

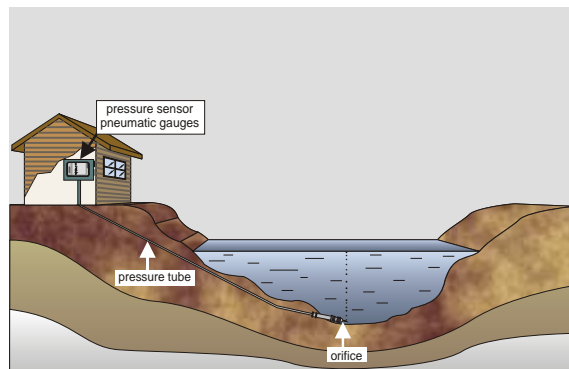


Pressure Sensor Pneumatic Gauges Type PS-DELTA, PS-MDS III, PS- Insider, PS-LCD

QZV We are certified
ISO 9001
certificate no. 01110505
Quality Is Our Standard



- bubbler system with purging unit
- microprocessor driven pressure measurement with high accurate, longterm stable pressure sensor
- with integrated battery-operated mini-compressor and storage tank (compressed-air bottles are not necessary)
- measuring range 0 - 10m
- battery operation 12 V (option solar panels)
- registration with strip chart and/or MDS data logger



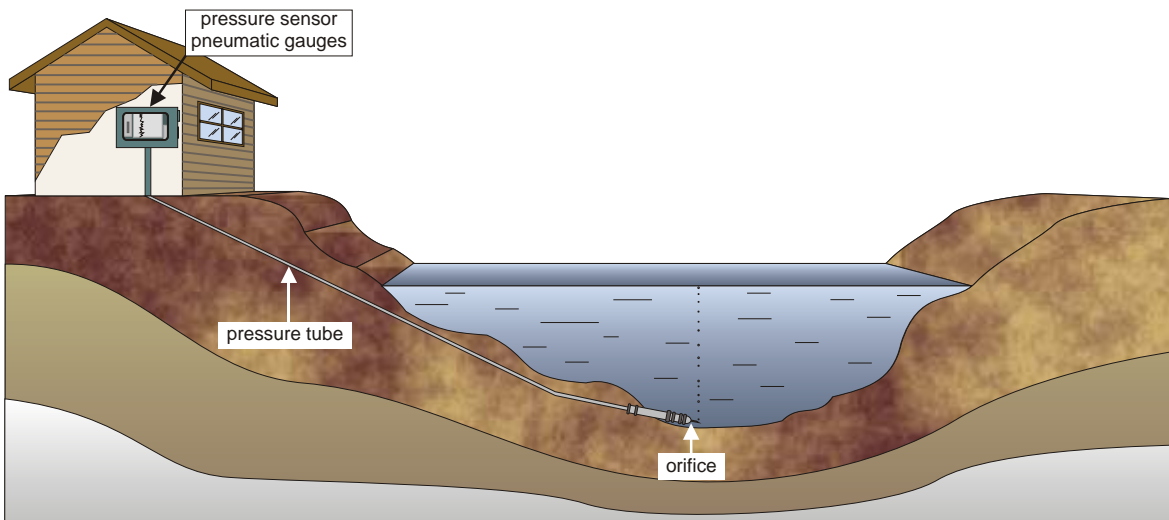
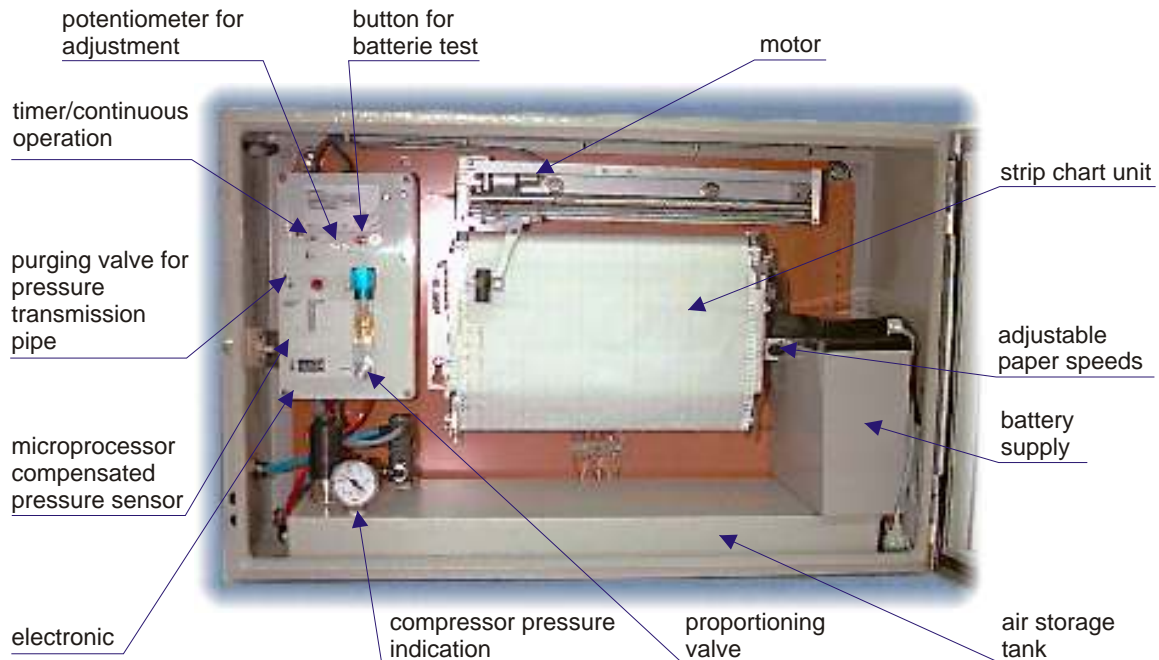
The **SEBA** pressure sensor pneumatic gauges type **PS-DELTA**, **PS-MDS III**, **PS-INSIDER** and **PS-LCD** are used for accurate water level measurements.

