

# TOPAZ DIFFERENTIAL

## PRODUCT INFO



## Differential



### Description

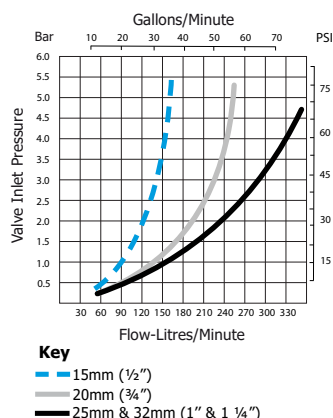
Topaz Differential valves are ideal for use in water tanks which are filled by a pressure system controlled water pump. The valve gives a level difference which is adjustable from 50mm up to 2.5m to minimise starting and stopping of the pumping system.

### Applications

Maintaining Water Levels in:

- Water Storage Tanks
- Water Cisterns
- Irrigation Applications

### Flow Graph



### 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)

200 L / MIN

### Features

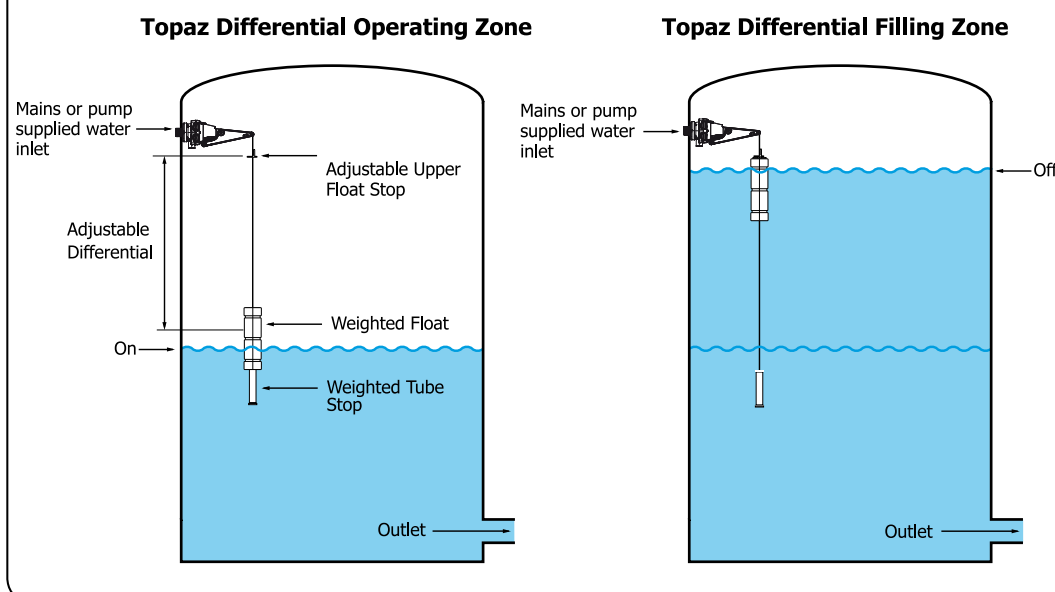
- High flow
- Start and stop levels can be easily adjusted to give water level differentials from 50mm to 2.5 m
- Keeps pump operation to a minimum.
- Detach™ Valve Seal Access System for quick access to valve seal (Patented)
- Ideal for all makes and models of tanks.

### 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



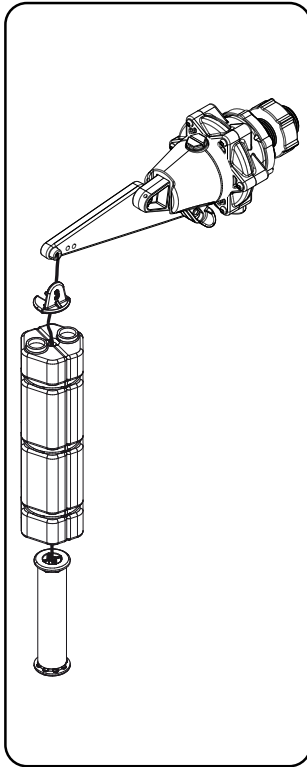
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## DIMENSIONS & MATERIALS

