

BETA 50



Operating Manual

The **BETA 50** is a Digital Panel Meter (DPM) in 48 x 96 size for measurement of DC Current. You can program the input current on the site either as 0 20 mA DC or 4 ... 20 mA DC. Four ranges for power supply are available.

Operation:

By changing short links decimal point can be adjusted as shown in sticker on page 2. The full scale value on the display can be adjusted on site with potentiometer at the rear side of the instrument from 10% to 100% of FSD (FSD = 19999). Similarly it is possible to adjust the live zero (in case of 4 - 20 mA) with the help of potentiometer at the rear side.

Further **BETA 50** version from the series :

BETA 60/70 Instrument for DC Voltage measurement.

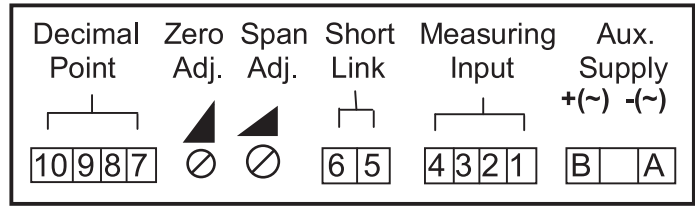
Technical data

Display	Display range Decimal point position Negative display indication Digit height Overload indication	19999 selectable by short links at the Rear side. “-“ 14 mm / 7- segment digits last 4 digits blank (1).
Measuring ranges (Max overload 20% of Full scale range value)	Accuracy Current (Voltage drop < 600 mV) Temperature coefficient zero point drift Range adjustment span	< 0.1 % + 1 digit. DC 0...20mA or 4...20mA (on site programmable) 300 ppm / °C, plus. 200 ppm / °C. from 10% to 100% of range.
Power supply	Direct voltage DC Alternating voltage AC (47 - 60 Hz)	24 V +/-15 % max.5.5 W (isolated). 110 V +10 %, -15% max 5.5 W (isolated). 110 V +10 %, -15% max.5.5 W (isolated). 230 V +10 %, -15% max.5.5 W (isolated).
Environmental conditions	Climatic class Operating temperature Storage temperature Safety class IP Protection Device safety EMC immunity EMC radiated interference	Class 2 to VDE / DIN 3540. 0 ... 55 °C. -25 °C ... +65 °C. II to IEC 348 / VDE 0411. IEC EN 60 529. For Back : IP 20. Front : IP 50 (IP 54 on request) According to IEC EN 61 010. According to IEC / EN 61 000-4-1 up to 4. According to IEC / EN 61326 class B.
Dimensions and weights	Front bezel size Panel cut-out Overall depth Weight Approx.	96 mm x 48 mm DIN 43 718. 92 + 0.8 mm x 43.5 + 0.6 mm. 138 mm. approx. 500 gm.
Sundry	Connections	Plug and screw terminal blocks.

Sample sticker

Connection Diagram

BETA 50		Sr. No. / /	
Range: 0... 20mA		Display: 19999	
Aux Supply	A N(~) B L(~)	230 VAC, 50 Hz (+10 % -15 %)	
Input Current (I)	1 LO	COMMON	
	2 HI	0... 20 mA	
	3 HI	4... 20 mA	
	5 - 6 -	Short the Terminals 5 & 6 for 4... 20 mA Input range	
Decimal Point Adjustment	XXXXX	x.XXXX	xx.XXX
	xxx.XX	xxxx.X	
Decimal Point	Zero Adj.	Span Adj.	Short Link
Measuring Input	Aux. Supply +(~) -(~)		



Measuring input

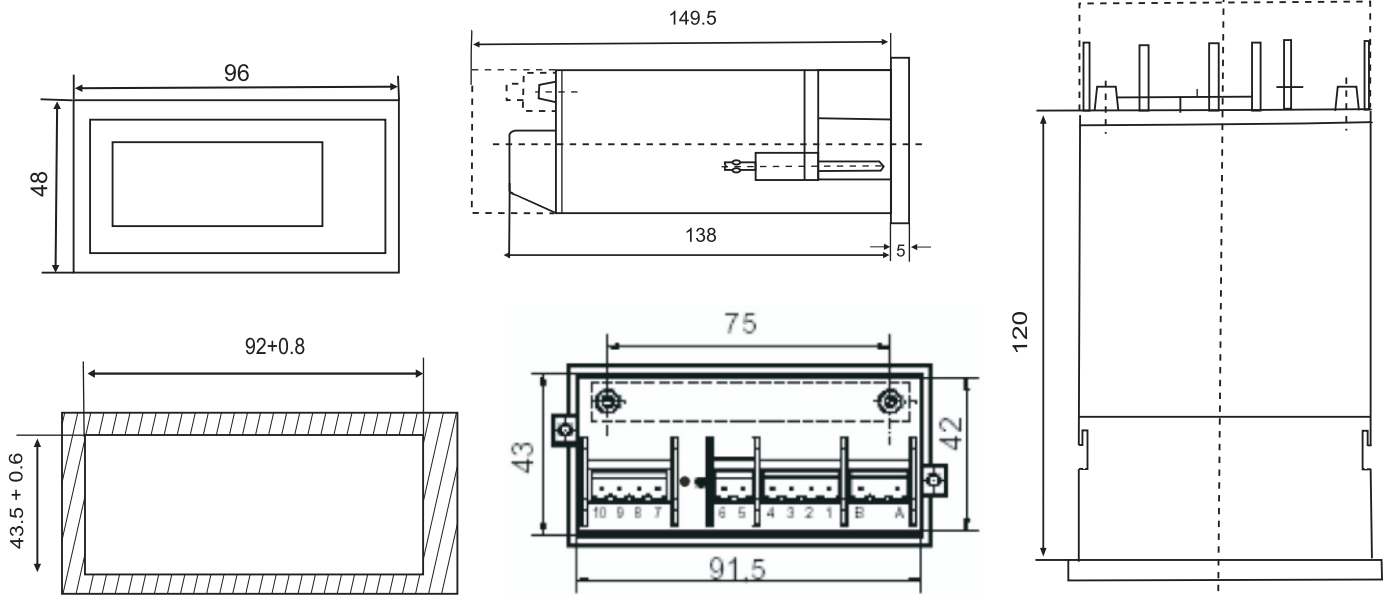
Aux. Supply :
Current DC : 0... 20 mA

4... 20 mA

Display adjust (with external calibrator)
Decimal point programming

Terminals A (-/N) and B (+/L)
Terminals 1 and 2 with
terminals 5 and 6 open.
Terminals 1 and 3 plus
jumper between terminals 5 and 6.
With zero and span pots.
With short links at rear side.

Design and Installation



Installation Cutout

Mounting Position



Caution : Do not change the short links on Display (for decimal point adjustment) when the input is applied to the DPM.

Subject to change without notice!

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