Their main operational areas are:

- rivers
- channels
- dams
- lakes
- tide regions

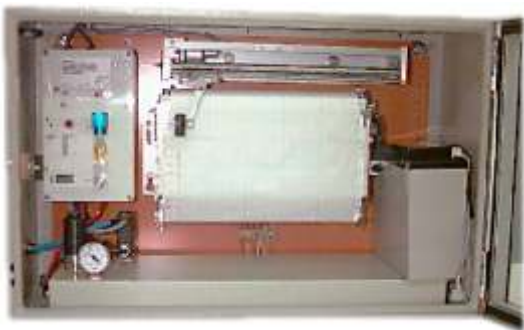
Principle of measurement

From an integrated mini-compressor with storage tank air is directed via a proportioning valve and the pressure transmission pipe into the water. The pressure within the pipe corresponds to the static pressure of the water column (h) above the outlet orifice and thus serves as measured variable for the level position. This static pressure of the water column is transmitted to a high precision, temperature compensated pressure sensor. In case of water level fluctuations the pressure sensor sends a respectively changed output signal. This output signal - depending on the instrument type - will be recorded on a data logger or transferred to an electronically driven servo motor, which moves the connected writing device to the corresponding, actual water level.



Description

Modern, well designed housing (humidity protected) with solid door or inspection window and safety lock. The recording of water level fluctuations is effected on a strip chart recorder with 16 m paper roll and quartz stabilized clockwork or with data logger MDS. In case of analoguous registration, the writing pen will be moved by a reversing spindle proportionally to the water level. It's driven by a high accurate motor.



PS-DELTA



PS-MDS III

Options

- additional analoguous output 0 - 1 V for operation of a data logger or a teletransmission system (PS-DELTA)
- U/I-converter with output 0/4 - 20 mA (only for mains supply)
- automatic purging unit with adjustable intervals (prevents the outlet from silting and mudding-up)
- additional temperature registration (version with two-line-recorder)
- instantaneous indication of actual value (4-digit counter with indication in m and cm) type PS-DELTA
- registration of water level fluctuations alternatively or parallel with strip chart recorder, data logger MDS III or MDS-Insider (type PS-DELTA)



PS-INSIDER



PS-LCD

Technical data

	housing:	weight:
PS-DELTA:	steel-plate (IP 65), 640(B) x 367(H) x 237(T) mm	27 Kg
PS-MDS III:	steel-plate (IP 65), 640(B) x 367(H) x 237(T) mm	25 Kg
PS-INSIDER:	steel-plate (IP 65), 205(B) x 180(H) x 440(T) mm	7 Kg
PS- LCD/LED:	steel-plate (IP 65), 205(B) x 180(H) x 440(T) mm	7 Kg

Recording of measuring values with pressure sensor

micro-processor compensated, high accurate pressure transducer

accuracy:	0,05 % = 1 cm at 15 m measuring range
measuring ranges:	0 up to 2,5 m 0 up to 5 m 0 up to 7,5 m 0 up to 10 m 0 up to 15 m further ranges on request
output:	0 - 1 V - temperature compensated with micro-processor
operation temperature:	-20 °C up to +50 °C

Registration of measuring values

PS-DELTA:	with strip chart unit	
	usable writing width:	250 mm
	paper roll:	16 m long
	clockwork:	quartz-driven (high accuracy)
	paper speed:	2 -5 -10 -20 mm / h - selectable
	writing aggregate:	with reversing spindle
	registration scales:	1:5 1:10 1:20 1:40 - selectable
	measuring interval:	15 min (resp. acc. to indication)
	battery test indication	
PS-MDS III:	with data logger MDS III (technical data please learn from separate leaflet)	
PS-INSIDER:	with data logger MDS INSIDER (technical data please learn from separate leaflet)	

Actual measuring value indication

for type PS-LCD and type PS-LED

power supply:	battery operation / 12 V integrated by type PS-DELTA and PS-MDS III external by type PS-INSIDER, PS-LCD and PS-LED
proportioning valve:	with infinitely adjustment, for adjustment and survey of the gas quantity resp. gas flow
mini-compressor:	integrated in above mentioned instrument types
air storage tank:	6 liter for type PS-DELTA and PS-MDS III 3 liter for type PS-INSIDER and PS-LCD / LED
pressure transmission pipe:	for outside- or earth-laying plastic material 11 mm dia., 6 mm inside dia. with protective casing max. length 300 m
damping device (option):	in case of rough water level (strong waves), we recommend using a damping device at the end of the pressure transmission pipe
automatic purging mechanism (option):	regular purging of the pressure transmission pipe prevents from silting resp. mudding up of the outlet orifice. With a rotary switch up to 8 different purging intervals can be selected (i.e. 6, 12, 24 h, 2, 4, 8, 16 days)

The right is reserved to change or amend the foregoing technical specification without prior notice.



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