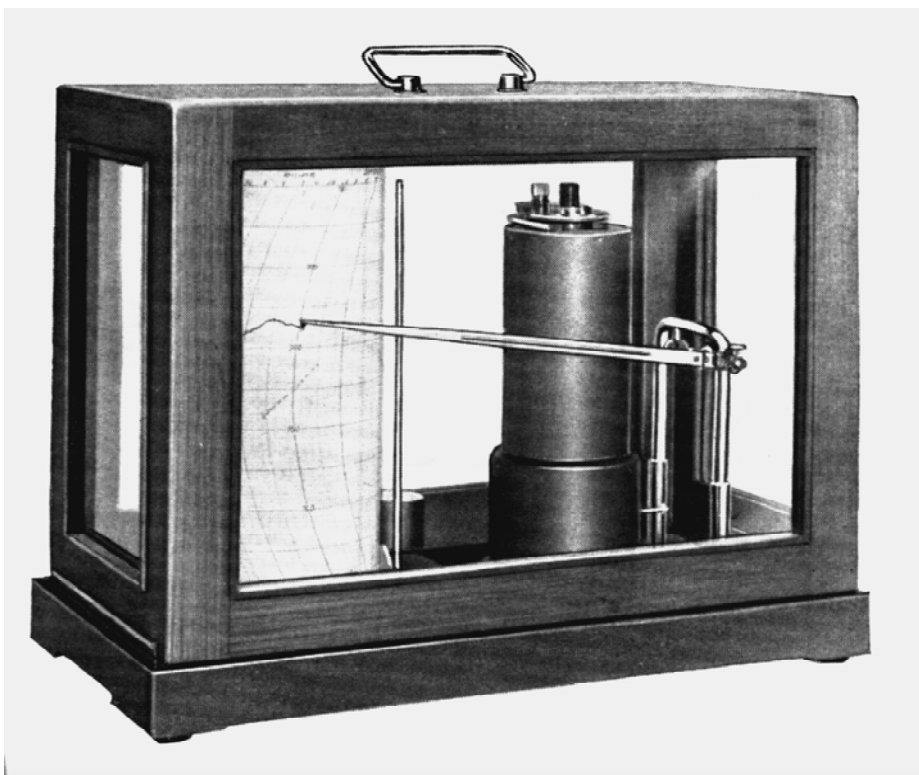


**113,1E**

## **Micro-Barograph**



Microbarograph 78m is a highly sensitive measuring instrument for especially sensible and precise recording of atmospheric pressure. Owing to the great height of pen travel of 5mm, for every torr of alteration in pressure, also slightest variations of pressure and fine structures are well to be made out and read with an accuracy of  $\pm 0,1$  torr.

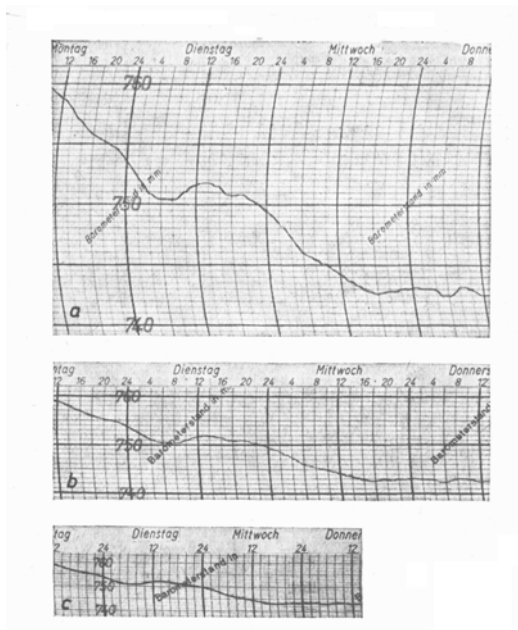
As with the types described in leaflet 113,0E, the motions of the set of aneroid cells are, mechanically, transmitted to the pen arm by means of a lever system, with a interconnected bimetallic system effecting perfect temperature compensation, with in the entire measuring range.

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, which is fed by 6 to 8 volts from a small transformer, generates a slight, hardly sensible vibration of the mount 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 measuring system is mounted on a solid light-metal socle, on which the glazed protective rare wood casing is resting. 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. Actuating the push button on tight lateral face of the socle, time marks may be applied in form of short deviations of the pen.

With the chosen scale of recording (1 torr = 5mm), and a pen travel of 250 mm, results a range of 50 torr, which may be covered by one single trace of pen travel. The barograph is supplied in 12 types, for twelve continuous sea levels of the site of installation; i. e., between -1200 and +4600 meters. Seven ranges each one displaced from the following by 10 torr, may be covered without readjustment, within everyone of the twelve levels (see table on page 4) so that the total range comprises 110 torr.



The adjustment 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, to this end, is equipped with a correspondingly numbered, divided disc arrangement. This same device serves, also, to cover occasional maxima of pressure, exceeding 50 torr.

The drum is equipped with a reversible clockwork. By actuating a switch lever, a period of rotation of one day or one week may be selected, according to choice, without having to exchange gear wheels.

**Fig.1** Reduced reproduction of three original recordings of same time  
a) Microbarograph 78m  
b) Large Barograph 78b  
c) Standard Barograph 78a

## Specifications

<b>range</b>	:	50 torr (66 mb), adjustable within 110 torr (146 mb)
<b>drum</b>	:	133 mm dia x 259 mm effective height
<b>pen travel</b>	:	5 mm for 1 torr (1,33 mb)
<b>time of rotation</b>	:	1 day and 1 week, reversible
<b>paperfeed</b>	:	16 mm/h resp. 57 mm/day
<b>dimensiones</b>	:	450 x 230 x 385 mm
<b>weight</b>	:	10,5 kg

No.	Height above sea level m	Range adjustable between		No. of chart			
		torr	mb	division in torr		division in mb	
				1 week	1 day	1 week	1 day
<b>78 m 03</b>	-1200...-650	790...900	1052...1198	324	325	326	327
<b>78 m 02</b>	-750...-200	750...860	1002...1148				
<b>78 m 01</b>	-450...+100	720...830	962...1108				
<b>78 m 1</b>	0...+600	680...790	907...1053				
<b>78 m 2</b>	+350...+950	650...760	867...1013				
<b>78 m 3</b>	+800...+1450	610...720	812...958				
<b>78 m 4</b>	+1150...+1800	580...960	772...918				
<b>78 m 5</b>	+1650...+2350	540...650	722...868				
<b>78 m 6</b>	+2100...+2800	510...620	682...828				
<b>78 m 7</b>	+2650...+3400	470...580	627...773				
<b>78 m 8</b>	+3100...+3900	440...550	587...733				
<b>78 m 9</b>	+3700...+4600	400...510	532...678				

## Accessories (no extra charge):

1 set of charts consist of 54 sheets for weekly or  
100 sheets for daily rotation  
1 spare pen  
1 bottle of special ink  
1 small transformer 220/8 volts a. c.

When ordering, please indicate altitude of site of installation and number of chart requested.

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