



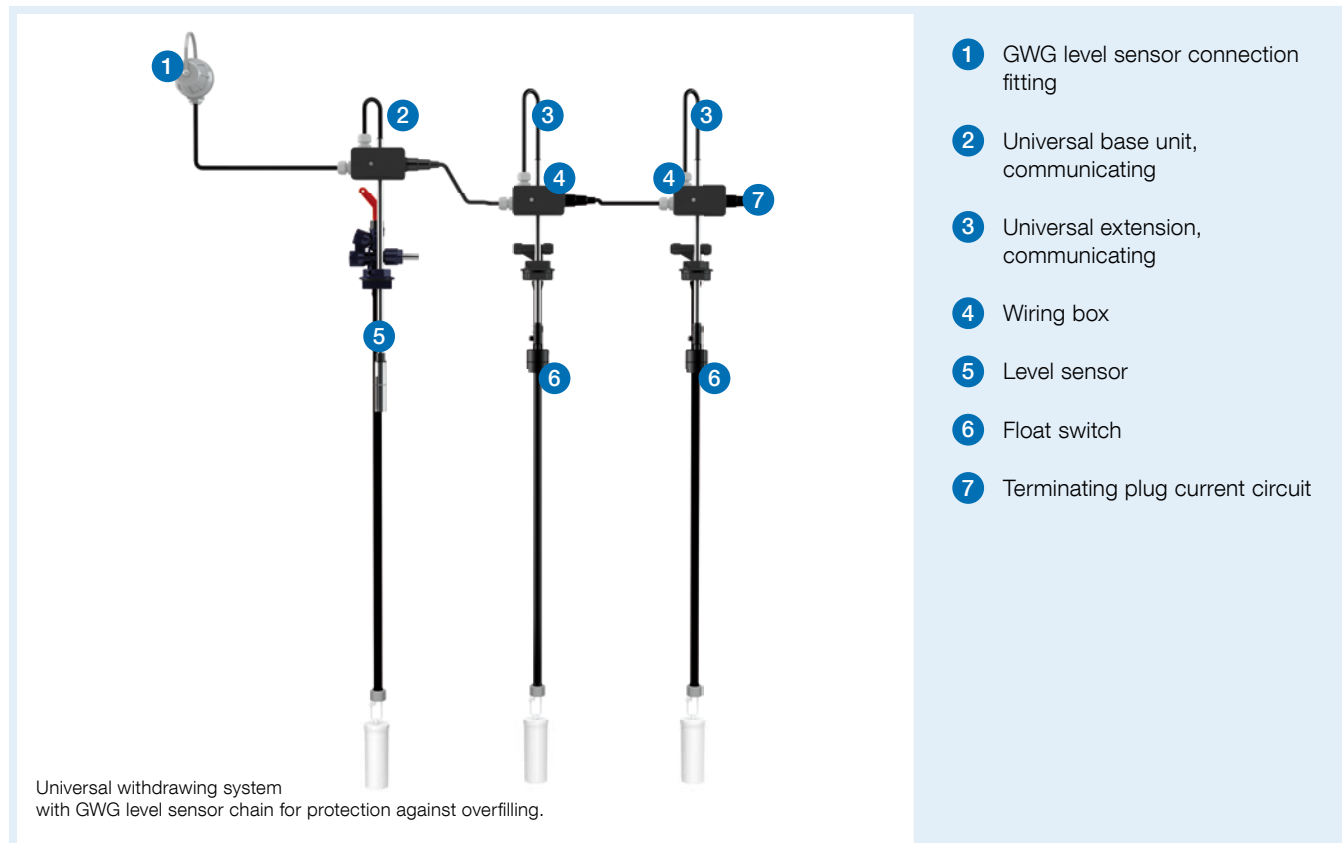
Level sensor chain

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Is the battery tank facility protected against overflow damage?

Level differences at the beginning of or during the filling process are not an uncommon phenomenon; there are various reasons for this. If this effect occurs, the causes must be identified and removed as quickly as possible. Possible causes include an insufficient flow rate during filling, pollution in the filling or withdrawal systems or leaks. When conventional tank facilities are filled and

the first tank filled is not equipped with a level sensor, there is a high risk of overflowing and fuel oil spills. Possible fatal consequences: damage to the building, soil contamination, environmental damage (groundwater), long-term odour problems and immense consequential costs. The owner or operator is fully responsible for all damages.



Function principle of GWG level sensor chain

The current circuit of the level sensor which is supplied from the tank vehicle during the filling process and which serves as a safety shut-off system includes float switches if the GWG level sensor chain is installed. A terminating plug at the last tank closes the current circuit. During normal filling, the filling process is terminated when the level sensor is submerged. However, if a tank of the facility without a level sensor reaches its maximum level first, the

float switch stops the filling process just as if the level sensor had responded. The additional volume caused by the shut off delay and the content of the filling line is considered. Since the filling level of all tanks must be visually detectable or indicated by means of a level indicator, the tank that has caused the shut off is easy to identify.

Level sensor chain



GWG level sensor chain – the best protection against damage caused by overfilling

The AFRISO GWG level sensor chain is used to protect battery tank facilities against overfilling. The system is available for communicating and non-communicating tank facilities. The first tank – in direction of filling – is equipped with the level sensor officially required (system with filling from the top). With the GWG level sen-

sor chain, each additional tank of the facility contains a float switch to limit the filling level; this level switch is connected to the wiring box of the first level sensor by means of pre-assembled cables and connectors. A terminating plug is connected at the last tank.

Universal withdrawal system with GWG level sensor chain in non-communicating system for three battery tanks with level sensor, level limiters and floating withdrawal. Available for retrofitting of existing systems and for new systems of virtually all well-known tank manufacturers.



Picture: DEHOUST GmbH

Application example with Dehoust tanks: GWG level sensor chain as top filling system DE-A-01 with combined filling and vent line, withdrawal line, level sensor, level limiters and floating withdrawal.