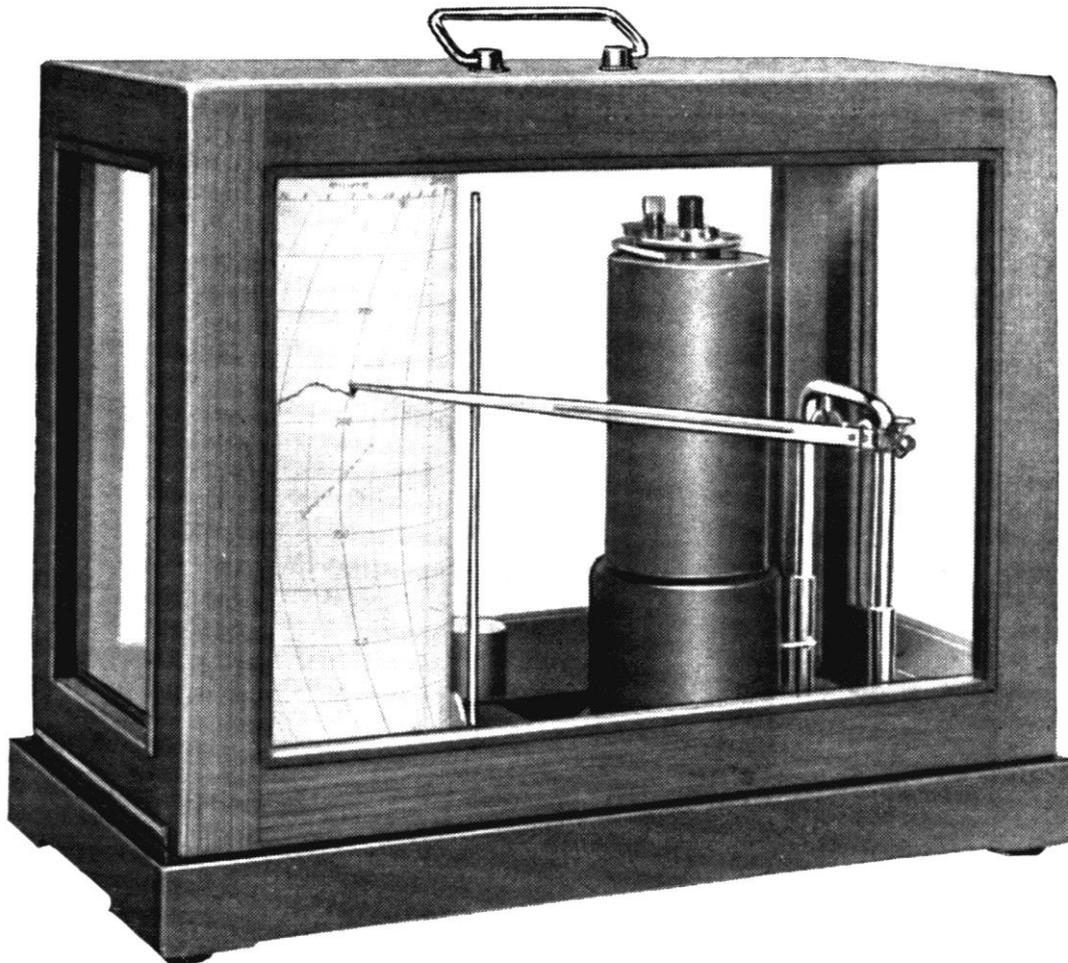


Micro-Barographs 78m and 78mm



The Microbarograph 78m (resp. 78mm) is a highly sensitive measuring instrument for especially sensible and precise recording of atmospheric pressure. Owing to the great height of pen travel of 3.8 mm, for every hPa (mbar) of alteration in pressure, also slightest variations of pressure and fine structures are well to be made out and read with a accuracy of ± 0.1 hPa (mbar)

As model **78m** the measuring system is mounted on a solid light-metal socle, on which the glazed protective fine wood casing is resting. The microbarograph model **78mm** has a metal housing.

As with the types described in leaflet 113,0E, the motions of the set of aneroid cells are, mechanically, transmitted to the pen arm by means of a lever system, with a interconnected bimetallic system effecting perfect temperature compensation, with in the entire measuring range.

