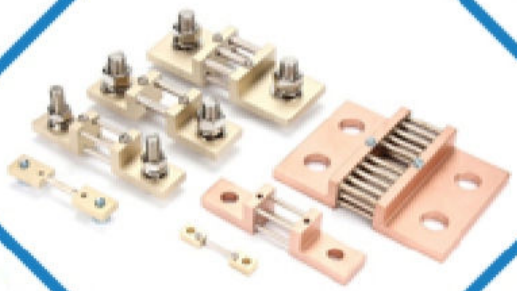


XIQI ELECTRIC

PRODUCE CATALOGUE

Global Suppliers of Measurement Instrument for Industry

www.cnchog.com

AUTHORITY

Brief introduction

Since the company was established in 1992, XIQI has been dedicated to the manufacture and development of industrial automated instruments more than 25 years.

XIQI mainly supplies products of shunt, temperature controller, thermocouple, RTDs, Solid-State Relay and relevant customized products with high quality and competitive price. Our products have gotten the certificates of European CE, ISO9001, RoHS and IATF16949.

After several years development, XIQI has become the leader of Chinese instrument manufacturer with huge domestic market share. Every year, XIQI provides more than one million instruments to clients all over the world. High quality, fast response and the spirit of innovation, responsibility help us earn a good reputation in this industry.

If you are interested in our products or customized service, feel free to contact with us. We are looking forward to forming successful business relationship with you in near future.

OUR FACTORY

Catalogue

About the DC Shunt

A range of shunts are available to measure DC currents and provide a proportional 50~100mV DC output to safely drive a moving coil instrument, overload protection or other control device. The shunts are accurate to class 0.5 and are suitable for all DC current monitoring applications. The manganin shunts have brass ends and are available to measure currents from 0.1A up to 10000A.

Technical Standard

Color	Black & Silver & Yellow
Current Rating	1 ~ 4000A: 0.5%; 5000 ~ 10000A: 1% (Default)
Operating Temperature	-40℃~+60℃
Voltage Drop	50mV/60mV/75mV/100mV(costomized)
Accuracy Class	0.5/0.2(Customized 0.01)
Material	Copper+Manganin
Overload Capacity	120% Of Rated Current For 2H
Application	Use For DC Digital Amp Meter
The load under the heat:	Temperature stability tends to change, The rated current 50A The following does not exceed 80 ℃; Rated current 50A or more does not exceed 120 ℃.
Function	120% Of Rated Current For 2H

Model Standard

FL-□ ____A / ____mV
① ② ③ ④

①Shunt ②Design number

2：National Standard A
2：National Standard B
2C：Patented Type
2D：DIN43703 Type
2F：Cooling Type (Wind)
2S：Cooling Type (Water)
13：Russian Type
15：USA Type
19：Welding Type
19：Welding Type(ECO)
21：Taiwan Export Type
27：High Accuracy 0. 2
28：High Accuracy 0. 1
29：Bend Type
39：Middle Type
U：U Type
P：Piece Type
P1：Piece Non-inductive Type
T1：Round Tube Non-inductive Type

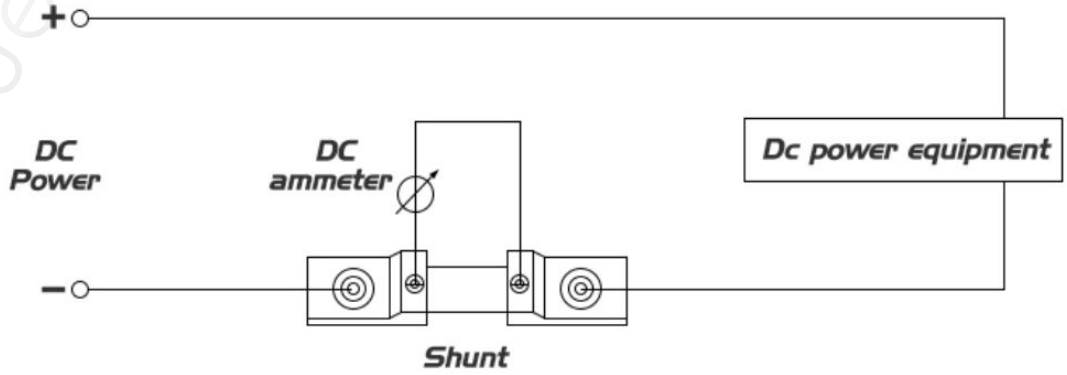
③Rated current
1A · · · 15000A

④Voltage Drop(default 75mV)
10mV · · · 800mV

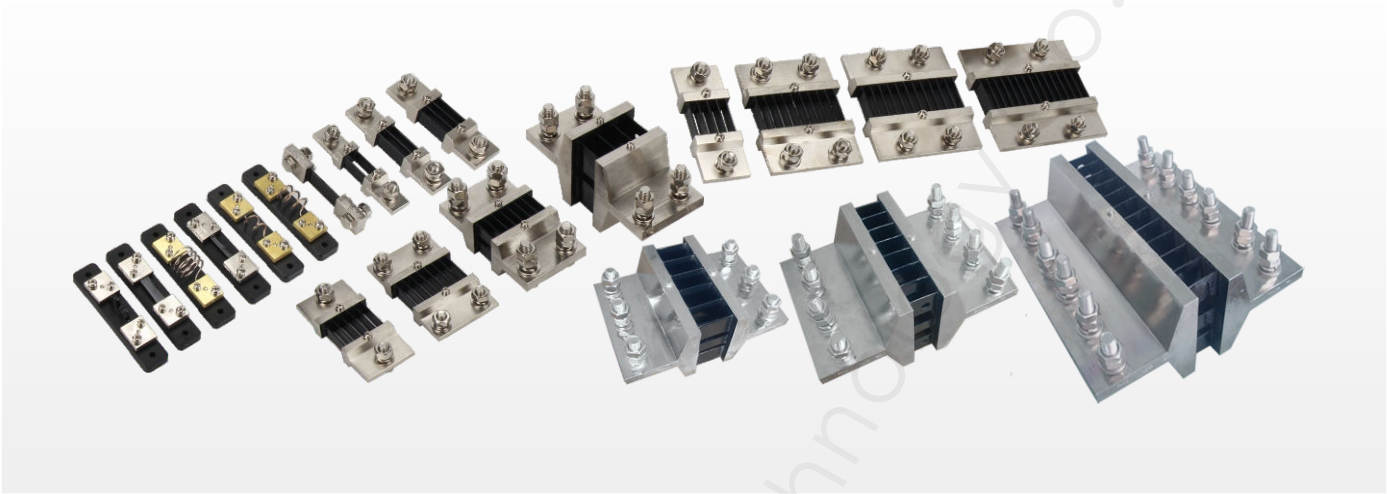
■ Example:
FL-2 300A/75mV

As a manufacturer with nearly 30 years of production experience, and also a famous factory in China. We have quality material suppliers and skilled workers with the good appearance and quality shunt. There are many different type shunts,please contact us if any requirement.

Wiring Diagram

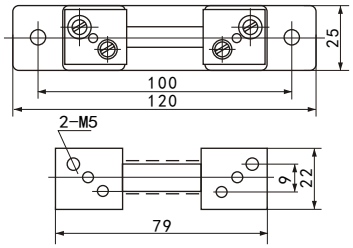


■ FL-2 Shunt(Standard A) 1-20000A

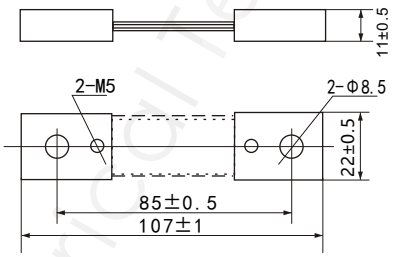


■ Dimension Diagram(75mV)

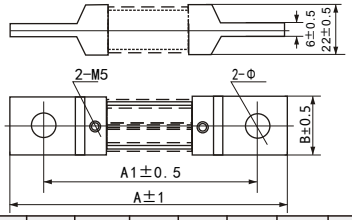
1-50A



75A-100A

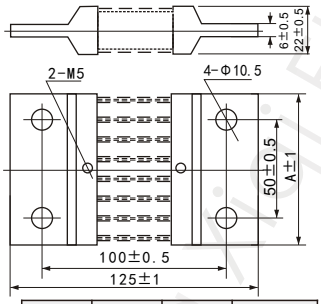


150A-600A



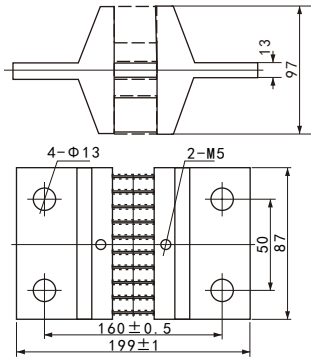
电流	150A	200A	250A	300A	400A	500A	600A
A(mm)	116	116	116	125	125	125	125
A1(mm)	85	85	85	100	100	100	100
B(mm)	22	22	22	26	36	46	56
Φ	8.5	8.5	8.5	10.5	10.5	10.5	10.5

750-1500A(小型)

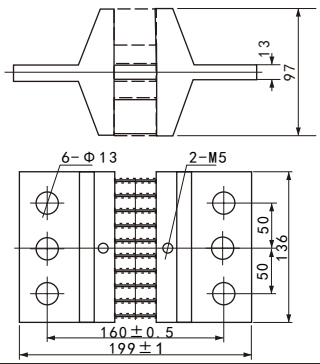


电流	750A	1000A	1500A小型
A(mm)	76	96	132

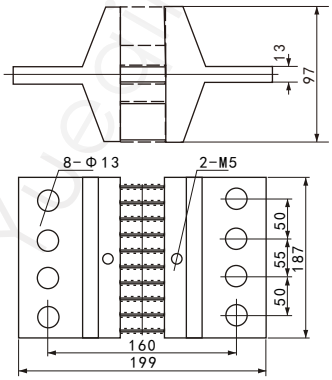
1500-2500A



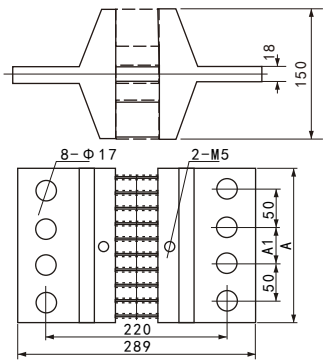
3000A



4000A

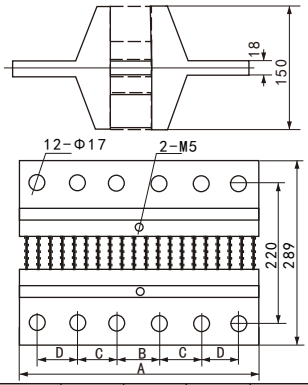


5000A-6000A



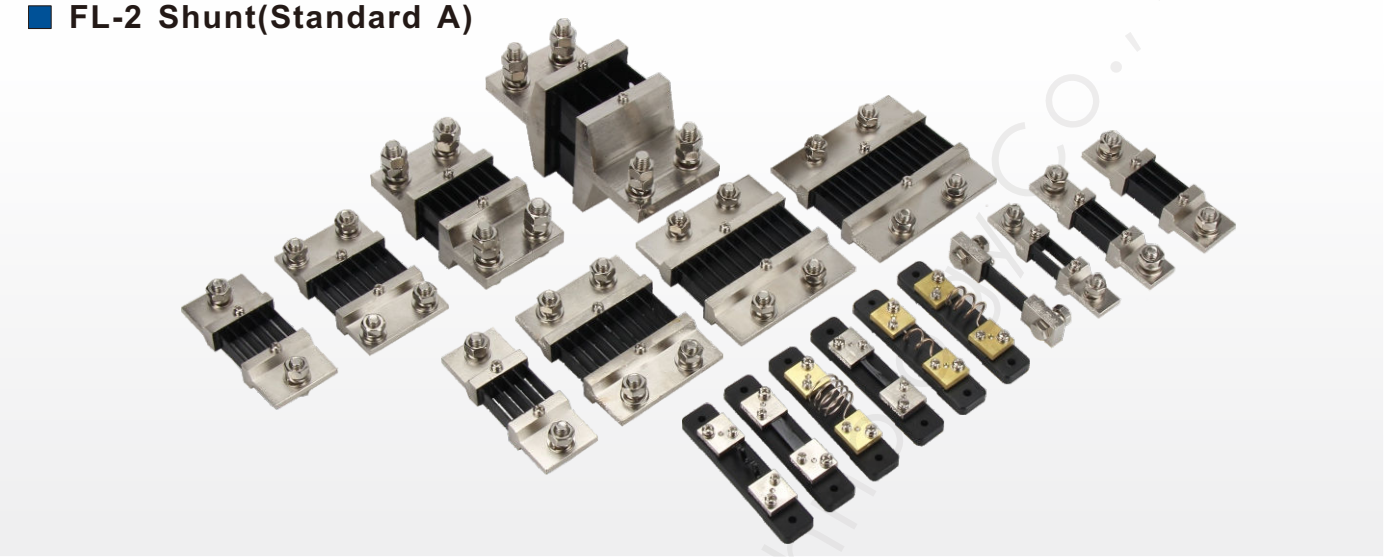
电流	5000A	6000A
A(mm)	196	240
A1(mm)	55	80

