

# Rapid-Flo Valve and Slo-Flo Valve

RAIN RELIEF RAIN RELIEF

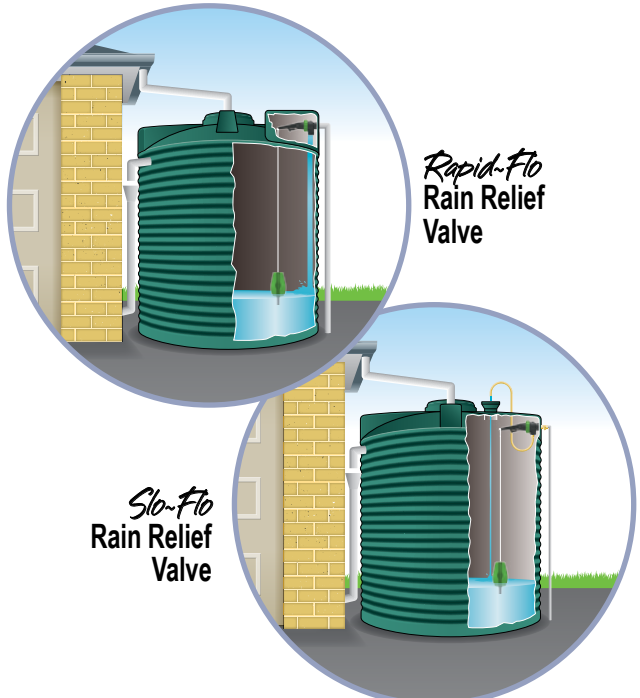
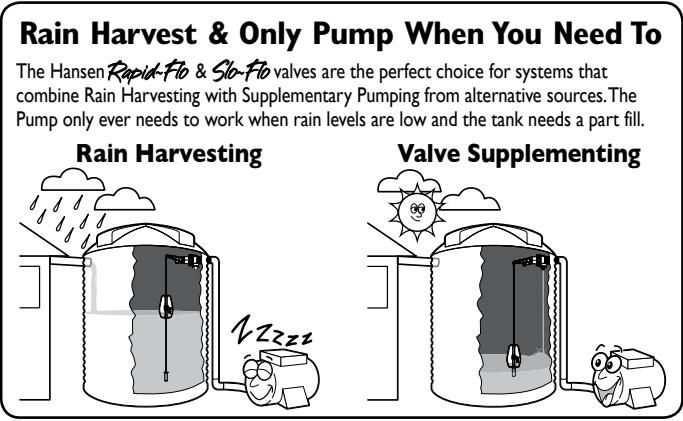
**Difference Between Rapid-Flo & Slo-Flo Rain Relief Valves**

**The Rapid-Flo Valve functions at unrestricted full flow as indicated in the flow chart below.**  
**The Slo-Flo Valve is restricted to 2 litres/min.**

If the tanks rain water drops below where the green float is set to, the 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 50mm or 100mm depending on the setting.

## Rapid-Flo and Slo-Flo Rain Relief Valve Features and Benefits

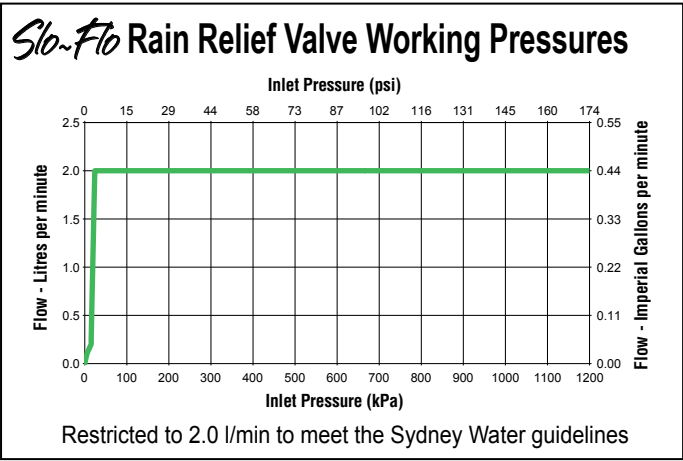
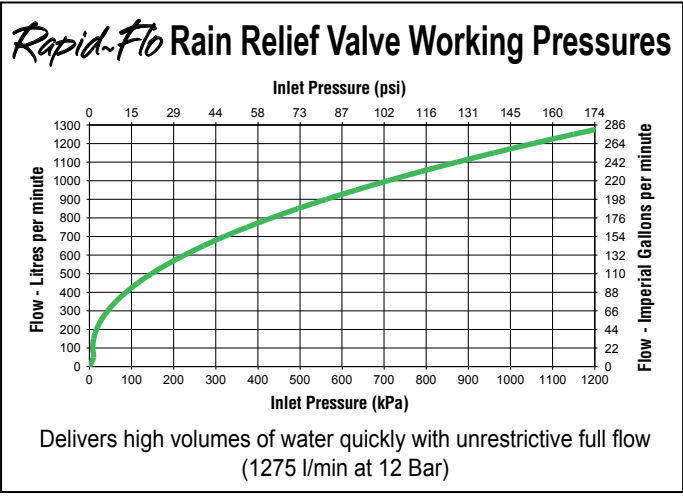
- Maintains a minimum water level in rainwater tanks
- Suitable for high/low pressures (0.2 Bar – 12 Bar)
- Max pressure @ 20°C = 12 Bar / 174 PSI
- Patent pending “self cleaning pilot” for use in clean/dirty water conditions
- Soft open and close action preventing valve bounce and water hammer
- Strong compact design
- Manufactured from strong, non corrosive UV stabilised materials



