
| 720 | | 4.5 | 73.0 | 19.3 | 16.1 | 103.7 | 27.4 | 22.8 | |
| | | 6.0 | 94.0 | 24.8 | 20.7 | 141.0 | 37.3 | 31.0 | |
| | | 7.5 | 108.0 | 28.5 | 23.8 | 172.8 | 45.7 | 38.0 | |
| 6 / 20 | | 340 | 4.5 | 10.0 | 2.6 | 2.2 | 14.2 | 3.8 | 3.1 |
| | | | 6.0 | 24.0 | 6.3 | 5.3 | 36.0 | 9.5 | 7.9 |
| | | | 7.5 | 36.0 | 9.5 | 7.9 | 57.6 | 15.2 | 12.7 |
| | 400 | 4.5 | 17.0 | 4.5 | 3.7 | 24.1 | 6.4 | 5.3 | |
| | | 6.0 | 33.0 | 8.7 | 7.3 | 49.5 | 13.1 | 10.9 | |
| | | 7.5 | 47.0 | 12.4 | 10.3 | 75.2 | 19.9 | 16.5 | |
| | 480 | 4.5 | 26.0 | 6.9 | 5.7 | 36.9 | 9.8 | 8.1 | |
| | | 6.0 | 44.0 | 11.6 | 9.7 | 66.0 | 17.4 | 14.5 | |
| | | 7.5 | 60.0 | 15.9 | 13.2 | 96.0 | 25.4 | 21.1 | |
| | 600 | 4.5 | 40.0 | 10.6 | 8.8 | 56.8 | 15.0 | 12.5 | |
| | | 6.0 | 61.0 | 16.1 | 13.4 | 91.5 | 24.2 | 20.1 | |
| | | 7.5 | 77.0 | 20.3 | 16.9 | 123.2 | 32.5 | 27.1 | |
| | 720 | 4.5 | 52.0 | 13.7 | 11.4 | 73.8 | 19.5 | 16.2 | |
| | | 6.0 | 75.0 | 19.8 | 16.5 | 112.5 | 29.7 | 24.7 | |
| | | 7.5 | 91.0 | 24.0 | 20.0 | 145.6 | 38.5 | 32.0 | |
| | 8 / 26 | 340 | 4.5 | | | | | | |
| | | | 6.0 | 6.0 | 1.6 | 1.3 | 9.0 | 2.4 | 2.0 |
| | | | 7.5 | 17.0 | 4.5 | 3.7 | 27.2 | 7.2 | 6.0 |
| 400 | | 4.5 | 3.0 | 0.8 | 0.7 | 4.3 | 1.1 | 0.9 | |
| | | 6.0 | 13.0 | 3.4 | 2.9 | 19.5 | 5.2 | 4.3 | |
| | | 7.5 | 26.0 | 6.9 | 5.7 | 41.6 | 11.0 | 9.2 | |
| 480 | | 4.5 | 10.0 | 2.6 | 2.2 | 14.2 | 3.8 | 3.1 | |
| | | 6.0 | 24.0 | 6.3 | 5.3 | 36.0 | 9.5 | 7.9 | |
| | | 7.5 | 38.0 | 10.0 | 8.4 | 60.8 | 16.1 | 13.4 | |
| 600 | | 4.5 | 20.0 | 5.3 | 4.4 | 28.4 | 7.5 | 6.2 | |
| | | 6.0 | 39.0 | 10.3 | 8.6 | 58.5 | 15.5 | 12.9 | |
| | | 7.5 | 56.0 | 14.8 | 12.3 | 89.6 | 23.7 | 19.7 | |
| 720 | | 4.5 | 31.0 | 8.2 | 6.8 | 44.0 | 11.6 | 9.7 | |
| | | 6.0 | 53.0 | 14.0 | 11.7 | 79.5 | 21.0 | 17.5 | |
| | | 7.5 | 70.0 | 18.5 | 15.4 | 112.0 | 29.6 | 24.6 | |
| 10 / 33 | | 600 | 4.5 | 7.0 | 1.8 | 1.5 | 11.2 | 3.0 | 2.5 |
| | | | 6.0 | 23.0 | 6.1 | 5.1 | 36.8 | 9.7 | 8.1 |
| | | | 7.5 | 39.0 | 10.3 | 8.6 | 62.4 | 16.5 | 13.7 |
| | 720 | 4.5 | 16.0 | 4.2 | 3.5 | 25.6 | 6.8 | 5.6 | |
| | | 6.0 | 36.0 | 9.5 | 7.9 | 57.6 | 15.2 | 12.7 | |
| | | 7.5 | 54.0 | 14.3 | 11.9 | 86.4 | 22.8 | 19.0 | |
| 12 / 39 | 600 | 4.5 | 1.0 | 0.3 | 0.2 | 1.6 | 0.4 | 0.4 | |
| | | 6.0 | 10.0 | 2.6 | 2.2 | 16.0 | 4.2 | 3.5 | |
| | | 7.5 | 24.0 | 6.3 | 5.3 | 38.4 | 10.1 | 8.4 | |
| | 720 | 4.5 | 6.0 | 1.6 | 1.3 | 9.6 | 2.5 | 2.1 | |
| | | 6.0 | 20.0 | 5.3 | 4.4 | 32.0 | 8.5 | 7.0 | |
| | | 7.5 | 37.0 | 9.8 | 8.1 | 59.2 | 15.6 | 13.0 | |
| | 900 | 4.5 | 17.0 | 4.5 | 3.7 | 27.2 | 7.2 | 6.0 | |
| | | 6.0 | 37.0 | 9.8 | 8.1 | 59.2 | 15.6 | 13.0 | |
| | | 7.5 | 50.0 | 13.2 | 11.0 | 80.0 | 21.1 | 17.6 | |
| | 14 / 46 | 600 | 4.5 | | | | | | |
| | | | 6.0 | 3.0 | 0.8 | 0.7 | 4.8 | 1.3 | 1.1 |
| | | | 7.5 | 8.0 | 2.1 | 1.8 | 12.8 | 3.4 | 2.8 |
| 720 | | 4.5 | | | | | | | |
| | | 6.0 | 7.0 | 1.8 | 1.5 | 11.2 | 3.0 | 2.5 | |
| | | 7.5 | 21.0 | 5.5 | 4.6 | 33.6 | 8.9 | 7.4 | |
| 900 | | 4.5 | 5.0 | 1.3 | 1.1 | 8.0 | 2.1 | 1.8 | |
| | | 6.0 | 21.0 | 5.5 | 4.6 | 33.6 | 8.9 | 7.4 | |
| | | 7.5 | 33.0 | 8.7 | 7.3 | 52.8 | 13.9 | 11.6 | |

