

OPTIMA SPRAYING EQUIPMENT BUYERS' GUIDE

EFFECTIVE JANUARY 2019



www.croplands.com.au

CROPLANDS
OPTIMA™



**COMPREHENSIVE
COMPONENTS
GUIDE AVAILABLE**
CROPLANDS.COM.AU



**1000
LINKAGE**



CR7

AGR-XT500C



NEW FOR 2019

**300
RETRASPRAY
TRAYMOUNT**



GENERAL MANAGER'S WELCOME

Dear Customer

The 2019 OPTIMA Buyers' Guide is designed to assist you in the purchase of your new sprayer, or spare parts and accessories for your existing one.

As always, we are listening to our customers' needs, and as a result we have an exciting new range of skid mount, ute mount and ATV mount spot spraying units ready for release this year. With a new design tank and frame, fitted with trusted Croplands components we are sure your spot spraying jobs will be made much easier, faster, and safer with the Croplands new skid mount range. You will also find some 'HOT' new HYPRO pricing for all your centrifugal and 12-volt pump needs.

We have expanded our Nozzle Selection and Spraying Guide significantly with updated nozzle selection charts and loads of information of how to maximise your spray quality and minimise spray drift.

You can find more of our components in the Components Buyers' Guide which is available to download from the Croplands website. You can also search the product code via our website for products that carry the Parts Breakdown symbol.

I would like to take this opportunity to thank you for considering the Croplands OPTIMA range of spray equipment for your application needs.



Sean Mulvaney
General Manager
Croplands



This stewardship program is a Nufarm initiative to deliver best practise spraying and drift management techniques. SprayWise has been instrumental in raising awareness amongst the farming community about important spray application parameters. SprayWise consolidates various tools, research results and training courses into one program to assist farmers better manage their spraying activities.



LIQUID FERTILISER READY

'LFR' means that this Croplands product has a pump and plumbing system specifically designed to handle liquid fertiliser through the appropriate nozzles to suit the application.



QR CODES

Croplands uses QR codes to link you to videos for more information about our products. Here's how to use them:

1. Download a QR Scanner from your app store
2. Hover your device over the code to scan it
3. It will take you directly to the link



PARTS BREAKDOWN AVAILABLE

Parts breakdowns are available at www.croplands.com.au or www.croplands.co.nz for products where you see this sign.



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CROPLANDS ARE COMMITTED TO CUSTOMER SERVICE



Australian Sales and Technical Support team
(Gary, Clarry, David, Chris, Kierran, Steve and Kieran)

Our Sales Support teams are dedicated to providing our customers expert advice and support in finding a solution to your spraying needs.



New Zealand Sales Support team (Kris, Ash, John)



Attendees of the 2017 One Nufarm Conference

ONE NUFARM

Croplands is a subsidiary of agricultural chemical company, Nufarm Ltd., along with agricultural seed company, Nuseed.

Nufarm has been a trusted brand for farmers for over 60 years and has worked alongside growers to provide a wide range of top quality crop protection products.

Nufarm has an extensive team of agricultural and horticultural specialists who offer local know how and support that assists in delivering the results farmers demand for their long-term sustainability.

Nufarm is the largest manufacturer of crop protection products in Australia with an extensive network of Regional Service Centres. Various acquisitions and solid organic growth have seen the

business rapidly expand. Nufarm is now ranked the 9th largest crop protection company in the world, with a clear leadership position in Australia and substantial operations in North and South America, Europe, New Zealand and Asia.

With Croplands, Nufarm and Nuseed together under the One Nufarm banner, they offer growers a very unique portfolio. Pulling together their products and people for SprayWise events and the like, they can not only demonstrate application equipment, but provide information on the best chemical mixes and tips on effective application. The One Nufarm group of companies hold strength in the knowledge they share with one another and their customers.

For information on these products, please feel free to call us on:

Australia

Freecall 1800 999 162, or

Email sales@croplands.com.au

New Zealand

Freecall 0800 106 898, or

Email sales@croplands.co.nz



KEY SUPPLIERS



CROPLANDS VISION

To create innovative application equipment for sustainable agriculture



CROPLANDS RANGE OF SPRAY EQUIPMENT BUYERS' GUIDES

HORTICULTURE



Croplands range of Horticultural Buyers' Guides comprises of Tree Crop, Vineyard and Vegetable.

The proven axial fan head technology of the Quantum Mist has single, two or three row capabilities for vineyards and the Tower and Ultra Tower sprayers are perfect for tree crops. Vegetable crops are covered by the Quantum Mist's horizon boom model, as well as Bargam trailed and self propelled sprayers. The Cropliner is well suited to tree crops with its powerful range of air blast fans.

BROADACRE



Croplands has broadacre trailed sprayers to suit a range of property sizes. The compact Pinto 3000 and 4000 litre trailed sprayers suits smaller operations, while the robust Pegasus 5000 and 6000 are practical options for medium sized broadacre properties. The NEW Pegasus 7000 Plus with its versatile 1500 litres of extra tank capacity and the 8000 litre Pegasus trailed sprayers will handle those big acres with ease.

WEEDit



Croplands WEEDit Optical Spot Sprayers are the market leading solution for combatting herbicide resistance in fallow spraying situations. Available in the traditional 4000 or 6000 litre models. For a dual line/dual tank option consider the 7000 litre WEEDit, allowing blanket spraying while simultaneously spot spraying hard to kill weeds. For smaller broadacre and irrigation the WEEDit Toolbar Kit may be the best option. Now available with the 12 metre Toolbar is the PhantomDrive add-on platform to allow for driverless, autonomous spot spraying.

ROGATOR



Croplands RoGator self propelled sprayers are tailored for the professional farmer or contract sprayer.

Just recently released is the new C Series RoGator – the RG1100C and RG1300C. These powerful performers have a revolutionary AWD SmartDrive package and intuitive Accuterminal controls and monitor, making them so easy to operate – even the beginner can apply like a pro! The RG1300 is also available with optional 48.5 metre aluminium Pommier boom for spraying those big acres.

The lightweight champion of the RoGator range is the RG700B – it travels smoothly over uneven terrain, with less soil compaction.



JEREMY DECK
South VIC Territory
Manager/OPTIMA
Product Lead

With Croplands since 2011
Learnt to build, plumb and test
units in the Croplands factory
during the school holidays.
Worked in Croplands
customer service for 2 years.



STEVE ROSS
VIC Territory Manager

With Croplands since 2016
18 years in the agricultural
spraying industry. 2 years
in tractor and machinery
retail sales.



DAVID HAMILTON
South NSW/VIC
Territory Manager

With Croplands since 2006
Advanced Diploma of
Viticultural Management.
Certificate 3 in Engineering
(Fabrication). Automotive
apprenticeship and
experience in the spare
parts industry.



ANDREW GERMEIN
SA/TAS Territory Manager/
Horticulture Product Lead

With Croplands since 2018
21 years in agricultural
dealership machinery
sales and management,
specialising in the horticulture
product portfolio.



JOHN GRIFFITHS
Regional Manager (West)

With Croplands since 1997
Grew up on a grain and
livestock property in south
west WA. One of Croplands
longest serving staff members.
Croplands Self-propelled
specialist in the west.



GAVIN MERRITT
WA Territory Manager

With Croplands since 2011
Grew up on family sheep
cattle and grain farms.
Involved in the spraying
industry since 1992.



JEREMY RENNICK
Regional Manager (North)

With Croplands since 2005
Experience with Croplands
products since 1999. Worked
with Croplands parent
company, Nufarm for three
years. Actively involved
in Nufarm's stewardship
program, SprayWise.



DAVE FARMER
Central NSW Territory
Manager/Bargam
Product Lead

With Croplands since 2001
Experience managing a
mixed farming operation.
16 years experience working
throughout NSW and Canada
in agriculture. Advanced
Certificate in Agriculture.



ROB GRAHAM
Coastal QLD/NT
Territory Manager

With Croplands since 2011
Grew up on the family farm
in northern NSW. Spent 10
years in the cotton farming
industry. Previous sales
roles in the agricultural
machinery industry.



CRAIG BLACKETT
South QLD/North NSW
Territory Manager

With Croplands since 2017
Over 30 years experience
working in the Agricultural
industry working as a
reseller agronomist and as
a sales rep for a leading
Ag Chem company.





ROB MARSHALL

**Regional Manager and
NZ Upper South Island
Territory Manager**

With Croplands since 2002
Previous sales roles in the
automotive and engineering
industry. Currently studying
part time towards a Diploma
in Business.



VIC BARLOW

**NZ Lower North Island
Territory Manager**

With Croplands since 2011
Diploma in Horticulture.
Experience as a Field
Consultant for 11 years.
Orchard Manager for
almost 20 years.



GREG SMALL

**NZ Waikato, Counties
Territory Manager**

With Croplands since 2011
29 years in the spray
equipment industry. Diverse
scope of experience from
build and design of sprayers
to sales and management.



CHRIS WAITES

**NZ Upper North Island
(excluding Waikato/Counties),
Central Otago, Southland
Territory Manager**

With Croplands since 2010
12 years in the horticultural and
agricultural industry. Previous
sales roles in horticultural
supplies. Croplands NZ
customer service and logistics
for 6 years.



STACEY JAMES

Sales Support Manager

With Croplands since 2016
Extensive Customer Service
Management and Sales
Support experience across a
range of industries. Bachelor
of Management (Marketing).



SEAN MULVANEY

General Manager

With Croplands since 1997
Started as a Territory
Manager, progressed to
Sales Manager, and later
General Manager. Diploma
in Horticulture.



MICHAEL CLARKE

**Central QLD
Territory Manager**

With Croplands since 2018
Grew up on and worked on
the land for many years –
starting with livestock
and moving into grains
and fibre. Over 30 years
experience in a range of
agricultural industries.



SCOTT RICHARDSON

SA Territory Manager

With Croplands since 2018
5 years experience in large
agricultural machinery
retail sales and branch sale
management and 20 years
experience in a mixed
farming operation.



NEILL MOREY

**Commercial Manager/
Regional Manager (South)**

With Croplands since 2016
Previously worked in farm
machinery dealership
management. Bachelor
Degree in Commerce.



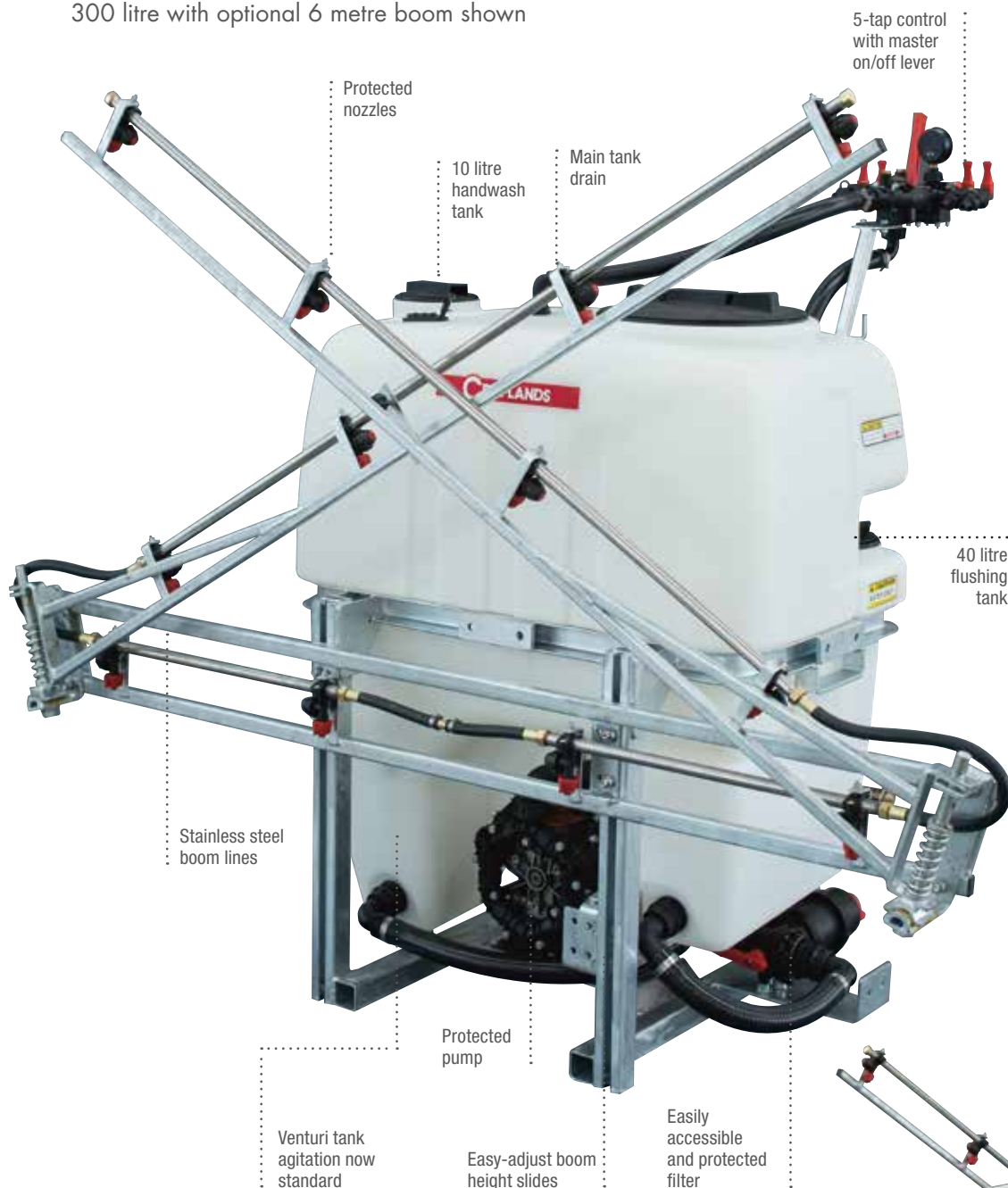
STEVE NORTON

Portfolio Manager

With Croplands since 2013
Over 30 years in the
agricultural spraying industry
both in Australia and
America. 6 years in tractor
and machinery sales.

300 AGRIPAK LINKAGE

300 litre with optional 6 metre boom shown



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
LA300	1200mm	900mm	1420mm	160kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.



**FOR MORE
OPTIONS SEE PAGE
18 AND 19**



FEATURES AND OPTIONS INCLUDE

1. Spring-loaded boom breakaways to protect from impacts
2. Large basket strainer to ensure clean water to the tank
3. Standard positive displacement triple diaphragm pump for smooth operation, high flow and wide pressure range
4. Optional hose reel with spray lance

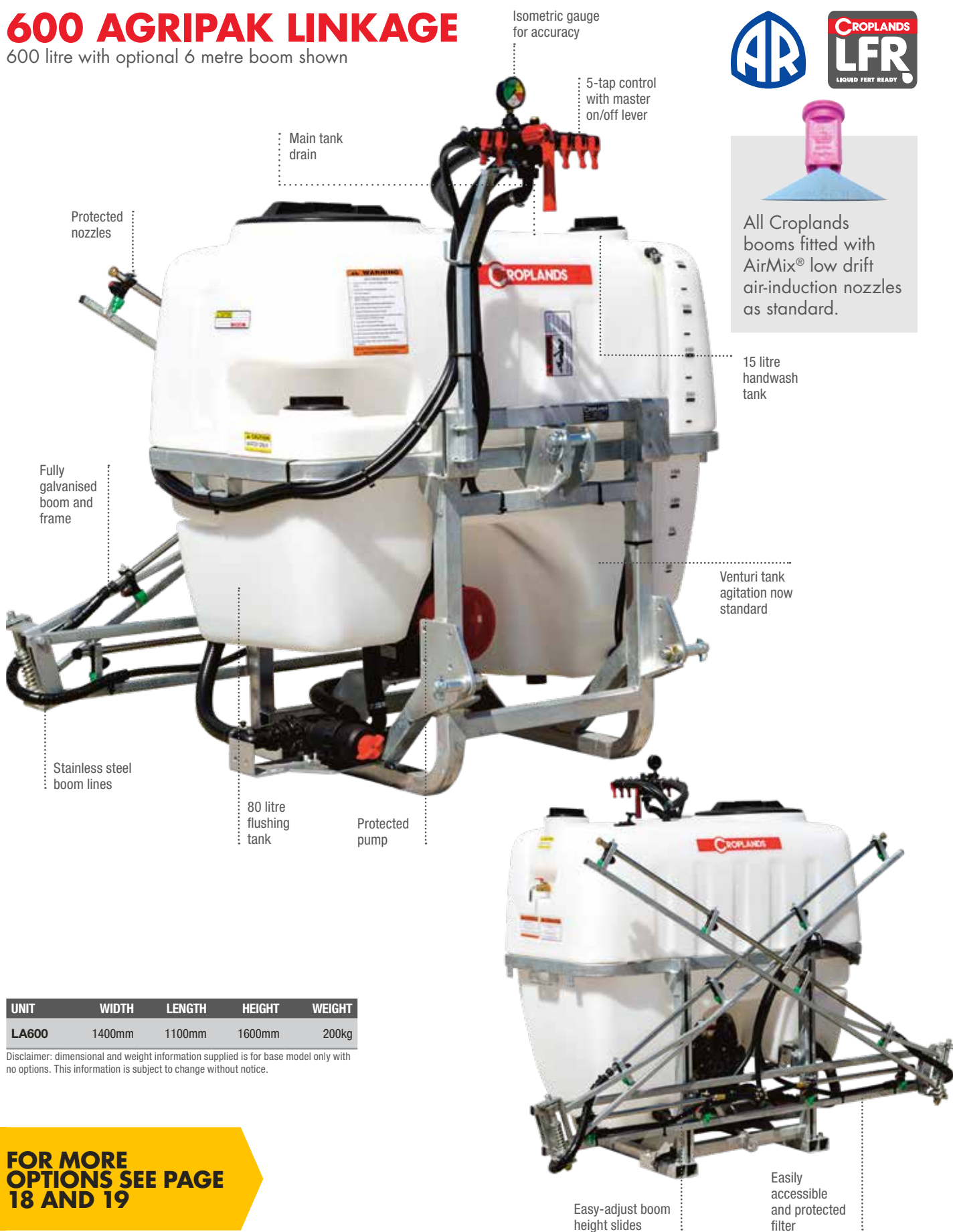


ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
LA300	300 litre AgriPak linkage sprayer with AR80* liquid fertiliser-ready pump, UCM 5-way controller fitted (no hose reel or boom – see options)	2,961.73	3,257.90	X
LA300/MBX04	As above with 4 metre MBX series boom fitted	3,875.60	4,263.16	X
LA300/MBX06	As above with 6 metre MBX series boom fitted	4,014.36	4,415.80	X
LA300/MSCL-2	As above with double-sided covered boom fitted	4,354.06	4,789.47	X
LA300/XTKIT	As above with XT boom kit fitted c/with X Tender boom jets. Standard X Tender nozzles fitted are # 24, which gives coverage of up to 8 metres width depending on height the XT boom kit is mounted. An Ideal choice for hill country or liquid fertiliser applications	3,384.68	3,723.15	X
LA300/MVB5-5	300 litre AgriPak linkage sprayer with AR30* 0–40 Bar pressure pump, ARG140 2-way manual pressure controller and 5 nozzle per-side Vertiboom fitted. (No hose reel fitted. Not an option on this model)	5,081.33	5,589.46	X

*The AR80 pump is the market leading Annovi Reverberi triple diaphragm positive displacement pump with poly heads and manifolds. This pump is rated from 0–20 Bar pressure and 80 litres per minute (open-flow). For more information see page 50. The AR30 pump is an Annovi Reverberi twin diaphragm pump rated from 0–40 Bar pressure and 32 litres per minute (open-flow). PTO shaft supplied with all AgriPak linkage models.

600 AGRIPAK LINKAGE

600 litre with optional 6 metre boom shown



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
LA600	1400mm	1100mm	1600mm	200kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

**FOR MORE
OPTIONS SEE PAGE
18 AND 19**



FEATURES AND OPTIONS INCLUDE

1. Hand wash tank fitted standard – ideal for hand washing or in-field filter clean
2. Every Croplands AgriPak has important safety information on the tank
3. A 3-way tap is located by the filter to allow tank selection – it is recommended to use the fresh water flush tank to flush the system in the field after spraying
4. Optional heavy duty hose reel with Turbo400 spray gun
5. Easy-adjust boom slides make boom height adjustment a breeze



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
LA600	600 litre AgriPak linkage sprayer with flushing tank, hand-wash tank, AR80* liquid fertiliser-ready pump, UCM 5-way controller (no hose reel or boom – see options)	3,937.80	4,331.58	X
LA600/MBX06	As above with 6 metre MBX series boom fitted	4,727.27	5,200.00	X
LA600/MAX08	As above with 8 metre MAX series boom fitted – no self-leveller	5,856.46	6,442.11	X
LA600/MAX08L	As above with 8 metre MAX series boom fitted and with self-leveller	6,598.08	7,257.89	X
LA600/MAX10	As above with 10 metre MAX series boom fitted – no self-leveller	6,894.74	7,584.21	X
LA600/MAX10L	As above with 10 metre MAX series boom fitted and with self-leveller	7,578.95	8,336.85	X

*The AR80 pump is the market leading Annovi Reverberi triple diaphragm positive displacement pump with poly heads and manifolds. This pump is rated from 0–20 Bar pressure and 80 litres per minute (open-flow). For more information see page 50. PTO shaft supplied with all AgriPak linkage models.

800 AGRIPAK LINKAGE

800 litre with optional 12 metre boom shown



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.



UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
LA800	1400mm	1000mm	1850mm	200kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

**FOR MORE
OPTIONS SEE PAGE
18 AND 19**



800 LITRE AGRIPAK LINKAGE SPRAYER WITH 8 METRE MAX MANUAL FOLD BOOM

QUICK GUIDE

- » Calibrated tank with clear volume markings
- » Rear mounted pump to protect from damage and allow PTO more overlap
- » Large lid with strainer
- » Translucent white UV-stabilised tank – see level at a glance
- » Easy access drain for complete clean out
- » Handwash tank standard for safety
- » Large fresh water flush tank standard for in-field clean out
- » Quick-adjust boom slide mounts
- » Pictured with over-top support and hydraulic height adjuster fitted
- » Slide-out rear park legs for stability when parked with larger booms fitted
- » Venturi agitation standard – with on/off control tap on PRV control
- » Optional MAX 12 metre boom with self-leveller pictured

FEATURES AND OPTIONS INCLUDE

1. In-cab electric controls (wireless and standard available)
2. Easy-adjust boom slides make boom height adjustment a breeze
3. Hand wash tank fitted standard – ideal for hand washing or in-field filter clean
4. Venturi agitator fitted to all Croplands AgriPak linkage models



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
LA800	800 litre AgriPak linkage sprayer with flushing tank, hand-wash tank, AR80* liquid fertiliser-ready pump, UCM 5-way controller (no hose reel or boom – see options)	4,923.44	5,415.78	X
LA800/MAX08	As above with 8 metre MAX series boom fitted – no self-leveller	6,306.22	6,936.84	X
LA800/MAX08L	As above with 8 metre MAX series boom fitted and with self-leveller	7,047.84	7,752.62	X
LA800/MAX10	As above with 10 metre MAX series boom fitted – no self-leveller	7,119.62	7,831.58	X
LA800/MAX10L	As above with 10 metre MAX series boom fitted and with self-leveller	7,660.28	8,426.31	X

*The AR80 pump is the market leading Annovi Reverberi triple diaphragm positive displacement pump with poly heads and manifolds. This pump is rated from 0–20 Bar pressure and 80 litres per minute (open-flow). For more information see page 50. PTO shaft supplied with all AgriPak linkage models.



Photos are for illustrative purposes only. Prices and specifications are subject to change without notice. Prices effective January 2019. For indicative freight prices, see page 103.

1000 AGRIPAK LINKAGE

LAC1000 linkage with 12 metre manual fold boom



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.



UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
LAC1000	1420mm	1100mm	1800mm	450kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

**FOR MORE
OPTIONS SEE PAGE
18 AND 19**





QUICK GUIDE

- » Calibrated tank with clear volume markings
- » Height adjustable control mount
- » Rear mounted pump to protect from damage and allow PTO more overlap
- » Large lid with strainer
- » Translucent white UV-stabilised tank – see level at a glance
- » Easy access drain for complete clean out
- » Forklift points on bottom frame for safe loading/unloading
- » Handwash tank standard for safety
- » Large fresh water flush tank standard for in-field clean out
- » Quick-adjust boom slide mounts
- » Fold-up step standard
- » Over-top support standard for added strength
- » Four dedicated tie-down points for transport

FEATURES AND OPTIONS INCLUDE

1. Easy access slide-out parking legs for safe parking
2. Optional chemical suction probe
3. Optional 30 or 60 litre chemical mixer
4. Easy access suction filter



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
LAC1000	1000 litre AgriPak linkage sprayer, AR80* pump, UCM 5-way controller (base model, no hose reel or boom), Venturi agitation fitted standard	6,305.26	6,935.79	X
LAC1000/8M	As above with 8 metre MAX manual fold boom – 3 sections	8,132.63	8,945.89	X
LAC1000/8ML	As above with 8 metre MAX manual fold boom with self-leveller fitted – 3 sections	8,765.55	9,642.11	X
LAC1000/10M	As above with 10 metre MAX manual fold boom – 3 sections	8,927.27	9,820.00	X
LAC1000/10ML	As above with 10 metre MAX manual fold boom with self-leveller fitted – 3 sections	9,363.63	10,299.99	X
LAC1000/12ML	As above with 12 metre MAX manual fold boom with self-leveller fitted – 3 sections	10,391.39	11,430.53	X
LAC1000/MHL12	As above with 12 metre hydraulic fold boom with self-leveller – 3 sections	16,736.84	18,410.52	X
LAC1000/MHL15	As above with 15 metre hydraulic fold boom with self-leveller – 3 sections	17,799.04	19,578.94	X

*The AR80 pump is the market-leading Annovi Reverberi triple diaphragm positive displacement pump with poly heads and minifolds. This pump is rated from 0–20 Bar pressure and 80 litres per minute (open flow). For more information see page 50. All Croplands AgriPak linkage models are supplied with a PTO shaft.

1300 | 1600 LINKAGE



LPMEC1600/160/MHL15

QUICK GUIDE

- » Calibrated and UV stabilised poly tank with sight tube and litres marked
- » Stabiliser legs fitted to the frame to keep unit safe from tipping when parked
- » Protected pump mounted beneath the tank for excellent suction and safety
- » Protected large suction filter with shut-off valve for easy cleaning
- » Large filling lid with strainer
- » Nozzles are protected on all booms to avoid damage
- » Stainless steel boom tubing with non-drip nozzle bodies
- » Easy access drain system for quick draining and clean out
- » Forklift points on bottom frame rails to assist with loading/unloading from a vehicle
- » Integrated 1,000mm hydraulic lift device
- » Integrated handwash tank standard
- » Integrated 170 litre flushing tank standard
- » 30 litre chemical mixer/induction unit standard
- » Clothing and glove locker
- » Folding access step for safety
- » 160 L/min pump standard
- » All Croplands booms fitted with AirMix® air-induction nozzles as standard



**FOR MORE
OPTIONS SEE PAGE
18 AND 19**



FEATURES AND OPTIONS INCLUDE

1. Easy-access suction filter and tank selector
2. All functions easily accessed from the workstation
3. Tank rinsing standard
4. Dual venturi agitation and bypass agitation
5. 160 litre per minute pump standard



ORDER CODE	DESCRIPTION – BASE MODELS (NO BOOM)	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
LPMEC1300/160	1300 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. Choose a boom option from page 18, or for standard hydraulic fold 12 and 15 metres booms, see below	14,105.26	15,515.79	W
LPMEC1600/160	1600 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. Choose a boom option from page 18, or for standard hydraulic fold 12 and 15 metres booms, see below	15,157.89	16,673.68	W
LPMEC1300/MHL12	1300 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. 12 metre hydraulic fold MHL boom fitted with individual left/right fold	24,196.16	26,615.78	W
LPMEC1300/MHL15	1300 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. 15 metre hydraulic fold MHL boom fitted with individual left/right fold	25,488.05	28,036.86	W
LPMEC1600/MHL12	1600 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. 12 metre hydraulic fold MHL boom fitted with individual left/right fold	25,248.80	27,773.68	W
LPMEC1600/MHL15	1600 litre linkage base unit with AR160 PTO-drive diaphragm pump. In-cab electric 3-section control unit, flushing and hand wash tank. 1,000mm integrated hydraulic height adjuster. 30 litre chemical mixer fitted. 15 metre hydraulic fold MHL boom fitted with individual left/right fold	26,540.67	29,194.74	W

For all other available options such as hose reels, manual fold booms, boom suspension, auto rate controllers etc, see pages 18 and 19.

LINKAGE OPTIONS

To add options to the base linkage sprayers listed on page 8–17, choose from those applicable below and next page.

Use base unit discount rate for options.

	ORDER CODE	DESCRIPTION	SEE MORE	CAN BE FITTED TO	\$ (EX. GST)	\$ (INC. GST)
HOSE REEL OPTIONS						
	L-R2412	Heavy duty steel hose reel with 30 metres hose and Turbo gun	page 46	300, 600, 800, 1000, 1300, 1600 litre	621.05	683.16
	L-R3000	Manual spring-loaded retractable reel, 16 metres hose and spray lance	page 46	300, 600 litre	362.68	398.95
BOOMS						
	MSCL-2	Adjustable-width covered boom	page 23	300, 600 litre	1,654.55	1,820.00
	MBX04	4 metre MBX series manual cross-fold boom	page 20	300, 600 litre	934.93	1,028.42
	MBX06	6 metre MBX series manual cross-fold boom	page 20	300, 600 litre	1,241.15	1,365.26
	MAX08	8 metre MAX series manual cross-fold boom	page 21	600, 800, 1000 litre	2,449.76	2,694.73
	MAX08L	8 metre MAX series manual cross-fold boom with self-levelling device	page 21	600, 800, 1000 litre	3,183.74	3,502.11
	MAX10	10 metre MAX series manual cross-fold boom	page 21	600, 800, 1000 litre	3,153.11	3,468.42
	MAX10L	10 metre MAX series manual cross-fold boom with self-levelling device	page 21	600, 800, 1000 litre	3,890.91	4,280.00
	MAX12L	12 metre MAX series manual cross-fold boom with self-levelling device	page 21	600, 800, 1000, 1300, 1600 litre	4,489.95	4,938.94
	GEX06H	6 metre GEX series hydraulic cross-fold boom	page 23	300, 600, 800, 1000 litre	5,210.53	5,731.58
	GEX08H	8 metre GEX series hydraulic cross-fold boom	page 23	600, 800, 1000 litre	6,626.79	7,289.47
	GEX10H	10 metre GEX series hydraulic cross-fold boom	page 23	600, 800, 1000, 1300, 1600 litre	6,818.18	7,500.00
	MHL12	12 metre Hydralink series hydraulic cross-fold boom with self-levelling device	page 22	1000, 1300, 1600 litre	10,091.86	11,101.05
	MHL15	15 metre Hydralink series hydraulic cross-fold boom with self-levelling device	page 22	1000, 1300, 1600 litre	11,384.68	12,523.15
BOOM EXTRAS						
	MHL12-2-KIT	Second set of hydraulic hoses to allow individual left and right fold of MHL boom (note – ensure your tractor has sufficient hyd remotes)	Not pictured	800, 1000, 1300, 1600 litre	521.53	573.68
	GEX-2-KIT	Second set of hydraulic hoses to allow individual left and right fold of GEX boom (note – ensure your tractor has sufficient hyd remotes)	Not pictured	300, 600, 800, 1000, 1300, 1600 litre	521.53	573.68
	BOFLS	Adjustable boom-end nozzle with manual tap for fence line spraying. (Not for use with MSCL-2)	Pictured left	300, 600, 800, 1000, 1300, 1600 litre	124.40	136.84
	BTEF-TEEJET	Electric fence line kit to clamp around boom tube – right hand side. Must have electric or auto-rate control fitted for this option	Pictured left	300, 600, 800, 1000, 1300, 1600 litre	409.57	450.53
	BTEF-TEEJETLH	Electric fence line kit to clamp around boom tube – left hand side. Must have electric or auto-rate control fitted for this option	Not pictured	300, 600, 800, 1000, 1300, 1600 litre	409.57	450.53
BOOMLESS NOZZLE KITS						
	LT-XTBOOMKIT	Kit to mount Croplands XT boomless nozzle kit to your sprayer. Kit includes 2 x #10 XT nozzles on adjustable swivel nozzle bodies, steel bracket and 2 x clamps for mounting. Hose and fittings to your pump are not supplied	page 44	300, 600, 800, 1000 litre	334.93	368.42
	LT-5880-KIT	Brass 5800-3/4-2T0C20 BoomJet for high volume applications (other sizes available, talk to Croplands)	Not pictured	600, 800, 1000, 1300, 1600 litre	801.92	882.11
HYDRAULIC BOOM LIFT DEVICES						
	LP060-LIFT	1000mm hydraulic boom-lift with hydraulic hose kit to tractor (requires 1 set hyd tractor remotes)	page 11	600 and 800 litre	2,631.58	2,894.74
	LT-GB360589000V	1200mm hydraulic boom-lift with hydraulic hose kit to tractor (requires 1 set hyd tractor remotes)	Not pictured	1000 litre	2,751.20	3,026.32
BOOM SUSPENSION OPTIONS						
	LT-GB383899000V	Airbag parallelogram suspension device to protect booms – ideal if a boom-lift device is not fitted or a nitrogen accumulator is not practical	Pictured left	1000, 1300, 1600 litre	2,933.01	3,226.31



LINKAGE OPTIONS

	ORDER CODE	DESCRIPTION	SEE MORE	CAN BE FITTED TO	\$ (EX. GST)	\$ (INC. GST)
CHEMICAL MIXING and INDUCTION HOPPERS						
	A5033301-KIT	35 litre chemical mixing and induction hopper fitted at fixed height at the side of the linkage sprayer. Fully enclosed for safe mixing, with container rinse function	page 42	300, 600, 800, 1000 litre	1,574.16	1,731.57
	L-H9351A-KIT	60 litre chemical mixing and induction hopper fitted at fixed height at the side of the linkage sprayer. Fully enclosed for safe mixing, with container rinse function	page 42	800, 1000 litre	1,674.64	1,842.11
PUMP AND PUMP DRIVE UPGRADES						
	LT-140-C	AR140LFP liquid fertiliser-ready pump in lieu of standard 80 litre pump. (133 L/min rated at 0-pressure, 0–15 Bar)	page 50	600, 800, 1000 litre	521.53	573.68
	LP-HYD	Hydraulic pump drive in lieu of PTO shaft-drive. Includes hyd hoses to tractor. Tractor model must be specified. Note – ensure your tractor has sufficient oil supply	Not pictured	600, 800, 1000, 1300, 1600 litre	1,468.89	1,615.78
ELECTRIC AND AUTO-SPRAY RATE CONTROL OPTIONS						
 BA5000-GE05  BRAVO180-ARAG5	I-E2012	ARAG single switch electric control kit fitted for boom shut-off using in-cab switchbox. (Boom section control is manually done using taps) (ARAG option available on request)	page 68	300, 600, 800, 1000 litre	726.32	798.95
	I-E2032A	ARAG 3-section electric control kit for individual on/off of 3 boom sections. Includes master on/off and electric pressure adjustment from in-cab switchbox. (ARAG option available on request)	page 68	300, 600, 800, 1000 litre	1,813.40	1,994.74
	I-E2052A	ARAG electric in-cab controller with switchbox. 5-section electric valves for individual section shut off, electric pressure regulating valve and a master on/off can all be operated from the switchbox in the cab or vehicle. Requires a reliable 12-volt power supply. (ARAG option available on request)	—	300, 600, 800, 1000, 1300, 1600 litre	2,291.86	2,521.05
	BA5000-GE03	Croplands 3-section fully auto spray-rate control of spraying application. Dual screen display, 3 boom section control, auto spray-rate adjustment	page 69	All models	3,244.02	3,568.42
	BA5000-GE05	Croplands 5-section fully auto spray-rate control of spraying application. Dual screen display, 5 boom section control, auto spray-rate adjustment	page 69	600, 800, 1000, 1300, 1600 litre	3,631.58	3,994.74
	BRAVO180-ARAG5	Bravo180 5-section fully auto spray-rate control of spraying application. Dual screen display, 5 boom section control, auto spray-rate adjustment	page 69	600, 800, 1000, 1300, 1600 litre	5,344.49	5,878.94
GUIDANCE AND FOAM MARKERS						
 RV117-2295-001  MATRIX430	A5200052	Double-sided foam marker with in-cab left/right control	page 44	All models	1,394.26	1,533.69
	RV117-2295-001	Raven CR7 system with a 7" field computer with customisable in-job layouts, ISO universal terminal and task controller capabilities, optional external GPS, compatible with direct injection, multi-product control including variable rate liquid, dry, and NH3 applications, slingshot – ready for file transfer, remote support, and OTA software updates	page 70	All models	3,489.92	3,838.91
	MATRIX430	Matrix 430 GPS mapping system complete with patch antenna (antenna upgrade available, see page 70)	page 70	All models	1,912.92	2,104.21
 HT-PROBE	HT-PROBE	Optional suction probe fitted	page 15	600, 800, 1000 litre	314.83	346.31

MBX MANUAL FOLD BOOMS

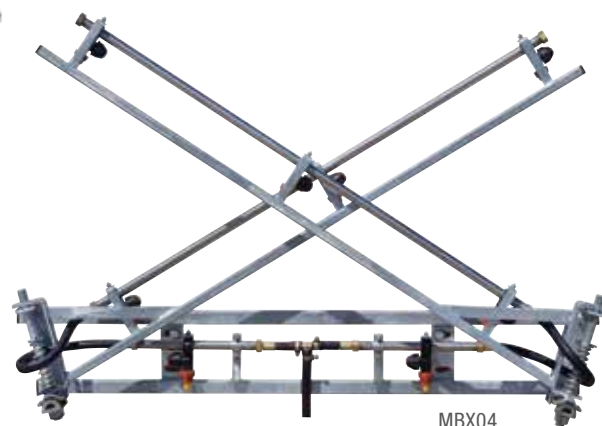


QUICK GUIDE

- » Rugged, galvanised steel construction
- » Nozzles are protected being placed above the boom rail
- » Stainless steel boom tubes for added strength and durability
- » Non-drip nozzles bodies with AirMix® low-drift nozzles fitted
- » Adjustable tension spring breakaway for each boom arm to ensure the arm returns to position
- » Folds neatly behind the sprayer or vehicle (not the MB02 which is fixed)



MBX06



MBX04



MBX03

NEW QUICK FITTING FEATURES



1



2



3



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
MB02	One piece 2 metre boom with 4 non-drip nozzles at 500mm spacings	290.91	320.00	X
MBX03	3 metre galvanised boom; 6 non-drip nozzles at 500mm spacings. 1.2 metres folded width. Ideal for RTVs, small sprayers and utes	846.89	931.58	X
MBX04	4 metre galvanised boom; 8 non-drip nozzles at 500mm spacings. 1.2 metres folded width. Ideal for RTVs, small sprayers and utes	934.93	1,028.42	X
MBX06	6 metre galvanised boom; 12 non-drip nozzles at 500mm spacing. Suitable for linkage sprayers, vehicles and traymount sprayers	1,241.15	1,365.26	X
ATVBOOMKIT	Mounting kit to allow fitting of the MBX booms to vehicle trays and RTVs	379.91	417.90	X



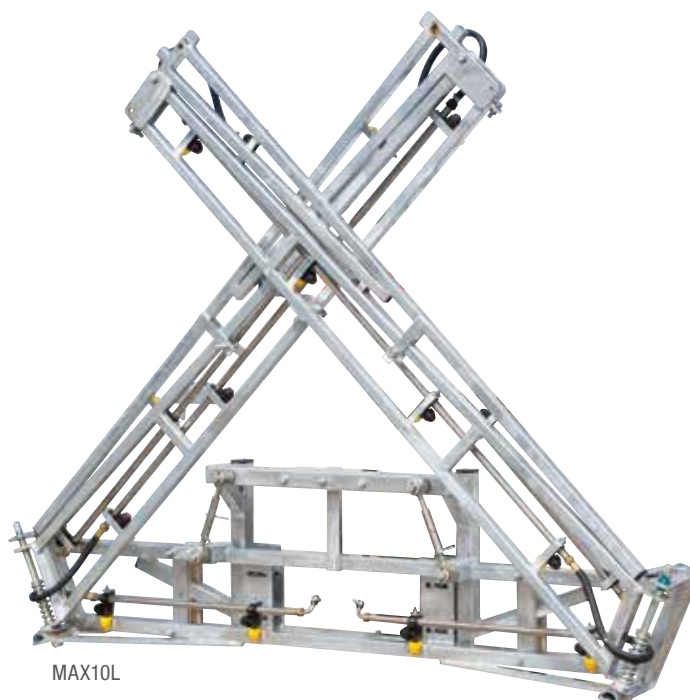
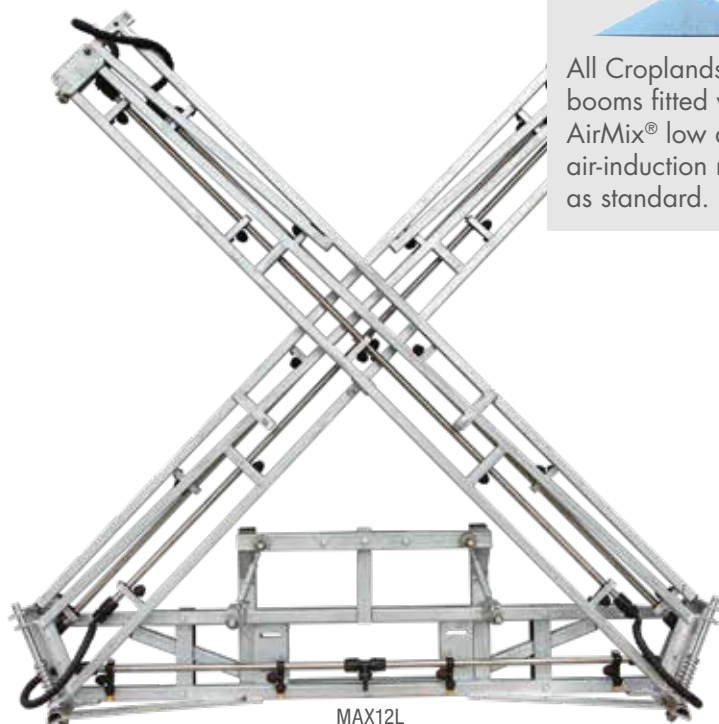
MAX BOOMS



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.

