


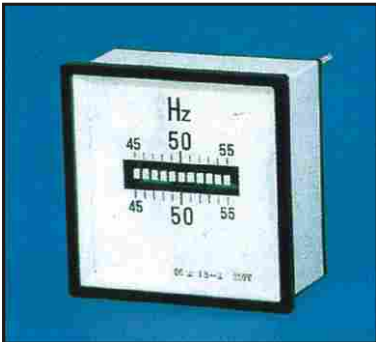




PANEL METER

		
<p style="text-align: center;"><b>BE96-V</b></p> <p><b>AC Voltmeters (moving iron) <math>\sim</math>V</b>  <b>Item: BE96-V BE72-V</b>                      Accuracy class: 1.5                      Specification: 30, 50, 75, 100, 120, 150, 200, 250, 300, 400, 550, 600V                      For 450-450KV meters use potential transformer with secondary voltage 100V</p> <p><b>DC Voltmeters (moving coil) <math>\square</math> V</b>  <b>Item: BE96-V BE72-V</b>                      Accuracy class: 1.5                      Specification: 0.1, 0.3, 0.5, 10, 15, 20, 30, 50, 75, 100, 150, 220, 250, 300, 450, 500, 600V                      rated voltage over 600V use external resistor (rated Current 5mA)</p>	<p style="text-align: center;"><b>BE96-A</b></p> <p><b>AC Voltmeters (moving iron) <math>\sim</math>A</b>  <b>Item: BE96-A BE72-A</b>                      Accuracy class: 1.5                      Specification: 0.1, 0.5, 1, 1.5, 3.5, 7.5, 10, 15, 20, 25, 30, 50, 60, 75, 100A                      For 75A-10KA, Use external current transformer, which secondary current is 5A.                      Note: For 60A, 75A, 100A meters, when these meters direct connect circuit their accuracy are class 2.5                      10/5, 15/5, 25/5, 30/5, 50/5, 60/5, 75/5, 100/5, 50/5, 200/5, 250/5, 400/5, 600/5, 800/5, 1000/5, 1500/5, 2000/5, 2500/5, 4000/5, 6000/5.</p> <p><b>DC Voltmeters (moving coil) <math>\square</math> A</b>  <b>Item: BE96-A BE72-A</b>                      Accuracy class: 1.5                      Specification: 1, 3, 5, 10, 15, 20, 30, 50, 75, 100, 150, 200, 250, 300, 500mA                      1, 3, 5, 735, 10, 20, 30, 50, 60, 100, 150, 250, 400, 600A                      For 60A-10KA use external 75mV shunt.</p>	<p style="text-align: center;"><b>BE96-HZ</b></p> <p><b>Frequency Meters (rectifier) <math>\square</math> Hz</b>  <b>Item: BE96-HZ BE72-HZ</b>                      Accuracy class: 2.5                      Specification                      voltage: 110, 220, 380, 440V                      frequency: 45-55Hz, 55-65Hz, 45-65Hz, 45-60Hz, 50-60Hz</p>
		
<p style="text-align: center;"><b>BE96-VHZ</b></p> <p><b>Frequency Meters (Vibrating reed) <math>\square</math> Hz</b>  <b>Item: BE96-VHZ BE72-VHZ</b>                      Accuracy class: 1.5                      Specification                      voltage: 110, 220, 380, 440V                      frequency: 45-55Hz, 55-65Hz, 45-65Hz, 47-53Hz, 57-63Hz</p>	<p style="text-align: center;"><b>BE96-PF</b></p> <p><b>Power Factor Meters (electronic) <math>\square</math> <math>\phi</math> 3-1ECOS <math>\phi</math></b>  <b>Item: BE96-PF BE72-PF</b>                      Accuracy class: 2.5 (ELECTRICAL)                      Specification                      voltage: 110, 220, 380, 440V                      frequency: 50-60Hz                      COS: LEAD0.5-1-LAG0.5                      test voltage: 2kV, 50-60Hz</p>	<p style="text-align: center;"><b>BE96-KW</b></p> <p><b>Single Phase Power Meters (electronic) <math>\square</math> W</b>  <b>Item: BE96-W</b>                      Accuracy class: 2.5                      Specification                      voltage: 110, 220, 380, 440V                      current: 5A                      test voltage: 2kV, 50-60Hz                      These meters are used with potential transformer or current transformer, which secondary voltage is 110V secondary current is 5A.</p>

