

TOPAZ DIFFERENTIAL

PRODUCT INFO



Differential

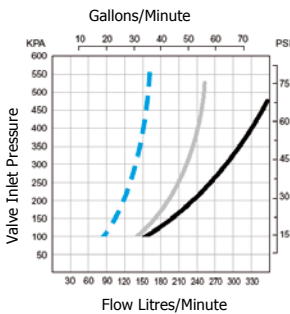
Description

Topaz Differential valves are ideal for use in water tanks which are filled by a pressure system controlled water pump. The valve gives a level difference which is adjustable from 50mm up to 2.5m to minimise starting and stopping of the pumping system.

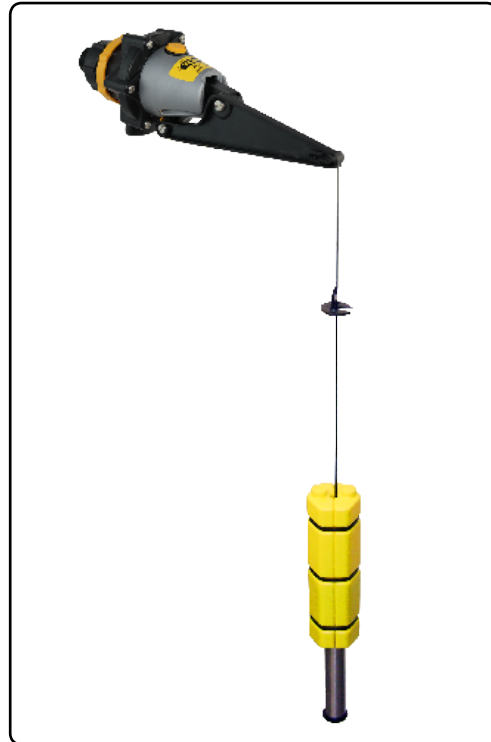
Applications

- Maintaining Water Levels in:
- Water Storage Tanks
 - Water Cisterns
 - Irrigation Applications

Flow Graph



- Key**
- 15mm (1/2")
 - 20mm (3/4")
 - 25mm & 32mm (1" & 1 1/4")



Principle of Operation

- The valve mounts at the top of the tank. It fits easily through a thin walled tank or screws into a threaded tank inlet.
- As the tank empties the weighted float travels down the cord until it hits the bottom stop. The valve then opens immediately to give a full flow.
- The valve now runs constantly and the weighted float rises until it hits the upper float stop. This lifts the arm and the valve shuts down.
- Observe the pressure that your pump runs at while the tank is filling. Set the pressure switch to turn the pump off at a pressure at least one bar above the running pressure.

Pressure Range
1 Bar – 10 Bar
(15psi-150 psi)

Features

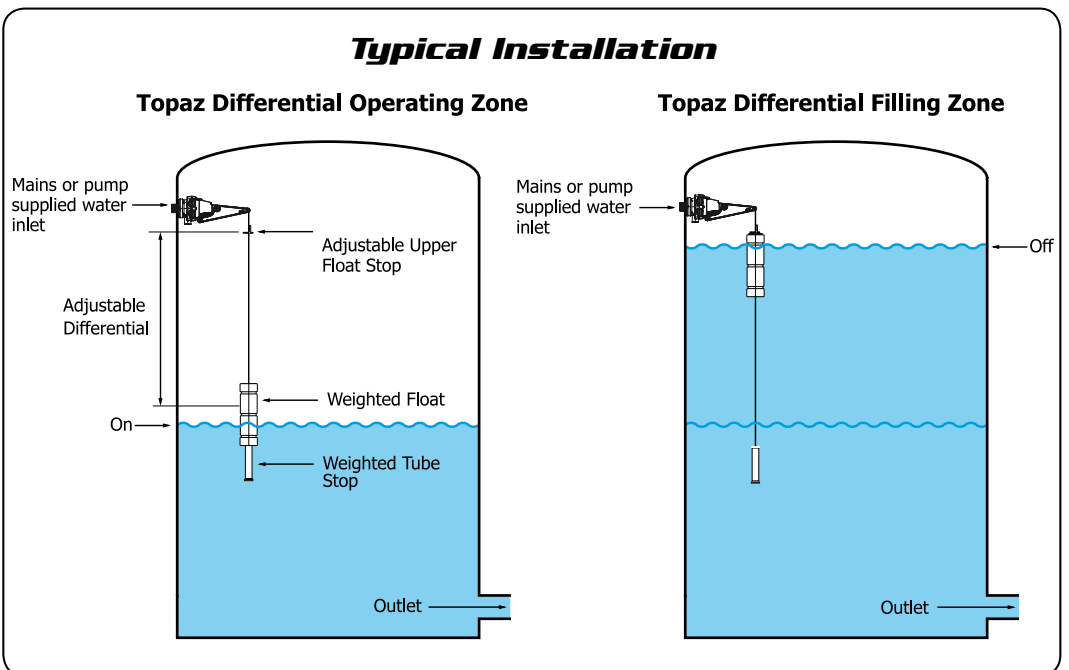
- High flow
- Start and stop levels can be easily adjusted to give water level differentials from 50mm to 2.5 m
- Keeps pump operation to a minimum.
- Detach™ Valve Seal Access System for quick access to valve seal (Patented)
- Ideal for all makes and models of tanks.

