

## Pt100-Simulator

## hsm-p, hsm-p-2

### General Function

The Pt100 simulator hsm-p and hsm-p-2 serves for checking and calibrating measurement and control instrumentation having a Pt100 input. The rotary selector enables a total of 23 temperature values to be simulated in the range -100...+600°C (-20...+200°C on hsm-p-2), a fixed resistance being incorporated for each temperature value. By means of the trimmer integrated the temperature can be continuously varied in the range -40...+200°C in the switch position "var", thus enabling e. g. min/max setting and switchpoints of digital displays to be easily checked.

### Features

- Pt100 simulation with 23 fixed temperature values
- two temperature ranges -20...+200°C and -100...+600°C
- special range on request
- continuously variable temperature simulation by trimmer
- handy, lightweight instrument
- easy to use

### Optionen

- leather bag htt-sm
- Pt1000-simulator hsm-p-20
- Special ranges and other values in steps of 5°C

### Connecting Instructions

You must ensure that a good electrical connection is provided between the cable and the terminals when connecting the simulator, otherwise accuracy of measurement will be detrimented. In two-wire circuiting take care that the length of the cable connecting the Pt100 simulator hsm-p is the same as that of the being simulated (same length and same cross-section). Otherwise the measurement will be falsified by the change in the cable resistance.



Pt100-Simulator hsm-p-2

### Soecification

Style	case	aluminum case,108x65x38mm
	clamp	4x 4mm-Clamp
Ambient	operating temp.	0...+50°C
	shelf temp.	-20...+70°C
	humidity	0...95% no condensate
Temperature range	hsm-p	-100...+600°C
	hsm-p-2	-20...+200°C
Trimmer range		approx. -40...+200°C in position "var"
Resistors	accuracy	±0,05%
	temp. drift	25ppm/K
	load rating	0,5W max.
Switch	contact	silber, gold flashed
	life	>25000 switching cycles

### Resistance Table ( IEC 751)

hsm-p		hsm-p-2	
temperature [°C]	resistance [Ω]	temperature [°C]	resistance [Ω]
-100	60,25	-20	92,16
-50	80,31	-10	96,09
-30	88,22	0	100,00
-20	92,16	+10	103,90
-10	96,09	+20	107,79
0	100,00	+30	111,67
+10	103,90	+40	115,54
+20	107,79	+50	119,40
+30	111,67	+60	123,24
+40	115,54	+70	127,07
+50	119,40	+80	130,89
+60	123,24	+90	134,70
+70	127,07	+100	138,50
+80	130,89	+110	142,29
+90	134,70	+120	146,06
+100	138,50	+130	149,82
+110	142,29	+140	153,58
+120	146,06	+150	157,31
+130	149,82	+160	161,04
+140	153,58	+170	164,76
+150	157,31	+180	168,46
+160	161,04	+190	172,16
+170	164,76	+200	175,84
+180	168,46	var	82...182
+190	172,16		
+200	175,84		
+250	194,07		
+300	212,02		
+400	247,04		
+600	313,59		
var	82...182		