7500-10000A



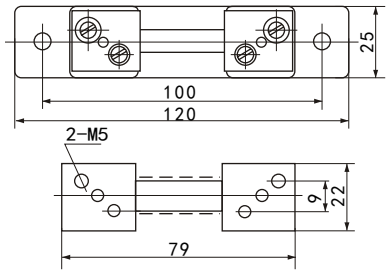
电流	A	B	C	D
7500A	320	50	60	50
10000A	410	50	90	50

FL-2 Shunt(Standard A)

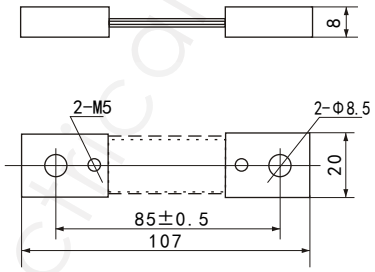


Dimension Diagram(75mV)

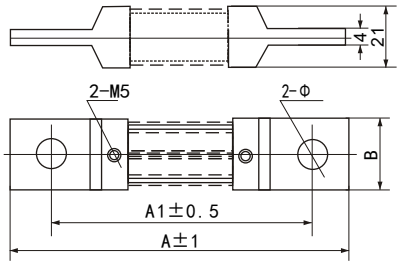
10-50A



75A 100A

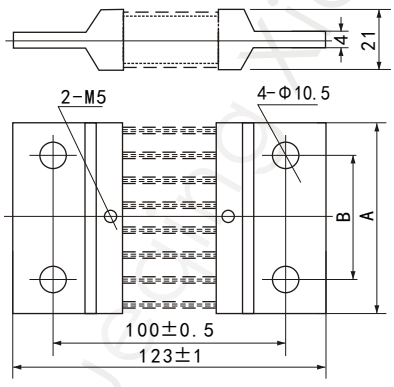


300A-600A



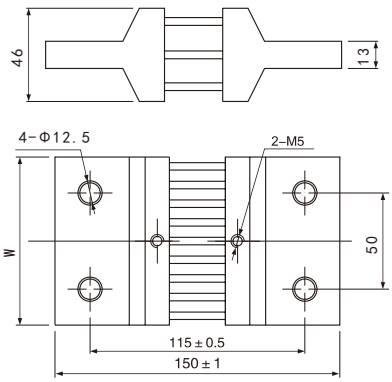
电流	150A	200A	250A	300A	400A	500A	600A
A(mm)	115	115	115	123	123	123	123
A1(mm)	85	85	85	100	100	100	100
B(mm)	17	17	17	20	27	35	42
Φ	8.5	8.5	8.5	10.5	10.5	10.5	10.5

750-1500A(小型)



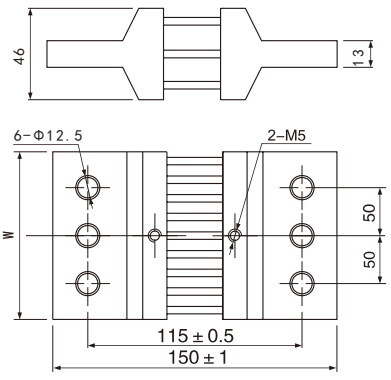
电流	750A	1000A	1500A小型
A(mm)	58	70	103
B(mm)	40	50	50

1500-2500A



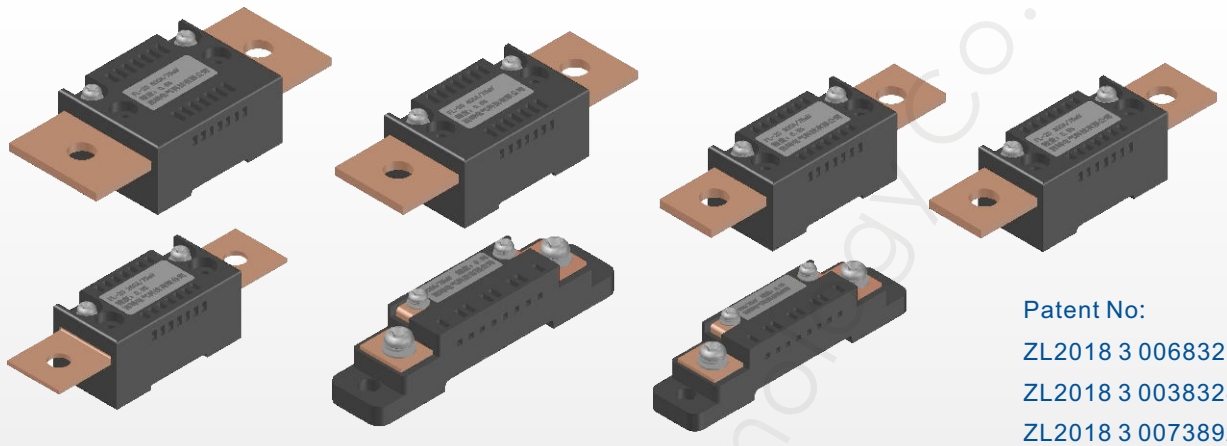
电流	1500A	2000A	2500A
W(mm)	80	80	80

3000A 4000A



电流	3000A	4000A
W(mm)	130	160

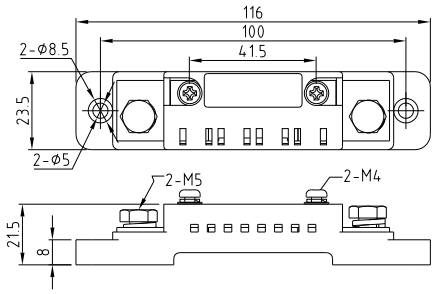
FL-2C Shunt(Patented Type)



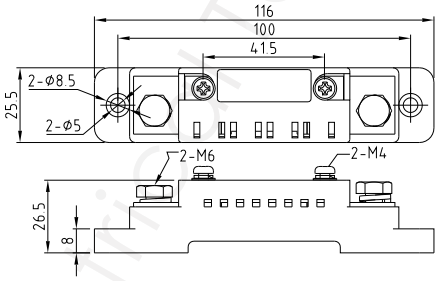
Patent No:
ZL2018 3 0068329.0
ZL2018 3 0038328.6
ZL2018 3 0073892.7
ZL2018 2 0270257.2

Dimension Diagram(75mV)

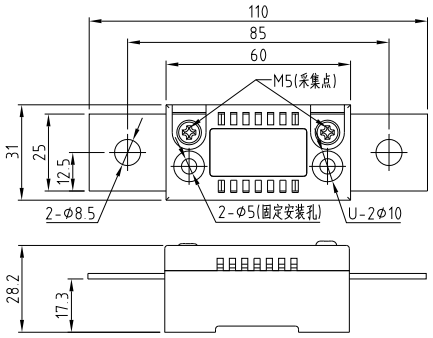
10A-50A



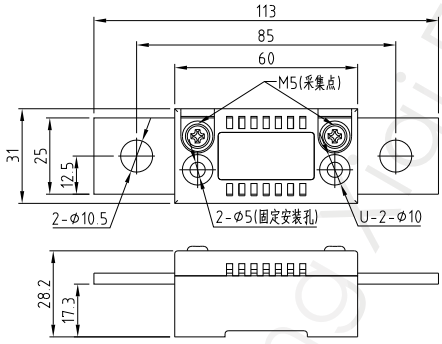
60A-75A-100A



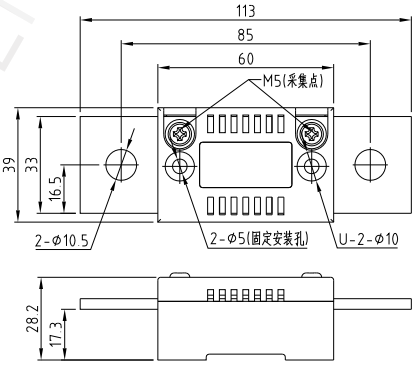
75A-D 100A-D



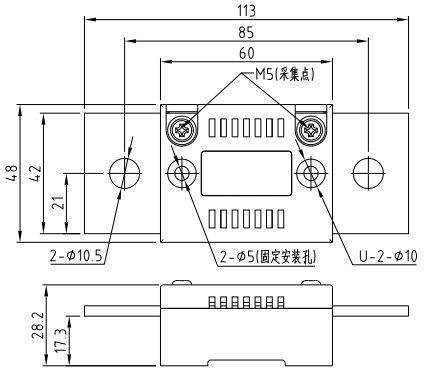
150A-200A-250A-300A



400A-500A



600A-750A



Appearance and structure

Structure	Connection block: copper Resistor: 6J13 manganese copper alloy
Surface	Pickling passivation and sandblasting
Case	High temperature flame retardant insulation material

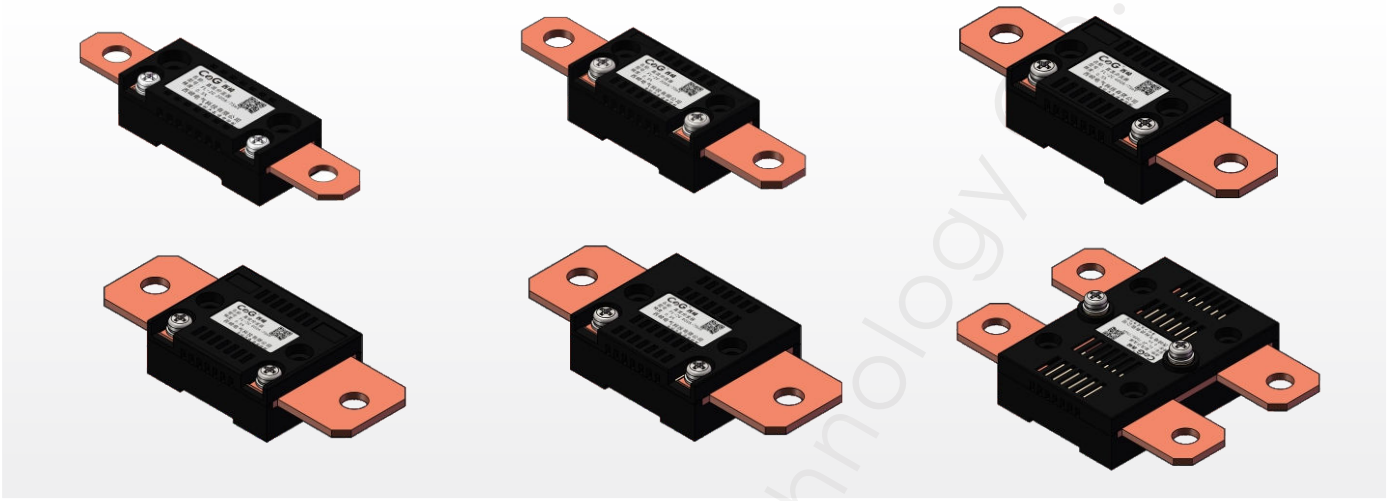
Basic parameters

Rated current	10A ~ 750A
Rated voltage	75mV....
Accuracy class	±0.5% (±0.25% customized)

