



APEX VALVES



LARGE & MEDIUM TROUGH VALVES



XtraFlo[®]

- ✓ Long life, simple operation trough valve
- ✓ High flow, full on and full off
- ✓ Armless* - less damage from stock
- ✓ Less parts = less problems
- ✓ Anti-Siphon and longtail versions available
- ✓ UV Stabilised and corrosion resistant
- ✓ Top Entry version available, use in tanks with stock protection



Pump requires pressure or flow switch



LARGE & MEDIUM TROUGH VALVES



XtraFlo®

FULL FLOW

APPLICATION: LARGE TROUGHS, HIGH DEMAND

Compact armless diaphragm valve with full - flow high volume fill, The valve has a 30mm (1") water level differential between opening and closing, reducing pump motor overload.

Full-flow operation, the pump runs unrestricted until trough is full.

SPECIFICATIONS

Working Pressure: 30 - 1200kPa (4 - 175psi)

PRODUCT CODES:

Xtraflo	XF20 - 20mm (3/4" BSP)
	XF25 - 25mm (1" BSP)
	XF32 - 32mm (1 1/4" BSP)
Xtraflo Longtail	XF\square20 - 20mm (3/4" BSP)
	XF\square25 - 25mm (1" BSP)
Xtraflo Top Entry	XFTE20 - 20mm (3/4" BSP)
	XFTE25 - 25mm (1" BSP)
	XFTE32 - 32mm (1 1/4" BSP)
Xtraflo Top Entry Longtail	XF\squareTE20 - 20mm (3/4" BSP)
	XF\squareTE25 - 25mm (1" BSP)
	XFTEK Top Entry Kit Only

RKXF - Repair Kit

NOTE: Top entry may require protection from stock.

Maximum Water Temperature: 60°C (140°F)

Minimum Water Temperature: 1°C (34°F)

PATENTS

- New Zealand Patent No. 328862
- Australian Patent No. 736446
- RSA Patent No. 736446
- US Patent Pending



Apex Trough-Mate
Slips comfortably over the top assembly of the XtraFlo® allowing easy dismantling of valve.

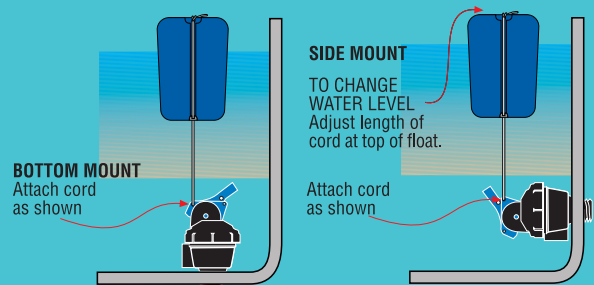
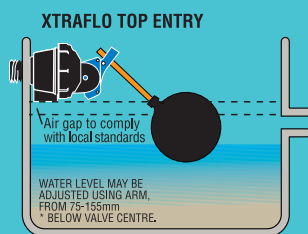
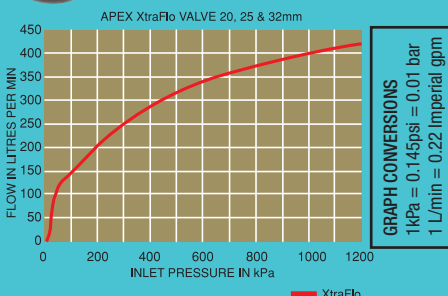


LONGTAIL AVAILABLE
for thin walled troughs



Top Entry Version
Air gap provides back-flow prevention

Only three internal moving parts (less parts = less problems)
Patented self-cleaning mechanism (to minimise blockages)
30mm (1") water level differential from open to closed (reducing electricity costs & increasing pump life)



LARGE & MEDIUM TROUGH VALVES



LONGTAIL VERSION

VALVES
Xcess[®]
FULL FLOW

APPLICATION: LARGE TROUGH, HIGH DEMAND

Full flow designed for fast filling large troughs. Unique cam-lock compatible outlet allows for convenient water supply for many jobs around the farm!

BENEFITS

- ☑ Very high flow rate 500L/min @ 1200kPa (175psi)
- ☑ Two sizes in one valve 25/20mm (1" & 3/4")
- ☑ Cam-lock compatible outlet
- ☑ No tools required for servicing
- ☑ Plunger serviced without removing arm
- ☑ Shut off pin to close valve
- ☑ Includes cord and nipple
- ☑ Longtail version available

SPECIFICATIONS

Cam-lock Compatibility: Top entry troughs or minimum clearance from trough bottom 6"

Uses 6" float

Working Pressure: 0 -1200kPa (0 - 175psi)

Maximum Water Temperature: 60°C (140°F)

Minimum Water Temperature: 1°C (34°F)

PRODUCT CODES

XS 25/20 25/20mm (1"/3/4" BSP)

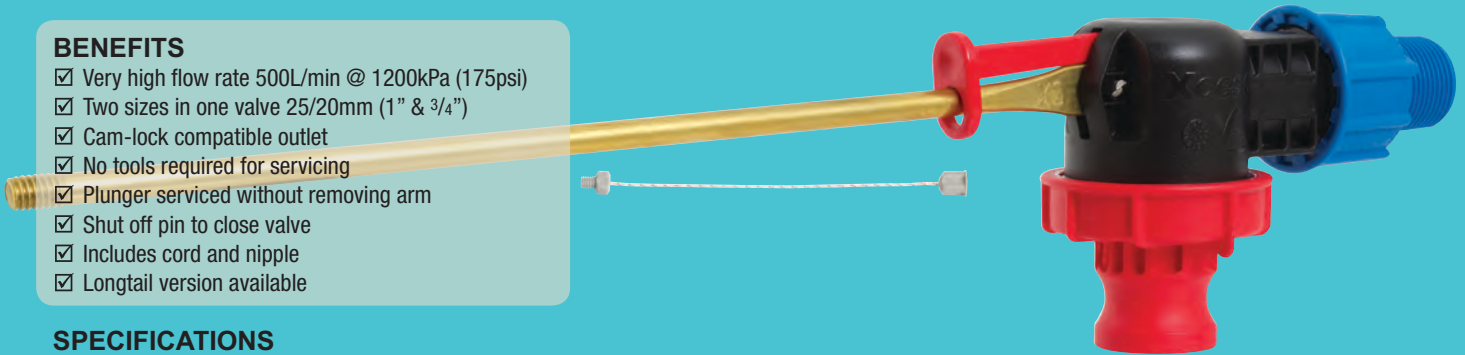
XSII 25/20 25/20mm (1"/3/4" BSP Longtail)

RKXS Repair Kit **ATENTS**

Use 150mm float
SPARE ARM CODE: **P16 XS**



w designed for fast filling large troughs.