Available Inlet Sizes

- 15mm (1/2")
- 20mm (3/4")
- 25mm (1")
- 32mm (1 1/4")

All supplied in Detach long tail thread with back nut

Typical Installation



200 L / MIN

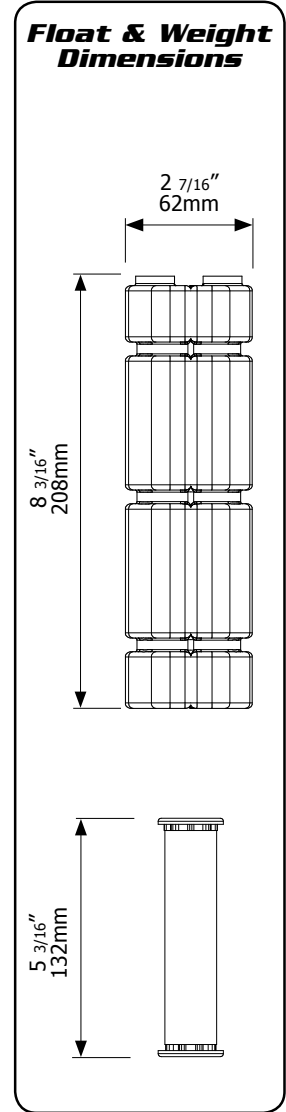
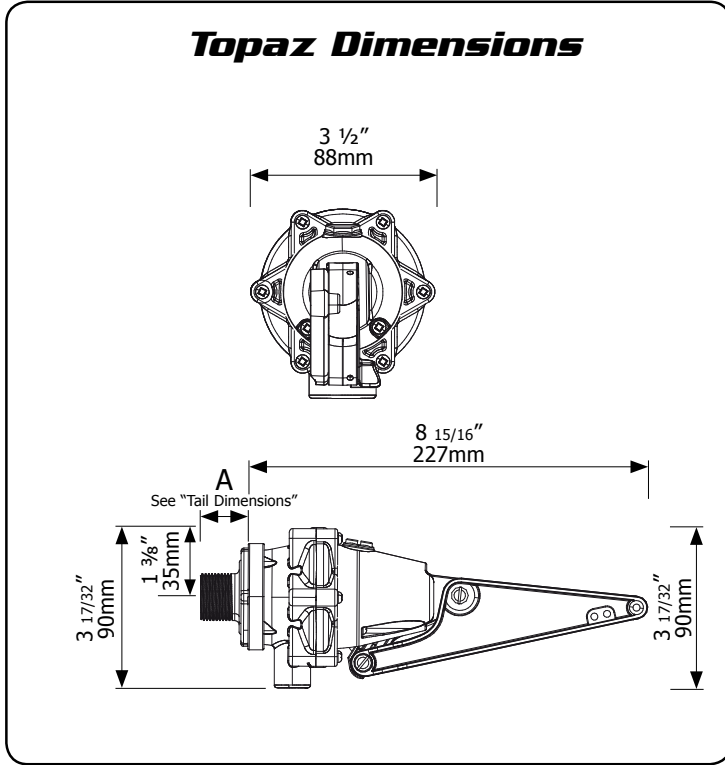
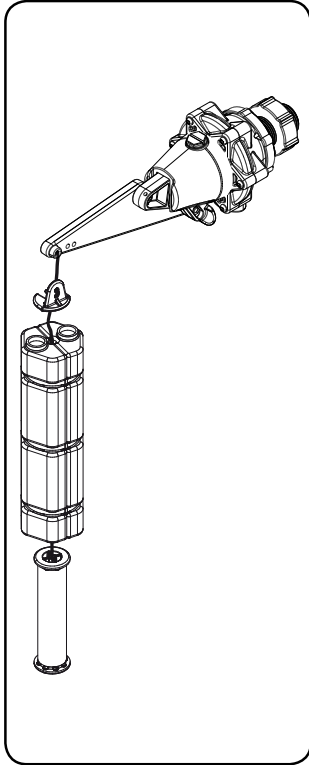
TOPAZ DIFFERENTIAL

