

Dräger MSI P7 Pressure, Leak and Volume Measurement

The Dräger MSI P7 is an extremely useful device designed to inspect gas or air-filled installations. The system performs pressure measurements, a direct tightness test (an integrated pump automatically applies test pressures) and a leak rate test. All of these tests are simply carried out without the need to fill external containers with gas, and can even be performed without knowing the volume of the installation. Additionally the Dräger MSI P7 can be equipped with temperature and absolute pressure measurement capabilities, as an option. The Dräger MSI P7 is TÜV approved and certified by the German association of gas and water installation companies (DVGW).



Leak rate measurement of operational gas installations according to common safety regulations

The Dräger MSI leak comparison method is simple and quick for the user to carry out. It just requires the connection of a single flexible tube to the gas pipe. No need to begin to dismantle the meter or to connect a separate gas filled container, the volume of the system does not even need to be known. After a short stabilisation period for temperature equalisation, the measuring instrument instructs the user to close the main supply valve (just behind the gas meter). The measuring instrument detects the pressure in the gas pipe and opens an internal comparison leak automatically. The leak rate and the examined volume of the gas pipe is calculated from the measured pressure changes, with and without the comparison leak. The results are displayed in clear text and may be printed or stored with date and time. Stored values can be converted to a printed measurement report using a standard PC.

Leak testing of new gas installations according to common safety regulations

With the Dräger MSI P7 leak testing of new installations is also a simple and straightforward task. To do this the operator connects the gas pipe to the Dräger MSI P7 with a single flexible tube. The test pressure of (slightly above) 110 mbar is automatically generated by the instrument. After temperature equalisation, the pressure within the gas pipe is measured for 10 minutes, without the necessity to open or close any valves. At the end of the test, the results are displayed and can be output, using a PC, to a printed measurement report which includes a pressure-time diagram.

Load test of new gas installations according to common safety regulations

The pressure in the gas installation has to be set to (slightly above) 1 bar. After temperature equalisation, the pressure within the gas pipe is measured for 10 minutes. At the end of the test, the results are displayed and can be output, using a PC, to a printed measurement report which includes a pressure-time diagram.



Dräger MSI P7:
Ideal for any given measurement requirement within gas installations.

TECHNICAL DATA

Pressure Measurements

Low pressure	Range	- 100 ... + 100 Pa
	Resolution	0.1 Pa
	Accuracy	< 5 % of MV or < 1 Pascal
Pressure I	Range	10 ... + 100 mbar
	Resolution	0.01 mbar
	Accuracy	< 3 % of MV or < 0.5 mbar
Pressure II	Range	- 15 ... + 150 mbar
	Resolution	0.1 mbar
	Accuracy	< 5 % of MV or < 0.5 mbar

Load test

High pressure	Range	- 200 ... + 2000 mbar
	Resolution	1 mbar
	Accuracy	< 5 % of MV or < 10 mbar

Leak test

Pump capacity	0.1 litre/min. to 0.5 litre/min. (pressure depending)
Test pressure	110.1 to 119.9 mbar, generated by internal pump
Resolution	0.1 mbar
Stabilisation period	2 to 10 min (pressure depending)
Measurement period	10 min.

Leak Rate Measurement

Leak rate	Range	0 to 10 litre/h
	Resolution	0.01 litre/h
Volume	Range	1 to 300 litre
	Resolution	0.1 litre
Gas types	Natural gas, propane, air	

General

Humidity	10 % to 90 %RF not condensing
Barometric press.	800 hPa to 1100 hPa
Operating temp.	+ 5 °C to + 40 °C
Storage temp.	- 20 °C to + 50 °C
Dimensions	145 x 195 x 75 mm (W x H x D)
Weight	ca. 1,000 g
TÜV approved, certified by German association of gas and water installation (DVGW)	

Approvals

*MV = Messwert

ORDER INFORMATION

See price list

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