



**7220/25**

**APEX**<sup>®</sup>  
V A L V E S



**BigBoy**



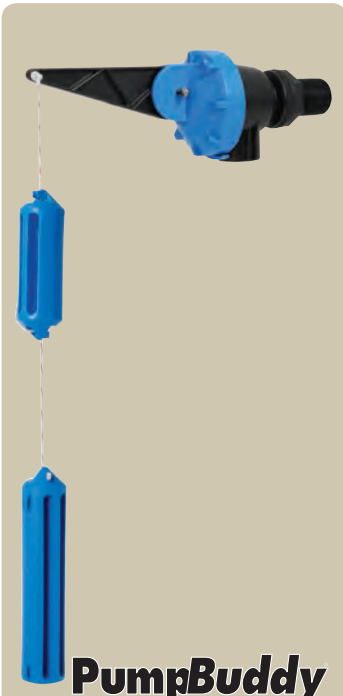
**XtraFlo**



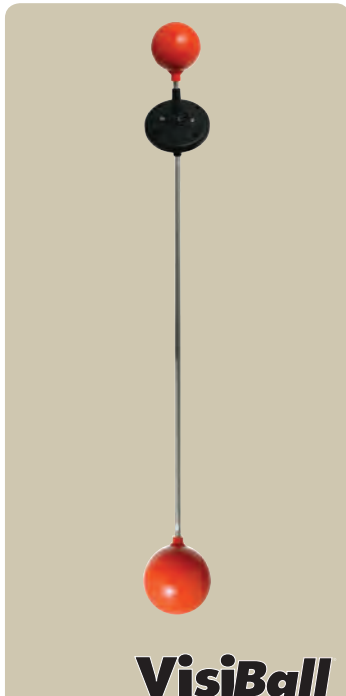
**RURAL**

Quality System  
Quality  
Endorsed  
Company  
ISO 9001  
Licence 4886

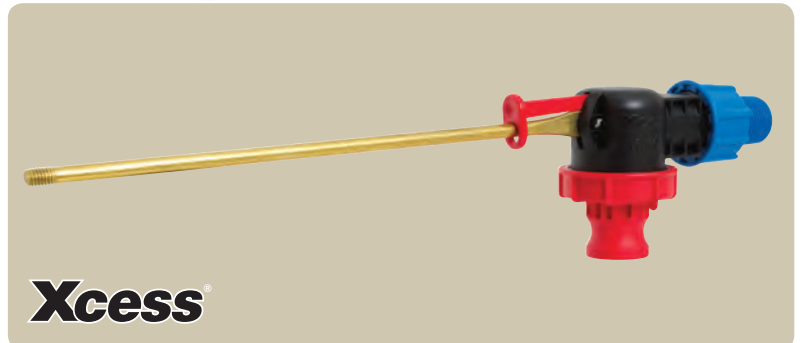
**Buy the Best!**



**PumpBuddy**



**VisiBall**



**Xcess**



**AP20/25**



NZ MADE

INTERNATIONAL EDITION 1

**APEX**<sup>®</sup>  
V A L V E S

**Buy the Best!**

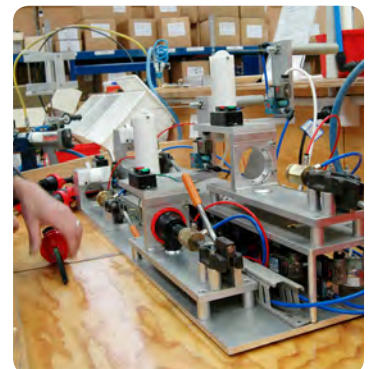


## ***BUY THE BEST!***

Apex Valves Limited is a privately owned New Zealand company specialising in the design and manufacture of float valves for water reservoirs, tanks and troughs. Apex Valves also manufacture water tank accessories such as the VisiBall water level indicator. In addition to our 'Rural Product Range' Apex Valves manufacture an extensive range of control valves for low and high pressure hot water and filtration systems.

Apex Valves is accredited with internationally recognised ISO 9001 Quality Certification.

We provide 100% backup and support for all products and are committed to being a progressive, responsible manufacturer, producing high quality, innovative products that are internationally recognised.





