

# FURROW MANAGEMENT SYSTEMS AUSTRALIA

## LIQUID INJECTION PRODUCT RANGE



# furrow CATALOGUE 2025

For more information call: (08) 9274 6400 email: [orders@furrowmsa.com.au](mailto:orders@furrowmsa.com.au) or visit: [www.furrowmsa.com.au](http://www.furrowmsa.com.au)



# Furrow and Friction Flow™

Furrow specialises in design, manufacture, and distribution of unique systems to “furrow inject” liquid fertilisers, trace elements, inoculants, fungicides, soil wetters, and other liquid products as part of one-pass seeding systems in broad-acre and row-planting operations.

Major advancement in furrow injection practice at seeding and planting time is due to our Friction Flow™ tubing, which accurately meters liquid into each furrow. This unique innovation, designed by our team in Western Australia, is manufactured in Australia, exclusively for Furrow.

Friction Flow™ tubing, with our specialised “suzi coil” design, coupled with our variable-rate and section-control ready Furrow Injection Modules (FIM), the Furrow suite offers growers the most precise, and convenient, furrow injection systems on the market, and can be easily adapted to retrofit existing liquid systems. Manufactured right here in Western Australia.

**The Season  
Starts with  
Friction Flow™**



*For more information call: (08) 9274 6400 email: [orders@furrowmsa.com.au](mailto:orders@furrowmsa.com.au)*

*or visit: [www.furrowmsa.com.au](http://www.furrowmsa.com.au)*

## CONTENTS PAGE

### LIQUID INJECTION MODULES

FIM-B	Page 1
FIM-F	Page 1
RatePod	Page 2
Regulating Manifold	Page 2

### SECTION CONTROL

SCPM	Page 3
SCM6	Page 3
SCM6-MBP	Page 3

### FRICITION FLOW™ KIT COMPONENTS

Guide To Friction Flow™ Liquid Injection	Page 5
Primary Flow Hose	Page 6
Primary Distribution Manifold Kit	Page 6
Secondary Flow Hose	Page 7
Secondary Distribution Manifold Kit	Page 7
Friction Flow™ Distribution Tubing	Page 8
2-Way Tap Kit	Page 8
Stainless Steel Tyne Tubing	Page 8
Liquid Placement in furrow	Page 9
Friction Flow™ Joiners	Page 10
Risa Clips	Page 11
Seed Tube Clips	Page 11
Tube Adaptor (Liquid Placement Holders)	Page 11
Friction Flow™ Tubing:	
- Red Friction Flow™	Page 12
- Green Friction Flow™	Page 12

### FURROW COMPLIMENTARY PRODUCTS

Single Filling Tap Plate	Page 13
Double Filling Tap Plate	Page 13
Triple Filling Tap Plate	Page 13
Tank Agitator	Page 14
Suction Filters	Page 14
Pressure Gauges & Pressure Gauge Outlets	Page 15
Tank Breather/Overflow	Page 16
Pump Fitting Kit	Page 16
Hypro Pump	Page 16
12 Volt Pump	Page 16
Hydraulic Drive Pump Rundown Kit	Page 17
Hypro Hydraulic Motor Seal Kit	Page 17
Hypro SS Wet Seal Kit	Page 17

### FORMS

FMSA Friction Flow™ Enquiry Form	Page 19
----------------------------------	---------

For more information call: (08) 9274 6400 email: [orders@furrowmsa.com.au](mailto:orders@furrowmsa.com.au)

or visit: [www.furrowmsa.com.au](http://www.furrowmsa.com.au)

## FIM-B FURROW INJECTION MODULE



- High end, all in one delivery system with automatic rate control
- Incl. Hydraulic pump, filter, flow meter and rate control valves - all in one, easy to mount cabinet
- Includes rate control computer and tank plumbing accessories
- Adjustable agitation, with electric recirc flush system controlled by switch box