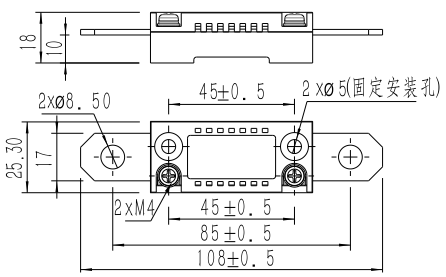
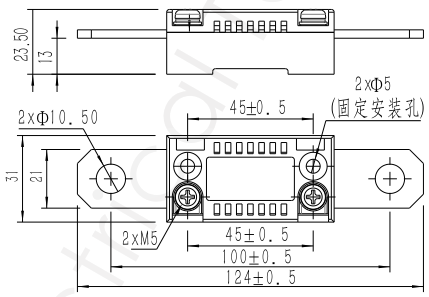
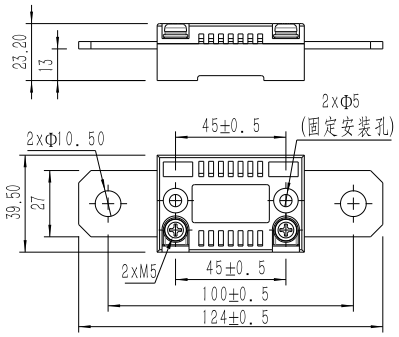
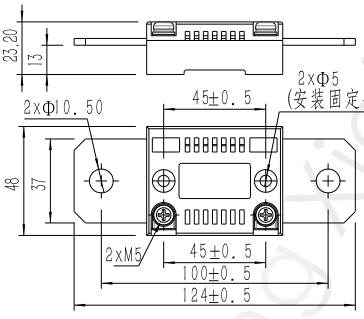
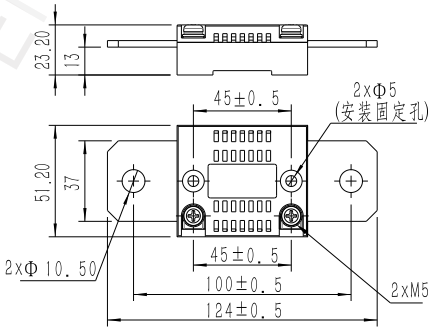
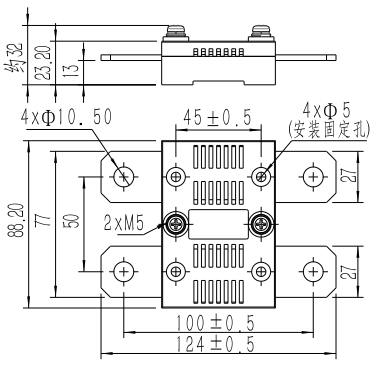
Performance Characteristics

Pilot projects	Performance requirements
Accuracy class	±0.5%
Operating Temp	-40℃ ~ +60℃
Operating RH	≤95% (35℃)
Voltage	75mV
Temp Rise	Not more than 120□
Temp Coef	0 ~ +40PPM/℃
Thermoelectric Potential	Not more than 50% of the level index

CG-2 Shunt(Patented Type)



Dimension Diagram(75mV)

75A 100A 150A 200A	250A-300A	400A
		
500A	**600A**	**750A-1000A**
		

Appearance and structure

Structure	Connection block: copper Resistor: 6J13 manganese copper alloy
Surface	Pickling passivation and sandblasting
Case	High temperature flame retardant insulation material

Basic parameters

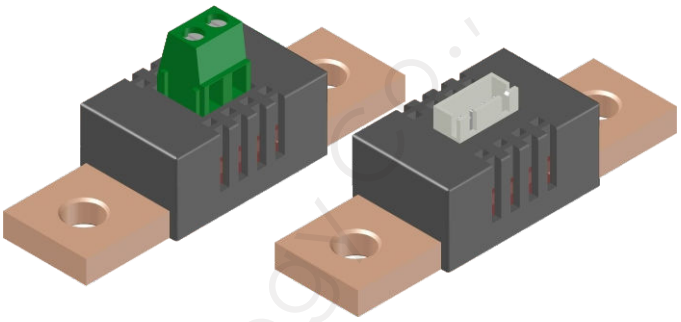
Rated current	10A ~ 750A
Rated voltage	75mV....
Accuracy class	±0.5% (±0.25% customized)

Performance Characteristics

Pilot projects	Performance requirements
Accuracy class	±0.5%
Operating Temp	-40℃ ~ +60℃
Operating RH	≤95% (35℃)
Voltage	75mV
Temp Rise	Not more than 120□
Temp Coef	0 ~ +40PPM/℃
Thermoelectric Potential	Not more than 50% of the level index

Application

Battery management system, power electronics current detection, inverter, UPS,Motor control and electronic load equipment.

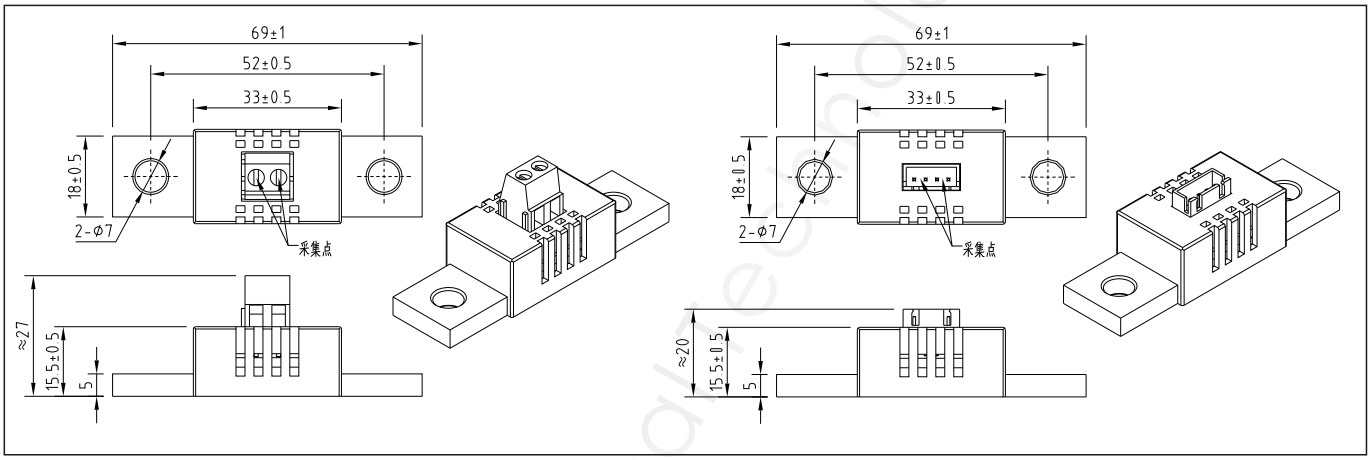


Product standard:

National Standard of the People's Republic of China: GB/T7676-1998 "Direct acting indicating analogue electrical measuring instruments and their accessories".

Professional Standard of the People's Republic of China: JB/T9288-1999 "External Shunt"

Dimension Diagram(75mV)



Appearance and structure

Structure	Connection block: copper Resistor: 6J13 manganese copper alloy
Surface	Pickling passivation and sandblasting
Case	High temperature flame retardant insulation material

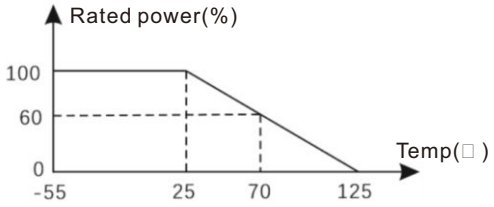
Performance Characteristics

Pilot projects	Performance requirements
Accuracy class	±0.5%
Operating Temp	-40℃ ~ +60℃
Operating RH	≤95% (35℃)
Voltage	75mV
Temp Rise	Not more than 120□
Temp Coef	0 ~ +40PPM/℃
Thermoelectric Potential	Not more than 50% of the level index

a. Resistance value: The resistance value of the shunt measured in the above environment is compared with its nominal resistance value. The error must be within the allowable error range.

b. Rated voltage: The rated voltage refers to the rated continuous operating voltage of the shunt, which can be calculated by the following formula: U = IxR
I: Rated current (A) R: Nominal resistance (Ω) U: Rated voltage (V)

c. Rated power: The rated power is determined by the power reduction curve in the figure below.



d. Mechanical shock: At room temperature, perform a mechanical shock test in accordance with GB / T31467.3. Measure the resistance value before and after the test. The resistance value conforms to the level index, and the shunt is not damaged.

e. Random vibration: At room temperature, perform a random vibration test in accordance with GB / T31467.3. Measure the resistance value before and after the test. The resistance value is in accordance with the grade index, and the appearance of the shunt is not damaged.

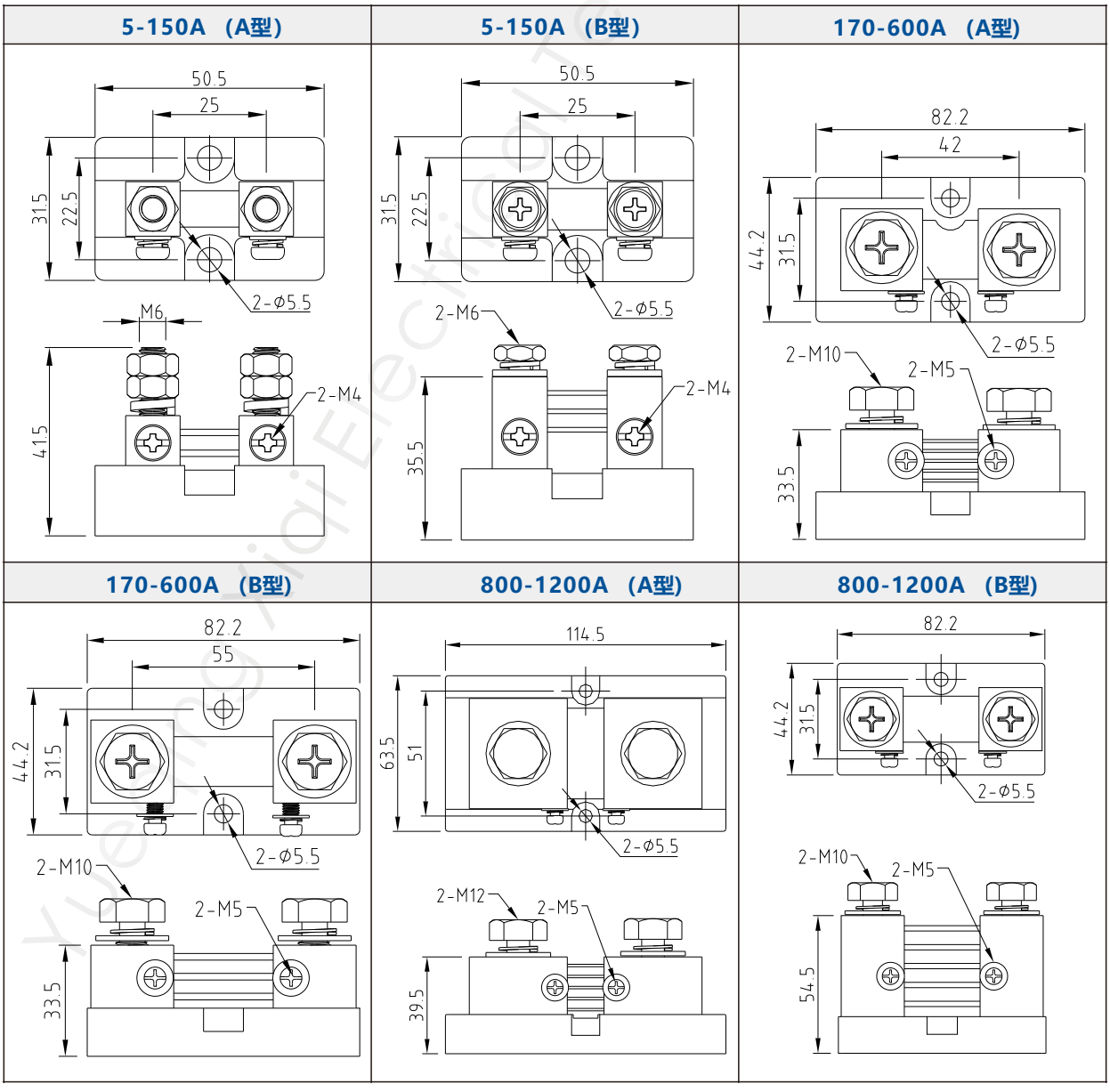
f. High-temperature storage: test 1000h, 80 ℃ in a high-temperature incubator without load, test the resistance Ri every 11 times for a total of 11 times, and the resistance value changes in accordance with the level index.

g. Low temperature storage: test 250h, -40 ℃, without load. In the test box, test the resistance Ri every 6 hours for a total of 6 times. The resistance value conforms to the level index, and the shunt is not damaged.

