

E59 Series (Custom Designed AC/DC Capacitors in Rectangular Case)

Features

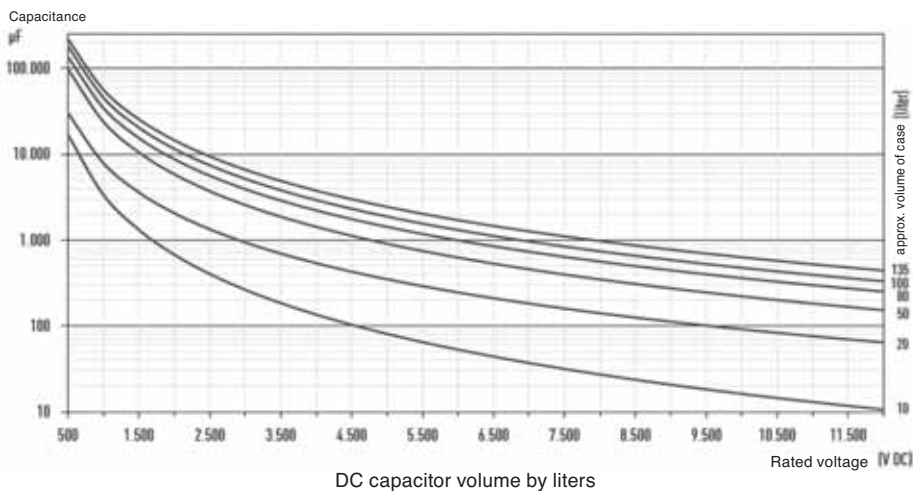
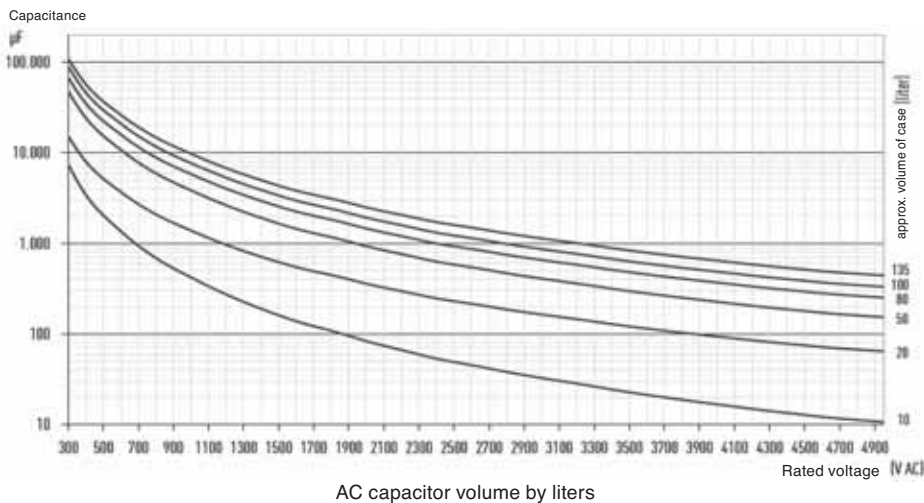
- Custom designed AC/DC capacitor in rectangular case.
- An irreversible pressure switch can be used for external monitoring of the internal pressure. (optional)

Specifications

Item	Specification
Category temperature range	-55 ~ +70°C (+85°C / Includes self temperature rise)
Storage temperature	-55 ~ +85°C
Rated voltage (UN)	500 ~ 25,000V DC / 200 ~ 17,000V AC
Standards	IEC 61071 : 2007
Dielectric	Polypropylene
Dielectric dissipation factor (tan δ ₀)	2 × 10 ⁻⁴
Capacitance tolerance	±10% (optional ±5%)
Safety devices	Optional pressure switch for external monitoring of the internal pressure (hermetical construction only)
Impregnant	Solid polyurethane
Material of case	Aluminum or Stainless steel
Environmental regulations	Comply with RoHS

