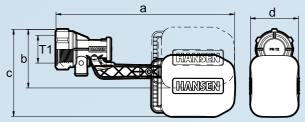






Technical Specifications

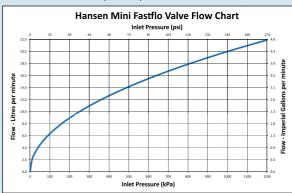
Hansen *Mini Fast-Flo* Valve Dimensions and Available Sizes



	Product Code	TI BSPT (DN)	a mm	b mm	c mm	d mm	Included Male Adaptors
ı	HMFFSVI5LS	25mm (I")	220	73	108	60	15mm Long Tail
ı	HMFFSV20LS	25mm (I")	220	73	108	60	20mm Long Tail
	HMFFSV25LS	25mm (I")	220	73	108	60	25mm Long Tail

Supplied with: Complete Plastic Valve Body, Arm & Float and Long Tail Adaptor

Hansen Mini Fast-Flo Valve Flow Chart



Results based on in-house testing

For further technical information including chemical & temperature specifications, please visit our website: www.hansenproducts.com

Frequently Asked Questions

- Will the Hansen Mini Fast-Flo valve work in my calf shed bowl troughs?
- A Yes the *Mini Fast-Flo* valve was designed as a compact valve for use in small bowls, compact troughs, feeders & header tanks or any situation where the valve space is confined.
- The pressure at my compact trough's is quite high and the compact float valves I have used either don't last very long or they don't shut off properly. Will the Hansen Mini Fast-Flo valve work with high pressure?
- A Yes the *Mini Fast-Flo* valve has the arm pivot point positioned to allow closing at pressures up to 12 bar (174 psi).
- I have found the rubber seats in the compact float valves I am using don't last very long, does the Hansen Mini Fast-Flo valve use the same rubber seat?
- No the seat we use in Hansen float valves are urethane which is a very durable and hard material. The seal is also reversible if a foreign body should damage it.
- I have a header tank in my house that is very noisy while filling, will the Hansen Mini Fast-Flo valve be any quieter?
- A The noise while the tank is filling is caused by the high velocity of the water from the valve outlet into the tank. The Mini Fast-Flo valve outlet doubles as a spigot so you can attach a length of hose to allow the flow to be placed onto the bottom of the tank eliminating this noise.
- What size tank inlet do I need to fit the Hansen Mini Fast-Flo valve?
- All the Hansen float valves carry a 25mm (1") female thread on the valve inlet. This gives you a couple of benefits. The valve will fit inlets from 15mm to 50mm when using our range of adaptors. The additional material used at the inlet to form the female thread strengthens the valve at an area that has been identified as a weak point in other brands of valves.





Best Installed Value

Hansen's Pipe Fittings and Valves have been working for New Zealanders for over 60 years and are winning a world market. It all started in the 1950's, Bert Hansen was building a house and couldn't find a reliable toilet valve, being an engineer he invented one and from there it all started.

Hansen Products is now proud to introduce a range of HiFlo Valves to its already established product range. The HiFlo Valves are Strong, Lightweight and Compact and have been designed and manufactured to deliver high volumes of water quickly with smooth unrestricted full flow control.

Adding to the Hansen HiFlo family of valves comes the much anticipated release of the Hansen Wini Fast-Flo valve. Ideally suited to tight fitting environments that demand a very compact sized valve with responsive on/off capabilities, the Wini Fast-Flo valve brings with it the perfect solution for ultra tight spaces. Built to the same quality and precision specifications as the Hansen range of valves that precede it, the barbed outlet allows for a hose attachment to both diffuse and help eliminate noise from the outlet flow. A tough, reversible urethane seat effectively doubles the life of the valve providing a 'best of class' valve that's reliable for the long term.

With over 60 years experience in manufacturing, Hansen Products knows the importance of fluid delivery, flow and pressure within a pipe system. This has seen Hansen Products build a reputation for providing high performance, easy to use, innovative simple products that provide our customers with "Best Installed Value".

