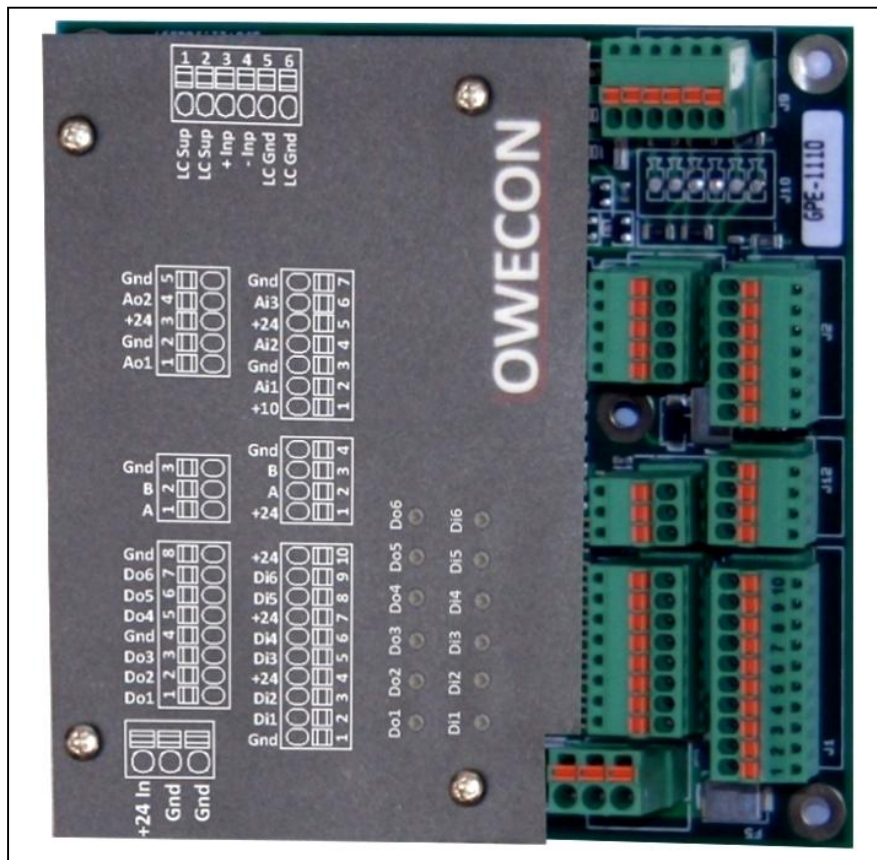


Owecon OWC330P Tension Controller PCB

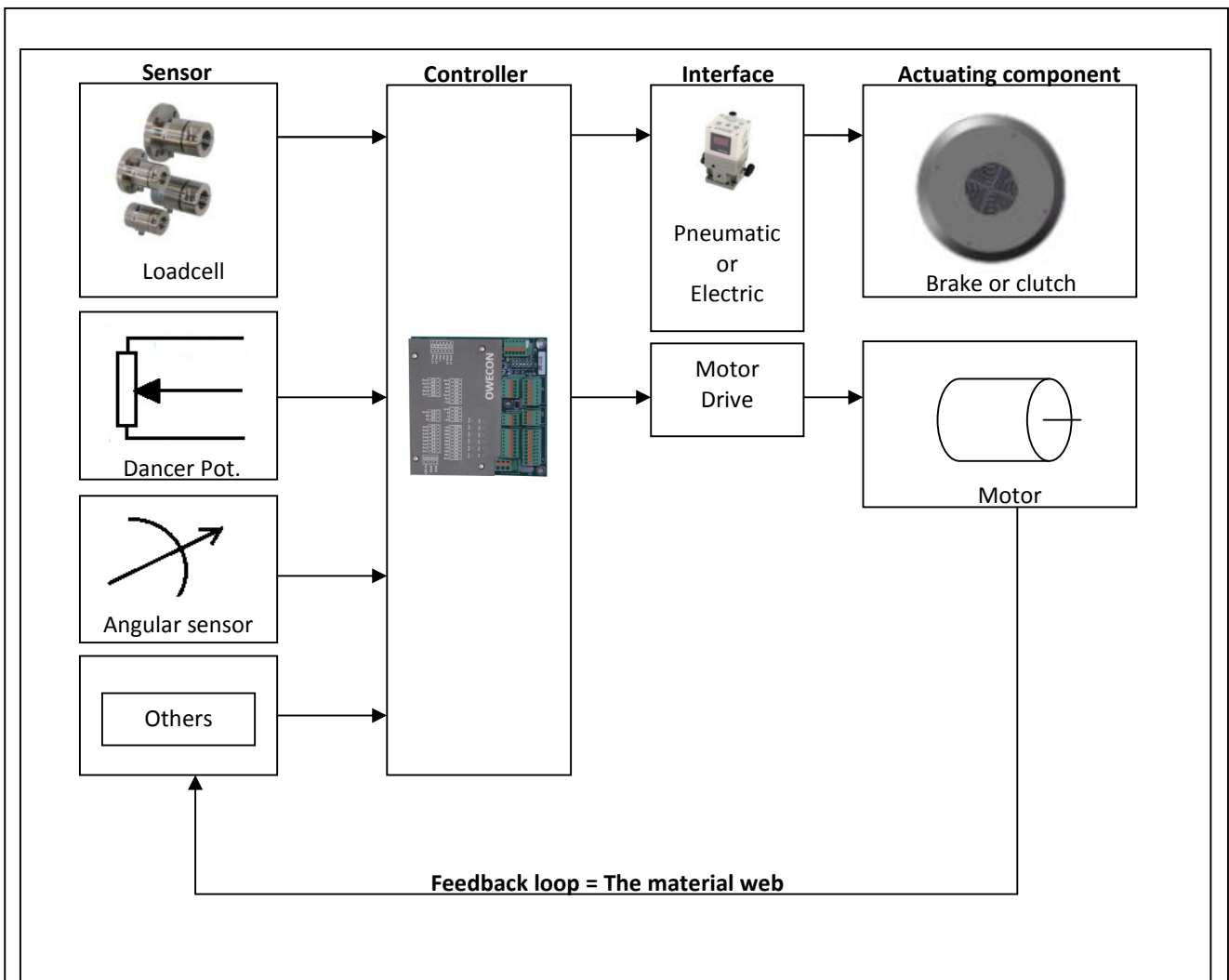
Datasheet



- ✓ PCB Version for OEM use, saves space and money
- ✓ Winding, unwinding and intermediate – one controller can handle all functions.
- ✓ Compact modern design – multiple functions in a small footprint
- ✓ Serial Bus interfacing capability – Remote connectability and integration simplicity
- ✓ Powerful and user-friendly in one package

1. How does it work?

- OWC330 is a closed loop tension controller for use in various web unwind-/rewind- and intermediate applications, it features optimum ease in installation, setup and use.
- In the basic applications, measurement of the web tension is done by loadcells or other sensors. The signal is computed by the controller and forwarded via an interface to the actuating component
