



# Automatic Control Valves for Pond Filling







## Application: Automatic Pond Filling

- Application Overview
- Position Control Valve
- Hydraulic Float Override
- VC-22 Controller
- X144 E-Flowmeter
- X143-IP

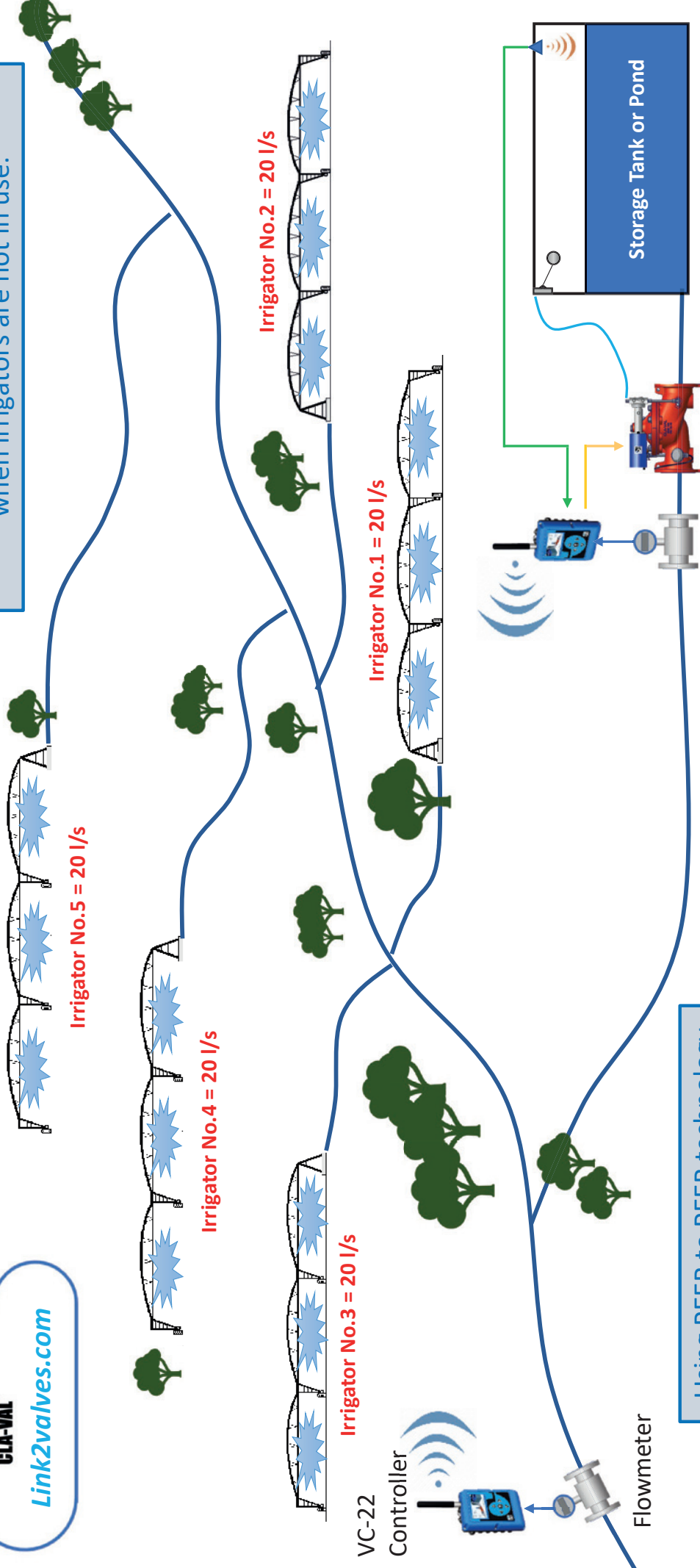
## Example

- Allowable total flow = 100 l/s  
(Over a 24 hour period)
- No. of Pivot Irrigators = x5
- Each Irrigator consumes = 20 l/s

Irrigator Status	Irrigator Flow (l/s)	Pond Flow (l/s)
Not in use	0	100
Irrigator No 1	20	80
Irrigator No 2	40	60
Irrigator No 3	60	40
Irrigator No 4	80	20
All in Use	100	0



Control valve feeds excess flow into tanks when irrigators are not in use.