Chart: Solar Operation solar generator: nominal voltage 48-72 V DC, open circuit voltage max. 150 V DC



Charts: Battery Operation battery, DC power supply: nominal voltage 48 V



| total lift (static + dynamic) | | flow rate | | | power input | current input |
|----------------------------------|------|-----------|------------|--------------|----------------|------------------|
| [m] | [ft] | [m³/h] | [US gal/h] | [Imp. gal/h] | [W] | [A] |
| 2 | 6.6 | 12.8 | 3382 | 2816 | 507 | 10.6 |
| 3 | 9.8 | 12.3 | 3250 | 2706 | 502 | 10.5 |
| 4 | 13.1 | 11.4 | 3022 | 2516 | 496 | 10.3 |
| 5 | 16.4 | 10.6 | 2801 | 2332 | 489 | 10.2 |
| 6 | 19.7 | 9.9 | 2616 | 2178 | 480 | 10.0 |
| 7 | 23.0 | 9.2 | 2431 | 2024 | 471 | 9.8 |
| 8 | 26.2 | 8.2 | 2166 | 1804 | 464 | 9.7 |
| 9 | 29.5 | 7.2 | 1902 | 1584 | 454 | 9.5 |
| 10 | 32.8 | 6.0 | 1585 | 1320 | 443 | 9.2 |
| 11 | 36.1 | 4.8 | 1268 | 1056 | 426 | 8.9 |
| 12 | 39.4 | 3.0 | 793 | 660 | 406 | 8.5 |
| 13 | 42.7 | 0.0 | 0 | 0 | 350 | 7.3 |

Technical Data

| PS600 BADU Top 12 | Solar operation | Battery operation |
|-------------------------------------|---|--|
| flow rate, max. | 15 m ³ /h / 4,000 US Gal./h | 13 m ³ /h / 3,400 US Gal./h |
| lift, max. | 14 m / 46 ft | 13 m / 43 ft |
| ambient temperature | -30° C to +45° C | |
| Controller | | |
| input voltage | solar generator: nominal voltage 48 to 72 V DC open circuit voltage max. 150 V DC | battery, DC source: nominal voltage 48 V DC |
| type of enclosure | IP 54 | |
| dimensions (net/packing) | 395 x 175 x 165 mm / 450 x 250 x 240 mm (0,0270 m ³) | |
| weight (nett/gross) | 4.5 kg / 5.3 kg | |
| Motor | | |
| | ECDRIVE 600 BADU Top | |
| power input, max. | 600 W | |
| type of enclosure | IP X4 | |
| class of insulation | F | |
| Pump end | | |
| | BADU Top 12 (manufacturer Speck Pumps) | |
| suction, positive inlet lift, max. | 3 m | |
| casing pressure, max. | 2.5 bar | |
| water temperature, max. | 60° C | |
| Pump unit (motor + pump end) | | |
| dimensions (net/packing) | see drawing below / 520 x 220 x 350 mm (0,0400m ³) | |
| weight (net/gross) | 8.7 kg / 9.7 kg | |

Dimensions For Pump Unit (Motor + Pump End)

