

# MFA Fuel & Water Pump. Pt.no.650.

Designed and manufactured by MFA to a high standard for model and industrial use. It is very compact and incorporates a precision brass gear type pump cavity. It operates on 6 - 12 volt DC and is reversible by simply reversing the power supply to the motor. The latter is ideal for filling and draining capability.

## Instructions for use:

Connect the motor contacts to your battery via a suitable switch (for reversing use, a 2 pole 3 position switch should be used, MFA pt.no.260). Connect up the outlet nozzles as required, silicone rubber tube MFA pt.no.108, is recommended. **Important:** Use an in-line filter (MFA pt.no.769 or 1074) to prevent the gears being jammed by impurities. The pump is now ready to use. Do not run it dry for longer than necessary. **WARNING: Do not use for petrol!**

## Pump maintenance:

The four screws hold the top plate on the pump and also control the clearance of the brass gears in their cavity. These have been factory set when each pump was individually tested, however, they can be adjusted if and when required. If the pump runs slowly (when actually pumping liquid) or starts fast and slows to a stop, gently back-off (anti-clockwise) the four screws a fraction of a turn. If the pump will not self-prime and sounds 'rattly', gently tighten the screws a fraction of a turn each. If the pump suddenly refuses to work, it could be impurities in the gear cavity (the reason for the filter!) in which case, remove the top plate to gain access to the gear cavity. When reassembling, carefully tighten the four screws equally and set up the pump as described above.

## Technical data:

O.A. Dimensions:	66 x 57 x 33mm.
Nozzle dimensions:	12mm x 4.9mm stepped up to 5.75mm, 2.5mm bore.
Pump housing material:	Glass filled black nylon.
Gears:	Machined brass.
Motor gear driver:	Brass.
Housing 'O' ring and shaft seal:	Nitrile rubber.
Motor:	12v DC, 3 pole, carbon brushes, oilite bearings.
Motor current consumption:	0.7 amp typical in operation.
Pump performance:	70 seconds per litre approx, 3mm bore tubing.
Max self-prime lift:	30 cm. approx.