



**A FORCE TO BE RECKONED WITH**

# GyroForce

## Robust and modular micro-sprinkler that operates at low pressure



**GyroForce is robust, modular, easy to use and geared to overcome challenges in the orchard.**

### / Benefits & Features

- ☞ Robust
- ☞ Colour coded parts
- ☞ Modular design for easy interchangeability
- ☞ Highly effective application of water
- ☞ Operates at low pressure (1 bar)
- ☞ High precision moulded components
- ☞ Wide product range for variety of applications
- ☞ Cost-effective
- ☞ Subject to rigid quality control
- ☞ Distribution diameters from 1.5 to 6.6 m
- ☞ Flow rates from 15 to 120 l/h
- ☞ Flow regulator overcomes fluctuating pressure (not with 15 l/h)
- ☞ Filtration: 130 micron (015 - 020) & 200 micron (030 - 120)

#### Operates at Low Pressure

GyroForce can operate at pressures as low as 1 bar, saving energy costs and making it suitable to a wider range of applications. It is even forgiving if the pressure drops below 1 bar in unpredictable field conditions.

#### Improved Ease of Use

A GyroForce micro-sprinkler's improved top bearing is easy to remove in the field, no tools or superhuman strength required. If blocked, the micro-sprinkler can quickly be disassembled and cleaned.

As trees grow, their water requirements change. The concave spreader facilitates a smaller wetted diameter for young trees with a smaller root system. The improved bearing enables you to easily remove the spreader and replace it with a suitable swivel to enlarge the wetted diameter and ensure continued efficient irrigation as the tree gets older.

#### Upright and Upside-down

In vineyards and trellised orchards, for example, micro-sprinklers may be used in an upside-down position. When upside down, the cup of the swivel forms the perfect spot for dust to collect, mix with water and form a grinding paste, leading to accelerated wear on the pin and cup. To remove this risk, a bearing and swivel was designed specifically for upside-down use.

#### Flow Regulator

The GyroForce flow regulator maintains constant flow rate for a GyroForce micro-sprinkler when the pressure is between 1.2 and 3.5 bar. It compensates for pressure variation caused by changing elevation or long laterals. Flow rates increase as pressure increases, this causes water-delivery that is not uniform and not precise.























#### Flow Adaptor

An adaptor has been developed to create a 15 l/h GyroForce micro-sprinkler. With decreasing tree spacing we need decreasing flow rates. Also, we have seen run-off occurring in some soils with lower infiltration rates. The 15 l/h adapted micro-sprinkler can overcome this in certain cases and allows GyroForce to be applied on a wider range of crops, areas, and circumstances.

## GyroSA and GyroForce

GyroForce is built on the success of the GyroSA micro-sprinkler. It brings improved features to the field to help you grow more with less. GyroSA will still be available in our product range. This is to ensure product stability, especially in terms of the anti-bug version and spreaders. Although GyroForce brings important improvements to the field, GyroSA still performs as excellently in practice as it is equal in terms of technical specifications. Peruse the information on the first page for more about the improved GyroForce features.

## / Technical Data

| GyroForce Range |   |                 |              |  | GyroForce Upright   |   |   |   |   | GyroForce Upside-down   |  |   |   | GyroForce with Concave Spreader   |   |
|-----------------|---|-----------------|--------------|--|---|---|---|---|---|---|--|---|---|---|---|
|                 |   |                 |              |  |  |   |   |   |   |  |  |   |   |  |   |
| Nozzle          |   |                 |              |  | Wetted Diameter (m) at 280 mm height  |   |   |   |   |   |  |   |   |   |   |
| Model           | Colour  | Flow Rate (ℓ/h) | Pressure (m) | Design Factors   |   | Upright Swivel  |   |   |   |   | Upside-down Swivel   |   |   |   | Concave Spreader  |
|                 |   |                 |              | K  | X   |  |  |  |  |    |  |  |  |  |  |
|                 |   |                 |              | Q = K(P <sup>x</sup> )<br>Q = flow rate<br>P = nozzle pressure |   | Green   | White   | Yellow  | Black   | Orange  | Blue   | Grey  | Brown   | Pink  | Orange  |
| 015             |    | 15.1            | 10           | 4.45   | 0.53  | 1.82  | n/a   | n/a   | n/a   | n/a   | n/a  | n/a   | n/a   | n/a   | 0.65  |
|                 | Purple Adaptor  |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 020             |  | 22.0            | 10           | 6.48   | 0.53  | 1.50  | 2.20  | n/a   | n/a   | n/a   | 1.50   | 2.20  | n/a   | n/a   | 0.65  |
|                 | Black   |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 030             |  | 29.9            | 10           | 9.02   | 0.52  | 1.60  | 2.30  | 3.00  | 3.70  | n/a   | 1.60   | 2.30  | 3.00  | 3.70  | 0.65  |
|                 | White   |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 040             |  | 40.5            | 10           | 12.24  | 0.52  | 1.80  | 2.40  | 3.20  | 3.90  | n/a   | 1.80   | 2.40  | 3.20  | 3.90  | 0.65  |
|                 | Green   |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 050             |  | 49.8            | 10           | 15.03  | 0.52  | 1.90  | 2.80  | 3.50  | 4.00  | n/a   | 1.90   | 2.80  | 3.50  | 4.00  | 0.65  |
|                 | Yellow  |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 060             |  | 63.9            | 10           | 19.29  | 0.52  | 2.00  | 3.20  | 3.80  | 4.20  | n/a   | 2.00   | 3.20  | 3.80  | 4.20  | 0.65  |
|                 | Red   |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 070             |  | 71.1            | 10           | 21.97  | 0.51  | n/a   | n/a   | n/a   | 4.40  | n/a   | n/a  | n/a   | n/a   | 4.40  | 0.65  |
|                 | Orange  |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 090             |  | 91.0            | 10           | 25.66  | 0.55  | n/a   | n/a   | n/a   | n/a   | 5.60  | n/a  | n/a   | n/a   | n/a   | 0.70  |
|                 | Blue  |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |
| 120             |  | 119.4           | 10           | 35.24  | 0.53  | n/a   | n/a   | n/a   | n/a   | 6.60  | n/a  | n/a   | n/a   | n/a   | 0.75  |
|                 | Brown   |                 |              |  |   |   |   |   |   |   |  |   |   |   |   |