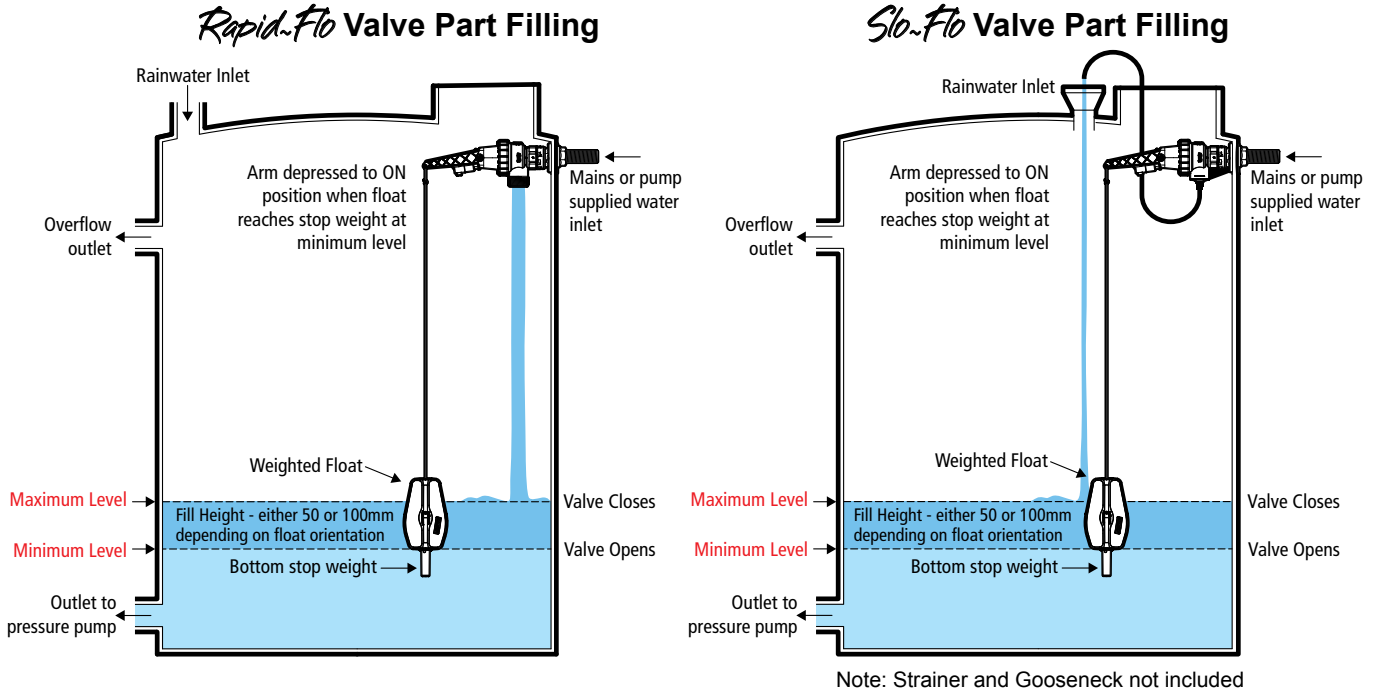
*Rapid-Flo*  
Rain Relief Valve

*Slo-Flo*  
Rain Relief Valve

Note: Strainer and Gooseneck not included



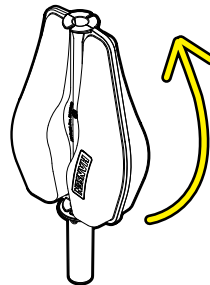
## Rapid-Flo and Slo-Flo Rain Relief Valve Operating Principle & Float Orientation



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.