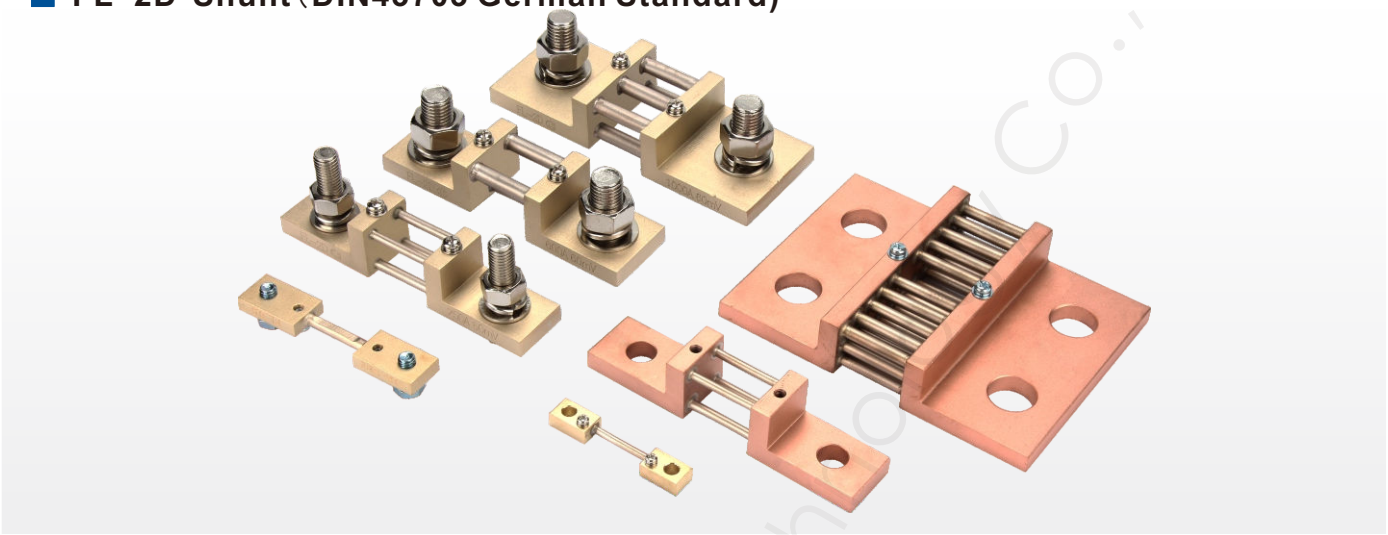
h. Humidity resistance: test T = 24h / cycle (25 ℃ ~ 65 ℃, 90% relative humidity, no load, not required for Step7a / 7b), repeat 16 cycles; test in the test box every 2 cycles The resistance Ri was tested a total of 9 times, and the change in resistance value conformed to the level index.

■ FL-15 Shunt(USA Type)

■ Dimension Diagram(50mV 75mV 100mV)

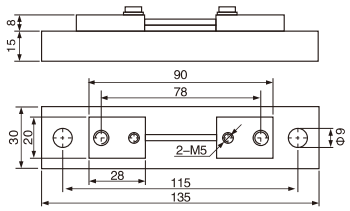


FL-2D Shunt（DIN43703 German Standard)

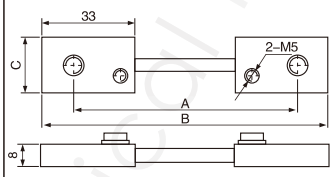


Dimension Diagram(60mV)

1～25A

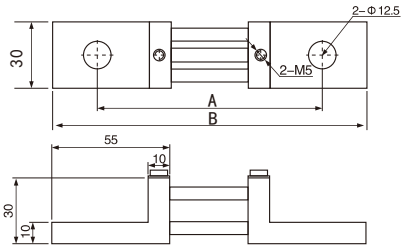


30～150A



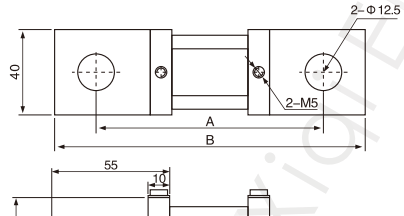
TYPE	A	B	C
60mV	80	100	20
100mV	125	145	25

200～300A



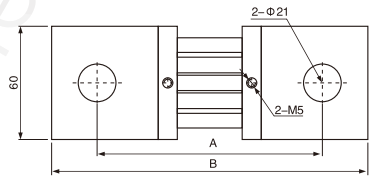
TYPE	A	B
60mV	105	145
100mV	150	190

400～800A



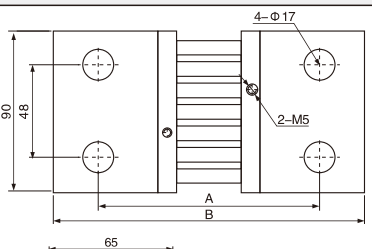
TYPE	A	B
60mV	105	145
100mV	150	190

1000～1200A



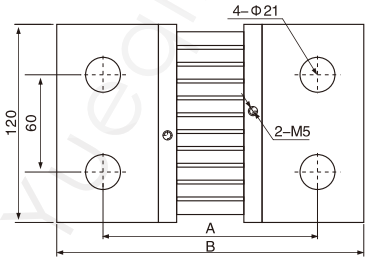
TYPE	A	B
60mV	115	165
100mV	160	210

1500～2000A

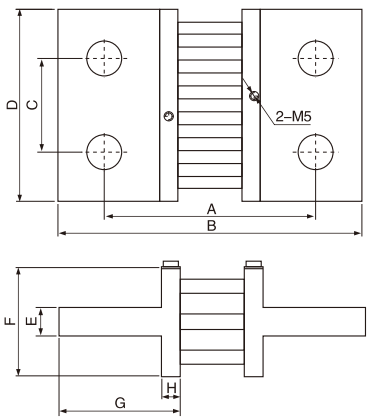


TYPE	A	B
60mV	115	165
100mV	160	210

2500A

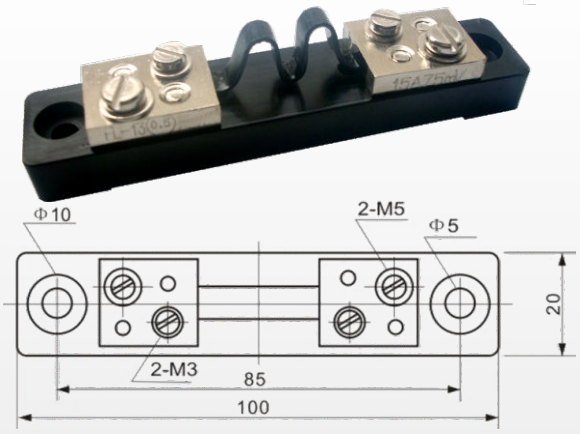


TYPE	A	B
60mV	115	165
100mV	160	210

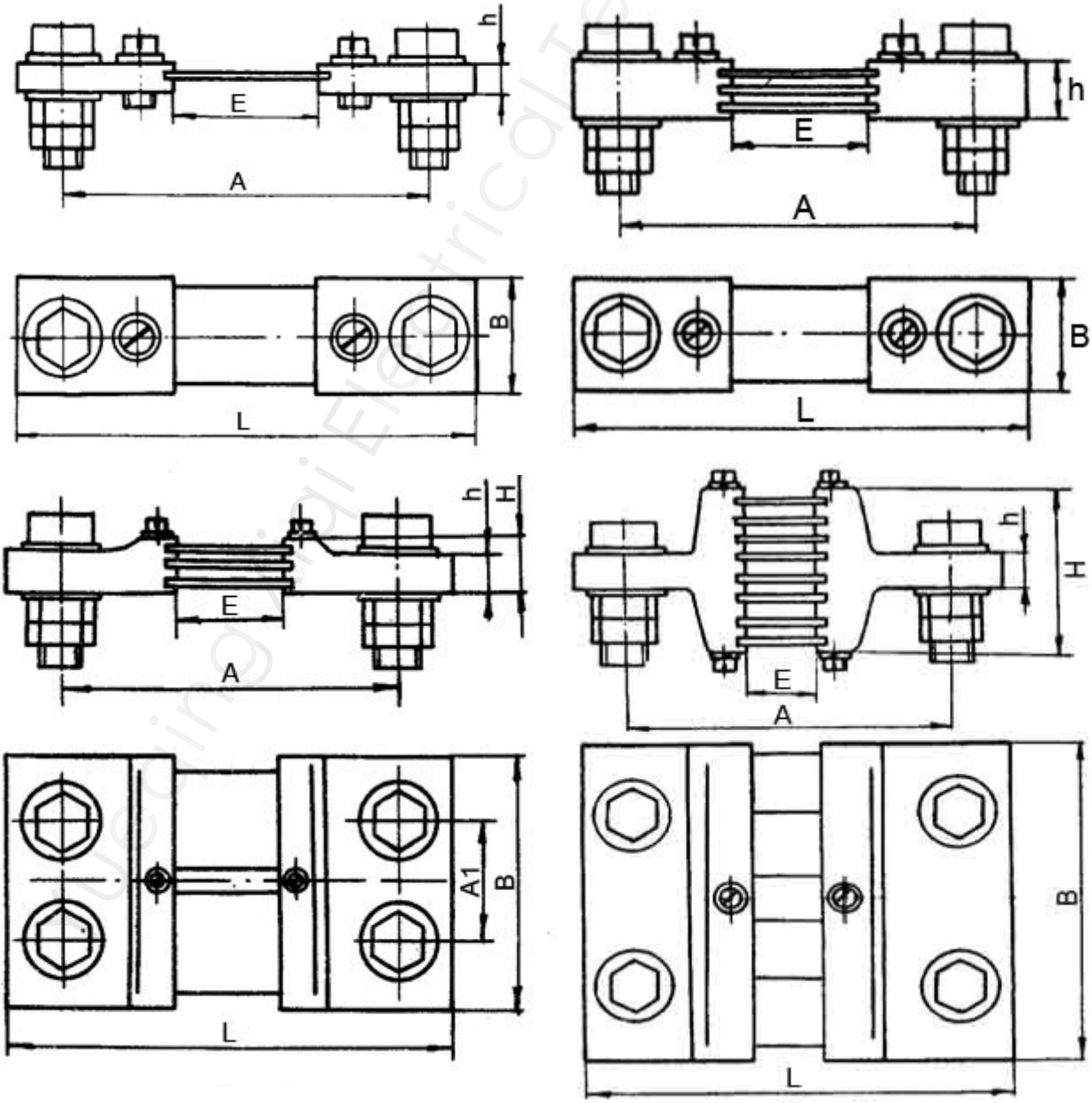


There are many different type shunts, please contact us if any requirement.

