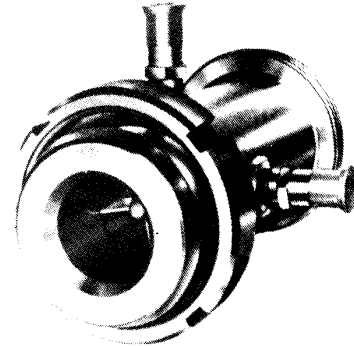


# TURBOQUANT-S-H TURBINE METERS

The TURBOQUANT-S-H hygienic turbine meters are designed for liquid flow measurement in the food industry. They are suitable to be used for reliable, continuous and accurate volumetric flow measurement and totalized volume measurement of liquids in pipelines under pressure.

The turbine meters are designed with specially designed slide bearing of axial flush. The bearing is always made of sintered corundum; thus, the bearings withstand any of the usual methods of sterilizing.

In the case of sterilizing, the dynamic effects resulting from the hot steam blowing-off shall be avoided. The turbine meters are suitable to be used for any aggressive liquids that occur in the food industry.



Gas detector electrode can also be built in the turbine meter. If the liquid flow is interrupted (e.g. due to an air bubble or foaming, emptying the pipeline, generating two phases), the detector issues a signal to a special purpose electronic circuit which, in turn, stops the flow meter display and the volume counter. With a Zener barrier connected, the TURBOQUANT-S-H is also suitable to be used in hazardous areas.

The safety class of the measuring circuit thus configured will be: **Ex i<sub>b</sub> IIC T6**.

## Specifications

Type number

**6 8 A B - 0 - 0 0 C - D**

Rated size		Measuring range (m <sup>3</sup> /h)	Accuracy		Air bubble detector	
09	40	3.5 ... 35	1	±0.5 (Q = 10 ... 100%)	1	installed
10	50	7.0 ... 70	2	±0.25 (Q = 20 ... 100%)	2	not installed
			3	±0.15 (Q = 60 ... 100%)		

Measuring range

- 6809 (size 40) 3.5 to 35 m<sup>3</sup>/h
- 6810 (size 50) 7,0 to 70 m<sup>3</sup>/h

Ambient temperature range

-50 to +50 C°

Temperature of the medium to be measured

-5 to +150 C°

Max. operating pressure (every size)

0.6 MPa (6 bar)

**Error limits under reference conditions**

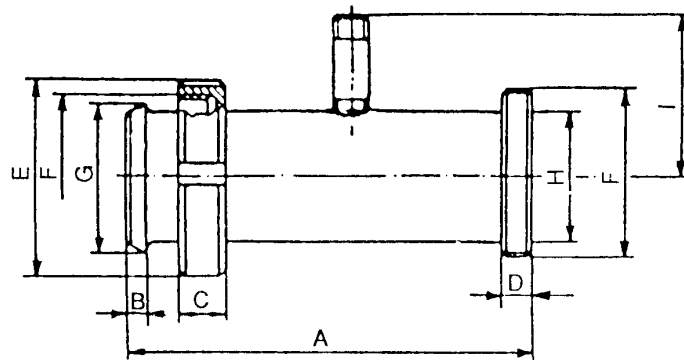
- 10 to 100% of the measuring range:  $\pm 0.5\%$  of the measured value
- 20 to 100% of the measuring range:  $\pm 0.25\%$  of the measured value
- 60 to 100% of the measuring range:  $\pm 0.15\%$  of the measured value

Repeatability 0.05%

**Output signal**

max. frequency at max. flow rate: 800 to 1100 Hz  
 voltage level at min. flow rate: min 20 mV rms

On special order, turbine meters integrated with air bubble detector are available.



Type	A (mm)	B (mm)	C (mm)	D (mm)	Ø E (mm)	F (mm)	Ø G (mm)	Ø H (mm)	I (mm)
6809-	185	11	22	14	92	Zs 78 x 1/6	68	61	95
6810-	205	12	25	16	112	Zs 95 x 1/6	86	70	100