DIMENSIONS & MATERIALS



Differential

200 L / MIN



Tail Dimensions

Dimension A	mm	inches
15mm (1/2") Long Tail	100	3 15/16
20mm (3/4") Long Tail	46	1 13/16
25mm (1") Long Tail	62	2 7/16
32mm (1 1/4") Long Tail	67	2 21/32

Part	Material	Part	Material
Valve Body	<i>Glass Filled Nylon</i>	O'Rings	<i>Nitrile</i>
Yellow & White Internal Parts	<i>Acetal</i>	Float	<i>HDPE</i>
Filter	<i>PP/Nylon</i>	Float Cord	<i>Polyester</i>
Diaphragm	<i>EPDM</i>	Actuator / Arms & Caps	<i>ABS</i>
Seal	<i>Urethane</i>		
Springs, Bolts, Nuts, Pin, Screws	<i>304 Stainless Steel</i>		

Maximum Operating Temperature **60°C, 140°F**

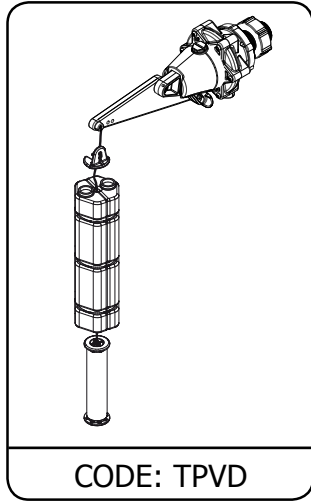
NB: High Temperature models on request.

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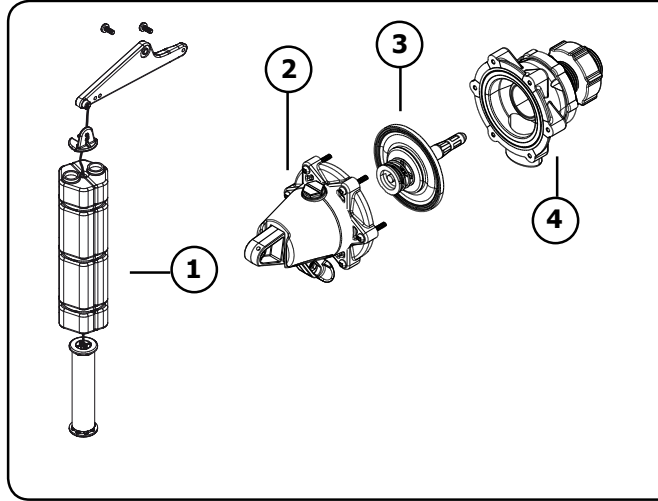
PARTS IDENTIFICATION SHEET