## SWITCHBOARD METER



The thermal/time characteristic of MDIs monitors the most economic use of cable and transformers. The directly heated bimetal element indicates mean r.i.s current over 8, 15 or 20 mins. A red slave pointer shows highest value reached and has a wire sealable reset knob. The optional saturating C.T. limits the power into the MDI and is used where a protection relay is connected in series from the same C.T. Scales are calibrated to match the C.T. plus 20% overload (e.g. 0-5-6-A).

Accuracy: Class 3.0

Ratings: 5A for use with sparate C.T.  
5/5 A saturating C.T.

Burdens: 50/60 Hz  
MDI-2.5VA, CT -1VA

Overload withstand

Standard: 5\*FL for 5 sec 10\*FL for 1 sec

With saturating C.T.: 40\*FL for 3 sec 90\*FL  
for 1 sec

Frequency: 50/60 Hz

## WIDE ANGLE SCALE INSTRUMENT



### BE-96 A/V:

Measuring Ranges:

- Moving Coil Type: 500  $\mu$  A-30A, DC 30V-300V DC
- Rectifier Type: 150V-600V AC, 1A-5AAC

For ranges higher than 30A DC, use external Multiplier with a 50mV DC Ammeter.

For ranges higher than 300V DC, use external Multiplier with a 1 mA Voltmeter.

For ranges higher than 5A AC, use external Current Transformer with a 5A AC Ammeter.

For ranges higher than 600V AC, use external Potential Transformer with a 150V AC Voltmeter.

### BE-96W KW:

110V, 220V, 380V, 500V. 1A, 5A.

For any rating other listed above, use external Current Transformer and/or external Potential Transformer with a 110V/5A instrument.

### BE-96W COS $\phi$ :

110V, 220V, 380V, 440V. 1A, 5A.

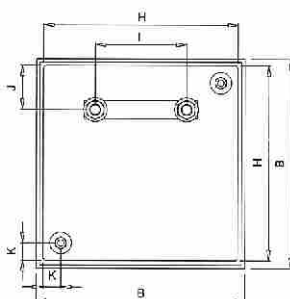
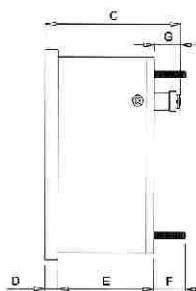
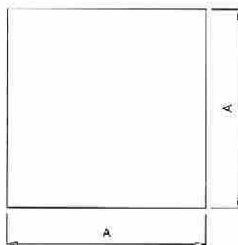
For any rating other listed above, use external Potential Transformer with a 110V/5A instrument.

### BE-96W Hz:

110V, 220V, 380V, 440V

For a voltage rating higher than above, use an external Potential Transformer with a 110V instrument.

PANEL CUT-OUT



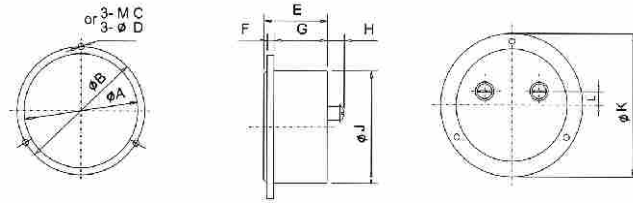
- Accuracy:
  - BE-96W A / V ---Class 1.5
  - BE-96W kW -----Class 1.5
  - BE-96W COS  $\phi$  -4' in phase angle.
  - BE-96W Hz-----Class 1.5
- Full scale deflection: 250'

- Composition:
  - Glass window, ABS Resin frame and case.
  - PC glass fiber base mounting fittings included.
- Colour: Black base and frame, white scale plate and meter body.
- Pointer: Stick shape in black colour.