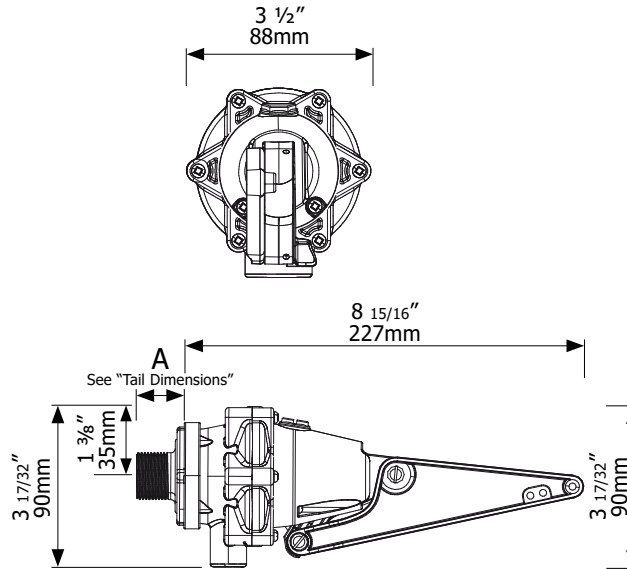


### Differential

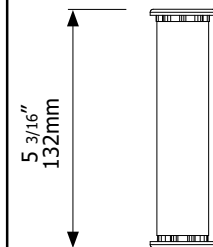
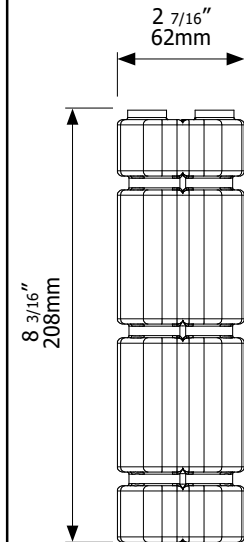
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#### Topaz Dimensions



#### Float & Weight Dimensions



#### Tail Dimensions

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

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

Maximum Operating Temperature

60°C, 140°F

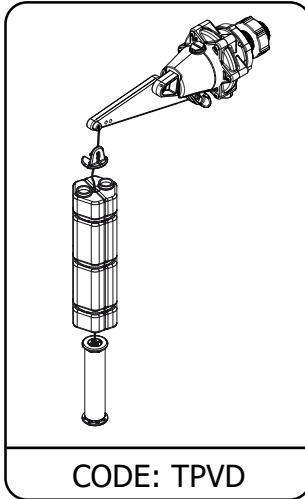
NB: High Temperature models on request.

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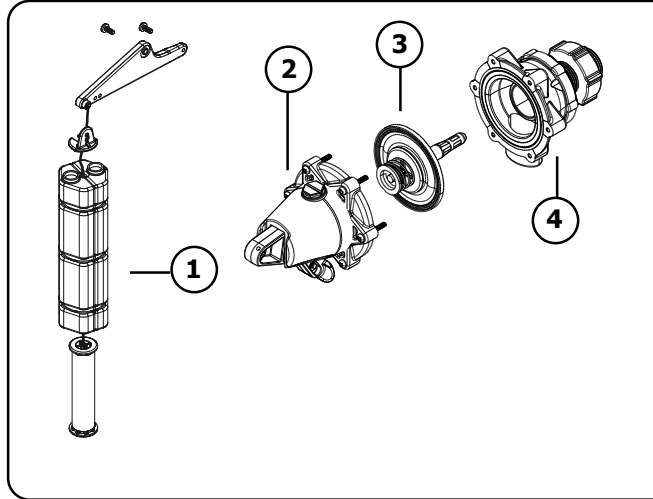
## PARTS IDENTIFICATION SHEET



