



Technical Data Sheet

Beta 50/60/70



Beta 50/60/70 is a digital panel meter used for the measurement & electrical parameters like volt, millivolt & current. It is mainly used in laboratories

Special Features

- DC Current ranges and DC Voltage ranges
- 4 ½ Digit ultra bright Display
- Highly adaptable DPMs suitable for a wide range of measuring applications
- Versions available for DC Current (mA) and DC voltage (mV & Volts) inputs

Application

Beta 50/60/70 The digital panel meters Digit have been designed for industrial applications, which frequently require precise and on-site adjustment of the display range. It can be used in industrial automation and for laboratory uses.

Technical Specifications

Accuracy	
(DIGIT A DC)	
Measuring Accuracy Current (Voltage drop < 600 mV)	< 0.1% of range + 1 digit.
Temperature coefficient	300 ppm / °C.
Zero point drift	200 ppm / °C.
Range adjustment span	from 10% to 100% of range.

Measuring input	
DC Current input	Terminal 1 (LO -) and 2, 3 (HI +).
Display adjust (with external calibrator)	With zero and span pots.
Decimal point programming	With short links at front side..

DIGIT V DC	
1) milli Volt ranges	
Measuring Accuracy milli volts (Input current < 300uA)	< 0.1% of range + 1 digit.
Temperature coefficient	300 ppm / °C.
Zero point drift	200 ppm / °C.
Range adjustment span	from 10% to 100% of range.
2) Volt ranges	
Measuring Accuracy volts (Input current < 300uA)	< 0.1% of range + 1 digit.
Temperature coefficient	300 ppm / °C.
Zero point drift	200 ppm / °C.
Range adjustment span	from 10% to 100% of range.

Display	
Display range	19999
Decimal point position	Selectable by short links at the rear side of Display.
Negative display indication	"_ "
Digit height	14 mm / 7- segment digits.
Overload indication	Last 4 digits blank. (1)

Sundry	
Connections	Plug-in screw terminal blocks.

Environmental conditions	
Climatic class	Class 2 to VDE / DIN 3540.
Operating temperature	-0 to 55°C.
Storage temperature	-25 to 65°
Humidity	0...95% non condensing
Safety class	II to IEC 348 / VDE 0411.
IP Protection	IEC EN 60 529. For Back : IP 20. Front : IP 50 (IP 54 on request)
Device safety	According to IEC EN 61 010.
High Voltage Test	For AC Aux.: 2 kV AC, 50 Hz for 1 minute. For DC Aux. : 1 kV AC, 50 Hz for 1 minute.
EMC immunity	According to IEC / EN 61 000-4-1 up to 4.
EMC radiated interference	According to IEC / EN 61326 class B.

Applicable Regulations and Standards	
Protection Class Front	IP 20 to IEC EN 60 529 IP 50
Device safety	IEC EN 61 010
EMC immunity	IEC/ EN 61 000-4-1 to 4
EMC radiated interference	IEC/ EN 61326 Class B

Measuring ranges [Max. Overload 120% of full-scale range value]	
Model	Beta 50 DIGIT A DC
DC Current Ranges Available (Voltage drop < 600 mV)	0...20 mA and 4...20 mA (Range selection by input choice)
Model	Beta 50 DIGIT A DC
1) DC mV Ranges Available (Input current < 300uA)	0...60 mV, 0...75mV, 0...150 mV and 0...200 mV (Range selection by input choice)
2) DC Voltage Ranges Available	0...2V or 0...20V or 0...200V or 0...500V or 0...1000V or Please specify any non - standard input Voltage range, available on request.

Dimensions and Weights	
V DC / A DC	
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 gm. Approx.