QUICK GUIDE

- » Hot-dipped galvanised finish
- » Available in 8, 10 and 12 metre boom widths
- » Can be plumbed in 3 sections
- » Stainless steel boom tubing
- » Non-drip nozzle bodies fitted with industry-leading AirMix® anti drift nozzles
- » Nozzle bodies fully protected
- » Self-returning breakaway on boom arms to protect against collision damage
- » Self-levelling device standard on 12 metre boom; optional on 8 and 10 metre boom. Self-leveller can be locked if required
- » Quick fitting features allowing to detach hose easier and quicker



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
MAX08	8 metre MAX series cross-fold boom, without self-leveller	2,449.76	2,694.73	X
MAX08L	8 metre MAX series cross-fold boom, with self-leveller	3,183.74	3,502.11	X
MAX10	10 metre MAX series cross-fold boom, without self-leveller	3,153.11	3,468.42	X
MAX10L	10 metre MAX series cross-fold boom, with self-leveller	3,890.91	4,280.00	X
MAX12L	12 metre MAX series boom with self-leveller (not available without self-leveller)	4,489.95	4,938.94	X

HYDRAULIC FOLD HYDRALINK BOOMS



QUICK GUIDE

- » Heavy duty galvanised steel construction
- » Nozzles and nozzle bodies mounted behind boom to protect from damage
- » Stainless steel boom tubes with non-drip nozzle bodies and AirMix® low-drift nozzles fitted
- » Adjustable tension breakaway on outer sections
- » Self-levelling centre section standard
- » Boom folds sequentially in a cross-fold style for transport – using the left/right hydraulic kit option, each side can be lifted independently which also automatically locks the self-levelling system. Ideal for lifting over fences at the headland or irrigation sprinklers
- » Ideal boom for small row-cropping, vegetables or undulating farm country

MHL15 boom shown folded and open



AirMix® low drift air-induction nozzles with nozzle protection as standard.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
MHL12	Heavy duty galvanised 12 metre hydraulic folding boom with 24 nozzles, twin ram with auto folding tips, hydraulically plumbed to fold both sides together. Central self-locking self-leveller standard	10,091.86	11,101.05	X
MHL15	Heavy duty galvanised 15 metre hydraulic folding boom with 30 nozzles, twin ram with auto folding tips, hydraulically plumbed to fold both sides together. Central self-locking self-leveller standard	11,384.68	12,523.15	X
MHL12-2-KIT	Second set of hydraulic hoses to allow left/right individual fold of MHL boom (text on your order)	521.53	573.68	W

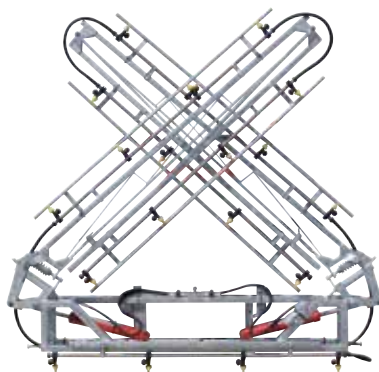
Booms shown on sprayers for illustration purposes only. Prices are for booms only.



HYDRAULIC FOLD GEX BOOMS



AirMix® low drift air-induction nozzles with nozzle protection as standard.



GEX10H boom shown folded (right) and open (above)



QUICK GUIDE

- » Galvanised steel construction
- » Nozzles protection fitted on outer sections
- » Stainless steel boom tubes with non-drip nozzle bodies and AirMix® low-drift nozzles fitted
- » Adjustable tension spring breakaway for each boom arm
- » Boom folds hydraulically in a cross-fold style. Note: the 8 and 10 metre models have a manual flip-over outer section which needs to be manually secured in the folded position prior to folding the boom for transport
- » Ideal boom for small row-cropping situations or vegetables



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
GEX06H	6 metre galvanised hydraulic folding boom; 12 non-drip nozzle bodies, 2 rams for folding, hydraulically plumbed to fold together. Weight = 87kg	5,210.53	5,731.58	X
GEX08H	8 metre galvanised hydraulic folding boom; 16 non-drip nozzle bodies, 2 rams for folding, hydraulically plumbed to fold together. 1 metre of each end is manually unfolded to make the boom 8 metres. Weight = 93kg	6,626.79	7,289.47	X
GEX10H	10 metre galvanised hydraulic folding boom; 20 non-drip nozzle bodies, 2 rams for folding, hydraulically plumbed to fold together. 2 metres of each end is manually unfolded to make the boom 10 metres. Weight = 96kg	6,818.18	7,500.00	X
MHL12-2-KIT	Second set of hydraulic hoses to allow left/right individual fold of GEX boom (text on your order)	521.53	573.68	W

FIREBREAK, UNDER TREE AND COVERED BOOMS



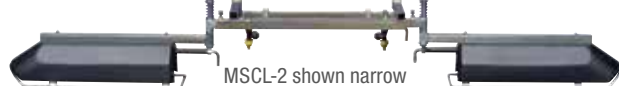
MC6 Firebreak boom shown fitted to tray



MVB5-5

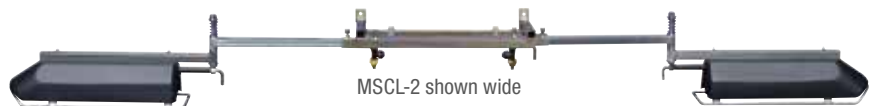


MSO



MSCL-2 shown narrow

2.3 metres



MSCL-2 shown wide

3 metres

QUICK GUIDE

Firebreak boom:

- » Ideal for the back of utes or small trailing sprayers
- » 1.5 metre wide with offset nozzles on adjustable swivel nozzle bodies on each end for additional 1.5 metre spray each side
- » For spraying firebreaks, farm tracks, contours, ditches and fence lines

Under-tree boom:

- » Galvanised boom with breakaway – extendable outer section with two nozzles, can be lifted up for transport
- » Perfect for spraying under trees or hedgerows

Shrouded booms:

- » Single or double sided options for sensitive areas
- » For spraying under sensitive crops such as grapes, trellis tomatoes and the like



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
MC6	1.5 metre wide Firebreak boom	507.18	557.90	X
MSO	Treeline boom with breakaway and 2 nozzles with manual-tap shut-off	665.07	731.58	X
MSCL	Single sided light covered boom with breakaway and 2 nozzles under spray shield	586.60	645.26	X
MSCL-2	Double sided light covered boom with left/right shielded booms with breakaways, adjustable width, and a 600mm wide uncovered centre section with 2 nozzles	1,654.55	1,820.00	X
MVB5-5	5 nozzles per side Vertiboom. Ideal for small horticultural growers	573.21	630.53	X

CROPAIR 300 | 600

Brass roll-over nozzle bodies. One set ceramic nozzles supplied, second set optional

Single speed 500mm fan with adjustable pitch blades and 5 nozzles per side

15 litre hand-wash tank for operator safety

Flushing tank

Heavy duty, galvanised frame

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
GB300/500	1000mm	1300mm	1100mm	230kg

Disclaimer: Dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.



Cropair Linkage 300

Large filling lid

Two speed 800mm fan for different air output requirements with adjustable pitch blades and 6 nozzles per side

15 litre hand-wash tank for operator safety

Flushing tank

Brass roll-over nozzle bodies. One set ceramic nozzles supplied, second set optional

Heavy duty, galvanised frame



Cropair Linkage 600

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
GB600/800	1550mm	1470mm	1560mm	390kg

Disclaimer: Dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.





Cropair Linkage 600 litre



FAN

On the 600 litre Cropair with 800mm fan fitted, there is an option to blank off the air to outlets not being used – for example in vine crops. This allows more air to be distributed through the remaining outlets and to use low-gear fan speed to reduce the power required to drive the fan – especially useful with smaller tractors.



NOZZLES

On both the 300 and 600 Cropair models, each nozzle body is made of brass, with a non-drip diaphragm to avoid dripping when the main tap is shut off. A selection of two nozzle sizes can be fitted so when the nozzle body is 'rolled over', the nozzle required is easily selected. In the halfway position, the nozzle is shut off.



MANUAL-TAP CONTROL AND ISOMETRIC GAUGE

Each Cropair comes standard with manual-tap control for left/right shut off of the spray-ring on each side. A master on/off lever is also provided, along with a rotational pressure control (PRV) and isometric gauge to accurately set the spraying pressure. For electric controls, see more information on page 68.



For nozzle selection, refer to page 95.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
GB600/800	600 litre Cropair with 800mm fan	10,765.55	11,842.11	X
GB300/500	300 litre Cropair with 500mm fan	6,937.80	7,631.58	X
HT-IS4021	Electric left/right 2-section on/off solenoids, electric pressure adjustment with integrated pressure filter and master switch with dump solenoid	2,464.12	2,710.53	X

300 LITRE TRAILED SPRAYER



QUICK GUIDE

- » Translucent UV-stabilised tank with large sump and graduated markings
 - » 12-volt models standard with NEW hose reel, with 10 metres of 10mm hose and spray lance
 - » Large, easy access lid with filling strainer
 - » 12-volt, 20 litre per minute (open-flow) pump to enable use with booms to 6 metres
 - » Easy access suction filter and regulator for pressure and flow adjustment
 - » Safety hitch for safe towing
 - » Flotation tyres on sturdy axle
 - » Rugged, one-piece chassis
 - » Handy parking stand
- On models with boom fitted:**
- » AirMix® air-induction low drift nozzles fitted standard
 - » Fully protected non-drip nozzle bodies on stainless steel boom tubes
 - » Spring loaded breakaways top protect boom arms from accidental impact damage

Above: UA300B Trailing sprayer with 4 metre boom and new 10m hose reel.

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
UA300B	2000mm	1200mm	1200mm	120kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.



All Croplands booms fitted with AirMix® low drift air-induction nozzles as standard.

BOOM OPTIONS

Options for booms to fit the UA300B are many and varied. On the next page you will see prices and options for the UA300B models. Two useful additions are:

- » Vertiboom – pictured right. This 5-nozzle per side vertical boom is ideal for small vineyards, nurseries and berryfruit plantings
- » Covered MSCL-2 boom – pictured below. This option can be used in sensitive areas for herbicide applications



MSCL-2



Above: UA300B/303/MVB5 pictured in grapes.



Croplands trailed 300 litre sprayers are a very popular option for block-holders and smaller farms all over Australia and New Zealand.



UA300B fitted with new NBX06 boom – model UA300B/20S/6BX.

POWERED by HONDA™

UA300B Trailing sprayer with 30 metres of hose, 25 litre per minute Honda-powered pump and spray gun – ideal for nurseries and greenhouses where hand-gun spraying is needed.



UA300B/20/HR30G



XT Boom Kit in action. For areas where a boom is not practical, consider the XT boom kit model – ideal for undulating conditions, firebreaks, contours and forestry work.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.	ACCESSORIES PAGE REF
UA300B	Trailer with hitch and 300 litre tank only – no pump, boom or gun	2,421.05	2,663.16	X	38, 39
UA300B/20.1S	Trailing 300 litre sprayer, 20 L/min 12-volt pump, regulator kit, 10 metres of 10mm hose on handy hose reel with spray lance – ideal spot sprayer	3,023.93	3,326.32	X	38, 39
UA300B/20S/4BX	Trailing 300 litre sprayer, 20 L/min 12-volt pump, regulator kit, 10 metres of 10mm hose on handy hose reel with spray lance and 4 metre boom	4,138.76	4,552.63	X	38, 39
UA300B/20S/6BX	Trailing 300 litre sprayer, 20 L/min 12-volt pump, regulator kit, 10 metres of 10mm hose on handy hose reel with spray lance and 6 metre boom	4,492.82	4,942.10	X	38, 39
UA300B/20S/XTKI	Trailing 300 litre sprayer, 20 L/min 12-volt pump, regulator kit, 10 metres of 10mm hose on handy hose reel with spray lance and NEW XT boom kit fitted	3,598.08	3,957.89	X	38, 39
UA300B/20/HR20G	Honda powered AR252 pump fitted to the UA300B trailing sprayer with 20 metres of 10mm hose on hose reel with RL10 spray lance	4,779.91	5,257.90	X	–
UA300B/20/HR30G	Honda powered AR252 pump fitted to the UA300B trailing sprayer with 30 metres of 10mm hose on heavy-duty steel hose reel with RL10 spray lance	5,162.68	5,678.95	X	–
UA300B/20/100RC	Honda powered AR252 pump fitted to the UA300B trailing sprayer auto-rewind remote control RetraSpray reel fitted	8,239.23	9,063.15	X	–
UA300B/303/MVB5	Honda powered AR303 pump fitted to the UA300B trailing sprayer with 5 nozzle per side Vertiboom fitted. Ideal for small horticultural growers	5,693.78	6,263.16	X	–



RETRASPRAY

Croplands RetraSpray 12-volt retractable reel will take all the work out of gun spraying. The time and effort saved is well worth the investment – up to 40% more productivity can be expected with the operator not having to lug a heavy hose around or to rewind over 100 kilos of hose up by hand when making a move to a new area. The Supa-slip hose on the reel will slip around rocks, tree stumps, posts and any other obstacle without snagging. Do yourself a favour and invest now.

RETRASPRAY REEL

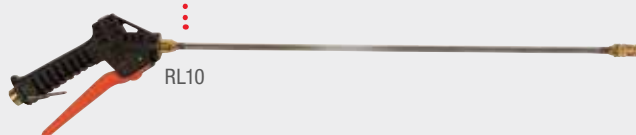


RSRL2-100RC



B26.901.165MK2

Choose your gun and add to your order



RL10

QUICK GUIDE

12-volt Retractable Reels

- » 12-volt 1/2HP low rev motor directly coupled to the reel
- » Push button hose retraction standard, remote control for rewinding is optional
- » Spray gun not included, select from gun options below or supply your own from your existing rig
- » Connect to 12-volt DC power source using heavy duty power cable supplied
- » Remote control option includes roller guides for hose and remote wireless control for rewinding

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
RSRL2-100RC	RetraSpray single reel with 100 metre hose and remote control	3,148.33	3,463.16	W
B26.901.165MK2	Turbo400 with metal grip and protected lever, 50 Bar (725 psi)	181.82	200.00	Y
RL10	RL10 gun with 500mm steel lance, adjustable nozzle, suits 100 model	86.13	94.74	Y

Note: guns sold separately.

CAN BE FITTED TO

LINKAGE SPRAYERS



LA600/100RC

TRAYMOUNT SPRAYERS



US200C/252/100RC



View the Traymount Sprayer in action



TRAYMOUNT SPRAYERS



500 RETRASPRAY TRAYMOUNT



US500/40/100RCT

QUICK GUIDE

- » Heavy duty hot-dip galvanised frame with carry handles
- » UV-stabilised tank with level markings
- » Large filling lid with basket strainer
- » Large sump for total emptying and easy draining and clean out
- » Genuine Honda motor to power the reliable AR diaphragm pump
- » 12-volt remote rewind reel option for effortless spraying and high productivity (RSRL100RC models)
- » For weed spraying, sheep jetting, fire fighting, water carting and pest control

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
US200C/252/100RC	1360mm	990mm	805mm	134kg
US300C/30/100RC	1360mm	990mm	805mm	148kg
US500/30/100RC	1700mm	1200mm	1200mm	220kg
US500/40/100RCT	1700mm	1200mm	1200mm	250kg
US600C/30/100RC	1255mm	1575mm	990mm	199kg
US600C/40/100RCT	1300mm	1575mm	990mm	239kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

200 RETRASPRAY TRAYMOUNT



US200C/252/100RC

300 RETRASPRAY TRAYMOUNT



US300C/30/100RC

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
US200C/252/100RC	NEW 200 litre traymount sprayer with galvanised frame, Honda powered 25 L/min pump, 12-volt auto retractable RetraSpray reel with 100m of non kink spray hose and Turbo Gun. 6 litre hand wash tank	7,080.86	7,788.95	W
US300C/30/100RC	NEW 300 litre traymount sprayer with galvanised frame, Honda powered 35 L/min pump, 12-volt auto retractable RetraSpray reel with 100m of non kink spray hose and Turbo Gun. 6 litre hand wash tank	7,380.86	8,118.95	W
US500/30/100RC	500 litre traymount sprayer with galvanised frame, Honda powered 35 L/min pump, 12-volt auto retractable RetraSpray reel with 100m of non kink spray hose and Turbo Gun	7,675.65	8,443.21	W
US500/40/100RCT	500 litre traymount sprayer with galvanised frame, Honda powered 46.3 L/min pump, Twin 12-volt auto retractable RetraSpray reels with 100m of non kink spray hose and Turbo Guns	11,093.78	12,203.16	W
US600C/30/100RC	NEW 600 litre traymount sprayer with galvanised frame, Honda powered 35 L/min pump, 12-volt auto retractable RetraSpray reel with 100m of non kink spray hose and Turbo Gun. 6 litre hand wash tank	8,175.65	8,993.21	W
US600C/40/100RCT	NEW 600 litre traymount sprayer with galvanised frame, Honda powered 46.3 L/min pump, Twin 12-volt auto retractable RetraSpray reels with 100m of non kink spray hose and Turbo Guns. 6 litre hand wash tank	11,593.78	12,753.16	W

NEW

200/300/600 MANUAL REEL TRAYMOUNT



US300C/30/HR30TG



US200C/252/HR30TG

QUICK GUIDE

- » Heavy duty hot-dip galvanised frame with carry handles
- » UV-stabilised tank with level markings
- » Large filling lid with basket strainer
- » Large sump for total emptying and easy draining and clean out
- » Genuine Honda motor to power the reliable AR diaphragm pump
- » Steel hose reel with galvanised mount, 30 metres of high quality hose and Turbo400 gun
- » For weed spraying, sheep jetting, firefighting, water carting and pest control

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
US200C/252/HR30TG	1275mm	1015mm	725mm	112kg
US300C/30/HR30TG	1275mm	1015mm	725mm	117kg
US600C/30/HR30TG	1255mm	1575mm	990mm	199kg
US600C/40/TWIN	1220mm	1475mm	990mm	239kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

POWERED by
HONDA™

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
US200C/252/HR30TG	NEW 200 litre traymount sprayer with galvanised frame, Honda powered 25 L/min AR pump. Manual two tap controls, 30 metre hose reel and Turbo Gun. 6 litre hand wash tank	4,176.10	4,593.71	X
US300C/30/HR30TG	NEW 300 litre traymount sprayer with galvanised frame, Honda powered 35 L/min AR pump. Manual two tap controls, 30 metre hose reel and Turbo Gun. 6 litre hand wash tank	4,476.10	4,923.71	X
US600C/30/HR30TG	NEW 600 litre traymount sprayer with galvanised frame, Honda powered 35 L/min AR pump. Manual two tap controls, 30 metre hose reel and Turbo Gun. 6 litre hand wash tank	5,476.07	6,023.68	X
US600C/40/TWIN	NEW 600 litre traymount sprayer with galvanised frame, Honda powered 46.3 L/min AR pump. Manual two tap controls, Twin 30 metre hose reels and Turbo Guns. 6 litre hand wash tank	6,340.67	6,974.74	X



500 LITRE TRAYMOUNT MANUAL REEL

(with frame)



US500/30/HR30TG

QUICK GUIDE

- » Heavy duty hot-dip galvanised frame with carry handles
- » UV-stabilised tank with level markings
- » Large filling lid with basket strainer
- » Large sump for total emptying and easy draining and clean out
- » Genuine Honda motor to power the reliable AR diaphragm pump
- » Steel hose reel with galvanised mount, 30 metres of high quality hose and Turbo400 gun
- » For weed spraying, sheep jetting, firefighting, water carting and pest control

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
US500/30/HR30TG	1700mm	1200mm	1200mm	220kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

POWERED by
HONDA™



US500/40/TWIN

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
US500/30/HR30TG	CropPak 500 litre, AR30 pump, reel with 30 metre hose and Turbo Gun, galvanised skid-frame	4,976.07	5,473.68	X
US500/70/HR30TG	CropPak 500 litre, AR70 pump, reel with 30 metre hose and Turbo Gun, galvanised skid-frame. AR70 pump is ideal for use with a range of booms (see page 20 and 21)	4,976.07	5,473.68	X
US500/40/TWIN	CropPak 500 litre, AR40 pump, twin reel both with 30 metre hose and Turbo Gun, galvanised skid frame	5,840.67	6,424.74	X

1100 | 1500 PONY TRAILED SPRAYERS

BT1100 Pony trailed base unit with PTO-drive pump and optional 3-section electric controls.
A cost effective sprayer for pasture spraying, small cropping areas and dairy farms.
Sprung axle protects unit in rougher conditions.



QUICK GUIDE

- » Remote tank drain valve, for safe tank draining
- » Huge sump to ensure all tank liquid can be utilised
- » Large, easy access filling lid with filling strainer
- » Easy access suction filter with shut-off to allow cleaning in-field if needed
- » Fully galvanised chassis
- » Sprung axle fitted to protect chassis and boom from premature wear
- » 11.5/80 x 15.3 tubeless agricultural tyres on steel rims
- » Adjustable height swivel towing eye
- » Large side step for easy tank access
- » Liquid fertiliser ready Poly 3-diaphragm pump fitted standard (PTO shaft supplied)
- » See options listed on the next page



BT-1100 shown
with MAX boom and
electric controller option



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
BT-1100	Base model 1100 litre trailed sprayer with galvanised chassis, leaf-spring single axle, PTO-drive 80 L/min AR triple-diaphragm pump (0–20 Bar rated), ARUCM 5-manual tap control unit, 20 litre handwash tank and jockey wheel. No boom or reel fitted – add from options next page. PTO supplied	7,673.68	8,441.05	W
BT-1500	Base model 1500 litre trailed sprayer with galvanised chassis, leaf-spring single axle, PTO-drive 80 L/min AR triple-diaphragm pump (0–20 Bar rated), ARUCM 5-manual tap control unit, 20 litre handwash tank and jockey wheel. No boom or reel fitted – add from options next page. PTO supplied	7,946.32	8,740.95	W

Note: ensure your vehicle is approved for the laden or trailed weight of the sprayer you have chosen.



OPTIONS FOR 1100 | 1500 PONY TRAILED

BOOM OPTIONS

For the Pony trailed sprayers. Ensure the folded width does not exceed your State specifications for transport if you plan to take these sprayers on public roads.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT	SEE MORE
BT-MAX08L	8 metre MAX series manual cross-fold boom with self-leveller fitted at fixed height (can be adjusted by unbolting and refitting). Folded width = 2,055mm	3,183.74	3,502.11	W	21
BT-MAX10L	10 metre MAX series manual cross-fold boom fitted. Specifications as per MAX08L above	3,890.91	4,280.00	W	21
BT-MAX12L	12 metre MAX series manual cross-fold boom fitted. Specifications as per MAX08L above	4,489.95	4,938.94	W	21
LT-GB383899000V	Parallelogram airbag suspension system for booms	2,933.01	3,226.31	W	18



MAX10L 10 metre MAX boom with self-leveller



LT-GB383899000V airbag suspension

PUMP OPTIONS – TRAILED

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT	SEE MORE
LT-140-C	140 L/min PTO pump in lieu of standard 80 L/min model	521.52	573.67	W	50
BT-AR70-5H	AR70 Honda-powered motorised pump in lieu of PTO drive AR80	2,945.45	3,240.00	W	–



LT-140-C poly pump

ELECTRIC AND AUTO SPRAY-RATE CONTROLLERS (IF BOOM IS FITTED)

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT	SEE MORE
LT-LA-IE2032A	3-section control of 3 boom sections and pressure control	1,813.40	1,994.74	W	68
BA5000-GEO3	3-section auto-rate spray controller for fully automatic spray rate control	3,244.02	3,568.42	W	69

FOAM MARKER AND GPS OPTION

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT	SEE MORE
A5200052	Double sided foam marker fitted	1,394.26	1,533.69	W	44
MATRIX430	Basic GPS mapping system in lieu of a foam marker. Ideal for knowing where you have applied	1,912.92	2,104.21	W	70



A5200052 foam marker



MATRIX430

30 | 60 | 100 CROPPAK



Features – standard models



US100A/15



FEATURE	BENEFIT
1 3-stage filtration	Large filling screen under lid; large suction filter; pressure filter in lance handle
2 Lance clips onto lid	Ensures neat storage and avoids lance dragging on the ground
2 Large filling lid	Helps prevent spillage when filling
3 Metal lance with adjustable nozzle	Superior to plastic, higher strength. Many accessories available to fit the lance – page 38
4 Large carry handles	Easy handling and for storing hose neatly
5 6 metre hose	6 metres of high quality 20 Bar rated spray hose fitted
6 Large drain	Easy-to-use, large 'boat plug' drain for quick clean-out
7 Large suction filter, easy access	Very large filtering area with easy-clean filter screen. Simple and quick to access
8 Cavity mounted pump	Total protection against the elements and damage. Low pump position ensures excellent priming
9 Quick-clip power connection	High quality electrical connector to the pump with waterproof plug for quick hook up and reliability
10 Translucent tank	Easy to see liquid level in the tank
10 Rugged design, locally made	Rotomolded tank has uniform thickness and can take high impact force
10 UV stabilised tank	Excellent UV resistance. Many imported models have no UV inhibitor in the material
Heavy duty power cable	Long, heavy duty 12-volt power lead with rocker-switch for easy hook-up to your battery

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
US30S	280mm	640mm	380mm	9kg
US60S	440mm	760mm	440mm	11kg
US100S	460mm	1000mm	460mm	14kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.



US30S

US60S

US100S

On page 38 and 39 you will find a wide range of accessories available for use with the standard lance to make your purchase of a Croplands CropPak a worthwhile investment. Please ensure your vehicle's load rating can carry the sprayer you want before making your purchase.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.	ACCESSORIES PAGE REF
US30S	30 litre CropPak, on-demand 6.8 L/min open-flow pump, 6 metres of spray hose, spray lance and electrical power lead with on/off switch	506.22	556.84	X	38, 39
US60S	60 litre CropPak, on-demand 6.8 L/min open-flow pump, 6 metres of spray hose, spray lance and electrical power lead with on/off switch	588.52	647.37	X	38, 39
US100S	100 litre CropPak, on-demand 6.8 L/min open-flow pump, 6 metres of spray hose, spray lance and electrical power lead with on/off switch	636.37	700.01	X	38, 39
US100A/15	100 litre CropPak, on-demand 15 L/min open-flow pump, pressure regulator and gauge, 6 metres of spray hose, spray lance and electrical power lead with on/off switch	832.54	915.79	X	38, 39



200 | 400 CROPPAK

200 and 400 litre CropPaks – these flat-based 200/400 litre units are a great choice for a higher capacity utility sprayer. They will sit on a ute tray, RTV tray, tractor tray or trailer. The clever design includes cutaways in the tank to provide baffles to avoid sudden liquid movement – a must if being used on sloping country.



US200/15

UNIT	WIDTH	LENGTH	HEIGHT	WEIGHT
US200	600mm	1190mm	600mm	35kg
US200/15	600mm	1190mm	600mm	40kg
US400/15	750mm	1490mm	750mm	80kg

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.

FEATURE	BENEFIT
1 Metal lance with adjustable nozzle	Superior to plastic, higher strength. Many accessories available to fit the lance – page 38 and 39
2 Handy suction filter, easy access	Easy-clean filter screen. Simple and quick to access
3 Lance clips onto lid	Ensures neat storage and avoids lance dragging on the ground
3 Large filling lid	Helps prevent spillage when filling
4 3-stage filtration	Large filling screen under lid; suction filter; pressure filter in lance handle
5 Graduated, translucent tank	Easy to see liquid level in the tank with level marks
5 Rugged design, locally made	Rotomolded tank has uniform thickness and can take high impact force

FEATURE	BENEFIT
5 UV stabilised tank	Excellent UV resistance. Many imported models have no UV inhibitor in the material
6 Carry handles	Ensures safe handling
7 Baffled tank	Integrated baffles to avoid sudden liquid movement
8 6 metre hose	6 metres of high quality 20 Bar rated spray hose fitted
9 Hose holders mounted on tank	To wrap hose around to avoid tangles and dragging hose
Heavy duty power cable	Long, heavy duty 12-volt power lead with rocker-switch for easy hook-up to your battery
Quick-clip power connection	High quality electrical connector to the pump with waterproof plug for quick hook up and reliability

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.	ACCESSORIES PAGE REF
US200	200 litre CropPak, on-demand 6.8 L/min open-flow pump, 6 metres of spray hose, spray lance and electrical power lead with on/off switch	1,023.93	1,126.32	X	38, 39
US200/15	200 litre CropPak, on-demand 15 L/min open-flow pump, pressure regulator and gauge. 3-way valve enables connection to a boom. 6 metres of spray hose standard with spray lance. Power lead with on/off switch provided	1,311.00	1,442.10	X	38, 39
US400/15	(Not pictured) 400 litre CropPak, 12-volt 15 L/min Triplex pump with pressure adjusting regulator fitted, 6 metres hose and adjustable spray lance. Accessories available such as small booms	1,813.40	1,994.74	X	38, 39

KNAPSACK SPRAYERS

SW503

**TOP
SELLER**



SW540R



INDUSTRIAL RANGE



SW189C

Heavy duty 15 litre knapsack designed for industrial use (diesel compatible); wide filling neck, rugged shut-off gun, adjustable nozzle, in-built pressure filter, brass lance. Lance clips into the handle for storage and transport.

See page 38 for a full range of accessories to suit.



SW322-315

High quality heavy duty 9 litre compression sprayer for use with selected solvents and diesel; wide filling neck, rugged shut-off gun, adjustable nozzle, pressure relief valve, in-built pressure filter, brass lance. Lance clips into the handle for storage and transport.

See page 38 for a full range of accessories to suit.



PAKMAN (FITTED TO SPRAYER)

Chemical resistant foam back protector, designed to significantly increase comfort for prolonged spraying needs. Fits SW503 15 litre knapsack sprayers. A must for making spraying much more comfortable.



SW320-310

The Acid Sprayer resists hydrochloric muriatic and phosphoric acids. Ideal for staining and etching concrete, and dissolving of rust on metal surfaces.



AGRICULTURAL RANGE



SW319

High quality heavy duty 5 litre compression sprayer; wide filling neck, rugged shut-off gun, adjustable nozzle, pressure relief valve, in-built pressure filter, brass lance. Lance clips into the handle for storage and transport.

See page 38 for a full range of accessories to suit.



SW320

High quality heavy duty 7 litre compression sprayer; wide filling neck, rugged shut-off gun, adjustable nozzle, pressure relief valve, in-built pressure filter, brass lance. Lance clips into the handle for storage and transport.

See page 38 for a full range of accessories to suit.



AIRMIX® ANVIL TYPE AIR-INDUCTION FLAT FAN NOZZLE

Designed for use predominantly for knapsack sprayers, the TDAM-AN-04 nozzle has a spray pattern of approximately 120°, perfect for turf applications especially as it has the same Venturi air-induction system as the standard AirMix® flat fan nozzle range. Available in the ISO red size 04.

At around 500–550mm off the ground (standard height for most knapsack spray lances) the sprayed width is around 120cm – ideal for spraying turf or larger weed areas such as stockyards etc. Now you can spray much more safely with this air-induction breakthrough.



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW319	Compression sprayer 5 litre	100.47	110.52	X
SW320	Compression sprayer 7 litre	104.31	114.74	X
SW322-315	Compression sprayer 9 litre – solvent model	133.97	147.37	X
SW503	Knapsack 15 litre piston/diaphragm	200.96	221.05	X
SW540R	Knapsack 15 litre piston pump with safety chamber and gauge on lance	215.32	236.85	X
SW189C	Knapsack sprayer 15 litre (diesel)	207.65	228.42	X
PAKMAN	Back protector for SW503	71.77	78.95	X
SW320-310	Acid knapsack sprayer 7 litre	104.31	114.74	X
TDAM-AN-04	AirMix® anvil type air-induction flat fan nozzle	16.07	17.68	Z

CROPPAK AND SWISSMEX ACCESSORIES

Croplands spray lances, pictured below, are fitted to our range of CropPak sprayers, knapsack sprayers and compression sprayers. They can be used for a wide range of spraying applications up to 10 Bar pressure. See below for information on the great range of booms, spray guards, extensions and other accessories that fit these lances.

Learn more about spray lances, scan the QR code



SPRAY LANCES



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW-LANCE-ASSY	Complete spray gun with brass lance, adjustable nozzle and hose connector fitted (in-built pressure filter)	65.07	71.58	Y
SW-LANCE-ADJ-AS	Complete spray gun with extendable fibreglass lance, adjustable nozzle and hose connector fitted (in-built pressure filter)	79.42	87.36	Y

SPRAY BOOMS TO FIT THE LANCE ASSEMBLY



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW219-147C	2-nozzle boom, narrow (pictured above right)	21.05	23.16	Y
SW219-140C	2-nozzle boom, 500mm (above)	24.88	27.37	Y
SW219-148C	2-nozzle boom, 750mm (above)	28.71	31.58	Y
SW219-138C	3-nozzle boom, 1,000mm (above)	34.45	37.90	Y
SW219-151C	3-nozzle boom, 1,500mm (above)	48.80	53.68	Y
SW219-282C	4-nozzle boom, 1,500mm (not pictured)	64.11	70.52	Y

EXTENSION LANCES AND NOZZLES



Learn more about extension lances, scan the QR code

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW219-142C	1,000mm spray lance extension to fit Swissmex trigger assembly, with nozzle	22.97	25.27	Y
SW219-143C	1,500mm spray lance extension to fit Swissmex trigger assembly, with nozzle	28.71	31.58	Y
SW219-146C	2,000mm spray lance extension to fit Swissmex trigger assembly, with nozzle	35.41	38.95	Y
SW803-085	Brass spray lance, 520mm (standard lance), nozzle not included	28.71	31.58	Y
SW219-236C	Telescopic lance (to 940mm), with nozzle	22.97	25.27	Y
SW803-262C	Plastic adjustable nozzle complete with cap and gasket	6.69	7.36	Y
SW219-089C	Brass adjustable nozzle complete with cap and gasket	25.84	28.43	Y
XR8003-VK	80° flat fan nozzle for use with spray guard or lance	13.59	14.95	Z





DID YOU KNOW?

Did you know that Croplands range of CropPak sprayers use the Swissmex lance, so all the useful accessories on these two pages are suitable for use with the 12-volt CropPaks on page 34.

SPRAY GUARDS TO PROTECT SENSITIVE PLANTS. CONSTANT FLOW VALVE.



Learn more about spray guards, scan the QR code



SW219-099



SW219-117



SW219-852



Learn more about constant flow valves, scan the QR code

DID YOU KNOW?

Did you know by fitting a constant flow valve to your lance (left), you can reduce pumping by up to 30% and have constant pressure at the nozzle.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW219-099	Herbicide spray guard, 400mm, large (above left)	12.44	13.69	Y
SW219-117	Herbicide spray guard, 220mm, small (above centre)	9.57	10.53	Y
SW219-852	Constant flow valve, 1 Bar to 3 Bar pressure. *1 = 1 Bar, 2 = 1.5 Bar, 3 = 2 Bar, 4 = 3 Bar	65.07	71.58	Y

COMMON REPLACEMENT COMPONENTS AND KITS



Trigger, SW808-073C



Tail for trigger assembly, SW808-014



Elbow from tank, SW502-191



Tank lid, SW502-001C



Lid strainer, SW501-004



Lid seal, SW501-002



Diaphragm, SW503-031



Repair service kit, SWRPK120



Repair service kit, SWRPK503



Repair Service kit, SWRPK189

To make repairs to your Croplands Swissmex knapsack or compression sprayer, see the options below.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW808-073C	Complete trigger assembly (pictured above)	22.01	24.21	Y
SWRPK120	Repair/service kit for SW319 and SW320 (pictured above)	22.78	25.06	Y
SWRPK189	Repair/service kit for SW189	22.78	25.06	Y
SWRPK189C	Repair/service kit for SW189C	34.16	37.58	Y
SWRPK503	Repair/service kit for SW503 (diaphragm not included in kit – not pictured)	22.78	25.06	Y
SW503-031	Diaphragm to suit SW503 Knapsack (pictured above)	11.48	12.63	Y
SW502-024C	Pump module for SW502 (not pictured)	65.36	71.90	Y
SW502-191	Elbow connector 90° – outlet to hose from tank (pictured above)	11.67	12.84	Y
SW808-014	Hose tail to fit 3/8" (10mm) hose – attached to back of trigger assembly (pictured above)	3.25	3.58	Y
SW502-001C	Red tank lid – suits all models (pictured above)	19.42	21.36	Y
SW501-002	Lid seal (pictured above)	19.91	21.90	Y
SW501-004	Lid strainer (pictured above)	11.58	12.74	Y

apex

A range of handy sprayers for use in non-commercial situations. The compression sprayer range includes 1.5 litre, 5 litre and 10 litre models. The 15 litre model is a piston-type with shoulder straps and built in accumulator to hold pressure whilst in use.

The rechargeable and battery operated 12-volt units have additional features with the added benefit of not requiring manual pumping, allowing the operator to concentrate solely on the application at hand. Specifications and features are listed by each model.

COMPRESSION SPRAYERS



ASNS-1.5A



ASFM-5A



ASFM-10A

GRANULAR APPLICATOR



ASGS-10

QUICK GUIDE

- » Clear lid to see what product is left
- » Adjustable application rate
- » Enclosed lubricated gearbox
- » Spreading width approximately up to 5 metres (depending on material being spread)

16 LITRE APEX BATTERY-POWERED KNAPSACK SPRAYER



ASBBS-16

QUICK GUIDE

- » Rechargeable 12-volt sealed lead/acid battery; voltmeter to see charge level at a glance
- » Large battery gives longer spraying time – approximately 4 hours continuous use from full charge
- » Large filling lid
- » 12-volt diaphragm pump for positive spraying pressure

30 LITRE APEX TROLLEY SPRAYER



ASAT-30M3

QUICK GUIDE

- » 3 L/min (open flow) 12-volt diaphragm pump powered by a large lead/acid rechargeable battery (charger included)
- » Large filling lid
- » Large drain for emptying and complete clean out
- » Spray lance with adjustable nozzle
- » 10 metres of hose on handy rear-mounted reel
- » Sturdy steel frame

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
ASBBS-16	16 litre 12-volt rechargeable knapsack sprayer	200.00	220.00	X
ASAT-30M3	30 litre trolley sprayer with 3 L/min pump (open-flow), 10 metre hose and reel	526.32	578.95	X
ASNS-1.5A	1.5 litre hand-held compression sprayer. Suction strainer on the inlet tube. Nickel-coated nozzle for longer life. Excellent sealing for better compression and spraying quality	11.43	12.57	X
ASFM-5A	5 litre compression sprayer with lance. Pressure relief valve to avoid over-pressurisation and to relieve pressure prior to emptying. Trigger gun with 450mm lance and adjustable nozzle. 1.2 metre hose length. Lance is vertically stored. Positive pump action. Light weight (1.4kg empty). 100mm filling neck with splash-shield rim	32.48	35.73	X
ASFM-10A	10 litre compression sprayer with lance. Pressure relief valve to avoid over-pressurisation and to relieve pressure prior to emptying. Trigger gun with 450mm lance and adjustable nozzle. 1.2 metre hose length. Lance is vertically stored. Positive pump action. Light weight (1.8kg empty). 125mm filling neck with splash-shield rim	37.27	41.00	X
ASGS-10	10 litre granular applicator. Granular applicator for spreading granulated formulations and fertilisers. Clear lid to see what product is left. Adjustable for application rate and direction. Fully enclosed and lubricated gearbox. Spreading width approximately up to 5 metres (depending on material being spread)	91.86	101.05	X



BATCH MASTER 1200 STAND ALONE BATCHING SYSTEM

Dual lids for simultaneous overhead filling while introducing chemicals for mixing

1200 litre poly tank

Internal knife system to quickly and safely puncture containers and bags (pictured below)

Safe, fold-out working platform

3" inlet and outlet ports

Honda-powered ultra-high flow centrifugal pump for rapid mixing and transfer

Heavy-duty hot-dipped galvanised frame

UNIT	WIDTH	LENGTH	HEIGHT
L-H9800	1600mm	2000mm	1400mm

Disclaimer: dimensional and weight information supplied is for base model only with no options. This information is subject to change without notice.



Above: Stainless steel knife to puncture containers combined with rinsing function.

QUICK GUIDE

- » 1200 litre capacity
- » 6.5HP Honda GX 200 powered 3 inch Banjo pump, 1100 litres per minute open flow capacity for rapid mixing and filling
- » 3" (80mm) external filling port for fresh water
- » High-flow venturi for rapid liquid chemical induction from a shuttle source
- » Stainless steel knife inside tank lid for rapid container or bag puncture to speed up mixing
- » Huge mixing nozzles to completely mix contents quickly and efficiently
- » Large Banjo taps for easy control of mixing, filling and batching processes
- » Safe operating platform
- » Forklift points
- » Hot-dipped galvanised frame
- » Extra lid for overhead tank-filling if needed

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H9800	Batch Master 1200 batching system complete	9,368.42	10,305.26	W

Photos are for illustrative purposes only. Prices and specifications are subject to change without notice. Prices effective January 2019. For indicative freight prices, see page 103.