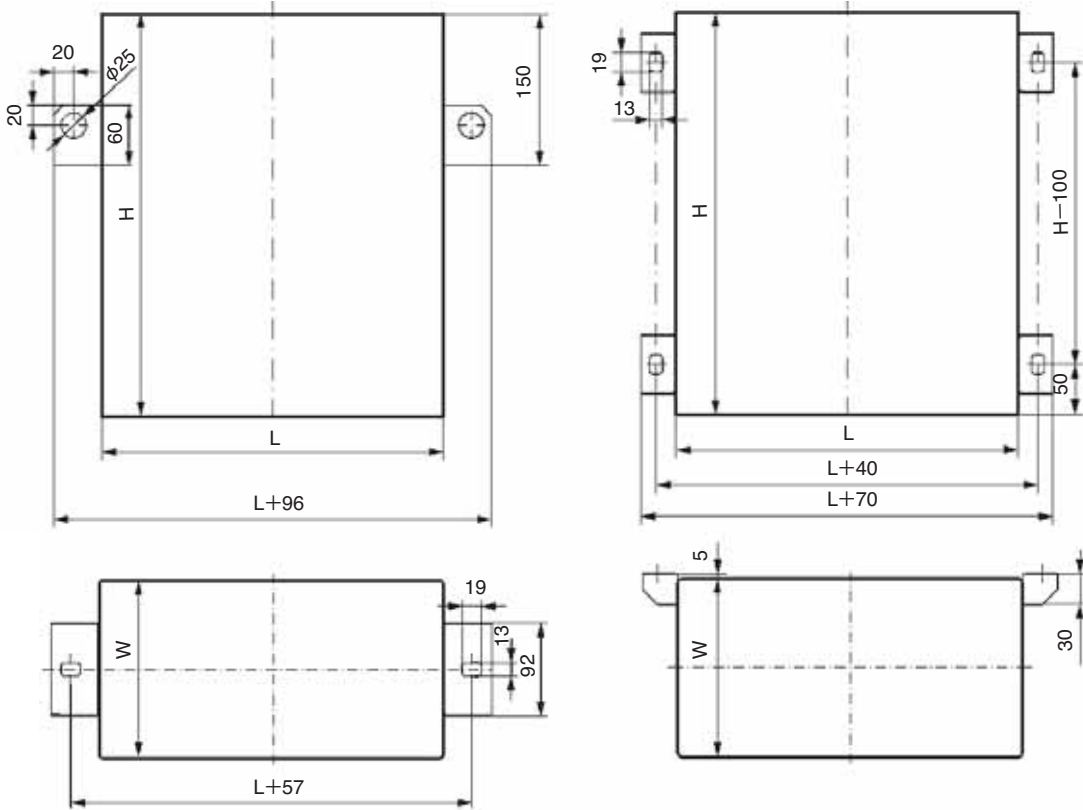


Volume by liters per capacitance and rated voltage



Other values and designs on request.