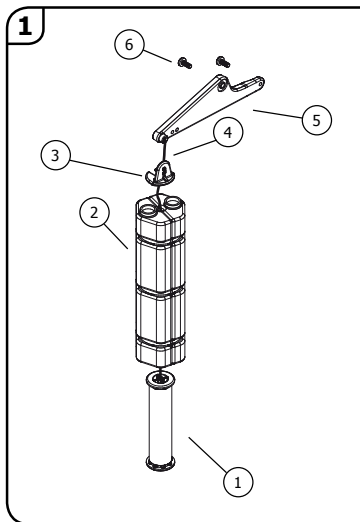
Differential



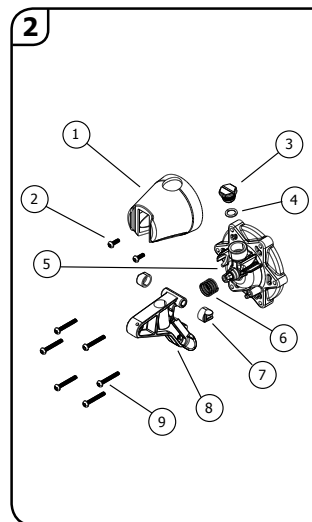
CODE: TPVD



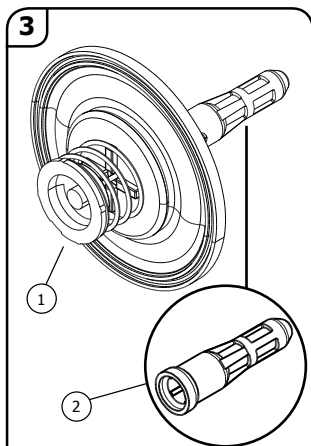
CODE	DESCRIPTION
1 TPPD1	Float, Arm & Weight Assembly
2 TPPD2	Cap & Actuator Assembly
3 TPP3	Diaphragm Assembly
4	Detach Base Assembly



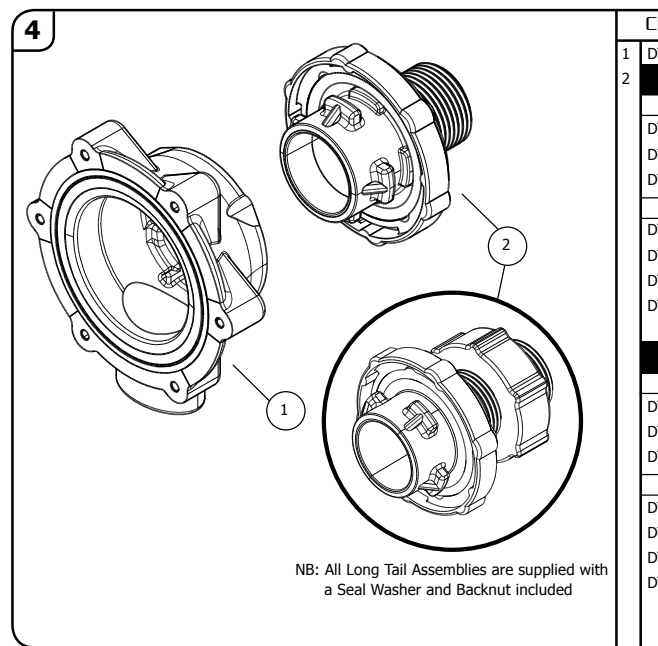
CODE	DESCRIPTION
1 TPPD1010	Weighted Tube Stop
2 TPPD1040	Weighted Float
3 TPPD1030	Upper Float Stop
4 TPPD1020	Cord
5 TPPD1050	Arm Extension
6 TPP1040	M5 x 12 Bolt



CODE	DESCRIPTION
1 TPPD2011	Actuator Cap
2 TPP2020	6g x 10 S/S Screw
3 TPP2030	Frost Pro Plug
4 TPP2040	Frost Pro O'ring
5 TPP2050	Valve Cap Assembly
6 TPPD2061	Damping Spring
7 TPP2080	Bearings (set of two)
8 TPP2090	Actuator Arm
9 TPP2100	6g x 25 S/S Screw



CODE	DESCRIPTION
1 TPP3	Diaphragm Assembly
2 TPP3010	Pilot Flow Filter (Fine)
TPP3011	Pilot Flow Filter (Coarse)



NB: All Long Tail Assemblies are supplied with a Seal Washer and Backnut included

CODE	DESCRIPTION
1 DTP1	Detach Base
2	BSP Tails
	Short Tail Assembly (BSP)
DTP020	Detach Tail 20mm(3/4") Short
DTP025	Detach Tail 25mm(1") Short
DTP032	Detach Tail 32mm(1 1/4") Short
	Long Tail Assembly (BSP)
DTP015L	Detach Tail 15mm (1/2") Long
DTP020L	Detach Tail 20mm (3/4") Long
DTP025L	Detach Tail 25mm (1" bsp) Long
DTP032L	Detach Tail 32mm (1 1/4" bsp) Long
	NPT Tails
	Short Tail Assembly (NPT)
DTP0075	Detach Tail 3/4" npt
DTP0100	Detach Tail 1" npt
DTP0125	Detach Tail 1 1/4" npt
	Long Tail Assembly (NPT)
DTP0050L	Detach Tail 1/2" npt Long
DTP0075L	Detach Tail 3/4" npt Long
DTP0100L	Detach Tail 1" npt Long
DTP0125L	Detach Tail 1 1/4" npt Long

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