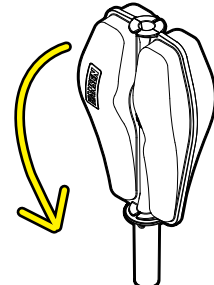
The maximum top up water level is set by the float orientation.

This is the Float in Position A



Position A = 50mm fill

This is the Float in Position B



Position B = 100mm fill

## Rapid-Flo and Slo-Flo Rain Relief Valve Installation

- 1 Install Adapter into water tank / reservoir as per Hansen tank fitting installations steps Section Twelve Page 2.
- 2 Flush lines into water tank / reservoir before installing Rapidflo Rain Relief Valve.
- 3 Thread O-Ring end of correct size Adapter into Rapidflo Rain Relief Valve body.
- 4 Thread Rapidflo Rain Relief Valve onto Adapter inside tank, making sure it is vertical and then tighten up the nut on the Adapter.
- 5 String the cord through the float. Note: the float orientation determines the maximum top up water level.
- 6 Tie the cord to the bottom end of the Rapidflo Rain Relief Arm with the Weight at the required minimum water level. Note: the minimum water level must be above the tank outlet.
- 7 Check and ensure the valve is not locked in the Off position.

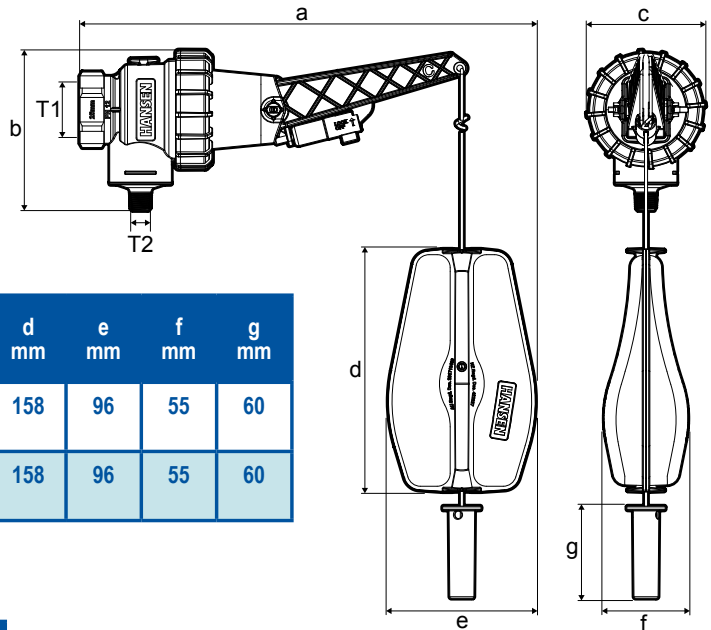
*Rapid-Flo and Slo-Flo*  
**Rain Relief Valve**  
**Chemical Resistance Chart**

CHEMICAL TYPE	RESISTANCE LEVEL		
	Good	OK But Check Further	BAD Try to Avoid
Drinking Water	X		
Sea Water	X		
Bloat Remedies Diluted		X	
CHEMICAL TYPE	RESISTANCE LEVEL		
Acids Weak			X
Acids Strong			X
Organic Acids Weak		X	
Organic Acids Strong			X
Bases Weak	X		
Bases Strong			X
Bleach			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Automotive Fuel			X
Automotive Lubricants			X
Hydraulic Fluids			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Solvents			X
Hydrocarbons			X
Halogens			X
Alcohols			X
Aldehydes			X
Amines			X
Esters			X
Ethers			X
Ketones			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Detergents	X		
Oxidising Agents			X
Weak Hydrogen Peroxide			X
Ozone			X
Phenols			X
CHEMICAL TYPE	RESISTANCE LEVEL		
Calcium Chloride			X

PLEASE NOTE: This chart is intended as a basic guide only. The resistance to a given chemical will vary with temperature & concentrations. Some chemicals within the group mentioned may result in different rating. For further information, please email us with your specific question.