P

- New Zealand Pat No. 239796
- New Zealand Pat Des. App. No. 415938
- Australia Pat No. 653422
- Australia Des. No. 11/099/2012 & No. 11111/2012
- Patent Application No: 595205, 595420 & 599134

NOTE: permission or consent may be required to irrigate from various water sources.



Connect to portable breakfeed trough



Filling spray tank



Wash down equipment

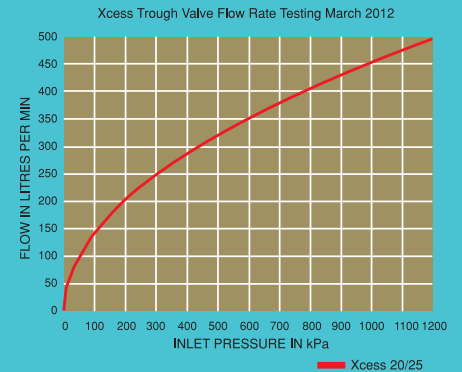


No tools required to service



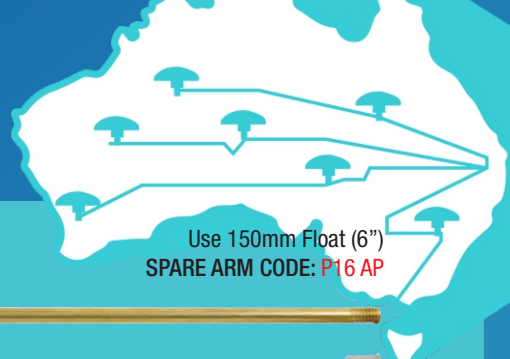
Service without removing arm

Service valve in seconds



GRAPH CONVERSIONS
1kPa = 0.145psi = 0.01 bar 1 L/min = 0.22 Imperial gpm

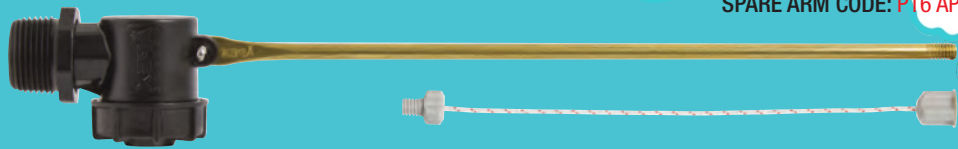
LARGE & MEDIUM TROUGH VALVES



Use 150mm Float (6")
SPARE ARM CODE: P16 AP

AP20/25 ACETYL FULL FLOW

APPLICATION: MEDIUM TROUGHS
Economy Acetyl sleeve valve - full flow design for fast filling medium troughs.



FULL FLOW TROUGH VALVE: Includes cord and nipple and 25mm (1") bush.
Working Pressure: 0 - 1200kPa (175psi)

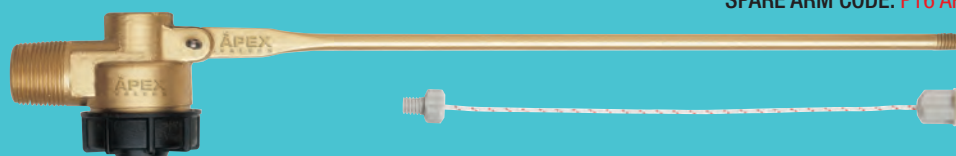
PRODUCT CODES (plastic cord):
AP 20/25 - 20/25mm (3/4" BSP with 1" bush)
APC Lt20 - 20mm (3/4" BSP) longtail
APC Lt25 - 25mm (1" BSP) longtail

RKAP - Repair Kit

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)

AB20 BRASS FULL FLOW

APPLICATION: MEDIUM TROUGHS
Robust Brass sleeve valve - full flow design for fast filling medium troughs.



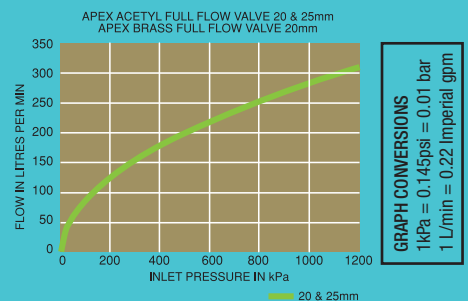
Use 150mm Float (6")
SPARE ARM CODE: P16 AP

FULL FLOW TROUGH VALVE: Includes cord and nipple
Working Pressure: 0 - 1200 kPa (175 psi)

PRODUCT CODE
ABC 20 - 20mm (3/4" BSP)

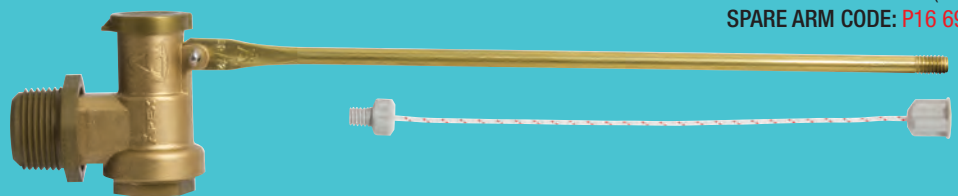
RKAB - Repair Kit

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)



7220/25 BRASS FULL FLOW

APPLICATION: MEDIUM TROUGHS
Robust Brass sleeve valve - full flow design for fast filling medium troughs.