All Hansen products carry our Limited Lifetime Warranty*

 $\hbox{``For more information on our warranty, please visit www.hansenproducts.com/legal.htm}$

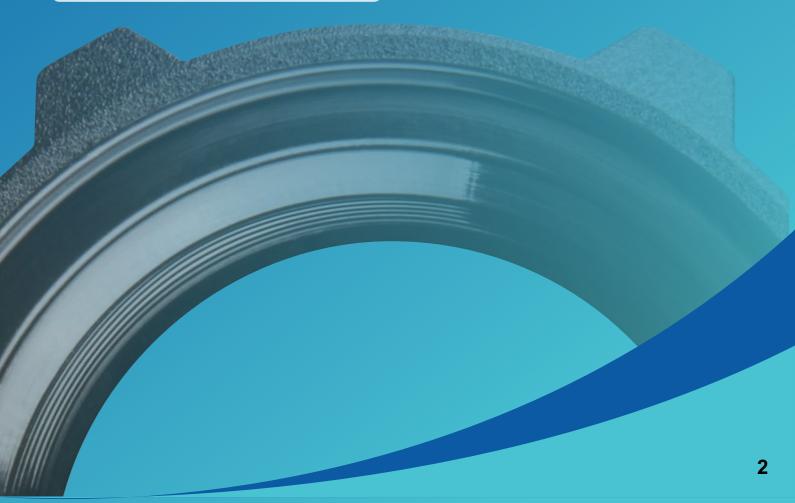
Features & Benefits

- Mini compact design suited to confined spaces ie small feeder bowls, troughs & header tanks
- Designed with a Hansen "Ezi Clamp" arm to make water level adjustment a breeze
- Reliable in High/Low pressures 0 to 12 Bar
- · Durable urethane seat, which is reversible
- Cost effective trough/tank valve 29 PSI 9 I/min
- Ability to attach a diffuser hose to reduce water turbulence & noise in top entry installations & Anti-Syphon Holes to prevent back flow.
- Will fit multiple thread & connection combinations 15 50mm
- Suitable for top entry
- Manufactured from strong non corrosive UV stabilised materials
- All plastic parts used in the manufacturing of Mini Fast~Flo valves have been approved for use with potable water.





Hansen *Mini Fast-Flo* Valves feature the Hansen Ezi Clamp arm making level adjustment a breeze





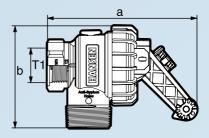
Ultra Compacti

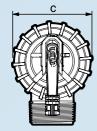


Mass Flo Valves

Technical Specifications

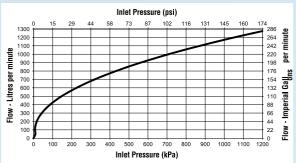
Hansen Max-Flo Valve Dimensions and Available Sizes





Product Code	TI BSPT (DN)	a mm	b mm	c mm	Included Male Adaptors
HMFDV2520	25mm (I")	144	98	76	20 & 25mm Standard
HMFDV3225	25mm (I")	144	98	76	25 & 32mm Standard
HMFDV2520L	25mm (I")	144	98	76	20 & 25mm Long Tail
HMFDV3225L	25mm (I")	144	98	76	25 & 32mm Long Tail

Hansen Max-Flo Valve Flow Chart



For further technical information including chemical & temperature specifications, please visit our website: www.hansenproducts.com

Rural Agriculture **Horticulture**

Frequently Asked Questions

- Q Can I use the Hansen Mar-Flo Valve as a top entry valve with an air gap?
- Yes, the Hansen Mar-Flo Valve can be installed at the top, side or bottom entry as all components come with each valve.
- O My troughs have both 20mm & 25mm threaded inlets. Does the Hansen Max-Flo Valve come in both sizes?
- A Yes each Hansen Mar-Flo Valve comes with the required components to install in 20mm or 25mm threaded inlets. This of course means you only have to buy one valve for all sized inlets. Also available in 15 & 32mm short and long threaded adaptors.
- **Q** Will the higher flow cost me more to run my pump?
- A No, because the Hansen Max-Flo Valve is more efficient than what you are used to. The reduced operating pressure required will equate to higher flows at lower pressures at your pump which in turn will reduce pumping time and cost.
- At present I get valve bounce in my troughs, will the Hansen Max-Flo Valve stop this?
- A Yes, valve bounce is created from high flows at high pressures, the Hansen *Mar-Flo* Valve opens and closes slower than other valves so will reduce incidences of this problem.
- I have problems with having to constantly clean my valves as my water supply can get dirty at times, how will your valve handle these conditions?
- A Our patent pending "Self Cleaning Pilot" will increase durability and suitability in dirty water situations.
- At present I have noticed some shuddering & noise in my pipelines when my pump starts & stops, will your valve stop this?
- A Yes this is called water hammer, we have designed the Hansen Max-Flo Valve to open & close slower than other valves effectively varying the flows at these times to minimise the chance of water hammer.
- What pressure can I run my Hansen Max-Flo Valve at?
- A The Hansen Max-Flo Valve will operate from 0.2bar to 12bar.