Using PEER to PEER technology

Flowmeter & CPC34 Valve

VC-22

Controller

Flowmeter

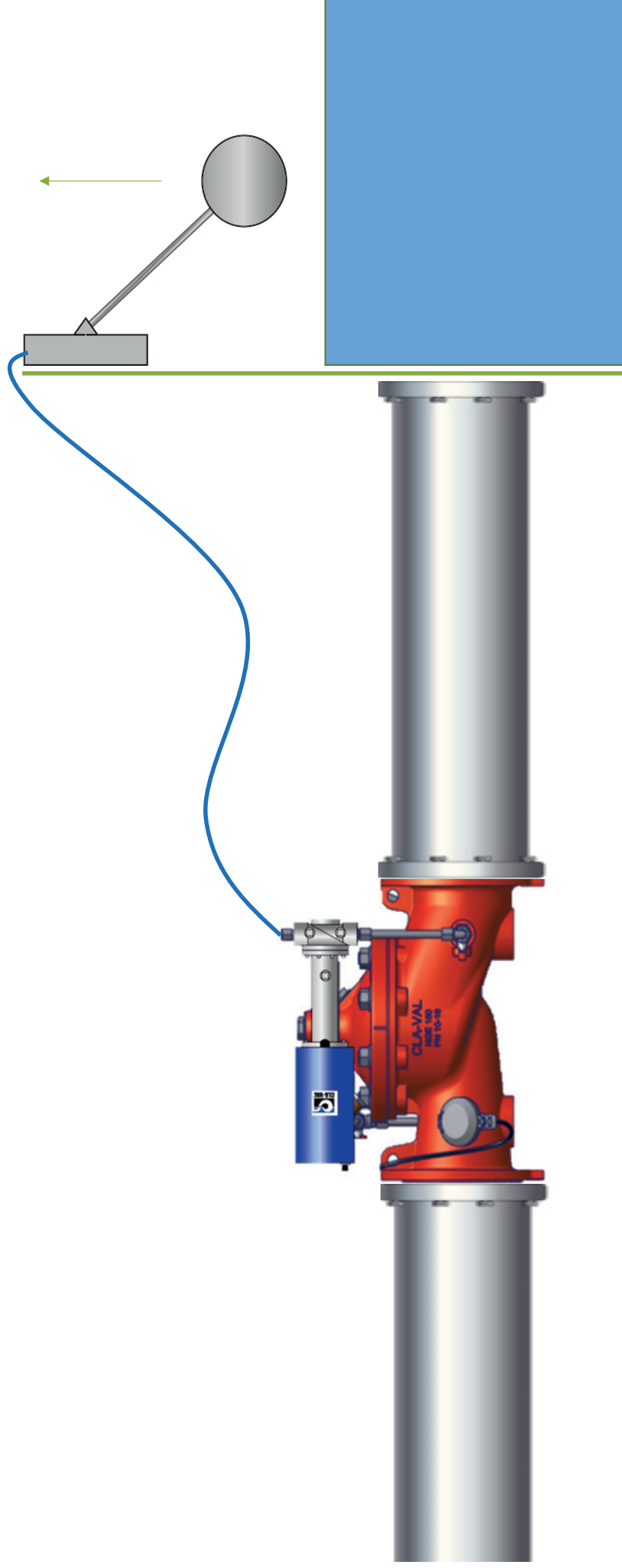
Storage Tank or Pond

## CPC34 - Position Control Valve

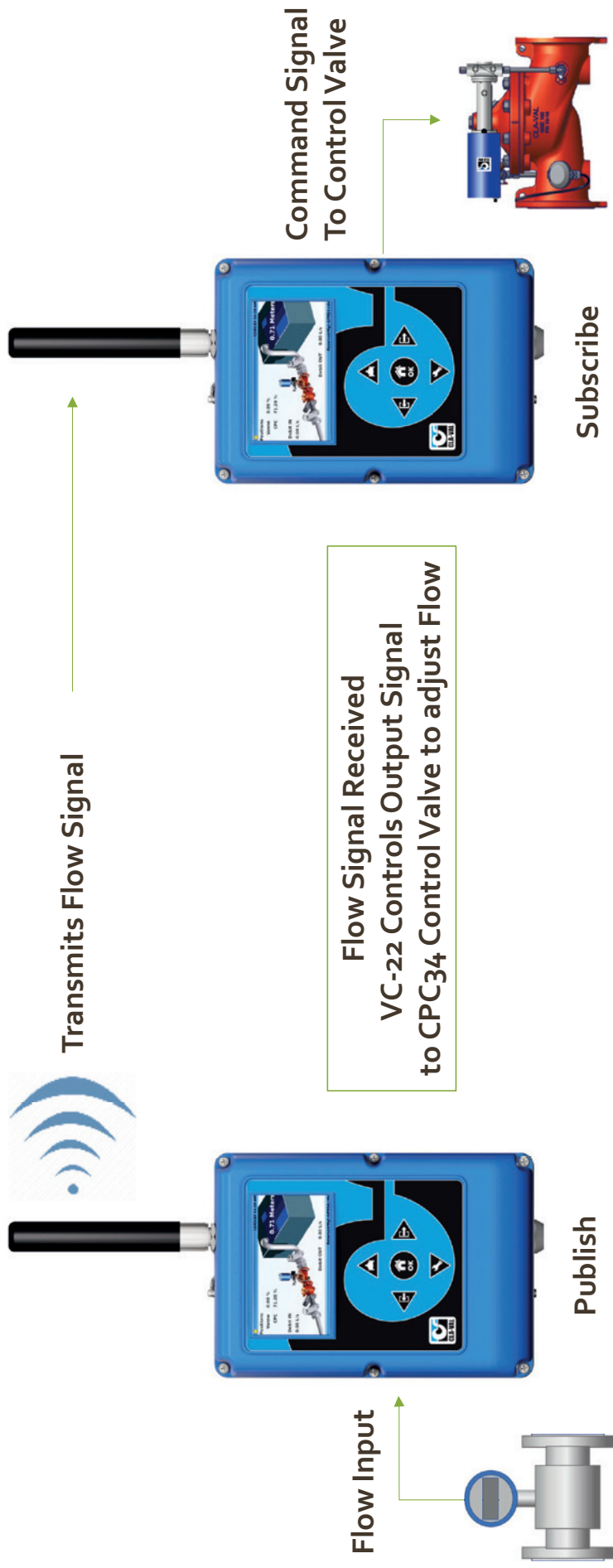


- ☑ Provides precise and accurate stem position control - Linear Actuation
- ☑ Direct Control - Analogue 4-20mA regulating pressure, flow or level
- ☑ 24VDC - only 8W power consumption (4-20mA)
- ☑ Ideal for applications where the process variable is monitored separately and a SCADA or similar remote system provides valve control
- ☑ Option of MPC (Manual Position Control) feature

