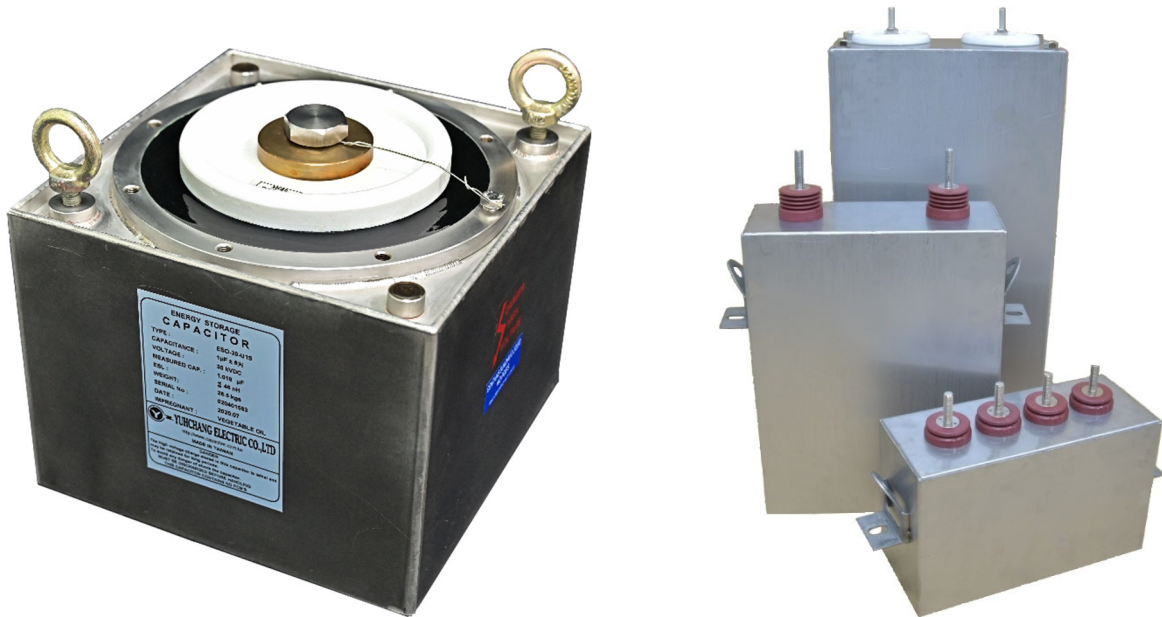


# Capacitors for Power Electronics

## **Energy storage capacitors (Oil type)**

Series **ESAS/ESBS/ESCS/ESFS**



### **General**

The capacitors are specifically designed for discharge applications.  
The capacitor elements are made by following optional technologies:  
Series ESAS: Paper dielectric + Al Foil + Castor oil  
Series ESBS: Metallized polypropylene film + Vegetable oil  
Series ESCS: Polypropylene film + Al Foil + Vegetable oil  
Series ESFS: Polypropylene film + Al Foil + PXE oil

### **Characteristics**

Standard	IEC 61071
Capacitance tolerance	±10% (optional ±5%)
Rated DC Voltage	up to 50kV
Dielectric	Paper or Polypropylene film
Self-inductance (ESL)	< 100nH
Test voltage between terminals	1.25xUn / 10s at 25±5°C
Test voltage between terminals and case	1.5xUn VAC / 60s at 60Hz 25±5°C
Operating temperature	-40°C / +70°C (optional 85°C)
Storage temperature	-40°C / +85°C
Case	Rectangular non-magnetic stainless steel
Filling material	according the design "Series"
Cooling method	Natural

ISO 9001:2015 認證工廠

YCE CAT-29 V01.2021.04



**裕昌機電工廠股份有限公司**

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# Capacitors for Power Electronics

## **Energy storage capacitors (Oil type)**

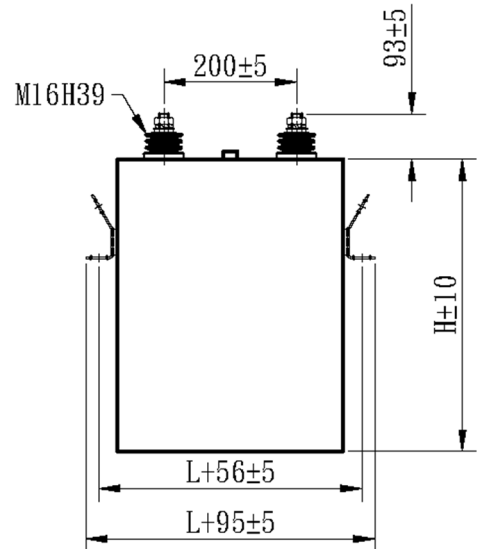
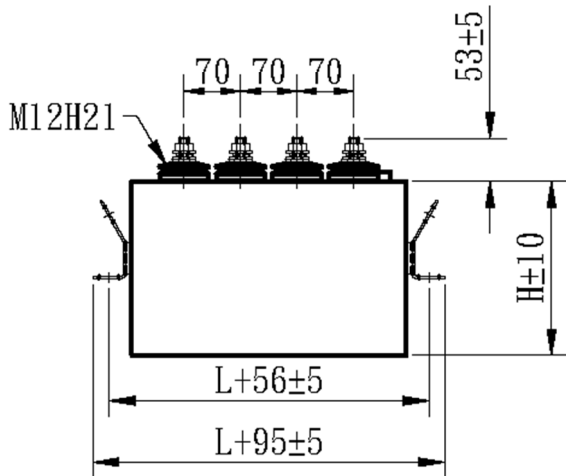
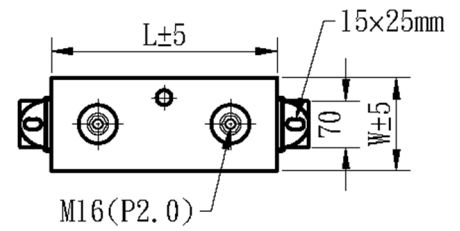
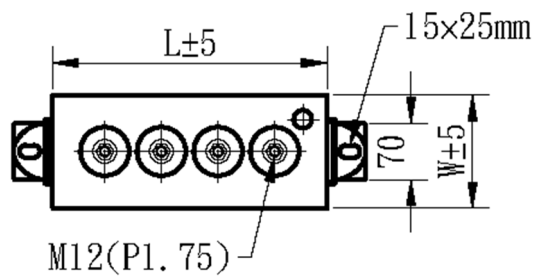
Series **ESAS/ESBS/ESCS/ESFS**