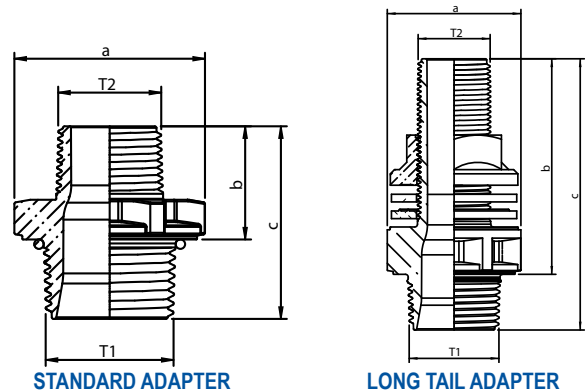
## Rapid-Flo and Slo-Flo Dimensions

Valve	T1 BSPT (DN)	T2 BSPT	a mm	b mm	c mm	d mm	e mm	f mm	g mm
Slo-Flo	1" (25mm)	1/4" (8mm)	297	99	78	158	96	55	60
Rapid-Flo	1" (25mm)	1 1/4" (32mm)	297	105	78	158	96	55	60



## Adapter Dimensions

Product	T1 BSPT	T2 BSPT	a mm	b mm	c mm
<b>STANDARD ADAPTERS</b>					
15mm Adapter BSPT	1" (25mm)	1/2" (15mm)	48	34	54
20mm Adapter BSPT	1" (25mm)	3/4" (20mm)	48	35	55
25mm Adapter BSPT	1" (25mm)	1" (25mm)	48	38	58
32mm Adapter BSPT	1" (25mm)	1 1/4" (32mm)	48	32	52
40mm Adapter BSPT	1" (25mm)	1 1/2" (40mm)	49	39	59
50mm Adapter BSPT	1" (25mm)	2" (50mm)	61	44	64
<b>LONG TAIL ADAPTERS</b>					
15mm Adapter BSPT	1" (25mm)	1/2" (15mm)	48	73	93
20mm Adapter BSPT	1" (25mm)	3/4" (20mm)	48	78	98
25mm Adapter BSPT	1" (25mm)	1" (25mm)	54	78	98
32mm Adapter BSPT	1" (25mm)	1 1/4" (32mm)	64	86	106
40mm Adapter BSPT	1" (25mm)	1 1/2" (40mm)	73	97	117
50mm Adapter BSPT	1" (25mm)	2" (50mm)	86	104	124



## Wall Thickness Guide

Long Tail Adapter	HMAL15	HMAL20	HMAL25	HMAL32	HMAL40	HMAL50
Tank Wall	14mm	22mm	19mm	24mm	24mm	24mm

Hansen Long Tail Adapters Maximum Wall Thickness for Tanks when screwed into a Hansen Female Bend

## Rapid-Flo and Slo-Flo Rain Relief Valve Materials

- **Diaphragm Valve Body** – Glass Fibre Reinforced Nylon
  - **Diaphragm** – Nitrile Rubber
  - **Guide Bush** – Nylon
  - **Guide Tube** – Acetal
  - **Springs** – Stainless Steel
  - **Split Pin** – Stainless Steel
  - **Valve Body Cap** – Acetal
  - **Guide Pin** – Stainless Steel
  - **Valve Body Cap Nut** – Glass Fibre Reinforced Nylon
  - **Pilot Seal** – Nitrile Rubber
  - **Float Arm** – Glass Fibre Reinforced Nylon
  - **Housing** – Glass Fibre Reinforced Nylon
  - **Roller** – Acetal
  - **Plunger Housing** – Acetal
  - **Locking Plunger** – Acetal
  - **Pivot Tube** – Acetal
  - **Cord** – Polyester
  - **Float** – Polypropylene
  - **Weight** – Stainless Steel
  - **Weight Carrier** – Glass Fibre Reinforced Nylon
- SLO-FLO ONLY**
- **Adapter** – Glass Fibre Reinforced Nylon
  - **Adapter O-Ring** – EPDM (Ethylene Propylene)
  - **Stroke Limiter** – Acetal
  - **Flow Restrictor** – Acetal & Silicone

## *Rapid-Flo* and *Slo-Flo* Rain Relief Valve Frequently Asked Questions

### **Q What is the difference between the Rain Relief Valve and the Leveller Valve?**

**A** The Leveller Valve opens when a pre-defined minimum water level is reached and will fill your entire tank. The Rain Relief Valve will only supplement your tank with either 50mm or 100mm of water, depending on the float orientation. So if it rains shortly afterwards you can continue rain harvesting.

### **Q What is the difference between the *Slo-Flo* Rain Relief Valve and the *Rapid-Flo* Rain Relief Valve?**

**A** The *Rapid-Flo* and *Slo-Flo* Rain Relief Valves are essentially the same valve. The key difference between them is the *Rapid-Flo* valve is capable of functioning at full flow rate where as the *Slo-Flo* valve is restricted to 2 l/min to conform to the Sydney Water guidelines.

### **Q My rain water supply can get very dirty at times. Can the Rain Relief Valve cope with dirty water?**

**A** Yes, both the *Slo-Flo* and *Rapid-Flo* Rain Relief Valves are designed to handle dirty water.