**ORDER CODE: FIM-B**

## FIM-F FURROW INJECTION MODULE



- Integrated stainless steel Hypro pump
- Auto rate control ready
- Manual override for system flushing
- Precision Arag componentry
- Bolt on stainless steel cabinet
- Integrated suction filter
- Electromagnetic flow meter
- \* Harnessing available upon request



**ORDER CODE: FIM-F**

## RATEPOD FURROW INJECTION MODULE

- Compatible with all pumps
  - Auto rate control ready
  - Manual override for system flushing
  - Precision Arag componentry
  - Bolt on stainless steel cabinet
  - Electromagnetic flow meter
- \* Possible to use existing pump and filtration to complete RatePod system, or Furrow can supply. Harnessing available upon request

ORDER CODE: FIM-RPOD

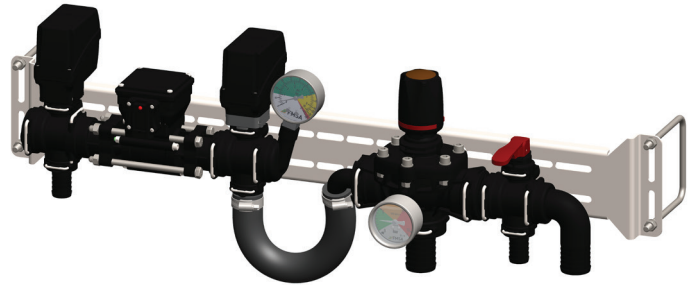
USE ANY PUMP



## REGULATING MANIFOLD

- Auto rate control ready
  - Precision Arag componentry
  - Bolt on stainless steel bracket
  - Simple layout
  - Electromagnetic flow meter
- \* Possible to use existing pump and filtration to complete Regulating Manifold system, or Furrow can supply. Harnessing available upon request.

ORDER CODE: REGMAN450-0



## SECTION CONTROL PRIMARY MANIFOLD (SCPM)

- Section control upgrade for Furrow Primary Distribution Manifold
- Arag electric valves bolt onto an existing Furrow Primary Distribution Manifold bracket
- Incorporated 63mm stainless steel pressure gauge

### *Options Available:*

- Valve sets up to 8 sections
- Metered bypass valves for rapid section switching with minimal pressure change
- 100mm pressure gauge

**ORDER CODE: SCPM(X#)**

## SECTION CONTROL MANIFOLDS - SCM

Furrow section control manifolds deliver efficiency gains for liquid product application in seeding operations by preventing product overlap, particularly in paddocks with irregular shape - input costs are reduced.

### Furrow's SCM

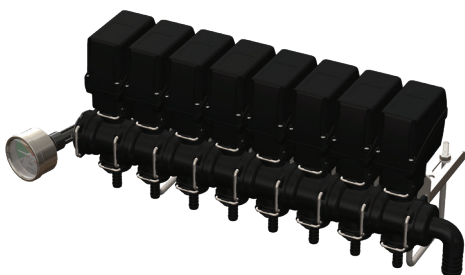
- ARAG electric valves
- Incorporated 100mm stainless steel pressure gauge
- Protective stainless-steel housing mounts to your seeding bar

### *Options Available:*

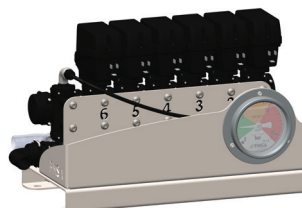
- Valve sets in 6 and 8 sections
- Metered bypass valves for rapid section switching with minimal pressure change
- Mounting bracket assembly

**ORDER CODE STANDARD SECTION CONTROL: SCM6, SCM8**

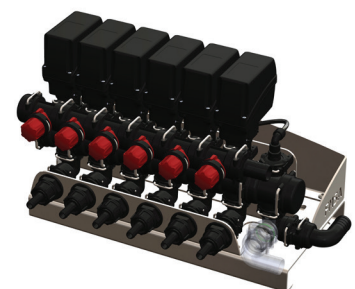
**ORDER CODE METERED BYPASS SECTION CONTROL: SCM6-MBP, SCM8-MBP**



**SCPM**



**SCM6**



**SCM6-MBP**

# FRICION FLOW™

Friction Flow™ tubing virtually eliminates blockage in liquid fertiliser delivery systems.