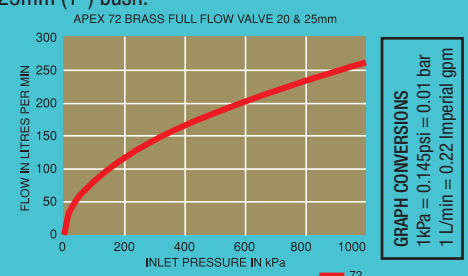
Use 150mm Float (6")
SPARE ARM CODE: P16 69

FULL FLOW TROUGH VALVE: Includes cord and nipple and 25mm (1") bush.
Working Pressure: 0 - 1000kPa (150psi)

PRODUCT CODE:
72 20/25 - 20/25mm (3/4" BSP with 1" bush)

RK 6972 - Repair Kit

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)



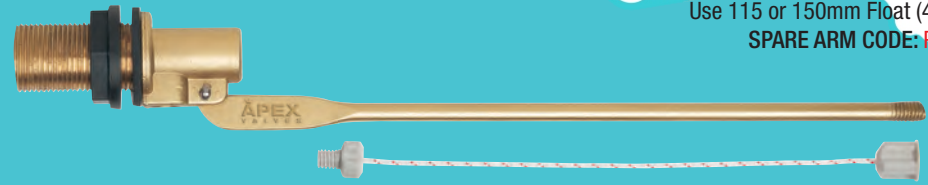
MEDIUM & SMALL TROUGH VALVES



Use 115 or 150mm Float (4" or 6")
SPARE ARM CODE: **P16 220**

HiLo20 HiLo15 HIGH/LOW

APPLICATION: MEDIUM TROUGHS
Durable Brass, for medium sized troughs. Has removable brass valve seat for lower pressures (stainless steel seat models also available).



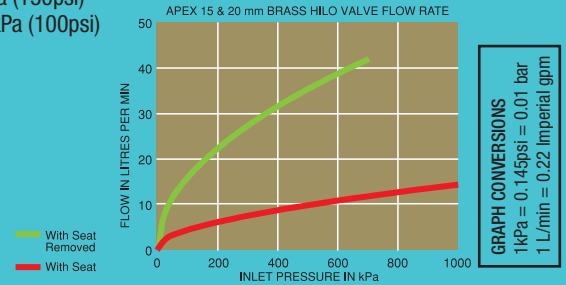
TROUGH VALVE/REMOVABLE SEAT: Includes cord and nipple
High Working Pressure with Seat: 0 - 1000kPa (150psi)
Low Working Pressure without Seat: 0 - 700kPa (100psi)

225 Brass: Includes cord and nipple

PRODUCT CODES:
225 15 15mm, 1/2" BSP
225 20 20mm, 3/4" BSP

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)

See page 14 for repair kit codes



220P HIGH/LOW

APPLICATION: MEDIUM TROUGHS
Economy Acetyl, plunger activated valve for medium sized troughs. Barbed outlet to fit silencer tube for cistern applications. Has removable valve seat for lower pressures.



Use 115 or 150mm Float (4" or 6")
SPARE ARM CODE: **P16 220P**

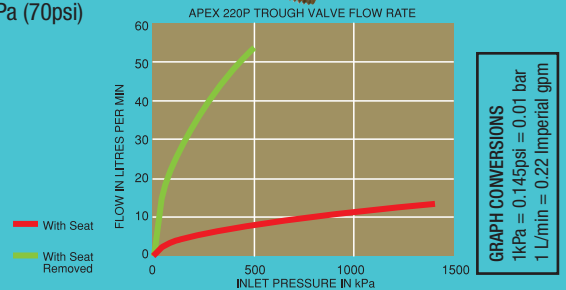


220P PLASTIC HIGH/LOW
High Working Pressure with Seat: 0 - 1400kPa (200psi)
Low Working Pressure without Seat: 0 - 500kPa (70psi)

PRODUCT CODES:
220P 15 (15mm, 1/2" BSP)
220P 20 (20mm, 3/4" BSP)
220P 25 (25mm, 1" BSP)

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)

See page 14 for repair kit codes



SpaceSaver

APPLICATION: DRINKER & HYDROPONICS
individual troughs and drinkers.



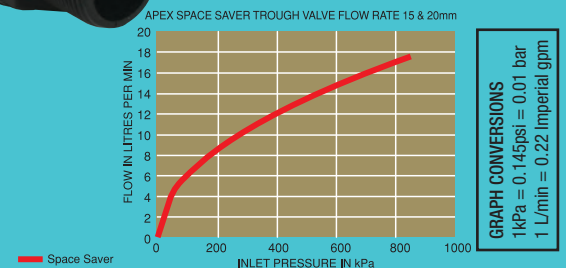
SPARE ARM CODE: **P16 SS**

SPACESAVER
Working Pressure: 0 - 850kPa (120psi)

PRODUCT CODES:
SS 15 (15mm, 1/2" BSP)
SS 20 (20mm, 3/4" BSP)

Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)

See page 14 for repair kit codes



REPAIR KITS & SPARES



FLOATS



FLT SQBLU XTRAFLO FLOAT



FLT 1500 BALL FLOAT



FLT 115B BALL FLOAT



CORD AND NIPPLES
SP82



FLT SS SPACESAVER FLOAT

FLOATS

- FLT 115B** (4" Black Ball Float)
- FLT 150B** (6" Black Ball Float)
- FLT 1150** (4" Orange Ball Float)
- FLT 1500** (6" Orange Ball Float)
- FLT SQBLU** (XtraFlo Replacement Float)
- FLT SS** (SpaceSaver Float)

All UV Stabilised
ACETYL THREAD INSERT
5/16" BSW THREAD
MAXIMUM TEMPERATURE 60°C (140°F)

REPAIR KITS

(For contents see apexvalves.co.nz/rural)

- PRESLKA** Res valve lever kit with arm
- RK220P** 220P repair kit
- RK6972** 69/72 trough valve repair kit
- RKAP** Apex plastic trough valve repair kit
- RKHL** High low trough valve repair kit
- RKPB** PumpBuddy® repair kit
- RKRA** RainAid® repair kit
- RKRES** Res valve repair kit
- RKSS** SpaceSaver repair kit
- RKXS** Xcess repair kit
- RKXF** XtraFlo® repair kit

ARMS & SPARES

- P16 AP** Arm AP/AB without cord/nipple
- P16 APB** Arm AP bottom entry
- P16 XS** Arm XS 25/20 (incl shut off pin)
- P16 PHIL** Arm Philmac
- P16 SS** Arm SpaceSaver
- P16 220** Arm Hi/Lo without cord and nipple
- P16 220P** Arm 220P -159mm
- P16 69** Arm 69 without cord/nipple
- SP84SP84** Twin Float Connector
- PBN15** Back nut 15mm (1/2")
- PBN20** Back nut 20mm (3/4")
- PBN25** Back nut 25mm (1")
- PBNW15** Back nut washer 15mm (1/2")
- PBNW20** Back nut washer 20mm (3/4")
- PBNW25** Back nut washer 25mm (1")
- SP82SP82** Cord and nipple
- SP92SP92** Cotter pins, bag of 5
- PVSB EXT** VisiBall® extension tube

TroughMate

APPLICATION

Two piece tool used to service the complete range of Apex trough valves.

