ADF20 – 20mm Fertilizer inferential-jet pulse flowmeter

FEATURES

- **Ideal for use with corrosive liquids and most known liquid fertilizers.**
- **Inferential-jet impeller measurement, passes particles without blockage.**
- **Dry contact closure signal output 10 or 20 pulse/litre options.**
- **Accuracy ± 2% (Qt-Qs), two flowrange options, temperature to 50ºC**
- **Low headlosses - ideal for gravitational flows.**
- **Threaded ¾"Bsp(m) connection ends.**

ADF20 inferential-jet flowmeters with signal output are made of chemical resistant plastics and metals. This makes them suitable for dispensing/dosing applications of common fertilizers and chemicals. The volt-free contact closure output makes the ADF20 suitable for connection as a resetable flowmeter with the ManuFlo ME5-T-B resetable counter, or for connection to batch controllers, dosing controllers and PLCs.

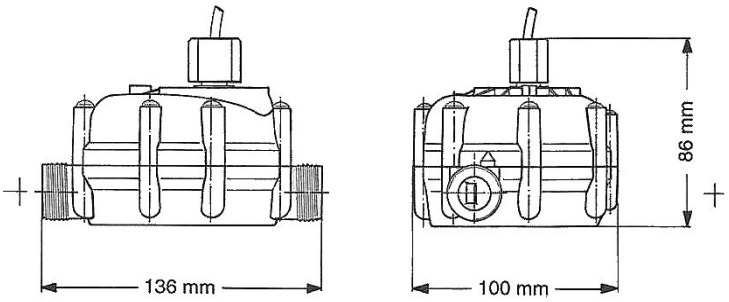
The principle of measurement is achieved by an inlet orifice which directs liquid to the blades of the vane wheel. As the wheel moves, imbedded ceramic magnets switch the pulse probe, generating the signal output.

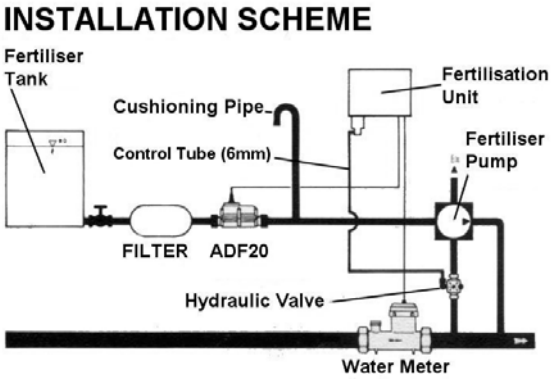
SPECIFICATIONS

	Model Number	ADF20-N	ADF20-S
	Size (mm)	20	20
Pulse output rate	**pulses/Litre**	10	20
Min. flow	**Qm ±5% Litres/minute**	1.0	0.33
Min. transitional flow	**Qt ±2% Litres/minute**	2.0	1.15
Max. flow	**Qs ±2% Litres/minute**	12.5	8.3

OTHER SPECS:

Pulse Data: Contact closure Vmax 28VDC @ Imax 50mA. Signal cable: 2-core, 1 metre length.
Dimensions: Length: 136mm, Width: 100mm, Height: 85mm.
Pressure: 5 bar maximum.





INSTALLATION

ADF meters are pre-calibrated for installation in a horizontal position.

Note that peristaltic, diaphragm or piston pumps injecting fertilizer can deliver a pulsating flow. In order to prevent pressure flow variations, which could effect measurement accuracy, a dampener pipe should be installed. The dampener pipe to be used depends on the type and size of pump. Two conditions must be fulfilled:

- The volume of the dampener pipe should be at least 4 times the volume injected by the pump.
- The top of the dampener pipe should be at least 25cm above the top of the fertilizer tank.

Example: For an injection pump having a volume of 33cm^3 per stroke, a 25mm inner diameter dampener pipe should be at least 27cm long. In order to keep it clean, it is recommended to bend or cover the edge of the dampener pipe. Do not block venting.

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Rev: 0512/1