

Suitability of Pumps for BubbleBead Filters – 2008 (UK)

Submersible Pumps (Discontinued models in grey)

| BBF Model and max flow <i>litres per minute</i> | Pump Max Head m | Pump Output @ 2m head LPM | BBF XS1 60 lpm | BBF 1.5 95 lpm | BBF XS2 115 lpm | BBF 3 190 lpm | BBF XS4 245 lpm | BBF 5 250 lpm | BBF 7 300 lpm | BBF 9 375 lpm |
|---|--------------------------|---------------------------------------|----------------------|----------------------|--------------------------|------------------------|---------------------------|------------------------|---------------------------|---------------------------|
| OASE | | | | | | | | | | |
| Nautilus 250 in strainer basket | 4.5 | 55 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| Nautilus 350 in strainer basket | 5.0 | 100 | High Flow | YES | Low Flow | NO | NO | NO | NO | NO |
| Nautilus 400 in strainer basket Bypass required! | 7.0 | 125 | NO | High Flow | YES + Bypass | Low Flow | NO | NO | NO | NO |
| Nautilus 450 in strainer basket Bypass required! | 7.5 | 145 | NO | High Flow | High Flow + Bypass | Low Flow | Low Flow | NO | NO | NO |
| Neptun 6000 with strainer | 5.0 | 65 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| Neptun 9000 with strainer | 6.0 | 115 | High Flow | YES | YES | Low Flow | NO | NO | NO | NO |
| Neptun 12000 with strainer Bypass required! | 7.0 | 155 | NO | NO | High Flow + Bypass | Low Flow | NO | NO | NO | NO |
| Profinaut 21 * extra strainer! Bypass required! | 9.6 | 320 | NO | NO | NO | NO | *High Flow + Bypass | High Flow* | YES* | Low Flow* |
| Profinaut 27 * extra strainer! Bypass required! | 10.0 | 400 | NO | NO | NO | NO | NO | NO | *High Flow + Bypass | YES* + Bypass |
| Profinaut 40 * extra strainer! Bypass required! | 11.0 | 580 | NO♦ | NO | NO♦ | NO | NO♦ | NO | NO | *High Flow + Bypass |
| Aquamax Eco 8000 * extra strainer! | 4.0 | 80 | High Flow* | Low Flow* | NO | NO | NO | NO | NO | NO |
| Aquamax Eco 12000 * extra strainer! | 5.2 | 120 | NO | High Flow* | YES* | NO | NO | NO | NO | NO |
| Aquamax Eco 16000 * extra strainer! | 5.6 | 170 | NO | NO | High Flow* | Low Flow* | NO | NO | NO | NO |
| Promax 30000 * extra strainer! | 5.0 | 260 | NO | NO | NO | High Flow * | YES * | YES * | Low Flow* | NO |
| Profimax 20000 * extra strainer! Bypass required! | 8.0 | 280 | NO | NO | NO | NO | YES* + Bypass | YES* | Low Flow* | Low Flow* |
| Profimax 30000 *extra strainer! Bypass required! | 8.5 | 420 | NO | NO | NO | NO | NO | NO | High Flow* | YES* |
| Profimax 40000 *extra strainer! Bypass required! | 10 | 600 | NO | NO | NO | NO | NO | NO | NO | NO |
| <p>* extra strainer – the fitted pump strainer is insufficient, use a further pre-filter to capture oversized solids (over 2mm)</p> <p>Bypass required -- a suitable pressure-release bypass is essential when using pumps with a maximum head of 10m or more (7m for XS models). When a bypass is fitted, pumps with heads of up to 12m may be used with BBF filters, (10m with XS models see notes on page 5).</p> <p>♦ Use of overpressure pumps voids your guarantee (see guidance notes on page 5)</p> | | | | | | | | | | |