CHEMICAL MIXING AND TRANSFER

30 LITRE CHEMICAL MIXER



A5033301

30 LITRE QUICK GUIDE

- » Can handle liquids, powders and granulated products
- » Venturi suction system with integrated drain valve
- » Three venturi options to adapt to the pump type being used
- » Easy to understand tap controls for chemical mixing, mixer rinse and container cleaning system
- » Integrated lifting handle
- » Simple mounting system to ensure easy fit up to existing sprayers
- » Optional suction probe

60 LITRE CHEMICAL MIXER



L-H9351A

60 LITRE QUICK GUIDE

- » Large access lid, fully sealed for safety
- » External and internal level markings
- » Dual filling and product agitation jets for rapid mixing
- » Container rinse nozzle capable of rinsing up to 20 litre containers
- » Mixer rinsing nozzle mounted directly under the lid for complete cleaning
- » Large taps for easy operation
- » Venturi with shut off valve
- » Sturdy handle and mount
- » Optional drop-down bracket available
- » Simple to follow guidelines using Croplands QR code
- » High flow capacity via large venturi

STAND ALONE 60 LITRE MIXER



L-H9353B

STAND ALONE 60 LITRE QUICK GUIDE

- » Trolley mounted Croplands chemical mixer for stand-alone mixing operations
- » Same features as itemised at left unit without pump requires a pressurised water source to allow mixing, filling and venturi to operate correctly – the pump on the sprayer could be used
- » Unit with 240-volt pump best used where a water tank and power is available but no existing pressurised water source is available

*Pentair Venturi



See how to use Croplands Chemical Mixers, scan the QR code

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A5033301	30 litre chemical mixer and transfer hopper for use with smaller trailed sprayers, linkage sprayers and traymount units. Includes universal mount, 3-tap control bank, container rinse and venturi options to match to the pump size and type being used	1,574.16	1,731.57	X
L-H9351A	Croplands 60 litre chemical mixer and transfer hopper for use with larger trailed sprayers, linkage sprayers and traymount units. Includes universal mount, taps for mixing, container rinse and system cleaning. Cleaning nozzle mounted directly under lid for complete clean out. Internal and external markings	1,674.64	1,842.11	X
L-H9353B	Croplands 60 litre chemical mixer as described above on a handy trolley frame. Ideal for use at a chemical mixing station where an external pressurised water supply is available using an existing filling pump or similar	2,535.88	2,789.47	X
L-H9353C	Croplands 60 litre chemical mixer as described above on a handy trolley frame with 240-volt centrifugal pump fitted. Ideal for use at a chemical mixing station where an external water tank is available along with mains power to power the pump	3,631.58	3,994.74	X
L-H9355A	Optional spring-loaded drop down mount for Croplands 60 litre mixer model L-H9351A. Ideal where operator height is an issue	1,066.99	1,173.69	X



EASYFLOW

CLOSED TRANSFER SYSTEM FOR CROP PROTECTION PRODUCTS

The EasyFlow closed transfer system is designed as a fully closed system for introducing crop protection, herbicides or pest control products into a spray tank or chemical mixer in total safety.

A clever locking system prevents any chance of coming into contact with the product being introduced. The mounting system is simple to install.



View the EasyFlow system in action, scan the QR code



QUICK GUIDE

- » Fully closed system for introducing chemicals to your spray tank or mixer
- » Kit includes components needed to install the system, instructions for installation and three chemical container adaptors
- » For use with containers up to 10 litres capacity with 63mm neck threads
- » Fully sealed for total safety
- » External fresh water source is needed for rinsing
- » Completely simple to install and use

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AT16077	EasyFlow tank adaptor kit – includes tank adaptor and 5 x container (jug) adaptors	697.61	767.37	W
AT16071	Wedge plate kit (2 plates and seals) – allows for fitting the tank adaptor to angled surfaces	20.00	22.00	W

MIXING JUGS



ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H9001	Croplands calibrated 1 litre measuring jug	13.40	14.74	X
L-H9003	Croplands calibrated 3 litre measuring jug	21.05	23.16	X
L-H9005	Croplands calibrated 5 litre measuring jug	27.75	30.52	X
L-H9025	Croplands heavy duty 25 litre calibrated mixing bucket with pouring spout	52.63	57.89	X

CHEMICAL TRANSFER



QUICK GUIDE

- » Easy and accurate chemical transfer is achieved with the AgRunner chemical transfer unit
- » Pump has nylon housing with Viton seals to ensure maximum performance for today's agricultural chemicals
- » A multiple pump-chamber design ensures long life and durability

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SHUSF-1105PTS	The AgRunner portable mini bulk transfer system uses a 12-volt SHURflo chemical transfer pump for pumping liquid agricultural chemicals from bulk containers into chemical mixers or spray tanks. The unit has a handy carry frame to protect the pump unit, pump-mounted flow indicator, 6 metres of power cable, shut-off gun, 4 metres discharge hose, and a camlock inlet fitting with shut-off and 4 metres inlet hose	2,100.47	2,310.52	W
SHUSF-1105	12-volt SHURflo pump unit only, Viton valves, Santoprene diaphragms with internal bypass and 6 metre power cable. On/off switch on the pump. 29 L/min output at 15 psi pressure. Draws 14 amps	1,104.39	1,214.83	X
SHUFM-11001	Pump-mounted electronic flowmeter with LCD display and long-life lithium battery	535.88	589.47	W
L-H9562A	3 pin Envirodrum male coupling	597.13	656.84	X
L-H9556	3 pin Envirodrum rinsing socket (must be connected to fresh water source)	238.27	262.10	X

CROPLANDS XT BOOM KIT

The Croplands XT boomless nozzle kit enables your spray application to be targeted into places a conventional boom may not reach. This kit delivers a uniform spray pattern over a distance of up to 6.5 metres (a wider swath may be possible if the kit is mounted higher than the 90cm as stated in the table below).

Ideal uses would be forestry – spraying under trees; farm tracks and undulating pasture land.

Other useful features and uses include:

- » Under trees in orchards
- » Golf courses and turf applications
- » Hedge rows and fencelines
- » Firebreaks
- » Large droplets for reduced drift risk and to assist with coverage on woody weeds
- » Spraying around obstacles where a conventional boom is not able to be used

Standard set up is with #10 nozzles as per the chart below*.



XTNOZZLEKIT



XT Boom Kit in action

Nozzle size	Pressure (Bar)	Flow (L/min) 2 nozzles	Application rate L/ha – at swath width shown km/hr							Approx. swath width @ 90cm height (XT 2-nozzle kit)
			4 km/hr	5 km/hr	6 km/hr	7 km/hr	8 km/hr	10 km/hr	12 km/hr	
10	2	6.4	166	132	110	95	83	66	55	5.8
	3	7.8	202	161	134	115	101	81	67	6.5

*Disclaimer: all values are calculated application rates in L/ha based on the swath width in the far right column and assuming the pressure and flow can be achieved using the pump on your sprayer. 90cm height from the spray target is recommended using Croplands UA300B trailed sprayers but may vary depending on the sprayer being fitted to, the available mounting height, and the vehicle the XT kit is being fitted to. If the height is adjusted upwards the application rate will be lower; if the kit is adjusted to spray wider than the table suggests, the application rate will be lower. The reverse will be true if the height and/or width is reduced.

Larger nozzle sizes are available on request. Ensure your pump has adequate flow to achieve the desired spray rate and sprayed width. For more information visit hypro.pentair.com and search on XT X Tender nozzles.

XT BOOMKIT

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
XTBOOMKIT	Kit to mount Croplands XT boomless nozzle kit to your sprayer. Kit includes 2 x #10 XT nozzles on adjustable swivel nozzle bodies, steel bracket and 2 x clamps for mounting. Hose and fittings to your pump are not supplied	334.93	368.42	X
XTNOZZLEKIT	XT boomless nozzle kit, includes 2 x #10 XT nozzles on adjustable swivel nozzle bodies, no bracket, clamps or hoses supplied	286.13	314.74	X

PRESSURE REGULATOR KIT



UOPRK

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
UOPRK	Pressure regulator kit for use with most 12-volt pumps such as FloJet and SHURflo. Ideal for regulating pressure and flow when a small spray boom is being used	107.18	117.90	X

FOAM MARKER AND FOAM CONCENTRATE



A5200052
(kit includes
foam droppers)

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A5200052	Double-sided foam marker kit with in-cab switchbox for use on booms up to approximately 18 metres (depending on speed of travel)	1,394.26	1,533.69	X

SPRAY TANKS



All tanks are supplied with a lid and outlet. All prices are ex-store. Dimensions may change without notice.

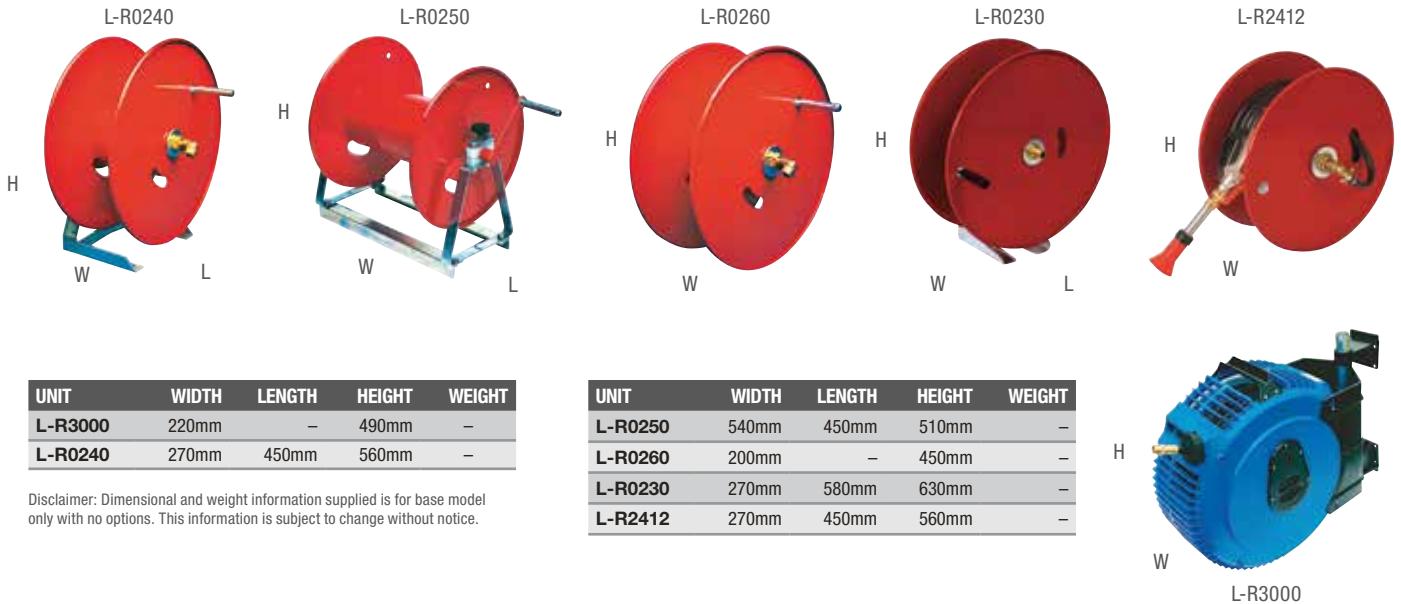
ORDER CODE	POSITION	LITRE CAPACITY	DIMENSIONS (MM)			STRAINER	FREESTANDING	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
			L	W	H					
P20	(not shown)	20	300	300	400	No	No	195.21	214.73	X
P30B	A	30	625	300	333	Yes	Yes	240.19	264.21	X
P50	B	50	450	410	400	Yes	No	221.05	243.16	X
P60B	C	60	740	380	380	Yes	Yes	280.38	308.42	X
P60L	D	60	440	440	545	No	Yes	226.79	249.47	X
P100L	E	100	440	440	810	No	Yes	250.72	275.79	X
P100	F	100	975	400	425	Yes	Yes	316.75	348.42	X
P120	G	120	610	470	600	Yes	No	288.04	316.85	X
P125L	H	125	440	440	960	No	Yes	291.86	321.05	X
P200	I	200	900	600	600	Yes	No	365.55	402.10	X
P200B	J	200	1,160	580	539	Yes	Yes	728.23	801.05	X
P300	K	300	1,100	550	550	Yes	No	443.06	487.37	X
P300B	L	300	1,269	750	753	Yes	No	762.68	838.95	X
P400	M	400	1,490	627	760	Yes	Yes	1,372.25	1,509.48	X
P400C	N	400	1,190	760	650	Yes	No	630.62	693.68	X
P450	O	450	1,070	750	580	Yes	No	586.60	645.26	X
P500C	P	500	1,190	760	825	Yes	No	688.04	756.85	X
P500	Q	500	1,200	600	1,100	Yes	No	712.92	784.21	X
P700	(not shown)	700	1,350	640	1,200	Yes	No	839.23	923.15	X
P800	R	800	1,740	1,000	770	Yes	Yes	2,333.01	2,566.31	X
P1000L	S	1,000	1,350	800	1,500	Yes	No	1,466.03	1,612.63	X
P1100A	T	1,100	1,400	1,279	890	Yes	Yes	1,629.66	1,792.63	X
P1500A	U	1,500	1,400	1,430	1,150	Yes	No	2,104.31	2,314.74	X
P2000	V	2,000	2,200	1,300	1,030	Yes	No	1,986.60	2,185.26	X
P3000	W	3,000	2,200	1,300	1,300	Yes	No	2,871.77	3,158.95	X
P4000A	X	4,000	2,200	1,300	1,670	Yes	No	3,366.51	3,703.16	X

Dimensions may vary from tank to tank.

HOSE REELS

Croplands range of manual hose reels include nine models listed below that are made of steel. A steel reel, complete with high quality fittings, that will last years and is a good investment for that reason. The steel on the reel itself is sand-blasted and powder coated for high corrosion resistance. A galvanised base on the larger base-mount models is heavy duty and hot dip zinc plated. The smaller L-R0150 reel has a clever swivel-base design and locking pin.

All Croplands spray hoses are specifically made for Croplands – the pressure hose in particular has added longitudinal nylon fibres to ensure the hose will not stretch, along with added nitrile compound internally so it will not break down and de-laminate like cheaper hoses often do. Being black in colour our hose resists sun damage for many years longer than coloured hose.



*All bare capacities are for 10mm spray hose. L=length, W=width, H=height; dimensions may change without notice and do not include side-bracket on side-mount reels.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-R0240	Base mount model, 50 metre capacity* (bare reel)	516.75	568.42	X
L-R1412	Base mount model comes with 30 metres of 10mm spray hose and Turbo400 spray gun	716.75	788.42	X
L-R0260	Side-mount (with bracket), 50 metre capacity* (bare reel)	381.82	420.00	X
L-R2412	Side-mount (with bracket), comes with 30 metres of 10mm spray hose and Turbo400 spray gun	621.05	683.16	X
L-R2412HP	Replacement reel for US500/30/HR30TG high pressure (40 Bar)	764.58	841.04	X
L-R0250	Large base mount model, 100 metre capacity* (bare reel)	947.37	1,042.11	X
L-R0230	Slim-line steel hose reel, galvanised base mount model, 100 metre capacity* (bare reel)	573.21	630.53	X
L-R3000	High-impact poly reel, spring retractable; 15 metres of 10mm spray hose and threaded end-fitting (no gun fitted)	362.68	398.95	X

PRESSURE GAUGES

Glycerine-filled gauges in 63mm and 100mm sizes.



ORDER CODE	DESCRIPTION	MAX PRESS BAR	MAX PRESS KPA	MAX PRESS PSI	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A908006	Pressure gauge, 40mm, 0–600 kPa	6	600	90	30.62	33.68	Y
L-G1426	Isometric pressure gauge, 63mm, 1/4" bottom-entry	25	2,500	360	37.32	41.05	Y
L-G1425	Pressure gauge, 63mm, 1/4" bottom-entry	25	2,500	360	32.54	35.79	Y
L-G1430	Pressure gauge, 63mm, 1/4" bottom-entry	40	4,000	580	32.54	35.79	Y
L-G1432	Pressure gauge, 63mm, 1/4" bottom-entry	60	6,000	870	32.54	35.79	Y
L-G1602	Pressure gauge, 100mm, 1/4" bottom-entry	25	2,500	360	84.21	92.63	Y
L-G1611	Pressure gauge, 100mm, 3/8" bottom-entry	16	1,600	230	84.21	92.63	Y
L-G1612	Pressure gauge, 100mm, 3/8" bottom-entry	25	2,500	360	84.21	92.63	Y
L-G1660	Pressure gauge, 100mm, 3/8" bottom-entry	60	6,000	870	99.53	109.48	Y
L-G1626	Isometric pressure gauge, 100mm, 3/8" bottom-entry	25	2,500	360	92.82	102.10	Y

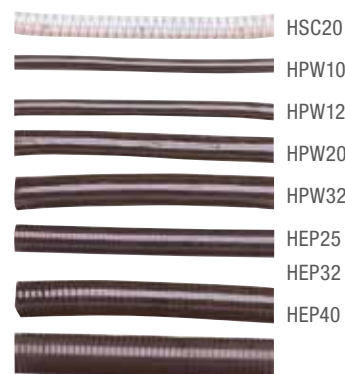


SPRAY GUNS AND LANCES

ORDER CODE	#	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SW-LANCE-ASSY	1	Swissmex gun and lance	65.07	71.58	Y
SW-LANCE-ADJ-AS	2	Swissmex gun and extendable lance	79.42	87.36	Y
RL10	3	RL10 gun with 500mm steel lance, adjustable nozzle	86.13	94.74	Y
AA30L-PP	4	TeeJet GunJet poly spray gun, 10 Bar (150 psi)	111.96	123.15	V
AA30L-¼	5	TeeJet GunJet drip-free spray gun, 17 Bar (250 psi)	136.84	150.53	V
AA31	6	TeeJet forged brass trigger gun, 35 Bar (500 psi)	159.81	175.79	V
AA43HA-8	7	TeeJet heavy duty high pressure gun, 55 Bar (800 psi)	332.05	365.26	V
AA43LA-8	8	TeeJet heavy duty medium pressure gun, 14 Bar (200 psi)	332.05	365.26	V
B26.901.165MK2	9	Turbo400 with metal grip and protected lever, 50 Bar (725 psi)	181.82	200.00	Y
B46.901.46RG	10	Turbo400RG gun with ergonomic grip and positive-notch droplet selection, 40 Bar (580 psi)	222.01	244.21	Y
B7.901.10	11	Evolution turbine gun, 60 Bar (850 psi)	320.58	352.64	Y
B35.901.16	12	Spot spray gun, pistol type, 40 Bar (580 psi)	129.19	142.11	Y

HOSES

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
HCVT20	Hose 20mm vinyl clear	5.17	5.69	Y
HSC20	Clear wire spiral hose, 20mm	13.40	14.74	Y
HEP25	Hose 25mm suction (black)	9.57	10.53	Y
HEP32	Hose 32mm suction (black)	14.36	15.79	Y
HEP40	Hose 40mm suction (black)	14.36	15.79	Y
HPW10	Hose 10mm 20 Bar for pesticide and herbicide	3.25	3.58	Y
HPW10/40	Hose 10mm 40 Bar for pesticide and herbicide	8.42	9.26	Y
HPW10-30	Hose 10mm 20 Bar for pesticide and herbicide (30 metres)	94.74	104.21	Y
HPW10-100	Hose 10mm 20 Bar for pesticide and herbicide (100 metres)	320.58	352.64	Y
HPW12	Hose 12mm 20 Bar for pesticide and herbicide	3.83	4.21	Y
HPW12/40	Hose 12mm 40 Bar for pesticide and herbicide	9.57	10.53	Y
HPW12-30	Hose 12mm 20 Bar for pesticide and herbicide (30 metres)	113.87	125.26	Y
HPW12-100	Hose 12mm 20 Bar for pesticide and herbicide (100 metres)	381.82	420.00	Y
HPW20	Hose 20mm 20 Bar for pesticide and herbicide	11.48	12.63	Y
HPW20-50	Hose 20mm 20 Bar for pesticide and herbicide (50 metres)	591.39	650.53	Y
HPW25	Hose 25mm 20 Bar for pesticide and herbicide	14.36	15.79	Y
HPW32	Hose 32mm 20 Bar for pesticide and herbicide	22.97	25.27	Y



CLAMPS

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
COBRAC13/8	Cobra clamp for 8mm hose	1.34	1.47	Z
COBRAC15/8	Cobra clamp for 10mm hose	1.34	1.47	Z
COBRAC18-19/8	Cobra clamp for 12mm hose	1.43	1.57	Z
COBRAC24/8	Cobra clamp for 20mm hose	1.53	1.68	Z
TR38HC	Hose clamp 10mm steel band worm drive	2.68	2.95	Z
TR12HC	Hose clamp 12mm steel band worm drive	2.97	3.27	Z
TR34HC	Hose clamp 20mm steel band worm drive	3.83	4.21	Z
TR1HC	Hose clamp 25mm steel band worm drive	2.87	3.16	Z
TR114HC	Hose clamp 32mm steel band worm drive	4.02	4.42	Z
TR112HC	Hose clamp 40mm steel band worm drive	4.31	4.74	Z
TR2HC	Hose clamp 50mm steel band worm drive	4.68	5.15	Z
TR3HC	Hose clamp 75mm steel band worm drive	4.88	5.37	Z



FIREFIGHTERS



US500/FF1 – 500 litre traymount firefighter on galvanised steel skid



SHUMB25LK MiniBlaze firefighter kit



SHUB55H firefighter pump



BT1500/FF2 – heavy duty 1500 litre trailed firefighter on galvanised chassis – hook up and go at a moment's notice when the need arises

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SHUMB25LK	MiniBlaze firefighter kit, 2.5HP petrol motor. Quick fill priming port, 1" discharge, 5 metres of 20mm hose with nozzle, 2.5 metres suction hose with filter. Tool kit supplied. Flow rate 50–150 L/min	626.18	688.80	X
SHUB55H	Honda GX160-powered Onga firefighter pump. Industrial grade nylon impeller, alloy housing, 3-way discharge outlets and carry handle. 1 1/2" priming port. Flow range 100–500 L/min in the 2–5 Bar pressure range. Price is for pump only	955.98	1,051.58	W
US500/FF1	Traymount 500 litre firefighter. Galvanised frame, SHUB55H pump, heavy duty steel hose reel with 30 metres of 20mm delivery hose, adjustable nozzle and 3 metre suction kit with filter	3,826.79	4,209.47	W
BT1100/FF	Trailed 1100 litre firefighter with sprung axle, galvanised chassis, eye-hitch, ag-tyres, SHUB55H pump, heavy duty steel hose reel with 30 metres of 20mm delivery hose, adjustable nozzle and 3 metre suction kit with filter. Ideal for farm use (not pictured)	6,925.21	7,617.73	W
BT1500/FF	Trailed 1500 litre firefighter with sprung axle, galvanised chassis, eye-hitch, ag-tyres, SHUB55H pump, heavy duty steel hose reel with 30 metres of 20mm delivery hose, adjustable nozzle and 3 metre suction kit with filter. Ideal for farm use (not pictured)	7,202.22	7,922.44	W
BT1500/FF2	Pro-series trailed 1500 litre firefighter with sprung axle, galvanised chassis with mudguards, tow-hitch, brakes, lights, Land Cruiser wheels, SHUB55H pump, heavy duty steel hose reel with 30 metres of 20mm delivery hose, adjustable nozzle and 3 metre suction kit with filter	10,717.71	11,789.48	W

Please note: trailed firefighters are not legal for road use.

DID YOU KNOW?

All Croplands firefighters are powered by genuine Honda motors. The Honda motor uses an advanced electronic ignition with automatic compression release providing effortless starts in all weather and conditions.



DECK MOUNT TURF SPRAYERS



QUICK GUIDE

- » 400 and 600 litre capacities
- » AR115 PTO drive pump supplied with 6-spine shaft (other drive options available)
- » 15 litre handwash tank
- » Adjustable de-mount legs
- » 6, 8 or 10 metre hydraulic fold GEX series booms as options
- » Standard with one double-acting hydraulic service with manual diverter to select left/right and simultaneous fold – requires a set of hydraulic ports – more options available including electric control
- » Electric or fully auto spray-rate control options
- » Available by indent only – talk to your Croplands Territory Manager

ENVIROSAFE COVERED BOOMS



EnviroSafe boom shown fitted to linkage unit.

QUICK GUIDE

- » 4.5 or 5.5 metre EnviroSafe fully covered booms to suit linkage, deck-mount or trailed sprayers
- » Manual or hydraulic fold options
- » Forward tilt ram supplied standard to allow boom to be inclined forwards to access nozzles and for parking
- » Pivoting wheels to allow boom to follow ground contours and stay at the perfect spraying height
- » Available by indent only – talk to your Croplands Territory Manager

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
DECKMOUNT	400 or 600 litre deck mount sprayers for a range of turf vehicles such as Kubota, Toro Diesel, Jacobsen, Cushman and John Deere. A wide range of options available for indenting the right machine for your requirements. Contact Croplands for further information	POA	POA	W
ENVIROSAFE	4.5 or 5.5 metre EnviroSafe booms with various options for boom control, nozzle selection and to fit linkage or turf vehicles. Contact Croplands for further information	POA	POA	W

LOW PRESSURE DIAPHRAGM PUMPS

NEW POLY PUMP RANGE FOR A WIDER RANGE OF APPLICATIONS

Annovi Reverberi (AR) has developed a new range of diaphragm pumps to suit the changing demands of agriculture. The heads and manifolds of this new range are made from reinforced polypropylene or nylon to allow use with a wider range of products including liquid fertilisers.

For information on controllers to suit our pumps, refer to page 55.



AR80LFP

Ideal for booms up to 12 metres

Open flow	76 L/min
Max pressure	20 Bar
Max RPM	550
Weight	14kg
HP required	3.4

Triple diaphragm, reinforced poly heads and manifolds

Available with **C**



AR185LFP

Ideal for booms up to 24 metres

Open flow	182 L/min
Max pressure	15 Bar
Max RPM	550
Weight	25kg
HP required	7.4

Four diaphragm, reinforced nylon heads and manifolds

Available with **CF25**



AR330LFP

Ideal for booms from 36 metres to 52 metres

Open flow	318 L/min
Max pressure	15 Bar
Max RPM	550
Weight	58kg
HP required	11.6

Four diaphragm, reinforced nylon heads and manifolds

Available with **CF32**



AR140LFP

Ideal for booms up to 18 metres

Open flow	132 L/min
Max pressure	15 Bar
Max RPM	550
Weight	16kg
HP required	5.2

Triple diaphragm, reinforced nylon heads and manifolds

Available with **C**



AR245LFP

Ideal for booms from 28 metres to 36 metres

Open flow	242 L/min
Max pressure	15 Bar
Max RPM	550
Weight	45kg
HP required	9

Triple diaphragm, reinforced nylon heads and manifolds

Available with **CF32**



AR410LFP

Ideal for booms from 36 metres to 52 metres

Open flow	401 L/min
Max pressure	15 Bar
Max RPM	550
Weight	75.5kg
HP required	14.9

Six diaphragm, reinforced nylon heads and manifolds

Available with **CF32**



AR160LFP

Ideal for booms up to 21–24 metres

Open flow	166 L/min
Max pressure	15 Bar
Max RPM	550
Weight	25kg
HP required	6.8

Four diaphragm, reinforced nylon heads and manifolds

Available with **CF25**



AR275LFP

Ideal for booms up to 36 metres

Open flow	273 L/min
Max pressure	15 Bar
Max RPM	550
Weight	45kg
HP required	10.7

Triple diaphragm, reinforced nylon heads and manifolds

Available with **CF32**



C Cardan shaft – pump is fitted with a 1 3/8" male 6-spline shaft



CF25 Female input for direct hydraulic motor fitting. 6-spline male shaft on one side
CF32



For more information on hydraulic motors and kits to suit CF25/32 models contact Croplands.

Note: All flow information is at zero pressure, open flow.

MODEL			\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR80LFP	C	AR80 LFP series triple diaphragm polypropylene pump with 6-spline male shaft	1,035.41	1,138.95	Y
AR140LFP	C	AR140 LFP series triple diaphragm reinforced nylon pump with 6-spline male shaft	1,651.67	1,816.84	Y
AR160LFP	CF25	AR160 LFP series four diaphragm reinforced nylon pump with 6-spline male shaft one side, 25mm keyed female input on the other	2,396.17	2,635.79	Y
AR185LFP	CF25	AR185 LFP series four diaphragm reinforced nylon pump with 6-spline male shaft one side, 25mm keyed female input on the other	2,649.76	2,914.73	Y
AR245LFP	CF32	AR245 LFP series triple diaphragm reinforced nylon pump with 6-spline male shaft one side, 32mm keyed female input on the other	2,917.71	3,209.48	Y
AR275LFP	CF32	AR275 LFP series triple diaphragm reinforced nylon pump with 6-spline male shaft one side, 32mm keyed female input on the other	3,608.61	3,969.47	Y
AR330LFP	CF32	AR330 LFP series four diaphragm reinforced nylon pump with 6-spline male shaft one side, 32mm keyed female input on the other	4,311.00	4,742.10	Y
AR410LFP	CF32	AR410 LFP series six diaphragm reinforced nylon pump with 6-spline male shaft one side, 32mm keyed female input on the other	6,378.95	7,016.84	Y



LOW PRESSURE DIAPHRAGM PUMPS

ALLOY PUMPS WITH ANODISED OR COATED HEADS AND MANIFOLDS


The Annovi Reverberi (AR) range of diaphragm pumps have been industry leaders for more than 60 years. Croplands have been fitting AR pumps to their entire sprayer range for 40 years, and supplying farmers and growers with these high quality pumps for the same duration. Rugged, reliable and robust, an AR pump will give years of good service if looked after and maintained.



AR252

Open flow	25 L/min
Max pressure	25 Bar
Max RPM	650
Weight	4kg
HP required	1.45
Twin diaphragm pump	
Ideal for small boom sprayers	


Available with **C T SP CRGI**



AR70 Bp

Open flow	72 L/min
Max pressure	20 Bar
Max RPM	550
Weight	11.8kg
HP required	3.4
Twin diaphragm pump	
Ideal for booms up to 12 metres	


Available with **C T SP CR**



AR115 Bp

Open flow	114 L/min
Max pressure	20 Bar
Max RPM	550
Weight	15.5kg
HP required	5.5
Triple diaphragm pump	
Ideal for booms up to 15 metres	


Available with **C**



AR135 Bp

Open flow	132 L/min
Max pressure	20 Bar
Max RPM	550
Weight	15.5kg
HP required	6.8
Triple diaphragm pump	
Ideal for booms up to 18 metres	

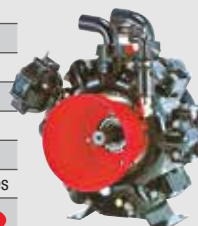
Available with **C T SP CR**



AR250 Bp

Open flow	254 L/min
Max pressure	20 Bar
Max RPM	550
Weight	38.5kg
HP required	11.4
6-diaphragm pump	
Ideal for booms up to 36 metres	


Available with **CF25 APCC**



AR280 Bp

Open flow	282 L/min
Max pressure	20 Bar
Max RPM	550
Weight	38.5kg
HP required	12.9
6-diaphragm pump	
Ideal for booms to 36 metres or more	

Available with **CF25**



Note: All flow information is at zero pressure, open flow

MODEL	C		CR		CRGI		SP		T		APCC	CF25	CF32	PROD. CAT.
	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (INC. GST)	
AR252	721.52	793.67			1,152.15	1,267.37	645.93	710.52	938.75	1,032.63				Y
AR70	1,035.41	1,138.95	1,572.25	1,729.48			983.73	1,082.10	1,256.46	1,382.11				Y
AR115	1,427.74	1,570.51												Y
AR135	1,470.81	1,617.89	2,041.14	2,245.25			1,505.26	1,655.79	1,644.02	1,808.42				Y
AR250											2,996.16	3,295.78		Y
AR280											3,225.84	3,548.42		Y




DRIVE OPTIONS FOR AR PUMPS

C Cardan shaft – pump is fitted with a 1 1/8" male 6-spline shaft

APCC Cardan shaft – 1 1/8" 6-spline shaft both sides of pump

CF25 **CF32** Female input for direct hydraulic motor fitting. 6-spline male shaft on one side.

T Tractor kit – to connect pump directly to tractor PTO shaft

SP Bare shaft – models to suit various kits and applications

CR Gearbox fitted to pump but without PRV fitted

CRGI Gearbox and PRV fitted to pump




For petrol and electric drive models, see following pages along with spare parts information.



For common parts such as diaphragms, valves, o-rings and repair kits visit croplands.com.au and access the Croplands OPTIMA Components Guide.

MEDIUM AND HIGH PRESSURE DIAPHRAGM PUMPS

AR medium pressure pumps are rated up to 40 Bar pressure. This range is ideal for hand gun spraying where flow and pressure are important – particularly for spraying brush weeds. The high pressure pumps are typically used for Airblast sprayers in tree crops. The brass models are particularly good at resisting copper compounds.

For information on controllers to suit our pumps, refer to page 55.



AR303

Open flow	35 L/min
Max pressure	40 Bar
Max RPM	550
Weight	9kg
HP required	3
Triple diaphragm pump	
Ideal for spot spraying units	

Available with **C CR**

See table on page 51 for more information



AR30

Open flow	35 L/min
Max pressure	40 Bar
Max RPM	550
Weight	9.3kg
HP required	2.9
Twin diaphragm pump	
Ideal for spot spraying units	

Available with **C T SP CRGI**

See table on page 51 for more information



AR40

Open flow	46.3 L/min
Max pressure	40 Bar
Max RPM	550
Weight	9.5kg
HP required	3.5
Twin diaphragm pump	
Ideal for spot spraying units	

Available with **CRGI**

See table on page 51 for more information



AR503

Open flow	54 L/min
Max pressure	40 Bar
Max RPM	550
Weight	11.5kg
HP required	5.6
Triple diaphragm pump	
Ideal for spot spraying units	

Available with **C T SP CR CRGI CSP**

See table on page 51 for more information

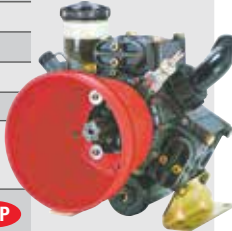


AR813

Open flow	80 L/min
Max pressure	50 Bar
Max RPM	550
Weight	20.5kg
HP required	8.8
Triple diaphragm pump	
Ideal for high pressure spot spraying units and small airblast sprayers	

Available with **APCC CSP**

See table on page 51 for more information



AR1064

Open flow	105 L/min
Max pressure	50 Bar
Max RPM	550
Weight	23.5kg
HP required	13.1
4 diaphragm pump	
Ideal for high pressure spot spraying units and small airblast sprayers	

Available with **APCC**

See table on page 51 for more information



ARBHS170

Open flow	163 L/min
Max pressure	50 Bar
Max RPM	550
Weight	65kg
HP required	19.3
4 diaphragm pump	
Ideal for high pressure airblast sprayers	

Available with **APCC**

See table on page 51 for more information



ARBHS200

Open flow	194 L/min
Max pressure	50 Bar
Max RPM	550
Weight	65kg
HP required	22.1
4 diaphragm pump	
Ideal for high pressure airblast sprayers	

Available with **APCC**

See table on page 51 for more information



AR1604

Open flow	153 L/min
Max pressure	50 Bar
Max RPM	550
Weight	40kg
HP required	18
4 diaphragm pump	
Ideal for high pressure airblast sprayers	

Available with **APCC**

See table on page 51 for more information



Note: All flow information is at zero pressure, open flow.

MODEL	C		CR		CRGI		SP		T		CSP APC APCC		PROD. CAT.
	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	\$ (EX. GST)	\$ (INC. GST)	
AR30	995.21	1,094.73			1,531.10	1,684.21	916.74	1,008.41	1,220.09	1,342.10			Y
AR40					1,599.00	1,758.90							Y
AR303	974.15	1,071.57	1,409.56	1,550.52									Y
AR503			1,835.41	2,018.95	1,952.15	2,147.37	1,110.05	1,221.06	1,413.40	1,554.74	1,279.42	1,407.36	Y
AR813											1,669.85	1,836.84	Y
AR1064											1,887.08	2,075.79	Y
AR1604											2,746.41	3,021.05	Y
ARBHS170											4,466.98	4,913.68	Y
ARBHS200											4,585.64	5,044.20	Y



AR MOTORISED POSITIVE DISPLACEMENT PUMPS

Croplands have a great range of petrol and electric drive pumps for spraying and semi-industrial applications. Powered by genuine Honda engines, the petrol powered models are bullet proof and will run day in, day out. A full range of spare parts are available for our range, and Honda dealers throughout New Zealand and Australia can supply engine parts and service when needed.



AR303-6H

POWERED by
HONDA



AR252-EM



AR252-4H

To petrol drive larger AR pumps, please contact Croplands for options and pricing. Note, to fit electric start on the AR petrol-driven motorised pumps on this page, please add the following code and price to your order.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR-ES	Electric start kit for Honda	668.90	743.20	X

AR252-4H	<ul style="list-style-type: none"> » AR252 dual diaphragm pump fitted with gearbox, genuine Honda motor and ARGR30 pressure regulator » Ideal for smaller hand-gun or boom spraying applications and on small trailed and RTV sprayers » Maximum pressure 25 Bar, open-flow 25 L/min
AR252-EM	<ul style="list-style-type: none"> » AR252 pump with single-phase electric motor and ARGR30 pressure regulator » Very popular positive displacement pump for use in agriculture for fertiliser injection systems » Maximum pressure 25 Bar, open-flow 25 L/min
AR30-EM	<ul style="list-style-type: none"> » AR30 with single-phase electric motor and ARG140 pressure regulator » A larger positive displacement pump for use with fertiliser or chemical injection and industrial applications » Maximum pressure 40 Bar, open-flow 32 L/min
AR30-ET	<ul style="list-style-type: none"> » The ET version of the AR30 with 3-phase motor fitted has the same specifications as the EM model » Available for indent only for agricultural or industrial applications » Maximum pressure 40 Bar, open-flow 32 L/min
AR30-5H	<ul style="list-style-type: none"> » AR30 dual diaphragm pump with gearbox, genuine Honda motor and ARG140 pressure regulator » Ideal for gun spraying in glasshouses, nurseries and on utility-mounted sprayers units » Very reliable for higher pressure applications where hand-guns are used » Maximum pressure 40 Bar, open-flow 32 L/min
AR303-6H	<ul style="list-style-type: none"> » AR303 triple diaphragm pump with gearbox, genuine Honda motor and ARG140 pressure regulator » Ideal for gun spraying in glasshouses, nurseries and on utility-mounted sprayers units » Smooth running for higher pressure applications where hand-guns are used » Maximum pressure 40 Bar, open-flow 35 L/min
AR40-6H	<ul style="list-style-type: none"> » AR40 dual diaphragm pump with gearbox, genuine Honda motor and ARG140 pressure regulator » Ideal for gun spraying in glasshouses, nurseries and on utility-mounted sprayer units » Very reliable for higher pressure applications where hand guns are used » Maximum pressure 40 bar, open flow 46.3L/min
AR70-5H	<ul style="list-style-type: none"> » AR70 dual diaphragm pump with gearbox, genuine Honda motor and ARECM-2 pressure regulator » Suited to boom spraying applications where spraying pressure required is under 10 Bar » Can also be used in spot spraying applications » Maximum pressure 20 Bar, open-flow 72 L/min
AR135-6H	<ul style="list-style-type: none"> » AR135 triple diaphragm pump with gearbox, genuine Honda motor and ARECM-2 pressure regulator » Suited to boom spraying applications where spraying pressure required is under 10 Bar » Ideal for booms up to around 18 metres in width mounted on utes or vehicles » Maximum pressure 20 Bar, open-flow 132 L/min

PETROL AND ELECTRIC DRIVE MODEL

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR252-4H	AR252 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure Regulator supplied and fitted to the pump	2,049.76	2,254.73	X
AR252-EM	AR252 pump powered by single phase electric motor. Installation required by a registered electrician. Pressure regulator supplied and fitted to the pump	1,410.53	1,551.58	X
AR30-EM	AR30 pump powered by single phase electric motor. Installation required by a registered electrician. Pressure regulator supplied and fitted to the pump	2,736.84	3,010.53	X
AR30-ET	AR30 pump powered by three-phase electric motor. Installation required by a registered electrician. Pressure regulator supplied and fitted to the pump	2,531.11	2,784.22	X
AR30-5H	AR30 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	2,592.35	2,851.58	X
AR40-6H	AR40 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	2,690.00	2,959.00	X
AR303-6H	AR303 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	2,262.20	2,488.42	X
AR70-5H	AR70 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	3,033.49	3,336.84	X
AR115-5H	AR115 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	3,469.85	3,816.84	X
AR135-6.5H	AR135 pump powered by Honda GX200QX Engine, rated at 4.1 kW. Pressure regulator supplied and fitted to the pump	3,469.85	3,816.84	X

PARTS AND ACCESSORIES

DIAPHRAGMS

ORDER CODE	DIAPHRAGMS FOR PUMP MODELS	MATERIAL	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR1040083	AR80LFP-C	BLUEFLEX	39.80	43.78	Y
AR550086	AR70, 115, 125, 135, 145, 160, 185, 250, 280, 370, 500 (20 Bar max), AR140FLP-C	HPDS	51.20	56.32	Y
AR620080	AR30 (40 Bar max), AR503 (50 Bar max)	GOMMA	31.20	34.32	Y
AR800086	AR19 and 252 (20 Bar max)	HPDS	25.94	28.53	Y
AR1040081	AR813, 1064 (50 Bar max), AR80LFP-C	GOMMA	35.51	39.06	Y
AR2240080	ARBHA140, BHS140, BHS160/170, BHS200 (50 Bar max)	GOMMA	44.59	49.05	Y



HPDS diaphragms – AR550086

VALVES

CODE	VALVES FOR PUMP MODELS	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR759051	AR70, 115, 125, 135, 145, 160, 185, 250, 280, 370, 500 (20 Bar max). ARBHA140, BHS140, BHS160/170, AR2HS200 (50 Bar max)	45.94	50.53	Y
AR1409050	AR30 (40 Bar max). AR503, 813, 1064 (50 Bar max)	32.16	35.38	Y
AR809060	AR252 (25 Bar max)	19.72	21.69	Y
AR2429050	AR80LFP-C, AR140FLP-C	46.74	51.41	Y



Valves – AR759051

VALVE O-RINGS

CODE	VALVE O-RINGS FOR PUMP MODELS	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AR680070	AR125, 145, 160, 185, 250, 280, 370, 500 (20 Bar max). ARBHA140, BHS140, BHS160/170, BHS200 (50 Bar max)	3.25	3.58	Y
AR320030	AR70, 115, 135 (20 Bar max)	3.25	3.58	Y
AR620030	AR30 (40 Bar max). AR503, 813, 1064 (50 Bar max)	2.01	2.21	Y
AR880830	AR252 (25 Bar max)	0.77	0.85	Y
AR3460240	AR80LFP-C, AR140FLP-C	8.91	9.80	Y



AR110121

DISCS

CODE	DISC FOR ARG140 REGULATOR	\$ (EX. GST)	\$ (INC. GST)	PROD CAT
AR110121	Vulkulan disc	10.15	11.17	Y
AR1922	5 pack of Vulkulan discs	43.44	47.78	Y

REPAIR KITS

CODE	COMMON REPAIR KITS	\$ (EX. GST)	\$ (INC. GST)	PROD CAT
PR66	2 X AR550086 for AR70 pump	99.81	109.79	Y
PR67	4 valves and O-rings for AR70	187.27	206.00	Y
AR2374	Kit (8 x 680070 and 8 x 759051) for 4-diaphragm pumps	369.66	406.63	Y
AR1917	Valve and O-rings kit for AR30	182.29	200.52	Y
AR1925	Kit reg overhaul (GI40) for ARG140 regulator	57.42	63.16	Y



AR1434

SAFETY RELIEF VALVES

CODE	SAFETY RELIEF VALVES	\$ (EX. GST)	\$ (INC. GST)	PROD CAT
AR1432	Valve safety (20 Bar) – safety relief valve with reset	58.47	64.32	Y
AR1433	Valve safety (40 Bar) – safety relief valve with reset	60.96	67.06	Y
AR1434	Valve safety (50 Bar) – safety relief valve with reset	60.96	67.06	Y



AR pump with gearbox fitted

GEAR BOXES





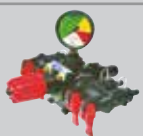



CODE	COMMONLY USED GEARBOXES FOR AR PUMPS	\$ (EX. GST)	\$ (INC. GST)	PROD CAT
AR1613	Gearbox (AR19/202/252 1:4.3)	443.54	487.89	Y
AR1636	Gearbox (AR30 1:5.9)	788.52	867.37	Y
AR1639	Gearbox (AR50/503/703 and 904 1:5.9)	862.39	948.63	Y
AR1671	Gearbox (AR70/115/120 1:5.9)	960.96	1,057.06	Y



For more information, refer to Croplands Components Guide online visit www.croplands.com.au



MANUAL CONTROL VALVES AND REGULATORS

	ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	ARGR30	Controller for AR252 pump, max flow 40 L/min, maximum operating pressure 25 Bar (360 psi). Mounting kit not included. (*See AR892 for remote mount kit.)	131.11	144.22	Y
	AR892	Remote mount kit for ARGR30, includes mount plate and bolts, extra tap, hoesetails and inlet/outlet fitting	76.84	84.52	Y
	ARGI40	3-outlet (2-taps supplied) manual controller suited to the AR30 pump. Can be pump mounted or remote mounted*. (*See AR980 for remote mount kit). Max flow 80 L/min, maximum pressure 40 Bar (580 psi)	220.09	242.10	Y
	AR980	Remote mount kit for ARG140, includes mount plate and bolts, extra tap, hoesetail and inlet/outlet fitting	95.69	105.26	Y
	ARRM40I	Two-way controller to suit AR503 pump. Can be pump mounted or remote mounted*. (*See AR985 for remote mount kit.) Max flow 90 L/min, maximum pressure 40 Bar (580 psi)	248.80	273.68	Y
	AR985	Remote mount kit for ARRM40I, includes mount plate and bolts, extra tap, hoesetails and inlet/outlet fitting	93.49	102.84	Y
	ARVDR50	Two-way controller to suit AR813 or AR1064 pump. Can be pump mounted or remote mounted*. (*See AR998 for remote mount kit.) Max flow 130 L/min, maximum pressure 50 Bar (725 psi)	464.12	510.53	Y
	AR998	Remote mount kit for ARVDR50, includes mount plate and bolts, extra tap, hoesetails and inlet/outlet fitting	110.91	122.00	Y
	ARECM-4	Remote mount 4-way controller suitable for most 20 Bar rated diaphragm pumps. 4 individual shut-off taps and gauge fitted. Comes with remote mount plate fitted. Max flow 150 L/min, maximum pressure 20 Bar (290 psi). 2-tap version also available	389.47	428.42	Y
	ARUCM-5	Remote mount 5-way controller suitable for most 20 Bar rated diaphragm pumps. 5 individual shut-off taps, master shut-off lever and gauge fitted. Comes with remote mount plate fitted. Max flow 150 L/min, maximum pressure 20 Bar (290 psi). 2-tap and 6-tap version also available. Fitted as standard on all AgriPak linkages	637.32	701.05	Y
	ARIDROM-4	Remote mount pressure compensating 4-way controller suitable for most 20 Bar rated diaphragm pumps. Bypass taps on each section can be adjusted for pressure compensation of +/- 15%. 4 individual shut-off taps, master shut-off lever and gauge fitted. Comes with remote mount plate fitted. Max flow 150 L/min, maximum pressure 20 Bar (290 psi). 2-tap and 6-tap version also available	973.21	1,070.53	Y
	ARBMH50	Two-outlet manual controller suited to high pressure 50 Bar rated diaphragm pumps. Rotary selector lever controls individual left and right shut-off or master shut-off with either pressure bypass or non-pressure bypass. Can be pump mounted or remote mounted*. (*See AR996 for remote mount kit.) Max flow 200 L/min, maximum pressure 50 Bar (725 psi)	590.43	649.47	Y
	AR996	Remote mounting kit for ARBMH50 controller includes mount plate and bolts, hoesetails and inlet/outlet fitting	50.05	55.06	Y

HYPRO PUMPS

NEW TECHNOLOGY

LIFE GUARD SILICON CARBIDE PUMP SEALS

Croplands stocks a good range of Hypro pumps for agricultural sprayers – mostly with Life Guard seals fitted. Stocking pumps with this seal material helps our customers with a pump that will last longer and help resist seal failure.