Small, single point restrictors of the past, like orifice-plates, or line-meters, made it difficult to create adequate back-pressure without blocking. Friction Flow™ works with a larger internal diameter, allowing particles to pass freely, while inducing the right amount of friction, allowing liquid products to be accurately metered - at any flow rate. Friction Flow™ produces a solid stream, ensuring accurate liquid placement in the furrow. No more drips or bubbles at low rates!

Made from superior material, using the highest-grade nylon, with durability in mind. Extreme wall strength, resists kinking, crushing and distortion of the internal diameter – ensuring consistent metering in the toughest conditions. Maximum UV stability, and chemical and fertiliser resistance. Our revolutionary “suzi coil” design simplifies fitment, resulting in a neat and tidy installation – no more spaghetti tubes. Pair with a Furrow Injection Module (FIM, or RatePod) for a complete liquid delivery solution. The concept is simple, more friction = less flow, less friction = more flow – that’s Friction Flow™.



## GUIDE TO TROUBLE FREE FRICION FLOW™ LIQUID INJECTION

### CONTROL SYSTEM



Choose from FMSA's range of rate control systems, from manual "set and forget", to fully automatic rate control, with section control capability.

### PRIMARY FLOW HOSE



High grade Australian manufactured hose rated for chemical use.

### PRIMARY DISTRIBUTION MANIFOLD



The first stage to evenly distribute your liquid across the implement.

### SECONDARY FLOW HOSE



High grade Australian manufactured hose rated for chemical use.

### SECONDARY DISTRIBUTION MANIFOLD



Precisely distribute liquid to each delivery point (tyne, or disc etc.), with integrated non-drip valves. One outlet per delivery point.

### FRICION FLOW™ DISTRIBUTION TUBING



Tubing connects the Secondary Distribution Manifolds with Friction Flow™.

### FRICION FLOW™ JOINERS



Equal 6mm straight joiners for connecting distribution tubing to the Friction Flow™.

### FRICION FLOW™ TUBING



The key to trouble free liquid metering. Available in a range of lengths and internal diameters for virtually any application.

# FRICION FLOW™ DISTRIBUTION SYSTEM

## PRIMARY FLOW HOSE

- Delivers liquid from a Furrow Injection Module to the Primary Distribution Manifold.
- High grade Australian manufactured pressure hose, rated for chemical use.
- Kink resistant and flexible.

**Dimensions:** 25mm internal diameter in 20m rolls.

**ORDER CODE: PFLOWHOSE**



## PRIMARY DISTRIBUTION MANIFOLD KIT

First stage of distribution across the implement. Primary Distribution Manifold kit delivers liquid to the Secondary Distribution Manifolds.

- Pre-built with six outlets
- Comes with Stainless steel mounting bracket and hardware
- Modular Arag componentry, with Viton rubber O-rings
- Can add more outlets, as required
- Easy to install

**ORDER CODE: PMKIT**



## SECONDARY FLOW HOSE

- Delivers liquid from a Primary Distribution Manifold to a Secondary Distribution Manifold.
- High grade Australian manufactured pressure hose, rated for chemical use.
- Kink resistance and flexible.

**Dimensions:** 13mm internal diameter in 50m Rolls.

**ORDER CODE: SFLOWHOSE**



## SECONDARY DISTRIBUTION MANIFOLD KIT

Modular design lets you customize number of outlets to match air-kit heads

- Pre-built with 10 outlets and an additional single outlet in the box
- Built in non-drip valves
- Stainless steel mounting brackets
- Fork coupled Arag components with Viton O-rings
- Press-Fit fittings for fast tubing installation

**ORDER CODE: SMKIT**



# FRICION FLOW™ DISTRIBUTION SYSTEM

## FRICION FLOW™ DISTRIBUTION TUBING

Friction Flow™ distribution tubing connects the Secondary Distribution Manifold with the Friction Flow™ tubing on the tyne.