PRODUCT CODE: ATM



USAGE CHART

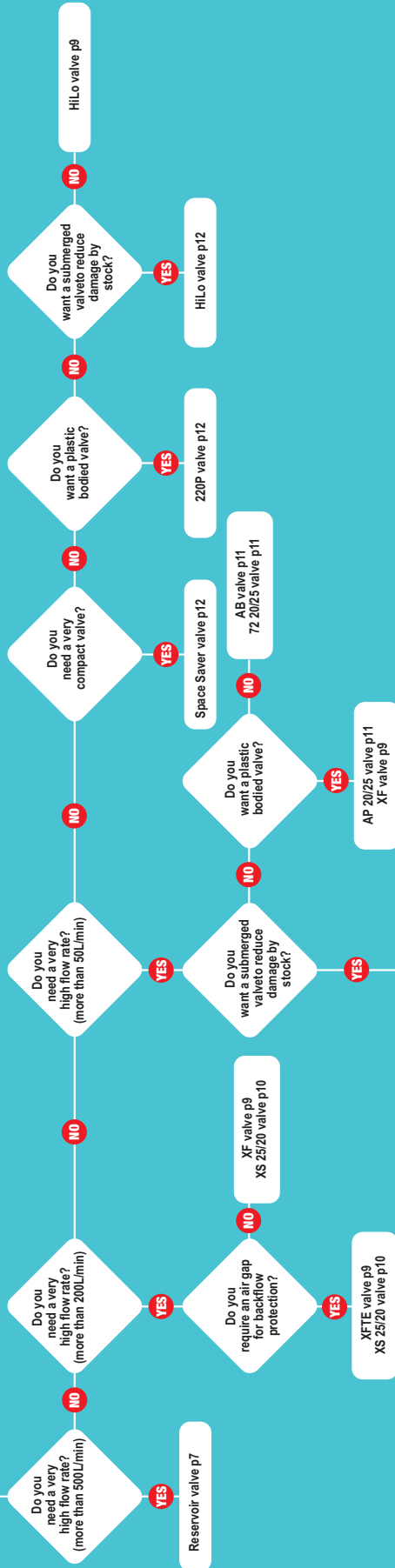


Trough Valve Selection Guide

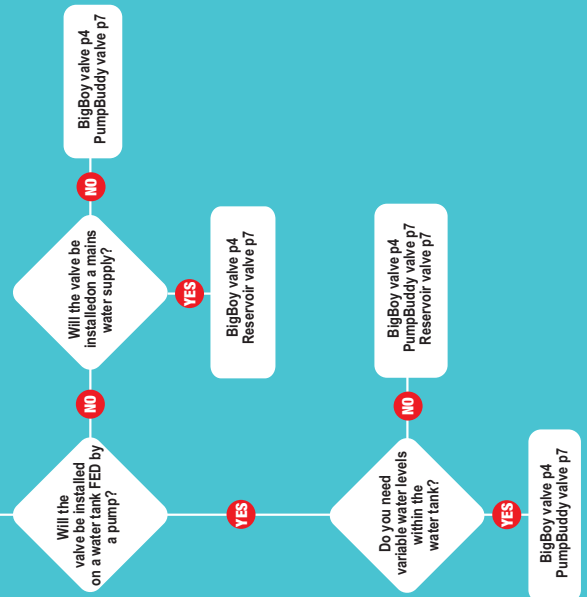
Stock	Litres/Head/Day	Trough Size	Valve	Flow Rate (L/min)
Dairy	70	Large-High demand	XtraFlo, Xcess	>300 l/m
Beef	45	Large-High demand	XtraFlo, Xcess	>300 l/m
Dairy	70	Medium to large	AP;AB; 72	Up to 300 l/m
Beef	45	Medium to large	AP;AB; 72	Up to 200 l/m
Horse (grazing)	36	Medium	AP;AB; 72	Up to 200 l/m
Sheep/Pigs etc	4	Small to Medium	225; 220p	Up to 50 l/m
Other		Drinker	Space Saver	Up to 17 l/m

