

JZ-Analysis-System

Radio data transmission in vertical filter presses:

- **control of membrane leakage**
- **control of cake thickness distribution**



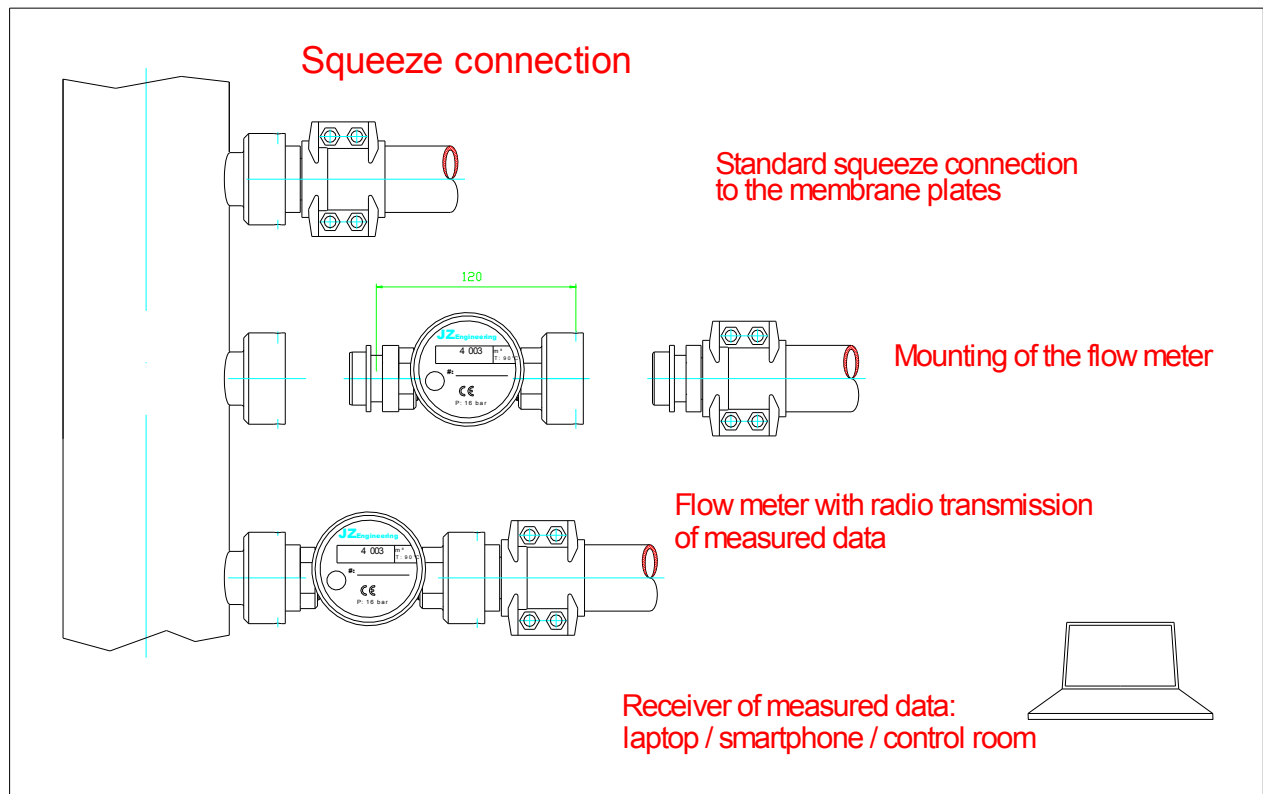
Illus. 1: flow meter unit (series 4) with radio transmitter and individual connection adapters



Illus. 2: flow meter units mounted in a filter tower

Goals:

- **avoiding downtimes of filter presses by a fast locating of broken membrane plates**
thus increasing production capacity
- **saving of squeezing medium and energy considering environmental aspects**
- **no contamination of filtrate or filter cake by the squeezing medium**
- **locating of blocked sludge inlets reduces the risk of broken plates**
- **improvement of cake washing**



Illus. 3: mounting of the flow meter units

Our advantages:

- the flow meter is protected against environmental influences according to IP68
- reliable function for water, oil or air as squeezing medium
- the flow meter is designed for a squeeze pressure of 16 bar
- solid particles in the squeezing medium up to a diameter of 1,5 mm do not restrict the function
- the units are approved for a squeezing medium temperature of up to 90 °C
- Recording the volumes of squeezing medium permits conclusions regarding cake thickness and cake washing results
- the measured data are transmitted to a PC via radio

Protection in compliance with:
PCT/EP2019/069359



Illus. 4: display in the analysis program

Analysis:

- **contactless radio data transmission of measured squeeze volumes to a data memory**
- **analysis software can be called up via laptop or smartphone**
- **determination of the period to be monitored**

→ **display of three diagrams:**

-Volume Difference:

display of the measured squeeze volume in the determined period for each plate

-Volume:

display of the chronological sequence of squeeze flows into all plates

-Volume Flow:

display of the chronological sequence of the flow rate of the squeezing medium for all plates