### OUTLINE AND FIXING DIMENSIONS:

ITEM NO.	A	B	C	D	E	F	G	H	I	J	K
BE-96	91	96	63.5	6	44	14.5	13.5	89.5	42	20.3	8
BE-96B	91	96	63.5	6	44	14.5	13.5	89.5	42	20.3	8
BE-96W	91	96	63.5	6	44	14.5	13.5	89.5	42	20.3	8
BE-72	67.5	72	55.5	6	36	14.5	13.5	66	23.6	10	4

PANEL METER



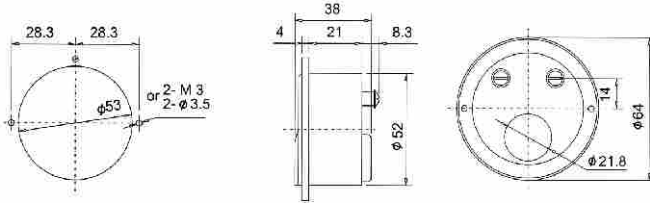
PANEL CUT-OUT

BO-65/52

OUTLINE AND FIXING DIMENSIONS:

Unit:mm

ITEM NO.	A	B	C	D	E	F	G	H	J	K	L
BO-65	66	72.5	3	3.5	37	3.6	31.5	8.3	65	83	4.7
BO-52	53.5	58	3	3.5	35.2	3.3	30	12	52.5	66.5	11



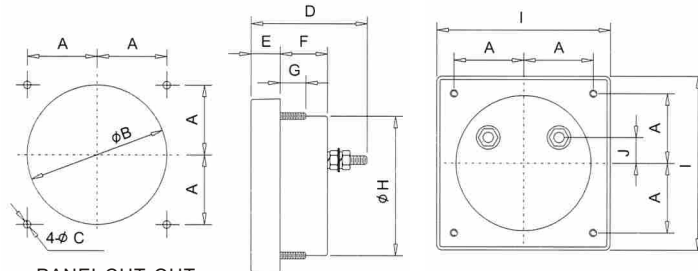
PANEL CUT-OUT

BO-52P

MEASURING RANGE: (Accuracy: class 2.5)

ITEM NO.	Moving Iron Type	Moving Coil Type
BO-65	50mA-50A AC 150V-500V AC	50 μA-50A DC 1V-1000V DC
BO-52	50mA-30A AC 150V-500V AC	-
BO-52P	50mA-20A AC 150V-300V AC	-

- Case and composition:  
-Glass window and Bakelite case for BO-65, BO-52.  
-Three Stud mounting.  
-Acrylic Resin front and Bakelite case for BO-52P.  
-Two Stud mounting.
- Colour: Black case, white scale plate.
- Pointer: Tube or knife type, colour in black or red.



PANEL CUT-OUT

BP-100/80/65/60/38

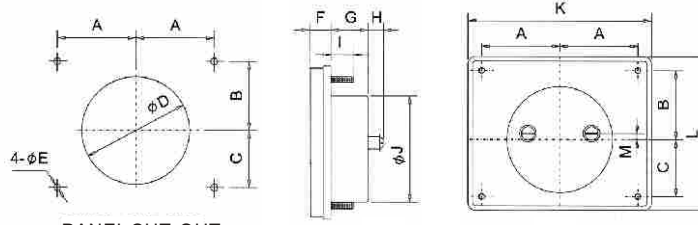
Measuring Range:

- Moving Coil Type:  
-50 μA-50A DC  
-Accuracy: class 1.5 class 2.5
- Moving Iron Type:  
-50mA-50A AC  
-150V-500V AC  
-Accuracy: class 2.5
- Rectifier Type:  
-3V-500V AC  
-Accuracy: class 2.5

OUTLINE AND FIXING DIMENSIONS:

Unit:mm

ITEM NO.	A	B	C	D	E	F	G	H	I	J
BP-100	40	87	3.5	55	14	25	12	85.5	101	10
BP-80	32.5	65	3.5	54	13.5	22	12	63.5	81	12
BP-65	25.5	53.5	3.5	47	13	24	12	52.5	67	4
BP-60	24	53	3.5	46	11	25.5	12	52	60	12
BP-38	15.8	38	3.5	41	9.6	22.3	12	37.6	45	8



