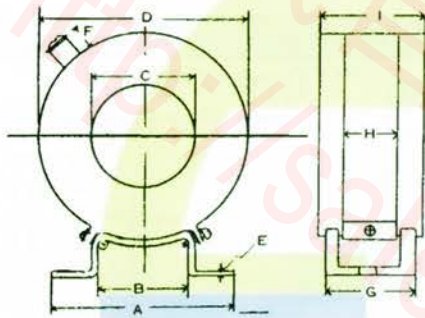
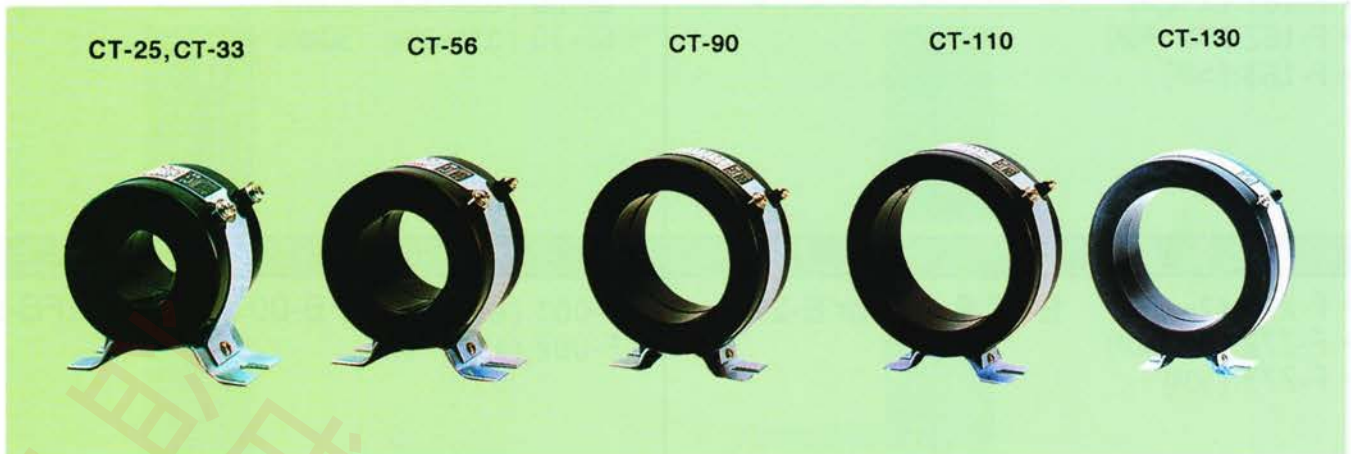




# Current Transformer Round Type

圓形比流器



圖面尺寸 Dimension Sizes(單位 Unit : mm)

型號 Model No.	A	B	C	D	E	F	G	H	I
CT-25	75	55	32	65	1.2	11	28	13	30
CT-33	90	44	35	78	2	13	45	25	53.5
CT-56	103	44	60	102	2	13	45	25	54.5
CT-90	103	60	90	135	2	13	45	25	55.5
CT-110	103	60	110	151	2	13	45	25	55.5
CT-130	103	60	128	183	2	13	45	25	60

每具比流器 PP 材質外殼上均附白色或其他單色之紙板 (含使用說明)  
PP case of each current transformer is attached with a white or unicolor paper board box, including instruction manual.

