



Also available in black.
Please specify separately.

Digital measuring instruments

4-digit, 96 x 48 mm
for temperature and resistance

Type:
DSM 96 Pt / W



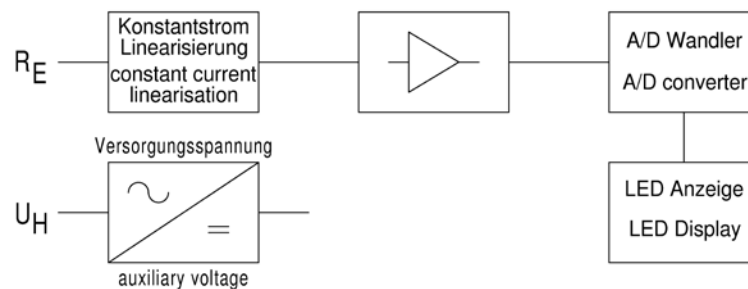
Application

The digital measuring instrument DSM 96 Pt is used for measuring the temperature in connection with a resistance thermometer Pt 100. Type DSM 96 W is designed for measuring resistances.



Function

The measurand is converted into a direct voltage in an evaluation circuit and fed to a 4-digit A/D converter. The conversion is made following the „Dual Slope“ principle. The values are indicated by 7-segment low-power LED displays. In case of line breakage of the Pt 100, the LED flashes. The measurement may be done in two-wire or three-wire technique. A hold function may be achieved by connecting two ports. The zero point compensation is done automatically. Decimal points, dark switching of the last digit, zero point as well as display range may be changed after removing the front panel.



Technical data

Types	DSM 96 Pt / W	
Display	LED seven-segment low-power, height 13mm, red; 4-digit	
Decimal points	adjustable on front panel using DIP switch	
Dark switching	of last digit, on front panel using DIP switch	
Sensor current	max. 3 mA	
Sensor voltage	max. 4 V	
Two-wire technique	max. input lead resistance 10 Ω (adjustment using „ZERO“ -potentiom.)	
Three-wire technique	max. 100 Ω input lead resistance symmetrical	
Polarity	by negative (-) display	
Overflow	flashing LED	
Resolution	maximum display +/- 9999 digit	
Sampling rate	approx. 3 measurement per second	
Measuring principle	Dual-Slope integration	
Accuracy	$\pm 0,2\%$, ± 2 Digit of measuring range	
Hold function	by connecting terminals 1 + 4	
Temperature range	-15 °C to +20 °C to +30 °C to +55 °C	
Temperature influence	< 0,05 % at 10 K	
Test voltage	4 kV between measuring input and auxiliary voltage	
IP code	housing IP 50, terminals IP 10	
Connection	plug-in 12-pin terminal block, screw terminal max. 2,5 mm ²	
Auxiliary voltage	Standard	230 V AC $\pm 20\%$, 45-65 Hz, 3 VA
	Options	24 V DC, -15 % to +25 %, 2,5 W 6-30 V AC + DC or 36-265 V AC + DC, 2,5 VA



Types and variants

Types	DSM 96 Pt, DSM 96 W	
Front panel (mm)	96 x 48	
Housing (mm)	90 x 42,5	
Cut-out (mm)	92 x 45	
Installation depth (mm)	118	
weight (kg)	0,35	
DSM 96 Pt 4-stellig	Messbereich	Anzeige
Temperaturmessung Pt 100	-60 bis +850 °C	-60,0 bis +850,0 °C
DSM 96 W4-digit	Measuring range	Display
Resistance measurement		
3-wire circuit	an arbitrary value between 0-100 Ω to 0-10 kΩ	1000 to 9999
2-wire circuit	0-100 Ω	1000 to 9999
	0-1 kΩ	1000 to 9999
	0-10 kΩ	1000 to 9999
Surcharges	Outside of standard series	
	Different measuring unit (e.g. mm/h)	
	Auxiliary voltage	24 V DC
		6-30 V AC + DC
		36-265 V AC + DC

In case of resistance measurement: Please specify 2-wire or 3-wire circuit in order!



Connection

