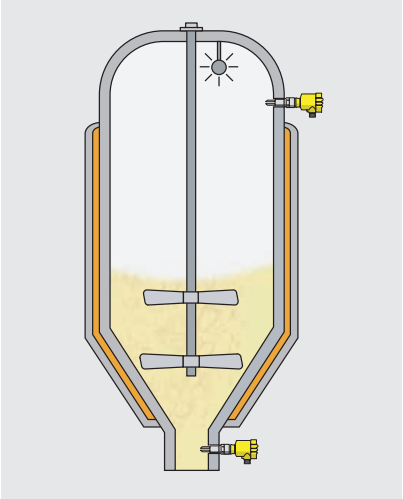
Point level I Vibration I Liquids



Area of application

The point level sensors of the VEGASWING series are used for overfill and dry run protection in liquids. They are also suitable for safety-related applications up to SIL2. Special materials and coated versions also allow their use in aggressive media.

Measuring principle

The tuning fork of VEGASWING is made to vibrate by a piezo drive. If the tuning fork comes in contact with the medium, the frequency is damped. The electronics responds by triggering a switching signal.

Advantages

With a tuning fork only 40 mm long, VEGASWING works reliably in all liquids – regardless of the installation position. Pressure, temperature, foam and viscosity do not influence the switching accuracy. The low-cost point level sensors are easy to install and can be set up and commissioned without medium.

	VEGASWING 51	VEGASWING 61/63	VEGASWING 66
			
Application	Liquids	Liquids	Liquids under high and low temperatures
Version	Compact version	VEGASWING 61: Compact version VEGASWING 63: Tube extension up to 6 m	Compact version or with tube extension up to 3 m
Material	316L	316L, Alloy, ECTFE, PFA, enamel, Alloy 400, Duplex	Inconel 718 (tuning fork), 316L, Alloy
Process fitting	Thread from G½, ½ NPT, hygienic fittings	Thread from G¾, ¾ NPT, flanges from DN 25, 1", hygienic fittings	Thread from G1, 1 NPT, flanges from DN 50, 2"
Process temperature	-40 … +150 °C	-50 … +250 °C	-196 … +450 °C
Process pressure	-1 … +64 bar (-100 … +6400 kPa)	-1 … +64 bar (-100 … +6400 kPa)	-1 … +160 bar (-100 … +16000 kPa)
Signal output	Transistor output, contactless electronic switch	Relay, transistor, two-wire, NAMUR output, contactless electronic switch	Relay, transistor, two-wire output
Approvals	Overfill protection, Ship	ATEX, IEC, FM, CSA, EAC (GOST), UKR Sepro, Overfill protection, Ship, SIL2	ATEX, IEC, CSA, EAC (GOST), UKR Sepro, Overfill protection, steam boiler, Ship, SIL2
Benefit	▪ Minimal time and cost expenditure thanks to simple setup without medium ▪ Accurate and reliable function through product-independent switching point ▪ Minimal costs for maintenance and servicing		

Signal conditioning instruments see page 54 – 59