FLUXUS® CA
Compressed Air Flow Measurement Solutions

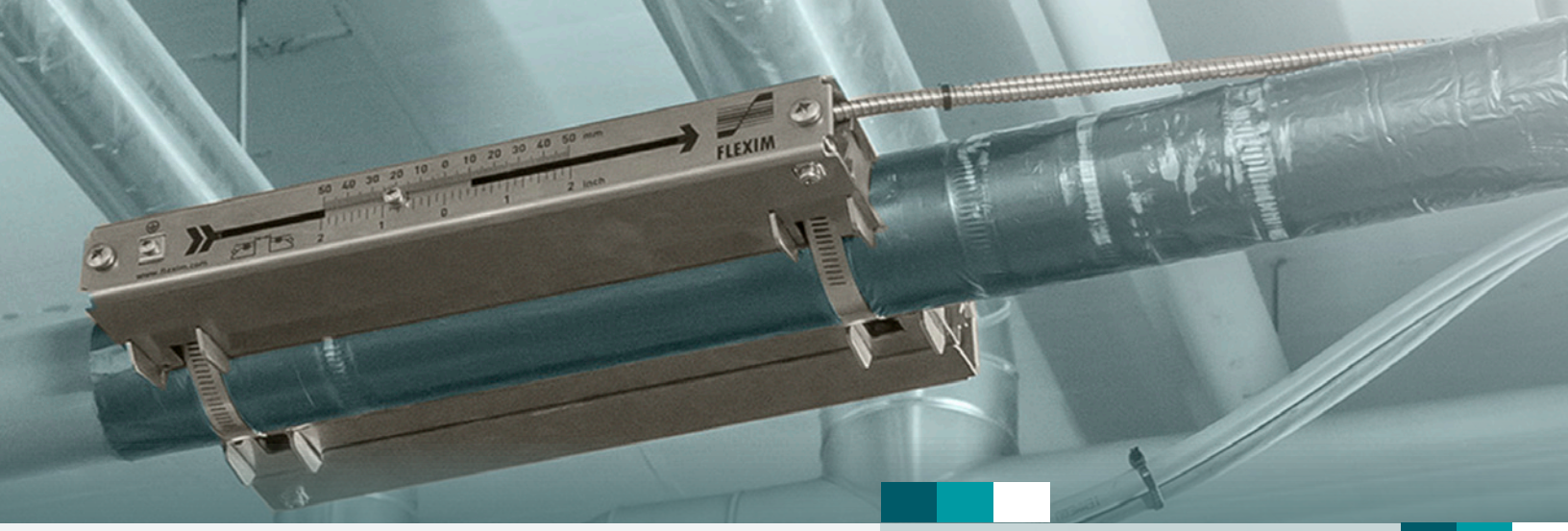
Non-invasive - Accurate - Reliable

Consumption Metering

Leak Detection

Line Balancing

FLEXIM
when measuring matters



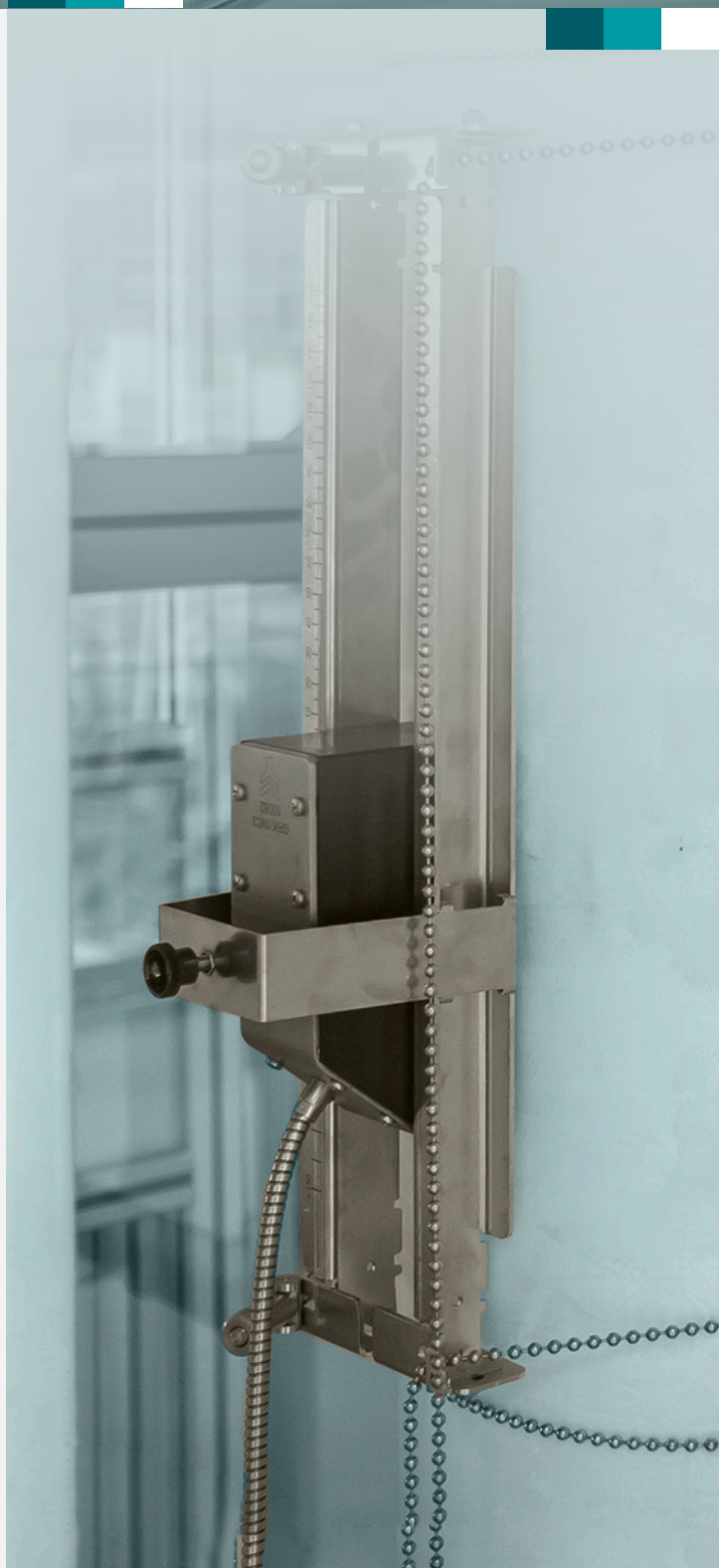
Non-invasive Compressed Air Flow Measurement

Compressed air accounts for as much as 10% of industrial consumption of electricity. However, often less than 10% of this energy is converted to usable energy delivered to the end-users.

Measuring the compressed air flow precisely in all conditions is the key to improving the energy efficiency of compressed air systems while reducing costs.

Using state-of-the-art technology, non-invasive ultrasonic flowmeters provide the best measurement solutions.

- **Non-Invasive**
  It has never been so convenient to install a flow meter, as all the conventional steps, such as shutting down processes, cutting pipes, welding flanges, are no longer necessary.
- **No Risks of Secondary Contamination of Compressed Air**
  In many cases the compressed air that comes into contact with products or people at the end use of a process needs to be of very high quality. Using a non-invasive ultrasonic flow meter is the best option for such situations, as the compressed air is never touched by flowmeters.
- **No Risks of Potential Leakage**
  Leaks can waste up to 30% of the useful energy in compressed air systems. Compared to inline flowmeters, the non-invasive ultrasonic flowmeter gives zero chance of potential leakage, as the pipe system is always intact.
- **Zero Wear and Tear**
  Without moving parts, and with no contact to the moving airflow, non-invasive ultrasonic flowmeters have absolutely no wear and tear, which reduces the total costs of ownership significantly.
- **Maintenance-free**
  Old clamp-on ultrasonic flowmeters need to have their transducers regularly greased. FLEXIM has overcome such challenges, meaning that FLEXIM flowmeters are truly install-and-forget, where regular maintenance can be a thing of the past.