Suitability of Pumps for BubbleBead Filters – 2008 (UK)

| OASE - Discontinued models | | | | | | | | | | |
|---|--------------------|------------------------------|--------------------|-------------------|---------------------|------------------|--------------------|------------------|------------------|------------------|
| BBF Model and max flow <i>litres per minute</i> | Pump Max Head m | Pump Output @ 2m head LPM | BBF XS1 60 lpm | BBF 1.5 95 lpm | BBF XS2 115 lpm | BBF 3 190 lpm | BBF XS4 245 lpm | BBF 5 250 lpm | BBF 7 300 lpm | BBF 9 375 lpm |
| Pump models | | | | | | | | | | |
| Nautilus 6000 with strainer | 5.1 | 75 | YES | Low Flow | Low Flow? | NO | NO | NO | NO | NO |
| Nautilus 8000 with strainer | 6.1 | 110 | High Flow | YES | Low Flow | Low Flow? | NO | NO | NO | NO |
| Nautilus 12000 with strainer Bypass required! | 7.7 | 175 | NO | High Flow | High Flow + Bypass | YES | Low Flow + Bypass | Low Flow | NO | NO |
| Atlantis 75 with strainer | 4.5 | 55 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| Atlantis 150 with strainer Bypass required! | 8.0 | 100 | High Flow + Bypass | YES | YES + Bypass | Low Flow | NO | NO | NO | NO |
| Atlantis 200 Bypass required! | 10.2 | 285 | NO♦ | NO | NO♦ | NO | NO♦ | YES + Bypass | YES + Bypass | NO |
| Atlantis 85 * extra strainer! | 4.0 | 60 | YES * | Low Flow * | NO | NO | NO | NO | NO | NO |
| Atlantis 110 * extra strainer! | 5.0 | 90 | High Flow * | YES * | Low Flow * | NO | NO | NO | NO | NO |
| Atlantis 130 * extra strainer! | 5.5 | 120 | NO | High Flow * | YES * | Low Flow * | NO | NO | NO | NO |
| Aquamax 15000 * extra strainer! | 5.0 | 150 | NO | High Flow * | YES * | Low Flow * | NO | NO | NO | NO |
| Hozelock | | | | | | | | | | |
| Cascade 5500 with strainer | 4.9 | 54 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| Cascade 7000 with strainer | 5.5 | 68 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| Titan 8000 *strainer at 2mm! | 4.0 | 73 | YES * | Low Flow * | Low Flow * | NO | NO | NO | NO | NO |
| Titan 12000 new *strainer at 2mm! | 4.0 | 100 | High Flow * | YES * | Low Flow * | NO | NO | NO | NO | NO |
| Titan 15000 new *strainer at 2mm! | 4.2 | 125 | Too High * | High Flow * | YES * | NO | NO | NO | NO | NO |
| Prima XL 5000 * extra strainer! | 5.0 | 63 | YES * | Low Flow * | Low Flow * | NO | NO | NO | NO | NO |
| Prima XL 6000 * extra strainer! | 6.0 | 80 | High Flow * | Low Flow * | Low Flow * | NO | NO | NO | NO | NO |
| Prima XL 9000 * extra strainer! Bypass required! | 7.5 | 140 | NO | High Flow * | *High Flow + Bypass | Low Flow * | NO | NO | NO | NO |
| Prima XL 15000 * extra strainer & Bypass required! | 9.6 | 240 | NO | NO | NO | High Flow * | YES + Bypass | YES* | Low Flow * | NO |
| Little Giant | | | | | | | | | | |
| WGP-65 * extra strainer! | 6.1 | 80 | High Flow* | Low Flow* | Low Flow* | NO | NO | NO | NO | NO |
| WGP-75 * extra strainer! Bypass required! | 7.5 | 130 | NO | High Flow* | YES* + Bypass | Low Flow | NO | NO | NO | NO |
| WGP-95 * extra strainer! Bypass required! | 8.1 | 215 | NO | NO | NO | YES* | *Low Flow + Bypass | Low Flow* | Low Flow* | NO |
| See general notes on front page and guidance notes on page 5 | | | | | | | | | | |

Suitability of Pumps for BubbleBead Filters – 2008 (UK)

Submersible pumps (cont.)