- A change (+ or -) in expected tension calculated by the controller results in a reactive signal (- or +) on the output - controlling the actuating component, and so the web



Principle of the closed loop tension control method using the Owecon OWC330P controller

2. Configuration

Basis Configuration Unwind/Rewind

Unwind works with Owecon pneumatic brakes or any other type of brakes.

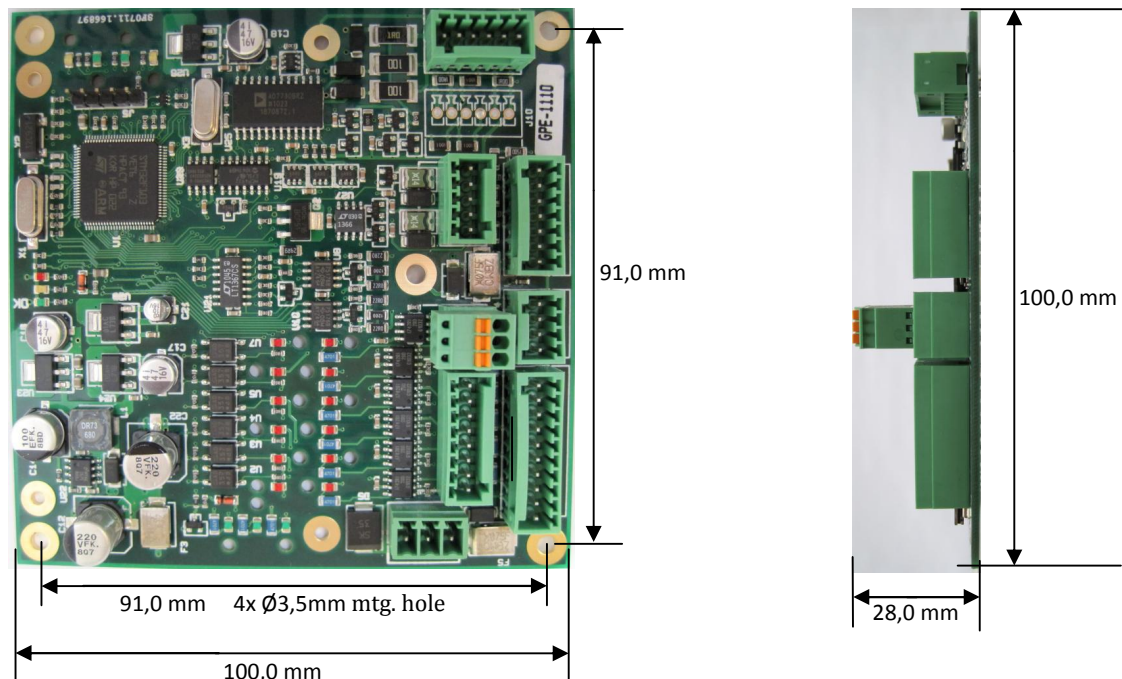
Based on sensor inputs from a set of loadcells, sensing directly on the web tension at a specific point (idler roller) of the machine, unwind section.

Rewind works with torque control by an Owecon or third party clutch. The OWP330P controller controls the clutch torque directly. Additionally, the controller feeds a revs/speedsignal to the motor drive, to set the correct overspeed on the clutch input side. This way, the clutch is kept at its optimum workload, preventing excessive heat buildup and wear.

