

Pressure Measurement

Complete range of instruments for measuring gauge, differential and absolute pressure. In addition to high measuring precision and ruggedness, defining features include the convenience and functionality of a modular system as well as the perfect safety concept. We have a proven range of products for all pressure applications .

Manufacturers



Rototherm
instrumentation and control



EMERSON



KLAY
INSTRUMENTS



TEMPRESS



SOR
MEASUREMENT AND CONTROL



SIEMENS
Ingenuity for life



WIKAI



ASHCROFT



NUOVA FIMA



Endress+Hauser
People for Process Automation



YOKOGAWA



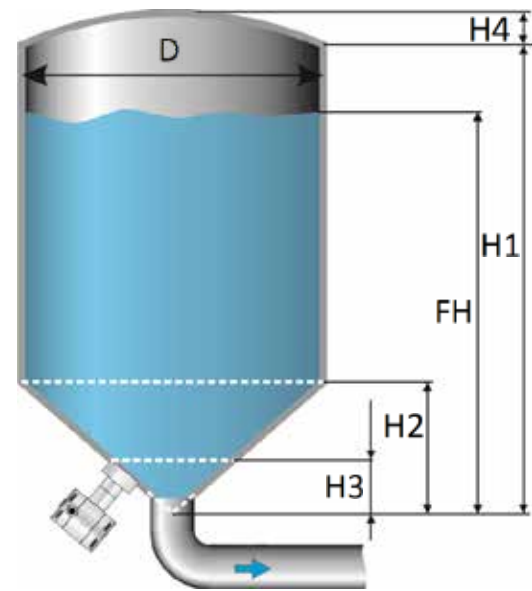
STIKO



ITT Industries
Engineered for life

Linearization Vertical Tank With a Control Bottom

LINEARIZATION VERTICAL TANK WITH A CONICAL BOTTOM



- 1. Navigate to **Vert. Sphere.** with the navigation button, and push to confirm.
- 2. Two choices appear on the screen: **Input** and **Simulate**
- 3. Select **Input**, and push to confirm.
- 4. Six choices appear on the screen:

Display	Drawing	Explanation
Height1	H1	The height of the tank
Diameter	D	The diameter of the tank
Height 2	H2	the height of the cone
Height 3	H3	The height till the topside of the diaphragm
Height 4	H4	The height of the parabolic tank roof
Fill Height	FH	The maximum percentage of filling of the tank

- 5. Fill in each value, and confirm with the navigation button. **The entered value's must be in meters.**
- 6. Select **SAVE** to save the setting.
- 7. The transmitter will return to the main menu.

SIMULATION

After linearization is entered and stored, it is possible to perform a simulation based on the entered value's. Based on the value entered in mWc, the transmitter will display the number of hectoliters (on the basis of the specified linearization values).

- 1. Navigate to program point **P111 – TANK LIN**, and push the navigation button to enter the menu.
- 2. Navigate to **Vert. Sphere.** with the navigation button, and push to confirm.
- 3. Two choices appear on the screen: **Input** and **Simulate**
- 4. Select **Simulate**, and push to confirm.
- 5. Fill in the desired value based on mWc, the number of hectoliters change directly with a change in the value mWc.