Source:MAF

Trough Filling



Tank/Reservoir Filling



TANK



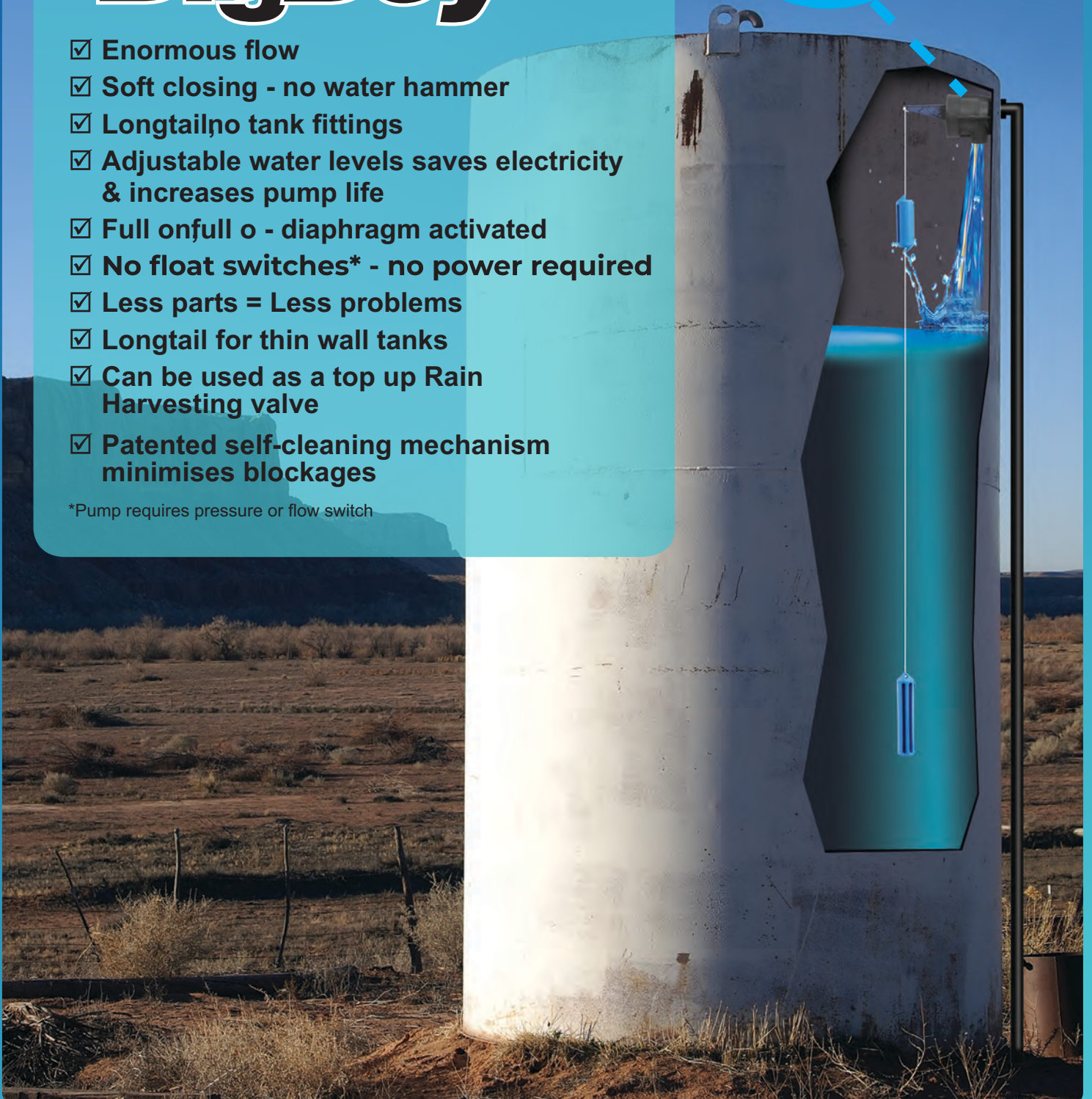
WATER TANK & RESERVOIR VALVES



BigBoy®

- ✓ Enormous flow
- ✓ Soft closing - no water hammer
- ✓ Longtail no tank fittings
- ✓ Adjustable water levels saves electricity & increases pump life
- ✓ Full onfull o - diaphragm activated
- ✓ No float switches* - no power required
- ✓ Less parts = Less problems
- ✓ Longtail for thin wall tanks
- ✓ Can be used as a top up Rain Harvesting valve
- ✓ Patented self-cleaning mechanism minimises blockages

*Pump requires pressure or flow switch



WATER TANK & RESERVOIR VALVES



BigBoy®

APPLICATION

- Pump fed large reservoirs - it allows for a single level or variable minimum and maximum levels within a reservoir/tank.
- Mains/Gravity fed large storage tanks and/or reservoirs - it allows for a single level or variable minimum and maximum water levels within a reservoir/tank.
- Rain Harvesting - as a backup water supply control valve, providing a backup supply of water in the event of demand exceeding rainfall.

OPERATING PRINCIPLE

The BigBoy® will be closed when both weights are submerged (maximum water level). The valve will remain closed until the bottom weight is exposed (minimum water level). The valve will then open and remain open until the maximum level is reached.

PRODUCT CODES

BB32 - 32mm (1 1/4" BSP)

BB40 - 40mm (1 1/2" BSP)

BB50 - 50mm (2" BSP)

RKBB - Repair Kit

SPECIFICATIONS

WORKING PRESSURE: 15kPa - 1200kPa (2psi - 175psi)

Flow Rates:

Very high flow rates - refer graph below

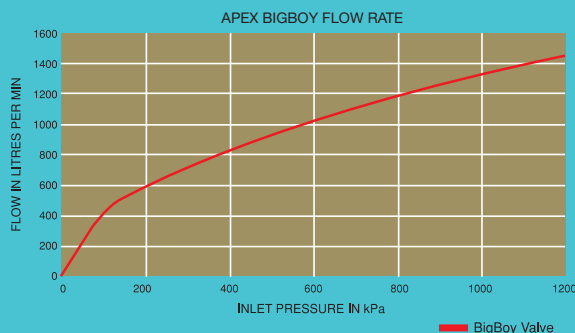
Temperature Range: 1°C - 60°C (34°F - 140°F)

PATENTS AT

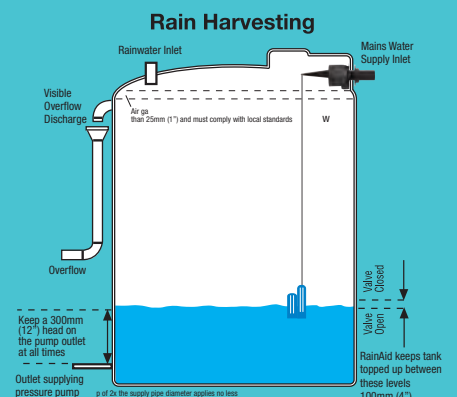
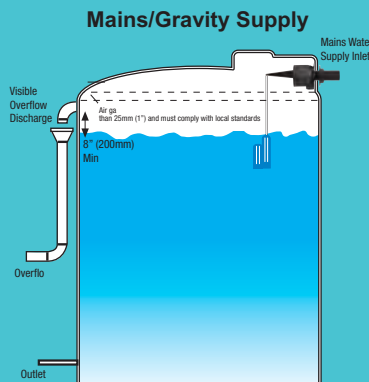
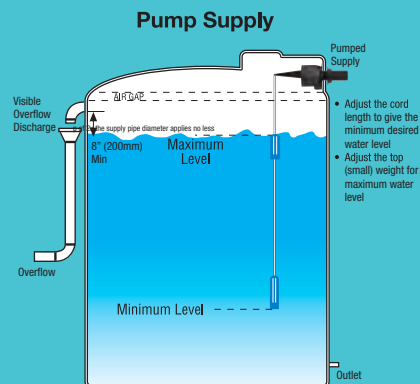
NZ P 598546, NZ PAT 328862, NZ PAT 535912, AUS PAT 73644, RSA PAT 98/87777, AUS CLASS 11 NO 1025211