The set of aneroid cells consists of fifteen single cells which, to a high degree, are free from ageing and hysteresis, because best-suited materials are chosen, only, and owing to a special thermic treatment. Frictional resistances of the transmitting system has been reduced to a minimum by most careful manufacture of the bearing beds and by arranging the aneroid cells in a hanging kind of way. A small, electro-magnetically actuating vibrator generates a slight, hardly sensible vibration of the housing and the measuring system, which contributes to a further reduction in bearing friction, and to an increase in accuracy and sensibility of pen adjustment.

The aneroid cells are protected against dust and damage by a metal tube.

By means of a zero setting screw, the barometer reading may be corrected in known manner, comparing it with a mercury barometer, for instance. By actuation the push button on right lateral face of the socle, time marks may be applied in form of short deviations of the pen.

The Microbarograph 78m (resp. 78mm) is supplied in 12 types for different site of installation between -1200 and +4600 meters. Five ranges of 60 hPa each one displaced from the following by 20 hPa, may be covered without new calibration, so that the total range comprises 140 hPa.

The adjustment of the five ranges for the place of installation is effected in a way, which is as quick and easy, as it is sensitive, by turning the setting screw arranged above the set of aneroid cells which is equipped with a correspondingly numbered, divisioned disc arrangement.

If occasionally occurs extrema of pressure variation the customer can use the above described device to select the suitable range of 60 hPa (mbar) within the total range of 140 hPa (mbar)

The drum is equipped with a weekly or daily mechanical clockwork. On special customers request exchange gear wheels can be delivered from the factory.

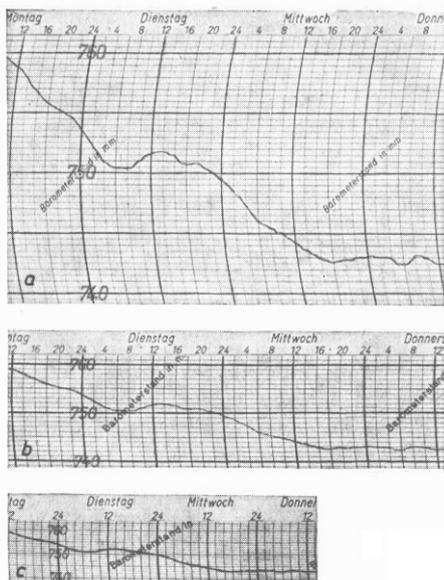


Fig.1 Reduced reproduction of three original recordings of same time

- a) Microbarograph 78m
- b) Large Barograph 78b
- c) Standard Barograph 78a

No.	Designation	Range hPa (mbar)	Recording height in mm for 1 hPa
78m	Micro Barograph	60 *	3.8
78b	Large Barograph	105	1.5
78a	Normal Barograph	105	0.75

* If occasionally occurs extrema of pressure variation the customer can use the above described device to select the suitable range of 66 hPa (mbar) within the total range of 140 hPa (mbar)

Specifications

range	:	60 hPa (mbar), adjustable within 140 hPa (mbar)
drum	:	133 mm dia x 259 mm effective height
chart size	:	261 x 428 mm (h x w)
height of recording range	:	247.5 mm
pen travel	:	5 mm for 1,33 hPa (mbar)
time of rotation	:	1 week or 1 day reversible by exchange of gear wheel (optionally)
paperfeed	:	16 mm/h resp. 57 mm/day
dimensiones model 78m	:	450 x 230 x 385 mm
weight model 78m	:	10.5 kg

Version- No.*	Height above sea level in m	Range adjustable between	No. of chart division in hPa (mbar)	
			hPa (mbar)	1 week 1 day
78 m 03	-1200...-650	1055...1195	326	327
78 m 02	-750...-200	1005...1145		
78 m 01	-450...+100	965...1105		
78 m 1	0...+600	910...1050		
78 m 2	+350...+950	870...1010		
78 m 3	+800...+1450	815...955		
78 m 4	+1150...+1800	775...915		
78 m 5	+1650...+2350	725...865		
78 m 6	+2100...+2800	685...825		
78 m 7	+2650...+3400	630...770		
78 m 8	+3100...+3900	590...730		
78 m 9	+3700...+4600	535...675		

*for version in metal housing an "m" is attached on the No.

Accessories (no extra charge):

- 1 set of charts consist of 54 sheets for weekly or 100 sheets for daily rotation
- 1 spare metal pen and 1 bottle of special ink or alternative 1 fibre pen
- 1 power supply for vibrator

When ordering, please indicate altitude of site of installation, selected drum rotation and type of housing.

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