

Pressure monitor MULTI 2

Qmt-tech's compact pressure monitor MULTI 2 in a new design. The unit is used to monitor pressure levels in medical gas systems and provide connection point and/or permanent reserve gas supply. Pressure monitor MULTI 2 are usually placed in the corridor of the department it supplies. The unit is delivered as standard with a connection of 22 mm. MULTI 2 is available in versions from two to five gases, for recessed or surface mounting. The product has pressure gauge on the inlet and outlet and is equipped with the stainless steel ball valve Classic. The system pressure can be read on the pressure gauge or via a connected alarm system. Each gas type has a medical gas outlet for high flow reserve gas supply. Single reserve gas outlet is standard, double reserve gas outlets are optional. The unit can be equipped with a connection to permanently connected reserve gas supply system. MULTI 2 can be delivered with a microswitch on the reserve gas supply valve (optional). For standard alarms connected to the unit, the following functions apply: Reading of all gases, 4 relay outputs, 1 Modbus RS485, 1 modbus TCP/IP, monitoring of UPS and slave alarm unit or indicator tableau. See also separate document for alarms. Device without alarm unit is not standard. The product complies with the European standard EN ISO 7396-1 and the national standard SIS HB 370. The connection pipes are plugged on delivery to meet the cleanliness requirements.



Program text

QMT 8XXXXXXXXXXXXXXXXX Pressure monitor MULTI 2 is used for medical gases. Reserve gas supply can be supplied through single/double gas outlets or permanently connected reserve gas supply system. The product is painted in white RAL 9010. The device is equipped with the stainless steel ball valve Classic. Pressure class PN 16. Pressure monitor MULTI 2 complies with the European standard EN ISO 7396-1 and the national standard SIS HB 370 and is CE marked.

Construction

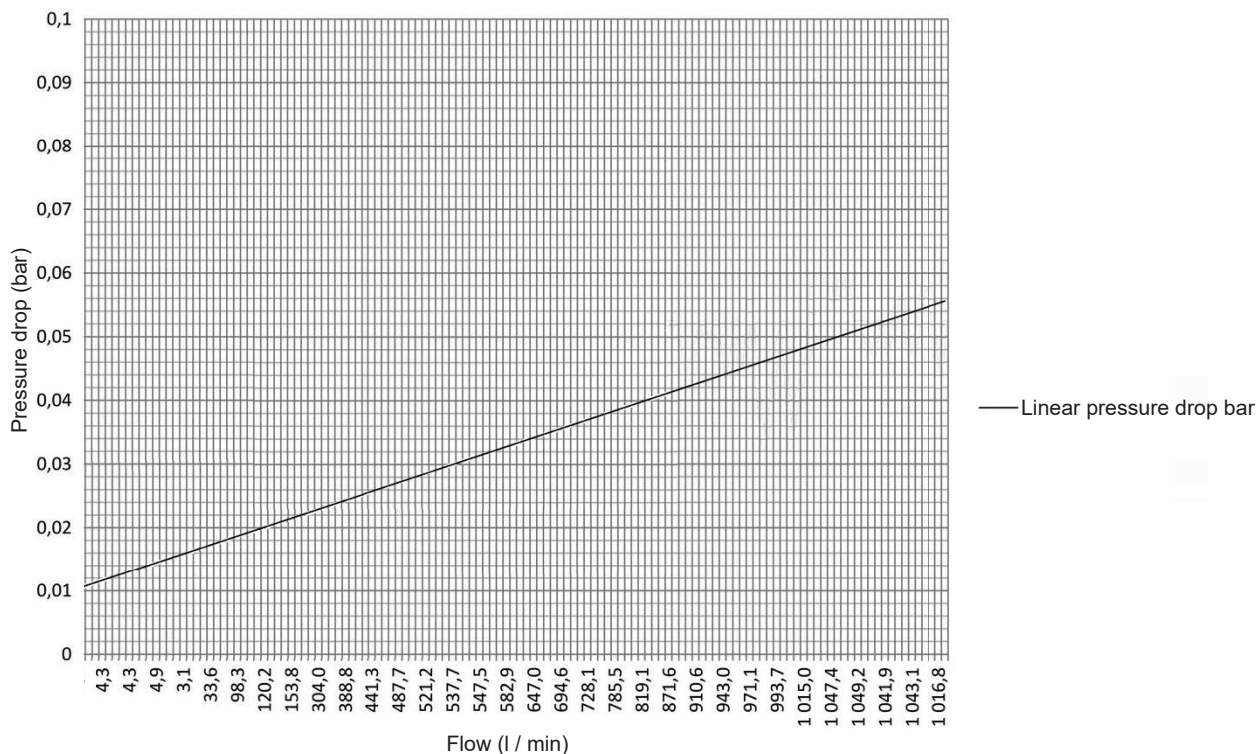
MULTI 2 is used to monitor that the medical gas pipeline supply system pressure is maintained within the set supply pressures. High or low pressure is indicated with pressure sensor that can be connected to acoustic and visual alarms. Connection to external devices is made via 3 m long cables. Each gas/pipe package has non-interchangeable medical gas outlets to enable safe reserve gas supply. In the event of a greater need for reserve gas, the equipment can optionally be equipped with a connection point for a permanently connected reserve gas supply system. The product is CE marked and corresponds to the standards EN ISO 9170-1, EN ISO 7396-1, 837-1 and national standard SIS HB 370.