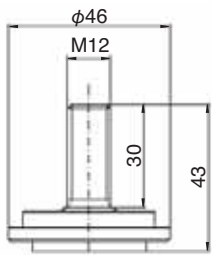
Standard fixing brackets



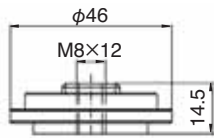
Standard terminal dimensions

F1 terminals

Clearance in air : 17mm
Creepage distance : 26mm



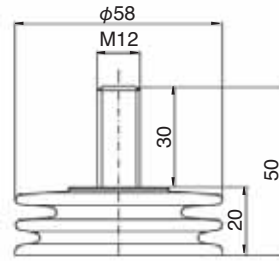
F1 M12×30



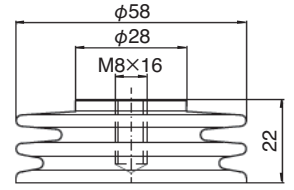
F1 iM8×12

F4 terminals

Clearance in air : 32mm
Creepage distance : 60mm



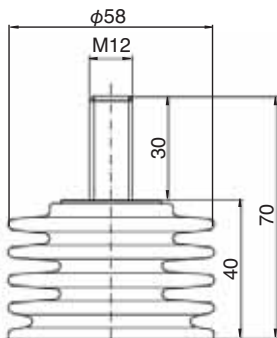
F4 M12×30



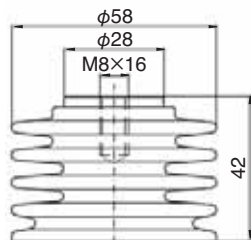
F4 iM8×16

F5 terminals

Clearance in air : 51mm
Creepage distance : 129mm



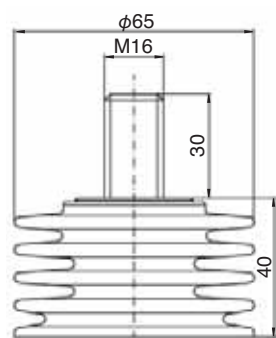
F5 M12×30



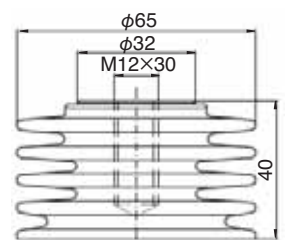
F5 iM8×16

F6 terminals

Clearance in air : 51mm
Creepage distance : 140mm



F6 M16×30



F6 iM12×30

Irreversible Pressure Switch

Type

Mechanical pressure switch with a diaphragm of EPDM or stainless steel, and a change-over contact for converting pressure into an electrical switching signal, RoHS-compliant.

Contacts

Cable-plugs 6.3mm x 0.8mm; we recommend using insulated cable plugs if operating the switch without protective cap.
Recommended cable size: $\geq 0.75\text{mm}^2$

Functions

The pressure switch just provides a signal for information about the rising pressure inside the capacitor.

The pressure switch does NOT have the following functions.

- provide detailed data about the exact pressure inside the capacitor
- interrupt the current path and disconnect the capacitor from its supply

Table. The switch can be used for the following signal currents :

Type of load	Type of current	Maximum voltage	Maximum current
Inductive	AC	250V rms	2A
	DC	24V	1A
Ohmic	AC	250V rms	4A
	DC	24V	2A



Fig. Pressure switch

Our pressure switch is designed as an SPDT (Single Pole, Double Throw) device. It can therefore be used for the following options.

Table. Options for the pressure switches :

Option	Advantage	Disadvantage
Opening switch	Monitoring of the conductor	power losses by permanent current risk of electrochemical corrosion
Closing switch	No current, no power losses No electrochemical corrosion	No conductor monitoring, risk of monitoring failure going unnoticed
Change-over switch	Additional verification of the switching contact, minimization of false alarms	Risk of incorrect cable connection during assembly process

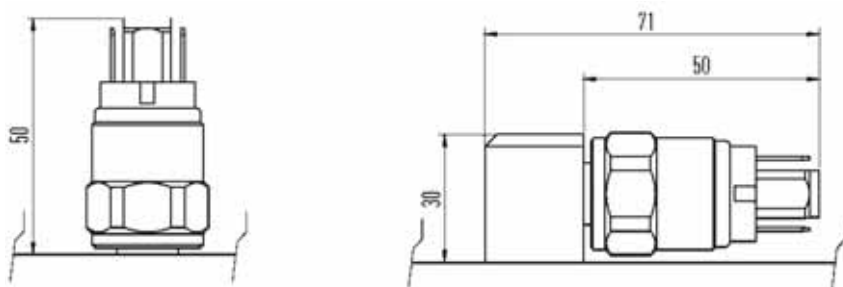


Fig. Dimension of pressure switch

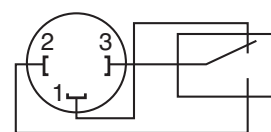


Fig. Circuitry of pressure switch

Protective cap (optional, IP54)

A protection cap made of NBT can be ordered as an accessory. The cap can be used for additional protection of the pressure switch from environmental impact, for insulation and protection from accidental contact.

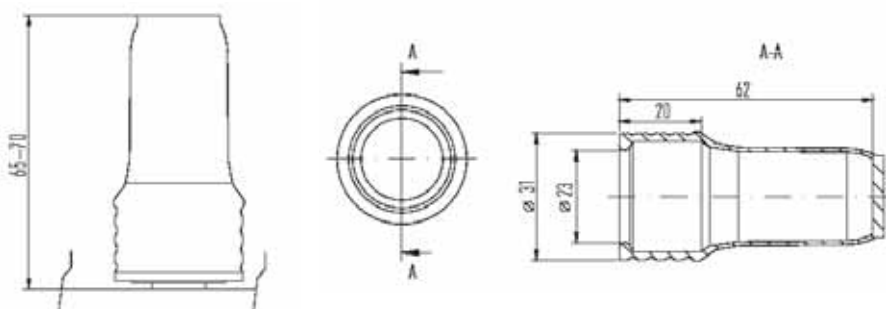


Fig. dimension of protective cap



Photo. Appearance of protective cap