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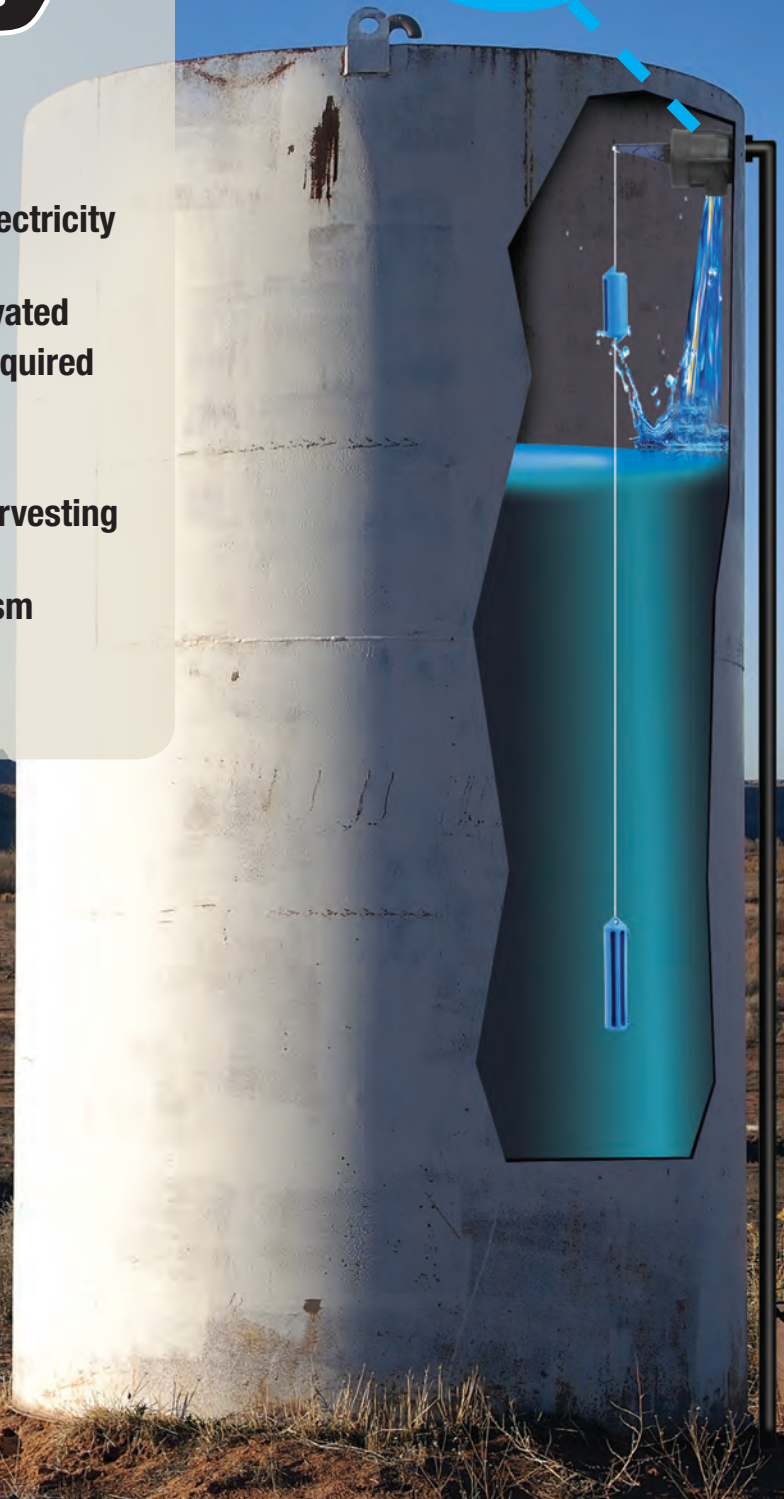




**APEX**  
VALVES  
**BigBoy**<sup>®</sup>

- ☑ Enormous flow
- ☑ Soft closing - no water hammer
- ☑ Longtail, no tank fittings
- ☑ Adjustable water levels saves electricity & increases pump life
- ☑ Full on, full off - 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