For further technical information including chemical & temperature specifications, please visit our website: www.hansenproducts.com





Best Installed Value

Hansen's Pipe Fittings and Valves have been working for New Zealanders for over 60 years and are winning a world market. It all started in the 1950's, Bert Hansen was building a house and couldn't find a reliable toilet valve, being an engineer he invented one and from there it all started.

Hansen Products is now proud to introduce a range of *HiFlo* Valves to its already established product range. The *HiFlo* Valves are Strong, Lightweight and Compact and have been designed and manufactured to deliver high volumes of water quickly with smooth unrestricted full flow control.

One of the Hansen HiFlo Valves is the Hansen Max-Flo Valve which has been designed with multiple thread and connection combinations to increase overall durability and versatility, the Patent pending "Self Cleaning Pilot" to ensure the valves are durable and suitable for dirty water applications, less operating pressure required to reduce pumping costs and increase flows, mini body design for easy installation across a wide range of applications and 30 year time tested performance slow open and close diaphragm to ensure no undue stress is placed on pump lines or pumps.

With over 60 years experience in manufacturing, Hansen Products knows the importance of fluid delivery, flow and pressure within a pipe system. This has seen Hansen Products build a reputation for providing high performance, easy to use, innovative simple products that provide our customers with "Best Installed Value".

All Hansen products carry our Limited Lifetime Warranty*

 $\hbox{\rm *For more information on our warranty, please visit www.hansenproducts.com/legal.htm}$

Features & Benefits

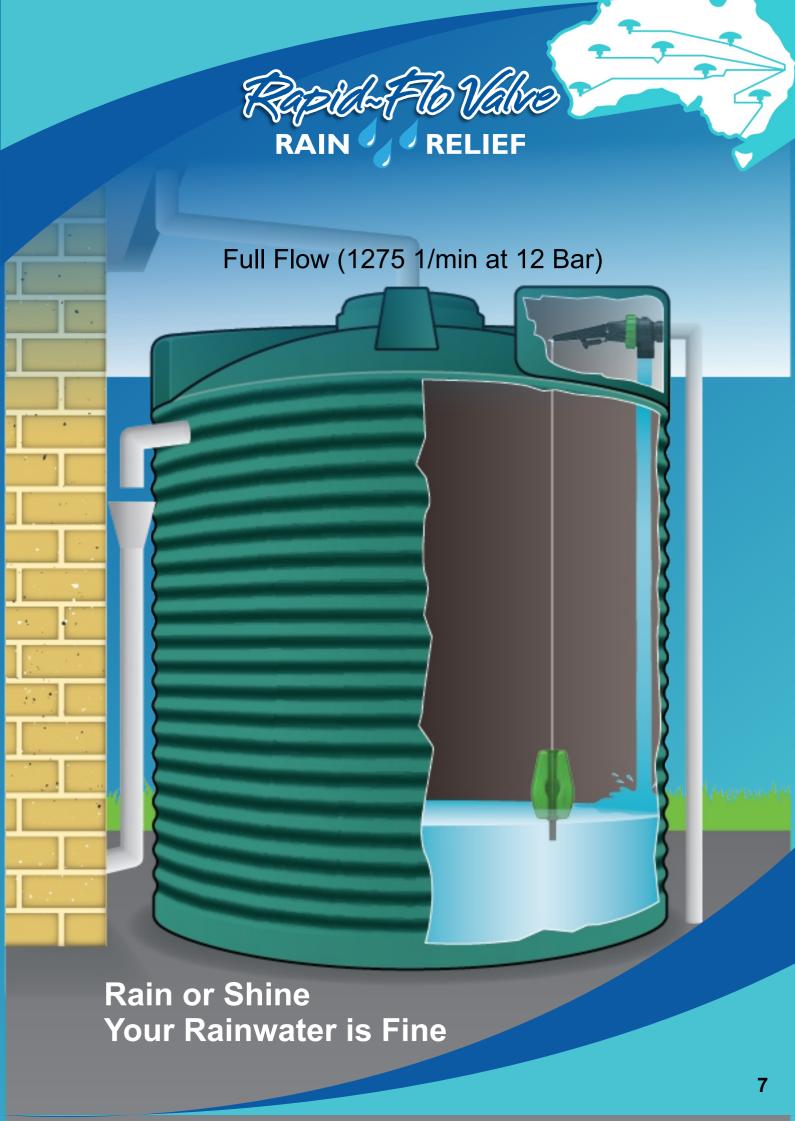
- High Performance, Cost Effective Trough/Tank Valve (29 PSI, 570L/PM)
- Suitable for Side, Bottom and Top entry
- Strong Compact Design
- Delivers high volumes of water quickly with unrestricted full flow
- Patent pending "Self Cleaning Pilot" for use in Clean/Dirty water
- Low operating pressure required reducing pumping costs and increasing flow
- Mini body design to enable easy installation
- Manufactured from strong, non corrosive UV stabilised materials
- Available in Female and Male BSPT, NPT and ACME thread configurations
- Suitable for High/Low Pressure operations from 0.2bar to 12 bar
- Variable open and close action preventing valve bounce and water hammer
- Valve is supplied with: Complete Glass Fibre Reinforced Nylon Valve Body, Glass Fibre Reinforced Nylon Threaded Adaptors, Adjustable Extension Arm, 100mm Blue Flanged Float & 600mm Cord.

