

Pump Types

Pro's

Con's

Typical Application

Asynchronous:

Aquascape AquaSurge
Alpine Cyclone
Danner Hy-Drive

3 yr. warranty
Low operating cost
4-5 yr avg. life

Loses flow in high head pressure
Does best in a skimmer, needs a prefilter if located in the pond.
Medium purchase price.

When used in a skimmer or pump vault, for a feature with only 5-10' of head pressure, these pumps are hard to beat due to their very low wattage & 3 yr. warranty

Mag Drive:

Pondmaster
EasyPro
Alpine (1 yr. warranty)

3 yr. warranty
Lower operating cost
4-5 yr avg. life
Low purchase price

Low solids handling, needs more prefiltering than other pumps.
Loses flow in higher head pressure.

Fountains or small waterfalls. Secondary pump for a u.v. light or back-up pump. 100-1000 gal. ponds w/ in-pond filters, good with "Little Ditty" add-on skimmers.

Direct Drive, plastic bodied, sump-style:

Leader Eco-Series, Clear & Solid Answer, Danner 6-MSP

Low purchase price
Good flow at head pressure against head pressure
2.5-3.5 yr avg. life

1 yr warranty, lower solids handling.
Higher operating cost, especially above 3000 gph.

Meeting lower budget needs, 2000-3500 gph applications. 10-20' head pressure applications, back-up or utility pump needs.

Solids Handling:

EasyPro, Shinmaywa & Atlantic Stainless Steel, Leader Solid Answer, F&Q Cast Iron

Handles dirty water better than any other style of pump.
Needs little prefiltering.
Maintains good flow against Pressure. 3-5 yr avg. life.

Higher purchase price.
In low head applications operating costs are greater than with Asynchronous or Mag Drive

3000-8000 gph needs with 10-25' head pressure applications. In-pond pump applications where solids handling is important. More neglectable pumps for hands-off owners.

External Low Energy:

Aqua-Flo
Performance Pro
Sequence

Lowest operating cost for GPH.
Longest avg. life, 10-12+ yrs.
Extremely quiet operation.
Intakes can be plumbed to draw water in from multiple sources.
3 yr warranty

Hiding the pump takes planning.
Need to be checked 1-2 x per week for debris in leaftrap. A little more plumbing involved.

4000-7500 gph applications with 5-15' head pressure applications. These are the best value pumps, for water flow vs. operating cost. They are best suited for hands-on customers.