Diagram of pressure drop

Sample gas: Nitrogen
Inlet pressure: Se diagrammet
Temperature: 23°C

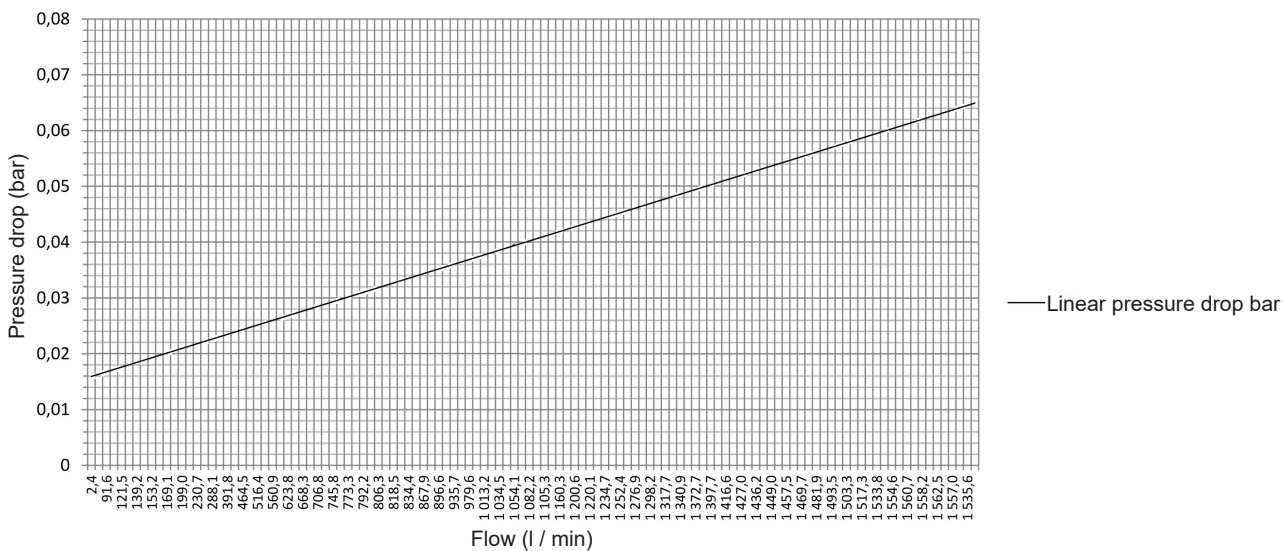
Linear pressure drop 2-3 bar

Pressure drop (bar) at 3,0 bar system pressure



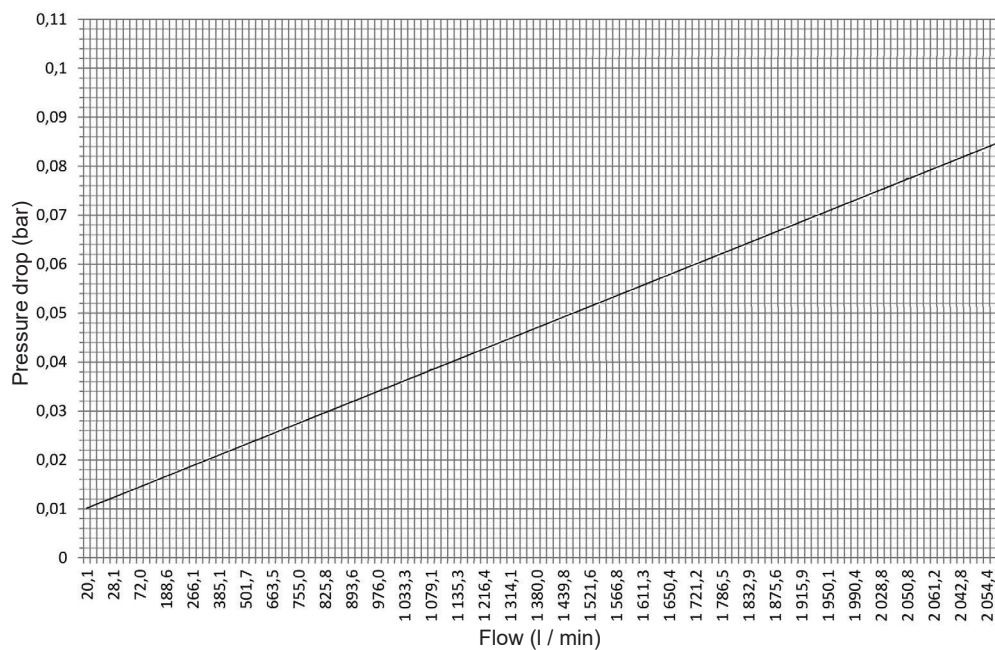
Linear pressure drop 2-5 bar

