



## INTELLIGENT SUBMERSIBLE LEVEL TRANSMITTERS

Remote Rangeable

# HYDROBAR 'I'

**HART**  
COMMUNICATION PROTOCOL

- ▶ Free Programmable by PC or HHT
- ▶ Output 4-20 mA and HART® Protocol
- ▶ Accuracy 0.1%
- ▶ Strong Diaphragms
- ▶ Perfect Long Term Stability (<0.1%/ 2 years)
- ▶ Temperature compensated
- ▶ Zero/Span adjustable
- ▶ Intrinsically Safe  
ATEX II 1G  
Ex ia IIC T4 Ga



The Hydrobar 'I' is an 'Intelligent', free adjustable, hydrostatic level transmitter with cable (IP68) for level measurement in water & wastewater, pulp, slurry, chemicals, etc.

Zero and span are adjustable by HART® Protocol and PC or HHT.

The Hydrobar 'I' has active temperature compensation and a strong (laserwelded) diaphragm which results in a **perfect long term stability**.



HART® is a registered trademark of the HART Communication Foundation

*Programmable by PC or HHT*

Made by

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*Our representative in your area is:*

# Specifications

Measuring ranges	: 0,04 bar to 10 bar
Output signal	: 4-20 mA / 2-wire + HART® Protocol
Adjustment	: Zero and span by PC or HHT
Accuracy	: 0.1% of adjusted span
Power supply	: 12 to 40 Vdc
External load (max.)	: 550 Ohm/24 Vdc to 1400 Ohm/40 Vdc
Protection grade	: IP68
Process temperature	: -10 °C to +70 °C
Temperature sensitivity	: +/- 0.01%/K
Wetted parts	: AISI 316L (standard)
Material cable	: Polyethylene (PE) (option: Hytrel or PTFE)

Specifications can change without notice



Strong flush diaphragm

# Ordering codes

ORDERINGCODE		Hydrobar -I- cable (length) -				
Ranges (bar)	Maximum overpressure (bar)	Adjustable span range (bar) min. - max.	↑	↑	↑	↑
0 - 0,04...0,4	6,4	0 - 0,04 / 0 - 0,4	1			
0 - 0,12...1,2	10,5	0 - 0,12 / 0 - 1,2	2			
0 - 1 ... 10	30	0 - 1 / 0 - 10	3			
- Mounting connection: Flange DIN or ANSI (specify size)					F	
- Other top mounting connections: Example G2" thread (specify)					X	
<b>OPTIONS</b>						
- Intrinsically safe: ATEX II 1 G Ex ia IIC T4 Ga					Ex	
- Hasteloy C diaphragm						G7
- Hytrel cable						G10
- Gold plated diaphragm						G16
- Process connection 1/2" BSP M. (By adapter)						G21
- Process connection 1" BSP (flush diaphragm)						G54

\* Always specify cable length at orderingcode

# Applications

The Hydrobar "I" can be used for level and pressure measurement in all kind of fluids, like water & waste water, pulp, slurry, chemicals, etc. Typical applications are Levelmeasurement in:

- Basins
- Deep wells
- Tanks/vessels
- Underground tanks
- Ballast tanks (Shipbuilding)

Also available with threaded connections (G1/2" and G1") for pressure measurement.

# General Information

- **Laser welded diaphragms**  
All Hydrobar leveltransmitters have strong, flush mounted, diaphragms which are laser welded.
- **Active Temperature compensation**  
All Hydrobar transmitters are fully Temperature compensated.
- **EMC/CE**  
Klay Instruments manufactures all transmitters according to the European CE rules.

# Approvals

- The following certificates are available:
- HART® Protocol
  - ATEX II 1G Ex ia IIC T4 Ga
  - DNV, RINA, BV Type Approvals



# Accessories



**Cable clamp**  
Art. no. 20636



**Junction Box FMD(IP67)**  
Art. no. 20069

