

## SPECIFICATION

**Power Supply** - 12/24 volts DC

**Range**- Min: 8v, Max: 36v

reverse voltage protection

**Maximum current consumption** -

12v@140mA / 24v@70 mA

### Digital Inputs:

**Logic '1'**- short to GND, 12v@2mA / 24v@ 4 mA

**Function as:**

1. Float #1
2. Float #2
3. Float #3
4. Float #4
5. Control Switch pump #1
6. Control Switch pump #2
7. Set-up Switch (located on the panel)

### Digital Output:

**Type:** Open Collector - 30 mA max sinking

**Function as:**

1. Pump #1 ON/OFF
2. Pump #2 ON/OFF
3. Info Light (located also on panel)

### Analog Input:

**Type:** 4-20 mA

**Resolution-**

10 bits (820+/- 2 LSB units for 4-20 mA)

**short circuit protection**

**Input impedance** - 500 ohm

**Function as:**

Level Transmitter

### Information:

**Mounting method:** DIN-Rail mounted (IP20)

**Operational Temperature:** -10 - 60 c

**Storage Temperature :** -20 - 70 c

**Weight :** 100 g

**Dimension:** 72mm x 88mm x 60mm (WxHxD)

**Electrical Connection:** quick 9 positions for I/O,  
quick 2 positions for Analog, quick 2 positions  
for Power Supply.

## TSL-2 LEVEL CONTROLLER



## PRODUCT DESCRIPTION

The TSL-2 controller with the new design, for use in **water drainage, filling and similar water applications.**

Ultrasonic level transducer is required almost in every simple level control board as well as floats for back-up. TSL-2 combine them and design to have analog and digital inputs for full redundancy.

TSL-2 provide galvanic isolation between I/O to the main MCU.

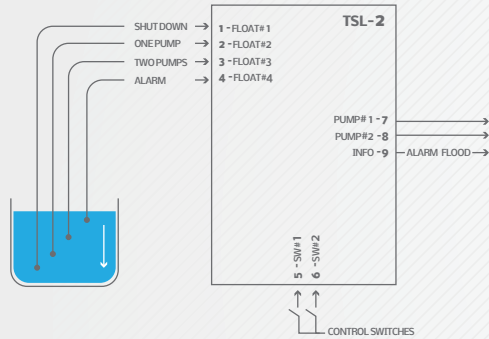
**The simplicity of use step ahead the TSL-2 to be the best type level controller.**



# TYPICAL APPLICATIONS

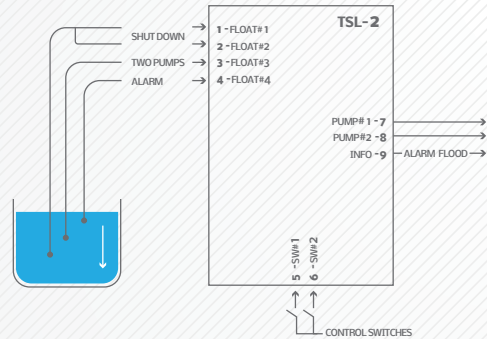
## MODE 1 (4 FLOATS)

DRAIN - 2 PUMPS BY 4 FLOATS



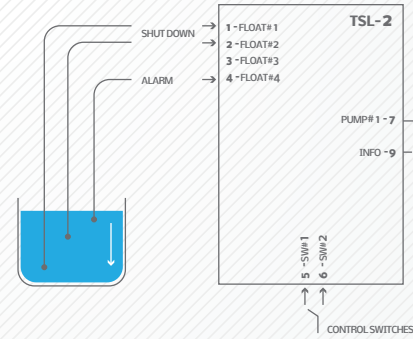
## MODE 2 (3 FLOATS)

DRAIN - 2 PUMPS BY 3 FLOATS



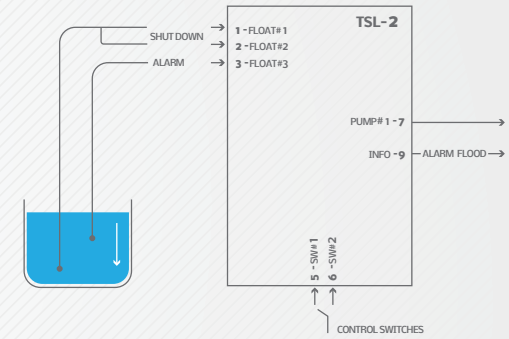
## MODE 3 (3 FLOATS)