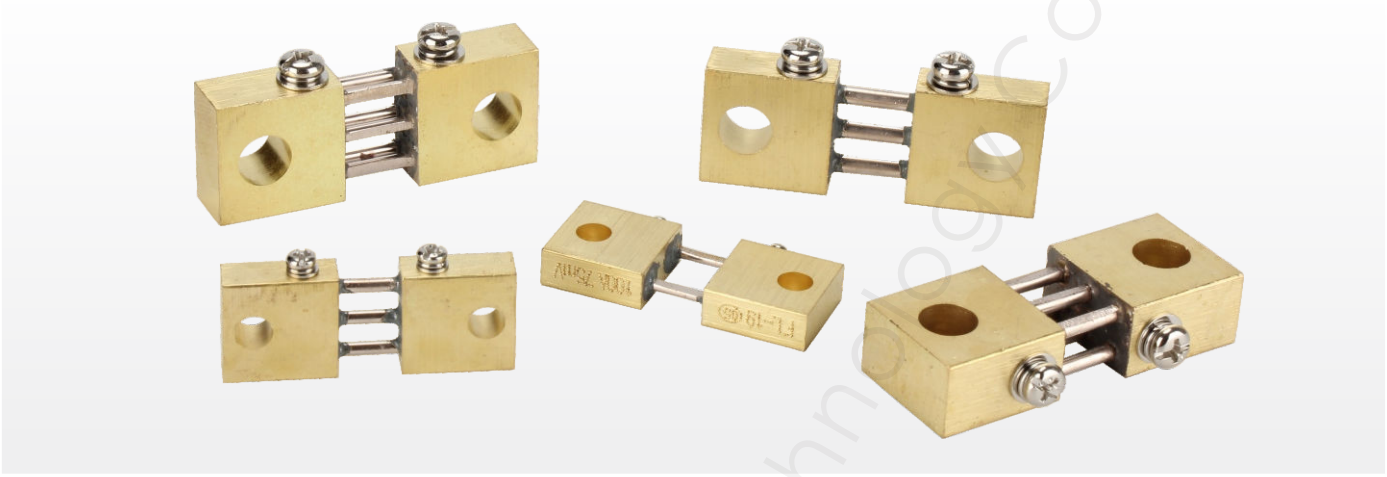
■ FL-13 Shunt (Russian Type)



■ Dimension Diagram(75mV)

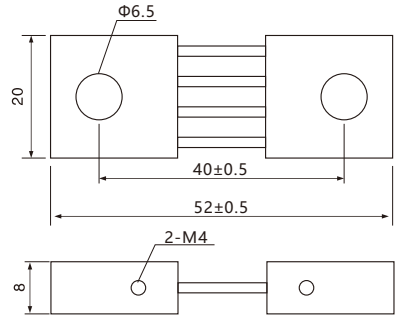


■ FL-19 Shunt(Welding Machine Type)

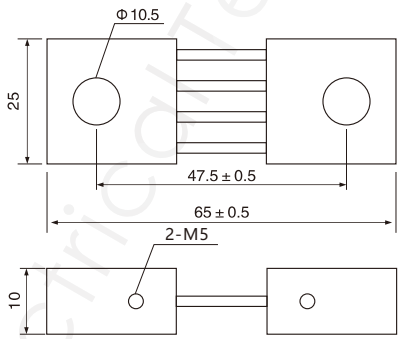


■ Dimension Diagram(75mV)

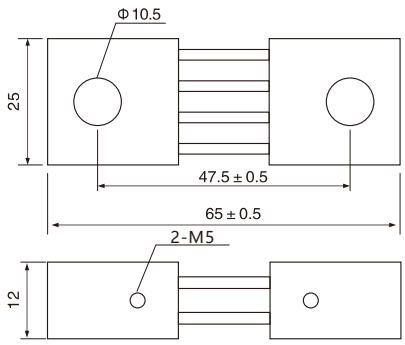
100A 150A 200A



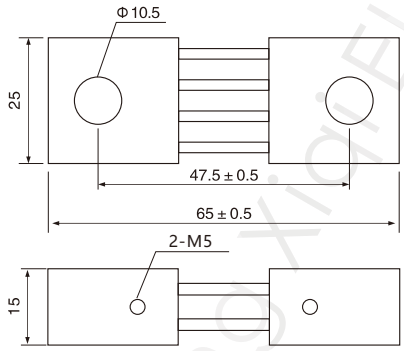
300A



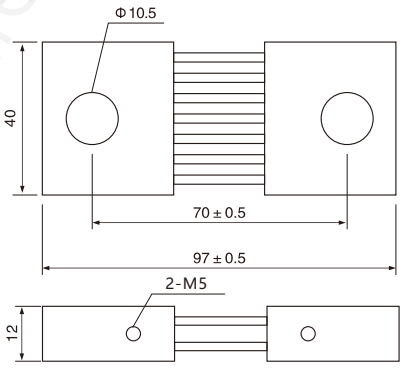
400A



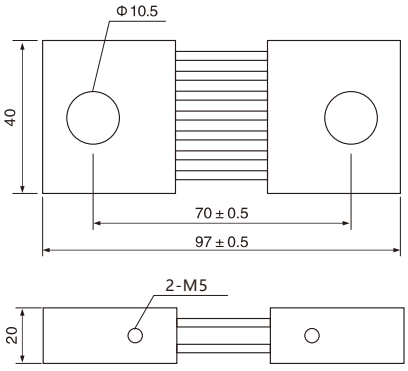
500A 600A



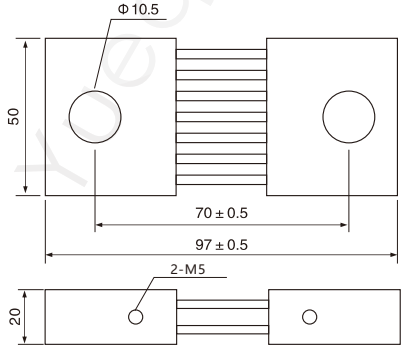
750A



1000A



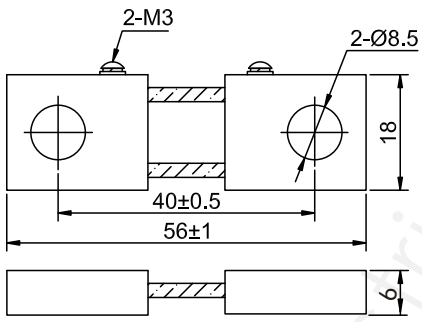
1500A



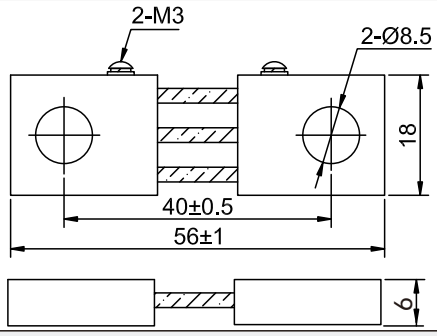
FL-19Z Shunt(Welding Machine Type B)

Dimension Diagram(75mV)

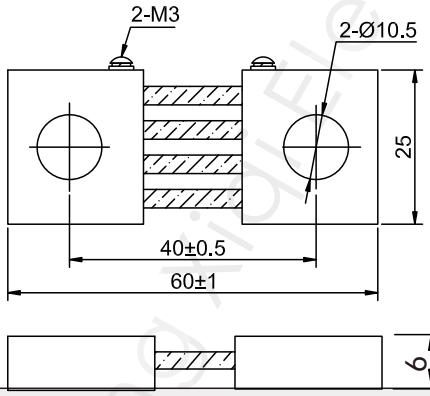
100A



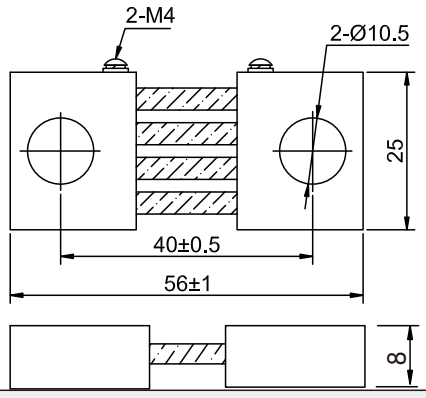
150A 200A



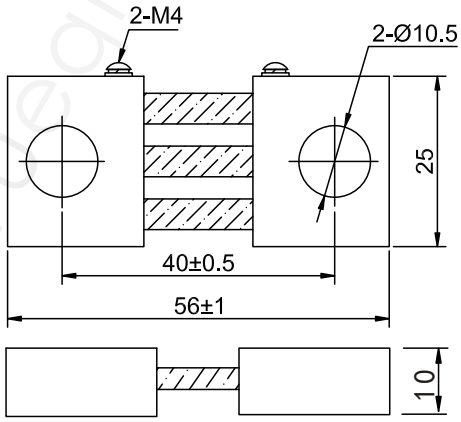
300A



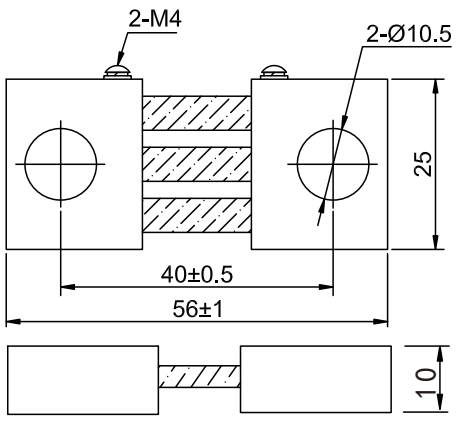
400A



500A



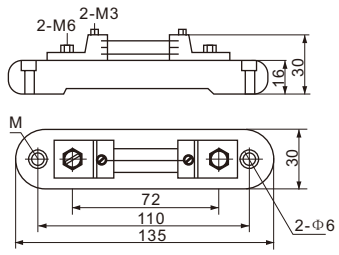
600A



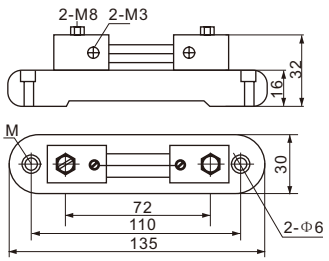
■ FL-21 Shunt(Taiwan Type)

■ Dimension Diagram(75mV)

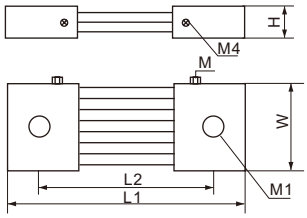
5-125A



150A-200A

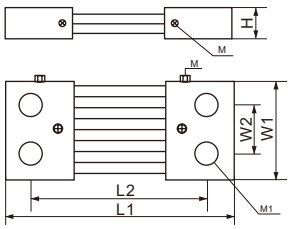


250-600A



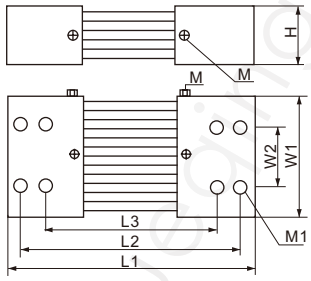
TYPE 50mV	250A	300A	400A	500A	600A
L1	116	116	116	116	122
L2	86	86	86	86	90
W	41	35	44	55	55
H	12	17	17	17	21
M	4	4	4	4	4
M1	13	13	13	13	13
Kg	0.31	0.37	0.49	0.61	0.77

800-1500A



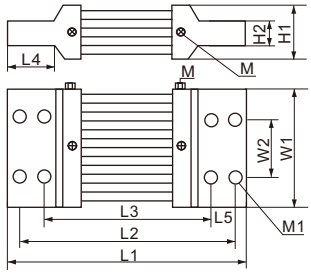
TYPE 50mV	800A	1000A	1200A	1500A
L1	122	159	161	159
L2	90	121	123	121
W1	70	70	85	100
W2	35	35	45	49
H	21	21	21	21
M	4	4	4	4
M1	17	17	17	17
Kg	0.97	1.4	1.7	2.3