FLUXUS® CA
The Smart Solution for Measuring Compressed Air

Whilst being widely used in compressed air systems, conventional technologies such as thermal mass, differential pressure and vortex flowmeters have inevitable disadvantages, such as process shut-down during installation, high installation and maintenance costs, pressure drop, poor turndown ratios, etc.

Non-invasive FLUXUS® CA ultrasonic flowmeters overcome all these technical challenges and provide the best measurement solutions for compressed air.

Unique, versatile and robust with unbeatable features

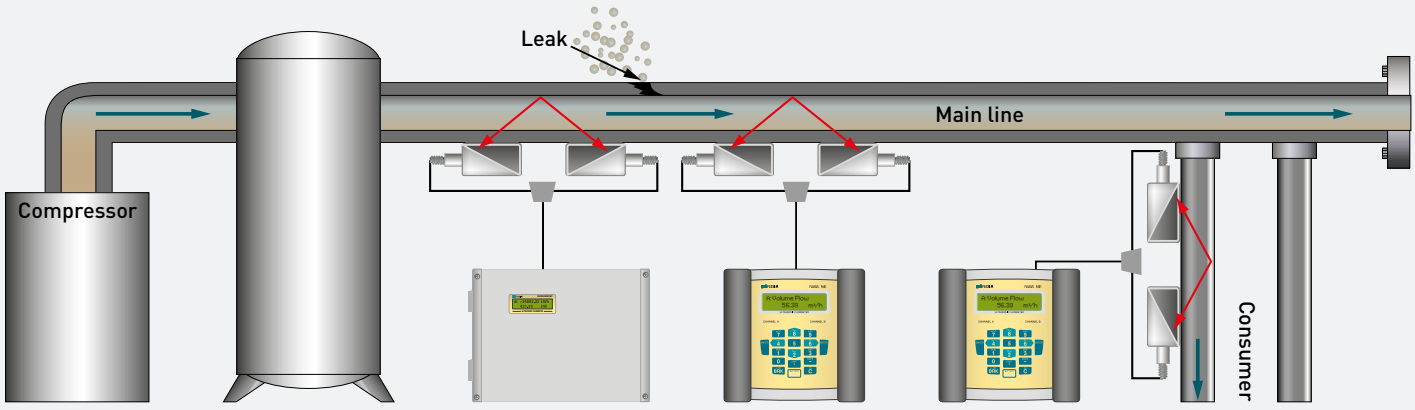
- **Competent for Low Pressure Systems**
  Thanks to FLUXUS® CA cutting-edge technology, compressed air systems can be measured at pressures as low as 45 psi. On plastic pipes it can even be measured down to atmospheric pressure.
- **High Sensitivity to Extremely Low Flow**
  FLEXIM flowmeters are able to detect flow down to 0.03 ft/s, which truly provides plant operators the unique opportunity to detect even a slight leakage of compressed air systems.
- **Covering full Pipe Ranges**
  Besides the most common pipes sizes from 0.6 to 10 inches, FLUXUS® CA are capable of measuring even smaller or larger pipes (customized system solutions), maximizing the customer's value.
- **Portable in FM Class I, Div. 2**
  The easy-to-perform temporary measurement is one of the outstanding advantages of clamp-on flowmeters. As the pioneer in this field, FLEXIM is far beyond the industrial convention, uniquely offering portable flowmeters suitable for FM Class I, Div. 2.

Powerful, flexible, reliable and well suited to all kinds of assignments

With both portable and fixed measurement systems, FLUXUS® CA makes an easy job of any compressed air flow measurement.