NB: Adaptor configurations vary per pack







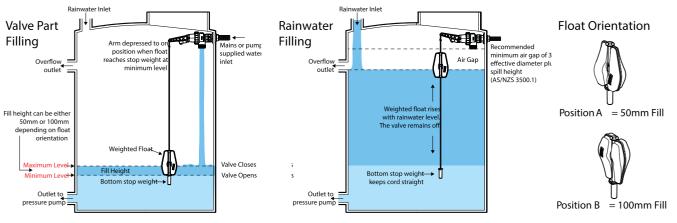


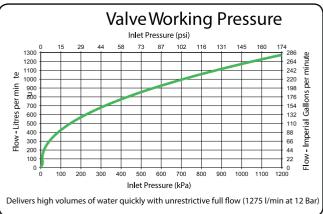
RAIN RELIEF

Technical Specifications

Hansen Rapid-Flo Rain Relief Valve Operating Principle & Float Orientation

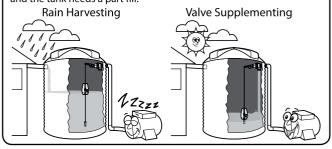
The minimum level is set by adjusting the length of the cord between the valve arm and the stop weight at the bottom of the cord. The maximum top up water level is set by the float orientation and can be either 50mm or 100mm





Rain Harvest & Only Pump When You Need To

The Hansen Rapid-Flo valve is the perfect choice for systems that combine Rain Harvesting with Supplementary Pumping from alternative sources. The Pump only ever needs to work when rain levels are low and the tank needs a part fill.





RAIN RELIEF

Best Installed Value

Hansen's Pipe Fittings and Valves have been working for New Zealanders for over 60 years and are winning a world market. It all started in the 1950's, Bert Hansen was building a house and couldn't find a reliable toilet valve, being an engineer he invented one and from there it all started.

Sometimes natures reserve doesn't quite have enough to meet our every day rainwater requirements. On those occasions the Hansen *Rapid-Flo* Rain Relief Valve provides what's needed. If the tanks rain water level drops below minimum, the Hansen *Rapid-Flo* Valve opens to supplement the tanks water from an alternative source such as the mains water supply. However it will only increase the water level by either 50 or 100mm in case it rains the next day.

The *Rapid-Flo* Rain Relief Valve has been designed to operate as a Full Flow Valve (1275 l/min at 12 Bar) and features the Hansen diaphragm for soft open and close thus reducing water hammer and increasing pump and water systems life expectancy. Also available is the Hansen *So-Flo* Rain Relief Valve with restricted flow (2 l/min at 12 Bar) as required by some water authorities, see separate brochure.

With over 60 years experience in manufacturing, Hansen Products knows the importance of fluid delivery, flow and pressure within a pipe system. This has seen Hansen Products build a reputation for providing high performance, easy to use, innovative simple products that provide our customers with "Best Installed Value".