- 6mm external diameter with 4mm internal diameter
- Strong and resists kinking
- High UV stability
- High grade Australian manufactured pressure tube, rated for chemical use



**PRODUCT: 20m Roll**      **ORDER CODE: D02-0068K20**

**PRODUCT: 100m Roll**      **ORDER CODE: D02-0068K100**

## 2-WAY TAP KIT

Friction Flow™ Tube used with the 2-Way Tap kit provides options for liquid stream placement to different locations on a tyne assembly.

Parts in kit:

- Divider with 6mm push-fit connectors
- Mini 2-way valve with 6mm push-fit connectors



RM2306E x 10



PPMSV040606W x 20



**ORDER CODE: RMTTAP-10**

## STAINLESS STEEL TYNE TUBING

Use stainless-steel tubing to guide, hold and protect Friction Flow™ tubing. Provides options for liquid placement.

- 1/4IN internal diameter
- High grade 316 stainless steel

**ORDER CODE: A269 (per mtr)**



## LIQUID PLACEMENT IN FURROW

Liquid placement is critical at seeding time. To improve seed germination, vigour, nutrient uptake and crop establishment, the right liquid needs to be in the right place. Furrow offers options to increase flexibility and productivity with a range of liquid placement options. Get more placement options by combining Friction Flow™ tubing with our 2-Way Tap kits and stainless-steel tubing to get liquids where they need to be.



## FRICION FLOW™ JOINERS

**Straight 6mm** - 6mm push-fit connectors

Connect Furrow distribution tubing to Friction Flow™ tubing.

**ORDER CODE: PM0406E-10 (Packet of 10)**



**Straight 6mm** - 8mm push-fit connectors

Connect 3rd party 8mm distribution tubing to Friction Flow™ tubing.

**ORDER CODE: PM200806E-10 (Packet of 10)**



**Straight 8mm stem** - 6mm push-fit reducer

Connect Friction Flow™ tubing to existing 8mm push-fit joiners.

**ORDER CODE: PM060806E-10 (Packet of 10)**



**Straight 6mm push-fit** - ¼ inch male BSP thread adapter

Modify nozzle caps to connect to Friction Flow™ tubing.

**ORDER CODE: PM010602E-10 (Packet of 10)**



## RISA CLIPS

The Risa clips fit around the 55mm stainless steel tube, which is part of the Secondary Air Delivery Head. It holds the distribution tubing in place as it travels up the tube and replaces the use of cable ties.

Please clip distribution tubing into Risa clip before attaching to riser tube.

**ORDER CODE: FFRISECLIP (Packet of 20)**



## SEED TUBE CLIPS

Seed tube clips (Nitro-clip) fits around the 32mm seeder hose, to guide the distribution tubing down to the Suzi Coil connection. 3 clips per seed tube is recommended. This clip replaces the use of cable ties

Please clip distribution tubing into Seed tube clip before attaching to the seeder hose.

**ORDER CODE: FFTUBECLIP (Packet of 25)**



## TUBE ADAPTOR (LIQUID PLACEMENT HOLDERS)

Attach to bottom of tyne with a hose clamp to keep the Friction Flow™ tube in place, to guide the liquid stream placement in the furrow.

Can fit up to 3 tubes in its 3 holes.

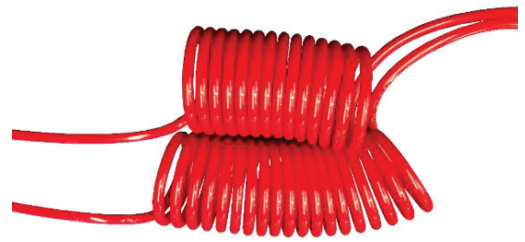
**ORDER CODE: DBS TUBE ADAPTOR (34037)**