# 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

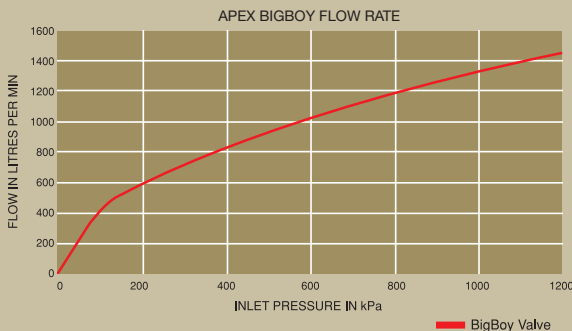
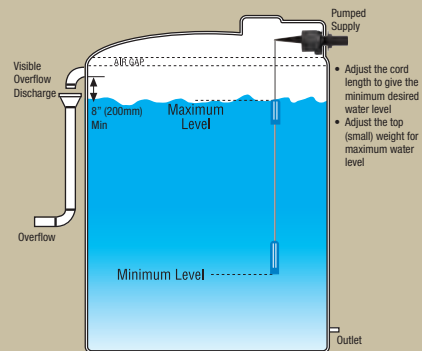
Temperature Range: 1°C - 60°C (34°F - 140°F)

## PATENTS

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

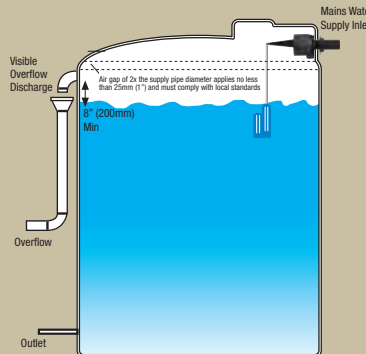


Pump Supply

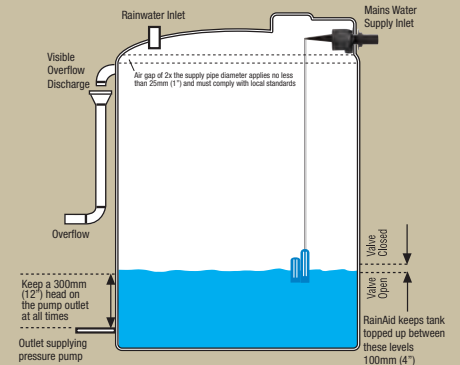


**GRAPH CONVERSIONS**  
1kPa = 0.145psi = 0.01 bar    1 L/min = 0.22 Imperial gpm

## Mains/Gravity Supply



## Rain Harvesting





**APEX**  
VALVES

# PumpBuddy®

- ✓ Adjustable water levels saves electricity & increases pump life
- ✓ Full on, full off - 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



**APEX 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**

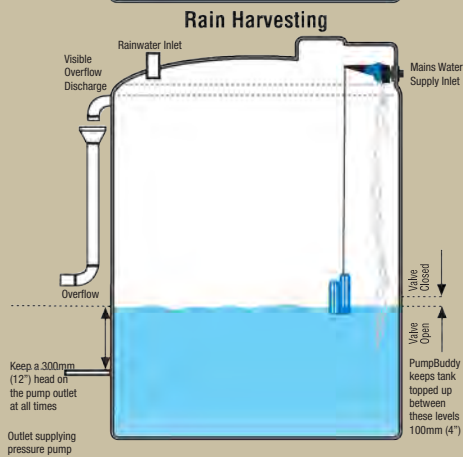
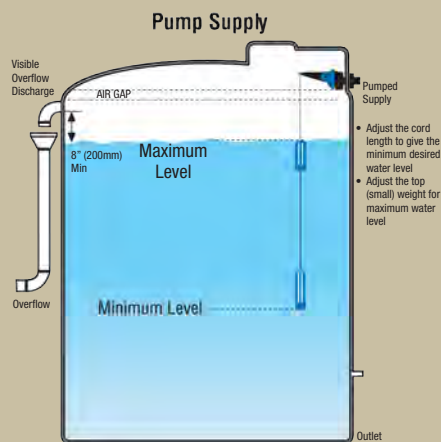
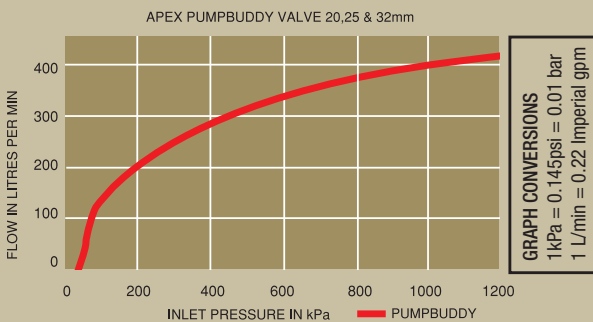
**PBLT20** - 20mm (3/4" BSP)