PANEL CUT-OUT

BP-120S/100S/80A/670/45

Measuring Range:

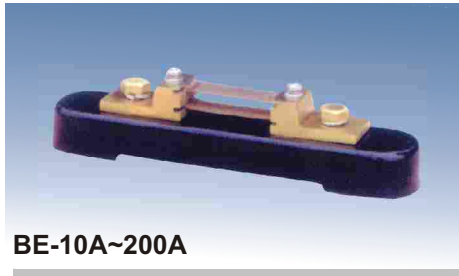
- Moving Coil Type:  
-50 μA-50A DC  
-Accuracy: class 1.5 class 2.5
- Moving Iron Type:  
-50mA-50A AC  
-150V-500V AC  
-Accuracy: class 2.5
- Rectifier Type:  
-3V-500V AC  
-Accuracy: class 2.5

OUTLINE AND FIXING DIMENSIONS:

Unit:mm

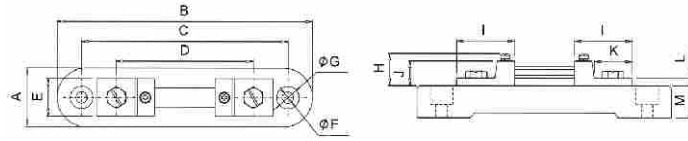
ITEM NO.	A	B	C	D	E	F	G	H	I	J	K	L	M
BP-120S	51	45	37	70	4.5	14	24	10	15	69	120	100	4
BP-100S	41.5	36.5	27.5	65	3.5	14	25	11	13.5	64	100	80	4
BP-80A	32.5	32.45	32.5	65	3.5	13.5	22	18.5	12	63.5	81	81	12
BP-670	24	24	24	53	3.5	11	25.5	10	13	52.5	70	60	5
BP-45	18.9	18.9	18.9	46	3.5	12	23.4	10	12	45	52	50	8

# SHUNT



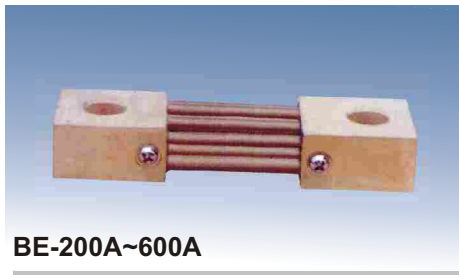
BE-10A~200A

## OUTLINE AND FIXING DIMENSIONS:



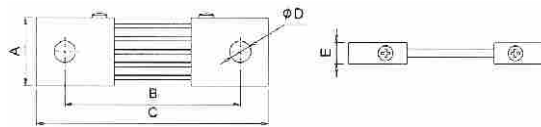
Unit:mm

ITEM NO.	A	B	C	D	E	F	G	H	I	J	K	L	M
BE-10A/50-100mV BE-150A/50-100mV	31	136	110	73	20	6	12	17	32	13	21	5	17
BE-200A/50-100mV	31	136	110	67	20	6	12	17	29	15	-	-	17



BE-200A~600A

## OUTLINE AND FIXING DIMENSIONS:



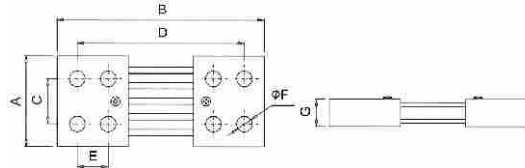
Unit:mm

ITEM NO.	A	B	C	D	E
BE-200A/50-100mV	32	89	116	9	10
BE-250A/50-100mV	41	86	116	10	12
BE-300A/50-100mV	34	86	118	12	20
BE-400A/50-100mV	45	86	119	12	20
BE-500A/50-100mV	55	86	116	12	20
BE-600A/50-100mV	55	90	122	12	21



