

Hoentzsch Polymer FM

for highly aggressive or caustic gases, non-metallic materials

Hoentzsch in Germany developed a new Polymer vortex sensor for highly aggressive gases in the

- chemical industry
- petrochemistry
- semiconductor industry, electroplating
- applications with halogenated gases which do not allow metallic material.

The only parts contacting the medium are the sensor body made of high-performance polymer, the transducer made of aluminium oxide ceramics and seals made of fluororubber.



The sensor has a low starting value of 0.5 m/s (measuring range: 0.5 up to 40 m/s, optionally up to 60 m/s) and is suited for the use in ex-protection zones category 3G and 3D (zone 2 and zone 22) and up to SIL2/SC3. It is the perfect sensor for chlorine or hydrogen chloride process gases and hydrochloric acid steam in scrubbers and RTOs specifically as an alternative to sensors made out of tantalum.

Process Media Applications:

- corrosive, caustic gases
- gases containing chlorine and hydrogen chloride
- gases containing SO₂-and NO_x
- gases that form acids when wet
- primarily single-phase gas mixtures, e.g. air, nitrogen, oxygen, methane, natural gas, ammonia, argon, carbon monoxide, exhaust gas, etc

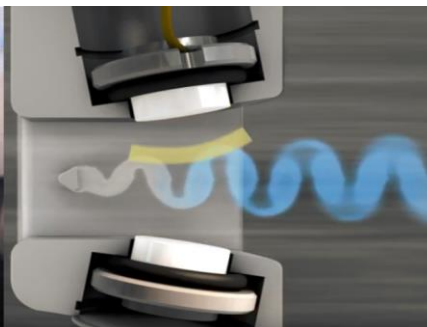
[more product details](#)

Working Principle of a Hoentzsch Vortex Flowmeter:

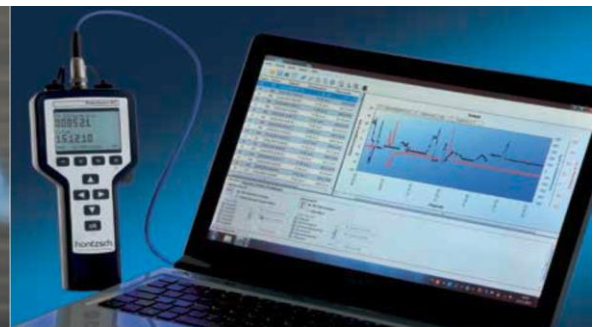
The measurement is based on ultrasonic scanning of the Karman Vortex Street. Vortices occur intermittently around the element in the sensor head and (different to most other Vortex technologies) are scanned ultrasonically. This allows low flow measurement starting from 0.4m/s of air/gases. The sensor has no moving parts, a recalibration is not necessary: "simply install and forget about it!"



suitable in extremely difficult service conditions



ultrasonic measurement of vortices - from 0.4m/s for low flow applications



easy config, data transfer, display, transport, HART

[Watch Hoentzsch Vortex Working Principle Video](#)