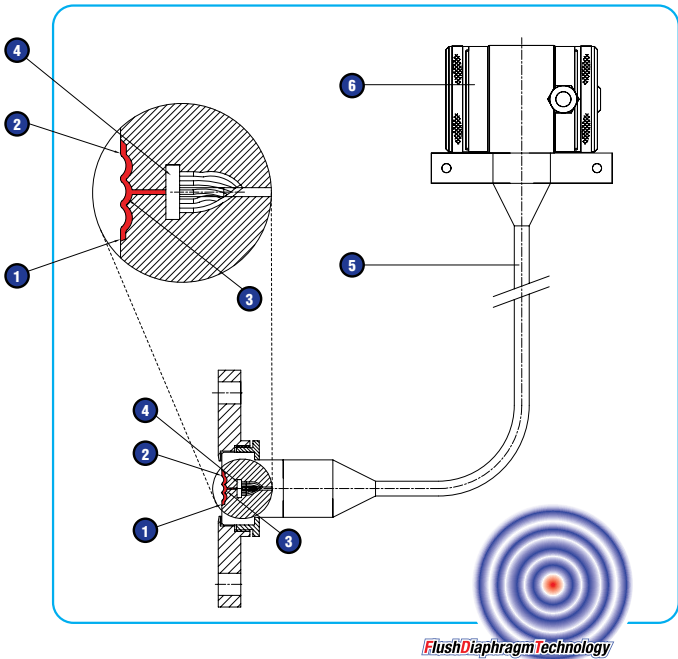
Main advantages Our Diaphragm

Our advantages against oil filled capillary systems & seals

With our well proven **Flush Diaphragm Technology** we have some **big advantages against transmit-ters . with oil filled capillary seals**
Instead of using oil filled capillaries we use our strong Hytel cable (with venting tube inside) between the process connection and the remote stainless steel electronics housing, which gives a lot of advantages.

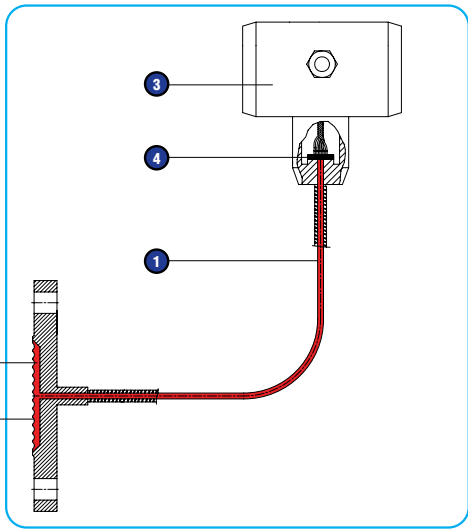
Find below our major advantages:

- 1. **Strong and small diaphragm**
 - Laser welded
 - Standard polished
- 2. **Minimum oil filling**
 - Between sensor and diaphragm by using our Flush Diaphragm Technology
- 3. **Wave structure (back-up) behind diaphragm**
 - Equal to diaphragm structure
 - Good protection against overpressure
 - Perfect long term stability
- 4. **Pressure sensor near the process**
 - Build-in Temperature Sensor
 - **Active** Temperature compensation
 - No mounting position effect!
- 5. **Strong “vented” cable (Hytel)**
- 6. **Electronics housing complete Stainless.Steel**



Disadvantages capillary systems:

- 1. - **Lots of oil filling**
 - Sensitive for temperature fluctuations
 - No Temperature compensation
 - Expensive solution
- 2. - Large diaphragm necessary, **more sensitive for damaging**
- 3. - Mounted on a standard transmitter
 - **No** active temperature compensation
 - **Large mounting position effects**
- 4. - Pressure sensor
 - No “feeling” with the process.



Pressure Measurement

Pressure Gauge



- Stainless steel, bronze and monel Bourdon tube options
- Wide selection of pressure connections and pressure ranges
- Teflon®-coated, 400 stainless steel movement
- PLUS!™ Performance (option) dampens vibration, shock and pulsation effects; provides liquid-fill performance in a dry gauge

DP Gauge



- Based on the high-quality pressure gauges
- Also with simultaneous indication of the working pressure
- Robust and durable
- For each application the right instrument

DP Transmitter



- All stainless steel housing
- Adjustable with unique programming button
- Graphic display with backlight
- Local indicator (option)
- Intrinsically safe ATEX and IECEx: Ex ia IIC T6 Ga

Pressure Switch



- Adjustable setpoints from %100-%15 of range
- Fixed or limited adjustable deadband
- Wide selection of switch elements and wetted materials
- Internal setpoint locking screw

Pressure Transmitter



- All stainless steel housing
- Adjustable with programming button, without test pressure
- Graphic display with backlight
- Local indicator (option)
- All current process connections

Hydrostatic LT



- Strong flush diaphragm
- Perfect long term stability
- Fixed or adjustable range
- Active temperature compensation