| BBF Model and max flow <i>litres per minute</i> | Pump Max Head m | Pump Output @ 2m head LPM | BBF XS1 60 lpm | BBF 1.5 95 lpm | BBF XS2 115 lpm | BBF 3 190 lpm | BBF XS4 245 lpm | BBF 5 250 lpm | BBF 7 300 lpm | BBF 9 375 lpm |
|--|--------------------------|---------------------------------------|----------------------|----------------------|---------------------------|------------------------|--------------------------|------------------------|------------------------|------------------------|
| Pump models | | | | | | | | | | |
| Blagdon | | | | | | | | | | |
| P8000 with strainer | 4.4 | 80 | High Flow | Low Flow | Low Flow | NO | NO | NO | NO | NO |
| P9000 with strainer | 4.6 | 85 | High Flow | Low Flow | Low Flow | NO | NO | NO | NO | NO |
| Torrent 8000 * extra strainer! | 5.5 | 105 | High Flow * | YES * | Low Flow * | Low Flow * | NO | NO | NO | NO |
| Torrent 10500 * extra strainer Bypass required! | 9.5 | 155 | NO | NO | *High Flow + Bypass | Low Flow* | *Low Flow + Bypass | Low Flow* | NO | NO |
| Lotus/Trident Classic/Maximus | | | | | | | | | | |
| 5000 * extra strainer! | 5.2 | 62 | YES * | Low Flow * | Low Flow * | NO | NO | NO | NO | NO |
| 7500 * extra strainer! | 5.2 | 90 | High Flow * | YES * | Low Flow * | NO | NO | NO | NO | NO |
| 9000 * extra strainer! | 5.5 | 106 | High Flow * | YES * | Low Flow * | Low Flow * | NO | NO | NO | NO |
| Olympus 6500 * extra strainer! | 4.1 | 90 | High Flow * | YES * | Low Flow * | NO | NO | NO | NO | NO |
| Olympus 10000 * extra strainer! | 5.2 | 150 | NO | High Flow * | High Flow * | Low Flow * | NO | NO | NO | NO |
| Fish Mate | | | | | | | | | | |
| 9000 with fine strainer! | 4.0 | 65 | YES | Low Flow | NO | NO | NO | NO | NO | NO |
| 12000 with fine strainer! | 5.5 | 115 | High Flow | YES | YES | Low Flow | NO | NO | NO | NO |
| 12000XS with fine strainer! Bypass required! | 8.0 | 135 | NO | High Flow | High Flow + Bypass | Low Flow | NO | NO | NO | NO |
| 15000 with fine strainer! | 6.5 | 150 | NO | High Flow | High Flow | Low Flow | Low Flow ? | NO | NO | NO |
| Heissner | | | | | | | | | | |
| P8000 * extra strainer! | 6.1 | 115 | High Flow * | YES * | YES * | Low Flow * | NO | NO | NO | NO |
| P10000 * extra strainer! Bypass required! | 8.3 | 155 | NO | NO | *High Flow + Bypass | Low Flow * | *Low Flow + Bypass | Low Flow* | NO | NO |
| P13000 * extra strainer! Bypass required! | 9.0 | 205 | NO | NO | NO | YES * | *Low Flow + Bypass | Low Flow * | NO | NO |
| P18000 * extra strainer! Bypass required! | 7.2 | 215 | NO | NO | NO | YES * | *Low Flow + Bypass | Low Flow * | Low Flow* | NO |
| See general notes on front page and guidance notes on page 5 | | | | | | | | | | |

Suitability of Pumps for BubbleBead Filters – 2008 (UK)