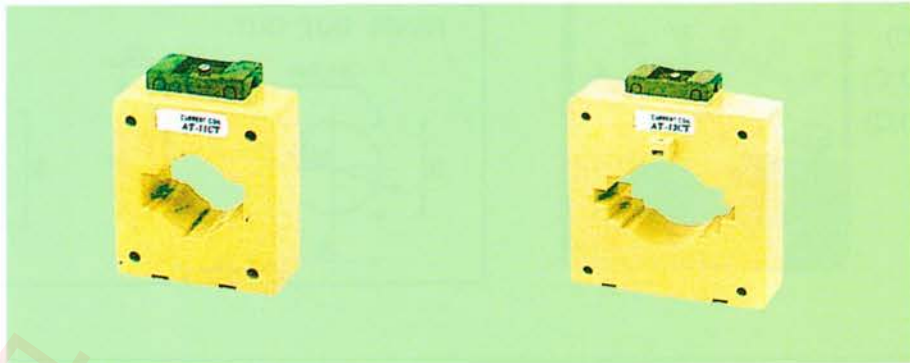
型號 Model No.	一次電流 Primary Current	二次電流 Second Current	額定負擔 Burden(VA)	精確度 Accuracy	過電流強度 Power Strength
CT-25	10/5A~400/5A	5	2	1.0	40
CT-33	10/5A~400/5A	5	15	1.0	40
CT-56	400/5A~800/5A	5	15	1.0	40
CT-90	800/5A~1200/5A	5	15	1.0	40
CT-110	1000/5A~1200/5A	5	15	1.0	40
CT-130	2000/5A~5000/5A	5	15	1.0	40



# Current Transformer Square Type

方形比流器

- AT-3
- AT-4
- AT-6
- AT-10



外殼材質為 ABS，電流輸出標籤附蓋鑲於側面。  
 ABS plastic case encloses ampere output tally at the secondary side.  
 固定用鐵片皆為兩片。  
 Metal housing fixing plates are all 2 pieces.  
 鐵棒及螺絲為固定銅排用。  
 Iron bar and screw for copper bus fixing are all 3 pieces.  
 標籤提供白色及其他單色可供選擇。  
 White or unicolor paper board box are available for packing.

圖面尺寸 Dimension Sizes(單位 Unit : mm)

型號 Model No.	A	B	C	D	E	F
AT3	75	43	82	17	60	31
AT4	75	43	82	17	60	31
AT6	101	45	112	17	60	31
AT10	145	45	139	17	60	31

型號 Model No.	額定電流 (一次/二次) Primary/ Secondary	錶面尺寸 Window Dimension	額定負擔 Burden(VA)	精確度 Accuracy	過電流強度 Power Strength
AT3	30/5A~500/5A	30x10mm	2.5	1.0	600V
AT4	30/5A~500/5A	40x10mm	5	1.0	600V
AT6	400/5A~800/5A	60x10mm	10	1.0	600V
AT10	800/5A~3000/5A	100x10mm	15	1.0	600V



# Panel Meter

電錶

- EA-50(A.C)
- EV-50(A.C)
- EA-50D(D.C)
- EV-50D(D.C)



50X50mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy: Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy: Class 2.5%

- EA-38(A.C)
- EV-38(A.C)
- EA-38(D.C)
- EV-38(D.C)



44X44mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy: Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy: Class 2.5%

- EA-60(A.C)
- EV-60(A.C)
- EA-60D(D.C)
- EV-60D(D.C)



60X60mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy: Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—500V AC  
 Rectifier Type:  
 3V—500V AC  
 Accuracy: Class 2.5%

- EA-65(A.C)
- EV-65(A.C)
- EA-65D(D.C)
- EV-65D(D.C)



65X65mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—10A DC  
 3V—1000V DC  
 Accuracy: Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—20A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy: Class 2.5%



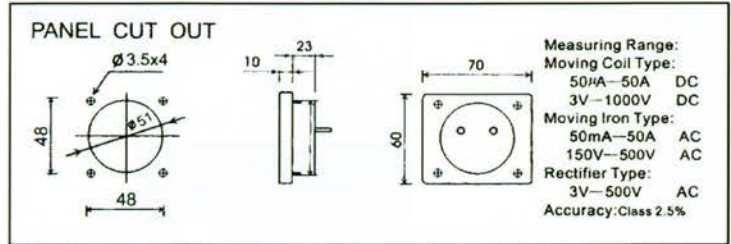
# Panel Meter

電表

- EA-67(A.C)
- EV-67(A.C)
- EA-67D(D.C)
- EV-67D(D.C)
- ER-67(R.P.M)