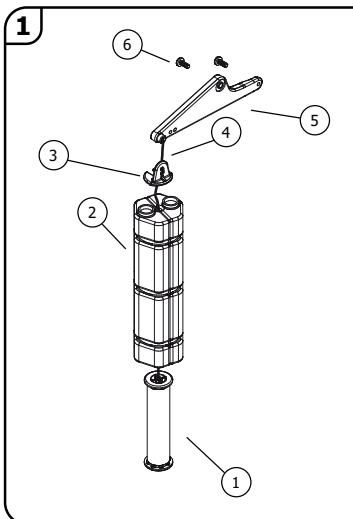
### Differential



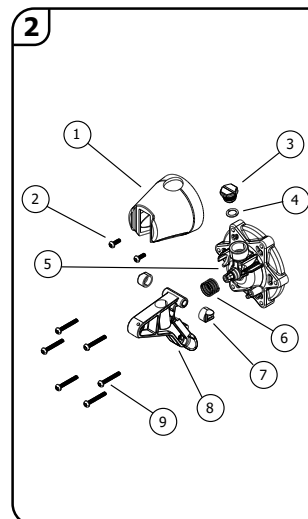
CODE: TPVD



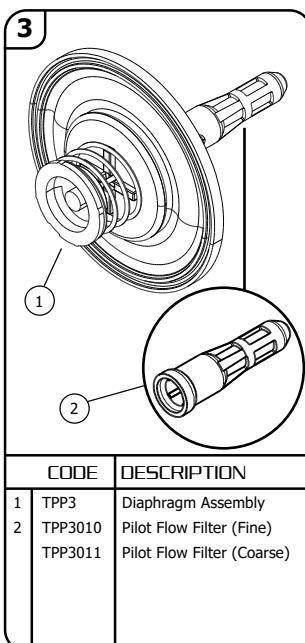
CODE	DESCRIPTION
1 TPPD1	Float, Arm & Weight Assembly
2 TPPD2	Cap & Actuator Assembly
3 TPP3	Diaphragm Assembly
4	Detach Base Assembly



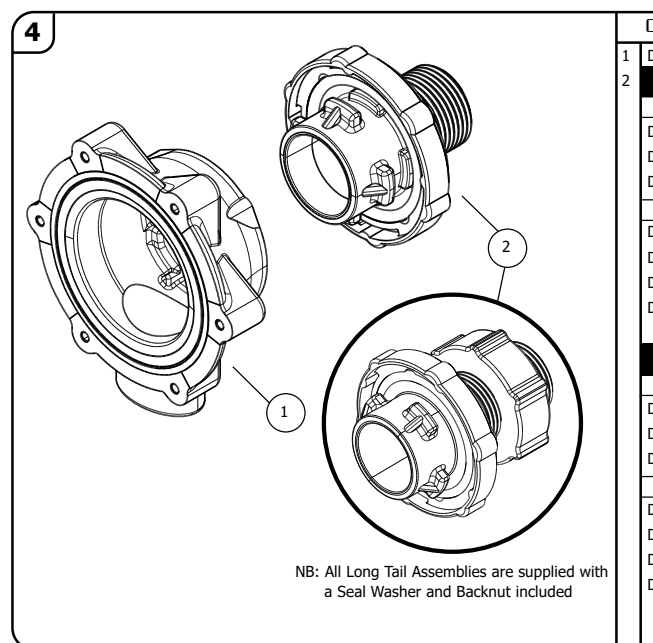
CODE	DESCRIPTION
1 TPPD1010	Weighted Tube Stop
2 TPPD1040	Weighted Float
3 TPPD1030	Upper Float Stop
4 TPPD1020	Cord
5 TPPD1050	Arm Extension
6 TPP1040	M5 x 12 Bolt



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)



CODE	DESCRIPTION
1 DTP1	Detach Base
2	<b>BSP Tails</b>
	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
	<b>NPT Tails</b>
	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

200 L / MIN