**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

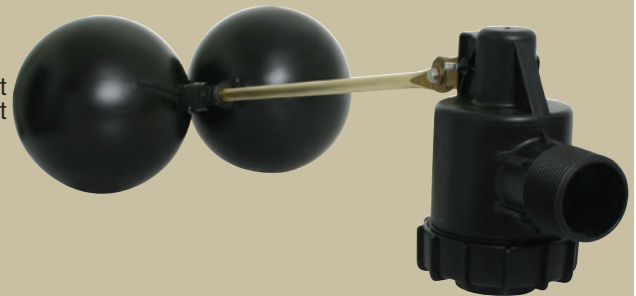
Supplied with two 150mm (6") floats and a twin Float Connector.

**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



**APEX**  
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





**APEX**  
VALVES  
**XtraFlo**<sup>®</sup>  
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**
- XFLT20** - 20mm (3/4" BSP)
  - XFLT25** - 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**
- XFLTE20** - 20mm (3/4" BSP)
  - XFLTE25** - 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<sup>®</sup> allowing easy dismantling of valve.

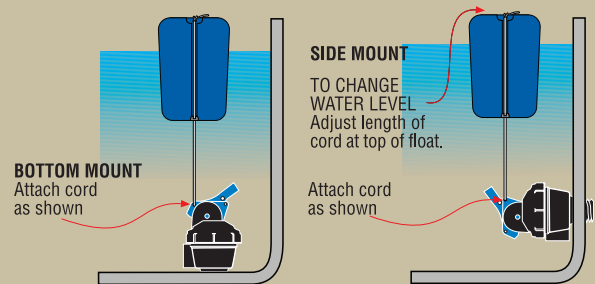
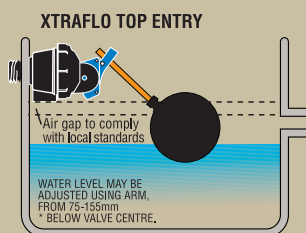
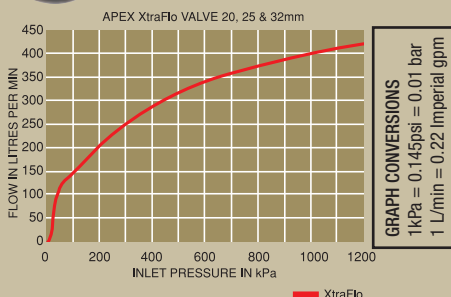