ENORMOUS FLOW!
up to 1500 L/min
at 1200 kPa



GRAPH CONVERSIONS
1kPa = 0.145psi = 0.01 bar 1 L/min = 0.22 Imperial gpm





PumpBuddy®

- ✓ Adjustable water levels saves electricity & increases pump life
- ✓ Full onfull o - diaphragm activated
- ✓ No float switches* - no power required
- ✓ Less parts = less problems
- ✓ Longtail available for thin walled tanks
- ✓ Can be used as a top up Rain Harvesting Valve

*Pump requires pressure or flow switch



WATER TANK & RESERVOIR VALVES



PumpBuddy®

APPLICATION :

- Pump fed large reservoirs - it allows for a single level or variable minimum and maximum levels within a reservoir/tank.
- Rain Harvesting - as a backup water supply control valve, providing a backup supply of water in the event of demand exceeding rainfall.

OPERATING PRINCIPLE

The PumpBuddy® will be closed when both weights are submerged (maximum water level). The valve will remain closed until the bottom weight is exposed (minimum water level). The valve will then open and remain open until the maximum level is reached.

SPECIFICATIONS

Working Pressure: 55 - 1200kPa (8 - 175psi)
Maximum water temperature: 60°C (140°F)
Minimum water temperature: 1°C (34°F)

PRODUCT CODES

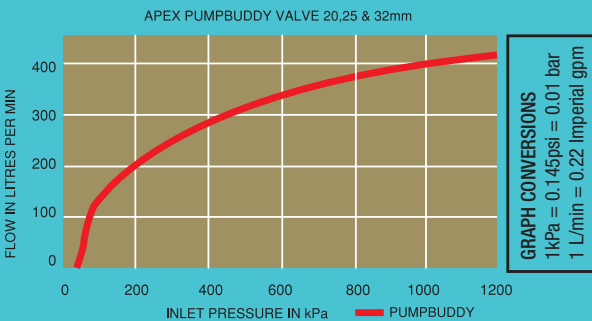
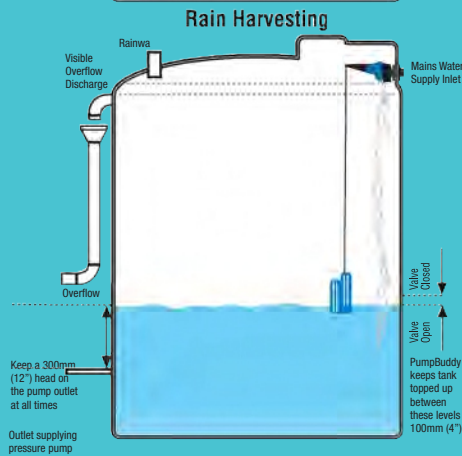
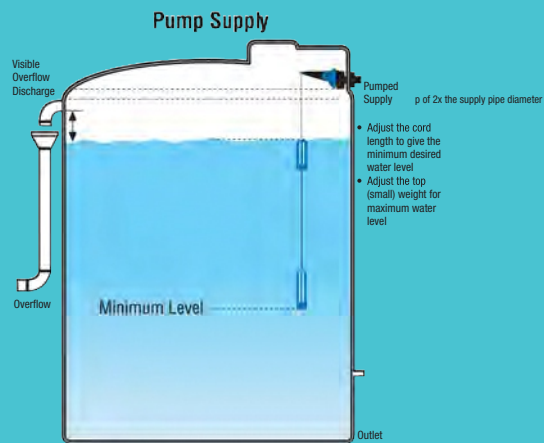
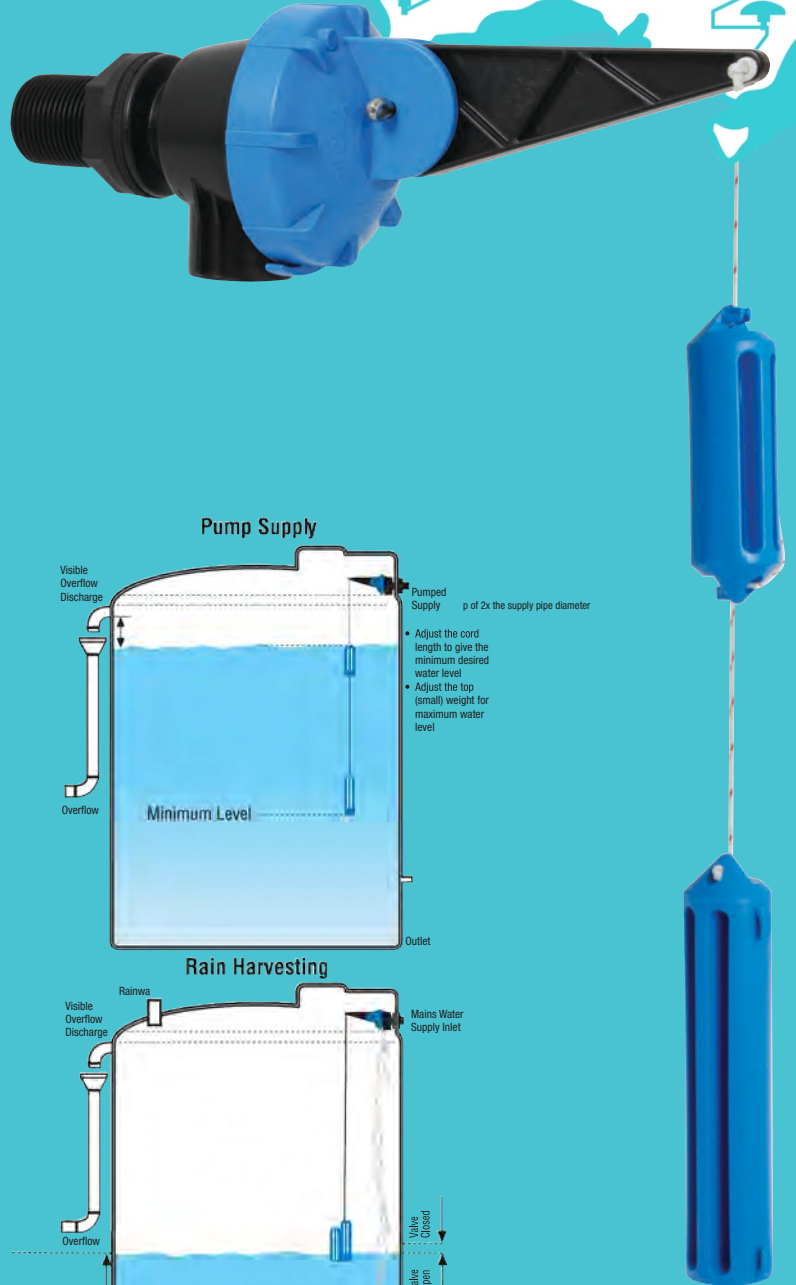
Standard
Pb20 - 20mm (3/4" BSP)
PB25 - 25mm (1" BSP)
PB32 - 32mm (1 1/4" BSP)