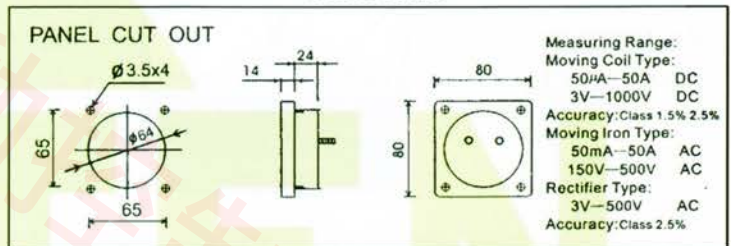
67X70mm



- EA-80(A.C)
- EV-80(A.C)
- EA-80D(D.C)
- EV-80D(D.C)



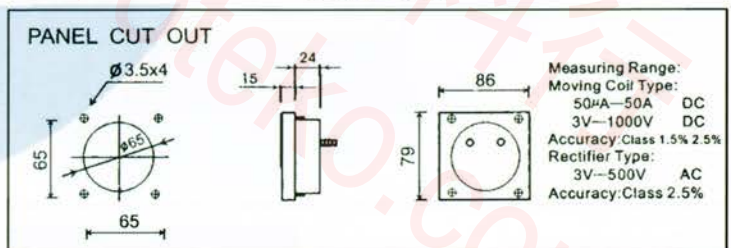
80X80mm



- EV-86  
 充電錶  
 Charge Meter



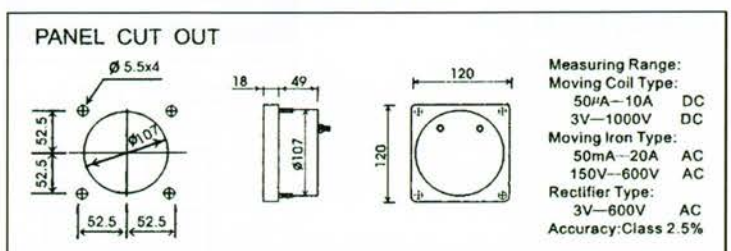
79X86mm



- E-A12(A.C)
- E-V12(A.C)
- E-A12D(D.C)
- E-V12D(D.C)



120X120mm





# Panel Meter

電錶

- ESA-12(A.C)
- ESV-12(A.C)
- ESA-12D(D.C)
- ESV-12D(D.C)



120X100mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy:Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy:Class 2.5%

- EA-10(A.C)
- EV-10(A.C)
- EA-10D(D.C)
- EV-10D(D.C)



100X100mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy:Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy:Class 2.5%

- ESA-10(A.C)
- ESV-10(A.C)
- ESA-10D(D.C)
- ESV-10D(D.C)



100X80mm

**PANEL CUT OUT**

Measuring Range:  
 Moving Coil Type:  
 50 $\mu$ A—50A DC  
 3V—1000V DC  
 Accuracy:Class 1.5% 2.5%  
 Moving Iron Type:  
 50mA—50A AC  
 150V—600V AC  
 Rectifier Type:  
 3V—600V AC  
 Accuracy:Class 2.5%

- EA-72(A.C)
- EV-72(A.C)
- EA-72D(D.C)
- EV-72D(D.C)
- EH-72(H.Z)
- ER-72( R.P.M )

72X72mm



**PANEL CUT OUT**

M5X2  
M2.6X2



# Panel Meter

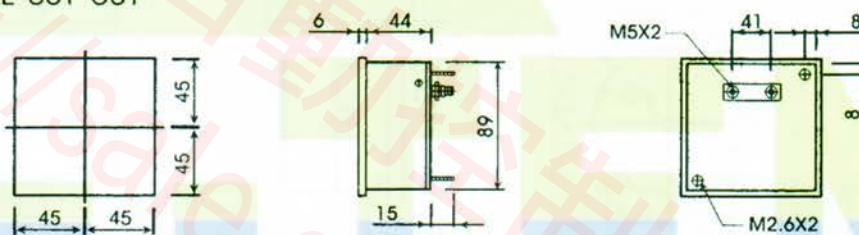
電表

- E-A96(A.C)
- E-A96D(D.C)
- E-H96(H.Z)
- E-K96(K.W)
- E-V96(A.C)
- E-V96D(D.C)
- E-P96(P.F,COS $\phi$ )



