



## Technical Data Sheet

# *Beta 90A / 90B*



*Beta 90A/90B* is the digital panel meter designed for industrial applications, which frequently require precise, onsite adjustment of the display range.

### Special Features

- Available in size 48 x 24 mm
- Compact digital display units in a 48 mm x 24 mm DIN standard snap-in housing.
- The low power consumption and small overall size of these DPMs suits high-density panel applications.

## Application

**Beta 90A** The digital panel meter has been designed for industrial applications, which frequently require precise, onsite adjustment of the display range. It can be used in industrial automation and for laboratory uses. It provides cost-effective solution for virtually all switchboard instruments.

## Description

The **90B** 24 x 48 is a digital panel meter for connection of measurement for voltage (0 ... 0.2 V, 0 ... 2 V or 0 ... 20 V) with 3 ranges.

The **90A** 24 x 48 is a digital panel meter for connection of measurement for voltage (10 V) and current (1mA, 20 mA or 4 ... 20 mA) with 4 ranges.

The setting of measuring range and display range is made by positioning DIP switches. The chosen input range is user adjustable from 10 % to 100 % of the full scale value by potentiometer on the rear of the meter.

## Technical Specifications

Display	
Display range	1999
Decimal point position	programmable, settable by DIP switch
Negative display indication	"-"
Digit height	8 mm / 7-segment digits
Overload indication	Last 3 digits blank
Setting time	< 1s (0...99%)

Measuring ranges		
	Version D	Version F
Direct voltage	0 ... 10 V	0 ... 0.2 V
(Input current < 100 mA)		0 ... 2 V
		0 ... 20 V
Direct current	0 ... 1 mA	
(Voltage drop < 200 mV)	0 ... 20 mA 4 ... 20 mA	
Measuring accuracy	< 0.2 % + 1 digit	
0 Temperature coefficient	100 ppm/ °C, plus	
0 Zero point drift	200 ppm/ °C	
Interference voltage suppression	> 40 dB	
Range adjustment span	from 10% to 100% of range	

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

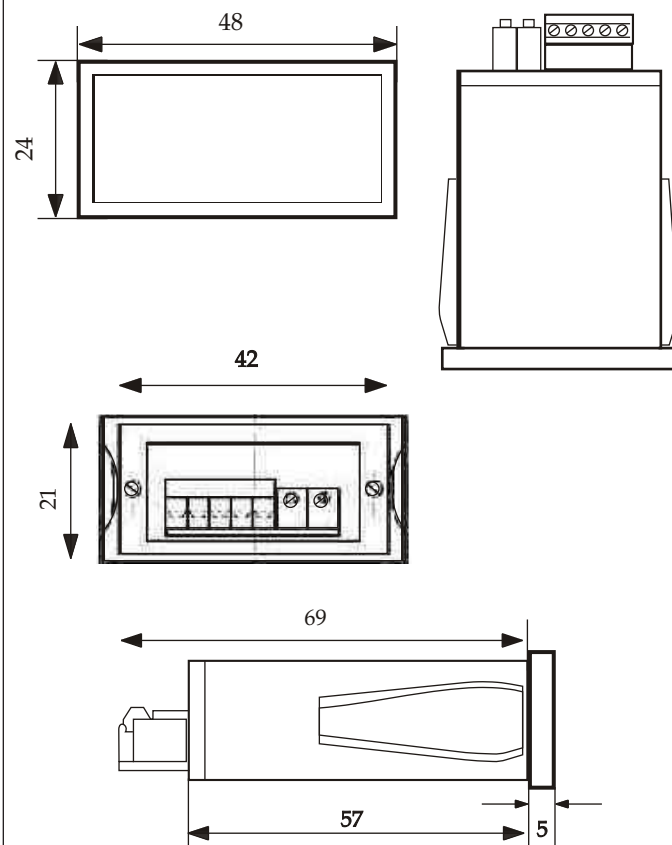
Dimensions & Weights	
Bezel size	48 mm x 24 mm DIN 43 718
Panel cut-out	45 +0.6 mm x 22.2 + 0.3mm
Overall depth	69 mm
Weight	< 50 g.

Power supply	
24 V DC	21 ... 30 V DC, 50 mA approx.

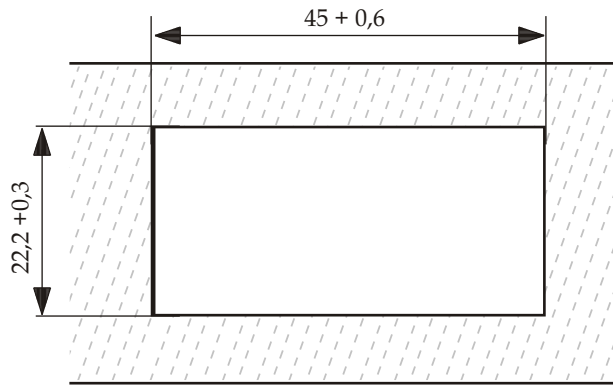
Sundry	
Connections	plug-in screw terminal block

Applicable Regulations and Standards	
Protection class	IP 20 to IEC EN 60 529
front	IP 54 (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

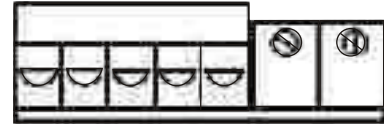
## Design and installation



## Panel cut-out



## Connections



Power supply

Measuring input

## Ordering Information

Product Code	BT90-	X	X	X	XX	X	X	X	0000
Size	24X48	A							
	24X96	C							
	96X96	G							
Display Size	Not Applicable		0						
	14mm		1						
	20mm		2						
Meter Type	MODEL D			1					
	MODEL F			2					
	MODEL S			3					
	MODEL VDC C			4					
	MODEL VDC F			5					
	MODEL ADC B			6					
Input Range	0-1mA				05				
	0-20mA				02				
	4-20mA				04				
	0-200mA				03				
	0-60mV				0A				
	0-75mV				0B				
	0-150mV				0C				
	0-200mV				0D				
	0-2V				1A				
	0-5V				1G				
	0-10V				1B				
	0-12V				1F				
	0-20V				1C				
	0-25V				1H				
	0-100V				1I				
	0-200V				1D				
	0-300V				1K				
	0-500V				1E				
0-1000V				1L					
+/-10mA				07					
Power Supply	5D					J			
	12D					8			
	24D					9			
	48D					A			
	110D					B			
	110A					2			
	230A					6			
	240A					7			
	45-300U					G			
	220D					E			
	120D					K			
	125D					C			
	IP Protection	W/O IP Protection						0	
With IP Protection							1		
Display	NORMAL DISPLAY							0	
	-/+ DISPLAY							1	
	Hz DISPLAY							2	



**Sifam Tinsley Instrumentation Ltd**

1 Warner Drive, Springwood Industrial Estate,  
Braintree, Essex CM7 2YW

Contact No. : +44 (0) 1376 335271

Email: [sales@sifamtinsley.com](mailto:sales@sifamtinsley.com)

[www.sifamtinsley.co.uk](http://www.sifamtinsley.co.uk)