2000-2500A



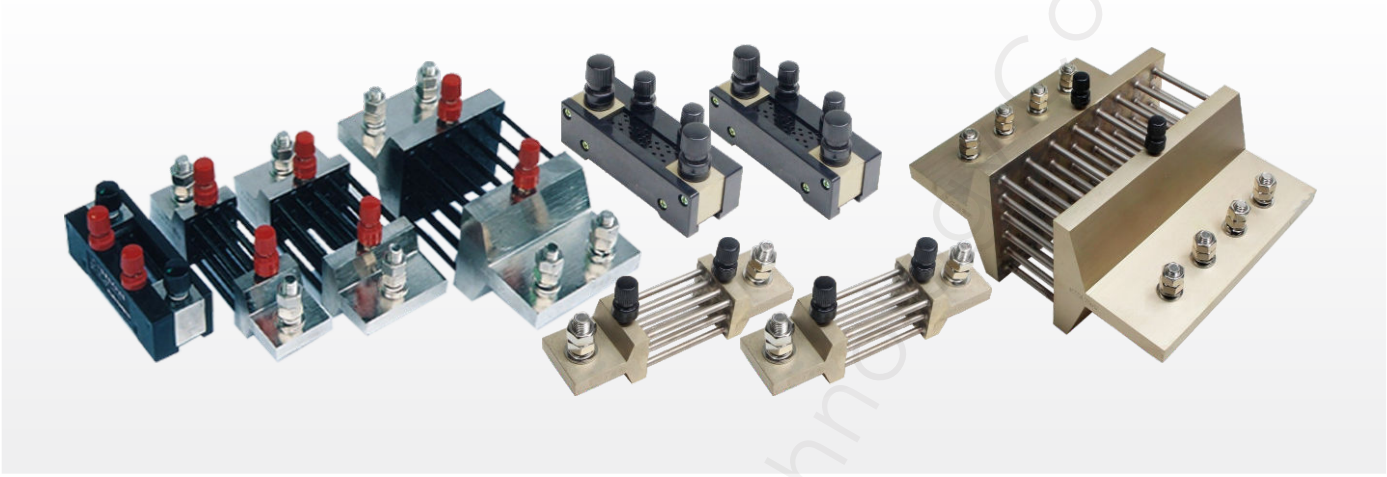
TYPE 50mV	2000A	2500A
L1	190	190
L2	165	165
L3	89	89
W1	100	110
W2	50	55
H	38	38
M	4	4
M1	17	17
Kg	4.7	5.3

3000-6000A



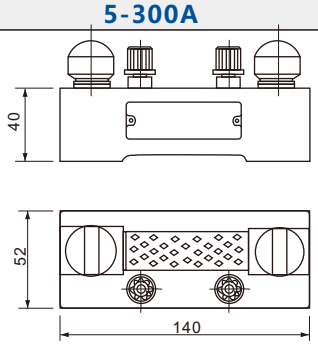
TYPE 50mV	3000A	4000A	5000A	6000A
L1	273	292	315	327
L2	232	253	271	283
L3	142	153	163	185
L4	90	97	100	108
L5	45	50	54	55
W1	103	110	128	133
W2	55	55	60	65
H1	64	82	106	115
H2	28	34	41	48
M	4	4	4	4
M1	17	17	17	17
Kg	7	9.5	15	19.2

FL-27 Shunt(0.2/0.1 High Accuracy Type)

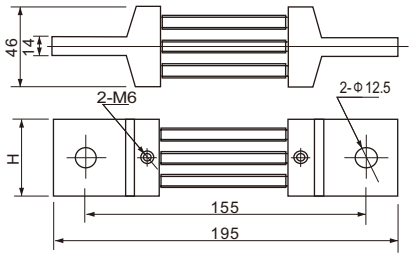


Dimension Diagram(75mV)

5-300A

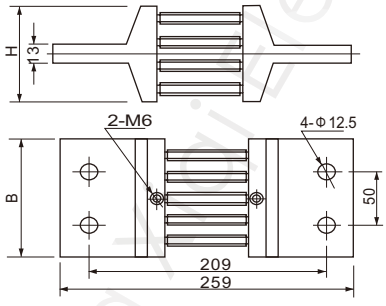


400A-750A



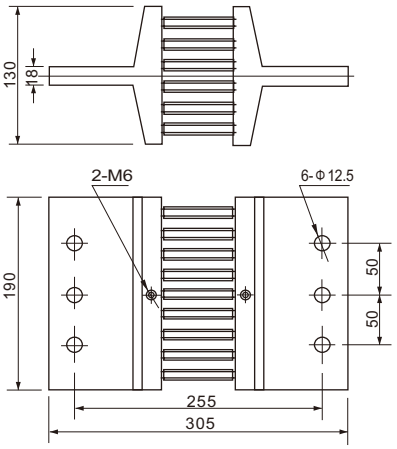
电流	400A	500A	600A	750A
H(mm)	50	50	50	80

1000-2000A

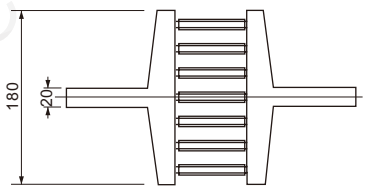


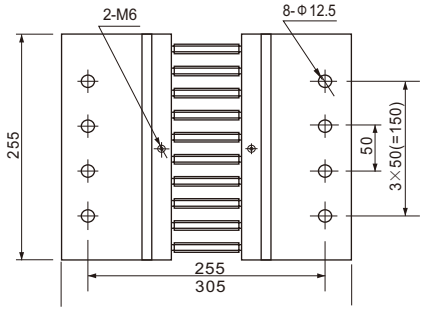
电流	1000A	1500A	2000A
B(mm)	110	130	150
H(mm)	46	100	110

3000A

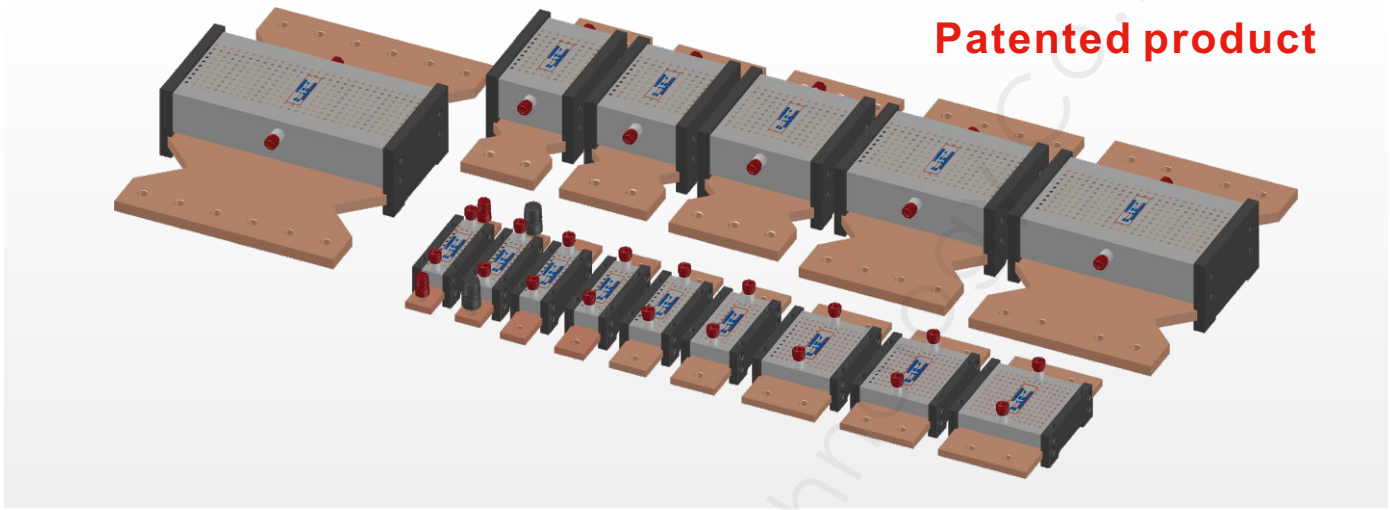


4000A





FL-28 Shunt(0.2/0.1 High Accuracy Type B)



Product Standard:

National Standard of the People's Republic of China: GB/T7676-1998 "Direct acting indicating analogue electrical measuring instruments and their accessories".

Professional Standard of the People's Republic of China: JB/T9288-1999 "External Shunt".

Application

Battery management system, power electronics current detection, inverter, UPS, motor control and electronic load equipment.

It can be used as a laboratory for scientific research units, power supply units, factories, metrology institutes, etc.DC resistance standard use.

Appearance and structure

Structure	Connection block: copper Resistor: 6J13 manganese copper alloy
Surface	Pickling passivation and sandblasting
Case	High temperature flame retardant insulation material

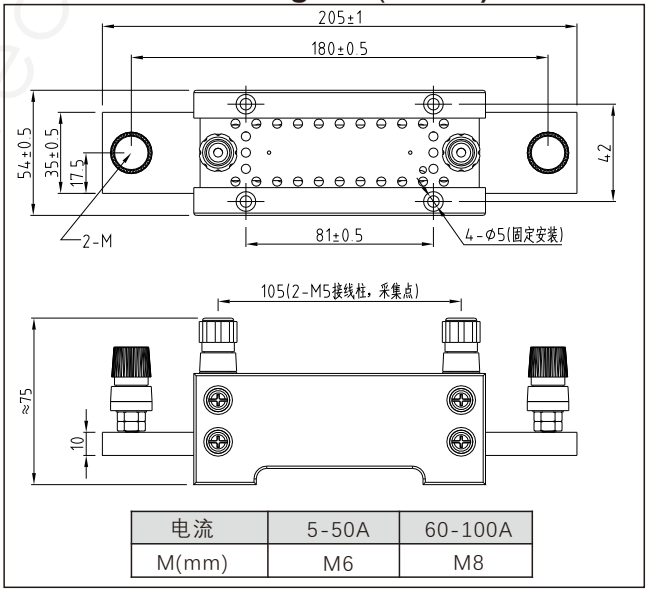
Basic parameters

Rated current	5A ~ 10000A
Rated voltage	25mV,30mV,50mV,60mV,75mV...
Accuracy class	±0.1% ,±0.2% (±0.05% customized)

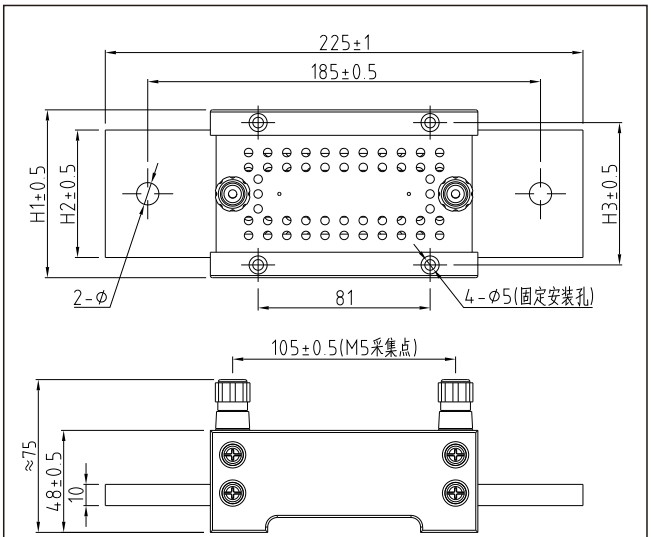
Performance Characteristics

Pilot projects	Performance requirements
Accuracy class	±0.1%,±0.2%
Operating Temp	-40℃ ~ +60℃
Operating RH	≤95% (35℃)
Voltage	25mV,30mV,50mV,60mV,75mV...
Temp Rise	Not more than 120℃
Temp Coef	0 ~ +20PPM/℃
Thermoelectric Potential	Not more than 50% of the level index

Dimension Diagram(75mV)