96X96mm

PANEL CUT OUT



圈動式 Moving Coil Type

DC $\mu$ A	DC mA	DC A	DC V
100	1	1	30
200	2	1.5	50
500	5	2	100
800	10	3	150
	20	5	300
	50	10	500
	100	15	600
	200	20	
	500	30	

整流器式 Rectifier Type

AC A	AC V
1	150
50	300
10	500
15	600
20	
30	
50	
60	
100	

96kw : 110V、220V、380V、440V、1A、5A

凡上列額定值以外者皆須外接 110V、5A 之比流器或比壓器  
For any ratings other than listed above, use external CT and/ or PT with an 110V, 5A instrument.

96 COS $\phi$  : 110V、220V、380V、440V、1A、5A

凡上列額定值以外者皆須外接 110V、5A 之比壓器  
For any ratings other than listed above, use external PT with an 110V, 5A instrument.

96Hz : 110V、220V、380V、440V

凡上列額定值以外者皆須外接 110V 之比壓器  
For any ratings other than listed above, use external PT with an 110V instrument.

直流電安培計 50A 以上者須搭配 50mV 電錶及外接分流器

DC Ammeters above 50A require a basic 50mV meter combined with an external shunt.

交流電安培計 100A 以上者須搭配 5A 電錶及外接比流器

AC Ammeter above 100A require a basic 5A meter combined with an external CT.

交流電安培計超目盛：200%、300%、600%

AC Ampere Overload : 200%、300%、600%

交流電伏特計 600V 以上者須搭配 150V 電錶及外接比壓器

AC Voltmeters above 600V require a basic 150V meter combined with an external PT.

精確度 Accuracy :

96 A/V - 等級 Class 1.5

96 kw - 等級 Class 1.5

96 COS $\phi$  - 面相角 4°內 4° in Phase Angle

96 Hz - 等級 Class 1.5

最大刻度角 Full Scale Deflection : 250°

外殼 Enclosure : ABS 材質外框及錶殼，底座使用 PC 玻璃纖維。

ABS frame and case, PC glass fiber base mount fitting included.

顏色 Color : 底座及外框為黑色，面板及錶身為白色。

Black base and frame, white scale plate and meter body.

指針 Pointer : 黑色桿狀指針

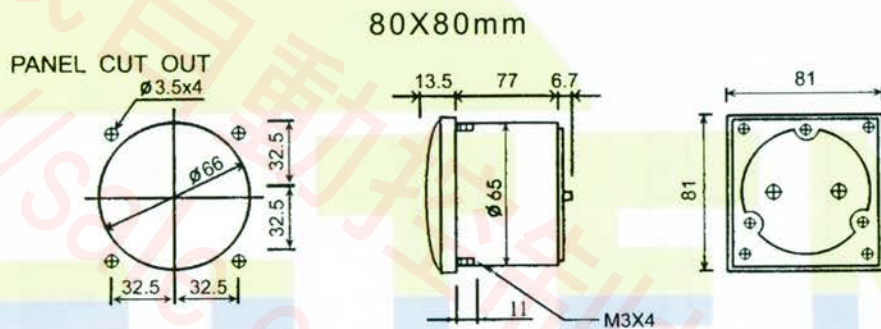
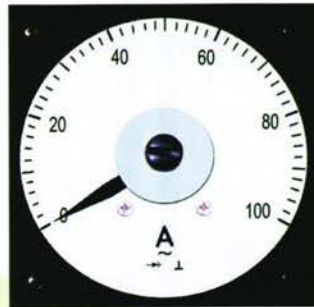
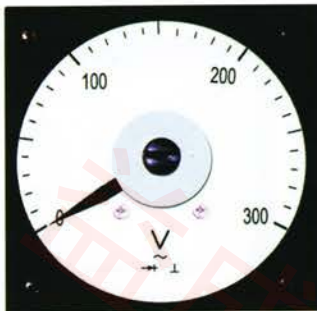
Stick shape in black color.