LONGTAIL AVAILABLE for thin walled troughs

**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)



**Top Entry Version**  
Air gap provides back-flow prevention



**APEX**  
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**

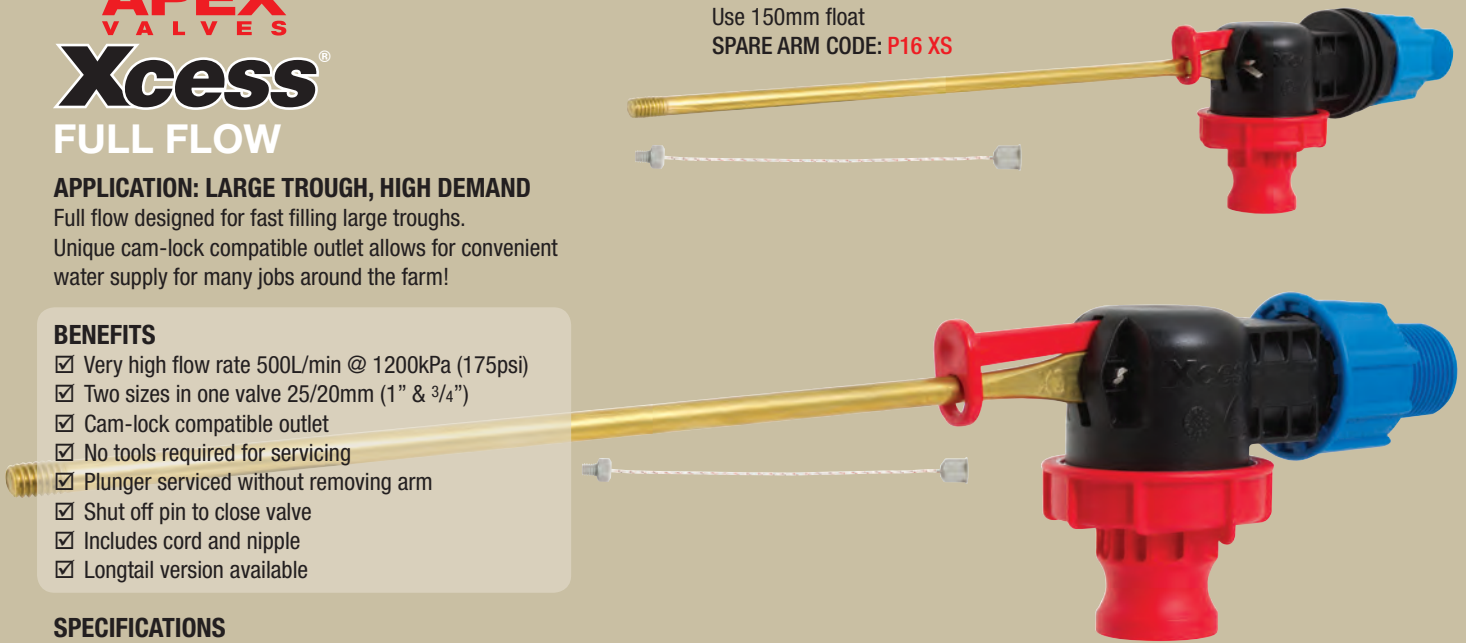
**XS 25/20** - 25/20mm (1" / 3/4" BSP)

**XSLT 25/20** - 25/20mm (1" / 3/4" BSP Longtail)

**RKXS** - Repair Kit

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

**LONGTAIL VERSION**



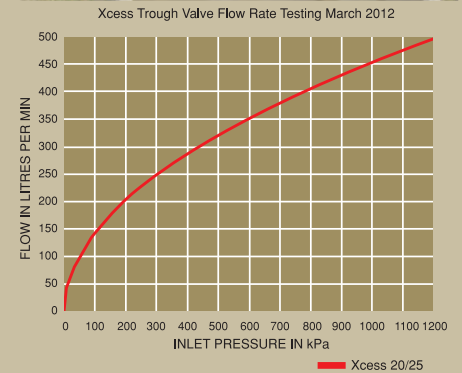
**PATENTS**

- 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.



**Service valve in seconds**



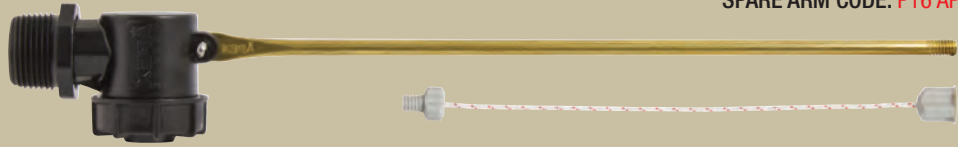
**GRAPH CONVERSIONS**  
1kPa = 0.145psi = 0.01 bar    1 L/min = 0.22 Imperial gpm





**AP20/25**  
ACETYL  
FULL FLOW

**APPLICATION: MEDIUM TROUGHS**  
Economy Acetyl 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 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

