

DIGITAL SCALING METER

Ordering information

S C M D - 0.2 1 - Ru B3



Measuring input

Terminal	
1	BCD output non -insulation
2	BCD output -insulation
3	Input : DC 4 to 20mA, (1 to 5VDC Option)
4	DC measurement

Ru	Under Relay - 1A.250V
Ro	Over Relay - 1A.250V

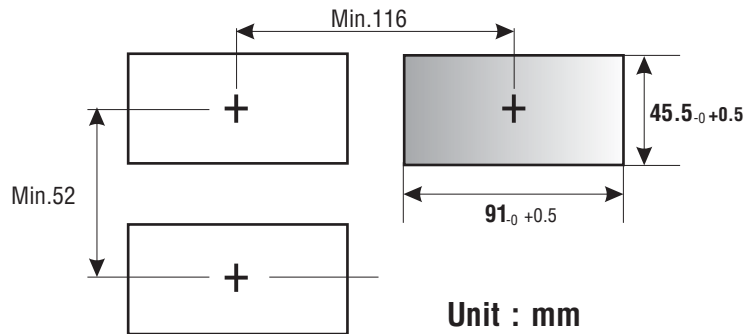
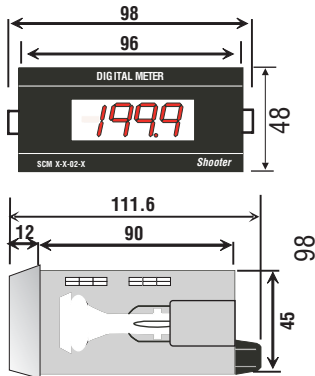
1	3 ½ digit - Average value - RMS value
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0.2	Class 0.2
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D	DC Measurement Single preset meter
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M	Series Meter for DIN size W96 x H48mm
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Panel cut - out



DIGITAL SCALING METER

■ Features

- Indicating 1999.
- AUTO ZERO . Available BCD output
- HOLD function .
Input : DC 4 to 20 mA , with relay output
Display 0 -1999
- DIN size of W96 x H48.
- Diverse models of indicator, single preset,



■ Rating

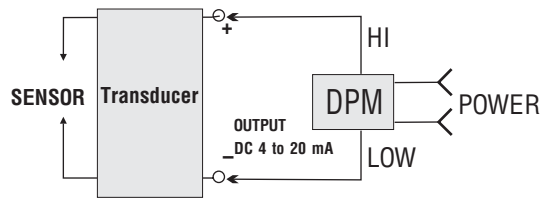
Model	SCM D-02 -1-Ru-B3	SCM D-02 -1-RO-B4
Measuring	AC voltage	
Power supply	100/220 VAC 50/60Hz	
Operating voltage range	90 to 110% rated voltage	
Power consumption	AC : 4VA	
Display method	7 Segment LED Display	
Indicating accuracy	F.S ±0,2% rdg. 1digit	
Sampling control	300mS	
Operating method	Dual slope A/D conversion	
Response time	2sec (0 to Max)	
Max, input	30 mA(15 VDC)	
Sampling time	2,5 Operation/sec	
Power consumption		250VAC 1A 1C

■ Characteristic

Insulation Resistance	100M Min. (At 500VDC) between power input terminal and control output terminal	
Impulse voltage	2000VAC 50/60Hz for 1 minute between power input terminal and control output terminal	
Noise	The square wave noise (pulse width :1 μs) by the noise simulator±300V	The square wave noise (pulse width1 μs) by the noise simulator± 1KV
Vibration	Mechanical durability	0,75mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 1hour
	Malfunction durability	0,5mm amplitude at frequency of 10 to 55Hz in each of X, Y, Z directions for 10 minutes
Shock	Mechanical durability	300m/S ² (30G) in X, Y, Z directions for 3 times
	Malfunction durability	100m/S ² (10G) in X, Y, Z directions for 3 times
Ambient operating temperature	0 to 50°C	
Ambient storage temperature	-25 to 65°C (at non-freezing status)	
Ambient humidity	35 to 85% RH	
Weight	SCM D 02Ru-B4: About 170g	

■ **Block Diagram**

● **How to measure DC**



* When measuring input 4 to 20 mA.(Max 30 VDC)

*F.S measuring display is 1999xx

How to use the Panel meter

correctly

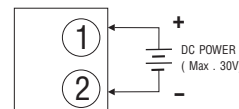
the double setting value of double preset meter must be set LOW.

(When LOW > HI, the Panel meter is caused error.)

Please check the ordering information before purchasing the panel meter, because there are insulation type of BCD output meter and that of non-insulation type of BCD output meter. Insulation type of BCD output meter must be supplied DC power at the external, because it is built-in photo coupler.

2) Connection terminals

Terminals No.	Items	Contents
1 2	+5V GND	The power terminal (5VDC)
3	HOLD	Note connection diagram
4 5 6 7	D.P1 D.P2 D.P3 D.P COM	10^3 10^2 10^1 } Selection terminals of decimal point. - Common terminal of decimal point. $10^3 10^2 10^1$ 1.9.9.9
8 9 10	IN- NC IN+	Measuring signal input terminal

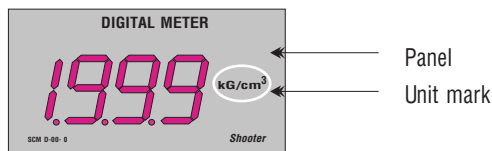


The terminal of BCD output meter is made of a connector type.

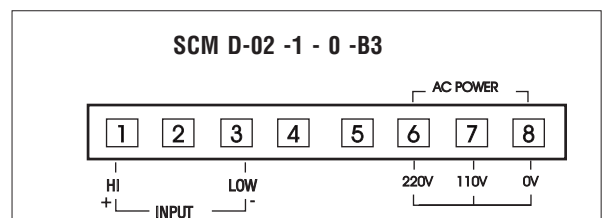
(Connector cable can not be supplied)

3) Unit mark

There is no unit mark in the SCM meter, please attach the unit mark on the panel board.



● **Terminal Connection**



4) Caution

- Take care of insulation because it is not insulated between signal input line and power line.
- Be sure to supply the power after checking polarity of the power.
- If polarity of the power is connected in the opposite direction, the inner circuit can be damaged.
- Take care of direction of the connector in order not to mount it in the opposite direction.
- If the display indicate 1 or-1, be sure to turn off the power and check external connection, in this case the input signal is higher than full scale range or the power is lower than the rated voltage.