# FRICION FLOW™ DISTRIBUTION SYSTEM

## RED FRICTION FLOW™ TUBING

- Red Friction Flow™ tubing with 2mm internal diameter
- High grade Australian manufactured pressure tube, rated for chemical use
- Available in 2m, 3m, 4m and 5m Suzi Coils



**PRODUCT: 2M Suzi Coils**      **ORDER CODE: FFREDSUZI2**

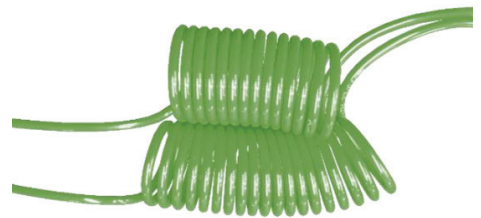
**PRODUCT: 3M Suzi Coils**      **ORDER CODE: FFREDSUZI3**

**PRODUCT: 4M Suzi Coils**      **ORDER CODE: FFREDSUZI4**

**PRODUCT: 5M Suzi Coils**      **ORDER CODE: FFREDSUZI5**

## GREEN FRICTION FLOW™ TUBING

- Green Friction Flow™ tubing with 1.5mm internal diameter
- Generally suited to soil wetters and aqueous products
- Available in 2m, 3m and 4m suzi coils



**PRODUCT: 2M Suzi Coils**      **ORDER CODE: FFGRSUZI2**

**PRODUCT: 3M Suzi Coils**      **ORDER CODE: FFGRSUZI3**

**PRODUCT: 4M Suzi Coils**      **ORDER CODE: FFGRSUZI4**



## FURROW FILL TAPS

Furrow tap assemblies for connecting nurse tanks, or fresh water sources to bottom fill the tanks on your seeding rig, or liquid cart.

2 inch ball valves with 2 inch camlock fittings, bolted to a stainless-steel mounting bracket. With the option to include a smaller 1 inch ball valve for freshwater handwashing.

## SINGLE FILLING TAP PLATE

ORDER CODE: STAPASY



## DOUBLE FILLING TAP PLATE

ORDER CODE: DTAPASY



## TRIPLE FILLING TAP PLATE

ORDER CODE: TTAPASY



## FURROW TANK AGITATOR

The Furrow Tank Agitator is a fully adjustable modular nozzle array designed for high flow, low pressure liquid tank agitation. With outlets directed down, toward the bottom and corners of the tank, this design easily picks material up off the bottom of the tank. Ideal for keeping heavy particles suspended.

- Highly effective at suspending heavy mixtures
- Adjustable nozzle direction
- Modular design
- Precision Arag components
- Integrated bulkhead fitting
- 25mm hose barb for supply connection



**ORDER CODE: FIMTREEAGT3**

## FURROW SUCTION FILTERS

Furrow suction filter assemblies for your liquid delivery systems. The Suction Filters for both 2" and 3" have a bolt-on option that adds a high capacity suction filter and a source selection tap.

- 3-way source selection tap with isolation position
- Ultra-high and high capacity options
- Stainless steel mounting bracket
- Viton rubber and Teflon seals
- 50mm hose barb connections

\* 50 mesh screen available

\* Drain valve on 3 inch filter available



**ORDER CODE: SUCTIFLASY-T7 (2")**

**ORDER CODE: SUCTIFLASY-T9 (3")**

# FURROW PRESSURE GAUGES

Pressure Gauges for Friction Flow™ Liquid Delivery Systems can be mounted remotely making it easy to view and monitor delivery manifold pressure. Stainless steel mounting bracket and hardware are easy to install. Receives standard 6mm tubing.

63mm Swivel Pressure Gauge	100mm Swivel Pressure Gauge
0-16 Bar Scale	0-16 Bar Scale



**ORDER CODE: PG63K**

**ORDER CODE: PG100K**

# FURROW PRESSURE GAUGE TAKE-OFF FOR DISTRIBUTION MANIFOLDS

Furrow pressure gauge outlets for Primary and Secondary Distribution Manifolds are a modular option that easily adds an extra 6mm push-fit, or 1/4IN BSP female threaded outlet for connection to a pressure gauge, or pressure transducer.