# Panel Meter

電錶

## LS-80



動圈式 Moving Coil Type

DC $\mu$ A	DC mA	DC A	DC V
100	1	1	30
200	2	1.5	50
500	5	2	100
800	10	3	150
	20	5	300
	50	10	500
	100	15	600
	200	20	
	500	30	

整流器型 Rectifier Type

AC A	AC V
1	150
5	300
	500
	600

LS-Hz : 110V、220V、380V、440V

凡上列額定值以外者皆須外接 110V 之比壓器  
For a voltage rating higher than listed above,  
use external PT with an 110V instrument.

精確度 Accuracy :

LS-80 - 等級 Class 1.5

最大刻度角 Full Scale Deflection : 250°

外殼 Enclosure : 壓克力材質錶蓋，電木材質外框及底座。  
Acrylic Resin Cover; frame and base are made with bakelite.

直流電 30A 以上者須搭配 50mV 之直流電安培計及外接分流器  
External shunt with a 50mV DC ammeter required for ranges  
higher than DC 30A.

直流電 300V 以上者須搭配 1mA 之伏特計及外接增壓器  
External multiplier with a 1mA voltmeter required for ranges  
higher than DC 300V.

交流電 5A 以上者須搭配交流電 5A 之安培計及外接比流器  
External CT with an AC 5A ammeter required for ranges  
higher than AC 5A.

交流電 600V 以上者須搭配交流電 150V 電錶及外接比壓器  
External PT with an AC 150V voltmeter required for ranges  
higher than AC 600V.

顏色 Color : 面板為白色，端子板為黑色，錶身為灰色。  
White scale meter, black terminal plate, and grey meter body.

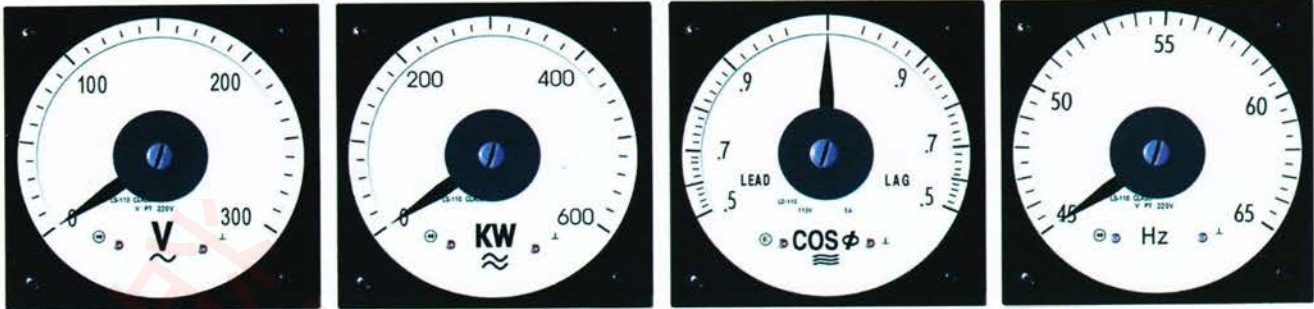
指針 Pointer : 劍形黑色指針。  
Sword type in black color.