Longtail
PBLT20 - 20mm (3/4" BSP)
PBLT25 - 25mm (1" BSP)

RKPB - Repair Kit

PATENTS

- New Zealand Patent Application No.535912
- Australian Class 11 Patent Application No. 1025211
- US Patent Application No.11/604204
- RSA Patent Application No. 2006/09432



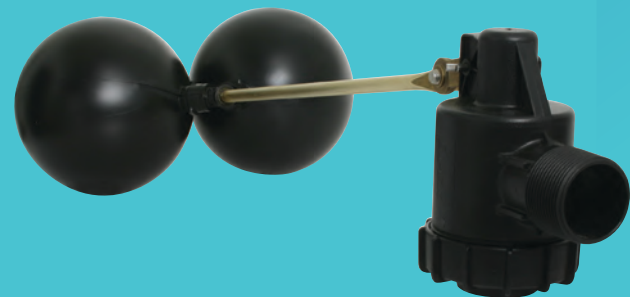
RESERVOIR VALVE

APPLICATION: LARGE STORAGE TANKS/RESERVOIRS

Large Acetyl sleeve valve. High volume flow valve for reservoirs and large header tanks (for pump fed tanks use BigBoy® or PumpBuddy® valves).

PRODUCT CODES:
RES 32 - 32mm (1 1/4" BSP) Single arm, dual float
RES 40 - 40mm (1 1/2" BSP) Single arm, dual float
RES 50 - 50mm (2" BSP) Single arm, dual float

Supplied with two 150mm (6") floats and a twin Float Connector.
WORKING PRESSURE: 0 - 850kPa (120psi)
Flow Rates: 500L/min @ 400kPa (58psi)
Maximum Water Temperature: 60°C (140°F)
Minimum Water Temperature: 1°C (34°F)



See page 14 for repair kit codes

REPAIR KITS & SPARES



FLOATS



FLT SQBLU XTRAFLO FLOAT



FLT 1500 BALL FLOAT



FLT 115B BALL FLOAT



CORD AND NIPPLES
SP82



FLT SS SPACESAVER FLOAT

FLOATS

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- FLT 150B** (6" Black Ball Float)
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- FLT 1500** (6" Orange Ball Float)
- FLT SQBLU** (XtraFlo Replacement Float)
- FLT SS** (SpaceSaver Float)

All UV Stabilised
ACETYL THREAD INSERT
5/16" BSW THREAD
MAXIMUM TEMPERATURE 60°C (140°F)

REPAIR KITS

(For contents see apexvalves.co.nz/rural)

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- RKRA** RainAid® repair kit
- RKRES** Res valve repair kit
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ARMS & SPARES

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- P16 PHIL** Arm Philmac
- P16 SS** Arm SpaceSaver
- P16 220** Arm Hi/Lo without cord and nipple
- P16 220P** Arm 220P -159mm
- P16 69** Arm 69 without cord/nipple
- SP84SP84** Twin Float Connector
- PBN15** Back nut 15mm (1/2")
- PBN20** Back nut 20mm (3/4")
- PBN25** Back nut 25mm (1")
- PBNW15** Back nut washer 15mm (1/2")
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- SP92SP92** Cotter pins, bag of 5
- PVSB EXT** VisiBall® extension tube

