

PTSV platinum vibration-resistant reference resistance thermometers



DESIGNED FOR

PTSV platinum vibration-proof reference resistance thermometers (hereafter thermometers) are designed for verification of temperature measuring instruments in accordance with State verification schedule for temperature measuring instruments (GOST 8.558-2009) and for use as a temperature measuring instrument of improved accuracy in various industries and scientific research.

Thermometers are portable devices, composed of primary thermal transducer - a sensitive element of a platinum thermometer (CHEPT) and a protective housing.

The principle of operation of thermometers is to use the temperature dependence of platinum electrical resistance.

Thermometer modification	Index	Total length, mm	Length of immersed part, mm	Diameter of head, mm	Diameter of immersed part, mm
PTSV-1	MGFK.405111.001	595 ± 5	550 ± 5	22 ± 0,5	6 ± 0,2
	MGFK.405111.001-01	575 ± 5	530 ± 5	22 ± 0,5	6 ± 0,2
PTSV-2	MGFK.405111.002	74 ± 1	50 ± 1	6 ± 0,2	4 ± 0,2
PTSV-2K	MGFK.405111.006	From 50 to 130 (±1)	50 ± 1	6 ± 0,2	4 ± 0,2
PTSV-3	MGFK.405111.003	626 ± 5	550 ± 5	22 ± 0,5	6 ± 0,2
	MGFK.405111.003-01	426 ± 2	350 ± 2	22 ± 0,5	6 ± 0,2
PTSV-4	MGFK.405111.004	629 ± 5	550 ± 5	22 ± 0,5	6 ± 0,2
PTSV-5	MGFK.405111.005	629 ± 5	550 ± 5	22 ± 0,5	6 ± 0,2
	MGFK.405111.005-01	426 ± 2	350 ± 2	22 ± 0,5	6 ± 0,2

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Modification and thermometer version	Category	Range of temperature measurement, °C	W_{Ga} , not less than	W_{Hg} , not more than	W_{100} , not less than *)
PTSV-1-2	2	Minus 50 ...450	1,11795	0,844235	1,3924
PTSV-1-3	3	Minus 50 ...450	1,11795	0,844235	1,3924
PTSV-2-1	1	Minus 200 ...100	1,11795	0,844235	1,3924
PTSV-2K-1	1	Minus 60 ...60	1,11795	0,844235	1,3924
PTSV-2-2	2	Minus 200 ...200	1,11795	0,844235	1,3924
PTSV-2K-2	2	Minus 200 ...200	1,11795; 1,11750	0,844235; 0,844990	1,3924; 1,3908
PTSV-2K-2	2	Minus 60 ...60	-	-	1,3908; 1,385
PTSV-2-3	3	Minus 200 ...200	1,11750	0,844990	1,3908
PTSV-2K-3	3	Minus 200 ...200	1,11750	0,844990	1,3908
PTSV-2K-3	3	Minus 200 ...200	-	-	1,385
PTSV-3-3	3	Minus 50 ...500	1,11795	0,844235	1,3924
PTSV-4-2	2	Minus 50 ... 232	1,11795	0,844235	1,3924
PTSV-4-3	3	Minus 50 ... 232	1,11795	0,844235	1,3924
PTSV-5-3	3	Minus 50 ... 250	1,11750	0,844990	1,3908

W_{Ga} - relative resistivity at gallium melting point

W_{Hg} - relative resistivity at mercury triple point temperature

W_{100} - relative resistivity at temperature of 100 °C