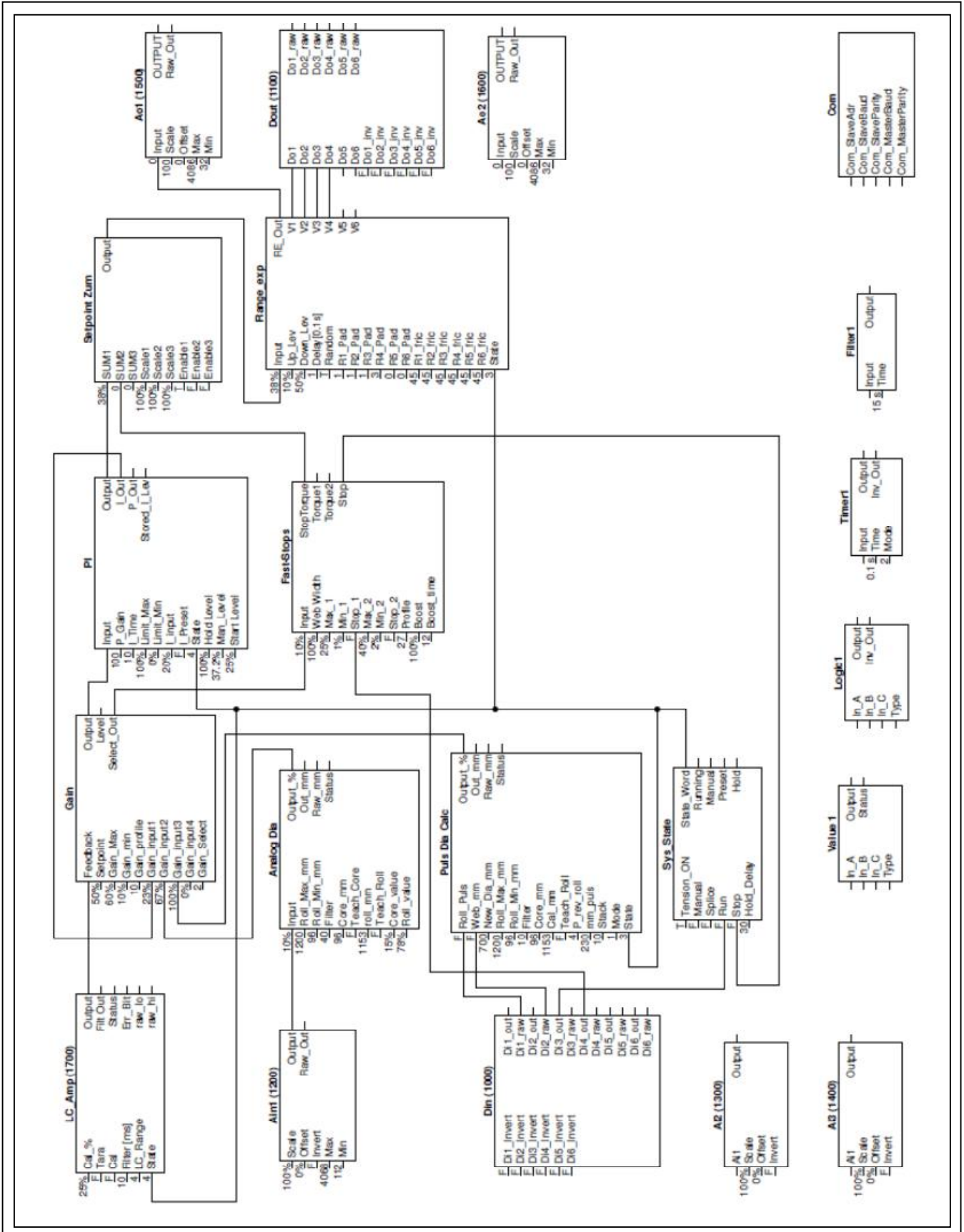
As an additional feature, both the unwind and the rewind configurations can work with a diameter adaptive function. A diameter signal can be fed to the controller - or the controller can calculate roll - diameter via pulses - for continuous adaption to the changing diameter on the material roll.

Using this feature, the OWP330P can work as an intelligent loadcell amplifier for AC motor drives, featuring full network communication via the ModBus interface.

3. Dimensions, mechanical installation



4. Owecon OWC330 Functional Diagram



5. Electrical Specifications

Loadcell input	Amp. for 1 set of loadcells	
Analogue I/O	3xIN ; 2xOUT	
Digital I/O	6xIN ; 6xOUT	
Loadcell supply	5VDC / 10 VDC	
Input signal ranges for loadcell input	10-20-40-80 and 300 mV	
Sensor supply	5VDC or 10VDC	
Performance A/D converter	24bit resolution / 1,2kHz	
Analogue Input / Output signal range	0-10VDC / 4-20mA	
Cycle time processor	1 ms	
Communication Interface	Modbus	
Programming / Communication	Standard Modbus Protocol	
Power supply	24VDC	
Temperature working range	0 to 50°C	
Net weight	0,1 Kg	