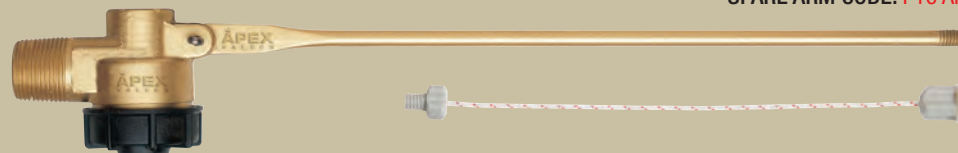
**RKAP** - Repair Kit

**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.



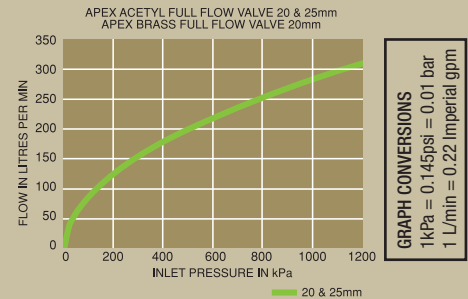
Use 150mm Float (6")  
SPARE ARM CODE: P16 AP

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

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

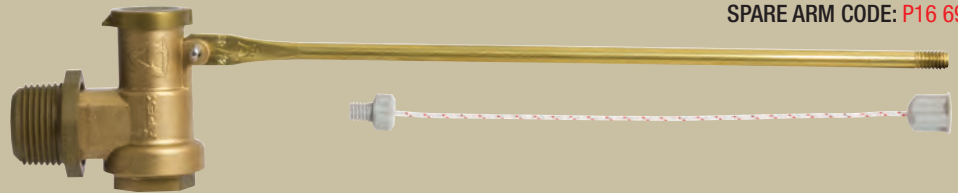
**RKAB** - Repair Kit

**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.



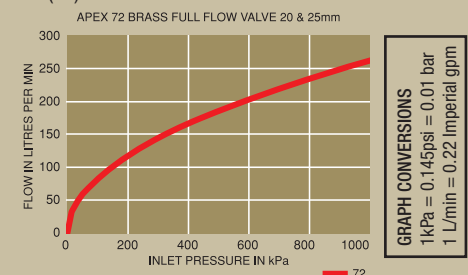
Use 150mm Float (6")  
SPARE ARM CODE: P16 69

**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)

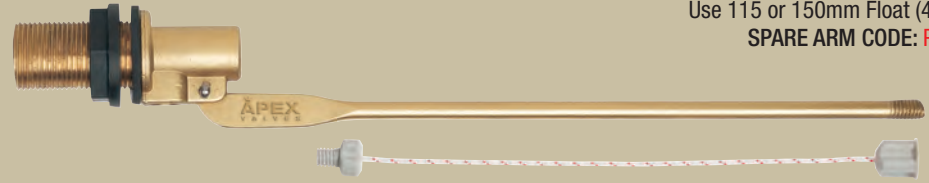
**RK 6972** - Repair Kit

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



**APEX**  
VALVES  
**HiLo20**  
**HiLo15**  
HIGH/LOW

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



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

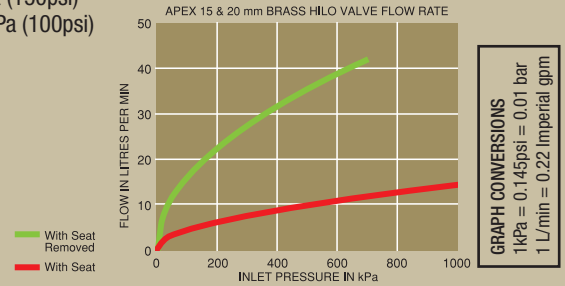
**TROUGH VALVE/REMOVABLE SEAT:** Includes cord and nipple  
**High Working Pressure with Seat:** 0 - 1000kPa (150psi)  
**Low Working Pressure without Seat:** 0 - 700kPa (100psi)

**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.



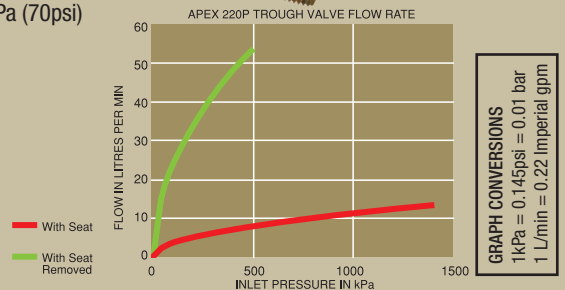
Use 115 or 150mm Float (4" or 6")  
SPARE ARM CODE: **P16 220P**

**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



**APEX**  
VALVES  
**SpaceSaver**

**APPLICATION: DRINKER & HYDROPONICS**  
Compact Acetyl valve designed for small individual troughs and drinkers. Non-corrosive materials - ideal for hydroponic applications.



