

# Options for the D122 series



For the digital indicator series D122 the following function and performance enhancements are available as an option

## 👍 External reset and current flow signal pulse output for totalizers D122.Z

*The hardware configuration of the totalizer D122 with I/O-Terminals increases its usability considerably*

Alternative to the known option of two digital outputs for external limit monitoring, a control input and a digital output for the D122 series are available. An active intrinsically safe signal (Low < 2V, High > 5V) on the control input sends a reset command to the totalizer.

The digital output port can be configured by software in two different modes: As a setpoint-reached signal when the totalizer sum reaches its limit or as a pulse output for the current flow signal. In this case, the D122 measures the present flow rate and converts it into a digital signal.

The resolution of the digital signal is directly coupled with the scale configuration of the totalizer: each increment of the least significant digit generates a pulse. **The pulse width is about 7 ms, by a maximum output frequency of 68 Hz.**

To order the option digital input and output use the following type code:

D122.Z.□.3.□

## 👍 Curve and Square root fitting

*The standard digital indicator D122 has a linear relation between measured and displayed current value - the option special software offers the possibility to program any monotone function between measured current and displayed value!*

The **curve fitting** software indicates the **measure current in a non-linear way**. Consider an application of a filling-level meter for a spherical tank. The measure current is linear to the filling-height of the liquid, but the function between the filling-height and the volume is non-linear. To get the correct quantity indication you require a **list of points**, which shows the connection between measure current and associated quantity inside the tank. The curve fitting software of the D122.XS interpolates the curve between these points with a first (linear) or a second (square) order polynomial. The **linear interpolation** requires a list of **17 points** - the **square interpolation** needs **33 points**.

**Square root fitting:** To program a square root-function, e.g., to display **the flow through an aperture**, a special square root-fitting feature is available. For this option it is not necessary to enter a long list of points, but just a start and an end value (associated flow by 4 and by 20mA measure current). The indicator calculates automatically the selected points for interpolation. The measure error is less than 0,1 % full scale, if measure current is more than 5 mA.

To order the special software option use the following type code:

D122.□S.□.□.□