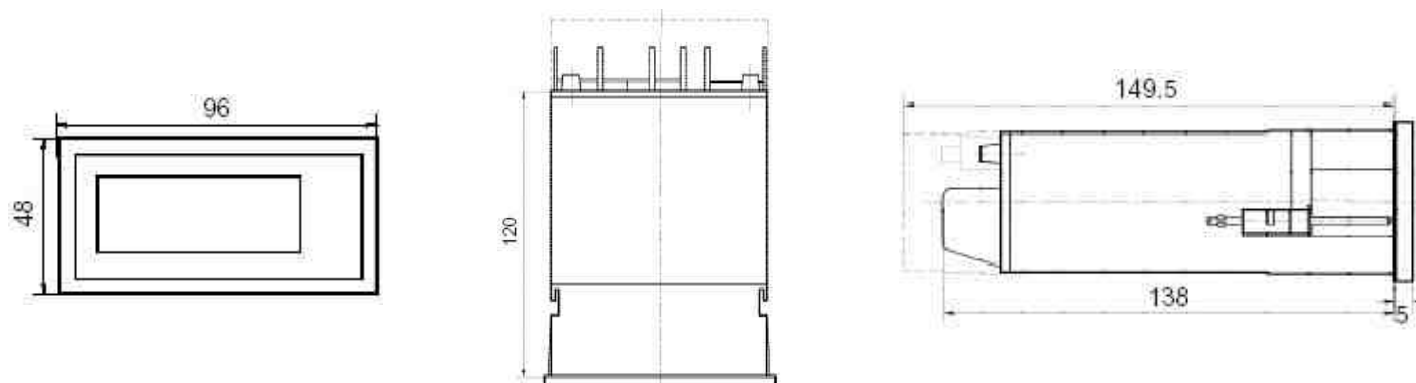
Technical Specifications

Power supply

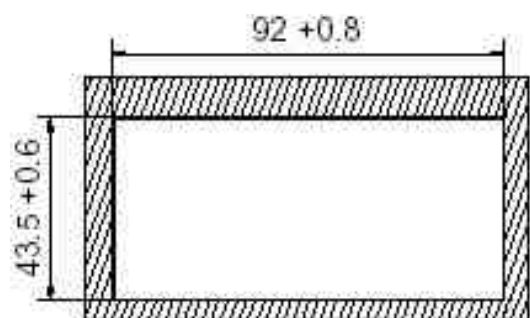
4 ranges for power supply are available.

Direct voltage DC	24 V DC (+/- 15%) 110 V DC (+ 10% / -15%)	5.5W approx. (isolated). 5.5W approx. (isolated).
Alternating voltage AC	110 V AC (+ 10% / -15%) 230 V AC (+10 % / -15%)	5.5W approx. (isolated). 5.5W approx. (isolated).
Frequency	47 – 60 Hz.	

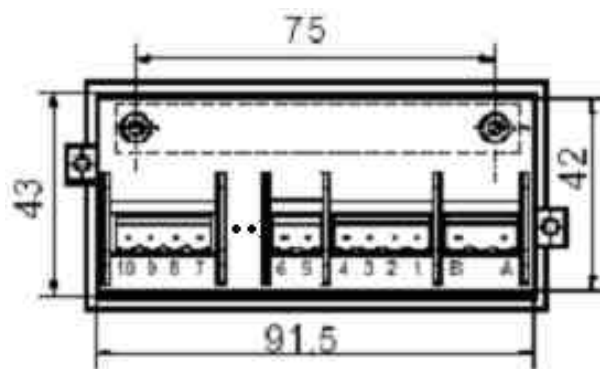
Design



Installation Cut-out



Connection

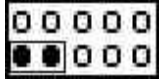
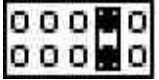
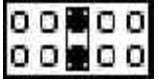
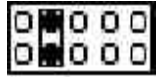
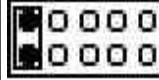


Connection

Current DC		Milli Volts DC		Volts DC	
0... 20 mA	Terminals 1 and 2 with terminals 5 and 6 open.	0... 60 mV / 0... 75 mV	Terminals 1 and 2.	0...2 V or 0...20 V or	Terminal is 1 and 4
		0...150 mV	Terminals 1 and 3.	0...200 V or	
4... 20 mA	Terminals 1 and 3 plus jumper between terminals 5 and 6.	0... 200 mV	Terminals 1 and 4.	0...500 V or	
				0...1000 V	

Decimal point Adjustment

Decimal point position is selectable by short links at the rear side

Short Link Position	Decimal point position on Display	Short Link Position	Decimal point position on Display	Short Link Position	Decimal point position on Display	Short Link Position	Decimal point position on Display	Short Link Position	Decimal point position on Display
	XXXXXX		X.XXXXX		XX.XXX		XXX.XX		XXXX.X

Ordering Information

Product Code	BT57-	X	X	XX	X	X	0000000
Size	48X96	E					
Display Size	MODEL ADC B	6					
	MODEL VDC C	4					
	MODEL VDC F	5					
Input Range	0-20mA	02					
	4-20mA	04					
	0-60mV	0A					
	0-75mV	0B					
	0-150mV	0C					
	0-200mV	0D					
	0-2V	1A					
	0-10V	1B					
	0-20V	1C					
	0-24V	1M					
	0-200V	1D					
	0-500V	1E					
	0-1000V	1L					
Power Supply	110A	2					
	120A	4					
	230A	6					
	24D	9					
	110D	B					
	220D	E					
IP Protection	W/O IP Protection	0					
	With IP Protection	1					



sifam tinsley
PRECISION INSTRUMENTATION

Sifam Tinsley Instrumentation Inc.

3105, Creekside Village Drive,
Suite No. 801, Kennesaw,
Georgia 30144 (USA)

E-mail Id : psk@sifamtinsley.com

Web : www.sifamtinsley.com

Contact No. : +1 404 736 4903

Sifam Tinsley Instrumentation Ltd.

Central Buildings, Woodland Close,
Old Woods Trading Estate,
Torquay, Devon, England, TQ27BB

Web: www.sifamtinsley.com/uk

Contact No. : +44 (0) 1803 615139