All Hansen products carry our Limited Lifetime Warranty*

*For more information on our warranty, please visit www.hansenproducts.com/legal.htm

Features & Benefits

- Maintains a minimum water level in rainwater tanks
- Available in 2 separate valve options; restricted flow So-Flo or full flow Rapid-Flo
- Suitable for high/low pressures (0.2 Bar 12 Bar)
- Strong compact design
- Soft open and close action prevents valve bounce and water hammer
- Lock off plunger allows the valve to be manually locked to the off position
- Manufactured from strong, non corrosive UV stabilised materials
- Patent pending "self cleaning pilot" for use in clean/dirty water conditions
- Valve supplied with Complete Gass Fibre Reinforced Nylon valve body & arm, Threaded Adaptors, Rain Relief Green Weighted Float, Weighted Float Carrier and 2.5 metre cord.

The Rain Relief Valves are protected by NZ registered design application 422627 and Australian registered design application 201710480. The Rain Relief Floats are patent pending, see our website for further details.



Rapid-Flo Valves are rigorously hand tested

RAIN RELIEF



Why do I Need a Hansen Rain Relief Valve?

- ✓ Prevents dry tank syndrome
- Supplement your rainwate r tank from an alternative water supply
- ✓ Harvest rainwater and only pump when you need to

Key Features...



DUAL LEVEL WEIGHTED FLOAT

Rotating the float determines the tanks fill depth of either 50mm or 100mm



LOCK OFF PLUNGER

Rotating the plunger tab allows the valve to be manually locked to the off position if rain is expected



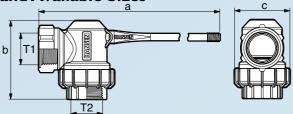
PATENTED SELF FLUSHING PILOT

Valve keeps cl & clear of

Sazar Flo Valves

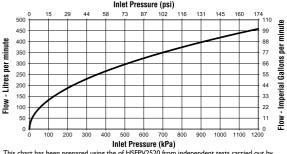
Technical Specifications

Hansen Super-Flo Valve Dimensions and Available Sizes



13 21							
Product Code Plastic Valve	Product Code Brass Valve	TI & T2 BSPT (DN)	a mm	b mm	c mm	Included Male Adaptors mm	
	Long Arm Valves						
HSFPV2520	HSFPV2520B	25mm (I")	376	83	58	Standard 25x15, 25x20, 25x25	
HSFPV2520L	HSFPV2520BL	25mm (I")	376	83	58	Long 25x20,25x25	
HSFPV2015L	HSFPV2015BL	25mm (I")	376	83	58	Long 25x15,25x20	
Short Arm Valves							
HSFPV2520S	HSFPV2520BS	25mm (I")	250	83	58	Standard 25x15, 25x20, 25x25	
HSFPV2520LS	HSFPV2520BLS	25mm (I")	250	83	58	Long 25x20,25x25	
HSFPV2015LS	HSFPV2015BLS	25mm (I")	250	83	58	Long 25x15,25x20	

Hansen Super-Flo Valve Flow Chart



This chart has been prepared using the of HSFPV2520 from independent tests carried out by The University of Auckland, New Zealand.

For further technical information including chemical & temperature specifications, please visit our website: www.hansenproducts.com



Frequently Asked Ouestions

- My troughs have both 20mm & 25mm threaded inlets, does your Hansen Super-Flo Valve come in both sizes?
- A Yes each Hansen Super-Flb Valve comes with the required components to install in 20mm or 25mm threaded inlets. This of course means you only have to buy one valve for all sized inlets. Also available in 15 & 32mm short and long thread adaptors.
- **Will the higher flow cost me more to run my pump?**
- A No, because the Hansen Super-Flo Valve is more efficient than what you are used to. The reduced operating pressure required will equate to higher flows at lower pressures at your pump which in turn will reduce pumping time and cost.
- At present I get valve bounce in my troughs, will your valve stop this?
- A Yes, valve bounce is created from high flows at high pressures, because our Hansen Super-Flo Valve delivers higher flows than other valves it will effectively reduce line pressure which in return will reduce the incidences of this problem also reducing water hammer. Furthermore the Super-Flo Valve allows you to fit a diffuser pipe.
- I have problems with having to forever clean my valves as my water supply can get dirty at times, how will the Hansen Super-Flo Valve handle these conditions?
- A We have designed the Hansen Super-Flo Valve to work in either clean or dirty water situations.
- What pressure can I run my Hansen Super-Flo Valve at?
- A The Hansen Super-Flo Valve will operate from 0 bar to 12 bar.
- The valves I have at present have a tendency to jam open or closed costing me time and either a bog around my trough or no available water for my stock, will your valve stop this problem?
- A Yes the Hansen Super-Flb Valve has a new patent pending "Slipper Fit Piston" design seal assembly to minimise this problem.



