

DATA SHEET



# PORTABLE MANOMETERS WITH VERTICAL LIQUID COLUMN



## KM series

### Pressure / Depression

The KM vertical liquid column portable manometer, developed and manufactured by Sauermann, measures low pressures in gas networks.



Easy to carry



"U"- shaped column for pressure and depression measurement



Direct read-off by moving the graduated slide strip



Safety valves actuation for momentaneous overshooting of the scale

## Measuring range

KM 45	Measuring range	Resolution
	0 - 45 mbar	0.2 mbar

## Dimensions

KM 45	Dimensions (height x width x thickness)	Weight (with accessories)
	306 x 50 x 20 mm	550 g

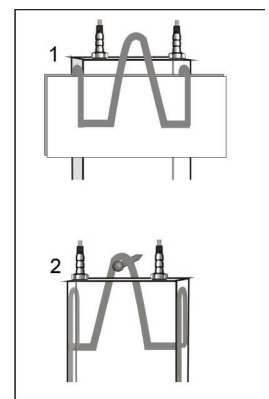
Fitted with valve connectors and mounting hook. Supplied with connection sleeves, a bottle of VOLT 15 liquid and carrying case.

## General features

Recommended range of use	From +5 to +30 °C
Possible range of use	From -30 to +60 °C
Maximum static pressure	8 bars
Manometer body	Transparent 15 mm thick Altuglas
Liquid column	Ø 4 mm bored into the solid block
Graduated slide strip	Altuglas transparent
Zero adjustment	By moving the graduated slide strip. Fixed via milled, nickel-plated brass screw
Manometric liquid	VOLT 1S, density 1.86 at 20 °C
Connection	On Ø 6.2 mm nickel-plated brass valve connectors, with 1m long neoprene tube fitted with dedicated end-pieces for gas equipment

## Mounting

1. **Dismount one of the 2 connectors** using a n° 12 spanner and slacken the milled head of the other connector by one turn.
2. **Check beforehand that the slide strip is at its lowest level.**
3. **Pour the liquid** in the column using the spout.
4. **Do not overfill. Never go beyond the NL line at the middle of the slide strip.**
5. **Remount the connector** and screw the milled head of the other connector back down.



## Operation

1. **Hang up** the manometer vertically by the mounting hook or hold manually.
2. **Open to the air** by slackening the milled heads of the 2 valves (one turn is sufficient).
3. **Push one of the ends of the connecting tube** firmly onto the right-hand valve. **Push the other end of the tube** onto the pressure point of the pipeline or the instrument which has to be checked.
4. **The liquid, under gas pressure, decreases** in the right column and rises in the left one. **If the gas flow occurs too hard and plays the safety valve**, repeat the operation by pinching the connecting tube more or less strongly to admit the gas more slowly (if the safety valve is working again, it is because the pressure control exceeds the measuring range of the manometers).
5. **When the liquid has settled, slide the graduated strip** so as to bring the zero mark opposite the right-hand tube's liquid level (lowest level).
6. **The graduation corresponding to the height of the liquid** in the left-hand tube indicates the exact gas pressure.
7. **Close off the 2 valves** securely after operation.



Only VOLT1S liquid will ensure precise measurement (slide scale graduation corresponding to the density of this liquid).  
Maximum static pressure: 8 bars