# Panel Meter

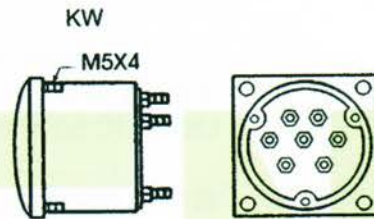
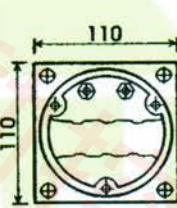
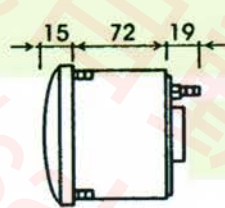
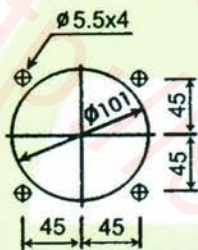
電錶

LS-110



110X110mm

PANEL CUT OUT



圈動式 Moving Coil Type

DC μA	DC mA	DC A	DC V
100	1	1	30
200	2	1.5	50
500	5	2	100
800	10	3	150
	20	5	300
	50	10	500
	100	15	600
	200	20	
	500	30	

整流器式 Rectifier Type

ACA	AC V
1	150
5	300
	500
	600

LS-110 kw : 110V、220V、380V、440V、1A、5A

凡上列額定值以外者皆須外接 110V、5A 之比流器或比壓器  
For any ratings other than listed above, use external CT and/ or PT with an 110V, 5A instrument.

LS-110 COS φ : 110V、220V、380V、440V、1A、5A

凡上列額定值以外者皆須外接 110V、5A 之比壓器  
For any ratings other than listed above, use external PT with an 110V, 5A instrument.

LS-110 Hz : 110V、220V、380V、440V

凡上列額定值以外者皆須外接 110V 之比壓器  
For any ratings other than listed above, use external PT with an 110V instrument.

直流電 30A 以上者須搭配 50mV 直流電安培計及外接分流器

For ranges higher than DC 30A, use an external shunt with a 50mV DC ammeter.

直流電 600V 以上者須搭配 1mA 伏特計及外接增壓器

For ranges higher than DC 600V, use an external multiplier with a 1mA voltmeter.

交流電 5A 以上者須搭配 5mA 伏特計及外接比流器

For ranges higher than AC 5A, use an external CT with a 5mA voltmeter.

交流電 600V 以上者須搭配 150V 伏特計及外接比壓器

For ranges higher than DC 600V, use an external PT with an AC 150V voltmeter.

精確度 Accuracy :

LS-110 A/V - 等級 Class 1.5

LS-110 kw - 等級 Class 1.5

LS-110 COS φ - 面相角 4°內 4° in Phase Angle

LS-110 Hz - 等級 Class 1.5

最大刻度角 Full Scale Deflection : 250°

外殼 Enclosure : ABS 材質外框及錶殼, 底座使用 PC 玻璃纖維。  
ABS frame and case, PC glass fiber base mount fitting included.

顏色 Color : 底座及外框為黑色, 面板及錶身為白色。  
Black base and frame, white scale plate and meter body.

指針 Pointer : 黑色桿狀指針

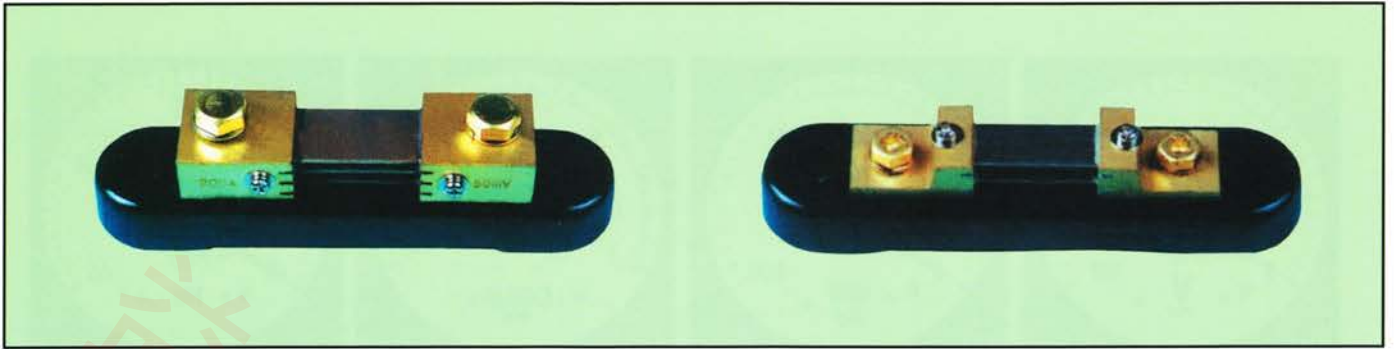
Stick shape in black color.