Typically, the standard seal will fail quite quickly if the pump is run dry for long. Life Guard seals dramatically improve the dry-run survivability of the seal in the case where a pump is run dry for any reason.

The Life Guard seal is much more resistant to abrasive products as well, improving the working life of the pump.



9310 SERIES FORCEFIELD CENTRIFUGAL PUMPS

ForceField Technology is a superior wet seal technology that provides the ultimate protection for the mechanical seal and avoids costly downtime.

It protects the mechanical seal against common failures related to dry run and chemical bonding by using a barrier fluid to keep it cool and lubricated

ForceField Centrifugal Pumps actively maintain a pressure differential between the barrier fluid and the pumping solution, which results in longer life and worry free operation.






HYPRO CENTRIFUGAL PUMP MODELS

ORDER CODE	SPECIFICATIONS	OUTPUT AND INPUT INFORMATION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
9203C-B	<ul style="list-style-type: none"> 9203C series pedestal-mount centrifugal pump Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Shaft rotation: counter clockwise when looking at the shaft-end Port sizes: 1-½" NPT inlet; 1-¼" NPT outlet Input shaft size: 5/8" (15.9mm) solid shaft Weight: 8.6kg Fitted to a number of OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 11.7 Bar (170 psi) Max L/min flow: 530 Max RPM: 6000 435 L/min flow at 2.8 Bar pressure and 4200 RPM 	852.58	937.84	X
9203C-BR	<ul style="list-style-type: none"> As for the model 9203C-B but with clockwise rotation Preferred pump for many OEM sprayers Suits 4000 series Spra-Coupe models 	<ul style="list-style-type: none"> As for model 9203C-B 	868.95	955.84	X
9303C-HM1C-B	<ul style="list-style-type: none"> 9303C series pedestal-mount centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Liquid Port sizes: 1-½" NPT inlet; 1-¼" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 11.8kg Fitted to a number of OEM sprayers Fitted standard to Croplands 4000 and 6000 litre WEEDit sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9 Bar (130 psi) Max L/min flow: 432 Max hyd flow required: 49.2 L/min 397 L/min flow at 3.4 Bar pressure and 45.4 L/min hydraulic flow 	1,695.09	1,864.60	X
9313C-M08	<ul style="list-style-type: none"> ForceField-equipped upgrade option for 9303C-HM1C (and B) pump models – see above 	<ul style="list-style-type: none"> Max pressure: 9.4 Bar (137 psi) Max L/min flow: 712 Max hyd flow required: 49.2 L/min 	2,557.74	2,813.51	X





ORDER CODE	SPECIFICATIONS	OUTPUT AND INPUT INFORMATION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
9303C-HM5C-B 	<ul style="list-style-type: none"> 9303C series pedestal-mount centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Liquid port sizes: 1–½" NPT inlet; 1–¾" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 11.8kg Fitted to a number of OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 10 Bar (145 psi) Max L/min flow: 556 Max hyd flow required: 60.6 L/min 450 L/min flow at 4.1 Bar pressure and 56.8 L/min hydraulic flow 	1,695.09	1,864.60	X
9303C-HM5C-B-SP 	<ul style="list-style-type: none"> 9303C series pedestal-mount self-priming centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Liquid port sizes: 1–½" NPT inlet; 1–¾" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 17.3kg Fitted to a number of OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9.7 Bar (140 psi) Max L/min flow: 530 Max hyd flow required: 60.5 L/min 356 L/min flow at 3.4 Bar pressure and 53 L/min hydraulic flow 	2,250.88	2,475.97	X
9303S-HM5C 	<ul style="list-style-type: none"> 9303S stainless steel series pedestal-mount centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Stainless steel housing with polypropylene impeller Liquid port sizes: 1–½" NPT inlet; 1–¾" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 11.8kg Preferred pump for many OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 10 Bar (145 psi) Max L/min flow: 556 Max hyd flow required: 49.2 L/min 450 L/min flow at 4.1 Bar pressure and 56.8 L/min hydraulic flow 	2,811.73	3,092.90	X
9306C-HM5C-B 	<ul style="list-style-type: none"> 9306C series pedestal-mount centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Liquid port sizes: 2" NPT inlet; 1–½" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 15kg Fitted to a number of OEM sprayers Suits RG series RoGator sprayer models – replaces part number AC579304D1 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9.6 Bar (140 psi) Max L/min flow: 803 Max hyd flow required: 64.4 L/min 803 L/min flow at 4.1 Bar pressure and 60.6 L/min hydraulic flow Internal threaded 	1,957.92	2,153.71	X
9306S-HM5C-3U 	<ul style="list-style-type: none"> 9360S series centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Stainless steel housing with nylon impeller Liquid port sizes: 300 x 220 (3U) universal flange Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 15kg Fitted to a number of OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9.6 Bar (140 psi) Max L/min flow: 1181 Max hyd flow required: 64.4 L/min 1018 L/min flow at 3.4 Bar pressure and 60.6 L/min hydraulic flow 	3,519.72	3,871.69	X

HYPRO PUMPS

ORDER CODE	SPECIFICATIONS	OUTPUT AND INPUT INFORMATION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
9306C-HM5C-3U	 <ul style="list-style-type: none"> 9306C series centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Cast iron housing with nylon impeller Liquid port sizes: 300 x 220 (3U) universal flange Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 15kg Fitted to a number of OEM sprayers 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9.6 Bar (140 psi) Max L/min flow: 1181 Max hyd flow required: 64.4 L/min 1018 L/min flow at 3.4 Bar pressure and 60.6 L/min hydraulic flow 	2,133.27	2,346.60	X
9316C3U-M10	 <ul style="list-style-type: none"> ForceField equipped upgrade option for 9306C-HM5C-3U pump 	<ul style="list-style-type: none"> Suits WEEDit Sprayers 	2,779.05	3,056.96	X
9306S-HM5C	 <ul style="list-style-type: none"> 9306S series pedestal-mount stainless steel centrifugal pump with hydraulic motor fitted (for open centre, closed centre and load-sensing systems) Equipped with Life Guard seals for longer seal life Stainless steel housing with polypropylene impeller Liquid port sizes: 2" NPT Inlet; 1-½" NPT outlet Hydraulic motor: internal gear gerotor; max motor psi = 3000 Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Hydraulic motor seal: double-lip Teflon Weight: 15kg Fitted to a number of OEM sprayers Optional stainless steel pump for Croplands WEEDit 7000 litre sprayer (replaces cast iron 9306C-HM5C-BU – 2 pumps fitted standard) Suits RG series RoGator sprayer models as a stainless steel option – replaces part number AC579304D1 	<ul style="list-style-type: none"> Max fluid temp: 60° C Max pressure: 9.6 Bar (140 psi) Max L/min flow: 803 Max hyd flow required: 64.4 L/min 803 L/min flow at 4.1 Bar pressure and 60.6 L/min hydraulic flow 	3,292.09	3,621.30	X

POLY TRANSFER PUMPS

ORDER CODE	SPECIFICATIONS	OUTPUT AND INPUT INFORMATION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
9342P-HM5C-5SP	 <ul style="list-style-type: none"> Poly transfer pump, 2" with hydraulic motor drive Polypropylene housing Suction lift 7.62 metres 5-vane impeller 2" NPT inlet and 2" NPT outlet ports Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Optional for Croplands 4000 and 6000 litre WEEDit® sprayers as a filling pump 	<ul style="list-style-type: none"> Max pressure: 4 Bar (58 psi) Max L/min flow: 757 Max hyd flow required: 42 L/min 	1,337.96	1,471.75	X
9343P-GM10-SP	 <ul style="list-style-type: none"> Poly transfer pump, 3" with hydraulic motor drive Polypropylene housing Suction lift 7.62 metres Poly impeller with stainless steel insert 3" NPT inlet and 3" NPT outlet ports Hydraulic ports: ½" NPT inlet, ¾" NPT outlet Optional for Croplands RoGator sprayers as a filling pump 	<ul style="list-style-type: none"> Max pressure: 3 Bar (44 psi) Max L/min flow: 1730 Max hyd flow required: 60 L/min 	2,092.46	2,301.71	X

Hypro pumps are fitted standard to Croplands RoGator self-propelled sprayers. For information on which models suit the various models of RoGators, contact Croplands or your local Croplands self-propelled dealer.



SHURflo

The Croplands range of 12-volt pumps includes popular models from SHURflo – the leading supplier of diaphragm pumps for agriculture and turf applications. These 12-volt models are commonly used on spot sprayers and small multi-tip boom sprayers.

We have included two heavier duty pumps to accommodate the needs of customers using their pumps in more demanding conditions. The higher flow 5059 series allows for continuous spraying for small booms up to approximately 6 metres – ideal for use in RTV and ATV vehicles, the back of utility vehicles, and small trailed sprayers. This pump model will perform very well in these situations and would be an ideal replacement if you have had failures with your existing set-up in the past.

We also have the fin-cooled high flow SHU2088-313-145 pump. It can handle tough going and is already proving very popular in the hot climates of Northern Australia on planters and in small boom situations. For really tough conditions, consider this model.

PUMP MODEL	DESCRIPTION	MAX L/MIN (OPEN FLOW)	MAX PRESSURE PSI	MAX PRESSURE BAR	PORT SIZE	MAX AMPS	PRESSURE SWITCH	INTERNAL BYPASS	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SHU8000-547-189	 <ul style="list-style-type: none"> • SHURflo 12-volt DC bypass diaphragm pump • Santoprene diaphragm; Viton valves • 12-volt sealed motor • Self-priming to 2.4 metres • Proven pump head design • Internal bypass for smooth flow operation • Ag-chemical resistant materials 	6.8	107	7.4	½" M	7.3	✓	✓	111.40	122.54	X
SHU2088-343-135	 <ul style="list-style-type: none"> • SHURflo 12-volt DC auto-demand diaphragm pump • Santoprene diaphragm; Viton valves • Self-priming to 3.7 metres • Can run dry without damage • Built in check valve • Ag-chemical resistant materials 	11.4	40	2.8	½" M	9.5	✓	×	204.50	224.96	X
SHU2088-313-544	 <ul style="list-style-type: none"> • SHURflo 12-volt DC bypass diaphragm pump • Santoprene diaphragm; Viton valves • 12-volt sealed motor • Self-priming to 2.4 metres • Proven pump head design • Internal bypass for smooth flow operation • Ag-chemical resistant materials 	15.1	45	2.5	½" M	13	✓	✓	271.82	299.00	X
SHU50593611D011	 <ul style="list-style-type: none"> • SHURflo 12-volt DC bypass diaphragm pump • Santoprene diaphragm; Viton valves • 12-volt sealed motor • Self-priming to 2.4 metres • Proven pump head design • Internal bypass for smooth flow-operation 	20.1	90	6.2	½" M	20.9	×	✓	277.40	305.14	X
SHU255-613	 <ul style="list-style-type: none"> • SHURflo bowl strainer • 50 mesh screen • ½" male inlet, ½" female outlet • Viton o-ring 								24.68	27.15	Y

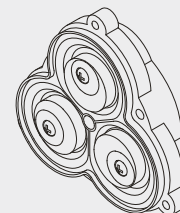
SHURFLO PUMP ACCESSORIES AND PARTS

ORDER CODE	DESCRIPTION
SHU234-2926	½" NPT – 14 female x 12mm (½") straight swivel barb (polypropylene)
SHU234-2916	½" NPT – 14 female x 10mm (¾") straight swivel barb (polypropylene)
SHU244-5286	½" NPT – 14 male x ¾" coupling/adaptor (polypropylene)
SHU234-3926	½" NPT – 14 female x 12mm (½") elbow swivel barb (polypropylene)
SHU234-3916	½" NPT – 14 female x 10mm (¾") elbow swivel barb (polypropylene)
SHU234-KIT	2 of each part numbers SHU234-2926, SHU234-2916, SHU244-5286, SHU234-3926, SHU234-3916



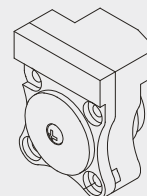
DIAPHRAGM/DRIVE ASSEMBLY KIT

PUMP MODEL	PART ORDER CODE
SHU8000-547-189	SHU94-385-32
SHU2088-343-135	SHU94-238-03
SHU5059-1311-D011	SHU94-910-04



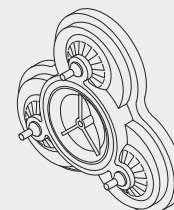
PRESSURE SWITCH KIT

PUMP MODEL	PART ORDER CODE
SHU8000-547-189	SHU94-229-08
SHU2088-343-135	SHU94-230-36
SHU5059-1311-D011	SHU94-910-02



VALVE ASSEMBLY KIT

PUMP MODEL	PART ORDER CODE
SHU8000-547-189	SHU94-391-46
SHU2088-343-135	SHU94-232-05
SHU5059-1311-D011	SHU94-910-05



CHECK VALVE KIT

PUMP MODEL	PART ORDER CODE
SHU8000-547-189	SHU94-374-08
SHU2088-343-135	SHU94-237-05
SHU5059-1311-D011	SHU94-910-03

SHURflo

TYPICAL SET UP OF SHURFLO PUMP



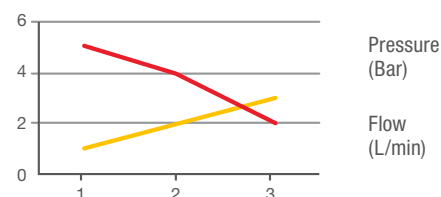
5059 series pumps fitted to Croplands UA300B/20S/4BX model (as pictured above).



FLOJET PUMPS

The FloJet range of 12-volt pumps is designed for small spot spraying and boom spraying operations. FloJet pumps perform well if used correctly and flushed out after use.

Note that FloJet pumps are rated for intermittent use. Also, all flow ratings in the information below are described as open-flow at zero pressure. The graph at right – for the FL3501-506 model – shows that when pressure is demanded from a FloJet pump, flow decreases. This should be taken into account when planning which pump is suitable for your application.



TRIPLEX AND PENTAFLEX MODELS

3501 Triplex Pump

FL3501-506

- Fully sealed motor for corrosion resistance
- Pressure switch for spot spraying and an internal bypass to ensure pump does not pulsate with small nozzle sizes
- Low pulsation and noise
- Superior pump head sealing
- Excellent priming
- Compact size
- 3/8" threaded ports for use with hositails or threaded nipples

Ideal for small boom or spot spraying and some other agricultural uses.



3521 Triplex Pump

FL3521-139

- Maximum flow of 15.1 L/min (open-flow)
- Internal bypass gives this model superior, smooth liquid delivery for multiple nozzles
- Plug-in bayonet connections (1/2") with quick release clips

Suited for small booms and high volume spot spraying. Triplex design makes it an excellent priming option.



PUMP MODEL	WITH PRESS. SWITCH	MAX L/MIN (OPEN FLOW)	VOLTS	MAX PRESS. (BAR)	INLET AND OUTLET	INTERNAL BYPASS	DIAPHRAGM MATERIAL	VALVE MATERIAL	AMPS	PUMP \$ (EX. GST)	PUMP \$ (INC. GST)	PROD. CAT.
FL3501-506	Yes	7.8	12V DC	3.4	3/8" hosebarb	Yes	S	S	8	238.27	262.10	Y
FL3521-139	Yes	15.1	12V DC	4	Plug-in bayonet and 1/2" hosebarb	Yes	S	V	9	314.83	346.31	Y

Note: All FloJet diaphragm pumps are rated for intermittent use.

DIAPHRAGMS

PUMP MODEL	PART NO.
FL3501-506	FL20419-012
FL3521-139	FL20419-015

PRESSURE SWITCHES

PUMP MODEL	PART NO.
FL3811-133	FL02091-150
FL3501-506	FL02091-060
FL3521-139	FL02091-060

VALVES

PUMP MODEL	PART NO.
FL3811-133	FL20407-022
FL3501-506	FL20407-033
FL3521-139	FL20407-021



Diaphragm



Pressure switch



Valve

NEW

500 AND 300 FERTILISER AND SEED SPREADER



QUICK GUIDE

AGR-XT300C and AGR-XT500C include:

- » Spun steel hopper, epoxy coated for maximum corrosion resistance
- » Ideal for spreading in pastures, crops, turf areas and fields
- » Ruggedly built – made of STEEL
- » Sealed gearbox rated for the towing load
- » Stainless steel spinner and vanes fitted as standard equipment
- » Clevis hitch standard, ball-coupling optional at extra cost
- » Agitator optional at extra cost
- » AGR-XT300C
 - » Standard with easy to reach shutter control lever – ideal for use with your ATV 4-wheeler
 - » 250 litre capacity, maximum payload 300kg
 - » Dry weight: 111kg
- » AGR-XT500C
 - » Standard with remote-mount manual shutter control – perfect for use with your RTV
 - » 350 litre capacity, maximum payload 400kg
 - » Dry weight: 115kg



AGR-XT500C

DID YOU KNOW?

Croplands range of spreaders are fully tested using the industry standard salt-spray test to ensure corrosion resistance from new.

ACCESSORIES

MECHANICAL REMOTE CONTROL



AGR-COM1000V27

AGITATOR FOR USE WITH SOME FERTILISER PRODUCTS



AGR-PA251400

DOUBLE-SIDED CONVEYOR



Conveyor shown fitted to the XA500 spreader for illustration purposes only.

AGR-CON8000V02

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AGR-XT500C	350 litre trailed fertiliser spreader complete	2,869.85	3,156.84	W
AGR-XT300C	250 litre trailed fertiliser spreader complete	2,200.00	2,420.00	W
AGR-COM1000V27	Remote control for 350 litre 3-PTL linkage spreader	573.21	630.53	W
AGR-CON8000V02	Double-sided conveyor	668.89	735.78	W
AGR-PA251400	Agitator for hopper on 350 litre 3-PTL linkage spreader	94.74	104.21	W
AGR-XA500T	Hopper cover to suit XA500 spreader	286.13	314.74	W



TRAILED 150 FERTILISER AND SEED SPREADER

The AGR-SP150C trailed spreader has a 150 litre capacity hopper capable of carrying up to approximately 180kg of fertiliser, depending on the material you are spreading. This unit is ideal for small holdings, turf areas, sports grounds and lifestyle farms for use with a ride-on mower, ATV 4-wheel motorcycle or RTV vehicle. It is not suitable on hill country but ideal on flat or gently undulating areas. If kept clean, the 150 trailed spreader should give years of use.



AGR-SP150C

QUICK GUIDE

- » Spun steel hopper with epoxy coated hopper for excellent resistance to corrosion
- » Pressed, epoxy coated tubular frame for strength and long life
- » Aluminium-cased gearbox with sealed bearings
- » 15 x 6.00 pneumatic 2-ply turf tyres
- » Adjustable height drawbar with 5 height settings
- » 5-position adjustment for output utilising a simple lever and preset locking nut
- » Length = 1,520mm
- » Height = 1,110mm
- » Width = 830mm
- » Weight (empty) = 41kg
- » Max Load = 180kg

FERTILISER TYPE	TYPICAL SPEED RANGE (KM/HR)	APPROX SPREADING WIDTH* (METRES)
Coarse Grain Fertiliser	8-12	6-8
Medium Grain Fertiliser	8-12	5-7
Fine Grain Fertiliser	8-12	5-6
Medium Grain Crystalline Fertilisers	8-12	4-5
Ammonium Sulphate	8-12	6-8

DID YOU KNOW?

Croplands range of spreaders are fully tested using the industry standard salt-spray test to ensure corrosion resistance from new.

ACCESSORIES

MECHANICAL REMOTE CONTROL



AGR-COM1000V27

TRAILER HITCH COUPLING



AGR-10330001

AGITATOR



AGR-SPA001V30

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AGR-SP150C	150 litre trailed fertiliser spreader complete	1,281.34	1,409.47	W
AGR-COM1000V27	Remote control for 150 litre trailed spreader	573.21	630.53	W
AGR-SPA001V30	Agitator for hopper on 150 litre trailed spreader	94.74	104.21	W

3 POINT LINKAGE 500 FERTILISER AND SEED SPREADER



The AGR-XA500C 3-point linkage spreader utilises a PTO (power take-off) drive system via a driveshaft which is supplied with the spreader. This turns the stainless steel spinner for spreading fertiliser or seed. Ruggedly built with a spun-steel epoxy coated hopper, this unit is ideal for small tractors capable of carrying up to around 400kg on the linkage with a 540RPM PTO-spline drive to operate the spreader. This unit will be ideal for small farms, grasslands, cropping areas, turf areas and pasture. For row crops, there is an optional double sided conveyor available.



Croplands AGR-XA500C is fitted with a stainless steel spinner – as pictured right.



QUICK GUIDE

- » Spun steel hopper with epoxy coating for excellent resistance to corrosion
- » Pressed, epoxy coated tubular frame for strength and long life
- » Aluminium-cased gearbox with sealed bearings
- » Stainless steel spinner with adjustable stainless steel vanes
- » Filtering grid in the hopper
- » Optional articulated agitator, remote control, double sided conveyor and filtering grid for the hopper
- » Easy-to-reach 5-position adjustment for output utilising a simple lever and preset locking nut
- » Length = 1,230mm
- » Height = 1,140mm
- » Width = 1,190mm
- » Weight (empty) = 63.5kg
- » Max Load = 400kg
- » Capacity = 350 litres

FERTILISER TYPE	TYPICAL SPEED RANGE (KM/HR)	APPROX SPREADING WIDTH* (METRES)
Coarse Grain Fertiliser	4–16	15–18
Medium Grain Fertiliser	4–16	14–16
Fine Grain Fertiliser	4–16	10–12
Medium Grain Crystalline Fertilisers	4–16	6–8
Ammonium Sulphate	4–16	8–10

ACCESSORIES

MECHANICAL REMOTE CONTROL



AGR-COM1000V27

AGITATOR FOR USE WITH SOME FERTILISER PRODUCTS



AGR-PA251400

DOUBLE-SIDED CONVEYOR



Conveyor shown fitted to the XA500 spreader for illustration purposes only.

AGR-CON8000V02

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
AGR-XA500C	350 litre 3-PTL linkage spreader	1,100.47	1,210.52	W
AGR-COM1000V27	Remote control for 350 litre 3-PTL linkage spreader	573.21	630.53	W
AGR-CON8000V02	Double-sided conveyor	668.89	735.78	W
AGR-PA251400	Agitator for hopper on 350 litre 3-PTL linkage spreader	94.74	104.21	W
AGR-XA500T	Hopper cover to suit XA500 spreader	289.13	318.04	W



TANK AND EQUIPMENT CLEANER, SPRAYSUITS AND GLOVES

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H9704	Spraymate tank and equipment cleaner, 600g	33.49	36.84	X
L-H230*	Disposable protective suit. Suitable for single or limited repeat use for protection against dust while mixing chemicals. Not rainfast. *Denotes size as follows: 1 = Medium; 2 = Large; 4 = XL; 5 = XXL	18.18	20.00	X
L-H700*	Nitrile protective spray gloves, 330mm. *Denotes size as follows: 3 = size 10; 5 = size 11	9.57	10.53	X
L-H710*	Nitrile protective spray gloves, long, 460mm. *Denotes size as follows: 2 = size 9; 3 = size 10; 4 = size 11	24.88	27.37	X

TANK CLEANER

- » Thoroughly clean your sprayer when changing from one pesticide to another with Spraymate™ tank and equipment cleaner
- » Powerful detergents remove residues from inaccessible areas in the tank and spray lines
- » It also removes rust and hard water scale and leaves a protective film to prevent corrosion during storage, prolonging the life of your sprayer



L-H9704

COVERALLS

- » Tyvek® Barrier Man Coveralls are disposable coveralls designed to protect workers from hazardous materials, or sensitive products and processes from contamination by people. Available in white, sizes medium to XXL
- » Please specify size



L-H230

GLOVES

- » Offers resistance to solvents and oils with good flexibility and dexterity. Excellent abrasion and puncture resistance
- » Sizes: 9–11. Please specify size





L-H700

RESPIRATORS AND PROTECTIVE MASKS

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H3016	K80-T9R respirator complete with helmet, blower unit and belt, single filter and 12-volt cable-charger for connection to a continuous 12-volt power source such as a tractor or vehicle. This unit will operate for approximately 30 minutes without the 12-volt power source from a small battery in the blower unit. Optional 240-volt charger available to charge the battery for 30 minutes of use if required as a stand-alone function. Designed to be continuously powered while in use. Agricultural use only	1,674.64	1,842.11	W
L-H3017	K80-T5 respirator complete with helmet, blower unit and belt, single filter and rechargeable battery pack – also carried on the belt. Designed to be charged overnight and powered by the battery pack during use. Approximately 6 hours operating time for 1 overnight charge. This will diminish as batteries degrade. For agricultural use only. Unit not pictured	1,674.64	1,842.11	W

KASCO FILTER GUIDE

ORDER CODE	DESCRIPTION	CLASS	COLOUR ON CARTRIDGE	PROTECTION AGAINST	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
KASCO-0601/19	ZA2P3 Filter	P3R		Particles, liquid and solid aerosols, organic vapours and gases	115.79	127.37	X
KASCO-0601/25	ZA2B2P3 Filter	A2P3R		Particles, liquid and solid aerosols, organic vapours and gases, inorganic vapours and gases. Suitable for HiCane use	266.65	293.32	X



L-H3300

Please note: once opened replace after 6 months



KASCO-0601/19



L-H3016

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H3300	SR100 silicone mask for superior face seal. Double anti-clog exhaust valves, filter not included	150.24	165.27	X
L-H3500	Particle filter P3 (210/310) particles, wet and dry dust, aerosols, mould, bacteria, viruses, smoke, mist and fumes	47.84	52.63	X
L-H3501	Pre-filter 221-1 (pack of 10)	11.48	12.63	X
L-H3502	Gas filter A1 (217) organic vapour such as solvents – regular capacity	56.46	62.11	X
L-H3503	Gas filter A2 (218) organic vapour such as solvents – high capacity	61.24	67.37	X
L-H3505	Gas filter ABEK1 (297) organic vapour such as solvents and inorganic vapour, acid gas and ammonia	67.95	74.74	X

ELECTRIC CONTROLS AND VALVES



ELECTRIC CONTROL MANIFOLDS AND SWITCHBOXES

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A871CCR005	Control manifold for auto-rate controllers, for pumps up to 180 L/min, manual PRV, electric bypass (7 sec), dump valve, 80-mesh flushing filter, ARAG Wolf flowmeter, mounting brackets (boom shut-off valves not included)	1,179.91	1,297.90	X
A873CCR002	Control manifold for auto-rate controllers, for pumps up to 280 L/min, manual PRV, electric bypass (7 sec), dump valve, 80-mesh flushing filter, ARAG Wolf flowmeter, mounting brackets (boom shut-off valves not included)	1,205.74	1,326.31	X
G8380C0002	Control manifold for auto rate controllers, for pumps up to 180 L/min, manual PRV, electric by pass (7 section), dump valve, 80-mesh flushing filter, Geoline flowmeter, mounting brackets. (Boom shut off valves not included)	1,184.68	1,303.15	X
G8376088	Control manifold for basic electric control systems. Max flow 180 L/min, 20 Bar rated. Kit includes manual PRV, Regulating valve, dump valve, pressure filter and 3 proportional electric boom shut-off valves	1,237.32	1,361.05	X
G8376077	Control manifold for basic electric control systems. Max flow 180 L/min, 20 Bar rated. Kit includes manual PRV, Regulating valve, dump valve, pressure filter and 5 proportional electric boom shut-off valves	1,633.49	1,796.84	X
A4628707	Highly accurate programmable flowmeter with LCD display and sapphire bearing paddle turbine. 40–800 L/min reading of actual flow, or you can view litres pumped. 2 separately resettable counters. 2 x AA batteries required. Will require T7 male fittings (A249177)	953.11	1,048.42	Y
G8406008	3 section electric switch box and tractor cables. Requires GC00900009 valve cable to connect control manifold. Suitable for G8376088 control manifold	301.43	331.57	X
GC00900009	3 section 5 metre valve cable. Requires G8406008 electric switch box. Suitable for G8376088 control manifold	173.49	190.84	U
G8406010	5 section electric switch box and tractor cables. Requires GC00900011 valve cable to connect control manifold. Suitable for G8376077 control manifold	334.93	368.42	X
GC00900011	5 section 5 metre valve cable. Requires G8406010 electric switch box. Suitable for G8376077 control manifold	228.71	251.58	U

CONTROL MANIFOLD COMPONENTS

Valves, filters and flowmeters to repair/update your control manifold.

PART REF	ORDER CODE	DESCRIPTION	MAX PRESS	MAX FLOW	PORTS/BYPASS	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
1	A8710502	Dump valve/PRV/inlet assembly	20 Bar	180 L/min	32mm	370.34	407.37	X
2	A8630024S	Electric bypass valve, 7 second open/close	20 Bar	150 L/min	25mm	431.96	475.15	U
3	A32621135	80-mesh flushing filter with manifold flanges	20 Bar	150 L/min	40mm	105.36	115.89	V
4	A46264A0	Wolf Flow Meter 10/200L	20 Bar	200 L/min		475.60	523.16	Y
5	A8730001	Dump valve, hi-flow, 0.6 sec	20 Bar	120 L/min	32mm	430.43	473.47	U
6	A8730020S	Electric bypass valve, hi-flow, 7 second open/close	20 Bar	150 L/min	25mm	401.24	441.37	U
7	A465522	Manual PRV	20 Bar	200 L/min	32mm	123.44	135.79	X
8	A4626000.300	Sensor for Wolf Paddle Flow Meter	–	–	–	432.35	475.58	U
–	UP-402	Proximity sensor BA and HV4000	–	–	–	186.60	205.26	Y
9	A4626000.503	Paddle assembly for Wolf Flow Meter	–	–	–	213.78	235.16	U
10	G8370025	Manual main valve 3 wire				363.63	399.99	V
11	G8386006	Servo valve (7 section)				241.15	265.26	X
12	G8386004	Electric bypass valve, 28 second open/close				241.15	265.26	X
13	GS02000020	Flow sensor square wave				153.11	168.42	Y
14	GF01001000	Flow meter 10–100				473.68	521.05	Y
15	G8125013	Filter flange self clean				66.13	72.74	U



ELECTRIC AND MANUAL VALVE KITS

GEOLINE



G8372071
G8388002 G8388005

ARAG



A463051
A463CCR009



A8630001

A8630011



A463CCR010



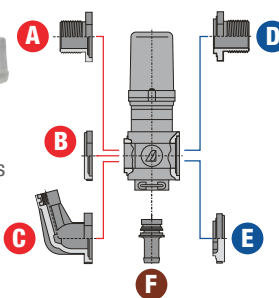
A863CCR006



A863CCR005



Valve mounting kits



Valve adaptors

VALVE MOUNTING KITS

To make up your own bank of 2-wire or 3-wire motor valves (see below for valve options), order the correct kit for bolts, nuts and O-rings as shown. For end-caps and inlet/outlet fittings, see the valve adaptors section below.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A463000.920	Kit for 2 valves, 150mm	35.02	38.52	U
A463000.930	Kit for 3 valves, 207mm	39.91	43.90	U
A463000.940	Kit for 4 valves, 264mm	45.84	50.43	U
A463000.950	Kit for 5 valves, 321mm	53.01	58.31	U
A463000.970	Kit for 7 valves, 436mm	68.71	75.58	U

VALVE ADAPTORS

On the inlet and outlet of each motor valve there is a range of adaptors and fittings commonly used to go with the mounting kit (above). Use the valve adaptors diagram above to choose the adaptors/fittings you require.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A463000.130	Male adaptor (A) 3/4" (BSP)	8.52	9.37	U
A463000.140	Male adaptor (A) 1" (BSP)	8.52	9.37	U
A463011.120	End cap (B)	2.68	2.95	U
A463011.130	Pressure gauge adaptor (C) 1/4" (BSP)	17.99	19.79	U
A463000.030	Male adaptor (D) 3/4" (BSP)	7.56	8.31	U
A463000.040	Male adaptor (D) 1" (BSP)	7.56	8.31	U
A463000.050	Male adaptor (D) 1 1/4" (BSP)	7.56	8.31	U
A463011.110	End cap (E)	3.63	3.99	U
A463001.113	Hosetail (F) 13mm	6.89	7.58	U
A463001.116	Hosetail (F) 16mm	6.89	7.58	U
A463001.119	Hosetail (F) 19mm	6.89	7.58	U
A463001.125M	Hosetail (F) 25mm	7.56	8.31	U
AG10071V	O-ring to suit 863 flanges (Viton)	6.22	6.84	U

ELECTRIC AND MANUAL VALVES

If you are updating your spraying control system, Croplands has a wide range of valves and valve kits to suit your application.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A8630011	Single electric boom shut-off valve, 3-wire for use with auto-rate controllers or basic electric controls, with bypass (suitable for 2 and 3-wire applications)	394.93	434.42	U
A8630001	Single electric boom shut-off valve, 3-wire for use with auto-rate controllers or basic electric controls (suitable for 2 and 3-wire applications)	370.91	408.00	U
A8730001	Electric boom shut-off valve, high flow (120 L/min), 3-wire for use with auto-rate controllers	430.43	473.47	U
A863CCRO05	Electric valve bank, 3-section complete with flushing tap, gauge port and mounting brackets	992.35	1,091.58	X
A863CCRO06	Electric valve bank, 5-section complete with flushing tap, gauge port and mounting brackets	1,597.13	1,756.84	X
A463CCRO09	2-bank manual valves complete with mounting brackets, 20 Bar	167.46	184.21	U
A463CCRO10	3-bank manual valves complete with mounting brackets, 20 Bar	260.28	286.31	U
A463051	Manual shut-off valve, 13mm tail, 20 Bar	57.42	63.16	V
A463050	Blank ARAG valves	45.94	50.53	V
G8372071	Electric valve bank, 5 section complete with gauge port and mounting brackets.	1,047.84	1,152.63	X
G8531032	Electric valve bank, 3 section complete with gauge port and mounting brackets. (Not pictured)	625.84	688.43	X
G8388005	Single electric boom shut off valve, 3 wire for use with auto rate controllers or basic electric controls, with bypass. (Suitable for 2 and 3 wire applications)	204.79	225.27	X
G8388002	Single electric boom shut off valve, 3 wire for use with auto rate controllers or basic electric controls (suitable for 2 and 3 wire applications)	194.26	213.69	X

ELECTRIC CONTROL KITS

If you need to upgrade your sprayer to control your boom or air-assisted sprayer, Croplands has the right range of electric controls to suit all applications. Options include 20 Bar rated systems for broadacre and low pressure air-assisted sprayers and 40 Bar rated systems for high pressure sprayers.

Also fitted as options to Croplands Linkage sprayers – see page 19.



I-E2032



I-E2012

ELECTRIC CONTROL KITS UP TO 20 BAR PRESSURE

(To suit linkage and boom sprayers; low-pressure air sprayers)

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
I-E2012	Entry level electric in-cab control with switchbox. One electric on/off valve shuts off the complete boom from the cab. 3 manual taps on the control manifold can be used for each boom section. A manual pressure regulator with gauge is supplied to allow working pressure to be set for the system	726.32	798.95	X
I-E2032	Electric in-cab controller with switchbox. 3-section electric valves for individual section shut off, electric pressure regulating valve and a master on/off can all be operated from the switchbox in the cab or vehicle. Requires a reliable 12-volt power supply	1,813.40	1,994.74	X
I-E2052	As above for 5-section control	2,291.86	2,521.05	X



I-S4021

ELECTRIC CONTROL KITS UP TO 40 BAR PRESSURE

(To suit high pressure orchard sprayers to 40 Bar)

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
I-S4020	Electric in-cab controller with switchbox. 2-section high-pressure electric valves for individual left/right shut off and a master on/off can all be operated from the switchbox in the cab. Requires a reliable 12-volt power supply	1,363.63	1,499.99	X
I-S4021	Electric in-cab controller with switchbox. 2-section high-pressure electric valves for individual left/right shut off, electric pressure regulating valve and a master on/off can all be operated from the switchbox in the cab or vehicle. Requires a reliable 12-volt power supply	2,464.12	2,710.53	X

SPRAY MONITORS AND AUTO SPRAY-RATE CONTROLLERS

To know your application rate, a spray monitor is a useful option to see speed, flow rate and spray application rate. For fully automatic spray rate control, Croplands has a number of excellent options to choose from to help your farming enterprise become more efficient.