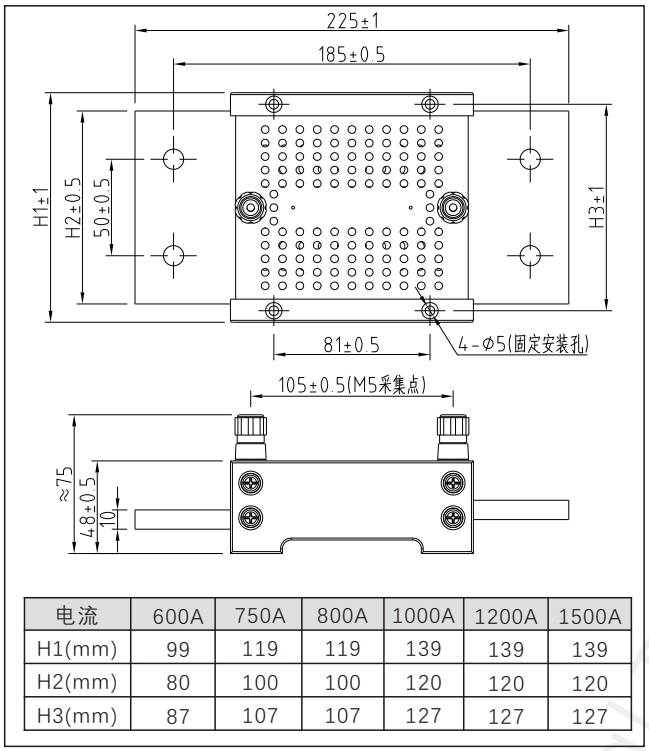


电流	5-50A	60-100A
M(mm)	M6	M8

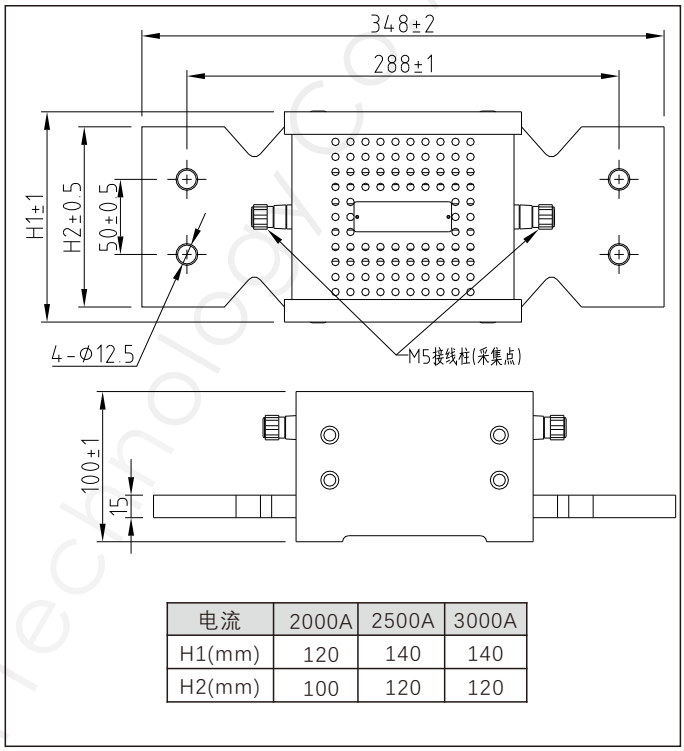


电流	150A	200A	250A	300A	400A	500A
H1(mm)	54	54	59	59	69	79
H2(mm)	35	35	40	40	50	60
H3(mm)	42	42	47	47	57	67
Φ	8.5	8.5	10.5	10.5	10.5	10.5

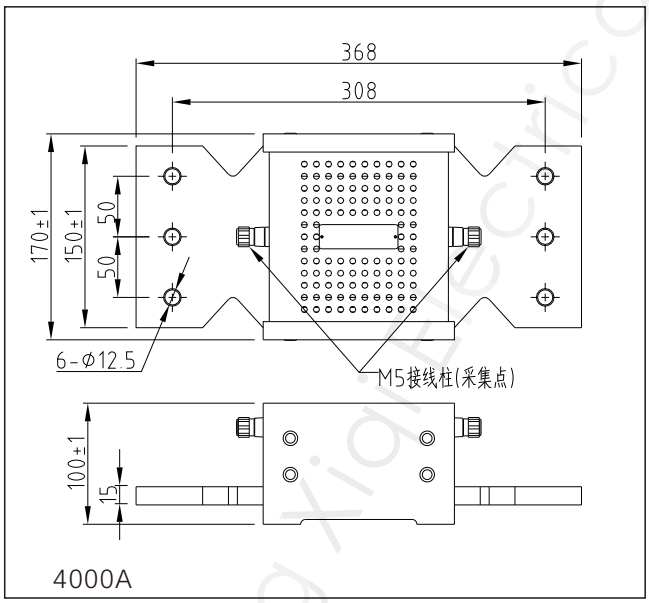
■ Dimension Diagram(75mV)

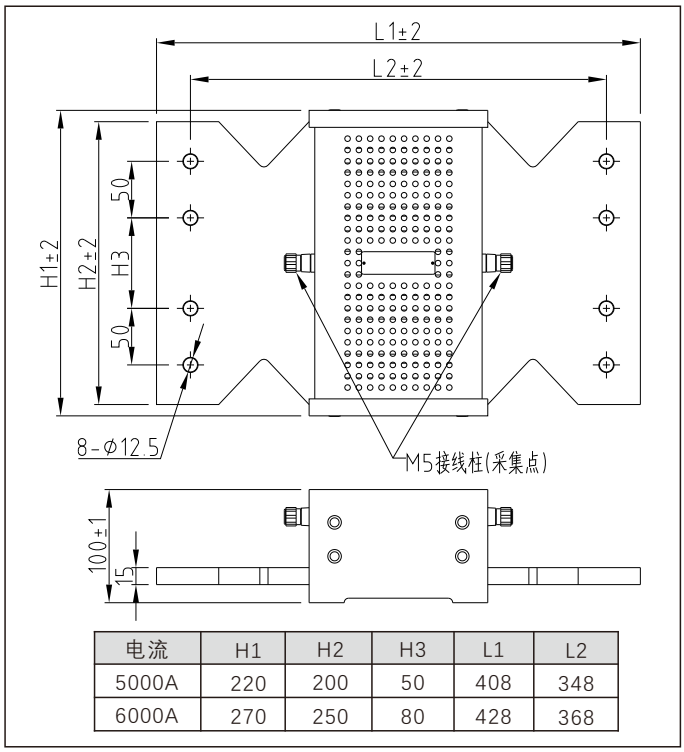


电流	600A	750A	800A	1000A	1200A	1500A
H1(mm)	99	119	119	139	139	139
H2(mm)	80	100	100	120	120	120
H3(mm)	87	107	107	127	127	127

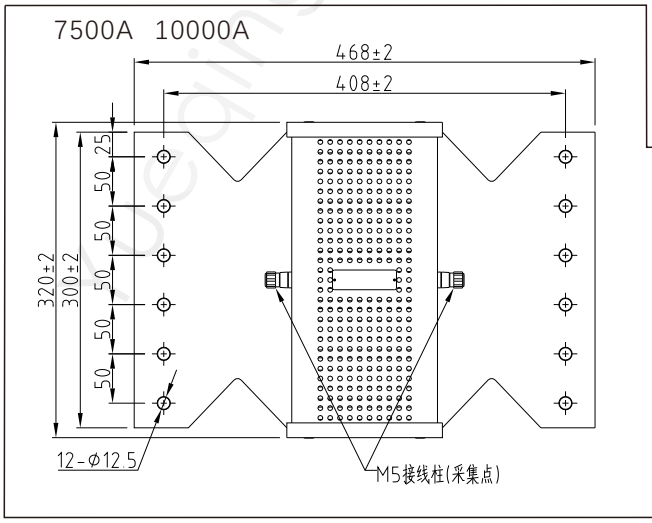


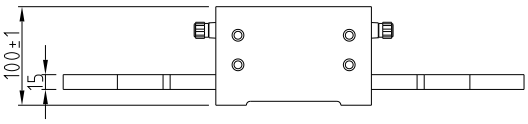
电流	2000A	2500A	3000A
H1(mm)	120	140	140
H2(mm)	100	120	120



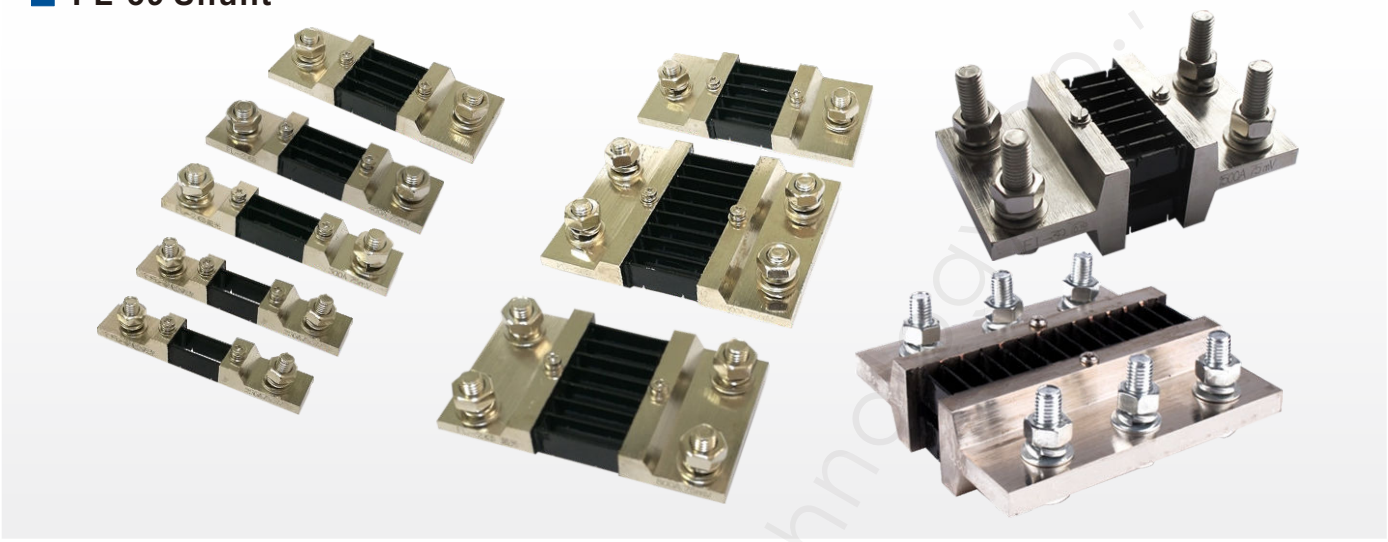


电流	H1	H2	H3	L1	L2
5000A	220	200	50	408	348
6000A	270	250	80	428	368



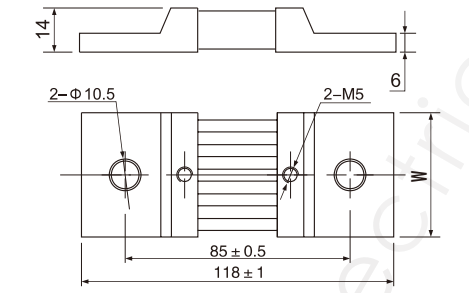


FL-39 Shunt



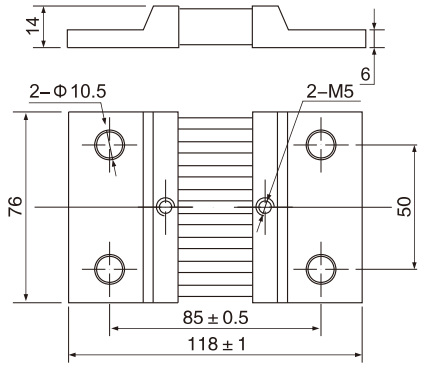
Dimension Diagram(75mV)