# External Shunt

分  
流  
器



型號說明 Model Designation :

SNS - A,B,C,D - mV - A

型式 Type 伏特 Volt. 安培 Amp.

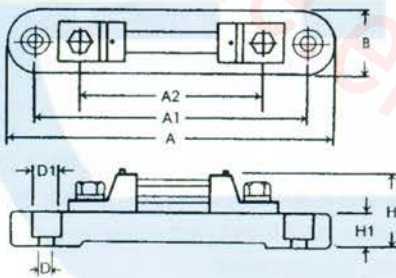
使用說明 Application :

使用 50 或 60 mV 之直流電錶以延伸測定範圍

Using DC 50 or 60 mV meter to extend DC current measuring range

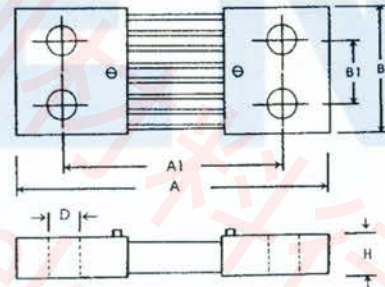
精確度 Accuracy : 等級 Class 1.0%

TYPE-A



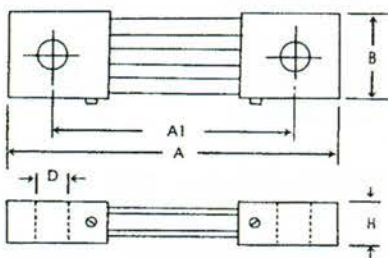
額定值 Ratings	A	A1	A2	B	H	H1	D	D1
150A 以下 Below 150A	50mV 135	110	73	31	33	16	6	12
	60mV 150	125	84	31	33	16	6	12

TYPE-C



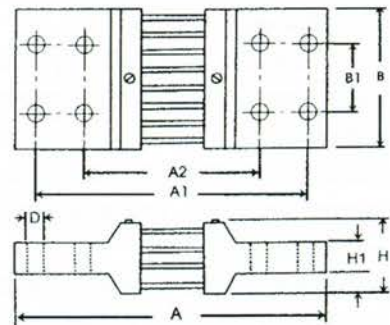
額定值 Ratings	50mV						60mV					
	A	A1	B	B1	H	D	A	A1	B	B1	H	D
800A	122	90	70	35	21	12	133	100	70	35	21	13
1000A	159	120	70	35	21	12	169	130	70	35	21	14
1500A	159	120	100	49	20	12						

TYPE-B



額定值 Ratings	50mV					60mV				
	A	A1	B	H	D	A	A1	B	H	D
200A	115	89	32	9	9	124	95	32	9	10
250A	115	86	41	12	9	126	95	41	12	10
300A	116	86	36	19	12	126	95	35	18	12
400A	116	86	44	19	12	126	95	44	19	13
500A	116	86	55	19	12	126	95	55	19	13
600A	122	90	55	21	12	133	100	55	21	13

TYPE-D



額定值 Ratings	50mV							
	A	A1	A2	B	H	H1	D	
2000A	230	205	129	103	50	50	26	14
3000A	273	232	142	103	50	64	28	14
4000A	292	253	153	110	50	82	34	17
5000A	315	271	163	128	60	106	41	17