A4670610-HA



SPRAY MONITORS

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
A4670610-HA	The Visio Hectare meter is a handy viewer to hook up to a vehicle or tractor to measure area, distance and speed. Supplied in the kit is the Visio multi-function display, mounting bracket and a speed-sensor that will need to be mounted to read the rotation of a wheel or PTO shaft	622.01	684.21	K
A4670610-SR100	The Visio spray monitor comes in a kit to fit up to a boom or orchard sprayer to measure spray application rate, litres used, area, distance and speed. Supplied in the kit is the Visio multi-function display, mounting bracket, speed-sensor that will need to be mounted to read the rotation of a wheel or PTO shaft, a 5–100 L/min flowmeter and all necessary cables. The kit will require some extra fittings to fit to an existing sprayer – consult your Croplands Dealer or service agent	1,233.49	1,356.84	K
A4670610-SR200	As above but with a higher flow rated flowmeter (10–200 L/min)	1,233.49	1,356.84	K



BRAVO180-ARAG3



BA5000-GEO3



HV2400-BRAG2

AUTO SPRAY-RATE CONTROLLERS

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
BA5000-GEO3	Croplands fully auto spray-rate controller for use on linkage sprayers. Optional as a fit-up to any new Croplands sprayer or as an upgrade to an existing sprayer. Features include: <ul style="list-style-type: none"> • Display of two functions on screen • Large back-lit display • Heavy duty switches • Up to 10 pre-set application rates • Fully programmable • Alarm settings and integrated diagnostics Kit includes: spray manifold with flowmeter, 3-section valve bank, looms, mount and operating instructions. The kit will require some extra fittings to fit to an existing sprayer – consult your Croplands Dealer or service agent Note: if you require a kit for a trailed broadacre sprayer, contact Croplands to ensure the correct length looms are supplied	3,244.02	3,568.42	K
BA5000-GEO5	As above but with 5 sections Note: if you require a kit for a trailed broadacre sprayer, contact Croplands to ensure the correct length looms are supplied	3,631.58	3,994.74	K
HV2400-BRAG2	Croplands fully auto spray-rate controller for use on horticultural sprayers. Has the same features as the BA5000 (specifications listed above) with the added option on Litres per 100 metres for application. Kit includes: spray manifold with flowmeter, 2-section high pressure valve bank, looms, mount and operating instructions. The kit will require some extra fittings to fit to an existing sprayer – consult your Croplands Dealer or service agent	3,826.79	4,209.47	K
HV2400-BRAG4	As above for horticulture but with 4 high pressure section valves	4,400.96	4,841.06	K
BRAVO180-ARAG3	ARAG Bravo180S fully auto spray-rate controller for use on linkage sprayers. Optional as a fit-up to any new Croplands sprayer or as an upgrade to an existing sprayer. Features include: <ul style="list-style-type: none"> • Display of two functions on screen • Large back-lit display • Heavy duty switches • Up to 10 pre-set application rates • Fully programmable • Visual and sound alarm settings • Programmable units of measure • GPS input for speed Kit includes: spray manifold with flowmeter, 3-section valve bank, looms, mount and operating instructions. The kit will require some extra fittings to fit to an existing sprayer – consult your Croplands Dealer or service agent Note: if you require a kit for a trailed broadacre sprayer, contact Croplands to ensure the correct length looms are supplied	4,554.06	5,009.47	K
BRAVO180-ARAG5	Same specifications as above with a 5-section valve bank	5,344.49	5,878.94	K

For more comprehensive information on auto-rate controllers, contact Croplands.

GPS GUIDANCE SYSTEMS



RV117-2295-001 – CR7



GD430-GLO-P-L – MATRIX 430



RXA-30

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
GD430-GLO-P-L	Portable, simple guidance Matrix 430 system for use in agriculture. 110mm (4.3") full colour, high-contrast touch-screen with on-screen numerical prompts. Minimal set up needed – guidance options include straight A-B, curved A-B, circle pivot and last pass. Handy return-to-point and boundary functions standard. Area counter displays applied area during operation and elapsed time counter measures current job-time. Standard with patch antenna for use where satellite reception is good. Optional RXA-30 antenna (listed below)	1,912.92	2,104.21	W
RXA-30	Upgrade antenna for Matrix 430 to improve GPS reception in areas where signal is weak. Enhances performance of the Matrix 430	764.59	841.05	W
RV117-2295-001	Raven CR7 system with a 7" field computer with customisable in-job layouts, ISO universal terminal and task controller capabilities, optional external GPS, compatible with direct injection, multi-product control including variable rate liquid, dry, and NH3 applications, slingshot – ready for file transfer, remote support, and OTA software updates. Simple to set up and operate, you'll be running confidently in minutes	3,489.92	3,838.91	X

TOOLS FOR ACCURATE SPRAYING

Croplands have a great range of extremely useful tools for checking or upgrading the performance of your sprayer. We provide advice and equipment to test and maintain your sprayer – to ensure your application is optimised. In the nozzle section to follow, on page 71 to 100, you will find some excellent information for determining your application options in broadacre and horticulture. Below you will find tools to make calibration and maintenance of your nozzles much easier.

ELECTRONIC SPRAY TIP PRESSURE TESTER

- » Can measure pressure in psi, kPa and Bar
- » Accurate to within +/- 1 psi, 0.07 Bar or 7kPa
- » 5 year battery life* (*depending on how much use)
- » Quick cap connector – easy fit up to the nozzle body
- » LCD display shows nozzle pressure and unit of measure
- » For test gauge use only – not for continuous use
- » Reads from 3 to 160 psi (11 Bar)
- » Absolutely foolproof



L-H9210

SPOT-ON CALIBRATOR

- » Waterproof design, no moving parts
- » Easy one-hand operation, electronic display
- » Reads in GPM or litres per minute
- » Accurate to 0.01 L/min
- » Battery life approx two years (has battery warning indicator)
- » Clear design allows for easy cleaning. Warning: only test your nozzles with water, not with mixed chemicals. Damage to the unit may occur



L-H9200

NOZZLE CLEANER AND NOZZLE CAP MULTI TOOL IN A HANDY PACK

- » Air-blast nozzle cleaner – simply charge it with air and it will blow out any grit or residue blocking your nozzle
- » Multi tool with brush, plastic pick for removing a pre-orifice or residue, spanner wrench to make undoing nozzles so much easier and a utility hook for removing nozzle filters and the like. A must for all farmers



L-H9220

WINDMATE™ HAND HELD WEATHER METER

- » Eight functions including temperature, wet bulb temperature, wind speed and direction, dewpoint, relative humidity, Delta T and comfort index. For more information see page 88 in the nozzle section
- » You simply cannot do without a WindMate™ to be sure you are spraying when conditions are right



L-H6001

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-H9210	Electronic pressure testing gauge	238.27	262.10	X
L-H9220	Nozzle cleaner and nozzle multi tool kit	94.74	104.21	X
L-H9200	Spot-on nozzle calibrator	324.40	356.84	X
L-H6001	WindMate™ hand held weathermeter	266.99	293.69	X



NOZZLE SELECTION AND SPRAYING



Spraying is a job that most farmers and growers do on a regular basis – whether it is for pest or disease control, selective or broadcast weed control, fertiliser applications or soil additives.

The key aspects of this part of farming are covered in the following sections:

BROADACRE SECTION

SprayWise Stewardship Program	71
Nozzle – Cereal Segment Guide	72–73
Nozzle Application Chart	74–75
Spray Quality Comparison Chart	76–77
Agrotop Nozzle Selection	78
ALBUZ Nozzle Selection	79
Hypro Nozzle Selection	80
TeeJet Nozzle Selection	81
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Tips For Selecting Nozzles – Broadacre	84–89
Wide Angle Flat Spray Nozzle	90
Fertiliser Nozzles	90

HORTICULTURAL SECTION

Specialised Nozzles – Off-centre, TurfJet, BoomJet, FloodJet	91
Orchard and Vineyard Nozzle Selection Guide	92–94
Ceramic Cone Nozzles for Tree and Vine Crops	95
Nozzle Bodies and Caps for Horticulture	96
Turbodrop® Narrow Angle Air-Induction Nozzles	97
Ceramic Disc and Core Nozzles with Application Chart	98
Spray Coverage in Horticulture	99

SPRAYWISE STEWARDSHIP PROGRAM

This stewardship program is a Nufarm initiative to encourage best practise spraying and drift management techniques. Since its introduction, SprayWise has been instrumental in raising awareness amongst the farming community about important spray application parameters. SprayWise consolidates various tools, research results and training courses into one program to assist farmers better manage their spraying activities.



AVAILABLE NOW – SPRAYWISE BROADACRE APPLICATION HANDBOOK

Used widely by most specialist application consultants and supplied with all Croplands Broadacre sprayers.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
SPRAYWISEBK	SprayWise Broadacre Application Handbook	22.73	25.00	W
SPRAYWISELOG	SprayWise Logbook	31.82	35.00	W
SPRAYWISEHK	SprayWise Horticulture Application Handbook	23.64	26.00	W



SprayWise Broadacre Application Handbook



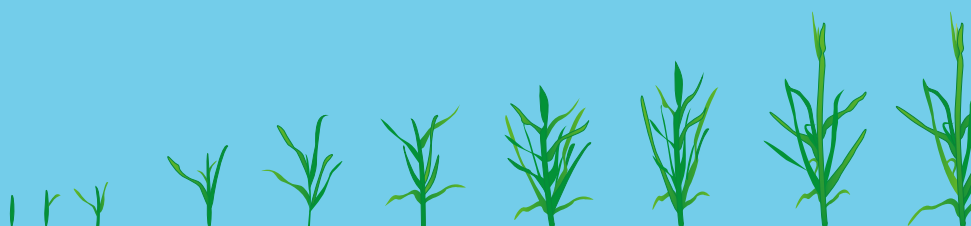
SprayWise Logbook



SprayWise Horticulture Application Handbook

NOZZLE – CEREAL SEGMENT GUIDE

PRODUCT RECOMMENDATION FOR
CEREAL CROPPING PROGRAM.



Growth Stage

Pre-plant

Emergence








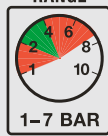



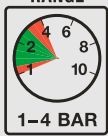
Tillering

Stem Elongation

Pre-emergent Nozzles

Pre-orifice Nozzles

Low Pressure Air-induction Nozzles

Pre-emergent Nozzles		Pre-orifice Nozzles		Low Pressure Air-induction Nozzles	
TURBODROP XL (D)	TTI TURBO TEEJET INDUCTION FLAT FAN TIP	GAT	ALBUZ ADI	TDAM	CVI
					
PRESSURE RANGE  1-8 BAR	PRESSURE RANGE  1-7 BAR	PRESSURE RANGE  2-6 BAR	PRESSURE RANGE  2-4 BAR	PRESSURE RANGE  1-7 BAR	PRESSURE RANGE  1-4 BAR
<ul style="list-style-type: none"> • Ideal pressure range: 2-4 Bar • Uses: weed control, plant health and liquid fertilisers • Up to 90% drift reduction 	<ul style="list-style-type: none"> • Ideal pressure range: 3-4 Bar • Uses: weed control and plant health, both contact and systemic 	<ul style="list-style-type: none"> • Ideal pressure range: 2-3 Bar 	<ul style="list-style-type: none"> • Ideal pressure range: 2-3 Bar • Uses: weed control and plant health 	<ul style="list-style-type: none"> • Ideal pressure range: 3-4 Bar • Uses: weed control and plant health 	<ul style="list-style-type: none"> • Ideal pressure range: 1.5-3 Bar • Uses: weed control and plant health
<ul style="list-style-type: none"> ✓ Variable droplet spectra from coarse to fine as pressure increases ✓ Excellent drift reduction at lower pressures ✓ Two-piece for easy disassembly ✓ Fast cap fitting 	<ul style="list-style-type: none"> ✓ Standard in Polymer ✓ High-pressure air-induction nozzle ✓ Two-piece with pre-orifice 	<ul style="list-style-type: none"> ✓ Two 110° air-induction flat fan nozzles directed at 30°, one forward one back ✓ Improves coverage on upright targets and soil clods ✓ New style fast-cap that suits Hypro, Arag and TeeJet nozzle holders 	<ul style="list-style-type: none"> ✓ Pink ceramic orifice for excellent wear and spray precision ✓ Compact design, easy to dismantle and clean ✓ Excellent coverage potential for selected use and the right spraying conditions 	<ul style="list-style-type: none"> ✓ Excellent value, proven performer ✓ Predominantly coarse-medium droplets for good coverage ✓ Compact design ✓ Protected air inlets to avoid blockage ✓ Two-piece for easy cleaning, no seals ✓ Also available as an off-centre nozzle 	<ul style="list-style-type: none"> ✓ Pink ceramic orifice for long life and precise spray quality ✓ Predominantly Very Coarse to Coarse ✓ Available in 80° and 110° ✓ Anti-clogging design and protected double air-intake orifice ✓ Compact design ✓ Also available as an off-centre nozzle





Heading

Ripening

Harvest

Fallow

Fungicide Nozzles

Pre-emergent Nozzles

CVI – TWIN



PRESSURE RANGE



- Ideal pressure range: 2 Bar
- Uses: contact and systemic products

- ✓ Pink ceramic orifice for long life and precise spray quality
- ✓ The inclination of the jets improves the penetration into the vegetation
- ✓ Air-induction nozzle
- ✓ Angle between the jets 65°

See pages 82–85 for spray quality data, flow rates and caps

TURBODROP XL (D)



PRESSURE RANGE



- Ideal pressure range: 2–4 Bar
- Uses: weed control, plant health and liquid fertilisers
- Up to 90% drift reduction

- ✓ Variable droplet spectra from coarse to fine as pressure increases
- ✓ Excellent drift reduction at lower pressures
- ✓ Two-piece for easy disassembly
- ✓ Fast cap fitting

TTI TURBO TEEJET INDUCTION FLAT FAN TIP



PRESSURE RANGE



- Ideal pressure range: 3–4 Bar
- Uses: weed control and plant health, both contact and systemic

- ✓ Standard in Polymer
- ✓ High-pressure air-induction nozzle
- ✓ Two-piece with pre-orifice

NOZZLE SELECTION AND SPRAYING

MODEL	NOZZLE SIZE	BAR	DUAL ANGLE NOZZLES		LOW PRESSURE AIR-INDUCTION				
			ALBUZ	HYPRO	AGROTOP	ALBUZ	HYPRO	HYPRO	TEEJET
			CVI-TWIN	Guardian Air Twin	AirMix®	CVI	Guardian Air	ULD-120	AIXR
									
01	1.5				M				
	2.0				M				
	3.0				F				
	4.0		Not available in this size	Not available in this size	F	Not available in this size	Not available in this size	Not available in this size	Not available in this size
	5.0				F				
	6.0								
	7.0								
	8.0								
015	1.5		VC			VC	UC	UC	VC
	2.0		VC		XC	VC	XC	XC	C
	3.0		VC		C	VC	C	VC	C
	4.0			Not available in this size	C		M	C	M
	5.0				C		M	C	M
	6.0				C		M	C	M
	7.0				M		M	M	M
	8.0						M	M	
02	1.5		VC			VC	XC	UC	VC
	2.0		VC	C	C	VC	VC	XC	VC
	3.0		C	M	C	C	M	C	C
	4.0			M	M		M	C	M
	5.0			M	M		M	M	M
	6.0			M	M		M	M	M
	7.0			F			M	M	
	8.0			F			M	M	
025	1.5		VC			VC	XC	XC	XC
	2.0		VC	UC	VC	VC	VC	XC	VC
	3.0		C	VC	C	C	C	C	VC
	4.0			M	C		M	C	C
	5.0			M	M		M	M	C
	6.0			M	M		M	M	M
	7.0			M			M	M	
	8.0			M			M	M	
03	1.5		VC			VC	UC	XC	XC
	2.0		VC	VC	VC	VC	XC	XC	VC
	3.0		C	C	C	C	VC	C	VC
	4.0			M	C		C	C	C
	5.0			M	C		M	M	C
	6.0			M	M		M	M	M
	7.0			M			M	M	
	8.0			M			M	M	
04	1.5		VC			VC	XC	UC	XC
	2.0		C	VC	VC	C	VC	UC	XC
	3.0		C	C	C	C	C	UC	VC
	4.0			M	C		M	XC	VC
	5.0			M	C		M	XC	C
	6.0			M	M		M	VC	C
	7.0			M			M	C	
	8.0			M			C	C	
05	1.5		VC			VC	XC	UC	XC
	2.0		C		VC	C	VC	UC	XC
	3.0		C		C	C	C	XC	VC
	4.0			Not available in this size	C		C	XC	VC
	5.0				M		C	VC	C
	6.0				M		M	VC	C
	7.0						M	C	
	8.0						C	C	

NOTE: SPRAY QUALITY DATA may appear finer than previous versions of this chart as manufacturers undertake new testing requirements. All data has been sourced from the manufacturer's websites as at May 2017 (date catalogue sourced from was published is listed in the chart), except for Agrotop TurboDrop TD (iso exit) and AirMix® which were sourced from Nufarm SprayWise Publications, published 2012. ? = data not published. Always check current spray quality information according to ASABE 572.1 or BCPC for older data. Compiled and updated by bill.gordon@au.nufarm.com 0418 794 514



MODEL	NOZZLE SIZE	BAR	HIGH PRESSURE AIR-INDUCTION					PRE-ORIFICE		INCLINED FLAT FAN
			ALBUZ	AGROTOP	AGROTOP	TEEJET	TEEJET	ALBUZ	TEEJET	HYPRO
			AVI	TD-XL D	TurboDrop TD	TTI	AITTJ60 TwinJet	ADI-110	DG-110	FC-3D100
										
01	1.5									
	2.0							M		
	3.0	VC						M		
	4.0	C	Not available in this size	Data not available	Not available in this size	Not available in this size		F	Not available in this size	Not available in this size
	5.0	C								
	6.0	C								
	7.0	C								
	8.0	C								
015	1.5					UC				C
	2.0					UC		M	M	M
	3.0	VC				UC		M	F	M
	4.0	C	Not available in this size	C		XC	Not available in this size	M	F	F
	5.0	C		C		XC				F
	6.0	C		C		XC				F
	7.0	C		C		VC				F
	8.0	C		C						
02	1.5			UC		UC	XC			C
	2.0			UC		UC	VC	M	M	M
	3.0	VC		XC		UC	C	M	M	M
	4.0	C		XC	C	UC	C	M	M	F
	5.0	C		XC	C	XC	M			F
	6.0	C		VC	C	XC	M			F
	7.0	C			C	VC	M			F
	8.0	C			C					
025	1.5			UC		UC	XC			C
	2.0			UC		UC	VC	M		C
	3.0	VC		XC		UC	C	M		M
	4.0	C		XC	VC	UC	C		Not available in this size	M
	5.0	C		XC	VC	XC	M			M
	6.0	C		VC	VC	XC	M			F
	7.0	C			VC	XC	M			F
	8.0	C			VC					
03	1.5			UC		UC	UC			VC
	2.0			UC		UC	XC	C	C	C
	3.0	XC		UC		UC	VC	M	M	M
	4.0	VC		XC	VC	UC	C	M	M	M
	5.0	C		XC	C	UC	C			M
	6.0	C		XC	C	XC	M			F
	7.0	C			C	XC	M			F
	8.0	C			C					
04	1.5			UC		UC	UC			VC
	2.0			UC		UC	XC	VC	C	VC
	3.0	XC		UC		UC	VC	C	M	C
	4.0	VC		XC	VC	UC	C	M	M	M
	5.0	VC		XC	VC	XC	C			M
	6.0	VC		XC	VC	XC	M			M
	7.0	VC			C	XC	M			M
	8.0	VC			C					
05	1.5			UC		UC	UC			VC
	2.0			UC		UC	XC		C	VC
	3.0	XC		UC		UC	VC		C	C
	4.0	XC		UC		UC	VC		M	C
	5.0	VC		UC	Data not available	UC	C			M
	6.0	VC		XC		XC	M			M
	7.0	VC				XC	M			M
	8.0									





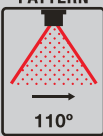
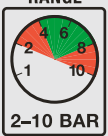
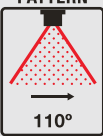

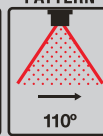
NOTE: SPRAY QUALITY DATA may appear finer than previous versions of this chart as manufacturers undertake new testing requirements. All data has been sourced from the manufacturer's websites as at May 2017 (date catalogue sourced from was published is listed in the chart), except for Agrotop TurboDrop TD (iso exit) and AirMix® which were sourced from Nufarm SprayWise Publications, published 2012. ? = data not published. Always check current spray quality information according to ASABE 572.1 or BCPC for older data. Compiled and updated by bill.gordon@au.nufarm.com 0418 794 514

		L/HA AT VARIOUS SPEEDS (KM/HR) BASED ON A 50CM NOZZLE SPACING														
		BAR	L/min/nozzle	4	6	8	10	11	12	13	14	15	16	17	18	19
NOTE: COLOUR CODING FOR NOZZLE SIZES ARE NOT RELATED TO COLOUR CODING FOR SPRAY QUALITIES	01 Orange	1.5	0.28	84	56	42	33	30	28	26	24	22	21	20	19	18
		2.0	0.32	97	64	48	39	35	32	30	28	26	24	23	21	20
		3.0	0.40	119	79	59	47	43	40	36	34	32	30	28	26	25
		4.0	0.46	137	91	68	55	50	46	42	39	36	34	32	30	29
		5.0	0.51	153	102	77	61	56	51	47	44	41	38	36	34	32
		6.0	0.56	167	112	84	67	61	56	52	48	45	42	39	37	35
		7.0	0.60	181	121	90	72	66	60	56	52	48	45	43	40	38
		8.0	0.65	194	129	97	77	70	65	60	55	52	48	46	43	41
	015 Green	1.5	0.42	126	84	63	50	46	42	39	36	34	32	30	28	27
		2.0	0.48	145	97	72	58	53	48	45	41	39	36	34	32	31
		3.0	0.59	178	118	89	71	65	59	55	51	47	44	42	39	37
		4.0	0.68	205	137	103	82	75	68	63	59	55	51	48	46	43
		5.0	0.76	229	153	115	92	83	76	71	65	61	57	54	51	48
		6.0	0.84	251	167	126	100	91	84	77	72	67	63	59	56	53
		7.0	0.91	272	181	136	109	99	91	84	78	72	68	64	60	57
		8.0	0.96	287	191	144	115	104	96	88	82	77	72	68	64	60
	02 Yellow	1.5	0.56	167	112	84	67	61	56	52	48	45	42	39	37	35
		2.0	0.65	194	129	97	77	70	65	60	55	52	48	46	43	41
		3.0	0.79	237	158	119	95	86	79	73	68	63	59	56	53	50
		4.0	0.91	274	182	137	109	100	91	84	78	73	68	64	61	58
		5.0	1.02	306	204	153	122	111	102	94	87	82	76	72	68	64
		6.0	1.12	335	223	168	134	122	112	103	96	89	84	79	74	71
		7.0	1.21	362	241	181	145	132	121	111	103	96	90	85	80	76
		8.0	1.29	387	258	193	155	141	129	119	110	103	97	91	86	81
	025 Lilac	1.5	0.70	209	140	105	84	76	70	64	60	56	52	49	47	44
		2.0	0.81	242	161	121	97	88	81	74	69	64	60	57	54	51
		3.0	0.99	296	197	148	118	108	99	91	85	79	74	70	66	62
		4.0	1.14	342	228	171	137	124	114	105	98	91	86	80	76	72
		5.0	1.27	382	255	191	153	139	127	118	109	102	96	90	85	80
		6.0	1.40	419	279	209	168	152	140	129	120	112	105	99	93	88
		7.0	1.51	452	302	226	181	165	151	139	129	121	113	106	101	95
		8.0	1.61	484	322	242	193	176	161	149	138	129	121	114	107	102
	03 Blue	1.5	0.84	251	167	126	100	91	84	77	72	67	63	59	56	53
		2.0	0.97	290	193	145	116	105	97	89	83	77	73	68	64	61
		3.0	1.18	355	237	178	142	129	118	109	101	95	89	84	79	75
		4.0	1.37	410	273	205	164	149	137	126	117	109	103	96	91	86
		5.0	1.53	459	306	229	183	167	153	141	131	122	115	108	102	97
		6.0	1.68	503	335	251	201	183	168	155	144	134	126	118	112	106
		7.0	1.81	543	362	271	217	197	181	167	155	145	136	128	121	114
		8.0	1.93	580	387	290	232	211	193	179	166	155	145	137	129	122
	04 Red	1.5	1.12	335	223	168	134	122	112	103	96	89	84	79	74	71
		2.0	1.29	387	258	193	155	141	129	119	110	103	97	91	86	81
		3.0	1.58	474	316	237	189	172	158	146	135	126	118	111	105	100
		4.0	1.82	547	365	273	219	199	182	168	156	146	137	129	122	115
		5.0	2.04	612	408	306	245	222	204	188	175	163	153	144	136	129
		6.0	2.23	670	447	335	268	244	223	206	191	179	167	158	149	141
		7.0	2.41	724	482	362	289	263	241	223	207	193	181	170	161	152
		8.0	2.58	774	516	387	309	281	258	238	221	206	193	182	172	163
	05 Brown	1.5	1.40	419	279	209	168	152	140	129	120	112	105	99	93	88
		2.0	1.61	484	322	242	193	176	161	149	138	129	121	114	107	102
		3.0	1.97	592	395	296	237	215	197	182	169	158	148	139	132	125
		4.0	2.28	684	456	342	273	249	228	210	195	182	171	161	152	144
		5.0	2.55	764	510	382	306	278	255	235	218	204	191	180	170	161
		6.0	2.79	837	558	419	335	304	279	258	239	223	209	197	186	176
		7.0	3.02	905	603	452	362	329	302	278	258	241	226	213	201	190
		8.0	3.22	967	645	483	387	352	322	298	276	258	242	228	215	204












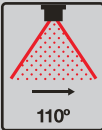

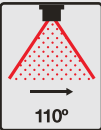
		L/HA AT VARIOUS SPEEDS (KM/HR) BASED ON A 50CM NOZZLE SPACING																	
		BAR	L/min/nozzle	20	21	22	23	24	25	26	27	28	29	30	32	34	36	38	40
NOTE: COLOUR CODING FOR NOZZLE SIZES ARE NOT RELATED TO COLOUR CODING FOR SPRAY QUALITIES	01 Orange	1.5	0.28	17	16	15	15	14	13	13	12	12	12	11	10	10	9	9	8
		2.0	0.32	19	18	18	17	16	15	15	14	14	13	13	12	11	11	10	10
		3.0	0.40	24	23	22	21	20	19	18	18	17	16	16	15	14	13	12	12
		4.0	0.46	27	26	25	24	23	22	21	20	20	19	18	17	16	15	14	14
		5.0	0.51	31	29	28	27	26	24	24	23	22	21	20	19	18	17	16	15
		6.0	0.56	33	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17
		7.0	0.60	36	34	33	31	30	29	28	27	26	25	24	23	21	20	19	18
		8.0	0.65	39	37	35	34	32	31	30	29	28	27	26	24	23	22	20	19
	015 Green	1.5	0.42	25	24	23	22	21	20	19	19	18	17	17	16	15	14	13	13
		2.0	0.48	29	28	26	25	24	23	22	21	21	20	19	18	17	16	15	14
		3.0	0.59	36	34	32	31	30	28	27	26	25	24	24	22	21	20	19	18
		4.0	0.68	41	39	37	36	34	33	32	30	29	28	27	26	24	23	22	21
		5.0	0.76	46	44	42	40	38	37	35	34	33	32	31	29	27	25	24	23
		6.0	0.84	50	48	46	44	42	40	39	37	36	35	33	31	30	28	26	25
		7.0	0.91	54	52	49	47	45	43	42	40	39	37	36	34	32	30	29	27
		8.0	0.96	57	55	52	50	48	46	44	43	41	40	38	36	34	32	30	29
	02 Yellow	1.5	0.56	33	32	30	29	28	27	26	25	24	23	22	21	20	19	18	17
		2.0	0.65	39	37	35	34	32	31	30	29	28	27	26	24	23	22	20	19
		3.0	0.79	47	45	43	41	40	38	36	35	34	33	32	30	28	26	25	24
		4.0	0.91	55	52	50	48	46	44	42	41	39	38	36	34	32	30	29	27
		5.0	1.02	61	58	56	53	51	49	47	45	44	42	41	38	36	34	32	31
		6.0	1.12	67	64	61	58	56	54	52	50	48	46	45	42	39	37	35	34
		7.0	1.21	72	69	66	63	60	58	56	54	52	50	48	45	43	40	38	36
		8.0	1.29	77	74	70	67	64	62	59	57	55	53	52	48	45	43	41	39
	025 Lilac	1.5	0.70	42	40	38	36	35	34	32	31	30	29	28	26	25	23	22	21
		2.0	0.81	48	46	44	42	40	39	37	36	35	33	32	30	28	27	25	24
		3.0	0.99	59	56	54	51	49	47	46	44	42	41	39	37	35	33	31	30
		4.0	1.14	68	65	62	59	57	55	53	51	49	47	46	43	40	38	36	34
		5.0	1.27	76	73	69	66	64	61	59	57	55	53	51	48	45	42	40	38
		6.0	1.40	84	80	76	73	70	67	64	62	60	58	56	52	49	47	44	42
		7.0	1.51	90	86	82	79	75	72	70	67	65	62	60	57	53	50	48	45
		8.0	1.61	97	92	88	84	81	77	74	72	69	67	64	60	57	54	51	48
	03 Blue	1.5	0.84	50	48	46	44	42	40	39	37	36	35	33	31	30	28	26	25
		2.0	0.97	58	55	53	50	48	46	45	43	41	40	39	36	34	32	31	29
		3.0	1.18	71	68	65	62	59	57	55	53	51	49	47	44	42	39	37	36
		4.0	1.37	82	78	75	71	68	66	63	61	59	57	55	51	48	46	43	41
		5.0	1.53	92	87	83	80	76	73	71	68	66	63	61	57	54	51	48	46
		6.0	1.68	101	96	91	87	84	80	77	74	72	69	67	63	59	56	53	50
		7.0	1.81	109	103	99	94	90	87	83	80	78	75	72	68	64	60	57	54
		8.0	1.93	116	111	105	101	97	93	89	86	83	80	77	73	68	64	61	58
	04 Red	1.5	1.12	67	64	61	58	56	54	52	50	48	46	45	42	39	37	35	34
		2.0	1.29	77	74	70	67	64	62	59	57	55	53	52	48	45	43	41	39
		3.0	1.58	95	90	86	82	79	76	73	70	68	65	63	59	56	53	50	47
		4.0	1.82	109	104	99	95	91	88	84	81	78	75	73	68	64	61	58	55
		5.0	2.04	122	117	111	106	102	98	94	91	87	84	82	76	72	68	64	61
		6.0	2.23	134	128	122	117	112	107	103	99	96	92	89	84	79	74	71	67
		7.0	2.41	145	138	132	126	121	116	111	107	103	100	96	90	85	80	76	72
		8.0	2.58	155	147	141	135	129	124	119	115	111	107	103	97	91	86	81	77
	05 Brown	1.5	1.40	84	80	76	73	70	67	64	62	60	58	56	52	49	47	44	42
		2.0	1.61	97	92	88	84	81	77	74	72	69	67	64	60	57	54	51	48
		3.0	1.97	118	113	108	103	99	95	91	88	85	82	79	74	70	66	62	59
		4.0	2.28	137	130	124	119	114	109	105	101	98	94	91	85	80	76	72	68
		5.0	2.55	153	146	139	133	127	122	118	113	109	105	102	96	90	85	80	76
		6.0	2.79	167	159	152	146	140	134	129	124	120	115	112	105	99	93	88	84
		7.0	3.02	181	172	164	157	151	145	139	134	129	125	121	113	106	101	95	90
		8.0	3.22	193	184	176	168	161	155	149	143	138	133	129	121	114	107	102	97

AGROTOP NOZZLE SELECTION






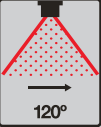

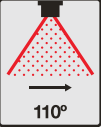

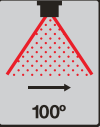

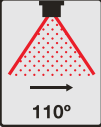
LOW PRESSURE AIR-INDUCTION NOZZLES			LOW PRESSURE NOZZLES			
AIRMIX®			TURBODROP CERAMIC		TURBODROP XL (D)	
NOZZLE OPTIONS	<div>NO. 1 SELLER</div> 					
KEY INFORMATION	<div><div><div>PRESSURE RANGE</div></div><div><div>SPRAY PATTERN</div></div></div> <div><ul style="list-style-type: none">• Ideal pressure range: 1–6 Bar• Uses: weed control and plant health• Up to 90% drift reduction</div>		<div><div><div>PRESSURE RANGE</div></div><div><div>SPRAY PATTERN</div></div></div> <div><ul style="list-style-type: none">• Ideal pressure range: 4–8 Bar• Uses: weed control, plant health and liquid fertilisers• Up to 95% drift reduction</div>		<div><div><div>PRESSURE RANGE</div></div><div><div>SPRAY PATTERN</div></div></div> <div><ul style="list-style-type: none">• Ideal pressure range: 2–4 Bar• Uses: weed control, plant health and liquid fertilisers• Up to 90% drift reduction</div>	
KEY BENEFITS	<ul style="list-style-type: none">✓ Excellent value✓ Proven performer✓ Predominantly Coarse-Medium droplets for good coverage✓ Compact design✓ Protected air inlets to avoid blockage✓ Two-piece for easy cleaning, no seals✓ Also available as an off-centre nozzle		<ul style="list-style-type: none">✓ Ceramic injector orifice and exit nozzle✓ Small droplet size variation over pressure range✓ Up to three times the life of polyacetal nozzles✓ Two-piece for easy disassembly✓ Excellent penetration using high pressure		<ul style="list-style-type: none">✓ Variable droplet spectra from coarse to fine as pressure increases✓ Excellent drift reduction at lower pressures✓ Two-piece for easy disassembly	
SPRAY QUALITY			See pages 76–77			
AVAILABLE SIZES	01 to 06		01 to 10		01 to 08	
ORDER CODE	TDAM-110***		TDCFFC1100***		TD-XLD***	
*** Denotes nozzle size (i.e. 015, 02, 025, 03 etc)						
SINGLE NOZZLE PRICE	\$ (EX. GST)	11.00	\$ (EX. GST)	23.90	\$ (EX. GST)	15.90
	\$ (INC. GST)	12.10	\$ (INC. GST)	26.29	\$ (INC. GST)	17.49
PROD. CAT.	Z		Y		Y	
10 PACK AirMix® nozzles – sizes 015 to 04	\$ (EX. GST)	105.25	NA		NA	
	\$ (INC. GST)	115.78				
ORDER CODE	PR**-TDAM					
** Denotes size: 10 = 015, 11 = 02, 12 = 03, 13 = 04, 14 = 025						
100 PACK AirMix® nozzles – sizes 015 to 04	\$ (EX. GST)	1004.80	NA		NA	
	\$ (INC. GST)	1,105.28				
ORDER CODE	PR**-TDAM100					
** Denotes size: 10 = 015, 11 = 02, 12 = 03, 13 = 04, 14 = 025						



ALBUZ NOZZLE SELECTION








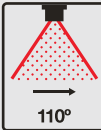

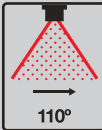

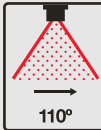
	LOW PRESSURE AIR-INDUCTION NOZZLES	LOW PRESSURE NOZZLES	PRE-ORIFICE NOZZLE	DUAL ANGLE NOZZLE				
	CVI	AVI	ADI	CVI-TWIN				
NOZZLE OPTIONS								
KEY INFORMATION	<div><div><p>PRESSURE RANGE</p><p>1-4 BAR</p></div><div><p>SPRAY PATTERN</p><p>80° & 110°</p></div></div> <ul style="list-style-type: none">• Ideal pressure range: 1.5-3 Bar• Uses: weed control and plant health• Up to 90% drift reduction	<div><div><p>PRESSURE RANGE</p><p>3-5 BAR</p></div><div><p>SPRAY PATTERN</p><p>80° & 110°</p></div></div> <ul style="list-style-type: none">• Ideal pressure range: 3-3.5 Bar• Uses: weed control, plant health and liquid fertilisers• Up to 95% drift reduction	<div><div><p>PRESSURE RANGE</p><p>2-4 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <ul style="list-style-type: none">• Ideal pressure range: 2-3 Bar• Uses: weed control and plant health• Reduces fine droplets by 50%	<div><div><p>PRESSURE RANGE</p><p>1-4 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <ul style="list-style-type: none">• Ideal pressure range: 2 Bar• Uses: contact and systemic products				
KEY BENEFITS	<ul style="list-style-type: none">✓ Pink ceramic orifice for long life and precise spray quality✓ Predominantly Very Coarse to Coarse✓ Available in 80° and 110°✓ Anti-clogging design and protected double air-intake orifice✓ Compact design✓ Also available as an off-centre nozzle	<ul style="list-style-type: none">✓ Pink ceramic orifice for excellent wear and spray precision✓ Anti-clogging design and double air-intake orifice✓ Available in 80° and 110°✓ Also available as an off-centre nozzle and as a twin nozzle	<ul style="list-style-type: none">✓ Pink ceramic orifice for excellent wear and spray precision✓ Compact design, easy to dismantle and clean✓ Excellent coverage potential for selected use and the right spraying conditions	<ul style="list-style-type: none">✓ Pink ceramic orifice for long life and precise spray quality✓ The inclination of the jets improves the penetration into the vegetation✓ Air-induction nozzle✓ Angle between the jets 65°				
SPRAY QUALITY	See pages 76-77							
AVAILABLE SIZES	015 to 05	01 to 10	01 to 04	015 to 05				
ORDER CODE	AZ-CVI-110*** (110°) AZ-CVI-80*** (80°)	AZ-AVI-***-110C (110°) AZ-AVI-***-80C (80°)	AZ-ADI-***-110C	AZ-CVIT-110***				
*** Denotes nozzle size (i.e. 015, 02, 025, 03 etc)								
SINGLE NOZZLE PRICE	\$ (EX. GST)	24.90	\$ (EX. GST)	24.90	\$ (EX. GST)	11.48	\$ (EX. GST)	30.62
	\$ (INC. GST)	27.39	\$ (INC. GST)	27.39	\$ (INC. GST)	12.63	\$ (INC. GST)	33.68
PROD. CAT.	Z	Z	Z	Z				

HYPRO NOZZLE SELECTION

	HERBICIDE NOZZLES		POST-EMERGENT PLANT HEALTH NOZZLES					
	ULTRA LO-DRIFT	GUARDIAN AIR	3D	GUARDIAN AIR TWIN				
NOZZLE OPTIONS								
KEY INFORMATION	<div><div><p>PRESSURE RANGE</p><p>1-8 BAR</p></div><div><p>SPRAY PATTERN</p><p>120°</p></div></div> <p>DRIFT REDUCING, DUAL AIR-INDUCTION</p> <ul style="list-style-type: none">• Ideal for systemic herbicide applications where drift control is crucial – ideal for 2,4-D applications• Wide, three dimensional pattern creates multiple angles for the spray to cover the target• Ideal for pre and post-emerge applications of systemic herbicides• Designed to eliminate driftable droplets, without sacrificing coverage	<div><div><p>PRESSURE RANGE</p><p>1-6 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <p>ENHANCED COVERAGE AIR-INDUCTION</p> <ul style="list-style-type: none">• Ideal for contact herbicide applications due to exceptional coverage through air-induction• Speed optimised inclined pattern provides superior droplet deposition and retention on targets• Ideal for high-coverage application of contact herbicides• Industry leading coverage among air-induced spray nozzles	<div><div><p>PRESSURE RANGE</p><p>1-6 BAR</p></div><div><p>SPRAY PATTERN</p><p>100°</p></div></div> <p>INCLINED ENHANCED COVERAGE</p> <ul style="list-style-type: none">• Alternative incline, all-purpose nozzle for optimum spray coverage – PWM system compatible• Optimised spray angle and incline for coverage and uniformity across the boom• Ideal for port-emerge health protectants. Also good for high coverage herbicide applications• Droplet spectrum optimised for coverage, fewer droplets bounce off or drift away	<div><div><p>PRESSURE RANGE</p><p>2-8 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <p>TWIN ENHANCED COVERAGE, AIR-INDUCTION</p> <ul style="list-style-type: none">• Capable of balancing speed and efficiency, with twin patterns to cover front and back of targets• Air-induced, twin pattern provides more uniform coverage over a wide operating range• Ideal for high-coverage application of post-emerge plant health protectants• Provides better coverage with more drops per litre compared to other air-induced twin sprays				
	See pages 76-77							
SPRAY QUALITY								
AVAILABLE SIZES	015 to 08 (polyacetal)	015 to 05 (polyacetal)	015 to 08 (polyacetal)	02 to 08 (polyacetal)				
ORDER CODE	FC-ULD120-***	FC-GA110-***	FC-3D100-***	FC-GAT110-***				
*** Denotes nozzle size (i.e. 015, 02, 025, 03 etc)								
SINGLE NOZZLE PRICE	\$ (EX. GST)	16.32	\$ (EX. GST)	14.74	\$ (EX. GST)	14.55	\$ (EX. GST)	16.90
	\$ (INC. GST)	17.95	\$ (INC. GST)	16.21	\$ (INC. GST)	16.01	\$ (INC. GST)	18.59
PROD. CAT.	X	X	X	X				



TEEJET NOZZLE SELECTION

	PRE-ORIFICE	LOW PRESSURE AIR-INDUCTION NOZZLES	HIGH PRESSURE AIR-INDUCTION NOZZLES					
	DG DRIFT GUARD FLAT FAN TIP	AIXR AIR-INDUCTION FLAT FAN TIP	AITT J60 AIR-INDUCTION TURBO TWINJET TWIN FLAT FAN TIP	TTI TURBO TEEJET INDUCTION FLAT FAN TIP				
NOZZLE OPTIONS								
KEY INFORMATION	<div><div><p>PRESSURE RANGE</p><p>1-5 BAR</p></div><div><p>SPRAY PATTERN</p><p>80° & 110°</p></div></div> <ul style="list-style-type: none">✓ Standard in polymer✓ Pre-orifice plate✓ Reduces drift-prone✓ Small droplets✓ (Also available in Visi-stain-less steel in some sizes in 80°)	<div><div><p>PRESSURE RANGE</p><p>1-6 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <ul style="list-style-type: none">✓ Standard in polymer✓ Low-pressure air-induction nozzle✓ Two-piece with pre-orifice	<div><div><p>PRESSURE RANGE</p><p>1.5-6 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <ul style="list-style-type: none">✓ Standard in polymer✓ Dual outlet design✓ Air-induction nozzle✓ 60° angle between forward and back spray pattern	<div><div><p>PRESSURE RANGE</p><p>1-7 BAR</p></div><div><p>SPRAY PATTERN</p><p>110°</p></div></div> <ul style="list-style-type: none">✓ Standard in polymer✓ High-pressure air-induction nozzle✓ Two-piece with pre-orifice				
SPRAY QUALITY	See pages 76-77							
AVAILABLE SIZES	015 to 05	015 to 06	02 to 08 (some larger sizes on request)	015 to 06				
ORDER CODE	DG110***-VP	AIXR110***-VP	AITTJ60-110***VP	TTI110***-VP				
*** Denotes nozzle size (i.e. 015, 02, 025, 03 etc)								
SINGLE NOZZLE PRICE	\$ (EX. GST)	12.42	\$ (EX. GST)	15.30	\$ (EX. GST)	18.10	\$ (EX. GST)	24.75
	\$ (INC. GST)	13.66	\$ (INC. GST)	16.83	\$ (INC. GST)	19.91	\$ (INC. GST)	27.23
25 PACK	\$ (EX. GST)	301.45	\$ (EX. GST)	376.10	NA		\$ (EX. GST)	610.50
	\$ (INC. GST)	331.60	\$ (INC. GST)	413.71			\$ (INC. GST)	671.55
ORDER CODE	PR**-DG **10 = size 015, 11 = 02, 12 = 03, 13 = 04	PR**-AIXR **10 = size 015, 11 = 02, 12 = 03, 13 = 04, 14 = 025			PR**-TTI **10 = size 015, 11 = 02, 12 = 03, 13 = 04, 14 = 025			
PROD. CAT.	V	V	V		V			






















Photos are for illustrative purposes only. Prices and specifications are subject to change without notice. Prices effective January 2019. For indicative freight prices, see page 103.