# CPC34 with Hydraulic Float Override Closure



# VC-22 Controller - Peer to Peer (P2P)







# X144 E-Flowmeter



## 12/24 VDC

- Pulse Output
- 4-20mA Output

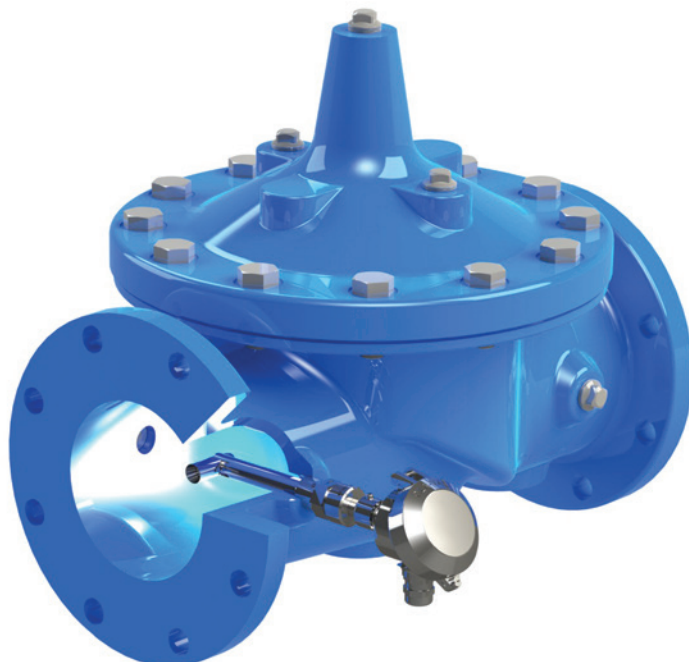


## 6VDC

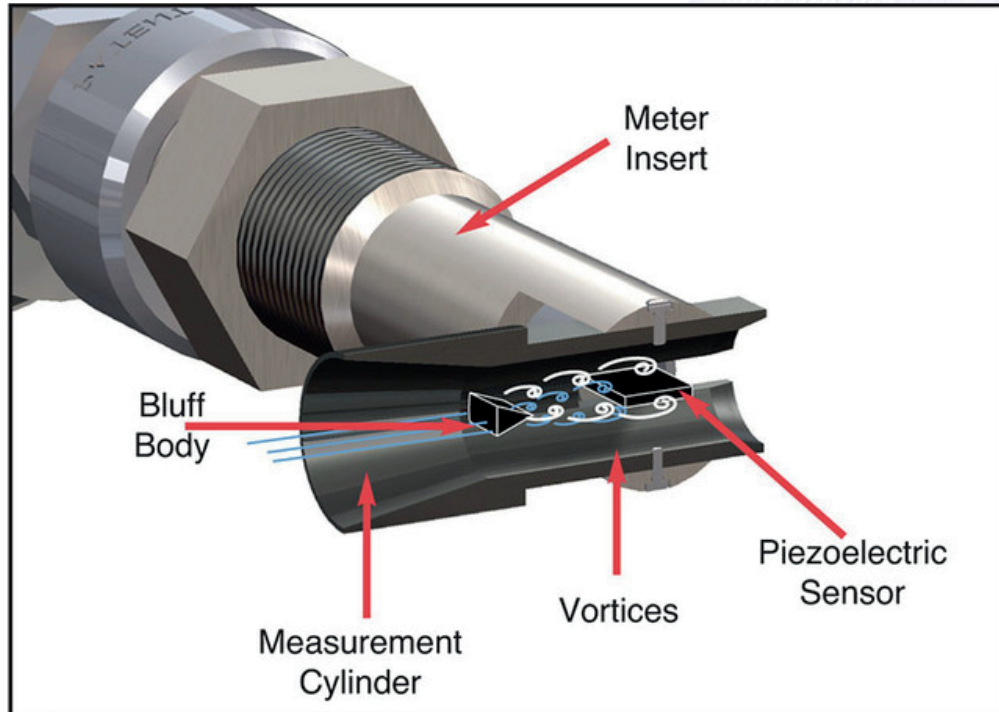
- Pulse Output



Insertion/Removal Tool



## How it Works!



Water is driven through the measurement cylinder over the bluff body generating vortices (or turbulent flow).

