HYDRO L1100

NEW LINE
SELF CLEANING LEVERMETER
BUBBLE TO BUBBLE SENSOR

DOMAINS OF APPLICATIONS

Industrials plants, tanks and reservoirs, rivers, groundwater, meteorology, hydrology, hydrogeology, hydrometry, environmental control, ...

New waterlevel meter sensor, low power consumption, working on the bubbling principle and designed to measure in remote area together with/ or not a datalogger. Several ranges are available :

HYDRO L1105 : 5 meters water dpth (full scale)
HYDRO L1110 : 10 meters water dpth (full scale)
HYDRO L1120 : 20 meters water dpth (full scale)

Thanks to its integrated compact air generator, HYDRO L1100 levelmeters measures the waterlevel by sending a small continuous pressure at a low flow to the bottom of the water column. This pressure is then applied to a silicium membrane sensor wich delivers a signal proportionnal to the waterlevel. The level measured can be transmitted as an analog signal, a serial signal, or under protocol SDI12 as standard ; Modbus, RTC or ASCII, PN2 current values can be supplied as option.

The HYDRO L1100 levelmeter comes standard with the following features

- **Temperature compensation** of the measurements and outpouts
- **The water depth compensation** according to **the influence factors**
- The user have several possibilities : the water level measurement can be transmitted as **an analog signal** 4-20mA ou 0-10V or as **a numeric message** through physical ports SDI12, RS232 or RS485
- Very **low power** consumption instrument ideal for remote area survey
- **The SDI12 serial port** can be used as well for programming or transmitting the measurements
- **The serial port COM1** RS232 type is used to communicate directly with a PC in terminal mode (for the setting and local operating)
- **A serial port COM2** RS232 / RS485 type is used to transmit the corresponding numerical value of the measurement with an ISP8 format in order to maintain the compatibility with our former instruments type LPN8

HYDRO L1100 can be optionnaly delivered with the following features

- 2 extra analog outpouts **4-20mA** ou **0-10V**
- **Modbus protocol on serial port COM2** if the numerical message ISP8 is not activated
- Protocol « **HYDROLOGIC current values** » on COM2 if the numerical **message ISP8** or the **modbus protocol are not activated**
- An external nitrogen bottle can be connected to the system in order to take over from **the integrate air generator i**f the power supply becomes to low to ensure a normal working of the level meter
- **A display with a LCD color** screen and a sensitive 6 buttom keypad
- An external 7bar compressor in the deeper enclosure
- **An air dryer**

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Polycarbonate enclosure	**Case size :** 200 x 200 x 140 mm **Weight :** 1.94kg
Safety class	IP 44
Analog outputs **4-20mA - 0-10 V**	1 in standard + 2 optionnal Isolated an request
Power supply	12 V Option : 24 Vdc ; 48 Vdc ; 220 Vac ; solar panel
Consumption (under 12v)	=45mA when operating <=2mA in sleep mode
Temperature range	-40° à + 60°C
Accuracy	+/- 0.1 % full scale on all temperature ranges
Final values	Serial numerical values or analog
Logging frequency	User selectable from 5 to 120 sec
Communications	SDI12, RS232/485, USB slave
Protocol on RS232/RS485	ISP8 and PN2 MODBUS as option
SDI12 protocol	Slave
GRAY signal	Yes – with ISP8 external
Datalogging set on whole hour	Yes
Spare parts life time counter	Time : compressor, capillary, battery, solenoid valve
Max speed in level change	20 cm/mn for a 100m lengh
Delayed start	According to datalogger
Micro controler	Yes
Temperature compensation	Yes as standard
Temperature drift	+/- 0.1% full scale in the range –40°à+60°C
Purge	Purge at the start - Automatic and/or manual
Measuring range	0 - 5 m 0 - 10 m 0 - 20 m
Hose length	From 0 à 300 m
Pneumatic connection	Screwed nut for rilsan tube 4/6mm
Electrical connection	Plug-in terminal blocks
Dust filter	Yes - easy access
Servicing	Easy access and low maintenance
Dismantling	Sensor and components can be easily dismantled
Overpressure	Minimum twice the full scale

Features and specifications are not binding unless confirmed our company.

EURO-QUALITY SYSTEM
ISO 9001

HYDROLOGIC

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