NOZZLE CAPS

CAP COLOUR OPTIONS












1	2	3	4	5	6	7	8	10
Black	White	Red	Blue	Green	Yellow	Brown	Orange	Lilac

CAP	NOZZLES/SEALS TO SUIT CAPS	ORDER CODE <small>*Denotes colour code as shown above – not all colours may be available.</small>	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	 <ul style="list-style-type: none"> AirMix® TeeJet XR, DG, TT, AIXR (smaller capacities to size 08) ALBUZ AXI, ADI, CVI, CVI TWIN, CVI 80 	114441-* - CELR	Cap and seat gasket set	2.53	2.78	V
		PR20-*	Pack of 10 caps and seats	22.01	24.21	
	<ul style="list-style-type: none"> Seal for use with nozzle caps 	CP19438-EPR	Seal for nozzle caps, EPDM	1.24	1.36	V
		PR60	Pack of 10 seals for nozzle caps	13.21	14.53	
	<ul style="list-style-type: none"> Seal for use with nozzle caps 	CP19438-VI	Seal for nozzle caps, Viton	5.36	5.90	V
	 <ul style="list-style-type: none"> TeeJet XR, DG, TT and AIXR flat spray tips (for sizes 10 to 20) 	25610-* - NYR	Cap and seat gasket set	2.97	3.27	V
	 <ul style="list-style-type: none"> TeeJet flat spray tips (smaller capacities) – see above. Tips can be positioned in choice of 2 spray plane directions: parallel or perpendicular to wings of Quick TeeJet cap 	25596-* - NYR	Cap and seat gasket set	2.97	3.27	V
	 <ul style="list-style-type: none"> TJ TwinJet / TJ60-Spray Tip / ALBUZ AVI, AVI TWIN, ESI, EXA, AIUB TeeJet / TTI Air-induction Turbo TeeJet SJ3 StreamJet 	114443-* - CELR	Cap and seat gasket set	2.89	3.18	V
	 <ul style="list-style-type: none"> TF-VS Turbo FloodJet / TK-VS FloodJet 	25600-* - NYR	Cap and seat gasket set	2.97	3.27	V
	 <ul style="list-style-type: none"> TK FloodJet / FL FullJet / TX ConeJet / TG Full Cone 	114445-* - CELR	Cap and seat gasket set	2.89	3.18	V
	 <ul style="list-style-type: none"> Ceramic Disc-Core/TXB ConeJet ALBUZ TVI, ATR 	26278-1 - NYR	Cap and seat gasket set	3.25	3.58	V
	 <ul style="list-style-type: none"> For use with Hardi nozzle bodies TeeJet flat fan spray tips Turbo TeeJet spray tips AirMix® nozzles 	23306H-1 - CELR	Cap and seat gasket for Hardi retro-fit cap to suit Hardi spray bodies. Available in black only	3.06	3.37	V
	 <ul style="list-style-type: none"> For use with Hardi nozzle bodies TJ TwinJet AI TeeJet, AIUB TeeJet spray tips flat TTI Air-induction Turbo TeeJet 	21398H-1 - CELR	Cap and seat gasket for Hardi retro-fit cap to suit Hardi spray bodies. Available in black only	3.06	3.37	V







	ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	CP1325	TeeJet® brass 11/16" threaded cap	3.44	3.78	V
	CP8027-NYB	TeeJet® nylon 11/16" threaded cap	1.92	2.11	V
	CP8027-1-NYB	TeeJet® nylon 11/16" threaded cap, extra long	2.48	2.73	V
	CP3942	TeeJet® brass blanking plug	1.15	1.27	V
	19843-NYR	Blanking cap with seal, black only	4.88	5.37	V
	QJ90-2-NYR	Twin-cap quick adaptor with seal	9.66	10.63	V
	QJ4676-¼-NYR	QJ adaptor cap comes with gasket and ¼" female thread	5.74	6.31	V
	QJ4676-90-¼-N	QJ adaptor cap, 90°, comes with gasket and ¼" female thread	9.66	10.63	V



NOZZLE BODIES

ORDER CODE	DESCRIPTION	REPLACES	FEATURES	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
4221N-B122 4221N-B123	PROFLO ½" single drop nozzle body for wet boom	TeeJet: QJ17560A-1/2-NYB ARAG: 402745	<ul style="list-style-type: none"> Low pressure drop at any given flow rate Unique check valve design reduces restrictions – supports faster field speeds and direct fertiliser applications 	7.64	8.40	V
	PROFLO ¾" single drop nozzle body for wet boom	TeeJet: QJ17560A-3/4-NYB ARAG: 402755	<ul style="list-style-type: none"> Bayonet attachment for correct flat fan nozzle alignment Compact design – less interference with boom structures 10mm nib 20 Bar rated 	7.64	8.40	V
4243N-B322 4243N-B323 4243N-B324	PROFLO ½" triple drop nozzle body for wet boom	TeeJet: QJ363C-1/2-NYB	<ul style="list-style-type: none"> Tab for boom clamp provided Low pressure drop at any given flow rate Unique check valve design reduces restrictions – supports faster field speeds and direct fertiliser applications 	39.23	43.15	V
	PROFLO ¾" triple drop nozzle body for wet boom	TeeJet: QJ363C-3/4-NYB	<ul style="list-style-type: none"> Turret-indexing design eliminates seizing issues common on other types Bayonet attachment for correct flat fan nozzle alignment 	46.89	51.58	V
	PROFLO 1" triple drop nozzle body for wet boom	TeeJet: QJ363C-1-NYB	<ul style="list-style-type: none"> Compact design 10mm nib 20 Bar rated 	46.89	51.58	V
24216-1/2-NYB	Compact triple nozzle body for wet booms – ½"		<ul style="list-style-type: none"> Vertical turret for use in situations where space is an issue 	52.82	58.10	V
	Compact triple nozzle body for wet booms – ¾"		<ul style="list-style-type: none"> Vertical turret for use in situations where space is an issue. (Also available in 1") 	52.82	58.10	V
24216-3/4-NYB	Compact triple nozzle body for wet booms – ¾"					
						
A402735	Single drop nozzle body for wet boom – 7mm nib		<ul style="list-style-type: none"> Hinged clamp single nozzle body with diaphragm check valve for quick connect caps with 7mm nib – suits MBX and MAX series manual fold booms 	10.24	11.27	Y
						
QJ39685-2-500-N	Dry boom nozzle body – ½" tee type		<ul style="list-style-type: none"> Dry boom nozzle body with diaphragm check valve for quick connect caps – tee type 	14.36	15.79	V
						
QJ39685-1L-500N	Dry boom nozzle body – ½" left elbow		<ul style="list-style-type: none"> Dry boom nozzle body with diaphragm check valve for quick connect caps – left elbow for boom end 	14.36	15.79	V
						
QJ39685-1R-500N	Dry boom nozzle body – ½" right elbow		<ul style="list-style-type: none"> Dry boom nozzle body with diaphragm check valve for quick connect caps – right elbow for boom end 	14.36	15.79	V
						
B716.617.2	Brass roll-over nozzle body		<ul style="list-style-type: none"> High pressure roll-over nozzle body with non-drip diaphragm check valve – comes with 2 caps (no nozzles supplied). For more information on horticultural nozzle holders, see page 96 	43.06	47.37	Y
						

NOZZLE FILTERS

	ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	8079-PP-*	TeeJet® polypropylene strainer, *50, *80 or *100 mesh screen	3.06	3.37	V
	PR51	Pack of 10 x 8079-PP-50 strainers	29.28	32.21	V
	PR52	Pack of 10 x 8079-PP-100 strainers	29.28	32.21	V
	4193A-PP-5-*SS	TeeJet® polypropylene strainer with check valve for 5 psi, *50 or *100 mesh screen	9.28	10.21	V
	4193A-5-*SS	TeeJet® brass strainer with check valve for 5 psi, *50 or *100 mesh screen	12.63	13.89	V
	4067-SS-*	TeeJet® cup strainer, *50 or *100 mesh screen	3.93	4.32	V
	4514-NY-*	TeeJet® nylon slotted strainer, for suspended solids, *10, *20 and *32	3.25	3.58	V

TIPS FOR SELECTING NOZZLES – BROADACRE

Often a single nozzle will not be able to do all of the spray tasks that the operator may require, however with at least two well chosen nozzles most operations should be able to be completed.

It is useful for applicators to consider the range of jobs they may do throughout the season, and group similar jobs by application volume and spray quality required. The diagram below summarises this for either high or low volume applications, with either a coarse or larger spray quality or a medium spray quality.

SUGGESTED SPRAY QUALITY AND APPLICATION VOLUMES FOR A RANGE OF SPRAYING SITUATIONS

TYPICAL APPLICATION VOLUME	MEDIUM SPRAY QUALITY (LOWER DRIFT RISK AREAS)	COARSE SPRAY QUALITY	EXTREMELY COARSE SPRAY QUALITY (HIGHER DRIFT RISK AREAS)
LOWER RANGE 50–60 L/ha (low stubble load) to 70–80 L/ha (high stubble load)	*Only where permitted on label Fully translocated herbicides Small to medium sized targets	Fallow spraying with fully translocated herbicides such as Glyphosate and Group I products, 2,4-D and other group/products	Fully translocated herbicides Medium sized targets, water soluble pre-emergent herbicides Very sensitive areas or NIGHT SPRAYING
HIGHER RANGE 70–80 L/ha (low stubble load) to 100 + L/ha (high stubble load/dense crop canopy)	*Only where permitted on label Contact type products. Small, vertical targets In crop spraying of fungicides and insecticides Retention and coverage on large cereal crops and hard to wet leaf surfaces Requires good conditions for spraying and reasonable buffers to mitigate spray drift risk Penetration and coverage in large and broadleaf crops	Good stubble penetration Pre-emergents Fully Translocated herbicides Contact herbicides onto moderate sized targets Translocated products onto hard to wet surfaces at the higher application volumes Penetration through large cereal crops. Reasonable retention on large, easy to wet broadleaf crops	Pre-emergents Medium sized targets with fully translocated summer fallow herbicides Very sensitive areas or NIGHT SPRAYING (no inversion)

In the above example a low pressure air-induction, such as an AirMix® nozzle, may do jobs indicated by the BLUE arrow, whereas a high pressure air-induction may be required, such as a TurboDrop or TeeJet TTI, to complete jobs indicated by the RED arrows.

APPLICATORS SHOULD ALWAYS REFER TO THE LABEL TO CONFIRM THE SPRAY QUALITY AND APPLICATION VOLUME REQUIREMENTS FOR EACH.



SPRAYING IN STUBBLE

Stubble retention is an important strategy for conserving soil moisture. When combined with narrower row spacings or increased harvest heights, the remaining stubble can present a challenge to gaining effective spray coverage onto the soil or onto weeds in fallow and in crop.

To optimise spray coverage in the lower parts of the stubble and onto the soil it may be useful for the applicator to use water sensitive paper (WSP) to determine where the droplets are landing.

Spray coverage can be assessed by measuring the percentage of the WSP that is covered by using the SNAPCARD APP which is free to download.



The SNAPCARD APP allows the cards to be photographed and coverage to be measured.

SPRAYING SMALL TARGETS

In broadacre spraying the applicator can adjust the spray coverage by changing droplet size and/or the water volume. The ability to hit small targets can be increased with higher water volumes or by producing more droplets, such as a medium spray quality versus a coarse (where permitted on label). If only few droplets hit a target, then using robust product rates increase the likelihood of delivering the lethal dose. In general, if coverage on small targets critical for the mode of action, such as contact herbicides, then increasing the water rate is more efficient than using smaller droplets.

To optimise application when targeting small grasses it is advisable to increase water rates, regardless of the spray quality or chemistry.

If the water rate used is too low (50–70 L/ha) a MEDIUM spray quality is likely to be more successful than a COARSE spray quality – but only under ideal conditions. Adverse weather conditions, such as inappropriate wind speeds or heat, smaller droplets may reduce the overall level of control compared to that of a COARSE spray quality.

SUGGESTED SPRAY QUALITY AND APPLICATION VOLUMES FOR A RANGE OF SPRAYING SITUATIONS



70cm high, 'stripper front', 4.7 t/ha residue



<10cm high, <2.2 t/ha residue

AgroTop AirMix® 02 nozzle 3 Bar, 16km/hr 50 L/ha	AgroTop AirMix® 03 nozzle 4 Bar, 16km/hr 100 L/ha	AgroTop AirMix® 04 nozzle 5 Bar, 16km/hr 150 L/ha
STRIPPER FRONT STUBBLE		
9.9%	10.3%	16.7%
BALED STUBBLE		
13.6%	26.2%	35.0%

Table 1. Spray card analysis for stripper and baled stubble treatments, medium droplet size.

Information from the Hart field side group, trials on stubble penetration and pre-emergent efficacy (S.A. 2015–2016, funded by SAGIT) images by Dr Sarah Noack.

TOP TIPS

- Increase product rate
- Increase water volume
- Use a COARSE spray quality or larger
- Reduce spraying speeds
- Decrease fan angle in erected stubble
- Increase spray height in erected stubble (only with minimum COARSE spray quality)
- Consider 25cm nozzle spacings if your boom has this facility
- Consider using slower spraying speeds



The SNAPCARD APP allows the cards to be photographed and coverage to be measured.

Most robust results on small targets are generally achieved with water rates above 80 L/ha. Many trials over recent years indicate that control of even small grass targets, when using these water rates, is at least as reliable with a COARSE spray quality as it is with a FINE/MEDIUM spray quality.



THE FOLLOWING DIAGRAM INDICATES SUITABLE CONDITIONS FOR SPRAYING, BASED ON A 24 HOUR CYCLE.



Windspeeds must be **above 4 km/h** and **less than 15-20 km/h** (refer to label) blowing away from sensitive areas

Medium spray quality: Delta T: 2-10

Coarse spray quality: Delta T: 2-12

To start spraying, the sun should be about 20 degrees above the horizon, and wind speed and direction consistent for 30-40 minutes



Windspeed should be **above 4-5km/h** after Sunrise to start spraying



Likely to be the best conditions for spraying



***EXTREME CAUTION REQUIRED**
High inversion risk
Dangerous air movement

Plan NOT TO SPRAY during this period



Spraying can only occur if the operator can be certain that a surface temperature inversion is not present.

The safest option is not to spray during this period.



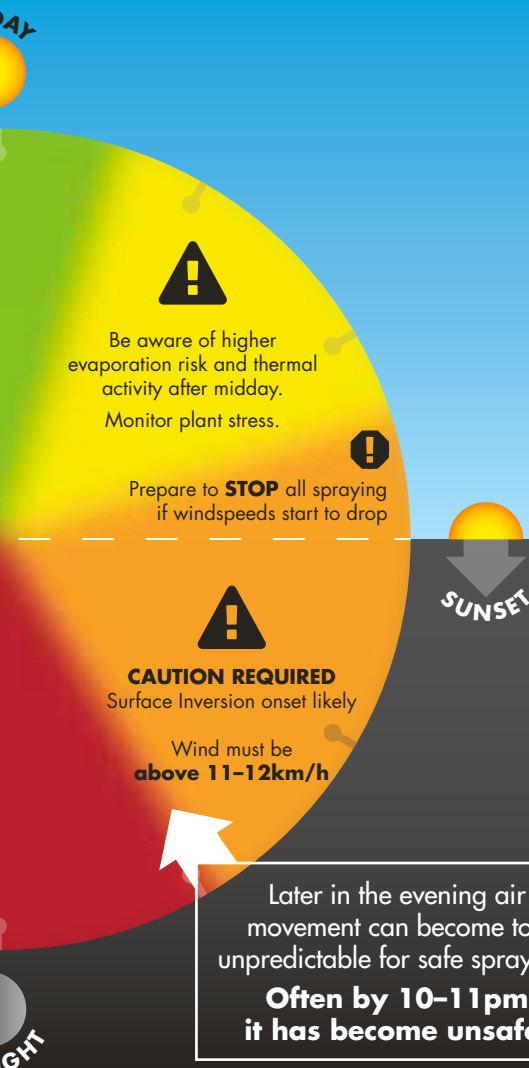
MANAGING AND MINIMISING THE POTENTIAL FOR SPRAY DRIFT TO OCCUR.

Spray drift is a major concern in all agricultural areas. The presence of sensitive areas located within close proximity to the spray target area introduces the possibility of off-target deposition. It is more important than ever that the agricultural industry demonstrates responsible chemical usage to reduce the need for severe application restrictions. For further information on chemical application or involvement in a SprayWise training course, please contact your local Nufarm or Croplands Territory Manager.

How the sprayer is set up and operated will determine how much of the applied product remains in the air, The conditions at the time of spraying and immediately afterwards will determine where the airborne product may move.

THE MAIN FACTORS THAT INFLUENCE THE RISK OF SPRAY DRIFT OCCURRING ARE:

- ✓ Conditions at the time of spraying
- ✓ Spray quality/nozzle choice
- ✓ Sensitivity of the target
- ✓ Product choice and rate (including water volume)
- ✓ Adjuvant choice
- ✓ Boom height
- ✓ Spraying speed



Monitor conditions closely

Consider using larger spray quality, higher water rates and managing evaporation with suitable adjuvants (ie. Collide, Activator)

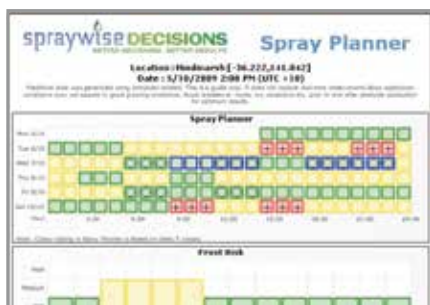


Often spraying into the early evening is possible in summer when air movement has continued to mix the air and prevent a surface temperature inversion forming.



Pay very close attention to changes in wind speed and wind direction throughout the evening.

Only use XC or UC spray quality, reduce spraying speed and boom height to minimise risk of droplets remaining airborne.



PLAN

- Utilise tools such as spraywisedecisions.com.au to plan the most appropriate application windows
- Spraying in a cotton area? Check cottonmap.com.au for neighbouring fields prior to application

- Read the product label
- Communicate with neighbours
- Upskill yourself by attending a Nufarm SprayWise training course or one run by specialist application consultants



BOOM HEIGHT/FALSE TARGET

- Boom height needs to be adjusted to the height of the false target (stubble height) or the height of the target – whichever is greater
- Keep boom height to a minimum (i.e. 500mm above target/false target for 110° nozzles at 500mm nozzle spacing)
- Increasing the boom height from 500mm to 700mm may double the amount of driftable fines and a boom height increase from 500mm to 1,000mm multiplies them up to four times



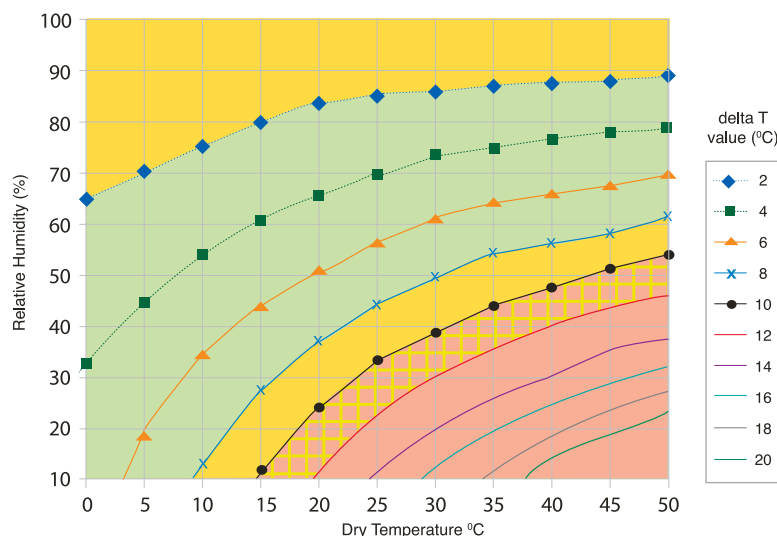
SPRAY QUALITY

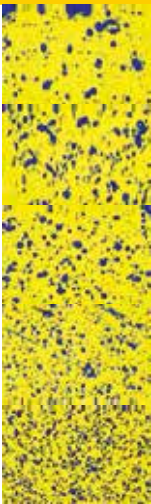






- A COARSE spray quality or larger must be used when applying Group I products – EXTREMELY COARSE may be warranted if night spraying
- Choose the nozzle producing the coarsest spray quality without compromising efficacy
- If needed, include drift-reducing adjuvants such as Collide 700, Activator or Bonza
- Use nozzles at appropriate pressure: conventional nozzles 1.5–3 Bar, pre-orifice nozzles 2–4 Bar, low pressure air-induction nozzles 3–5 Bar, high pressure air-induction nozzles 4–8 Bar

SELECTING THE RIGHT DELTA T CONDITIONS FOR SPRAYING

- preferred delta T conditions for spraying
- delta T conditions marginal
- delta T conditions unsuitable for spraying
- Conditions are marginal for 'COARSE' or greater spray quality and unsuitable for 'MEDIUM' or finer spray quality.

NEVER SPRAY DURING A LOW-LEVEL INVERSION



CHEMICAL AND TARGET INTERACTION				
SAMPLES OF DROPLETS ON WATER SENSITIVE PAPER	SPRAY QUALITY CLASSIFICATION	NOZZLE TYPE	APPLICATION	TEEJET OPTIONS
	ULTRA COARSE UC	 High Flow (HF)	Soil applied pre-emergent herbicides (typically pre-sowing) and fertiliser applications	
	EXTREMELY COARSE XC	 Ultra-Lo-Drift (ULD)	Some soil applied herbicides and some translocated herbicides (use if drift control is paramount over efficacy)	Turbo TeeJet Induction
	VERY COARSE VC	 TurboDrop (TD)	Translocated herbicides (large targets) and soil applied herbicides (heavy stubble loads)	AI and AIC TeeJet
	COARSE C	 Guardian Air (GA), AirMix® (TDAM)	Translocated herbicides, soil applied herbicides, some contact herbicides (use with higher water rates) and some fungicides	AIXR TeeJet and Turbo TwinJet
	MEDIUM M	 Guardian Air (GA), AirMix® (TDAM), ALBUZ ADI	Contact herbicides, fungicides and insecticides	Turbo TeeJet
	FINE F	 Guardian (GD) (smaller sizes)	Some fungicides, contact herbicides and insecticides	XR and XRC TeeJet
	VERY FINE VF	CAUTION: LARGE AMOUNTS OF DRIFTABLE FINES		

Droplet size classifications are based on BCPC specification and are in accordance with ASAE Standard S-572.



SPRAY QUALITY

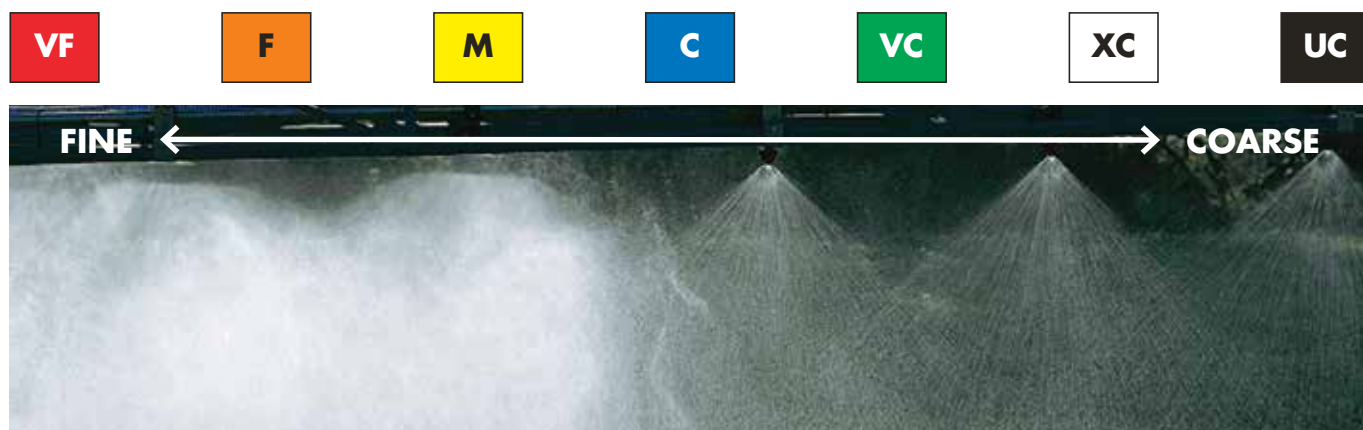
Systems of nozzle classification (BCPC, ASAE, and ASABE 572.1) have been developed around the world to unify and simplify the description of droplet size ranges that different nozzles produce. Accordingly nozzles can be classified as producing ULTRA COARSE, EXTREMELY COARSE, VERY COARSE, COARSE, MEDIUM, FINE and VERY FINE and ULTRA FINE spray qualities.

Applicators should be aware that spray quality information using ASABE S572.1 includes an adjuvant in the spray solution to better reflect actual tank mixes, other standards use water alone.

The spray quality a nozzle produces is very important. Generally, a MEDIUM spray quality will increase potential for coverage, but small droplets are very


prone to drift and environmental loss (evaporation) especially in warm conditions. On the other hand, COARSE spray quality with larger droplets, particularly using pre-orifice or air-induction nozzles, will greatly reduce drift potential but may compromise coverage – especially on small targets using low spray application volume. Choosing the coarsest spray quality without compromising efficacy is the trick.

Refer to the information provided by the chemical manufacturer on their product label, or consult the Nufarm SprayWise Boom Spray Application Guide – available from Nufarm or Croplands. Croplands and Nufarm have selected the best nozzles from around the globe to help our farmers and growers maximise their results when spraying is necessary.



WIDE ANGLE FLAT SPRAY NOZZLE

Thanks to the exceptional wear resistance of ALBUZ® pink ceramic, these nozzles can be used to spray suspension fertilisers. Flat jet (30° to 165° angle) providing coarse droplets without drift.

NOZZLE	USE AND FEATURES	ORDER CODE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	<ul style="list-style-type: none"> Wide angle flat fan Flood Jet for use with suspension fertilisers and some herbicides Commonly used in sugar cane and other row crops Ideal for soil-applied products in particular Exceptional wear resistance using pink ceramic surfaces Recommended pressure range 0.5 to 2 Bar 	AZ-MSI-***	15.40	16.94	Z


*** Denotes sizes as follows:


AZ-MSI-025 = Lillac, AZ-MSI-03 = Blue, AZ-MSI-04 = Red, AZ-MSI-05 = Brown, AZ-MSI-06 = Grey, AZ-MSI-08 = White, AZ-MSI-10 = Light Blue, AZ-MSI-15 = Light Green

BAR	FLOW RATE							
	Lillac	Blue	Red	Brown	Grey	White	Light Blue	Light Green
0.5	0.42	0.51	0.68	0.85	1.02	1.35	1.69	2.54
1	0.59	0.71	0.94	1.18	1.42	1.89	2.36	3.54
1.5	0.72	0.86	1.15	1.43	1.72	2.29	2.87	4.3
2	0.82	0.99	1.32	1.65	1.98	2.63	3.29	4.94
2.5	0.92	1.1	1.47	1.83	2.2	2.93	3.66	5.5
3	1	1.2	1.6	2	2.4	3.2	4	6
3.5	1.08	1.29	1.72	2.15	2.58	3.45	4.31	6.46
4	1.15	1.38	1.84	2.3	2.76	3.67	4.59	6.89
BAR	ANGLE							
	Lillac	Blue	Red	Brown	Grey	White	Light Blue	Light Green
1	96	96	96	104	108	117	133	150
1.5	103	103	104	110	114	122	140	154
2	107	108	111	114	118	127	142	156
3	112	113	116	116	124	132	144	160
4	116	116	121	122	128	135	147	162

FERTILISER NOZZLES

The timely and accurate application of fertiliser can make an enormous difference to crop yields. Liquid application is becoming more and more popular to improve response and to provide increased accuracy, especially where the risk of applying dry fertiliser by conventional spinner-type applicators could mean unwanted nutrient contaminating waterways. Typically uptake of liquid fertiliser is rapid and can provide the right boost to your crop at the right time.

NOZZLE	SIZES	TYPE, SPECIFICATION AND USE	FEATURES	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.	SIZE/ORDER CODE	FLOW RATE (L/MIN)							
								PRESSURE (BAR)							
								ALBUZ ESI	1	1.5	2	2.5	3	3.5	4
	015 to 06	<ul style="list-style-type: none">Specifically designed for fertiliser applicationPink ceramic calibrated pre-orificePressure range: 1–4 BarUses: predominant use in ground crops	<ul style="list-style-type: none">6 streams provide very coarse droplets for excellent distributionLong wear lifeAllows a wide range of applications at varying speedsISO colour coded. Tip only (caps and seal extra)Fits standard 50cm nozzle body spacings110° pattern	11.40	12.54	Z	AZ-ESI-015	0.37	0.44	0.50	0.55	0.60	0.64	0.68	
							AZ-ESI-02	0.52	0.61	0.68	0.74	0.80	0.85	0.90	
							AZ-ESI-025	0.64	0.76	0.85	0.93	1.00	1.06	1.10	
							AZ-ESI-03	0.77	0.91	1.02	1.12	1.20	1.28	1.35	
							AZ-ESI-04	1.03	1.21	1.36	1.49	1.60	1.70	1.80	
							AZ-ESI-05	1.35	1.56	1.73	1.87	2.00	2.11	2.22	

										PRESSURE (BAR)						
										HYPRO ESI	1	1.5	2	2.5	3	4
	015 to 20	<ul style="list-style-type: none">Specifically designed for fertiliser applicationPink ceramic calibrated pre-orificePressure range: 1–4 BarUses: soil seeded crops	<ul style="list-style-type: none">6 streams provide very coarse droplets for excellent distributionLong wear lifeAllows a wide range of applications at varying speedsIncludes cap and sealFits standard 50cm nozzle body spacings110° pattern	15.45	17.00	Z	FC-ESI-110015	0.35	0.42	0.49	0.55	0.60	0.69			
							FC-ESI-11002	0.46	0.57	0.65	0.73	0.80	0.92			
							FC-ESI-110025	0.58	0.71	0.82	0.91	1.00	1.15			
							FC-ESI-11003	0.69	0.85	0.98	1.10	1.20	1.39			
							FC-ESI-11004	0.92	1.13	1.31	1.46	1.60	1.85			
							FC-ESI-11005	1.15	1.41	1.63	1.83	2.00	2.31			



NOZZLES – SPECIALISED APPLICATION

(BANDING, OFF-CENTRE, TURF, FLOOD AND BOOMJET)

NOZZLE	TYPE AND DESCRIPTION	SAMPLE ORDER CODE	SIZE RANGE, MATERIAL SPRAY ANGLE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	ALBUZ OCI <ul style="list-style-type: none"> Ceramic Off centre 	AZ-OCI-02-80C	<ul style="list-style-type: none"> 02, 03 and 04 sizes Pink ceramic 80° 	32.55	35.81	Z
	ALBUZ AVI <ul style="list-style-type: none"> Air-induction Off centre 	AZ-AVIOC-8002	<ul style="list-style-type: none"> 01 to 04 sizes Pink ceramic 80° 	48.8	53.68	Z
	Turbo TurfJet <ul style="list-style-type: none"> Wide angle flat spray pattern Extremely coarse droplets Designed for turf applications 1.5–5 Bar pressure range 	¼TTJ05-VP	<ul style="list-style-type: none"> 02 to 15 polymer 	22.8	25.08	V
		¼TTJ05-VS	<ul style="list-style-type: none"> 02 to 15 stainless steel 	44.1	48.51	
	Turbo FloodJet <ul style="list-style-type: none"> Wide angle flat spray pattern Extremely coarse droplets Precise distribution pattern 1–3 Bar pressure range 	TF-VP4	<ul style="list-style-type: none"> 2 to 10 polymer 	7.75	8.53	V
		TF-VS4	<ul style="list-style-type: none"> 2 to 10 steel 	33.95	37.35	
	FloodJet <ul style="list-style-type: none"> Wide angle flat spray pattern 1–3 Bar pressure range 	TK-VS3	<ul style="list-style-type: none"> 2 to 10 stainless steel tip, polymer body 	30.60	33.66	V
	BoomJet <ul style="list-style-type: none"> Large capacity boomless nozzle Extra-wide flat spray projection Ideal for difficult access areas when spraying Useful for liquid fertiliser applications 	5880-¾-2TOC20	<ul style="list-style-type: none"> 10 to 40 brass 	661.35	727.49	V
	XP BoomJet <ul style="list-style-type: none"> Boomless flat spray nozzles Useful for roadside, end-row, orchard or forestry applications Extra-wide spray pattern Left and right options 1–4 Bar pressure range Excellent distribution 	B¼XP20L-VP B¼XP20R-VP	<ul style="list-style-type: none"> 10, 20 and 25¼" acetal left and right options 	114.85	126.34	V
		B½XP40L-VP B½XP40R-VP	<ul style="list-style-type: none"> 40 and 80 ½" acetal left and right options 	138.75	152.63	

SPRAYWISE ORCHARD/VINEYARD NOZZLE SELECTION

STEP 1.

Work out the dilute L/100m rate from the SprayWise Dilute table per row (page 93).

For example, a 1.5 metre grape VSP canopy has a dilute volume of 30 L/100m row (1.5 x 20 L).

Use table 1 (page 94) to sanity check what this L/100m rate represents in L/ha. Select your row spacing and follow the column down until you reach 30 or the nearest number. If you follow the row to the left the table will give you the per ha volume. Or you can work reverse from the per ha rate to find the L/100m rate.

1

	Row Spacing (m)									
	1.6	1.8	2	2.1	2.4	2.5	2.7	2.8		
100	1.6	1.8	2	2.1	2.4	2.5	2.7	2.8		
150	2.4	2.7	3	3.1	3.6	3.8	4	4.2		
200	3.2	3.6	4	4.2	4.8	5	5.4	5.6		
250	4	4.5	5	5.2	6	6.3	6.7	7		
700	11.2	12.6	14	15	17	17.5	18.9	19.6		
750	12	13.5	15	16	18	18.8	20	21		
800	12.8	14.4	16	17	19	20	22	22		
900	14.4	16.2	18	19	21	23	24	25		
1000	16	18	20	21	24	25	27	28		
1100	17.6	19.8	22	23	26	28	30	31		
1200	19.2	22	24	25	29	30	32	34		
1300	21	23	26	27	31	33	35	36		
1400	22	25	28	29	33	35	38	39		

STEP 2.

Work out the total flowrate of your pump per minute/row by matching the per 100m rate with your speed.

For example, you want to drive 8 km/hr. Find 8 km/hr on the top of table 2 and follow the column down until you reach 30 or the nearest number. If you follow the row to the right the table will give you the total flowrate you need per row to put out 30 L/100m at 8 km/hr. The flowrate is 40 L/min per row.

2

	L/100 m ↔ L/min									
	Travel Speed (km/h)									
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5
2	12	8	6	4.8	4	3.4	3	2.7	2.4	2.2
3	18	12	9	7.2	6	5.1	4.5	4	3.6	3.3
4	24	16	12	9.6	8	6.9	6	5.3	4.8	4.4
5	30	20	15	12	10	8.6	7.5	6.7	6	5.5
6	36	24	18	14.4	12	10.2	9	8	7.2	6.6
7	42	28	21	16.8	14	11.8	10.5	9.4	8.4	7.7
8	48	32	24	19.2	16	13.6	12	10.8	9.6	8.8
9	54	36	27	21.6	18	15.3	13.5	12	10.8	10
10	60	40	30	24	20	17	15	13.2	12	11
11	66	44	33	26.4	22	18.7	16.5	14.4	13	12
12	72	48	36	28.8	24	20.4	18	15.6	14.4	13.2
13	78	52	39	31.2	26	22.2	19.5	17.1	15.6	14.4
14	84	56	42	33.6	28	24	21	18.4	16.8	15.6
15	90	60	45	36	30	25.7	22.5	19.8	18	16.8
16	96	64	48	38.4	32	27.4	24	21.6	19.2	18
17	102	68	51	40.8	34	29.2	25.5	23.2	20.4	19.2
18	108	72	54	43.2	36	31	27	24.8	21.6	20.4
19	114	76	57	45.6	38	32.8	28.5	26.4	23.2	21.6
20	120	80	60	48	40	34.6	30	28	24.8	22.8
21	126	84	63	50.4	42	36.4	31.5	29.6	26.4	24
22	132	88	66	52.8	44	38.2	33	31.2	28	25.2
23	138	92	69	55.2	46	40	34.5	32.8	29.6	26.4
24	144	96	72	57.6	48	41.8	36	34.4	31.2	27.6
25	150	100	75	60	50	43.6	37.5	36	32.8	28.8
26	156	104	78	62.4	52	45.4	39	37.6	34.4	30
27	162	108	81	64.8	54	47.2	40.5	39.2	36	31.2
28	168	112	84	67.2	56	49	42	40.8	37.6	32.4
29	174	116	87	69.6	58	50.8	43.5	42.4	39.2	33.6
30	180	120	90	72	60	52.6	45	44	40.8	34.8
31	186	124	93	74.4	62	54.4	46.5	45.6	42.4	36
32	192	128	96	76.8	64	56.2	48	47.2	44	37.2
33	198	132	99	79.2	66	58	49.5	48.8	45.6	38.4
34	204	136	102	81.6	68	59.8	51	50.4	47.2	39.6
35	210	140	105	84	70	61.6	52.5	52	48.8	40.8
36	216	144	108	86.4	72	63.4	54	53.6	50.4	42
37	222	148	111	88.8	74	65.2	55.5	55.2	52	43.2
38	228	152	114	91.2	76	67	57	56.8	53.6	44.4
39	234	156	117	93.6	78	68.8	58.5	58.4	55.2	45.6
40	240	160	120	96	80	70.6	60	60	56.8	46.8
41	246	164	123	98.4	82	72.4	61.5	61.6	58.4	48
42	252	168	126	100.8	84	74.2	63	63.2	60	49.2
43	258	172	129	103.2	86	76	64.5	64.8	61.6	50.4
44	264	176	132	105.6	88	77.8	66	66.4	63.2	51.6
45	270	180	135	108	90	79.6	67.5	68	64.8	52.8
46	276	184	138	110.4	92	81.4	69	69.6	66.4	54
47	282	188	141	112.8	94	83.2	70.5	71.2	68	55.2
48	288	192	144	115.2	96	85	72	72.8	69.6	56.4
49	294	196	147	117.6	98	86.8	73.5	74.4	71.2	57.6
50	300	200	150	120	100	88.6	75	76	72.8	58.8

Formula: $L/100\text{ m} = L/\text{min} \times 6 \div \text{speed}$ $L/\text{min} = L/100\text{ m} \times \text{speed} \div 6$

STEP 3.

Work out the individual flow rate for each nozzle. If all nozzle are the same size you can simply divide the total flow rate per row by the number of nozzles per row.

For example, we have 24 nozzles per row and needed a total flow rate of 40 L/min. Each nozzle needs to put out 1.66 L/min (40/24). If several nozzle sizes are preferred the volume needs to be split. For example, rather than looking at all 24 nozzles putting out the same you could look at 12 nozzles putting out 25 L/min and 12 nozzles putting out 15 L/min.

STEP 4.

Match up pressure and nozzles size to achieve these outputs in table on page 95.