DRAIN - 1 PUMP BY 3 FLOATS



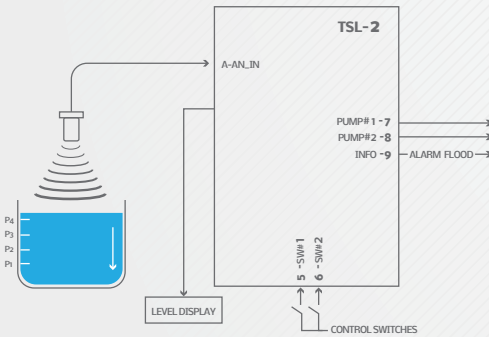
## MODE 4 (2 FLOATS)

DRAIN - 1 PUMP BY 2 FLOATS



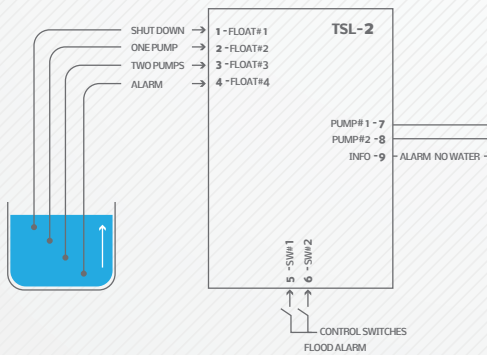
## MODE 5

DRAIN - BY ULTRASONIC SENSOR



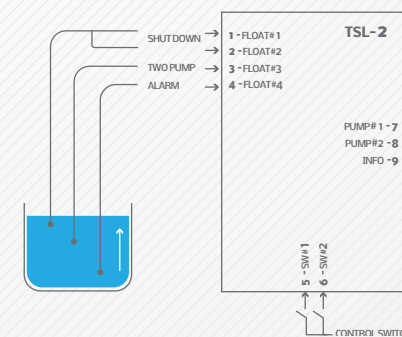
## MODE 6 (4 FLOATS)

FILL - 2 PUMPS BY 4 FLOATS



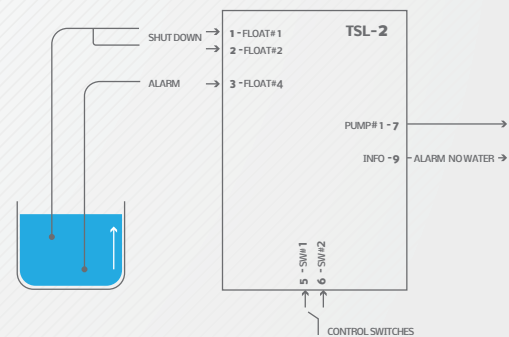
## MODE 7 (3 FLOATS)

FILL - 2 PUMPS BY 3 FLOATS



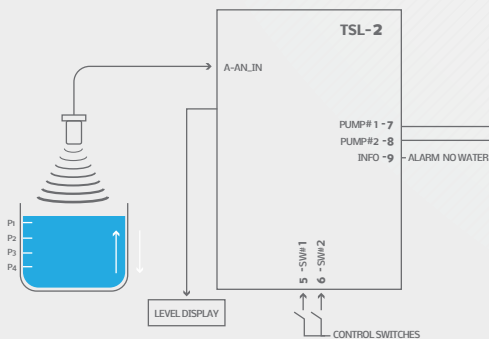
## MODE 8 (2 FLOATS)

FILL - 1 PUMP BY 2 FLOATS



## MODE 9

FILL - BY ULTRASONIC SENSOR



## LEGEND

1 ~ FLOAT#1	Digital Input for Float #1	A ~ AN_IN	Analog Input for Ultrasonic Sensor
2 ~ FLOAT#2	Digital Input for Float #2	B ~ AN_OUT	Analog Output for VFD
3 ~ FLOAT#3	Digital Input for Float #3		
4 ~ FLOAT#4	Digital Input for Float #4		
5 ~ SW#1	Control Switch for Pump #1	+ 24 VDC	+24Vdc Supply
6 ~ SW#2	Control Switch for Pump #2	- 24 VDC	-24Vdc Supply
7 ~ PUMP#1	Operation Command for Pump #1		
8 ~ PUMP#2	Operation Command for Pump #2		
9 ~ INFO	Info/Alarm signal		