BE-800A~2000A

## OUTLINE AND FIXING DIMENSIONS:



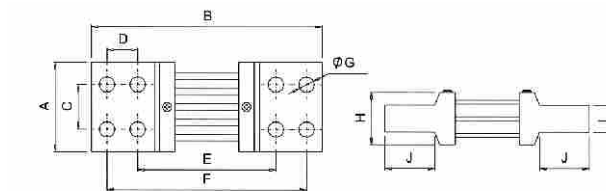
Unit:mm

ITEM NO.	A	B	C	D	E	F	G
BE-800A/50-100mV	70	122	35	90	-	12	21
BE-1000A/50-100mV	70	159	35	121	-	12	21
BE-1500A/50-100mV	100	159	49	119	-	12	21
BE-2000A/50-100mV	100	190	50	166	38	14	39



BE-3000A~5000A

## OUTLINE AND FIXING DIMENSIONS:



Unit:mm


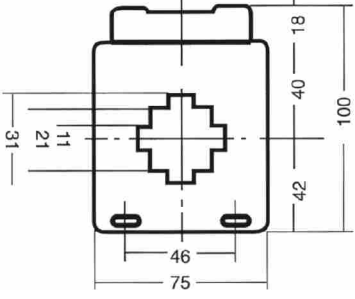
ITEM NO.	A	B	C	D	E	F	G	H	I	J
BE-3000A/50-100mV	103	273	55	45	142	232	14	64	28	90
BE-4000A/50-100mV	110	292	50	50	153	253	17	82	34	97
BE-5000A/50-100mV	128	315	60	54	163	271	17	106	41	100


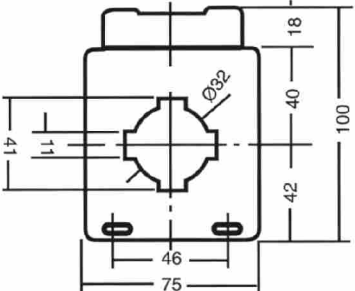
# CURRENT TRANSFORMER

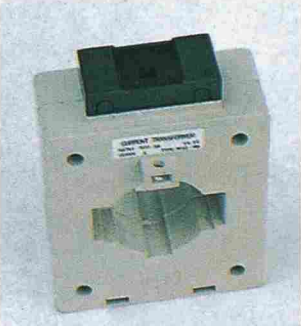
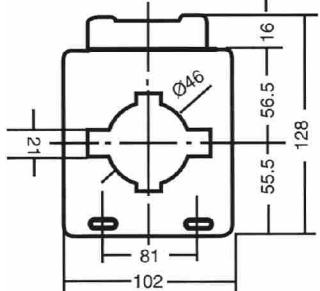
The series of current transformers can be applied to test, control, display and record the running of the electrical equipment, and to protect the equipment against the damage, in the AC circuit with the rated voltage value below 660V and the frequency of 50-60Hz.


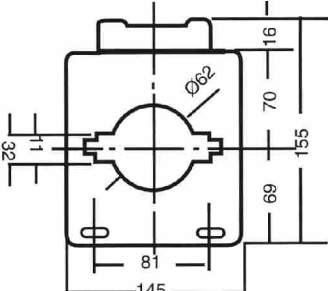
The product can be also applied to form a complete set of mine transformer.

The product conforms to IEC 185.

 <p>MFO-30CT</p>		MEASURING RANGE	THROUGH TIMES
		30-50A/5	2T
		60A/5	1T
		100A/5	1T
		150A/5	1T

 <p>MFO-40CT</p>		MEASURING RANGE	THROUGH TIMES
		200A/5	1T
		250A/5	1T
		300A/5	1T
		400A/5	1T

 <p>MFO-60CT</p>		MEASURING RANGE	THROUGH TIMES
		500A/5	1T
		600A/5	1T
		800A/5	1T

 <p>MFO-100CT</p>		MEASURING RANGE	THROUGH TIMES
		1000A/5	1T
		1200A/5	1T
		1500A/5	1T
		1600A/5	1T
		2000A/5	1T
		2500A/5	1T
		3000A/5	1T