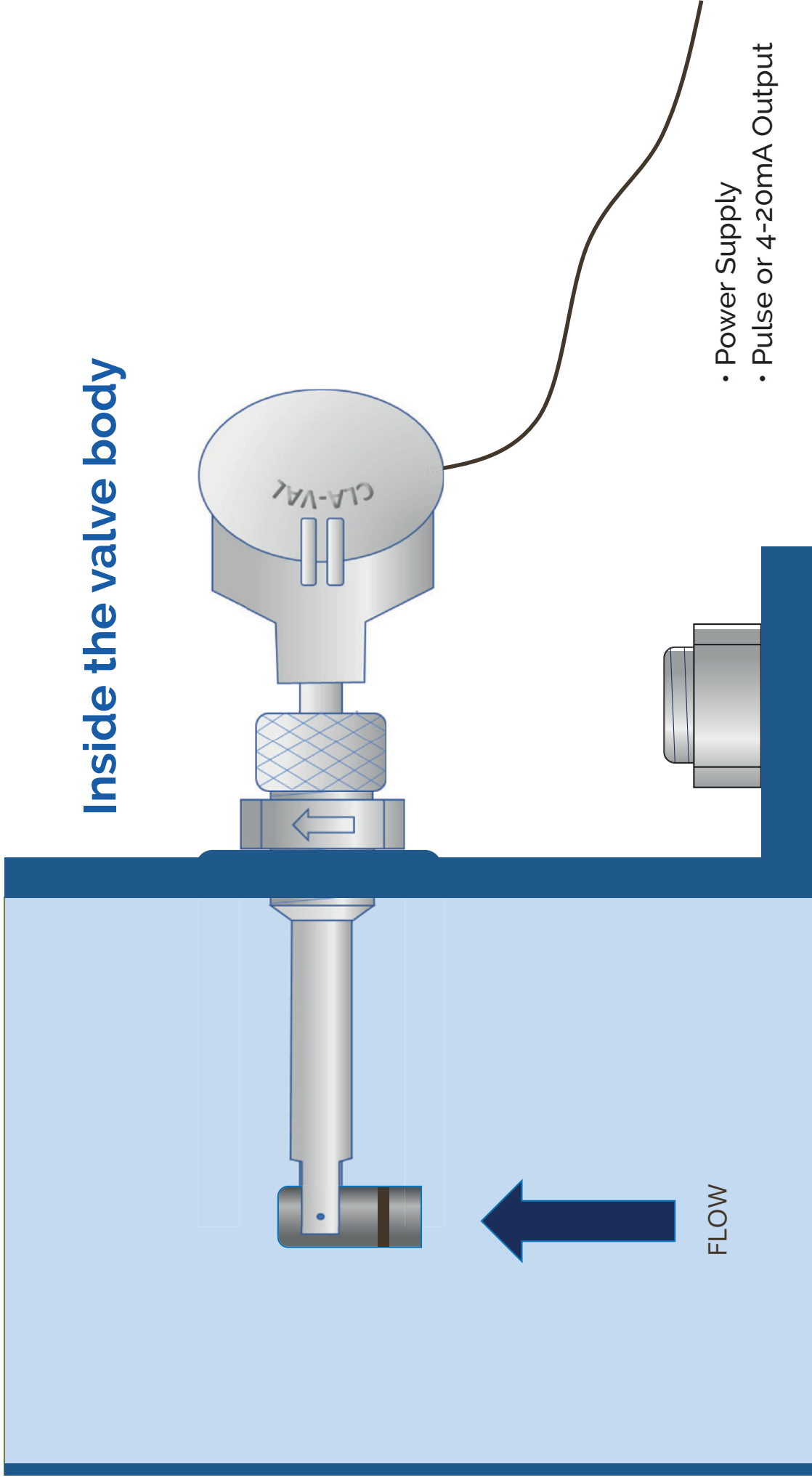
The piezoelectric sensor measures the vortex across the upper and lower surface of the sensor.

The sensor provides an accurate feedback of flow velocity.

The X144 internal PCB converts the velocity into an accurate flow output.

Can be retrofitted to Cla-val valve bodies.

## Inside the valve body





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