



## SUBMERSIBLE LEVEL TRANSMITTERS



## HYDROBAR

- ▶ ACCURACY 0,2%
- ▶ STRONG DIAPHRAGMS
- ▶ PERFECT LONG TERM STABILITY (< 0,1%/year)
- ▶ TEMPERATURE COMPENSATED
- ▶ ZERO/SPAN ADJUSTABLE
- ▶ INTRINSICALLY SAFE  
EEx ia IIC T4

### DESCRIPTION

The "Hydrobar" series are submersible level transmitters with a cable or SS tube extension, to measure the level in waterworks, deep wells, underground tanks, concrete bunkers, etc.

The "Hydrobar" transmitters are available as fixed range (type FR) units, or with adjustable zero and span.

All transmitters are fully temperature compensated, and are equipped with strong flush mounted diaphragms who are laserwelded, this results in a **perfect long term stability**.

Made by:

**KLAY-INSTRUMENTS B.V.**

Nijverheidsweg 5  
P.O. Box 13  
Tel. +31-521-591550

7991 CZ DWINGELOO  
7990 AA DWINGELOO  
Fax +31-521-592046

The Netherlands  
E-mail: [info@klay.nl](mailto:info@klay.nl)  
Website: [www.klay.nl](http://www.klay.nl)

Our representative in your area is:

## SPECIFICATIONS

Measuring ranges	: 0,1 bar to 10 bar
Output signal	: 4-20 mA, 2-wire
Adjustment	: Zero and span internally (not for FR type)
Overall accuracy	: 0,2% of adjusted span
Power supply	: 13 to 40 Vdc (Exi: 17-28 Vdc)
Electrical connection	: PG9, 1/2" NPT or M20 x1.5
External load (max.)	: 550 Ohm/24 V to 1400 Ohm/40 Vdc
Protection grade	: IP68 (cable/SS tube) IP66 (electr. housing)
Process temperature	: -10°C to +70°C
Temperature sensitivity:	+/- 0,015%/K
Wetted parts	: AISI 316L (standard)
Material cable	: Polyethylene (PE) (option: Hytrel or PTFE)



Flush diaphragm

Specifications can change without notice

SERIES HYDROBAR						
	Type code:	Hydrobar-Cable-FR	Hydrobar-Cable	Hydrobar-Cable-F	Hydrobar-EXTD	Hydrobar-EXTD-F

Detailed drawings available on request

## ORDER INFORMATION

Order code cable extension:*		Hydrobar-cable (length) -						
Order code SS extension:*		Hydrobar-EXTD (length) -						
Measuring Ranges (bar)	Maximum overpressure (bar)	Adjustable span range (bar)	↑	↑	↑	↑	↑	
0 - 0,1...0,4	6,4	0 - 0,1 / 0 - 0,4	B					
0 - 0,4...0,7	6,4	0 - 0,4 / 0 - 0,7	C					
0 - 0,7...1,5	10,5	0 - 0,7 / 0 - 1,5	D					
0 - 1 ... 4	16	0 - 1 / 0 - 4	E					
Fixed range: Specify calibrated range (only Hydrobar-cable)			FR					
- Mounting connection: Flange DIN or ANSI (specify size)				F				
- Special mounting connections: Example 1 1/2" or 2" BSP (specify)				X				
- Digital local indicator 3 1/2 digit, programmable					I			
- Intrinsically safe: EEx ia IIc T4						EX		
- SPECIALS: Other wetted parts (Hast.C or gold plated) or other cable material (Hytrel or PTFE) (specify)								G

\* Always specify cable or SS extension length at order code

## GENERAL INFORMATION

**Laser welded diaphragms:** All Hydrobar level transmitters consist of a strong, flush mounted diaphragm, which are laser welded.  
**Temperature compensation:** All Hydrobar transmitters are fully temperature compensated.  
**EMC/CE:** Klay Instruments manufactures all transmitters according to the new EMC/CE rules.

## ACCESSOIRES

- Cable clamp for Hydrobar-cable
- Wall mounting bracket for SS tube extension
- Extra cable length (standard 3 m, max 200 m)
- Extra SS tube length (standard 2 m, max 4 m)
- Sliding sleeve (for SS tube extension)
- Junction box (IP66) including venting