Surface Pumps

| BBF Model and max flow <i>litres per minute</i> | Pump Max Head m | Output @ 2m (4m) head LPM | BBF XS1 60 lpm | BBF 1.5 95 lpm | BBF XS2 115 lpm | BBF 3 190 lpm | BBF XS4 245 lpm | BBF 5 250 lpm | BBF 7 300 lpm | BBF 9 375 lpm |
|--|--------------------------|---------------------------------------|----------------------|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|------------------------|------------------------|
| ITT/Yamitt | | | | | | | | | | |
| AG8 with strainer Bypass required! | 8.0 | 135 (115) | NO | High Flow | High Flow + Bypass | Low Flow | NO | NO | NO | NO |
| AG10 with strainer Bypass required! | 9.5 | 165 (135) | NO♦ | High Flow. Bypass | NO♦ | Low Flow. Bypass | NO♦ | Low Flow ? Bypass | NO | NO |
| AG14 with strainer Bypass required! | 11.5 | 220 (190) | NO♦ | NO♦ | NO♦ | YES Bypass | NO♦ | Low Flow Bypass | Low Flow Bypass | NO♦ |
| AG16/AV75+ ♦Overpressure! | over 12m | | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ |
| J100 / J150 J200 / J250 ♦Overpressure! | over 17m | | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ |
| Speck/Badu | | | | | | | | | | |
| Magic 4 with strainer Bypass required! | 10.7 | 115 | NO♦ | YES Bypass | NO♦ | Low Flow. Bypass | NO♦ | NO | NO | NO |
| Magic 6 with strainer Bypass required! | 12 | 150 | NO♦ | High Flow. Bypass | NO♦ | Low Flow. Bypass | NO♦ | NO | NO | NO |
| Magic 8 /11 ♦Overpressure! | over 14m | | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ |
| Top 8 / 12 / 14 + ♦Overpressure! | over 14.5m | | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ |
| HydroProGreen | | | | | | | | | | |
| HPS25 with strainer Bypass required! | 11.0? | 205 | NO♦ | NO | NO♦ | YES Bypass | NO♦ | Low Flow Bypass | NO | NO |
| HPS33 with strainer Bypass required! | 12.0 | 280 | NO♦ | NO | NO♦ | High Flow. Bypass | NO♦ | YES Bypass | Low Flow. Bypass | Low Flow. Bypass |
| HPS 50 – 150 ♦Overpressure! | over 13m | | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ | NO♦ |
| Sequence | | | | | | | | | | |
| 12000S insufficient head | 3.0 | | NO | NO | NO | NO | NO | NO | NO | NO |
| 15000S | 4.5 | 210 | NO | NO | NO | YES | Low Flow | Low Flow | Low Flow | NO |
| 18000S | 4.5 | 255 | NO | NO | NO | High Flow | YES | YES | Low Flow | NO |
| 1/8 HP/11000 with strainer | 4.6 | 130 | NO | High Flow | YES | Low Flow | NO | NO | NO | NO |
| 1/6 HP/12000 with strainer | 4.6 | 190 | NO | High Flow | High Flow | YES | Low Flow | Low Flow | NO | NO |
| ¼ HP/13000 with strainer | 5.2 | 225 | NO | NO | NO | High Flow. | YES | Low Flow | Low Flow | NO |
| ¼+ HP/15000 with strainer | 5.2 | 265 | NO | NO | NO | High Flow | YES | YES | Low Flow | Low Flow |
| See general notes on front page and guidance notes on page 5 | | | | | | | | | | |

Suitability of Pumps for BubbleBead Filters – 2008 (UK)

Notes:

* extra strainer

- the fitted pump strainer is insufficient, fit a further pre-filter to prevent oversized solids (over 2mm) entering the Bubblebead filter and clogging inlet strainers.
- Pumps **must** be used with a prefilter or sieve capable of removing particles 2mm or larger!

Bypass required!

- Fit a bypass if using high-head pumps over 10m head (7m for BBF-XS models).
- A **suitable** pressure release bypass allows pumps with heads of up to 12m to be used with BBF filters (up to 10m with XS models).

A suitable bypass is a 1½” pressure release valve of 0.7bar/10psi or less, connecting to unrestricted pipework of at least 1½” bore. The excess flow can be directed back to the pond. Bypasses give a measure of protection for slightly over-pressured pumps and also help to relieve the pressure surge following pump startup.

See the User’s Guide for further information on high-pressure use or where backpressure could occur e.g. in pipe manifolds on the filter outlet. These current recommendations supercede all previous guidance.

◆Use of overpressure pumps voids your guarantee!

BubbleBead filters are specially designed to run with energy efficient pumps with lower to medium heads. Such pumps will save many hundreds of pounds in running costs compared to high pressure/high head pumps. BubbleBead filters function best with pumps whose head exceeds 4.0m. Ask the distributor if in doubt.

- Performance figures taken from manufacturers’ information.
- Pump flows shown at a 2 metre head for typical achievable flow using large bore pipework.
- If the filter outlet is much higher than the pond, a more powerful pump will be required.
- Oversized pumps (‘High Flow’) may require a restrictor or bypass on the pump.
- Where noted as ‘Low flow’, turnover may still be adequate in smaller volume ponds.
- Listing does not infer recommendation for any particular model or brand. Other brands of similar performance may also be suitable. If a suggested pump proves unsuitable in practice, please feedback and we will update this list.

Timers:

When using timers on auto BubbleBeads, check that they have adequate ‘inductive loading’ to control pumps. 7-Day timers can be programmed to carry out additional backwashes once per week. Many timers are unsuited to control of fluorescent UV units. Contact a qualified electrician if in doubt.

Good system design:

Make allowances for equipment failures: A second pump or an air-pump backup can supply essential aeration and circulation should your main pump fail or require maintenance. Wiring pumps through separate trip switches can prevent complete system shutdown if only one piece of equipment should fail. Careful plumbing design can prevent the pool draining completely should a pump joint or pipe-return spring a leak. Auto top-ups and low level warnings can also be useful. Take advice from your local dealer.