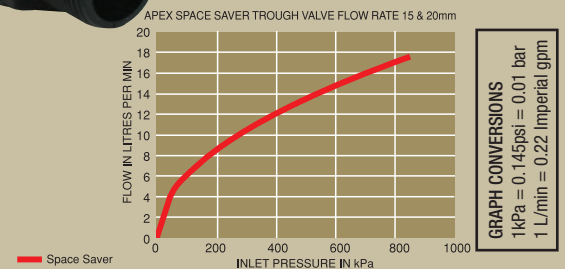
SPARE ARM CODE: **P16 SS**

**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







# 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

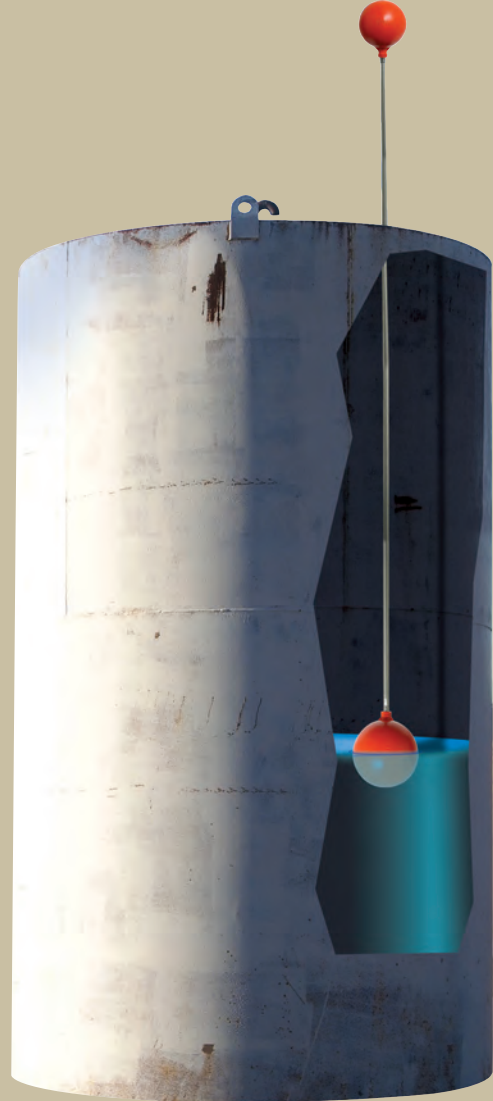
- VSB - VisiBall®
- PVSB EXT - VisiBall® extension tube

### 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



## FLOATS



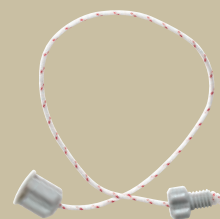
**FLT SQBLU XTRAFLO FLOAT**



**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
- SP84** 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")
- SP82** Cord and nipple
- SP92** Cotter pins, bag of 5
- PVSB EXT** VisiBall® extension tube