### **Specification and Dimensions**

Un DC	uF	Type	L	W	H	Ref. Figures	Weight kg
5000	4000	ESAS	420	340	880	Fig-3	210
44000	52	ESAS	340	370	740	Fig-4	162
900	4000	ESBS	340	125	215	Fig-1 or -2	11.1
900	24000	ESBS	340	175	580	Fig-1 or -2	40.4
2000	1000	ESBS	340	125	270	Fig-1 or -2	14.0
2000	5000	ESBS	340	175	700	Fig-1 or -2	49.4
5000	150	ESBS	340	125	285	Fig-3	14.8
5000	750	ESBS	340	175	650	Fig-3	46.3
5000	4000	ESBS	470	270	870	Fig-3	135
10000	300	ESBS	530	185	660	Fig-3	77.85
10000	2000	ESBS	360	360	830	Fig-3	128
15000	178	ESBS	400	370	370	Fig-3	62
20000	60	ESBS	530	185	690	Fig-3	82.3
40000	10	ESBS	530	185	570	Fig-4	66.9
44000	52	ESBS	405	335	750	Fig-4	132
12000	50	ESCS	350	250	480	Fig-3	64
30000	1	ESCS	290	290	220	Fig-4	34
15000	100	ESCS	420	220	370	Fig-3	48
15000	178	ESCS	420	370	370	Fig-3	80
7000	10	ESFS	140	110	220	Fig-2	7.2
10000	50	ESFS	290	240	340	Fig-2	33
50000	2	ESFS	300	290	220	Fig-4	58

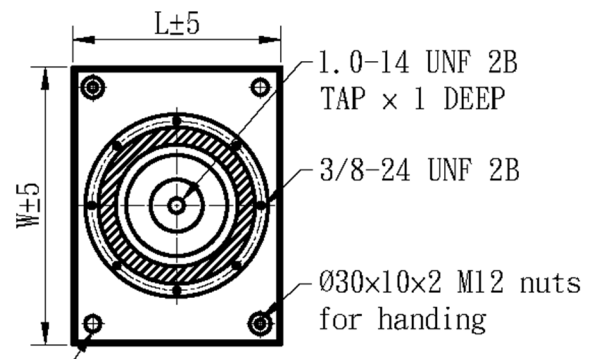
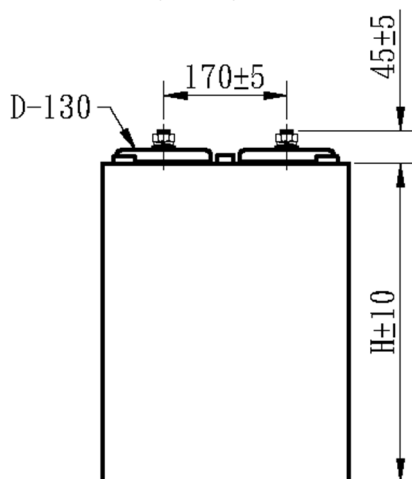
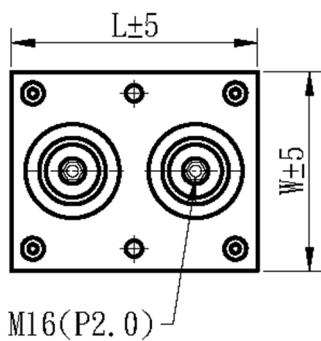
# Capacitors for Power Electronics

(Reference Dimensions)



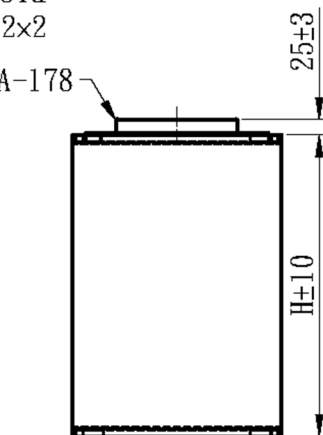
**Fig-1**

**Fig-2**



Oil hold  
 $\text{Ø}22 \times 12 \times 2$

CA-178



**Fig-3**

**Fig-4**