- for energy audits compliant with ISO 50001 or EN16247
- for metering the consumption of compressed air
- for checking and verifying existing flowmeters
- for leak detection of either the whole system or a subsection
- for balancing pipe networks within plants and production environments
- for individual measurement of virtually any com pressed air branch
- for monitoring compressor efficiency

All measurement data can be transferred to central control systems through the integrated field bus systems.

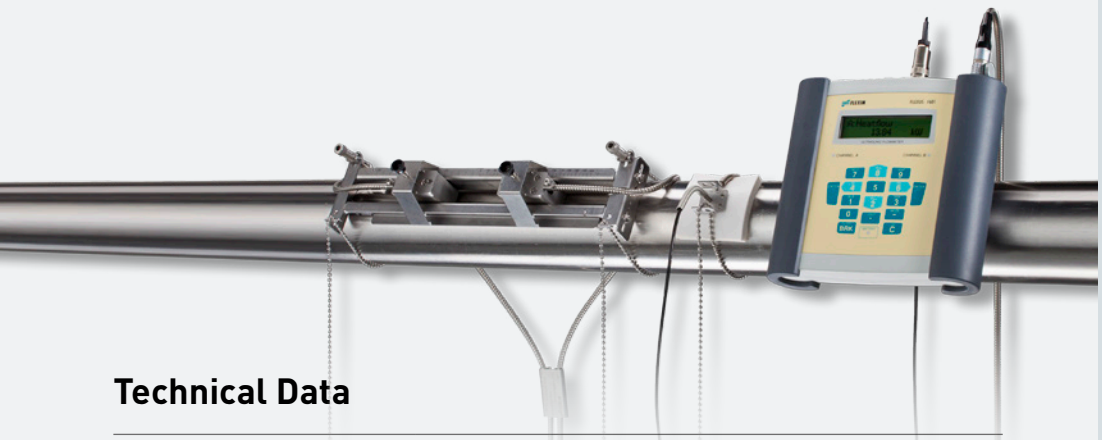


Differential measurement of volume flow for leak detection

Volume flow measurement at individual consumption lines

FLEXIM

More than 25 years of experience in ultrasonic flow meter technology



Technical Data

FLUXUS® CA:	**Portable** or **permanent** measuring device for non-intrusive flow measurement of compressed air and other industrial gases (clamp-on flow measurement according to the transit-time difference method, temperature measurement using clamp-on or inline temperature sensors)
Quantities of measurement:	Operating flow rate, standard flow rate, mass flow, flow velocity
Fluid:	Compressed Air, Nitrogen, Oxygen, Argon
Flow velocity:	0.03 to 115 ft/s
Repeatability:	0.15% of reading ± 0.03 ft/s
Accuracy:	±0.5% of reading ± 0.03 ft/s (field calibrated) ±1 ... 3% of reading ± 0.03 ft/s (out of the box - application dependent) For the flow measurement of gases / compressed air in metal pipes a minimum pressurization level of 45 psi is necessary. For plastic pipes no mimimum pressurization level is necessary.
Pipe diameter range:	0.6 inch ... 10 inch
Data logger capacity:	>100,000 measured values
Loggable values:	all physical quantities, totalized values and diagnostic values
Outputs:	Active and passive switchable current output, binary outputs
Inputs:	Temperature input (Pt100/Pt1000), current input
Communication Protocols:	Modbus RTU, M-Bus, BACnet MS/TP, RS485
Explosion protection:	FM Class I, Div. 2 or ATEX zone 2 (optional)

* under reference conditions and with v > 0.5 ft/s
** if reference uncertainty better than < 0.2%

Further Information can be found at the acc. G601 CA Energy and G704 CA Technical Specifications at **www.flexim.com**

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FLEXIM has offices located throughout North America.

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www.flexim.com
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1-888-852-PIPE

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