

The Gas Flow Tester GFT is based on an orifice measuring and operating as a differential pressure transmitter for measuring the flow of aggressive and non-aggressive gases, vapours, liquids, primarily in pipes up to DN 100:

- **Student GFT - for low temperature tests**
- **Professional GFT - for high temperature tests**

Technical Description

Measuring sections are throttling device with a ring chamber, equipped with calibrated inlet and outlet sections. The collecting ring is two-part according to DIN 19205 with a replaceable measuring plate. This is designed as a standard orifice plate according to ISO 5167-2. The retaining rings and measuring inserts are sealed with a flat gasket. The measuring sections are completely assembled and delivered ready for installation.

Restrictions

Especially in small pipelines, the measuring accuracy is affected by installation disturbances. This is avoided by ensuring that the inlet and outlet pipes form a unit with the measuring rings in the measuring path and lead smoothly up to the measuring disc without any transitions.

This achieves a concentric seating of the measuring insert and ensures the prescribed, disturbance-free inlet and outlet lengths. By using calibrated pipes, accurate calculation values for pipe inner diameter D and pipe roughness are obtained. The interchangeability of the measuring insert allows for a change in the measuring range.

Materials

Production is available in various materials including special materials. The base or “student” configurations are manufactured from PLA and aluminium. For the use at high temperatures and aggressive media, the specific application case must be assessed.

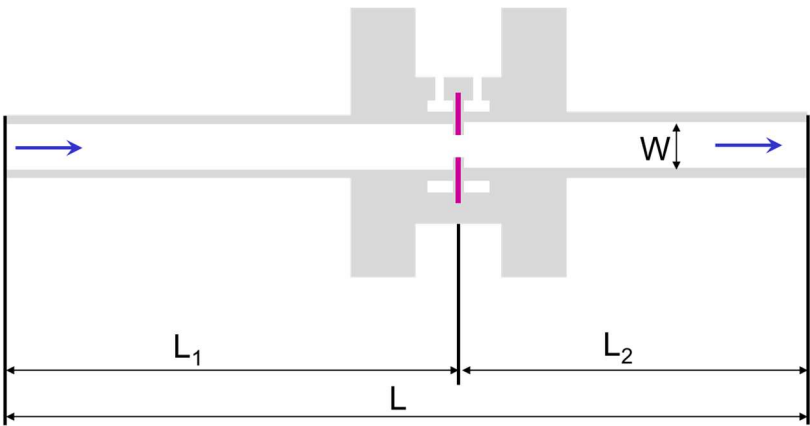
Material tests

Upon request, certificates for the materials used regarding material testing, e.g., according to EN 10204, can be provided.

The configurations of GFT can be ordered with the following options:

W, mm	15	20	25	32	40	50	65	80	100
L, mm	550	700	900	1100	1300	1500	1600	1800	2200
L ₁ , mm	380	500	650	800	1000	1200	1250	1400	1700
L ₂ , mm	170	200	250	300	300	300	350	400	500

Dimensions W, L as shown in Figure below:



All Configurations of GFT are supplied with detailed manuals and recommendation for experiment procedures. Additionally, we offer one hour training via teams to answer all open questions of researcher.

Please provide us with the following information for the preparation of the offer:

- Flow measurement range
- Type of gas or gases
- Nominal diameter of the pipe
- Material specification
- Operating conditions pressure and temperature
- Allowed pressure drop
- Measurement accuracy
- Ambient conditions