Suzzar Flo Valves

Best Installed Value

Hansen's Pipe Fittings and Valves have been working for New Zealanders for over 60 years and are winning a world market. It all started in the 1950's, Bert Hansen was building a house and couldn't find a reliable toilet valve, being an engineer he invented one and from there it all started.

Hansen Products is now proud to introduce a range of *HiFlo* Valves to its already established product range. The *HiFlo* Valves are Strong, Lightweight and Compact and have been designed and manufactured to deliver high volumes of water quickly with smooth unrestricted full flow control.

One of the Hansen HiFlo Valves is the Hansen Super-Flo Valve which has been designed with multiple thread and connection combinations to increase overall durability and versatility, the Patent pending "Slipper Fit Piston" design to reduce sticking and increase efficiencies, less operating pressure required to reduce pumping costs and increase flows, mini body design for easy installation across a wide range of applications and the ability to operate in clean or dirty water applications.

With over 60 years experience in manufacturing, Hansen Products knows the importance of fluid delivery, flow and pressure within a pipe system. This has seen Hansen Products build a reputation for providing high performance, easy to use, innovative simple products that provide our customers with "Best Installed Value".

All Hansen products carry our Limited Lifetime Warranty*

*For more information on our warranty, please visit www.hansenproducts.com/legal.htm

Features & Benefits

- High Performance, Cost Effective Trough Valve (29 PSI, 188L/PM)
- Each valve will fit multiple thread and connection combinations
- Strong Compact Design
- Delivers high volumes of water quickly with unrestricted full flow
- Patent pending* "Slipper Fit Piston" design to reduce valve sticking
- Low operating pressure required reducing pumping costs and increasing flow
- Mini body design to enable easy installation
- Manufactured from strong, non corrosive UV Stabilised materials
- Available in Female and Male BSPT, NPT, ACME thread configurations
- Suitable for High/Low Pressure operations (from 0 bar to 12 bar)
- Variable open and close action preventing valve bounce and water hammer
- Super-Flo Piston Valve is supplied with: Acetal or Brass Valve Body, Glass Fibre Reinforced Nylon Threaded Adaptors, Brass Arm, Cord and Nuts.

NB: Adaptor configurations vary per pack



Super-Flo Valves are rigorously hand tested



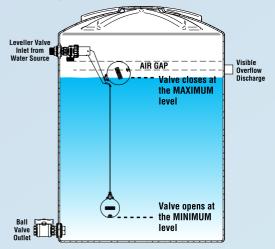




Lexeller Valve

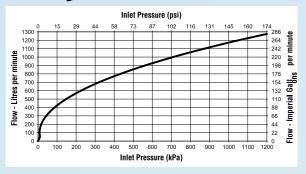
Technical Specifications

Hansen Leveller Valve Installer Guide



- The maximum level is set by the position of the top float on the valve arm allowing for maximum use of the tanks height.
- The minimum water level is set by adjusting the length of the cord between the top float and bottom weighted ball.

Hansen Leveller Valve Flow Chart

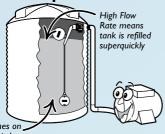




Protect Your Pump

✓ Lengthen Your Pumps Life

A well cared for pump is a happy pump! Adding the Hansen Leveller Value to your System means the tank only refills when it gets low. No more on/off cycling of your pump equals less work, less pump maintenance and a more reliable system.



Pump only switches on _ when the tank is low

✓ Rain Harvest & Only Pump When You Need To

The Hansen Leveller Value is the perfect choice for systems that combine Rain Harvesting with Supplementary Pumping from alternative sources. The Pump only ever needs to work when rain levels are low and the tank needs topping up.



EMPTY

Prevent Dry Tank Syndrome

Pumps can be severely damaged if your tank runs dry! The Hansen Leveler Value ensures that the pump can always supply enough fluid to the tank to prevent 'Dry Tank Syndrome', preventing significant repair costs as a result of a lack of supply.

Lexeller Valve

Best Installed Value

Hansen's Pipe Fittings and Valves have been working for New Zealanders for over 60 years and are winning a world market. It all started in the 1950's, Bert Hansen was building a house and couldn't find a reliable toilet valve, being an engineer he invented one and from there it all started.