150-600A



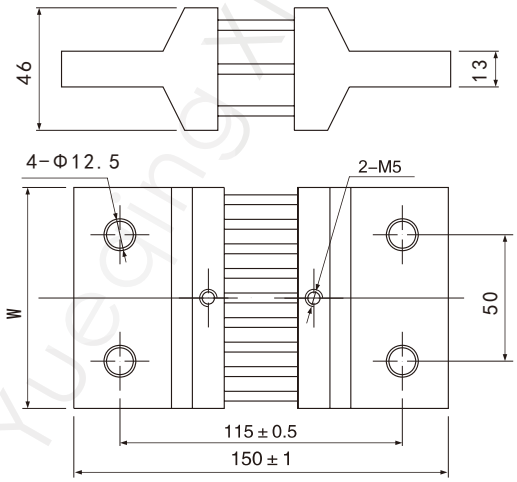
电流	150A–250A	300A	400A	500A	600A
W(mm)	22	26	36	46	56

750-1500A



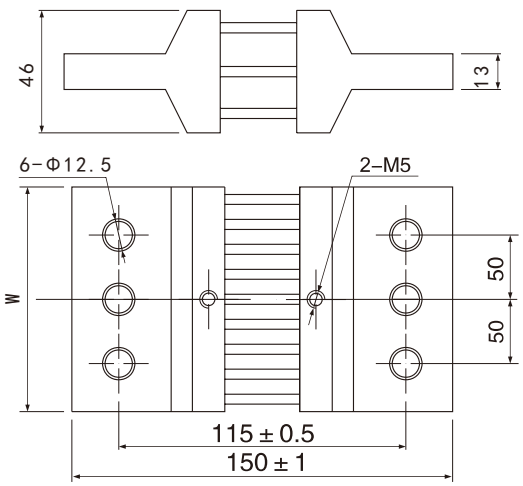
电流	750A	1000A	1500A(小型)
W(mm)	76	96	132

1500-2500A



电流	1500A	2000A	2500A
W(mm)	80	80	80

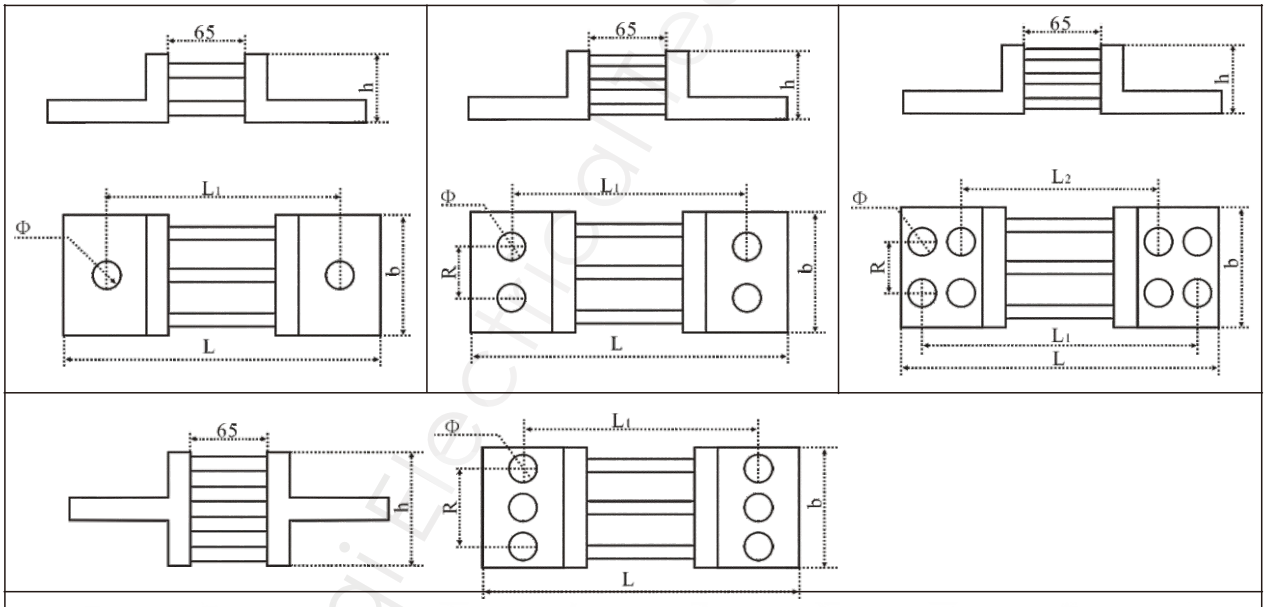
3000A 4000A



电流	3000A	4000A
W(mm)	130	160

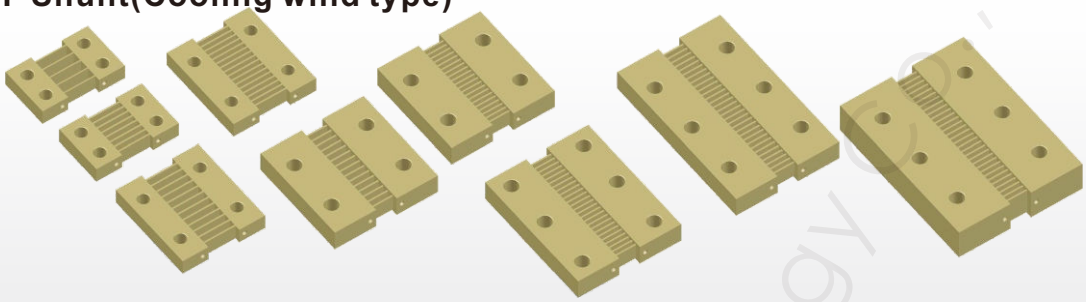
FL-29 Shunt

Dimension Diagram(75mV)



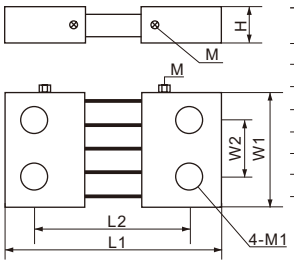
	量 程	L	b	h	L1	Φ	L2	R
detailed size value	75A	137	30	22	104	13		
	100A							
	150A							
	200A	152	40	24	114	17		
	250A							
	300A	157		30	118			
	400A	174	50		125			
FL-29型	500A							
定值分流器	600A			42	127			
精度等级0.5	750A	178						
	1KA	208	80	45	154	15		
	1.5KA							
FL-29 SHUNT CLASS 0.5	2KA	322	100	82	274	17	174	50
	2.5KA	344	120		300		180	60
	3KA	387	140		314		174	70
	4KA	318	100	164	274			50
	5KA	340	120	160	300		180	60
	6KA	384	140	164	314		174	70
	7.5KA	390	200	180	325			

FL-2F Shunt(Cooling wind type)



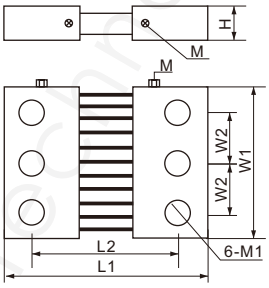
Dimension Diagram(75mV)

500-4000A



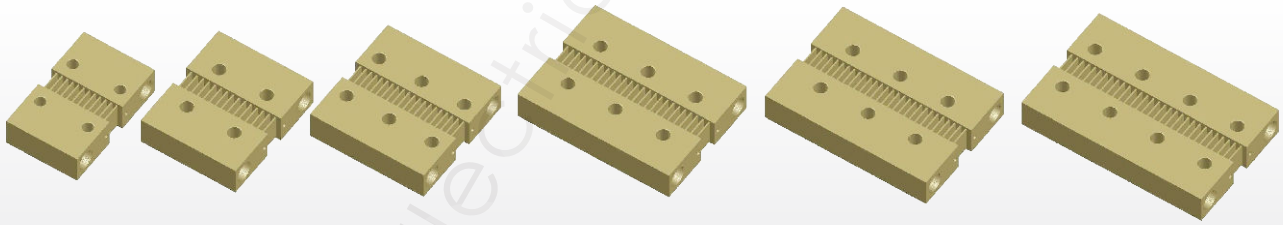
TYPE 75mV	500-1000A	1500-2000A	3000-4000A
L1	80	80	100
L2	60	60	70
W1	50	90	100
W2	25	50	50
H	15	15	20
M	5	5	5
M1	10.5	10.5	10.5

5000-8000A



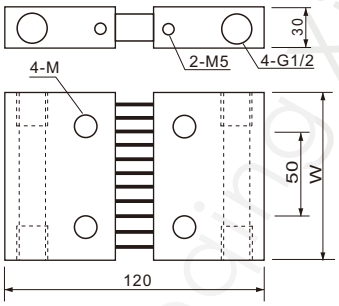
TYPE 75mV	5000A	6000A	8000A
L1	100	100	120
L2	70	70	80
W1	125	160	160
W2	45	50	50
H	20	20	30
M	5	5	5
M1	12.5	12.5	12.5

FL-2S Shunt(Cooling water type)



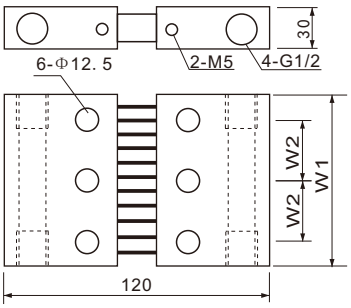
Dimension Diagram(75mV)

1500-4000A



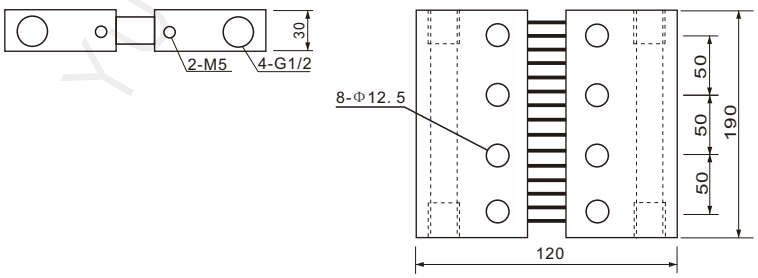
TYPE 75mV	1500-2000A	3000-4000A
W	75	100
M	10.5	12.5

5000-8000A



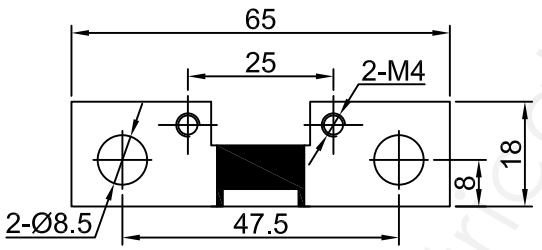
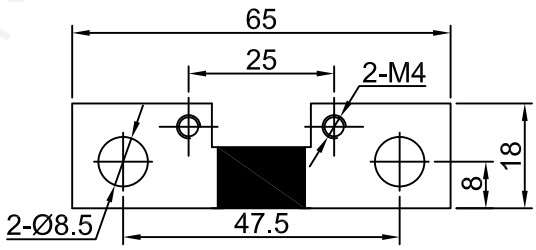
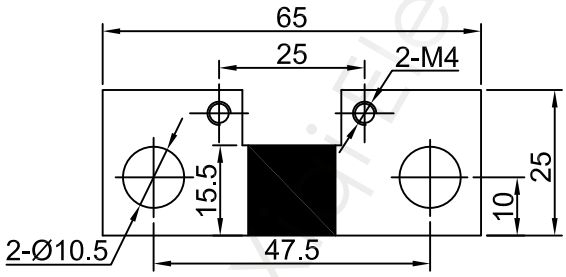
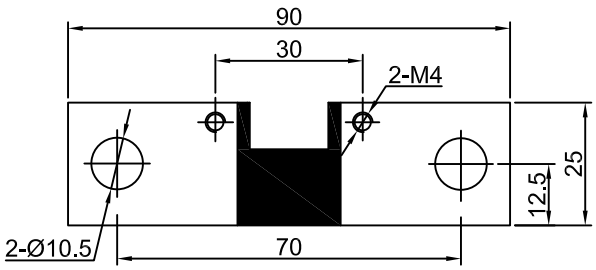
TYPE 75mV	5000A	6000A	8000A
W1	120	160	170
W2	45	50	50

10000A



■ FL-P Shunt

■ Dimension Diagram(75mV)

100A 150A	200A
	
300A 400A 500A	**300A(90mm)**
	

■ FL-U Shunt