SUBMERSIBLE DRAINAGE PUMPS
Model Numbers: D42A, D42M, D42A/B

PRODUCT DESCRIPTION
Submersible sump pump with twin impeller design for higher pressure, up to 32m head

APPLICATIONS
- Lawn & garden irrigation
- Sump emptying to higher heads
- Treated effluent disposal
- Water transfer from wells
- Model D42A/B specially designed for non potable rainwater applications

“A” suffix models equipped with present length automatic float switch fitted for automatic operation.

FEATURES & BENEFITS
- Double mechanical seal, one in oil bath on motor and extra mechanical seal on pump
  - Superior reliability
  - Long service life
- Corrosion resistant 304 stainless steel shaft, motor shell and fasteners
  - Long service life
- D42A/B has cast 316 stainless steel motor caps and super tough engineered thermo plastic pump casing
  - Outstanding corrosion resistance
  - Long life
- Centrifugal multistage twin impeller design
  - Higher pressures & increased efficiency
- Closed vane impellers with long engagement “D” drives
  - Positive operation
  - Long service life
- D42A & D42M have labyrinth impeller neck rings
  - Maintain pump performance
  - Less susceptible to wear
- D42A/B has patented independently floating neck rings
  - Outstanding pump performance
  - Long pump life
- Corrosion resistant hard wearing polycarbonate impellers
  - Long service life
- Corrosion resistant stainless steel fine mesh suction strainer with large surface area
  - Prevents blockages of the pump by solids
- In-built automatic thermal overload
  - Protects the motor in the event of blockage or voltage supply problems
- HO7RNF oil resistant leads, 10 metres long with 3 pin power plug
  - Easy to connect to power supply
  - Longer life in dirty water

OPERATING LIMITS

<table>
<thead>
<tr>
<th></th>
<th>D42A,M</th>
<th>D42A/B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacities to</td>
<td>110lpm</td>
<td>130lpm</td>
</tr>
<tr>
<td>Max. total head</td>
<td>26m</td>
<td>32m</td>
</tr>
<tr>
<td>Max. submergence</td>
<td>12m</td>
<td></td>
</tr>
<tr>
<td>Max. pumped water temperature</td>
<td>40°C</td>
<td></td>
</tr>
<tr>
<td>Max. soft solids</td>
<td>1.9mm O.D.</td>
<td></td>
</tr>
<tr>
<td>Outlet size (BSP)</td>
<td>1” F</td>
<td></td>
</tr>
</tbody>
</table>

Suitable Fluids
Clean water of neutral pH containing up to 1% small solids. Some wear should be expected while pumping hard solids in suspension.
## Technical Specifications

### Materials of Construction

<table>
<thead>
<tr>
<th>PART</th>
<th>MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impeller</td>
<td>Glass filled polycarbonate</td>
</tr>
<tr>
<td>Lock nut</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Pump casing</td>
<td>Cast iron - FC200 (D42A/M)</td>
</tr>
<tr>
<td>Diffuser and blanking ring</td>
<td>Glass filled polycarbonate</td>
</tr>
<tr>
<td>Mechanical seal - pump</td>
<td>Glass filled noryl</td>
</tr>
<tr>
<td>Mechanical seal - motor</td>
<td>Carbon/ceramic</td>
</tr>
<tr>
<td>Shaft seal elastomer</td>
<td>Silicon carbide/ceramic in</td>
</tr>
<tr>
<td>Pump shaft</td>
<td>oil bath</td>
</tr>
<tr>
<td>Orings</td>
<td>Nitrile rubber</td>
</tr>
<tr>
<td>Motor shell</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Bottom bearing housing</td>
<td>304 stainless steel</td>
</tr>
<tr>
<td>Upper motor cover</td>
<td>Cast iron - FC200 (D42A/M)</td>
</tr>
<tr>
<td>Handle</td>
<td>Cast 316 stainless steel</td>
</tr>
<tr>
<td>Fasteners</td>
<td>Cast 316 stainless steel</td>
</tr>
<tr>
<td>Float &amp; power supply leads</td>
<td>HO7RN-F oil resistant</td>
</tr>
</tbody>
</table>

### Electrical Data

- **Supply voltage**: 220-240V
- **Supply frequency**: 50Hz single phase
- **Speed**: 2 pole, 2850rpm
- **Full load current**: 4.0A
- **Locked rotor current**: 14A
- **Input power (P1)**: 0.94kW
- **Output power (P2)**: 0.60kW
- **IP rating**: X8
- **Insulation class**: Class F
- **Starting**: P.S.C.
- **Lead**: 10m long

### Hydraulic Performance

![Graph showing hydraulic performance](image)

### Installation & Priming

- Use a rope to position and retrieve the pump. Do not lower or retrieve the pump using the power lead as this may damage the cable entry seals, causing water leaks and unsafe operation.
- Don't use this product for recirculating or filtering swimming pools, spas, etc.
- While these pumps are built to high safety standards, they are not approved for installations where people will be in the water while they are operating.
- Don't pump abrasive materials. Sand and grit in the water being pumped will accelerate wear, causing shortened pump life.
- Keep your pump clean, particularly in situations where lint, hair or fibrous materials may get bound around the pump shaft. Regular inspection and cleaning will extend pump life.
- Make room for the float switch to operate. Automatic models have a float switch to turn them on when the water level rises and turn them off again when it has been pumped down to the safe operating level of the pump. If the float switch is not free to rise and fall, correct pump operation may not be possible.
- Don't run your pump dry. Non-automatic models must be switched off manually or by way of an external float/level switch when the water level is reduced to the top of the pump housing.

This literature is not a complete guide to product usage. Further information is available from your Davey dealer, Davey Customer Service Centre and from the relevant product Installation and Operating Instructions. This data sheet must be read in conjunction with the relevant product Installation and Operating Instructions and all applicable statutory requirements. Product specifications may change without notice. © Davey is a registered trademark of Davey Products Pty Ltd. © Davey Products Pty Ltd 2001.

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**Davey Products Pty Ltd**

Member of the GUD Holdings Ltd Group

ABN 18 066 327 517

Head Office and Manufacturing

6 Lakeview Drive, Scoresby, Australia 3179

Ph: +61 3 9730 9222
Fax: +61 3 9735 4100
Website: www.davey.com.au
Customer Service Centre

Ph: 1300 367 866
Fax: 1300 369 119
E-mail: sales@davey.com.au

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**International**

6 Lakeview Drive, Scoresby, Australia 3179

Ph: +61 3 9730 9121
Fax: +61 3 9735 4248
E-mail: export@davey.com.au

**Germany**

Kantstrasse 47, 04275 Leipzig

Ph: +49 341 301 0412
Fax: +49 341 301 0413
E-mail: akrenz@daveyeurope.com

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**DPM128-3a/0806/WEB supersedes DPM128-3/3K/0706/SC**