

# Level I Magnetic level gauge I Bypass

## Bypass level indicator without power supply

The bypass magnetic level indicator VEGAMAG 81 signals the level inside a vessel without the need for external energy. The measuring system is particularly suitable for measuring liquids, aggressive liquid media or for interface detection, for example in storage tanks where there is no access to power sources.

The measuring system consists of a bypass that is mounted on the side of the tank as a communicating pipe. An integrated float with a permanent magnet contactlessly transmits the level to the externally mounted magnetic indicator. The colours on the indicating scale change according to the filling level.

### The advantages

- ✓ On-site level indicator functions without power source (no auxiliary energy required)
- ✓ The level indication by means of a magnetic roller display cannot become soiled, because the indicator doesn't touch the medium
- ✓ Easy maintenance, as the bypass chamber can be isolated from the process via valves

### VEGAMAG 81



Application	Bypass vessel for liquid-holding tanks, for measuring and indicating levels without auxiliary energy (directly communicating vessel)
Measuring range	up to 4 m
Version	ASME B31.3 PED 2014/68/EU EAC 032/2013
Process fitting tank	Flanges from ½", DN 15 Threaded connections from ½" Welding sockets from ½"
Process temperature	-196 °C ... +450 °C
Process pressure	0 ... +100 bar (0 ... +10000 kPa)
Measurement accuracy	±5 mm
Approvals	ASME 31.3 PED 2014/68/EU EAC 032/2013
Benefits	✓ Measurement and on-site indication without auxiliary energy

## Bypass for continuous level measurement of liquids

In combination with a level or point level sensor, the VEGAPASS 81 bypass chamber enables continuous level measurement outside a container. Depending on the measuring instrument used, it is especially suitable for measurement in high temperature or pressure environments or for aggressive media.

The bypass consists of a standpipe assembly that is attached to the side of the container normally via two valved, isolatable process fittings. This type of mounting ensures that the level in the standpipe and the level in the container are exactly the same. On request, a VEGAPASS chamber and measuring instrument can be ordered together, pre-assembled and calibrated at the factory.

### The advantages

- ✓ From one source: optimally matched complete solution consisting of bypass chamber and suitable measurement technology
- ✓ Maintenance-free, as there are no moving parts
- ✓ Tailor-made: customer-specific adaptation to your process

## VEGAPASS 81



Application	Bypass chamber for liquid tanks to accommodate level, point level or interface sensors (communicates the direct vessel level)
Measuring range	up to 4 m
Version	ASME B31.3 PED 2014/68/EU EAC 032/2013
Process fitting tank	Flanges from ½", DN 15 Threaded connections from ½" Welding sockets from ½"
Process temperature	-196 °C ... +450 °C
Process pressure	0 ... +205 bar (0 ... +20500 kPa) depends on the built-in sensor
Measurement accuracy	depends on the built-in sensor
Approvals	ASME 31.3 PED 2014/68/EU EAC 032/2013 depends on the sensor technology installed
Benefits	✓ Complete solution comprising bypass vessel and measurement technology