ATR HOLLOW CONE FLOWRATE CHART

4

PRESSURE	Yellow	Orange	Red	Grey
5	0.73	0.99	1.38	1.5
6	0.8	1.08	1.51	1.63
7	0.86	1.17	1.62	1.76
8	0.92	1.24	1.73	1.87
9	0.97	1.32	1.83	1.98
10	1.03	1.39	1.92	2.08
11	1.07	1.45	2.01	2.17
12	1.12	1.51	2.09	2.26
13	1.17	1.57	2.17	2.35
14	1.21	1.63	2.25	2.43



Spraywise Dilute

General Guideline to Dilute Volume in Orchards and Vineyards



L/100 m per m Canopy Height

		20	25	30	35	40	45	50	...	70
	Fungicides									
	some Miticides, PGRs									
	Fungicides									
	some Miticides									
	Fungicides									
	some Miticides									
	Insecticides, some Oils									
	some Oils, PGRs									
	Fungicides	VSP	Sprawl							
	some PGRs		VSP	Sprawl						
	Fungicides									
	some Miticides									
	Fungicides									
	some Insect./Miticides									
	Insecticides									
	Fungicides									
	some Insect./Miticides									
	Fungicides	Trellis								
	some Insect./Miticides									

= indicates Dilute Volume, sprayed to the point of run-off

= indicates light Flood Volume, above the point of run-off (some miticides, insecticides and PGRs may benefit)

Example: A 3m high apple canopy should need a dilute rate between 60 and 75 L/100 m (3 x 20 or 3 x 25). As a sanity check, at a row spacing of 4 m that converts to 1500 to 1900 L/ha (see table next page). If not sure which way to go, as a sophisticated guess, the middle should be close, e.g. 70 L/100 m.

IMPORTANT:

- Volumes are given for full canopy.
- Volumes may vary according to canopy type, e.g. VSP vs Sprawl, shape and density. Use the lower end of the spectrum for easier to cover targets, e.g. in grapes use 20–25 for VSP and 25–30 for Sprawl.
- Height considers canopy height only - excluding the trunk.
- Guidelines assume that the sprayer is set up to cover the canopy height. In early season grapevine applications the minimum sprayer width becomes the canopy height! For example, a QM head covers 1 m. It can not be reduced to cover 10 cm shoots only. Therefore the dilute volume has to operate on the minimum width the equipment can produce.

Rate for Early Season Applications in Deciduous Tree/Vine Crops (in L/100 m per m Canopy Height)

Budburst	1st Spray BB + 10 days	2nd Spray BB+20 days	3rd Spray BB+30 days
14L (70 % of 20 L)	16L (80 % of 20 L)	18L (90 % of 20 L)	Full rate

1



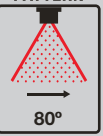
1		L/ha ↔ L/100 m																												Table unit L/100 m	
		Row Spacing (m)																													
		1.6	1.8	2	2.1	2.4	2.5	2.7	2.8	2.9	3	3.1	3.2	3.3	3.5	3.6	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	10			
L/ha	100	1.6	1.8	2	2.1	2.4	2.5	2.7	2.8	2.9	3	3.1	3.2	3.3	3.5	3.6	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	10			
	150	2.4	2.7	3	3.1	3.6	3.8	4	4.2	4.4	4.5	4.7	4.8	5	5.3	5.4	6	6.8	7.5	8.3	9	9.8	10.5	11.3	12	12.8	13.5	15			
	200	3.2	3.6	4	4.2	4.8	5	5.4	5.6	5.8	6	6.2	6.4	6.7	7	7.2	8	9	10	11	12	13	14	15	16	17	18	20			
	250	4	4.5	5	5.2	6	6.3	6.7	7	7.3	7.5	7.8	8	8.3	8.8	9	10	11.3	12.5	13.8	15	16.3	17.5	18.8	20	21	23	25			
	300	4.8	5.4	6	6.3	7.1	7.5	8.1	8.4	8.7	9	9.3	9.6	10	10.5	10.8	12	13.5	15	16.5	18	19.5	21	23	24	26	27	30			
	350	5.6	6.3	7	7.3	8.3	8.8	9.4	9.8	10.2	10.5	10.9	11.2	11.7	12.3	12.6	14	15.8	17.5	19.3	21	23	25	26	28	30	32	35			
	400	6.4	7.2	8	8.3	9.5	10	10.8	11.2	11.6	12	12.4	12.8	13.3	14	14.4	16	18	20	22	24	26	28	30	32	34	36	40			
	450	7.2	8.1	9	9.4	11	11.3	12.1	12.6	13.1	13.5	14	14.4	15	15.8	16.2	18	20	23	25	27	29	32	34	36	38	41	45			
	500	8	9	10	10	12	12.5	13.5	14	14.5	15	15.5	16	16.7	17.5	18	20	23	25	28	30	33	35	38	40	43	45	50			
	600	9.6	10.8	12	13	14	15	16.2	16.8	17.4	18	18.6	19.2	20	21	22	24	27	30	33	36	39	42	45	48	51	54	60			
	700	11.2	12.6	14	15	17	17.5	18.9	19.6	20	21	22	22	23	25	25	28	32	35	39	42	46	49	53	56	60	63	70			
	750	12	13.5	15	16	18	18.8	20	21	22	23	23	24	25	26	27	30	34	38	41	45	49	53	56	60	64	68	75			
	800	12.8	14.4	16	17	19	20	22	22	23	24	25	26	27	28	29	32	36	40	44	48	52	56	60	64	68	72	80			
	900	14.4	16.2	18	19	21	23	24	25	26	27	28	29	30	32	32	36	41	45	50	54	59	63	68	72	77	81	90			
	1000	16	18	20	21	24	25	27	28	29	30	31	32	33	35	36	40	45	50	55	60	65	70	75	80	85	90	100			
	1100	17.6	19.8	22	23	26	28	30	31	32	33	34	35	37	39	40	44	50	55	61	66	72	77	83	88	94	99	110			
	1200	19.2	22	24	25	29	30	32	34	35	36	37	38	40	42	43	48	54	60	66	72	78	84	90	96	102	108	120			
1300	21	23	26	27	31	33	35	36	38	39	40	42	43	46	47	52	59	65	72	78	85	91	98	104	111	117	130				
1400	22	25	28	29	33	35	38	39	41	42	43	45	47	49	50	56	63	70	77	84	91	98	105	112	119	126	140				
1500	24	27	30	31	36	38	40	42	44	45	47	48	50	53	54	60	68	75	83	90	98	105	113	120	128	135	150				
1600	26	29	32	33	38	40	43	45	46	48	50	51	53	56	58	64	72	80	88	96	104	112	120	128	136	144	160				
1700	27	31	34	35	40	43	46	48	49	51	53	54	57	60	61	68	77	85	94	102	111	119	128	136	145	153	170				
1800	29	32	36	38	43	45	49	50	52	54	56	58	60	63	65	72	81	90	99	108	117	126	135	144	153	162	180				
1900	30	34	38	40	45	48	51	53	55	57	59	61	63	67	68	76	86	95	105	114	124	133	143	152	162	171	190				
2000	32	36	40	42	48	50	54	56	58	60	62	64	67	70	72	80	90	100	110	120	130	140	150	160	170	180	200				
2500	40	45	50	52	60	63	67	70	73	75	78	80	83	88	90	100	113	125	138	150	163	175	188	200	213	225	250				
3000	48	54	60	63	71	75	81	84	87	90	93	96	100	105	108	120	135	150	165	180	195	210	225	240	255	270	300				
4000	64	72	80	83	95	100	108	112	116	120	124	128	133	140	144	160	180	200	220	240	260	280	300	320	340	360	400				
5000	80	90	100	104	119	125	135	140	145	150	155	160	167	175	180	200	225	250	275	300	325	350	375	400	425	450	500				
6000	96	108	120	125	143	150	162	168	174	180	186	192	200	210	216	240	270	300	330	360	390	420	450	480	510	540	600				
7000	112	126	140	146	167	175	189	196	203	210	217	224	233	245	252	280	315	350	385	420	455	490	525	560	595	630	700				
8000	128	144	160	167	190	200	216	224	232	240	248	256	266	280	288	320	360	400	440	480	520	560	600	640	680	720	800				
9000	144	162	180	188	214	225	243	252	261	270	279	288	300	315	324	360	405	450	495	540	585	630	675	720	765	810	900				
10000	160	180	200	208	238	250	270	280	290	300	310	320	333	350	360	400	450	500	550	600	650	700	750	800	850	900	1000				
Conversion Factor		62.5	55.5	50	47.6	41.7	40	37.0	35.7	34.5	33.3	32.3	31.3	30.3	28.6	27.8	25	22.2	20	18.2	16.7	15.4	14.3	13.3	12.5	11.8	11.1	10			
Formula		L/100 m = L/ha ÷ 100 x rowspacing (m)														L/ha = L/100 m x 100 ÷ rowspacing (m)															

2



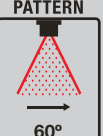
2	L/100 m ↔ L/min																				Table unit = L/100 m													
	Travel Speed (km/h)										Travel Speed (km/h)																							
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	8	9	10		
Total Flow Rate of All Nozzles (L/min)	2	12	8	6	4.8	4	3.4	3	2.7	2.4	2.2	2	1.8	1.7	1.5	1.3	1.2	60	360	240	180	144	120	103	90	80	72	65	60	55	51	45	40	36
	3	18	12	9	7.2	6	5.1	4.5	4	3.6	3.3	3	2.8	2.6	2.3	2	1.8	62	372	248	186	149	124	106	93	83	74	68	62	57	53	47	41	37
	4	24	16	12	9.6	8	6.9	6	5.3	4.8	4.4	4	3.7	3.4	3	2.7	2.4	64	384	256	192	154	128	110	96	85	77	70	64	59	55	48	43	38
	5	30	20	15	12	10	8.6	7.5	6.7	6	5.5	5	4.6	4.3	3.8	3.3	3	66	396	264	198	158	132	113	99	88	79	72	66	61	57	50	44	40
	6	36	24	18	14.4	12	10.3	9	8	7.2	6.5	6	5.5	5.1	4.5	4	3.6	68	408	272	204	163	136	117	102	91	82	74	68	63	58	51	45	41
	7	42	28	21	16.8	14	12	10.5	9.3	8.4	7.6	7	6.5	6	5.3	4.7	4.2	70	420	280	210	168	140	120	105	93	84	76	70	65	60	53	47	42
	8	48	32	24	19.2	16	13.7	12	10.7	9.6	8.7	8	7.4	6.9	6	5.3	4.8	72	432	288	216	173	144	123	108	96	86	79	72	66	62	54	48	43
	9	54	36	27	22	18	15.4	13.5	12	10.8	9.8	9	8.3	7.7	6.8	6	5.4	74	444	296	222	178	148	127	111	99	89	81	74	68	63	56	49	44
	10	60	40	30	24	20	17.1	15	13.3	12	10.9	10	9.2	8.6	7.5	6.7	6	76	456	304	228	182	152	130	114	101	91	83	76	70	65	57	51	46
	11	66	44	33	26	22	19	17	14.7	13.2	12	11	10.2	9.4	8.3	7.3	6.6	78	468	312	234	187	156	134	117	104	94	85	78	72	67	59	52	47
	12	72	48	36	29	24	21	18	16	14.4	13.1	12	11.1	10.3	9	8	7.2	80	480	320	240	192	160	137	120	107	96	87	80	74	69	60	53	48
	13	78	52	39	31	26	22	20	17.3	15.6	14.2	13	12	11.1	9.8	8.7	7.8	85	510	340	255	204	170	146	128	113	102	93	85	78	73	64	57	51
	14	84	56	42	34	28	24	21	18.7	16.8	15.3	14	12.9	12	10.5	9.3	8.4	90	540	360	270	216	180	154	135	120	108	98	90	83	77	68	60	54
	15	90	60	45	36	30	26	23	20	18	16.4	15	13.8	12.9	11.3	10	9	95	570	380	285	228	190	163	143	127	114	104	95	88	81	71	63	57
	16	96	64	48	38	32	27	24	21	19.2	17.5	16	14.8	13.7	12	10.7	9.6	100	600	400	300	240	200	171	150	133	120	109	100	92	86	75	67	60
	17	102	68	51	41	34	29	26	23	20	18.5	17	15.7	14.6	12.8	11.3	10.2	110	660	440	330	264	220	189	165	147	132	120	110	102	94	83	73	66
18	108	72	54	43	36	31	27	24	22	19.6	18	16.6	15.4	13.5	12	10.8	120	720	480	360	288	240	206	180	160	144	131	120	111	103	90	80	72	
19	114	76	57	46	38	33	29	25	23	21	19	17.5	16.3	14.3	12.7	11.4	130	780	520	390	312	260	223	195	173	156	142	130	120	111	98	87	78	
20	120	80	60	48	40	34	30	27	24	22	20	18.5	17.1	15	13.3	12	140	840	560	420	336	280	240	210	187	168	153	140	129	120	105	93	84	
21	132	88	66	53	44	38	33	29	26	24	22	20	18.9	16.5	14.7	13.2	150	900	600	450	360	300	257	225	200	184	160	150	138	129	113	100	90	
22	144	96	72	58	48	41	36	32	29	26	24	22	21	18	16	14.4	160	960	640	480	384	320	274	240	213	192	175	160	148	137	120	107	96	
23	156	104	78	62	52	45	39	35	31	28	26	24	22	19.5	17.3	15.6	170	1020	680	510	408	340	291	255	227	204	185	170	157	146	128	113	102	
24	168	112	84	67	56	48	42	37	34	31	28	26	24	21	18.7	16.8	180	1080	720	540	432	360	309	270	240	216	196	180	166	154	135	120	108	
25	180	120	90	72	60	51	45	40	36	33	30	28	26	23	20	18	190	1140	760	570	456	380	326	285	253	228	207	190	175	163	143	127	114	
26	192	128	96	77	64	55	48	43	38	35	32	30	27	24	21	19.2	200	1200	800	600	480	400	343	300	267	240	218	200	185	171	150	133	120	
27	204	136	102	82	68	58	51	45	41	37	34	31	29	26	23	20	220	1320	880	660	528	440	377	330	293	264	240	220	203	189	165	147	132	
28	216	144	108	86	72	62	54	48	43	39	36	33	31	27	24	22	240	1440	960	720	576	480	411	360	320	288	262	240	222	206	180	160	144	
29	228	152	114	91	76	65	57	51	46	41	38	35	33	29	25	23	260	1560	1040	780	624	520	446	396	347	312	284	260	240	223	195	173	156	
30	240	160	120	96	80	69	60	53	48	44	40	37	34	30	27	24	280	1680	1120	840	672	560	480	420	373	336	305	280	258	240	210	187	168	
31	252	168	126	101	84	72	63	56	50	46	42	39	36	32	28	25	300	1800	1200	900	720	600	514	450	400	360	327	300	277	257	225	200	180	
32	264	176	132	106	88	75	66	59	53	48	44	41	38	33	29	26	350	2100	1440	1050	840	700	600	525	467	420	382	350	323	300	263	233	210	
33	276	184	138	110	92	79	69	61	55	50	46	42	39	35	31	28	400	2400	1600	1200	960	800	686	600	533	480	436	400	369	343	300	267	240	
34	288	192	144	115	96	82	72	64	58	52	48	44	41	36	32	29	450	2700	1800	1350	1080	900	771	675	600	540	491	450	415	386	338	300	270	
35	300	200	150	120	100	86	75	67	60	55	50	46	43	38	33	30	500	3000	2000	1500	1200	1000	857	750	667	600	545	500	462	429	375	333	300	
36	312	208	156	125	104	89	78	69	62	57	52	48	45	39	35	32	600	3600	2400	1800	1440	1200	1029	900	800	720	655	604	554	514	450	400	360	
37	324	216	162	130	108	93	81	72	65	59	54	50	46	41	36	32	700	4200	2800	2100	1680	1400	1200	1050	933	840	764	700	646	600	525	467	420	
38	336	224	168	134	112	96	84	75	67	61	56	52	48	42	37	34	800	4800	3200	2400	1920	1600	1371	1200	1067	960	873	800	738	686	600	533	480	
39	348	232	174	139	116	99	87	77	70	63	58	54	50	44	39	35	900	5400	3600	2700	2160	1800	1543	1350	1200	1080	982	900	831	771	675	600	540	
Formula		L/100 m = L/min x 6 ÷ speed																L/min = L/100 m x speed ÷ 6																

NOZZLES FOR HORTICULTURE – TREE AND VINE

CERAMIC CONE NOZZLES FOR HORTICULTURE – TREE AND VINE CROPS

NOZZLE TYPE	ORDER CODE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
ALBUZ ATR 80°				
	AZ-ATR-**-80C ** denotes colour, e.g. YW	11.67	12.84	Z
FEATURES AND SPECIFICATIONS <ul style="list-style-type: none"> ✓ Hollow cone 80° ✓ Precision polished pink ceramic surfaces for long life ✓ Easily dismantled for cleaning ✓ Perfect sealing of swirl chamber for precise flow rate ✓ Pressure range 0–25 Bar (optimum 8–15 Bar) ✓ For tree, vine and trellis crops ✓ Ideal for fungicides and insecticides ✓ Fine to very fine drops for excellent spray coverage ✓ European colour coded (see chart below for pressure, flow rates and colours) 				
		PRESSURE RANGE	SPRAY PATTERN	
				



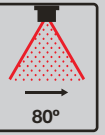
**Colour codes: WE = white, LC = lilac, BN = brown, YW = yellow, OE = orange, RD = red, GY = grey, GN = green, BK = black, BE = blue, PE = purple

NOZZLE TYPE	ORDER CODE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
ALBUZ ATR 60°				
	AZ-ATR-**-60C ** denotes colour, e.g. YW	11.67	12.84	Z
FEATURES AND SPECIFICATIONS <ul style="list-style-type: none"> ✓ Hollow cone 60° (note – white and purple only available in 80°) ✓ Precision polished pink ceramic surfaces for long life ✓ Easily dismantled for cleaning ✓ Perfect sealing of swirl chamber for precise flow rate ✓ Pressure range 0–25 Bar (optimum 8–15 Bar) ✓ For tree, vine and trellis crops ✓ Ideal for fungicides and insecticides ✓ European colour coded 				
		PRESSURE RANGE	SPRAY PATTERN	
				

**Colour codes: WE = white, LC = lilac, BN = brown, YW = yellow, OE = orange, RD = red, GY = grey, GN = green, BK = black, BE = blue, PE = purple

ALBUZ 60° AND 80° ATR HOLLOW CONE NOZZLE CHART

BAR	L/MIN										
	White	Lilac	Brown	Yellow	Orange	Red	Grey	Green	Black	Blue	Purple
5	0.27	0.36	0.48	0.73	0.99	1.38	1.5	1.78	2	2.45	3.05
6	0.29	0.39	0.52	0.8	1.08	1.51	1.63	1.94	2.18	2.67	3.32
7	0.32	0.42	0.56	0.86	1.17	1.62	1.76	2.09	2.35	2.87	3.57
8	0.34	0.45	0.6	0.92	1.24	1.73	1.87	2.22	2.5	3.06	3.81
9	0.36	0.48	0.64	0.97	1.32	1.83	1.98	2.35	2.64	3.24	4.03
10	0.38	0.50	0.67	1.03	1.39	1.92	2.08	2.47	2.78	3.4	4.23
11	0.39	0.52	0.7	1.07	1.45	2.01	2.17	2.58	2.9	3.56	4.43
12	0.41	0.55	0.73	1.12	1.51	2.09	2.26	2.69	3.03	3.71	4.61
13	0.43	0.57	0.76	1.17	1.57	2.17	2.35	2.79	3.14	3.85	4.79
14	0.44	0.59	0.79	1.21	1.63	2.25	2.43	2.89	3.26	3.99	4.96
15	0.46	0.61	0.81	1.25	1.69	2.33	2.51	2.99	3.36	4.12	5.12
16	0.47	0.63	0.84	1.29	1.74	2.4	2.59	3.08	3.47	4.25	5.28
17	0.48	0.64	0.86	1.33	1.79	2.47	2.67	3.17	3.57	4.37	5.43
18	0.50	0.66	0.89	1.37	1.84	2.54	2.74	3.25	3.67	4.49	5.58
19	0.51	0.68	0.91	1.4	1.89	2.6	2.81	3.34	3.76	4.61	5.73
20	0.52	0.70	0.93	1.44	1.94	2.67	2.88	3.42	3.85	4.72	5.87

NOZZLE TYPE	ORDER CODE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
ALBUZ TVI				
	AZ-TVI-****-80C **** denotes size, see table below	32.55	35.81	Z
FEATURES AND SPECIFICATIONS <ul style="list-style-type: none"> ✓ Air-induction hollow cone nozzle (venture system) ✓ Large drops filled with air for drift control ✓ Precision polished pink ceramic surfaces ✓ Compact length (19mm) ✓ Perfect sealing of swirl chamber for precise flow rate ✓ Ideal for fungicides and insecticides ✓ Coarse to ultra-coarse droplets for drift control ✓ ISO colour coding (see chart below) 				
		PRESSURE RANGE	SPRAY PATTERN	
				

SPRAY QUALITY INFORMATION FOR TVI NOZZLES

BAR	TVI 80°							
	Purple 80-0050	Pink 80-0075	Orange 80-001	Green 80-015	Yellow 80-02	Lilac 80-025	Blue 80-03	Red 80-04
5			UC	UC	UC	UC	UC	UC
7	UC	VC	UC	UC	UC	UC	UC	UC
10	XC	VC	XC	XC	XC	XC	UC	UC
15	VC	C	VC	VC	VC	XC	UC	UC

ALBUZ 80° TVI HOLLOW CONE NOZZLE CHART

BAR	L/MIN							
	Purple 80-0050	Pink 80-0075	Orange 80-001	Green 80-015	Yellow 80-02	Lilac 80-025	Blue 80-03	Red 80-04
5	-	0.39	0.52	0.77	1.03	1.29	1.55	2.07
6	-	0.42	0.57	0.85	1.13	1.41	1.70	2.26
7	0.31	0.46	0.61	0.92	1.22	1.53	1.83	2.44
8	0.33	0.49	0.65	0.98	1.31	1.63	1.96	2.61
9	0.35	0.52	0.69	1.04	1.39	1.73	2.08	2.77
10	0.37	0.55	0.73	1.10	1.46	1.83	2.19	2.92
11	0.38	0.57	0.77	1.15	1.53	1.91	2.30	3.06
12	0.40	0.60	0.80	1.2	1.6	2.00	2.40	3.20
13	0.42	0.62	0.83	1.25	1.67	2.08	2.50	3.33
14	0.43	0.65	0.86	1.30	1.73	2.16	2.59	3.46
15	0.45	0.67	0.89	1.34	1.79	2.24	2.68	3.58
16	0.46	0.69	0.92	1.39	1.85	2.31	2.77	3.70
17	0.48	0.71	0.95	1.43	1.90	2.38	2.86	3.81
18	0.49	0.73	0.98	1.47	1.96	2.45	2.94	3.92
19	0.50	0.75	1.01	1.51	2.01	2.52	3.02	4.03
20	0.52	0.77	1.03	1.55	2.07	2.58	3.10	4.13
21	0.53	0.79	1.06	1.59	2.12	2.65	3.17	4.23
22	0.54	0.81	1.08	1.62	2.17	2.71	3.25	4.33
23	0.55	0.83	1.11	1.66	2.22	2.77	3.32	4.43
24	0.57	0.85	1.13	1.70	2.26	2.83	3.39	4.53
25	0.58	0.87	1.15	1.73	2.31	2.89	3.46	4.62













NOZZLE BODIES AND CAPS FOR HORTICULTURE

- Caps for use with TurboDrop® AI nozzles in horticultural applications
- Nozzle bodies and o-rings used on Croplands sprayers for horticulture

Note – the complete nozzle body, when ordered from Croplands, comes with a cap/caps to suit. When ordering caps and o-rings to suit TurboDrop® AI nozzles, use the codes on the right-hand side of the table below.

- » Choose the correct cap to suit the nozzle body on your sprayer
- » The TurboDrop® uni narrow angle nozzles click together and remain in the cap once assembled. They cannot be disassembled – so choose the cap you need
- » Suitable o-rings are required for a complete seal – see table below




NOZZLE BODY	FITTED TO	CAP AND O-RING TO ORDER	DESCRIPTION	ORDER CODE	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
 B716.617.2 (standard type)	Croplands Cropliner® sprayers, Silvan models and other brands	 B716.605.3	Brass cap	B716.605.3	2.39	2.63	Y
 B73.610.105 (organic type)	Croplands Cropliner® sprayers for organic spraying	 B716.605.3	Brass cap	B716.605.3	2.39	2.63	Y
	Croplands Cropliner® and Cropliner SP® front entry fan models	 B75.605.46	Brass cap	B75.605.46	2.39	2.63	Y
 B75.617.6E (standard type)	Croplands Cropliner® and Cropliner SP® front entry fan models	 B75.605.46	Brass cap	B75.605.46	2.39	2.63	Y
 B264.612.172	Croplands Quantum Mist® sprayers	 B256.605.7	Nickel plated cap	B256.605.7	2.29	2.52	Y
 B67.617.67	Croplands Quantum Mist® tower sprayers	 B256.605.7	Nickel plated cap	B256.605.7	2.29	2.52	Y
O-rings to seal the caps on all listed nozzle bodies above	Croplands Quantum Mist® sprayers	 B73.602.22	O-ring, 16mm O.D. x 10.8 I.D	B73.602.22	0.58	0.64	Y

PRICING FOR NOZZLE BODIES SHOWN IN TABLE ABOVE

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
B716.617.2	Standard swing-over nozzle body, suits Croplands Cropliner sprayers.	43.05	47.36	Y
B73.610.105	Organic model swing-over nozzle body, suits Croplands Cropliner sprayers for organic applications.	39.25	43.18	Y
B75.617.6E	Swing-over nozzle body for Croplands front-entry fan models	46.90	51.59	Y
B264.612.172	Single swivel nozzle body for Croplands Quantum Mist® sprayers	13.68	15.05	Y
B67.617.67	Non-drip body with shut off for Croplands Quantum Mist® sprayers	41.24	45.36	Y



TURBODROP® NARROW ANGLE AI NOZZLES

DESCRIPTION	HOW TO ORDER	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
 <ul style="list-style-type: none"> ✓ High pressure air-induction nozzle ✓ 20, 40 and 60° options ✓ Fully ceramic injector and exit tip ✓ Pressure range 6–25 Bar ✓ Modular construction 	<p>Size i.e. 04</p> <p>TDCFFC6004UNI</p> <p>Angle i.e. 60°</p>	38.25	42.08	Y

For choosing the right cap to suit the TurboDrop® narrow angle AI nozzles and nozzle body, see previous page.

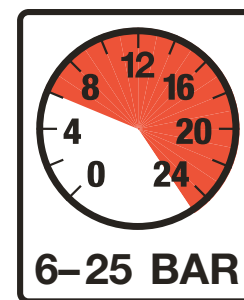
KEY FEATURES

- Narrow angle horticultural flat fan venturi nozzle designed specifically for horticultural applications
- All wearing components made from high quality ceramic material – ideal for reducing wear when using abrasive powders and granulated formulations in suspension
- ISO colour coded for easy identification
- Coarse to extra coarse droplet for effective drift reduction, even at high pressure
- High droplet speed for good projection and excellent penetration over a wide pressure range
- European JKI approved for up to 90% drift reduction

USES

- Axial-type air-blast fans for specific applications (i.e. HiCane application in kiwifruit)
- Top nozzles on airblast fans to reduce drift in upper canopies
- Croplands Quantum Mist sprayers for early season spray applications to reduce drift and improve coverage on tree branches, buds and vine cordons


PRESSURE RANGE



BAR	NOZZLE SIZE (ISO COLOUR CODED) AND OUTPUT IN L/MIN							
	01	15	02	025	03	04	05	06
6	0.57	0.85	1.13	1.41	1.70	2.26	2.83	3.39
7	0.61	0.92	1.22	1.53	1.83	2.44	3.05	3.67
8	0.65	0.98	1.31	1.63	1.96	2.61	3.26	3.92
9	0.69	1.04	1.39	1.73	2.08	2.77	3.46	4.16
10	0.73	1.09	1.46	1.82	2.19	2.92	3.65	4.38
12	0.80	1.20	1.60	2.00	2.40	3.20	4.00	4.80
14	0.86	1.29	1.73	2.16	2.59	3.46	4.32	5.19
16	0.92	1.38	1.85	2.31	2.77	3.70	4.62	5.54
18	0.98	1.47	1.96	2.45	2.94	3.92	4.90	5.88
20	1.03	1.55	2.07	2.58	3.10	4.13	5.16	6.20
22	1.08	1.62	2.17	2.71	3.25	4.33	5.41	6.50
24	1.13	1.70	2.26	2.83	3.39	4.53	5.65	6.79
25	1.15	1.73	2.31	2.89	3.47	4.62	5.77	6.93

NOZZLES FOR HORTICULTURE

NOZZLES – DISCS AND CORES

NOZZLE	TYPE AND DESCRIPTION	SAMPLE ORDER CODE	TYPE	SIZE RANGE, MATERIAL	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
	Disc and Core Jets: • Full and hollow cone spray patterns • Medium to fine droplets for use in air assisted situations • 5–20 Bar recommended range	AZ-AD4	Disc	• 1 to 7 • Pink ceramic	6.70	7.37	Z
		AZ-AC35	Core	• 13 to 56 • Pink ceramic	10.50	11.55	Z

DISC AND CORE ALBUZ CERAMIC – FLOWRATES

	DISC SIZE	CORE SIZE	ORIFICES DIAMETER	L/MIN							ANGLES	
				3 BAR	4 BAR	5 BAR	6 BAR	10 BAR	15 BAR	20 BAR	10 BAR	20 BAR
HOLLOW CONE	AD 1	AC 3	0,8	0,24	0,27	0,3	0,33	0,41	0,49	0,56	70°	79°
	AD 2	AC 13	1,02	0,31	0,35	0,39	0,42	0,53	0,64	0,73	87°	97°
	AD 3	AC 13	1,2	0,36	0,41	0,45	0,49	0,61	0,74	0,84	89°	98°
	AD 4	AC 13	1,56	0,45	0,52	0,57	0,62	0,78	0,93	1,06	99°	103°
	AD 5	AC 13	2	0,55	0,62	0,69	0,75	0,94	1,13	1,29	102°	105°
	AD 1	AC 23	0,8	0,28	0,32	0,35	0,38	0,48	0,57	0,65	66°	74°
	AD 2	AC 23	1,02	0,37	0,43	0,47	0,51	0,64	0,77	0,88	83°	93°
	AD 3	AC 23	1,2	0,44	0,51	0,56	0,61	0,76	0,92	1,04	84°	92°
	AD 4	AC 23	1,56	0,56	0,64	0,71	0,77	0,97	1,16	1,32	92°	98°
	AD 5	AC 23	2	0,72	0,82	0,91	0,99	1,24	1,49	1,7	96°	99°
	AD 6	AC 23	2,4	0,85	0,97	1,07	1,16	1,46	1,75	2	99°	101°
	AD 1	AC 25	0,8	0,41	0,46	0,51	0,55	0,7	0,84	0,95	50°	60°
	AD 2	AC 25	1,02	0,59	0,67	0,74	0,8	1,01	1,21	1,38	57°	66°
	AD 3	AC 25	1,2	0,72	0,81	0,9	0,98	1,23	1,48	1,68	63°	69°
	AD 4	AC 25	1,56	1,02	1,16	1,28	1,39	1,75	2,1	2,39	75°	80°
	AD 5	AC 25	2	1,41	1,6	1,77	1,92	2,42	2,9	3,3	77°	80°
	AD 6	AC 25	2,4	1,73	1,97	2,18	2,37	2,98	3,57	4,07	82°	85°
	AD 7	AC 25	2,8	2,07	2,36	2,61	2,83	3,57	4,28	4,87	88°	91°
	AD 1	AC 45	0,8	0,48	0,55	0,61	0,66	0,83	1	1,14	32°	39°
	AD 2	AC 45	1,02	0,73	0,83	0,92	1	1,26	1,51	1,72	46°	53°
	AD 3	AC 45	1,2	0,92	1,05	1,16	1,26	1,58	1,9	2,16	48°	52°
	AD 4	AC 45	1,56	1,35	1,54	1,7	1,85	2,32	2,79	3,17	59°	60°
	AD 5	AC 45	2	1,92	2,19	2,42	2,63	3,31	3,97	4,52	68°	70°
	AD 6	AC 45	2,4	2,46	2,79	3,09	3,35	4,22	5,07	5,77	72°	75°
	AD 7	AC 45	2,8	3,01	3,43	3,79	4,11	5,18	6,21	7,07	79°	80°
	AD 1	AC 46	0,8	0,55	0,62	0,69	0,75	0,94	1,13	1,29	23°	27°
	AD 2	AC 46	1,02	0,92	1,05	1,16	1,26	1,58	1,9	2,16	26°	30°
	AD 3	AC 46	1,2	1,2	1,37	1,51	1,64	2,06	2,48	2,82	30°	30°
	AD 4	AC 46	1,56	2,03	2,32	2,56	2,78	3,5	4,2	4,78	35°	35°
	AD 5	AC 46	2	3,11	3,54	3,91	4,24	5,34	6,41	7,3	40°	42°
	AD 6	AC 46	2,4	4,12	4,69	5,18	5,62	7,08	8,49	9,67	45°	46°
	AD 7	AC 46	3,230	5,49	6,40	7,10	7,84	10,16	12,43	14,33	55°	53°
FULL CONE	AD 1	AC 31	0,8	0,53	0,61	0,67	0,73	0,92	1,1	1,25	39°	39°
	AD 2	AC 31	1,02	0,82	0,93	1,03	1,12	1,41	1,69	1,92	87°	95°
	AD 3	AC 31	1,2	0,87	0,99	1,1	1,19	1,5	1,8	2,05	65°	62°
	AD 1	AC 35	0,8	0,53	0,61	0,67	0,73	0,92	1,1	1,25	34°	40°
	AD 2	AC 35	1,02	0,92	1,05	1,16	1,26	1,58	1,9	2,16	39°	39°
	AD 3	AC 35	1,2	1,28	1,46	1,61	1,75	2,2	2,64	3	44°	42°
	AD 4	AC 35	1,56	2,08	2,37	2,62	2,84	3,58	4,3	4,89	77°	72°
	AD 5	AC 35	2	2,62	2,98	3,3	3,58	4,51	5,41	6,16	37°	34°
	AD 2	AC 56	1,02	0,88	1	1,11	1,2	1,52	1,82	20,7	21°	20°
	AD 3	AC 56	1,2	1,19	1,36	1,5	1,63	2,05	2,46	2,8	28°	32°
	AD 4	AC 56	1,56	2,05	2,33	2,58	2,8	3,52	4,23	4,81	35°	38°
	AD 5	AC 56	2	3,46	3,94	4,36	4,73	5,96	7,15	8,14	43°	40°
	AD 6	AC 56	2,1	5,11	5,82	6,43	6,98	8,78	10,54	12	56°	49°
	AD 7	AC 56	2,3	6,87	7,81	8,64	9,38	11,8	14,17	16,12	68°	64°



CHECKING SPRAY COVERAGE

The appearance of a spray cloud interacting with the canopy does not provide accurate indications about coverage achieved in the canopy. More often than not the perception of the human eye is not even close to the real coverage achieved. For example, the plumes of high volume applications will generally look reassuringly better than the hardly visible plumes from low volume applications. Yet, coverage with the lower volume is often equivalent or even better.

Hard to cover surfaces may not allow deposition and what looks superficially like an effective plume may not translate into actual coverage. Therefore, for any realistic assessment of spray coverage it becomes imperative to create some unbiased standard with the help of spray indicators.

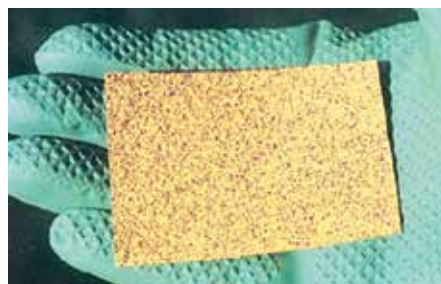


CLAY MARKERS

Their main use pattern is to protect fruits and leaves from sun burn. By far the most visible residues are produced by Surround which makes it an excellent product for the assessment of coverage. Spraying with Surround provides the advantage to see coverage over the entire canopy as a whole as well as in detail. Uneven banding or shading in the canopy can be picked up very effectively. Surround is the best method to demonstrate excessive run-off.

An assessment can be carried out soon after application, once the clay marker has dried. The sprayer can be modified according to shortcomings. This continuous workflow makes working on the set-up very effective.

A good visual spray indicator rate is 1.25kg/100 litre dilute volume. If a concentrate spray volume is used the x-factor rules must be applied.



The SNAPCARD APP allows the cards to be photographed and coverage to be measured.

WATER SENSITIVE PAPER

Water sensitive paper has the advantage that it is very easy to handle (but watch out for moisture) and store (used and unused) which make it an ideal tool for documentation. It can be assessed straight after the application and like clay, it is excellent to be incorporated into the work flow of the set-up.

It provides only a small snapshot of the canopy target and great care needs to be taken to produce a representative standard when placing the papers into the canopy. As a rule of thumb, if three out of ten papers show inadequate coverage the set-up needs improvement.



FLUORESCENT DYE

The glow of fluorescent dye in the light of a fluorescent torch under dark conditions can be quite spectacular. Even the tiniest droplets show up. The observer needs a fluorescent torch. Assessments are normally carried out in the night which makes it difficult to change set-ups on the go. Alternatively, leaves and fruits can be picked after application and observed in a darkroom during the day.

ORDER CODE	DESCRIPTION	\$ (EX. GST)	\$ (INC. GST)	PROD. CAT.
L-M1111	1 litre fluoro dye	126.32	138.95	X
L-M1115	4 litre fluoro dye	378.95	416.84	X
20301-1	Water sensitive paper 76 x 26mm (3" x 1") pack 50	72.73	80.00	X
20301-2	Water sensitive paper 76 x 52mm (3" x 2") pack 50	121.53	133.68	X

NOZZLE MATERIAL AND WEAR

Nozzle orifices are produced with different materials, the most durable of them being ceramic, followed by steel and various polymers. Nozzles with brass orifices are made from the least durable material.

Worn or damaged nozzles will produce an uneven spray pattern with serious implications for efficacy. Worn or damaged nozzles in spray units without an automatic rate controller will increase the output, spoil calibration, and may create unnecessary extra costs due to over application.

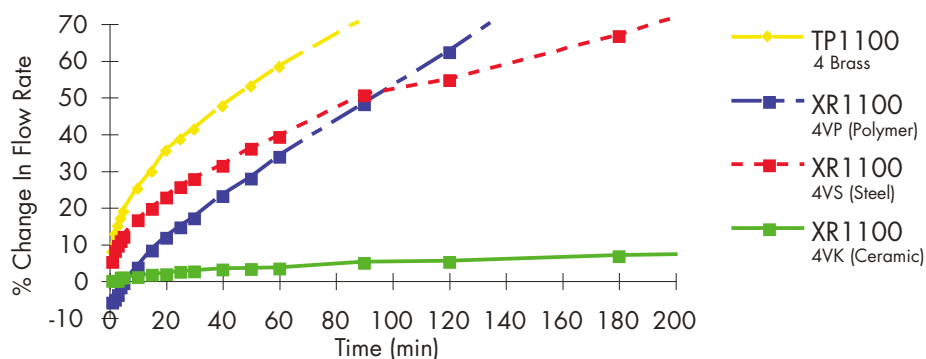
Most new sprayers have rate controllers that will compensate by measuring liquid flow and adjust

accordingly. However, they will cause under supply to the rest of the nozzles to adjust for the extra output of the worn nozzles. Again, this may result in an uneven spray pattern.

Nozzles should be checked for wear at least once per season. As a rule of thumb, nozzles made from durable plastic will need replacement every two years, nozzles with steel orifices should be replaced every three years and nozzles with ceramic tips should be replaced every four to five years.

These time frames will decrease with heavy use, especially when spraying abrasive chemicals.

EFFECT OF NOZZLE MATERIAL ON NOZZLE WEAR: ACCELERATED WEAR TEST



Source: TeeJet

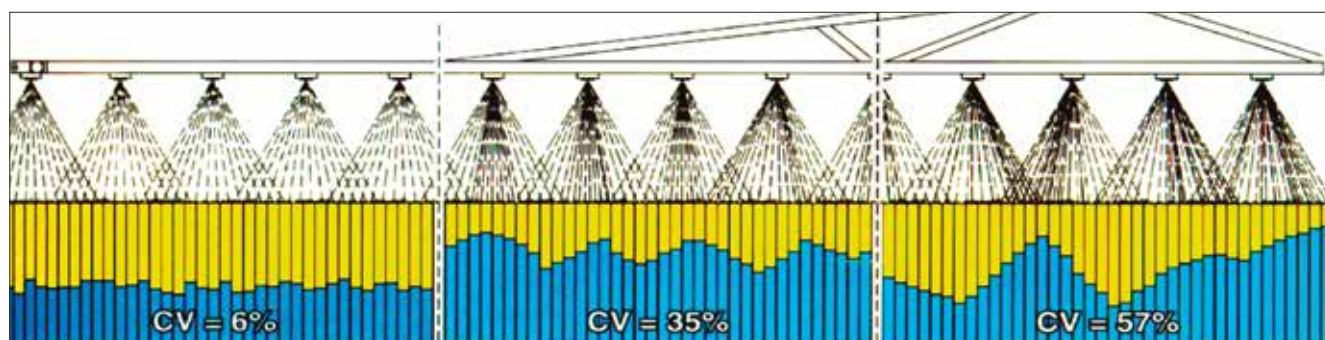
UNIFORMITY OF SPRAY

Uniformity of spray is affected by:

» Worn or damaged nozzles

» Nozzle type, spacing and height
» Boom movement, stability

» Liquid properties (adjuvants can have an uniforming effect, e.g. LI 700)



Source: TeeJet

NEW SPRAY TIPS

Produce a uniform distribution when properly overlapped.

WORN SPRAY TIPS

Have a higher output with more spray concentrated under each tip.

DAMAGED SPRAY TIPS

Have a very erratic output – over applying and under applying.

FLOW RATE

$$\text{L/min/nozzle} = \frac{\text{L/ha} \times \text{km/h} \times \text{W(m)}}{600}$$

For example, a farmer wants to spray 70 L/ha, drive with a speed of 18 km/h and his boom has a nozzle spacing of 50 cm:

$$\text{L/min} = \frac{70 \text{ L/ha} \times 18 \text{ km/h} \times 0.5 \text{ m}}{600} = 1.05 \text{ L/min}$$

To do so he needs to use a nozzle that delivers 1.05 L/min. He has several options, for example, he could use an 025 nozzle size at 3.5 bar or an 02 size at 5.5 bar (see table).