TroughMate

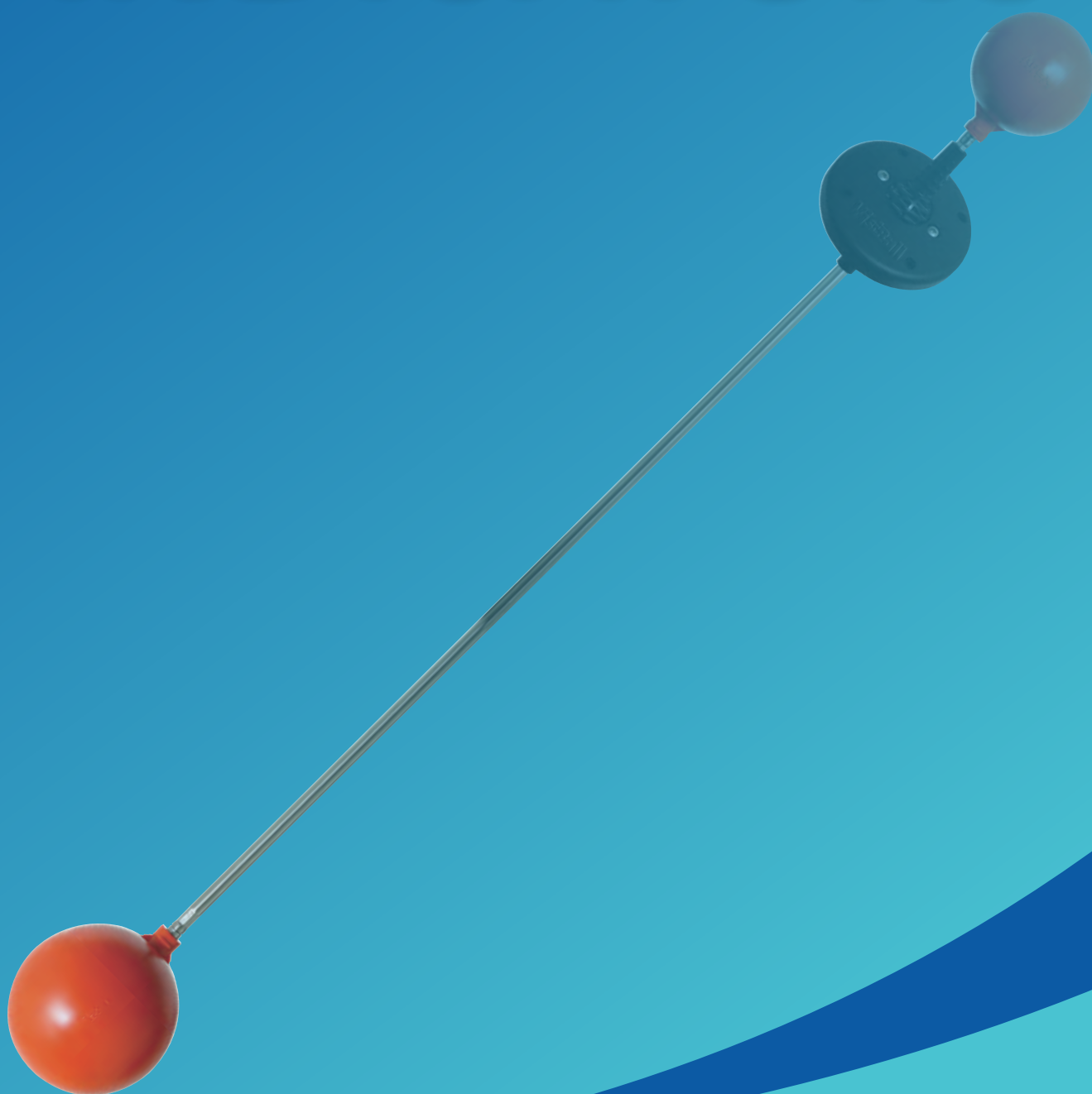
APPLICATION

Two piece tool used to service the complete range of Apex trough valves.

PRODUCT CODE: ATM



TANK LEVEL INDICATORS



WATER LEVEL INDICATOR



VisiBall

APPLICATION: WATER LEVEL INDICATOR

Highly visible water level indicator for large water tanks and reservoirs.
Innovative Uni-Ball Joint will suit any tank installation regardless of roof angle.

BENEFITS

- ☑ Easy fit with only one 25mm hole to be drilled
- ☑ Designed to withstand the harshest weather conditions
- ☑ Easily adjusted using the patented Uni-Ball joint to all roof angles, for all tank types
- ☑ Made from the highest quality UV resistant materials
- ☑ 100% guaranteed
- ☑ Doesn't get stuck

SPECIFICATIONS

- Stainless steel tube 2m (6.5ft), bottom float 150mm (6"), top float 115mm (4")
- Maximum wind speed @ 2m(6.5ft): 120km/hr (75mph)
- Maximum wind speed @ 3m(10ft): 80km/hr (50mph)

PRODUCT CODES

VSB- VisiBall®

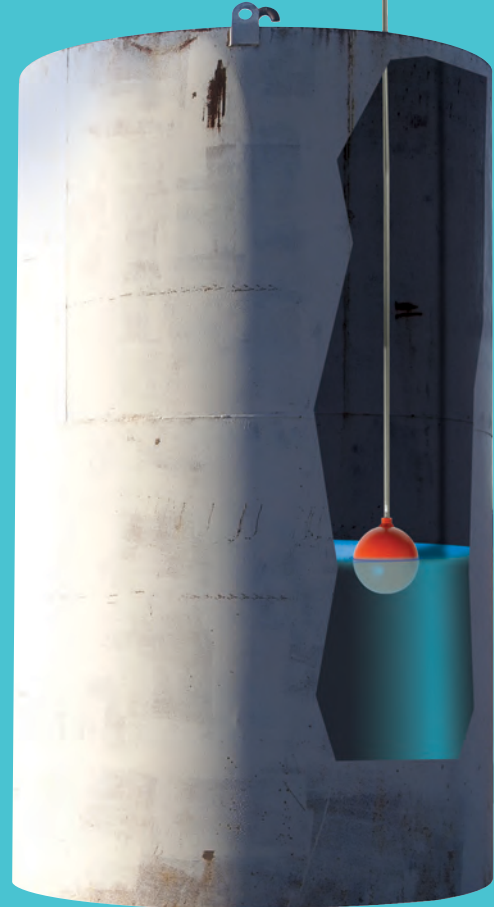
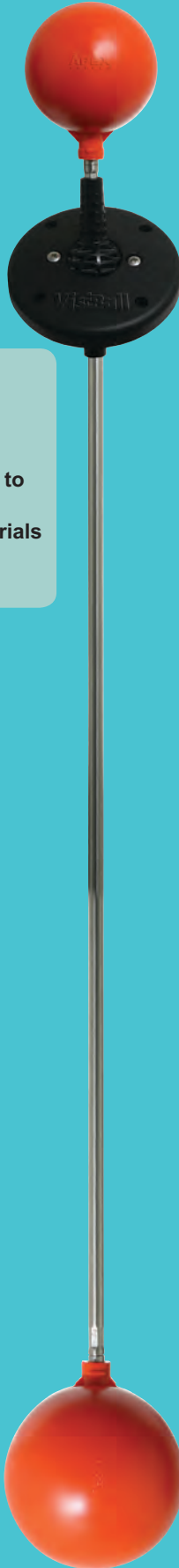
PVSB EXT - VisiBall® extension tube

INSTALLATION

- Tube must be vertical
- Maximum height: 3m (10ft)


PATENTS

- New Zealand Patent Application No. 569558
- Australian Patent Application No. 2008207462
- RSA Patent Application No. 2008/07409





APEX VALVES

A close-up photograph of a brown cow with yellow ear tags drinking water from a black trough. The cow's head is in the center of the frame, and its nose is just above the water level. In the bottom right foreground, a blue plastic valve is partially visible. The background shows a green, hilly landscape under a clear blue sky. The image is framed by a dark blue curved banner at the top and bottom.

For Assistance please contact Michael: 0488 917 285 or
michael@irrigationdirect.com.au