## **APEX** VALVES **TroughMate**

### APPLICATION

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

**PRODUCT CODE: ATM**



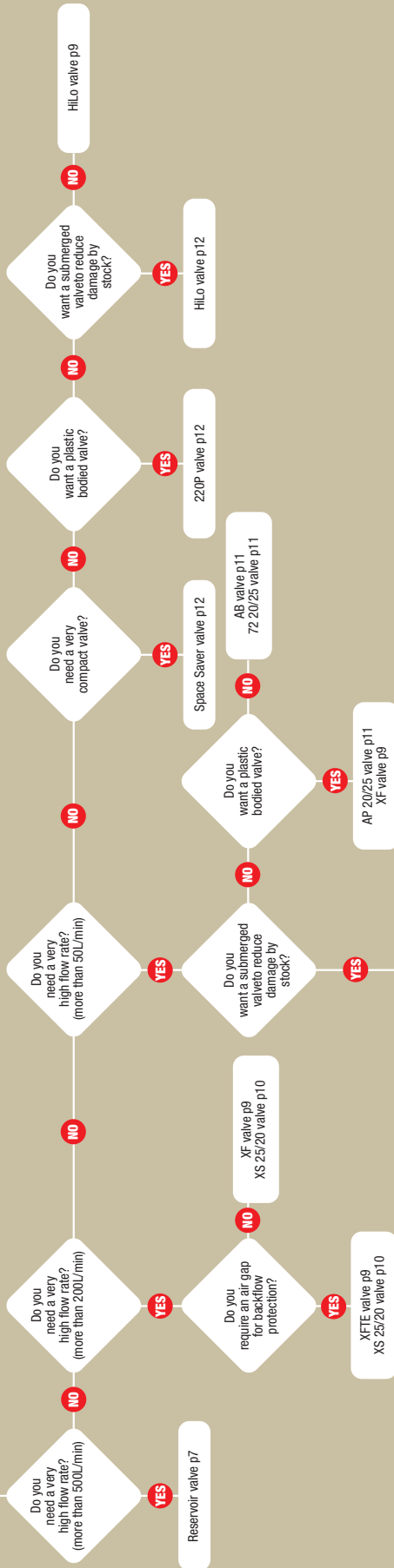


**Trough Valve Selection Guide**

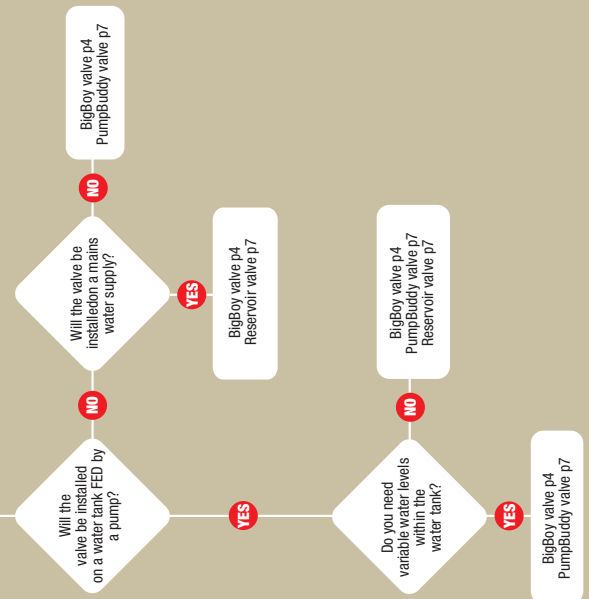
Stock	Litres/Head/Day	Trough Size	Valve	Flow Rate (L/min)
Dairy	70	Large-High demand	XtraFlo, Xcess	>300 l/m
Beef	45	Large-High demand	XtraFlo, Xcess	>300 l/m
Dairy	70	Medium to large	AP; AB; 72	Up to 300 l/m
Beef	45	Medium to large	AP; AB; 72	Up to 200 l/m
Horse (grazing)	36	Medium	AP; AB; 72	Up to 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**



# APEX VALVES 2 YEAR WARRANTY

Apex Valves warranty is limited to any fault found in a new valve due to poor workmanship or materials that is returned to Apex Valves Limited within the warranty period (2 years).

**The warranty does NOT apply if faults arise due to the following causes:**

1. Faulty operation due to foreign matter in the water supply.
2. Installation of valves to impure or deleterious water supplies that contain excessive dissolved salt or chemicals.
3. Installation that does not comply with any other relevant approved Standard or Manufacturers instructions and recommendations.
4. Abuse or mutilation of a valve during installation or in an attempt to repair or replace the valve.
5. Installation of a valve in an application where its intended use is not that for which the valve was designed without the prior written consent of Apex Valves Limited.
6. Failure due to a lack of maintenance.

**Apex Valves Limited shall in no way be liable for any loss, damage (direct, indirect or consequential), cost or expense incurred.**

**Apex Valves Limited reserves the right at any time to modify any valve specifications.**

The 2 year warranty is valid from the date of manufacture.

MANUFACTURER:



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Website: apexvalves.co.nz

Proudly made in  
New Zealand

The Apex Valves logo, featuring the word "APEX" in a large, bold, white font with a small crown icon above the letter "A". Below "APEX", the word "VALVES" is written in a smaller, white, all-caps font.

**APEX<sup>®</sup>**  
**VALVES**

**Buy the Best!**