L/min/nozzle = nozzle flow rate in litre per minute
L/ha = water application rate per hectare
km/h = driving speed
W = width of nozzle spacing in metres
600 = constant

TRAVEL SPEED

$$\text{Speed (km/h)} = \frac{\text{Distance (m)} \times 3.6}{\text{Time (sec)}}$$

For accurate application it is important to calibrate the speed of the tractor. An easy way to do so is to drive in the gear the application will be done in, measure the time it takes to travel 100 metre and apply this simple formula. For example, it takes the farmer 20 sec to drive 100 metre. His application speed is 18 km/h.

$$\text{Speed (km/h)} = \frac{100 \text{ m} \times 3.6}{20 \text{ sec}} = 18 \text{ km/h}$$

APPLICATION RATE

$$\text{Application rate (L/ha)} = \frac{\text{L/min/nozzle} \times 600}{\text{km/h} \times \text{W}}$$

PRESSURE

1 bar (bar) =
» 100 kilopascal (kPa)
» 14.5 pounds per square inch (PSI)

1 pound per square inch (PSI) =
» 6.89 kilopascal (kPa)
» 0.0689 bar (bar)

As a rule of thumb, to double the flow through a nozzle, the pressure must be increased four times. Higher pressures increase drift (less so for AI nozzles) and increase the rate of orifice wear.

SPOT/BAND SPRAYING

For spot and band spraying, the same formula can be used but W (nozzle spacing) becomes the spray width divided by the number of directed nozzles.

For example, a grower directs 3 nozzles over a 1 metre strip:

$$W = \frac{1 \text{ m}}{3 \text{ nozzles}} = 0.33 \text{ m}$$

TERMS AND CONDITIONS OF SALE

GENERAL TERMS AND CONDITIONS OF SALE ("TERMS")

Croplands Equipment Pty Ltd (ACN 006 450 184, "Croplands") hereby agrees with you that, unless expressly amended in writing by Croplands, these Terms comprise the only terms for the supply and sale of goods by Croplands to you and supersede all other terms, conditions or agreements between us and without further notice, will apply to all future transactions between Croplands and you. These Terms override anything that may be implied or expressed on your orders or your own documentation. In these Terms: "goods" means all agricultural products or services supplied to you by Croplands; "you" means Croplands' customer. If you are more than one, these Terms bind each of you jointly and severally.

1. QUOTES

- (a) A quote by Croplands is an invitation to you to do business with Croplands, it is not an offer. A quote will remain valid for seven (7) business days from the date of the quote, after which time it may be altered or withdrawn without any notice to you.
- (b) Any alteration to a quote will be effective only if it is in writing and altered by Croplands.

2. ACCEPTANCE

Your order(s) will be accepted by Croplands either when Croplands communicates its acceptance to you, or when Croplands takes steps to fill your order, irrespective of whether those steps are communicated to you. Croplands' acceptance of monies, however paid to it, will not constitute an acceptance of your order. Croplands may, in its sole discretions, without any liability to you, cancel any accepted order at any time.

3. WARRANTIES

- (a) Any provisions or rights under the Competition and Consumer Act 2010 or relevant state legislation which cannot be excluded by those statutes or by law are not intended to be excluded by these Terms. All warranties, guarantees and conditions, other than those expressly stated in these Terms and whether implied by statute, common law, custom or otherwise are to the extent that the law permits, expressly excluded.

If you have acquired goods as a Consumer, these conditions of sale shall not exclude, limit, restrict or modify the rights, entitlements and remedies conferred upon you or the liabilities imposed upon us, by any condition or warranty implied, by the commonwealth, state or territory act or ordinance, rendering void or prohibiting such exclusion, limitation, restriction or modification.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

- (b) You accept all risk and responsibility for consequences arising from the use of the goods whether singly or in combination with other products.
- (c) Any liability incurred by us to you is limited to the replacement or repair of the goods or (at our option) refund of the price paid by you, for a period of 12 months from the date of sale, provided the goods have not been damaged through misuse or handling and in particular does not extend to consequential loss.
- (d) To make a claim under this warranty, you can contact us on warranty@croplands.com.au, or call 1800-999-162, or contact your local Croplands Representative listed on the www.croplands.com.au/pages/contact.html website. The Buyer should specify the full particulars of such claim and wherever possible return a sufficient part of the Goods to enable a proper examination by the Seller.
- (e) Any advice, recommendation, information, assistance or service provided by Croplands in relation to the goods or their use or application is given in good faith, is believed by Croplands to be reliable, but is provided with an express disclaimer for any liability or responsibility on the part of Croplands.

4. PRICES

- (a) All prices unless otherwise stated are expressed in Australian currency and exclude the costs of delivery.
- (b) Notwithstanding any price contained in your order form or other document submitted by you, the price(s) charged to you, subject to clause 1, shall be the price(s) ruling as at the date of delivery. Any price indications or price lists are subject to alteration by Croplands from time to time to reflect price(s) ruling as at the date of delivery.
- (c) If any statutory charge, duty, impost or tax (including GST) ("charge") is levied in respect of the goods and that charge has not been allowed for by Croplands in calculating the price or when raising an invoice, then you must pay that charge and the price for the goods will increase accordingly.
- (d) Croplands may ask you to pay the whole or any part of the price for the goods at any time prior to delivery, as Croplands considers appropriate.

- (e) Croplands may change the price for the goods at any time.

5. DELIVERY OF THE GOODS

- (a) You must pay all costs of freight, delivery and unloading the goods and you must reimburse Croplands for all costs, which it incurs on your behalf in this regard.
- (b) You will pay any additional charges incurred by Croplands if you direct it to deliver the goods at times or to addresses different from those specified in your order as accepted by Croplands.
- (c) You will accept delivery of the goods when they are delivered to the address on your order.
- (d) If you fail to accept delivery of the goods, Croplands may deliver them to a place of storage nominated by you or, failing such nomination, to a place determined by Croplands. Delivery in this way will be deemed to be delivery of the goods to you. You be liable for all costs incurred by Croplands for storage, detention, double cartage or similar causes if these costs are caused by your inability or failure to accept the goods upon delivery.

6. RISK AND INSURANCE

- (a) You assume all risk in the goods (including Consigned Goods) upon delivery, even if you have not signed a receipt for the goods.
- (b) You must insure the goods so that your insurance is effective immediately upon receipt of delivery of the goods.

7. DELAYS

Whilst Croplands will make reasonable efforts to deliver the goods to you by your requested delivery date(s), it will be under no liability whatsoever if delivery is not made on the date(s) requested. You agree that your requested delivery date is an estimate only. Croplands shall not be liable for any delayed or non delivery of goods.

8. FORCE MAJEURE

- (a) If Croplands is unable to deliver the goods because of any acts of god, wars, insurrection or other significant internal disturbance, fire, floods, accidents, breakdowns of plant or machinery, unavailability of or delays in shipping, transport strikes, lock-outs of workers, shortages or other default by suppliers of fuel, power or raw material, priority for supplies claimed by the Federal or State Governments of the Commonwealth of Australia or any overseas government, or any other similar happening or event ("force majeure"), then:-
 - (i) you will not be entitled to make any claim against Croplands for any delay in the manufacture or delivery of the goods ordered;
 - (ii) whilst the delay continues, after 90 days of delay, Croplands and you will each have the option to cancel any orders.
- (b) Subject to Clause 8(a), you may not cancel any order or any part of it for any other reason without Croplands' prior consent in writing.
- (c) Croplands may consent to your proposed cancellation of any order or any part of it if you pay to Croplands what it considers to be a fair and reasonable amount to fully compensate it for any costs, expenses, loss of profit and consequential damage that it may have incurred or may suffer because of the cancellation.

9. PAYMENT

- (a) Payment always to clause 9(c) herein unless otherwise agreed in writing, all goods you order from Croplands will be paid on the 20th of the month following the close of the preceding calendar month. Time for such payment will be the essence of these Terms.
- (b) You must pay for the goods invoiced when the invoice is due for payment, even if you have not received all of the goods on that invoice.
- (c) Croplands' express or implied approval of a credit facility in your favour may be revoked at any time, without any reason being given.
- (d) If you become an insolvent pursuant to any of the provisions of the Corporations Act 2001 or the Bankruptcy Act 1966 or similar law or statute, all amounts then owing by you to Croplands, whether or not those amounts are then due under clause 9(a), will immediately become due and payable.
- (e) If you fail to pay any amounts due as required, then:-
 - (i) In addition to the invoiced amounts, and without prejudice to any of Croplands' other rights and remedies:-
 - (A) You must pay interest on all amounts due and payable to Croplands at the rate equal to the target cash rate of the Reserve Bank of Australia plus 5% at the time the relevant amounts fall due, calculated from the date that each amount you owe Croplands becomes due and payable; interest will continue to accrue until all the monies you owe are received in cleared funds by Croplands.
 - (B) You must indemnify Croplands for all loss and damage it incurs because of your failure to pay all amounts due to it by the due date(s);
 - (C) You must indemnify Croplands for all costs, loss and damage it incurs in taking possession of the whole or part

of the goods and reselling them or by any other reason, if that loss and damage is the result of your conduct;

- (D) You must pay interest on all loss and damage suffered by Croplands at the rate set out in sub-clause 9(e)(i)(A) as a result of your conduct or your breach of these Terms;
- (E) You must pay all costs, charges and expenses ("costs") incurred by Croplands in enforcing or attempting to enforce any of its rights under these Terms (including recovering any loss and damage or unpaid amounts). In the case of legal costs, you will pay Croplands' legal costs on an indemnity basis; and
- (F) You must deliver up the goods to Croplands immediately upon receipt of a demand in writing from Croplands to this effect. If you do not comply with the demand within one (1) business day of receipt of the demand, you authorise Croplands to enter upon your premises (whether owned or leased) at any time to do all things necessary to take possession of the goods. You must pay all costs of and incidental to Croplands' exercise of its rights under this clause on the basis set out in clause 9(e)(i)(E).
- (f) You authorise Croplands to apply any payments received from you first to satisfy interest which may have accrued on the amounts you owe it, next to any legal or other costs Croplands may have incurred in recovering the amount(s) from you, and then only to the principal amount.
- (g) Croplands may require you to pay the price for the goods at any time prior to delivery.
- (h) If you are involved in any dispute with Croplands, you must still pay all amounts due to Croplands. You must not withhold payment, set off or "contra" any amounts that you owe Croplands because of any claims that you may have, whether on account of your supply of goods, to Croplands, damages or other allegation against Croplands.

10. RETENTION OF TITLE

- (a) Subject to clause 10(b), and unless otherwise notified in writing, you are authorised to sell or use the goods if it is in the ordinary course of your business to do so.
- (b) Until full payment in cleared funds is received by Croplands for all goods sold by it to you, and any other amounts owing to Croplands are paid:-
 - (i) title and property in the goods will remain vested in Croplands and will not pass to you;
 - (ii) you must hold the goods as fiduciary bailee and agent for Croplands; and
 - (iii) you must keep all goods supplied and delivered to you by Croplands separate from your and other property, and in a manner to enable Croplands' goods to be identified.
- (c) If you sell, dispose of or use the goods before full payment in cleared funds is made to Croplands, until such full payment is made, you will hold all monies resulting from such sale, disposal or use on trust for Croplands in a separate account. You must not mix the monies you hold on trust for Croplands with your or any other monies and you must specifically identify relevant trust monies in your accounts as Croplands' property.
- (d) If you combine or incorporate the goods with other goods (not being the property of Croplands) before full payment in cleared funds is made to Croplands, so that Croplands' goods become mixed with goods of others, you authorise Croplands to dismantle and remove its goods from the other goods, if such dismantling or removal is possible without destroying the goods, yours or others' goods.
- (e) If you combine the proceeds of sale of the goods with other money in your bank account before you pay Croplands for the goods, you must expressly hold those proceeds on trust for Croplands and you hereby authorise Croplands to trace and receive those proceeds ahead of all other creditors, including secured creditors.
- (f) Croplands shall have a lien on any of your goods if you owe it money for goods sold and delivered to you, or if you owe it money for any loss and damage that you have caused to Croplands.

11. ASSIGNMENT OF DEBT

- (a) In consideration of Croplands' agreement to supply the goods to you on these Terms, and Croplands' undertaking to reimburse to you all of your profit in respect of the goods or any end product manufactured or cultivated with the goods ("end product"), you hereby assign to Croplands the whole of proceeds of the sale of the goods or end product to your customers, including any insurance proceeds payable to you in respect of your insurance of the goods or end product, immediately that the goods or any end product are either sold to your customers, or damaged or destroyed, whichever appropriate ("the assigned debt").
- (b) The assignment to Croplands in clause 11(a) above will be effected simultaneously with and automatically upon the sale of the goods, or any end product, to your customers.
- (c) Notwithstanding the assigned debt, Croplands will always be entitled to sue you for the price of the goods if you do not pay for them when payment is due.

- (d) If any part of the assigned debt is paid to or received by you, you acknowledge and declare that you receive and hold the assigned debt upon trust for Croplands, that you will not deal with or treat that receipt as part of your own money and will forthwith pay it to Croplands. Croplands will have the right to trace the assigned debt you receive from your customers to your bank account, even if those monies become mixed with other monies in your account.
- (e) You promise that you will execute any documents, do any acts or other things that Croplands may reasonably require you to do to further or more perfectly transfer the assigned debt to Croplands.
- (f) You will deliver possession and control of any documentation relating to or proving the assigned debt to Croplands upon Croplands' request, and Croplands jointly with you will be responsible for the management and collection of the assigned debt from that time on.
- (g) You promise that immediately upon effecting each and every sale of the goods or end product to your customers, you will (at Croplands' request) do all things necessary to inform your customers of the form and substance of this assignment, and further, do all things necessary to enable Croplands to collect the assigned debt from your customers.

1. PERSONAL PROPERTIES SECURITY ACT 2009 (PPSA)

- (a) In this clause 12, unless otherwise defined in these Terms, capitalised expressions have the meaning given to them in the PPSA.
- (b) You acknowledge and agree that by entering into a contract of sale under these Terms, you grant a Security Interest to Croplands in the goods and any proceeds of sale in respect to those goods and also consent to Croplands registering any one or more Financing Statements or Financing Change Statements in respect to any such Security Interest created by or contemplated by these Terms.
- (c) You and Croplands agree for the purposes of satisfying s20(1) (iii) of the PPSA, that the description of goods as shown on any invoice from Croplands is the subject of each and any Security Interest created under these terms and such and every invoice is incorporated into these Terms.
- (d) You agree that you are the Grantor and Croplands is the holder of a Purchase Money Security Interest (PMSI) by virtue of these Terms or the PPSA.
- (e) You agree that the following provisions of the PPSA will not apply to these Terms: Sections 95, 96, 125, 129, 130, 132(3) (d), 132(4), 135, 142 and 143.
- (f) Unless otherwise agreed in writing with Croplands, you agree to waive your rights to receive a verification statement in accordance with s157 of the PPSA.
- (g) For the purposes of s275(6) of the PPSA, you and Croplands agree that neither party will, or is entitled to, disclose information of the kind specified in s 275(1) of the PPSA.
- (h) You agree with Croplands that it will not enter into any agreement or arrangement which permits any other person to register any Security Interest in respect to unpaid goods, proceeds of sale of unpaid goods or any accounts owed in respect of the unpaid goods without Croplands' consent.
- (i) You agree to give Croplands at least 10 days prior written notice before changing any of your corporate details, such as your name, ABN or ACN, or principle place of business.
- (j) You agree to unconditionally ratify any actions taken by Croplands under this clause 9.
- (k) You agree to reimburse Croplands for all costs and/or expenses incurred or payable by Croplands in relation to registering, maintaining or releasing any Financing Statement or Financing Change Statement under these terms.
- (l) This clause 9 will survive the termination of the contract for sale and purchase of goods between you and Croplands to the extent permitted by law.

2. CLAIMS AND RETURNS

- (a) You must inspect the goods immediately on delivery and must, no later than seven (7) business days of receipt of the goods, give notice in writing to Croplands if the goods are not in accordance with Croplands' specifications for the goods or if the goods are damaged, short supplied or otherwise allegedly defective. If you do not give such notice within 7

days, you must accept and pay for the goods and you are no longer able to make any claim. Time is of the essence in the giving of such notice.

- (b) You may not make a claim against Croplands in respect of the goods unless at the time of the claim all of the goods the subject of the claim remain intact as a whole. Any disposal or use of any part of the goods will mean that you have accepted the goods and can no longer make any claim.
- (c) You grant to Croplands full and free access to the premises owned or occupied by you to enable Croplands to investigate any claim you make. Croplands' investigation of your claim does not constitute an admission of liability.
- (d) Croplands may, in its sole discretion, accept the return of the goods or refund you the purchase price of the goods. The invoice and/or the delivery note number must be supplied with the goods if they are returned.

3. LIMITATION OF LIABILITY AND INDEMNITY

- (a) Any representation made by Croplands in relation to the goods, their use, suitability for your purpose or application is given in good faith, is believed by Croplands to be reliable, but is provided with an express disclaimer for any liability or responsibility on the part of Croplands. You acknowledge that Croplands is not or may not be aware of your intended end use of the goods.
- (b) Subject only to the extent permissible at law, you agree that Croplands will not be liable to you for any consequential loss or damage that you incur or suffer as a direct or indirect result of your purchase, use or application of the goods. You hereby expressly release and discharge Croplands from any and all such consequential loss or damage, however incurred, whether directly or indirectly as a result of:-
 - (i) your purchase, sale, use or application of the goods;
 - (ii) any changes Croplands makes from time to time to the specifications or price of the goods; and
 - (iii) any delay or cancellation of your order.
- (c) You accept all risk and responsibility for consequences arising from the improper use of the goods.
- (d) You acknowledge that any liability to you will be limited, in the case of any goods not in accordance with Croplands' specifications or if the goods are damaged, short supplied or otherwise allegedly defective only to:-
 - (i) replacement by Croplands of the goods; or
 - (ii) the issue of a credit note for the invoice value of the goods; or
 - (iii) the return of any monies that you have paid in respect of the goods; or
 - (iv) the return of the goods;
 whichever Croplands in its absolute discretion considers appropriate.
- (e) You will indemnify Croplands for all and any loss and damage whatsoever or howsoever incurred by it, whether as a direct or indirect result of your failure to observe these Terms, your failure to discharge your duties under the common law or your failure to discharge your duties under statute, or otherwise.

4. GOODS ON CONSIGNMENT

- (a) If you hold goods on consignment you must maintain accurate records of these goods as required by Croplands and rotate the goods so that the oldest are sold or used first.
- (b) You must provide to Croplands a reconciliation in respect of the goods on consignment immediately following the end of March, June, September and December each year ("reconciliation") advising:-
 - (i) The opening balance for that quarter, part numbers for the goods unsold, remaining in your possession and on consignment as at the commencement of the quarter;
 - (ii) the quantity of goods received from Croplands each quarter including the part numbers in respect of the goods received;
 - (iii) the quantity of goods sold in each quarter including the part numbers in respect of each of the goods sold; and
 - (iv) the closing balance for each quarter, part numbers of the goods unsold, remaining in your possession and on consignment as at the conclusion of each quarter.

- (c) You must notify Croplands as soon as you receive a purchase order from a customer for any of the goods on consignment. Croplands will invoice you each month for the price of the goods as the date(s) of sale to your customers. You must pay for the goods on consignment in accordance with clause 9.
- (d) Croplands will invoice you for any lost or damaged goods on consignment and you must pay for these goods in accordance with clause 9 of the Terms.
- (e) You may only dispose of or use the goods on consignment in accordance with these Terms.

All monies resulting from the sale of the goods on consignment will be dealt with in the manner set out in clause 9.

5. MISTAKE

Any mistake of fact on any quote, order, invoice, delivery docket or other document issued by Croplands in relation to the goods will not bind Croplands and Croplands may in its discretion issue such amended document as is required to rectify the mistake. You must comply with Croplands' amended document.

6. YOUR REPRESENTATIONS

You represent that:-

- (a) the goods will only be used and applied in accordance with Croplands' directions and recommendations and in accordance with the registered label;
- (b) the goods will be handled with appropriate caution, care and protective clothing;
- (c) the goods will be used or applied with the appropriate utilities only;
- (d) you are aware that some goods purchased from Croplands are toxic, dangerous and hazardous to human health;
- (e) the goods the subject of any proposed claim have not continued to be used by you:-
 - (i) after you have become aware that the goods are damaged or defective in any way; or
 - (ii) after you have given written notice of the defects to Croplands;
- (f) you will report any defects to Croplands in accordance with clause 13.

7. ACCESS

You irrevocably grant to Croplands authority to enter into, forcibly or otherwise, all of your owned and leased premises for the purpose of inspecting or removing any of Croplands' goods.

8. DANGEROUS GOODS

You warrant to Croplands that after delivery of the goods and whilst Croplands retains any interest in the goods, you will comply with all applicable Acts, Regulations and Laws dealing with the transport, unloading, storage, sale or use of dangerous or hazardous materials.

9. LAW/INTERPRETATION

- (a) These Terms are to be interpreted according to the laws of the State of Victoria. The courts in the State of Victoria shall have exclusive jurisdiction to hear and determine all disputes of and incidental to these Terms, including any claims in respect of monies due to Croplands pursuant to these Terms, on account of a claim for damages or any other claim.
- (b) To the maximum extent permitted by law and statute, all warranties terms and conditions, expressed or implied by common law, equity, trade, custom, usage, statute or otherwise, in relation to the sale, supply, use or application of the goods, are excluded.

Croplands shall not accept any responsibility whatsoever (including consequential loss), or howsoever arising (including negligence) for any damage, injury or death connected with the sale, supply, use or application of the goods except for responsibility for the merchantable quality and except for any responsibility mandatorily imposed by statute.

10. SEVERANCE

If the whole or any part of these Terms is invalid or unenforceable for any reason, the invalid or unenforceable clauses will be severed from these Terms and the validity of the remaining clauses will be preserved.

Updated January 2019

CROPLANDS WARRANTY POLICY

Please be advised that until the Croplands Warranty Registration Card sent with each sprayer is completed by the purchaser of a Croplands unit, the sprayer is deemed to be void of any warranty. This warranty registration is to be completed and returned immediately to: Croplands Equipment Pty Ltd, PO Box 2441, Dry Creek, South Australia 5094, and marked attention of Service Manager. It is highly recommended that as part of the sales process, the warranty policy is read and discussed with the customer to ensure there is no confusion as to what is, and what is not, covered by warranty. The Warranty Registration Card requires a signed declaration that the purchaser understands the warranty policy of Croplands. This is in your best interest as an agent for Croplands and will better serve your customer in the long term.



The following tables detail freight on items listed in the 2019 OPTIMA Buyers' Guide.

- These prices may change at any time without notice. These freight charges will apply unless items are ordered that qualify to be included in a stock order.
- These charges apply Australia-wide. Goods can be sent by your choice of carrier and/or arranged for pick-up, or sent freight forward if we are advised at the time of order.

TABLE 1: WHOLEGOODS – SENT BY ROAD FREIGHT AS INDIVIDUAL ITEMS

Most 'X' and some 'Y' product category items are only suitable for road freight. All freight prices include any applicable fuel surcharges and remote area surcharges.

ITEM	FREIGHT \$(EX. GST)
Linkage sprayers (P8–19)	
LA300 and LA600 – all models up to 6m boom	\$250.00
LA800 – bare or with 6m boom	\$300.00
LA600/MAX08, LA800/MAX08 with 8m boom	\$500.00
LA800/MAX10L with 10m boom	\$600.00
LA1000, LA1000/80 bare unit (no boom)	\$500.00
LA1000/80/8M, 10M and 12ML models with 8, 10 and 12m booms	\$600.00
LA1000/MHL12 or MHL15 – 100 litre with 12/15m hyd fold booms	POA – ask for quote
MEC1300/1600 with boom attached	POA – ask for quote
Cropair 300 and 600 litre fan sprayers (P24–25)	POA – ask for quote
Spray booms (P20–23)	
MSO, MCL, MB02, MBX03, MBX04 booms	\$60.00
MC6, MBX06, MCL-2, MVB5-5 booms	\$80.00
MAX08 – flat pack only	\$90.00
MAX10 – flat pack only	\$120.00
MAX10L, MAX12L and GEX series booms – flat pack only	\$160.00
MHL 12 and 15m booms; BDU18 boom only – flat pack only	POA – ask for quote
Trailed 300 sprayers (P26–27)	
UA300B trailing sprayer (all models) and UA300B motorised nursery sprayers	\$425.00
RetraSpray and traymount sprayers; Pony traile sprayer (P28–33)	
RSRL2-100RC RetraSpray reel	\$180.00
US200C/US300C complete units	\$350.00
US500/30/HR30TG, US500/30/TWIN traymount units	\$350.00
US600C complete units	\$400.00
1100 and 1500 litre traile Pony sprayers	POA – ask for quote
CropPak 12-volt sprayers, knapsack sprayers and Apex sprayers (P34–40)	
US30S CropPak sprayer, ASATV-10 Apex 12-volt sprayer	\$50.00
US60, US100S, US100A/15 12-volt CropPaks, Apex ASAT-30M3 trolley sprayer, Apex mistblower	\$70.00
US200/15	\$150.00
US400, US400/15 CropPak 12-volt CropPaks	\$350.00
Swissmex SW319 and SW320; Apex 5 and 10 litre units; ASGS-10 spreader x 1 unit	\$30.00
Swissmex SW319 and SW320; Apex 5 and 10 litre units; ASGS-10 spreader x 10 units	\$120.00
SW503, SW189C, ASBBS-16, ASBBS-10 and ASNS-15FB x 1 unit	\$35.00
SW503, SW189C, ASBBS-16, ASBBS-10 and ASNS-15FB x 10 units	\$140.00
PAKMAN back protector, all Swissmex spray booms	\$30.00
Chemical mixing and batching units; mixing jugs and chemical transfer units (P41–43)	
Batchmaster 1200 litre chemical batching unit	POA – ask for quote
L-H9351A 60 litre mixer	\$110.00
L-H9351A with L-H9355A dropdown bracket	\$125.00
L-H9353A, L-9353C 60 litre mixers with trolley	\$140.00
L-H9003 and 9005 measuring jugs, 10 each	\$30.00
L-H9003 and 9005 measuring jugs, up to 5 each	\$25.00
L-H9025 25 litre buckets (each)	\$30.00
L-H9025 25 litre buckets (x 3)	\$50.00
SHUSF-1105PTSI AgRunner transfer unit	\$40.00
Boomless nozzle kits, foam, foam markers (P44–45)	
Boomless nozzle kits	\$15.00
Foam markers	\$60.00
Spray tanks	POA – ask for quote

ITEM	FREIGHT \$(EX. GST)
Hose reels, hose, spray guns (P46–47)	
30 metre rolls spray hose	\$30.00
All hose reels and 100 metre rolls hose	\$60.00
All spray guns x 1	\$15.00
All spray guns x 10	\$60.00
Firefighters and turf sprayers (P48–49)	
500 litre traymount firefighter	\$350.00
Trailed firefighters 1100/1500 litre models	POA – ask for quote
Trailed and traymount turf sprayers	POA – ask for quote
UW50/2B greens sprayer	\$90.00
Spray pumps (P50–61)	
AR pumps with gearboxes – models AR303, AR30, AR503, AR813	\$70.00
AR pump models AR30, AR70, AR80, AR252, AR503	\$35.00
AR pump models AR140, AR160, AR185, AR245 and 250, AR275 and 280, ARBHA140, ARBHS170, ARBHS200	\$80.00
AR pumps models AR330 and AR410	\$125.00
Hypro centrifugal pumps	\$50.00
FloJet and SHURflo 12-volt pumps x 1 unit	\$20.00
FloJet and SHURflo 12-volt pumps x 10 unit	\$70.00
Fertiliser spreaders (P62–64)	
AGR-SP150 traile 150 spreader	\$250.00
AGR-XA500 3-PTL spreader	POA for all 300/500 spreaders
Respirators, spray manifolds, spray controller kits and GPS units (P65–70)	
Kasco respirators	\$30.00
All control manifolds and I-E2021, 2032, 2052, I-E4020, 4021	\$60.00
All controller kits and GPS units (BA5000-GE03 etc)	\$50.00

TABLE 2: SPARE PARTS, COMPONENTS AND ACCESSORIES

Sent by airfreight/Australia Post for daily orders

Items such as:

- Spare parts
- Nozzles and nozzle caps
- 12-volt pumps
- Regulating valves
- Ball valves
- Solenoids
- Spray guns
- Respirators
- Gloves and suits
- Boom components
- Filters
- Gauges
- Tank fittings
- Camlocks
- Brass and poly fittings
- Most 'Z' and some 'Y' products are suitable for airfreight

AIRFREIGHT

ITEM	NOTES	\$(EX. GST)
Parts, accessories, components	1kg bag	\$15.00
Parts, accessories, components	3kg bag	\$20.00
Parts, accessories, components	5kg bag	\$30.00

Note: cut-off for air freight orders is 2:30pm ACDT. Anything placed after this time does not guarantee next day delivery.

AUSTRALIA POST

Croplands will no longer send orders by standard Australia Post due to the frequency of items being lost in transit (non-traceable). If method of dispatch is requested as post, Croplands will only use a signed receipt post option, priced as follows:

ITEM	NOTES	\$(EX. GST)
Parts, accessories, components	1kg–3kg bag	\$20.00

TABLE 3: STOCK ORDERS

ITEM	NOTES	COST
Parts, accessories, components with a dealer nett value of \$2,000.00 + GST*	<ul style="list-style-type: none"> • Mark your order clearly as a 'STOCK ORDER' • Stock orders can take up to five working days to pack and dispatch • Minimum of 15 individual lines must be ordered 	F.I.S.
*All items marked in BLUE in Table 1 qualify for stock orders.		
*All items marked in ORANGE in Table 1 do not qualify for stock orders.		
Croplands tanks do not qualify for stock orders.		

PLEASE NOTE: MINIMUM ORDER VALUE IS \$50 EX GST.

NATIONAL SALES AND SUPPORT

NORTH

REGIONAL MANAGER

Jeremy Rennick 0409 065 994

TERRITORY MANAGERS

Coastal QLD/NT Rob Graham 0409 597 462

Central/South QLD

Michael Clarke 0428 311 831

South QLD/North NSW

Craig Blackett 0407 485 569

Central NSW Dave Farmer

0427 651 971

SOUTH

REGIONAL MANAGER

Neill Morey 0429 512 477

TERRITORY MANAGERS

South NSW/VIC David Hamilton 0427 975 072

VIC Steve Ross

0417 832 784

South VIC

Jeremy Deck 0430 006 672

SA/TAS

Andrew Germein 0417 848 590

SA

Scott Richardson 0409 899 491

WEST

REGIONAL MANAGER

John Griffiths 0407 132 746

TERRITORY MANAGER

WA Gavin Merritt 0448 022 172

CROPLANDS HEAD OFFICE

50 Cavan Road Dry Creek SA 5094

Phone 08 8359 9300

Fax 08 8349 6175


Contact your local dealer or...


Croplands Australia

Freecall 1800 999 162

Freefax 1800 623 778

sales@croplands.com.au

 www.facebook.com/croplands

 www.twitter.com/Croplands

Technical Service 1300 650 724

YOUR CROPLANDS DEALER

NATIONWIDE DEALER LISTING

ACT

Canberra S & J Morrison 02 6284 2282

NEW SOUTH WALES

Albury	Mark's Spray Barn	02 6025 8862
Armidale	Armidale Pumps & Irrigation	02 6771 1645
Bangalow	Ace Ohlsson	02 6687 1452
Bathurst	On-Trac Ag	02 6332 5655
Camden	Southwells	02 4655 7004
Corowa	O'Connors	02 6033 1666
Cowra	Cowra Machinery Centre	02 6342 5555
Dubbo	Geronimo Farm Machinery	02 6826 8600
Finley	Agtrade Machinery	03 5883 4560
Forbes	Forbes Machinery Centre	02 6852 3211
Gilgandra	Western Farm Machinery	02 6847 0318
Goulburn	Goulburn Farm Machinery	02 4821 4148
Griffith	Guidolin Agrimac	02 6964 3400
Gunnedah	NFS-Ag	02 6742 7771
Gunnedah	Vantage NSW	1300 770 970
Hexham	Kentan Machinery	02 4964 8275
Inverell	Inverell Pumps & Sprays	02 6722 4088
Moree	Black Truck & Ag	02 6752 2277
Moree	Gwydir Spray Shop	02 6752 8022
Mudgee	Cudgegong Rural Supplies	02 6372 3500
Mudgee	On-Trac Ag	02 6372 2662
Northern Rivers	Kyogle Tractors	02 6632 3288
Orange	On-Trac Ag	02 6362 5566
Ourimbah	Coast & Valley Tractors 4U	02 4360 4040
Parkes	McPherson's Parts & Service	02 6862 3888
Pokolbin	Lawrence's Ag & Machinery Repairs	0414 234 841
Southern Highlands	Robertson Farm Machinery	02 4885 1020
Taree	Kentan Machinery	02 6552 5833
Temora	Temora Truck & Tractor Service	02 6977 1098
Tottenham	Western Farm Machinery	02 6892 4078
Tumut	Tumut Farm Machinery	02 6947 6422
Wagga Wagga	JGW Harvest & Tillage Support	02 6925 0427
Walgett	Walgett Tyre & Machinery Service	02 6828 1500
Walla Walla	CJ & LH Wiesner	02 6029 2151
Warren	Western Farm Machinery	02 6847 3422
West Wyalong	Gallaghers Machinery	02 6972 1057
Windsor	Windsor Rural	1300 978 725
Woolgoolga	Coffs Harbour Farm Machinery	02 6654 0658
Young	Carruthers Machinery	02 6382 7233

NORTHERN TERRITORY

Humpty Doo	HD Pumps	08 8988 1254
Winnellie	HD Pumps	08 8947 1008

QUEENSLAND

Atherton	Tableland Pumps & Pipes	07 4091 2277
Ayr	A & B Rural	07 4783 4488
Beerwah	Coochin Creek Co-Operative	07 5494 6219
Biloela	BMAS Biloela	07 4992 5332
Bowen	Bartec Rural Services	07 4785 2322
Bundaberg	Lindsay Rural	07 4150 0500
Caliris	Allclass North	07 4050 7500
Capalaba	Turf Irrigation Services	07 3245 6000
Capella	Western Mechanical QLD	07 4984 9614
Dalby	Dalby Mower Supplies	07 4669 6885
Dalby	Dalby Rural Supplies	07 4660 0400
Emerald	Cotton Growers Services	07 4982 2255
Gatton	Agricultural Requirements	07 5468 0000
Gatton	Lockyer Farm Machinery	07 5462 1888
Gordonvale	NQ Rural Supplies	07 4056 1977
Ingham	Ingham Farm Centre	07 4776 1477
Innisfail	GF Rural Supplies	07 4061 1066
Kalbar	South East Queensland Tractor Sales & Service	07 5463 5957
Kingaroy	Sengs Sales & Service	07 4163 6162
Mackay	07 4952 2466	
Mareeba	TGT Agriculture	07 4030 3190
Mareeba	Think Water Mareeba	07 4092 7788
Mossman	Mossman Ag Services	07 4098 2286
Mount Barker	Dreyer Mechanical & Hydraulic Services	0467 239 461
Murgon	South Burnett Machinery	07 4168 1411
Nambour	Tractor Machinery Implements	07 5476 4888
Pialba	Advanced Water Technologies	07 4194 2887
Proserpine	Farm HQ	07 4945 2733
Rockhampton	Millne Bros. Equipment	07 4927 1888
Roma	Roma Pumps and Solar	07 4622 4528
Sarina	Farm HQ	07 4956 2139
Springhurst	Springhurst Tractors	07 4984 1258
Stanthorpe	Vedelago Mechanical Repairs	07 4685 2200
Toowoomba	Toowoomba Spray Shop	07 4634 4000
Tully	GF Rural Supplies	07 4068 1002
Warrnambool	Norco	07 5496 6500

SOUTH AUSTRALIA

Adelaide	Adelaide Spray Shop	1800 777 090
Bordertown	O'Connors	08 8752 1311
Cleve	Pringles Crouch	08 8628 2150
Crystal Brook	Pringles Crouch	08 8636 2257
Cummins	Pringles Crouch	08 8676 2105
Gawler East	Tundarr Sales & Service	08 8522 2188
Gepps Cross	Kubpower	08 8139 7200
Kadina	AW Vater & Co	08 8821 2442
Loxton	Ronco Motors	08 8584 5575
McLaren Vale	DJ's Growers Services	08 8323 8339
Millicent	Millicent Farm Supplies	08 8733 4966
Mount Compass	HRI Ag & Irrigation	08 8556 8199

Murray Bridge	Daish Irrigation	08 8532 2711
Naracoorte	Kubpower	08 8762 0123
Nuriootpa	Farmer Johns	08 8562 1311
Pinnaroo	Ronco Motors	08 8577 8129
Saddleworth	AW Vater & Co	08 8847 5000
Strathalbyn	Bates Farm Machinery	0417 363 555
Strathalbyn	Daish Irrigation	08 8536 4422
Summertown	Kubpower	08 8390 3017
Tanunda	Vater Machinery	08 8563 2008
Virginia	CRT Complete Ag & Seed Supplies	08 8380 9400
Woodside	DJ's Growers Services	08 8389 7022
Wudinna	Pringles Crouch	08 8680 2236

TASMANIA

Statewide	Spray Shop Tasmania	03 6343 1666
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VICTORIA

Ballarat	Central Machinery Services	03 5332 0566
Bendigo	Precision Control	03 5448 8484
Beulah	North West Ag Services	03 5390 2264
Birchip	O'Connors	03 5492 2311
Boort	North West Ag Services	03 5455 2563
Charlton	North West Ag Services	03 5491 1976
Cobram	Cobram Farm Equipment	03 5872 1722
Colac	Swayn & McCabe	03 5231 5022
Donald	North West Ag Services	03 5497 1144
Dunolly	N H Hall & Co	03 5468 1202
Echuca	Agpower	03 5482 2264
Hamilton	Phillips Farm Machinery	03 5572 1822
Hopetoun	North West Ag Services	03 5083 3133
Horsham	O'Connors	03 5382 1727
Horsham	Traction Ag	03 5381 1385
Kerang	Lipps Bulk Super	03 5452 1333
Lilydale	Agpower	03 9739 5006
Maffra	Traf Tractors	03 5141 1700
Marnoo	North West Ag Services	03 5359 2240
Melton	Jon Kay Agricultural Services	03 9743 5644
Mildura	Sunrise Ag	03 5023 0284
Mildura	Agg Tech Machinery	03 5021 2722
Nhill	Traction Ag	03 5391 1144
Nullawill	North West Ag Services	03 5493 5251
Ouyen	Sunrise Ag	03 5092 1031
Ouyen	North West Ag Services	03 5092 1381
Quambatook	North West Ag Services	03 5457 1341
Sea Lake	North West Ag Services	03 5070 1080
Shepparton	O'Connors	03 5821 4555
Shepparton	Shepparton Ag	03 5832 3500
St Arnaud	Sprayer Centre	03 5495 3222
St Arnaud	North West Ag Services	03 5495 2211
Swan Hill	North West Ag Services	03 5032 5595
Swan Hill	Sunrise Ag	03 5032 0099
Swan Hill	Swan Hill Kubota	03 5032 9290
Trafalgar	Traf Tractors	03 5633 1588
Wangaratta	McGregor Machinery	03 5722 9933
Warrnambool	Class Harvest Centre	03 5561 1733
Warracknabeal	O'Connors	03 5398 1877
Warracknabeal	North West Ag Services	03 5394 1024
Wodonga	CJ & LH Wiesner	02 6024 6444
Woomelang	North West Ag Services	03 5081 2131
Yarrawonga	Agrispray Australia	03 5743 1610

WESTERN AUSTRALIA

Albany	AFGR	08 9842 8529
Albany	C&C Machinery	08 9842 2103
Booyup Brook	AFGR	08 9765 1305
Camamah	AFGR	08 9951 1130
Corrigin	Neu-Tech Auto Electrics	08 9063 2149
Cowaramup	Cowaramup Tractor Sales	08 9755 5207
Cunderdin	Ag Implements	08 9635 1364
Dalwallinu	AFGR	08 9661 1105
Donnybrook	Machinery West	08 9731 0700
Esperance	AFGR	08 9071 6702
Esperance	Esperance Rural	08 9071 5166
Forrestdale	Growers Agrishop	08 9397 2800
Geraldton	Burando-Hill	08 9964 7822
Geraldton	AgWest Machinery	08 9965 5855
Geraldton	Geraldton Ag Services	08 9965 7900
Geraldton	AFGR	08 9921 5044
Gnowangerup	AFGR	08 9827 1207
Katanning	BTW Spray Shop	08 9821 4844
Kununurra	Ord River District Co-Operative	08 9168 2255
Lake Grace	AFGR	08 9865 1100
Manjimup	FarmLink Rural	08 9777 2900
Manjimup	Southern Forest Machinery	08 9777 2100
Merredin	Ag Implements	08 9041 4100
Moora	AFGR	08 9651 1363
Moora	Cunninghams Ag	08 9651 0600
Muchea	CD Tractor Sales & Service	08 9571 4117
Mukinbudin	Ag Implements	08 9047 1109
Narembeene	Ag Implements	08 9064 7214
Narrogin	Narrogin Pump, Solar and Spraying	08 9881 4775
Northam	Ag Implements	08 9622 5855
Perth	AFGR	08 9478 5099
Perth	Sprayline Spraying Equipment	08 9250 6100
Pingelly	AFGR	08 9887 1395
Quairading	Ag Implements	08 9645 0077
Wagin	AFGR	08 9861 0000
Wagin	Marleys Diesel & Ag	08 9861 2345
Wangara	Boya Equipment	08 9409 2008
Welshpool	Spraymaster Spray Shop	08 9353 1177
Witchcliffe	AFGR	08 9757 6215
Wongan Hills	AFGR	08 9671 1311