

Spare parts/accessories

	BOTTLE	HEAD	BAG	COMPLETE INNER ASSEMBLY	PRESSURE REGULATOR	QUICK CONNECTOR KIT
ADM	ADM-BTL	ADM-HDA	ADM-BAG	ADM-BSA	AD-PR	ADM-FQC
ADMP	ADMP-BTL	ADM-HDA	ADM-BAG	ADMP-BSA	AD-PR	ADM-FQC

Contact our sales department or purchase from our website shop.

Where water pressure can exceed the rated bottle pressure a pressure regulator must be fitted.
Code: AD-PR



Quick connector kit allows the dilutor to be converted accept snap connectors instead of 'geka' style connectors.
Code: ADM-FQC



Safety advice

Trapped air is dangerous, always ensure there is no air trapped in the bottle or hoses. Always ensure local Water Regulations are observed if connecting to drinking water supplies. Avoid leaving the unit operational for long periods in strong sunlight. Protect the dilutor from frost. Always observe fertiliser manufacturers instructions. Never operate the dilutor at pressures in excess of the bottle rating. Never use 'trigger' type on/off valves as turning valves on and off very quickly can create pressure waves that burst the dilutor bottle.

Additional information is available on our website - www.access-irrigation.co.uk

Access Irrigation Ltd
Crick, Northampton, NN6 7XS
(01788) 823811
sales@access-irrigation.co.uk

Access Dilutor Range

Mobile



Specification

High pressure model

Code: ADMP
Capacity: 6.5 litres (nominal)
Flow rate: 300 – 3,400 l/h
Jets: 200:1, 150:1, 100:1
Pressure: 4.0 bar
Max temp: 30°C

Specification

Code: ADM
Capacity: 6.5 litres (nominal)
Flow rate: 300 – 3,400 l/h
Jets: 200:1, 150:1, 100:1
Pressure: 2.5 bar
Max temp: 20°C

What's in the box?

- Plastic bottle.
- Bag containing, instructions, spare boss 'O' ring, label.
- Bag containing, head, jets, brass Geka fittings.

Getting started

Fit the two brass Geka fittings to the inlet/outlet of head.
Select the appropriate coloured jet and fit to head.

Operating instructions

- 1 Remove head from the boss.**
Unplug the black tube from the head (1a).
Unscrew union nut anti-clockwise (1b).
- 2 Fill bottle (if not already full).**
Unscrew and remove black cap/tube from bottle side port (2a). On ADMP model remove grey cap on opposite side.
Fill bottle completely with plain water using the side port.
- 3 Put fertilizer into bag.**
Using the centre grey orifice fill or partially fill the inner bag (3). Whilst filling water will pour from the bottle side port. When sufficient fertilizer has been added replace the cap/tube.
- 4 Replace the head.**
Ensure centre 'O' ring is in place.
Re-connect the black tube into the head.
Connect supply hoses ensuring flow is as arrow on head.
- 5 Slowly turn on the water supply.**
Ensure supply hoses are not kinked and any downstream valves are open **before** turning water supply on.
- 6 Whilst feeding.**
Fertilizer inside the bag will slowly be drawn up into the water stream. Keep a check on fertilizer level and replenish as required.



Trouble shooting

The Access range of Feeders/Dilutors provide a simple and cost effective solution to plant feeding. With no moving parts there are also limited things to go wrong. If you are having problems follow our the troubleshooting checklist below:

Dilutor not working

1. Is the flow between the min/max range of dilutor?
2. Is the flow the same as the direction arrow on the head?
3. Is the jet clear and fully inserted?
4. Is the fertilizer fully dissolved?
5. Has the inner bag been damaged?

Dilutor leaks water

If water is weeping from the relief valve (ADM only) then the pressure is **too high**. Reduce the pressure at the tap or fit a pressure regulator (**AD-PR**) to the dilutor.

If the dilutor is leaking at the boss, firstly remove the head assembly at the union and unplug the tube. Carefully unscrew the boss and lift out of the bottle just enough to gain access to the 'O' ring. Clean and inspect for damage, replace if necessary. Retighten, ensuring the bag does not get damaged and remains secure.

