

Table 2.

Basic Parameters of Electric Sensors
for High-pressure Measurements(averaged values in the temperature range 15-25°C and in the
pressure range up to 2000 atm)

Electric Sensor	α	$\alpha \kappa$	$\beta \kappa$	$\gamma \kappa$	$Z \kappa$
		$\times 10^{-6}$ [atm ⁻¹]	$\times 10^{-5}$ [deg ⁻¹]	[atm·deg ⁻¹]	[deg·atm ⁻²]
1 German manganin	R_G	2.1	-0.4	-1.9	-11
2 Russian manganin [†]	R_R	2.4	0.5	2.08	11.5
3 German-Russian manganin [†]	R_{1+2}	2.25	0.1	0.44	51.1
4 Te	R_{Te}	-360	-1700	47	-76
5 InSb	R_{InSb}	300	-1200	-40	-75
6 Te(4) - InSb(5) [*]	R	-330	-250	7.5	-440
7 Te (selected crystal)	R_{Te}	-100	100	-10	100
8 InSb (selected crystal)	R_{InSb}	200	-900	-45	-44.4
9 Te(7) + InSb(8) ^{**}	R_{7+8}	-100	70	-7.0	142
10 Planar transistor $U_{CE} = \text{const.}$ $U_{BE} = \text{const.}$	I_C	67	7200	1074	0.62
11 Planar transistor $U_{CE} = \text{const.}$ $I_C = \text{const.}$	U_{BE}	2.3	-240	-1043	-0.022

[†]After heat treatment.[†]As in Table 1, item 6.^{*}In the neighbouring branches of a Wheatstone bridge.^{**}As in Table 1, item 9.

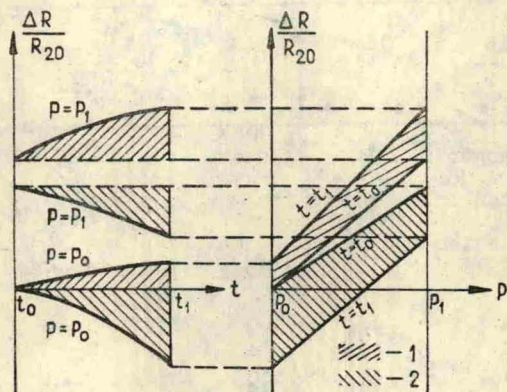


Fig. 1

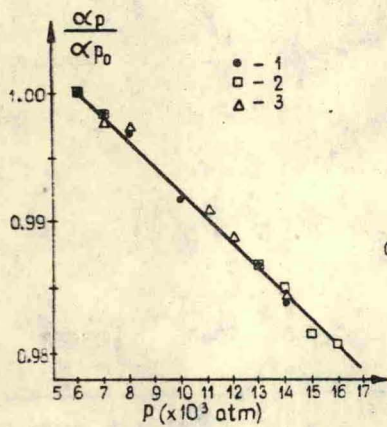


Fig. 2

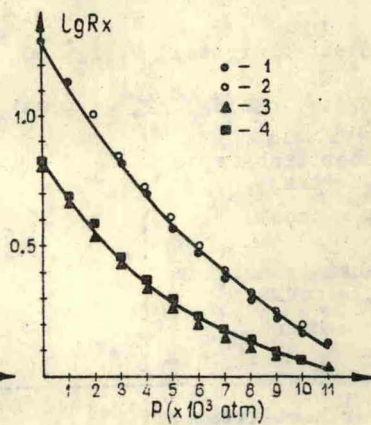


Fig. 3