The Hansen Leveller Valve has been designed for tank installations where a level differential is required to stop pumps and water systems cycling (continually switching on and off). The new design features a float and weighted ball that enables the user to set the valve to open at the minimum fluid level and close at the maximum fluid level.

The Leveller Valve features the Hansen diaphragm configuration with "Self Cleaning Pilot" which has been designed for soft open and close thus reducing water hammer and increasing pump and water systems life expectancy. The Leveller Valve has been designed to operate reliably in high and low pressures (0.2 bar - 12 bar) and in Clean and Dirty fluid conditions.

With over 60 years experience in manufacturing, Hansen Products knows the importance of fluid delivery, flow and pressure within a pipe system. This has seen Hansen Products build a reputation for providing high performance, easy to use, innovative simple products that provide our customers with "Best Installed Value".

All Hansen products carry our Limited Lifetime Warranty*

*For more information on our warranty, please visit www.hansenproducts.com/legal.htm

Features & Benefits

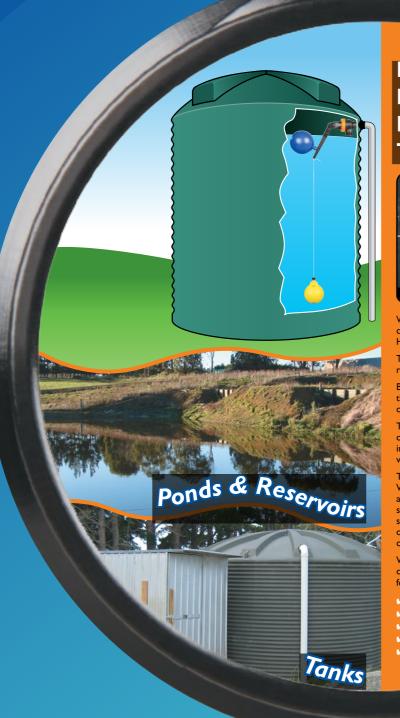
- High performance cost effective Reservoir/Tank valve
- Adjustable Minimum and Maximum on off control (50mm 2.5 metre)
- Suitable for High/Low pressures (0.2 bar 12 bar)
- Delivers high volumes of water quickly with unrestrictive full flow (1275 lpm at 12 bar)
- Patent pending "self cleaning pilot" for use in clean/dirty water
- Soft open and close action preventing valve bounce and water hammer
- Strong compact design
- Threaded outlet for use with a diffuser tube, ideal for high flows, eliminating turbulence
- Punch out anti siphon holes for multi tank filing or diffuser installations
- Manufactured from strong, non corrosive UV stabilised materials
- Valve supplied with Complete Glass Fibre Reinforced Nylon valve body and 32, 40, 50mm Threaded Adaptors, Leveller Control, 115mm weighted HiViz Threaded Ball, 140mm Blue Threaded Float, 2.5 Metre Cord

The Leveller Valve is protected by intellectual property rights owned by the Hansen group of companies in New Zealand and other countries, including New Zealand patent 596808 and registered design 415354, and Australian patent application 2012203015 and registered design 341444.



Leveller Valves
are rigorously hand tested

Lexeller Valva



No Smoke, No Mirrors, Just a Reliable Reservoir/ Tank Valve!



When Hansen re released the *HHHo* trough and tank valves in 2010 the first comments our customers said were "These valves are fantastic! But when is Hansen going to manufacture a high performance reliable reservoir/tank valve?

The answer we gave was, "we are currently developing a high performance reliable reservoir/tank valve and we will be releasing it in 2012."

Before starting the *Leveller* project we went back to our customers and asked them what they wanted in a valve and what were they unhappy about with the current products they used?

They told us that current products either stick open or closed, slam shut creating water hammer, don't work reliably in low pressure applications or in dirty water are too complicated or simply do not deliver high enough volumes of water.

The Leveller project has been a huge challenge for the R&D team. We needed to develop a valve that was reliable and simple, have an adjustable level control that could be set to open at the minimum setting and close at the maximum setting. When the valve opens and shuts it must do so softly. The valve also had to be capable of operation in very low/high pressures delivering high volumes of clean and or dirty water.

We believe we have addressed all of the issues that our customers told us, and we have added some extra new features to make it easy to install and operate.

- ✓ Min and Max Height control
- ✓ Low and High pressure
- ✓ Clean and Dirty water
- ✓ Soft open and close
- ✓ Reliable, simple Reservoir/Tank

