

# Light Wastewater Pump Type ABS MF 154HW

Compact submersible pump for the removal of domestic and commercial high temperature wastewater that can contain solids up to 20 mm.

## Applications

The MF 154HW submersible pump has been designed to cover a wide range of internal and external dewatering applications, but primarily where the temperature of the medium exceeds the standard upper limit (40 °C) to a maximum allowable temperature of 80 °C.

- Pumping of high temperature discharge water from laundries, commercial dishwashers and washing machines.
- Filling and emptying of containers, drainage of flooded cellars and removal of rainwater.
- Suitable for use in septic tanks and pumping effluent from locations below the backwash level in accordance with EN 12056.
- The vortex hydraulics are particularly suitable for the pumping of fluids containing gaseous or abrasive particles.
- The compact shape of the MF, fittings for easy mounting, and small sump requirements, ensure a quick and cost-effective installation of the pump.
- Maximum allowable temperature of the pumped medium is 80 °C (90 °C for max.5 minutes).

## Construction

The water-tight, fully flood-proof cast iron motor and the hydraulics section comprise a compact, robust, unit construction.

## Motor

Single-phase 220-240 V, 50 Hz, 2-pole (2900 r/min) motor. Insulation class F; protection type IP68.

## Bearings

The stainless steel rotor shaft is supported in lubricated-for-life ball bearings.

## Shaft sealing

Between motor and hydraulic section by means of a high quality mechanical seal of carbon / silicon carbide. Seal at motor side is an oil-lubricated NBR lip seal. Both are independent of direction of rotation and resistant to temperature shock.

## Temperature monitoring

TCS (Thermo-Control-System) with thermal sensors in the stator to switch off the pump in the case of overheating and switch on automatically after cooling down.

## Hydraulic section with vortex impeller

Free solids passage of 20 mm.

## Materials

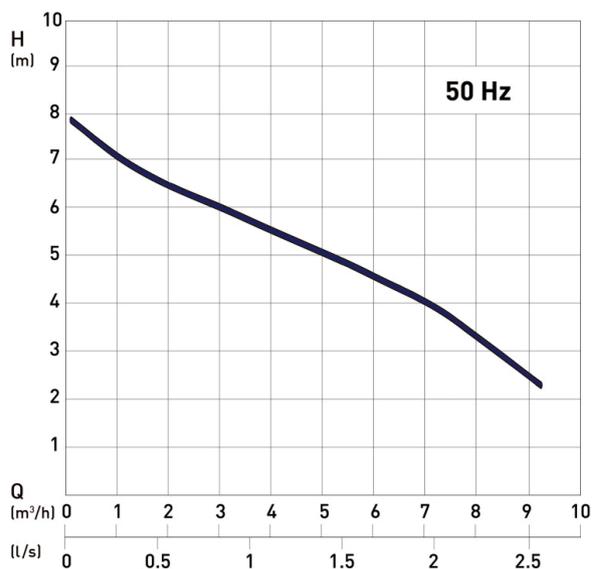
| Description   | Material                          |
|---------------|-----------------------------------|
| Upper Lid     | Stainless steel 1.4301 (AISI 304) |
| Motor Housing | Cast iron EN-GJL-250              |
| Rotor Shaft   | Stainless steel 1.4021 (AISI 420) |
| Volute        | Cast iron EN-GJL-250              |
| Impeller      | Polyamide                         |
| Cable         | Neoprene                          |
| Fasteners     | Stainless steel 1.4401 (AISI 316) |



## Features

- Simple, cost-effective, pump installation.
- Vortex hydraulics for blockage-free pumping in critical applications.
- Free-standing on legs, or pedestal mounted.
- Discharge connections G 1½" internal - 1¼" adaptor.
- Mechanical and lip seals on rotor shaft.
- Thermal sensors to protect motor against overheating.
- Float switch for automatic level control.
- EasyFit plug-in cable connection.
- Fitted with Europlug.

## Performance curve



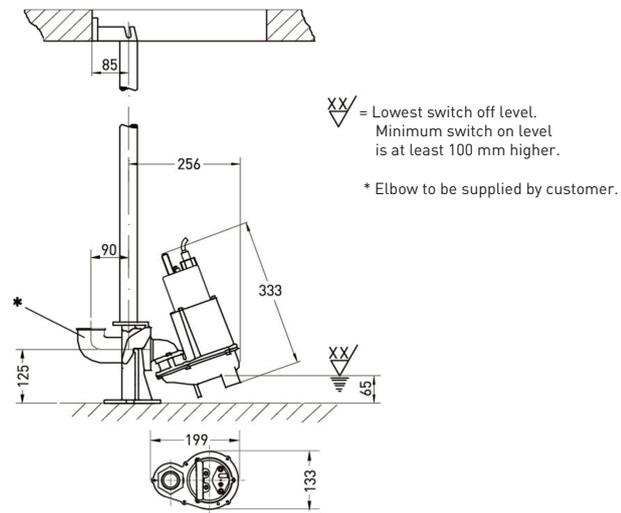
H = Total Head; Q = Discharge Volume.  
Curves to ISO 9906.

## Technical data

| MF 154HW              |                |      |
|-----------------------|----------------|------|
| Discharge connection  | G 1½" - 1¼"    |      |
| Motor power (kW)*     | P <sub>1</sub> | 0.65 |
|                       | P <sub>2</sub> | 0.42 |
| Speed (r/min)         | 2900           |      |
| Rated voltage (V)     | 220-240 1~     |      |
| Rated current (A)     | 2.8            |      |
| Cable type (H07BN4-F) | F3G1.0         |      |
| Cable length (m)      | 10             |      |
| Weight (kg)           | 8.5            |      |
| Solids size (mm)      | 20             |      |

\* P<sub>1</sub> = Power taken from mains. P<sub>2</sub> = Power at motor shaft  
According to VDE regulations submersible pumps for use externally must have a fixed cable connection with a length of at least 10 m. Regulations vary by country.

## Dimensions (mm)



## Accessories

|   | Description  | Size  | Part no. |
|---|--|---|----------|
| <b>Fixed Installation</b>                               | <b>Pedestal</b> (EN-GJL-250)<br>vertical discharge, without bend | G 1¼"   | 62325012 |
|   | <b>Bracket Kit</b><br>vertical discharge                         | G 1¼"   | 62325014 |
|   | <b>Guide Rail</b> (galvanized steel)                             | 1¼" x 1 m   | 31380007 |
|   |  | 1¼" x 2 m   | 31380008 |
|   |  | 1¼" x 3 m   | 31380009 |
|   |  | 1¼" x 4 m   | 31380010 |
|   |  | 1¼" x 5 m   | 31380011 |
|   | <b>Chain Kit</b> (galvanized steel)<br>including shackle         | 3 m   | 61265065 |
|   |  | 4 m   | 61265093 |
|   |  | 6 m   | 61265069 |
| 7 m   |  | 61265096  |          |
| <b>Chain Kit</b> (stainless steel)<br>including shackle |  | 3 m   | 61265081 |
|   | 4 m  | 61265099  |          |
|   | 6 m  | 61265085  |          |
|   | 7 m  | 61265102  |          |
|   | <b>General</b>   | <b>Non-return valve</b> (EN-GJL-250)<br>ball valve with internal thread | G 1¼"    |
| G 1½"   |  |   | 61400526 |
| <b>Gate valve</b> (brass)<br>with internal thread       |  | G 1¼"   | 14040005 |
|   |  | G 1½"   | 14040006 |