



Technical Data Sheet

Beta 90T



Beta 90T is the digital panel meter which have been specially designed for the temperature measurement

Special Features

- Pt 100 temperature version
- Scaling adjustable over a wide range
- Versions available for current or voltage inputs (DC and AC), or Pt 100 temperature sensors

Application

Beta 90T is the digital panel meter 48 x 96 mm size have been designed for industrial applications, which frequently require precise, on-site adjustment of the display range. It is basically used for temperature measurement.

Description

T	Temperature measurement with Pt100,2 2 ranges
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4 ranges for power supply are available

Technical Specifications

Accuracy

Measuring Accuracy DC	< 0.2% + 1 digit
Temperature coefficient	100 ppm/°C, plus
Zero point drift	100 ppm/°C
Range adjustment span	± 5%
Max. Allowable line resistance	
2L	10 W
3L	< 50 W
4L	< 50 W

Digital input HOLD [optional] "0" (not available for Versions AC, or T)

Display

Display range	1999
Decimal point position	selectable by rear jumper position
Negative display indication	"_"
Digit height	14 mm / 7-segment digits
Overload indication	Last 3 digits blank

Sundry

Connections	plug-in screw terminal block
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Power supply

Direct voltage DC	24V + 15%	4W approx.
	24V + 10% -15%	4W approx.
Alternating voltage AC	110V + 10% - 15%	4W approx.
	230V + 10% - 15%	4W approx.

Ambient conditions

Operating temperature	0°C to 50 °C
Storage temperature	-40°C to 80 °C

Applicable Regulations and Standards

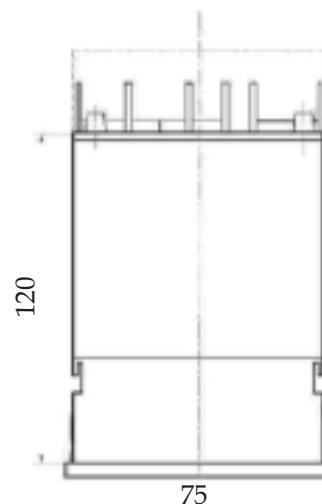
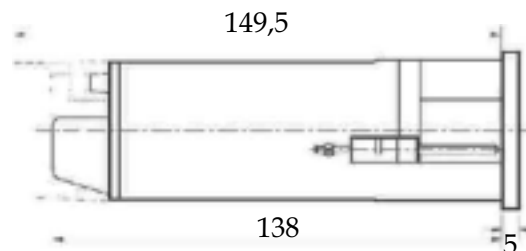
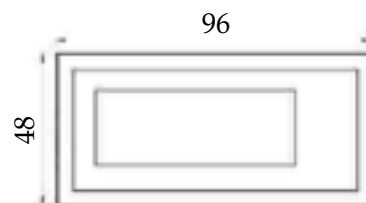
Protection class	IP 20 to IEC EN 60 529
front	IP 50 (IP 54 on request)
Climatic class	Class 2 VDE/DIN 3540
Safety class	II to IEC 348 / VDE 0411
Device safety	to IEC EN 61 010
EMC immunity	DIN EN 61 000-4-1 to 4
EMC radiated interference	DIN EN 50 081 class B

Technical Specifications

Dimensions and Weights

Bezel size	96 mm x 48 mm DIN 43 718
Panel cut-out	92 ^{+0.8} mm x 43.5 ^{+0.6} mm
Overall depth	138 mm
Weight	500 g. approx.

Design and installation

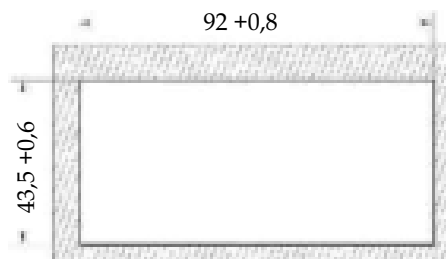


Measuring ranges

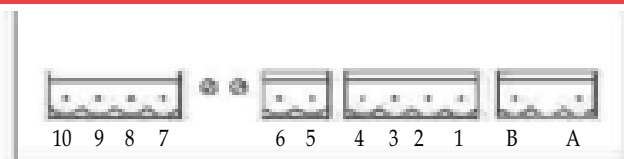
[Max. Overload 120% of full-scale range value]

Version	T
	$^{\circ}\text{C}$ or $^{\circ}\text{F}$
Voltage	
Input current < 300 μA	
Current	
Voltage drop < 600 mV	
Pt 100 sensors	-100...850 $^{\circ}\text{C}$
	-199.9...199.9 $^{\circ}\text{C}$
	2-, 3- or 4- wire
Range selection by	DIP switch

Installation cut-out



Connection

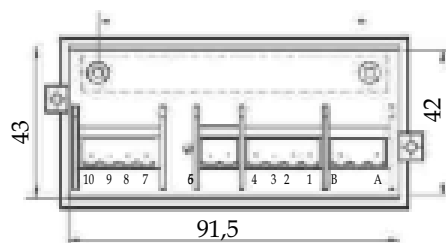


Decimal point

Measuring
input

Power
supply

Mounting Position



Ordering Information

Product Code	BT91-	X	X	XX	X	X	000000
Size	48X96	E					
Display Size	Temperature Meter T	T					
Input Range	0-2mA			01			
	0-20mA			02			
	4-20mA			04			
	0-200mA			03			
	0-60mV			0A			
	0-75mV			0B			
	0-150mV			0C			
	0-2V			1A			
	0-20V			1C			
	0-200V			1D			
	0-500V			1E			
	-100-850°C 2W			T1			
	-199.9-199.9°C 2W			T2			
	-100-850°C 3W			T3			
	-199.9-199.9°C 3W			T4			
	-100-850°C 4W			T5			
-199.9-199.9°C 4W			T6				
Power Supply	24A					1	
	110A					2	
	115A					3	
	120A					4	
	230A					6	
	12D					8	
	24D					9	
	48D					A	
	110D					B	
	125D					C	
	150D					D	
	220D					E	
	45-300U					G	
IP Protection	W/O IP Protection						0
	With IP Protection						1



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