Pressure drop (bar) at 5,0 bar system pressure



Linear pressure drop 2-7 bar

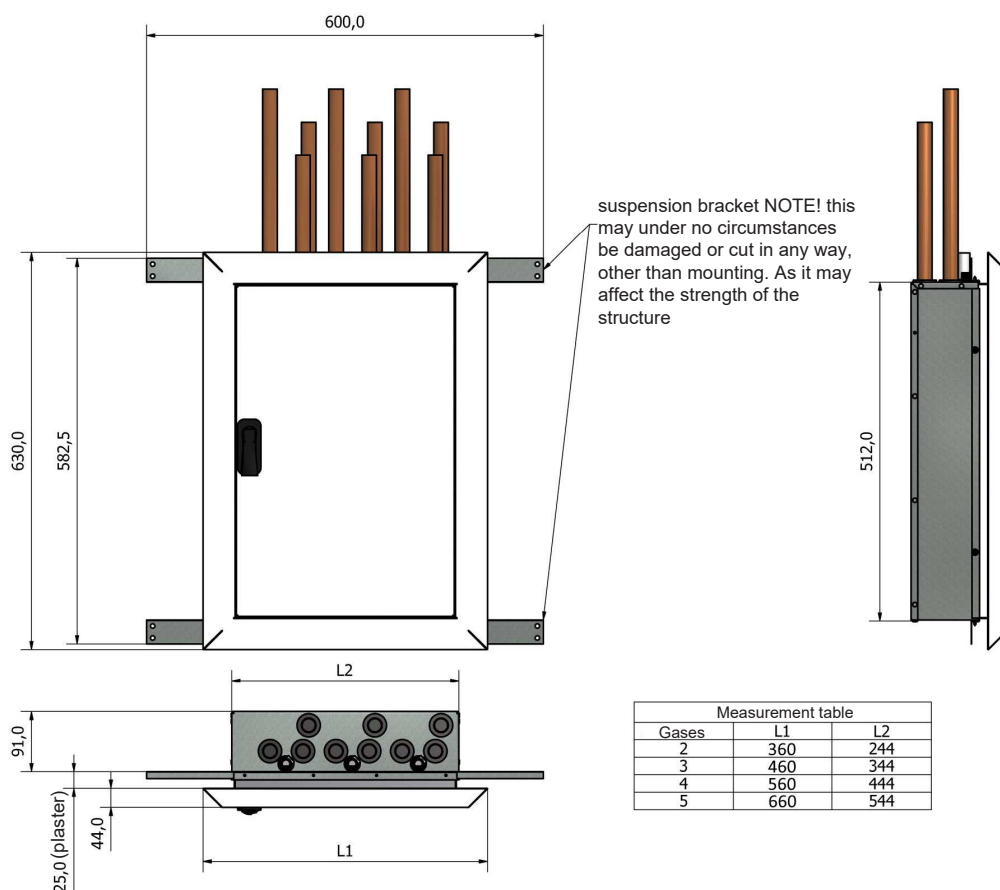
Pressure drop (bar) at 7,0 bar system pressure



— Linear pressure drop bar

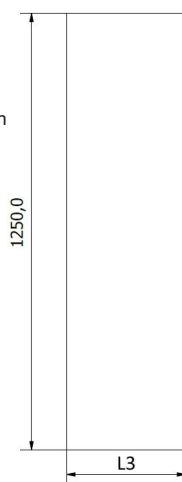
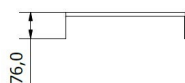
Installation