If the bottle itself is leaking, it has been over-pressurised and needs replacing.

Problem fertilizers

Before purchasing, check with the fertilizer manufacturer to ensure that the fertilizer will fully dissolve at the concentration you require (eg. 200:1), as it is sometimes difficult to get crystalline fertilizers to fully dissolve at the higher concentration rates.

Make sure that the fertilizer is denser than water (1 litre must weigh more than 1kg)

Do not leave unused fertilizer inside the bag for long periods always empty and flush with clean water.

Light coloured fertilizers

To see what the water should look like when it comes out of the dilutor, take some of the concentrated fertilizer and dilute it (200 times if using the 200:1 jet). If the colour is too light to see, add a colouring agent to the concentrated fertilizer. Food dye often makes a good colouring agent.

Servicing/maintenance

Change/check the jet

- 1) Disconnect the black tube from the head, unscrew the centre union fitting and remove the head.
- 2) Turn the head upside down to access the jet orifice. If there is a jet fitted using the tool supplied or pliers pull the jet out of its location (1).
- 3) The jet can be checked for blockages by holding it up to the light. If it is blocked, try placing it under running water or use a very fine needle, however be careful not to damage or enlarge the hole (2).
- 4) Reinsert the jet by pushing firmly into its orifice (3).
- 5) Refit the head ensuring the 'O' ring is in place and reconnect the black tube.



Periodic checks

- 1) Check for splits in the black tube.
- 2) Check the jet for fine debris.
- 3) Visually check bottle condition and clean down.
- 4) Empty and wash out inner bag with clean water.

End of season

- 1) Empty and wash out bag and bottle.
- 2) Drain bottle and bag.
- 3) Store in a frost free environment.

Jet identification and specification

Jet Colour	%	Ratio	Make fertilizer concentrate:	This will add fertilizer to:
Blue	0.5	200:1	200 times stronger	1300 litres of water
Purple	0.75	150:1	150 times stronger	975 litres of water
Black	1.0	100:1	100 times stronger	650 litres of water

Making up the concentrated fertilizer

Bag quantity

To make a fertilizer concentrate amount for the bag (nominal bag capacity 6.5 litres), the following calculation must be made:

$$\text{Manufacturers final application rate per litre} \times \text{Head ratio} \times 6.5$$

For example, if the fertilizer instructions state 'add 0.5ml to 1 litre of water' and the standard 200:1 jet (fertiliser concentrate 200x stronger) is being used, the amount of concentrated fertilizer to add would be:

$$\frac{0.5\text{ml}}{1 \text{ litre}} \times 200 \times 6.5 = 650\text{ml}$$

Put the 650ml of concentrated fertilizer into a mixing jug and make up to 6.5 litres with clean water. Mix thoroughly and fill the bag using the quick guide instructions opposite.

Stock solution method

To make up a stock solution the calculation is the same, but instead of multiplying by 6.5 (the nominal bag capacity) multiply by the amount of stock solution required. To make 25 litres of stock solution the calculation would be:

$$\frac{0.5\text{ml}}{1 \text{ litre}} \times 200 \times 25 = 2500\text{ml}$$

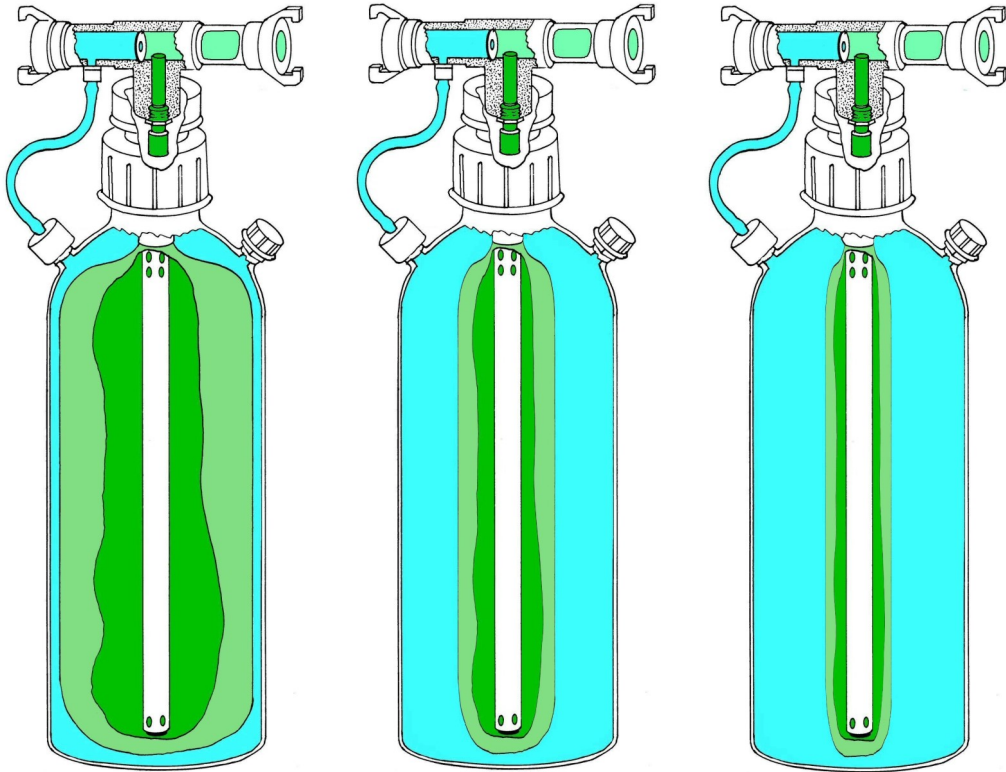
Make up the remainder of the 25 litres with clean water. Using this method the dilutor would be filled with the stock solution.

Stock solution method - commercial fertilizers

Commercial fertilizer manufacturers usually tell you to make up a stock solution by, for example, dissolving 1kg in 10 litres, then applying this to the plants at 200:1, 100:1, etc. Make up this stock solution and then use the table below to indicate how many litres of concentrated fertilizer to put in the bag. Fill the remainder of the bottle with plain water and ensure the contents are well mixed.

Stock strength	200:1 Jet	150:1 Jet	100:1 Jet
100:1	—	—	Full
200:1	Full	4.88	3.25
250:1	5.20	3.90	2.60
500:1	2.60	1.95	1.30

Operation details



How the dilutor works

The dilutor consists of a strong plastic bottle and a head with venturi. As the water flows past the venturi, concentrated fertilizer is drawn up into the water flow. The dilution ratio is fixed by the jet being used (200:1/150:1/100:1). Very little pressure is lost during operation.

As concentrated fertilizer is removed from the bag, plain water enters the bottle surrounding the bag via the black tube. As the fertilizer is kept physically separate from the water, the bottle can be moved and the fertiliser left in the bottle once watering is complete.

Servicing/maintenance

Change/check inner bag

- 1) The bottle and inner bag should be flushed then drained completely.
- 2) Disconnect the black tube from the head. Unscrew the centre union and remove the head (1). Unscrew and remove the side port cap/tube.
- 3) Using the hex nut unscrew the grey boss (2).
- 4) Carefully withdraw the bag assembly. Twisting the assembly round as it is lifted will allow the bag to exit the bottle (3).
- 5) With the assembly removed, carefully pull the bag grip ring downwards to release the bag (4).
- 6) Examine/replace the bag as necessary. Fit the grip ring onto the bag first, then feed the bag around the boss taper. Push the grip ring up to lock the bag in position.
- 7) Check the grey boss 'O' ring is in place and in good condition. Turn the boss clockwise whilst holding the bag to fold it around the stem enabling it then to be inserted into the bottle.
- 8) After the bag is inserted into the bottle twist the assembly back and forth to ensure the bag is not tangled.
- 9) Tighten the grey boss using the hex nut.
- 10) Refit the head ensuring the 'O' ring is in place.
- 11) Refit the side port cap/tube.
- 12) Refit the black tube into the head

