

FM4A - IN LINE 4-DIGIT FLOW METER



Applies to the following models **ONLY**:

FM4A

Please read carefully **BEFORE** commencing installation.

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ENVIRONMENTAL INFORMATION



UK Regulation SI 2013 3113 requires that the equipment bearing this symbol on the product and/or its packaging must not be disposed of with unsorted municipal waste. The symbol indicates that this product must be disposed of separately from regular household waste streams. It is your responsibility to dispose of this and other electric and electronic equipment via designated collection facilities appointed by the government or local authorities

PRODUCT SPECIFICATION

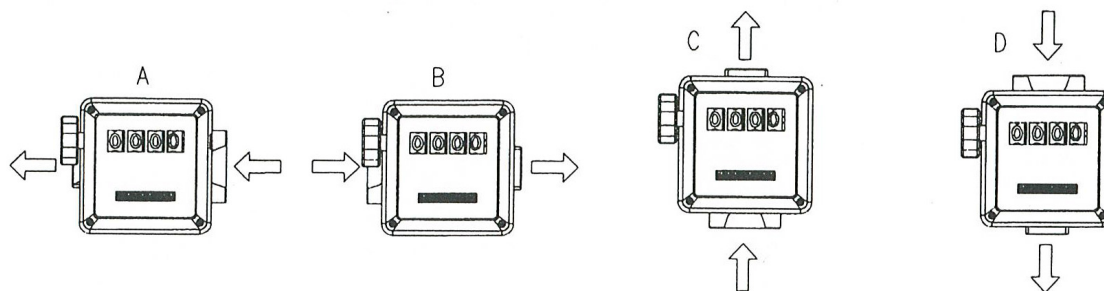
- Only suitable with diesel or biodiesel up to B30.
- Robust nutating disc flow meter shows up to 9999 litres
- 20 - 76L/min. 1" BSPF ports.
- Min operating pressure 0.5 BAR / 8 PSI.
- Max operating pressure 3.5 bar / 50 PSI.
- Accuracy +/- 2% with adjustable calibration.
- Aluminium housing.
- 4 digit register. 8 digit non resettable totaliser.
- Front face can be rotated in 90 degree increments.

IMPORTANT WARNING NOTES

1. This meter **MUST NOT** be used to dispense petrol or other flammable liquids with a flash point below 55°C.
2. This product must not be used if it is damaged or leaking.
3. This product must not be operated in a fully enclosed environment or without adequate ventilation.
4. Installation of this equipment and its associated tank, pipe work and fittings should only be carried out by qualified fuel installation engineers and must conform to all relevant electrical and local authority regulations and standards.

INSTALLATION INSTRUCTIONS

This meter is designed to be fitted horizontally or vertically in-line to rigid pipework. Check the flow direction arrow on the meter before fitting. This meter should only be fitted to the outlet side of the pump unit, not the inlet. The meter plate can be removed, rotated and refitted if required in order to change the meter flow direction.



Ensure that all threaded connections are sealed with a suitable thread sealant or sealing tape. If sealing tape is used then ensure that the tape does not intrude into the flow path. Meter must be recalibrated if housing has been turned.

CALIBRATION

The FM4A meter is pre-calibrated to be used with standard diesel fuels. However, specific operating conditions such as flow rate, temperature and density of fuel may affect the meter accuracy and a re-calibration should be carried out after the installation has been completed. A new calibration is necessary each time the meter is disassembled for maintenance operations or when it is used to measure fluids that differ from standard diesel fuel.

CALIBRATION PROCEDURE:

1. Unscrew the brass calibration cap located underneath the outlet port. This will expose the calibration screw.
2. Purge the system (pump, pipelines, meter) of air by dispensing until the flow stream is full and steady.
3. Stop the flow by shutting off the nozzle, but keep the pump running.
4. Reset the register to 0000 using the reset knob.
5. Dispense at the full flow rate into a calibration container having a capacity no lower than 20 litres. Do not reduce the flow in order to reach the graduated zone of the calibration container. The right method is to start and stop the full flow repeatedly until the required filling is obtained.
6. Compare the indication of the calibration container (real value) with the one of the meter (indicated value).
 - a. If the indicated value on the meter register is higher than the real value in the measure can then wind the calibration screw OUT (anti-clockwise).
 - b. If the indicated value on the meter register is lower than the real value in the measure can then wind the calibration screw IN (clockwise).
7. Repeat the operations 4 to 6 until accuracy is satisfactory.
8. Refit the brass calibration cap.