Recessed mounting



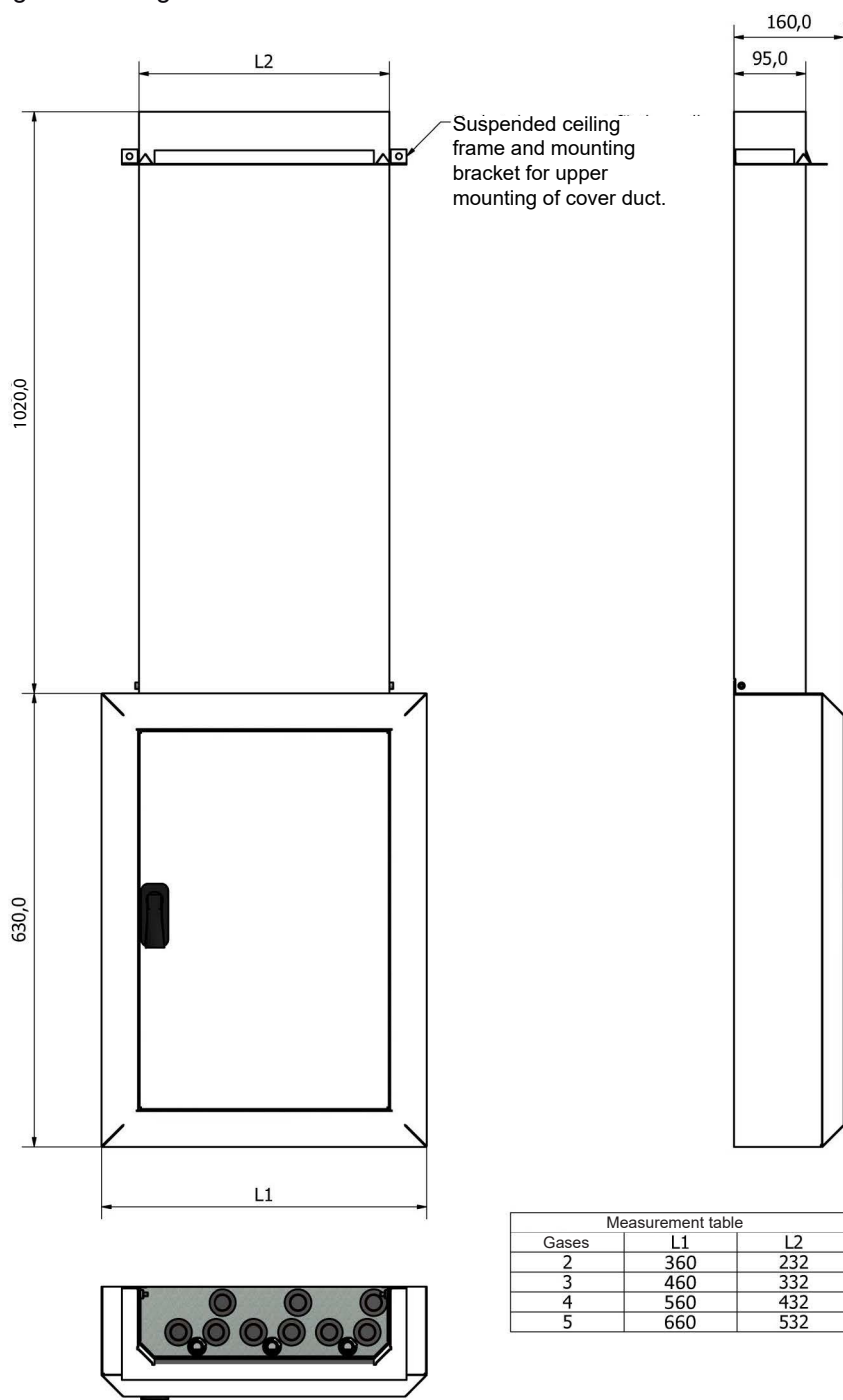
Measured nail protection

Gases	L3
2	242
3	342
4	442
5	542



Surface mounting

The length of the duct corresponds to a unit mounted on the center height (center of valve handle of main shut-off valve) 1500 mm above the floor and with a standard height for ceilings 2700 mm.



Note

- The installer must have required product knowledge and expertise in shield gas brazing, and have been certified for brazing in accordance to EN 13585. Brazing must be performed with shield gas, without flux and with silver phosphorous copper solder with a minimum of 5% silver content, article number QMT 7200812.
- The valve housings in the pressure monitor must not be exposed to temperatures exceeding 100°C. If the delivered pipe length is not cut, shielding gas soldering may take place without removing the valve body. If the pipes have been cut, the valve must be disassembled and solder spacer (QMT 7600XX) used during soldering operation.
- The installer must ensure that the correct gas and function are achieved through safety testing and that the system complies with EN ISO 7396-1 and national standard SIS HB 370.
- The system must be safety inspected before commissioning in accordance with current standards.

Operation & maintenance instructions

See separate Operation & Maintenance

Warning

The use of shielding gas in medical gas systems must be carefully planned and separated from the rest of the system. After soldering and testing is completed, the system is flushed with the medical gas (= drug) to be contained in the system, to prevent personal injury. See SIS HB 370 and the hospital's instructions. Valves must not be exposed to temperatures exceeding 100°C, either during installation or operation. Should this happen or suspect that this has happened, the valve must be replaced and the system cleaned. In case of fire or after fire, the system must be decontaminated in the affected parts. Do not install the product if the sealing plugs are removed, as it may be contaminated and unsafe to install in medical gas systems.