



BlueVCount

High quality gas volume measurement:
professional and precise





BlueVCount gas volume measurement

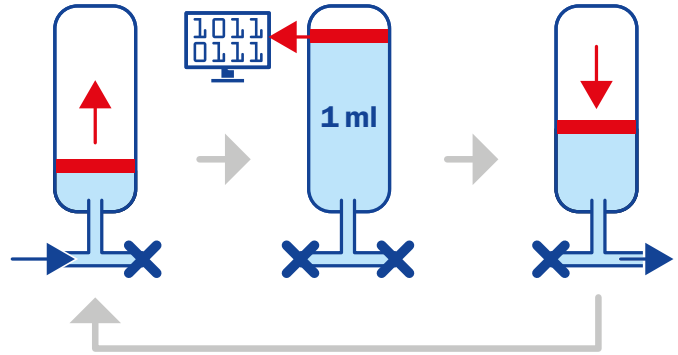


What is it for?

BlueVCount measures gas volumes in reactions of all kind. It is applicable for fermentations, degradation studies, substrate comparison studies, wastewater treatment, bioethanol or hydrogen production and is especially helpful in bio methane potential (BMP) determinations in industry and academia. Gas volume measurement delivers important information about the process and helps to optimize yields and process procedures.

How does it work?

BlueVCount is a volume measuring unit with a 1 ml cylinder that is equipped with an oil (special) sealed magnetic piston. It counts how often 1 ml gas comes through the cylinder and reports it to the integrated display or via Modbus RTU to a software (e.g. BlueVIS). To achieve this you do not need a minimum flow.



| Your demands | BlueVCount | Gas Endeavour* | Milligas-counter** |
|--|------------------|-------------------|--------------------|
| Minimum flow | No need | ≥ 2(9)ml/min | 1ml/h |
| Maximum flow | 80ml/min | 24(110)ml/min | 20ml/min |
| Accuracy | ±2% | n.a. | ±3% |
| Resolution | 1ml | 2(9)ml | 3ml |
| Absorber possible | ✓ | ✓ | ✓ |
| Limit of data logging | unlimited | 2x10 ⁴ | unlimited |
| Ethernet interface | ✗ | ✓ | ✗ |
| Modbus (RS485) | ✓ | ✗ | ✗ |
| Single device available | ✓ | ✗ | ✓ |
| Gas tank/bag connectable | ✓ | ✓ | ✓ |
| Auto-compensation of humidity, pressure, temperature to display I _N | ✓ | ✓ | ✗ |

* BioProcessControl AB

** Dr.-Ing. RITTER Apparatebau GmbH & Co.KG



BlueVCount at a glance

- More process information for a better process understanding
- Leads to less number of experiments and optimized yields
- No water or oil refill necessary
- Shows normalized volume because of integrated pressure and temperature sensors
- Integrated display for data information at any time
- Combinable devices (daisy chain) for less cable tangle
- BlueVIS ready via Modbus RTU for higher grade of automatization



BlueVCount – Technical Facts

| | |
|-----------------------------|-------------|
| Minimal volume flow | 0 ml/h |
| Max. volume flow | 4.800 ml/h |
| Mechanical protection up to | 12.000 ml/h |
| Resolution (Normvolumen) | 1ml |
| Deviation from value | + - 2% |
| Gas pressure needed | >3hPa |
| Working voltage | 24V |
| Data format | Modbus RTU |
| Baud rate | 38400 |
| Physical interface | RS485 |