- Arag fork coupling fittings
- Viton rubber O-ring
- Quick and easy installation
- Modular system



For Primary Distribution Manifold

**ORDER CODE: PGTOPM**



For Secondary Distribution Manifold

**ORDER CODE: PGTOSM**

## FURROW TANK BREATHER/OVERFLOW

Furrow Tank Breather/Overflow kits. A safety device for liquid tanks, designed to allow clean air in when emptying tank, and discharge liquid safely to ground in the event of over-fill.

- 2 inch double-acting valve assembly
- 2 inch discharge to ground

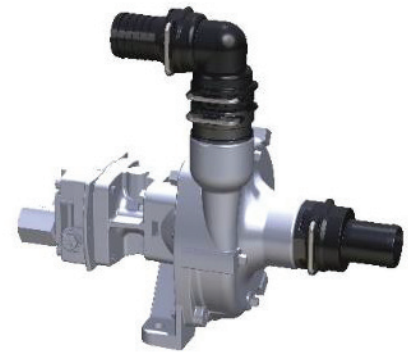


**ORDER CODE: TNKOB-50**

## PUMP FIT KIT

Hose barbs for 9303 series Hypro pumps.

- 50mm suction
- 40mm outlet



**ORDER CODE: PUMPFITKIT**

## HYPRO PUMPS

- Uses 22LPM oil
- Stainless steel
- 356LPM

**ORDER CODE: 9303S-HM2C Stainless-steel 365LPM**



## 12 VOLT PUMPS

SHURFLO 12 V PUMP

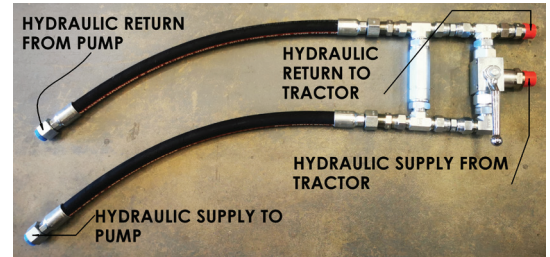
- 12VDC electric 20A
- 20LPM

**ORDER CODE: SHU5059**



## HYDRAULIC DRIVE PUMP RUNDOWN KIT

Protects hydraulic motor seals by allowing the motor to gradually wind down in the event of an abrupt stop, by recirculating oil from the return port, back to the pressure port, taking pressure off the seal.



**ORDER CODE: HYDRAULIC-OVERTAP**

## HYPRO HYDRAULIC MOTOR SEAL KIT

Suits HM2C & HM4C hyd motor.



**ORDER CODE: 3430-0881**

## HYPRO WET SEAL KIT

- Suits 9303S series pumps.
- Silicon carbide seal faces.



**ORDER CODE: 3430-0589**

## INDUSTRY PARTNERS



## PROUD SUPPLIERS



**AUSTRALIA**



## FURROW FRICTION FLOW™ ENQUIRY FORM



*Complete to receive quote*

<b>NAME</b>	
<b>EMAIL</b>	
<b>PHONE</b>	

**Tick box for quote:**

- Friction Flow™ Backend Kit  
  Fim-F  
  Rate-Pod  
  Regulating Manifold

Other: \_\_\_\_\_

**Please complete if details known (not essential)**

Seeder Bar Width	
Number Of Tynes	
Intended Rate Range (L/HA)	
Intended Speed (KM/H)	
What Liquids Are You Using? <i>(eg. Flexi-N, Trace Elements, Wetting Agents...etc.)</i>	
Number of Secondary Air Delivery Heads	

Dealer / Agency			
Contact Person		Phone	

**Once complete please email to [orders@furrowmsa.com.au](mailto:orders@furrowmsa.com.au)**



**For more information**

**Call: (08) 9274 6400,**

**Visit: [www.furrowmsa.com.au](http://www.furrowmsa.com.au),**

**In-store: 6 Military Road, Bellevue WA 6056**