DECLARATION OF CONFORMITY



Company Name: **Hytek (GB) Ltd**

Address: **Delta House, Green Street
Elsenham, Bishops Stortford
Hertfordshire
CM22 6DS, UK**

Date of Issue: **8th June 2016**

Equipment Details: **Hytek FM4A Flowmeter**

Applicable Directives:
& Standards **2006/42/EC Machinery Directive**

**97/23/EC Pressure Equipment Directive &
2014/68/EU Pressure Equipment Directive** (effective date 19th Jul 2016)

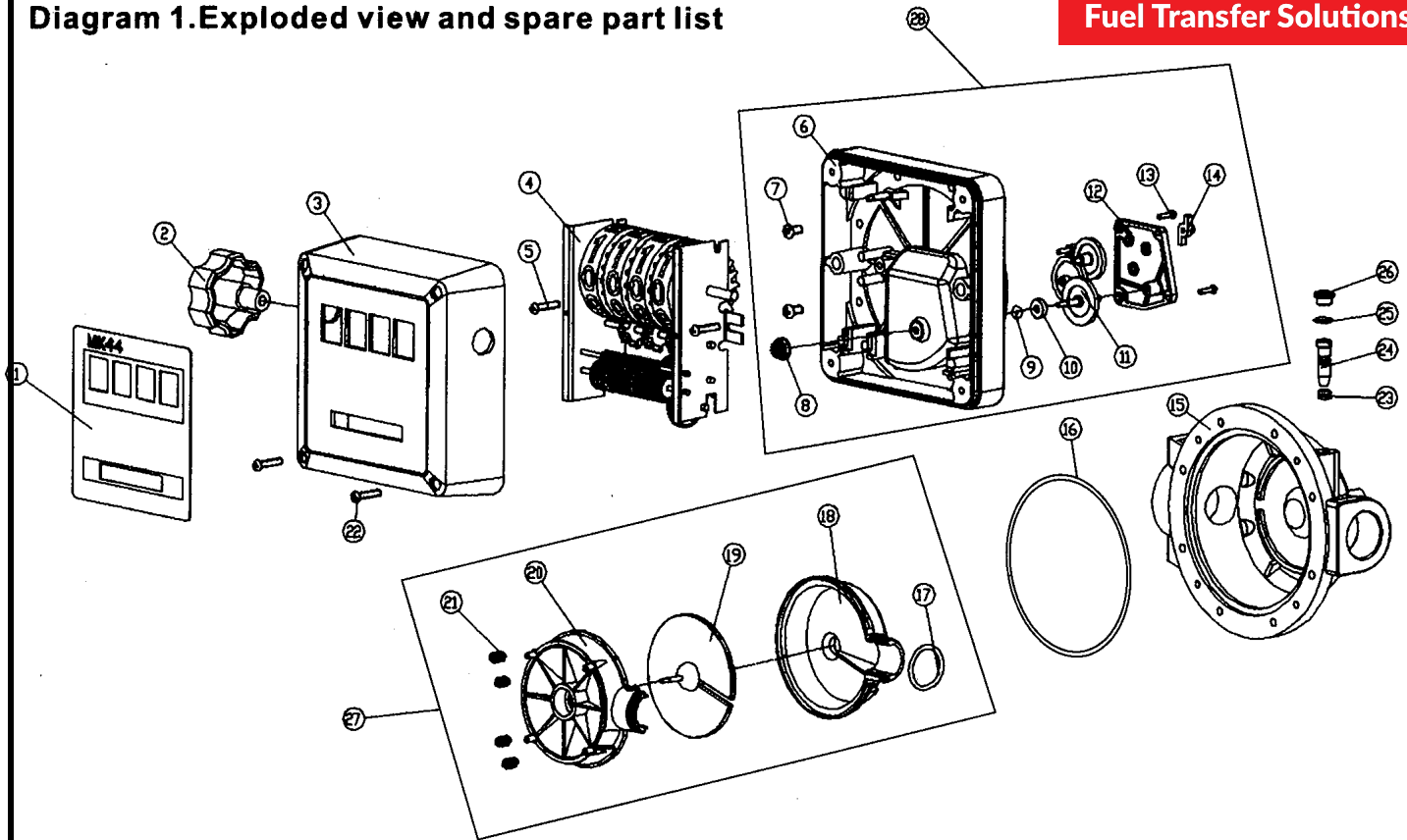
Declaration Number: **EU083/2**

On behalf of the above named company, I declare under our sole responsibility that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.

Clive Wellings
Clive Wellings
Technical Manager

PARTS DIAGRAM

Diagram 1.Exploded view and spare part list



PART NO:	DESCRIPTION:	PART CODE:
1	Meter cover sticker	FM4A.1
2	Reset Knob	FM4.2
3	Plastic meter cover/faceplate (includes item 1)	FM4A.3
4	Meter 4-Drum register	FM4.4
5	Register screw (x2)	FM4A.5
6	Register mounting plate	FM4A.6
8	Nylon Bevel Gear	FM4A.8
15	Aluminium rear meter housing	FM4A.15
16	Main body sealing O-ring	FM4A.16
22	Meter cover screw (x4)	FM4A.22
23/24/25	Bypass screw (complete)	FM4A.23
26	Bypass cap	FM4A.26
27	Plastic measure chamber (complete)	FM4A.27
28	Register mounting plate (complete)	FM4A.28

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