

## 8x10mm No. A450/A451/A452

## 3-electrode (20kA/10A) Enhanced Discharge Series

## Specifications



### Features

- Non-radioactive
- Lead Free
- Failsafe Option

### Applications

- Telecommunication
- Data Transmission
- Subscriber protection
- Underground cables

### Standard

- UL-497B
- complies to ITU-T K.12 (formerly CCITT)
- complies to DIN 57845/VDE 0845

### Approvals

- UL-rec.

### WebLinks

- Further info see:**  
[http://www.wickmanngroup.com/download/orderinfo\\_surgearr.pdf](http://www.wickmanngroup.com/download/orderinfo_surgearr.pdf)  
[http://www.wickmanngroup.com/download/crossref\\_surgearr.pdf](http://www.wickmanngroup.com/download/crossref_surgearr.pdf)



### Packaging

- A450: 00=Bulk (2.000 pcs.)
- A450/F: 00\_Bulk (500 pcs.)
- A451: 04=Tray (250 pcs.)
- A452/F: 04=Tray (500 pcs.)

### Materials

- Housing: Ceramic
- Gas: non-radioactive
- Leads: tin plated

### Arc Voltage @ 1A

~ 35V

### Transition Glow to Arc @

~ 1.0A

### Operating temperature

-40°C to +90°C

### Climatic Category

complies to IEC 60068-1  
+40°C, 21 days, <93% humidity

### Soldering characteristics

complies to IEC 60068-2-20

### Soldering Heat Resistance

complies to IEC 60068-2-58

### Transverse Delay Time

complies to ITU-T K.12  
< 0.2µs

### Marking

Ⓜ, Type, Nom. Voltage, Date

### Unit Weight

ca. 2.5g

### Characteristics

Type/ Order Code	DC sparkover voltage	Tolerance	Impulse sparkover voltage (1kV/µs) typ.	Glow Voltage	Insulation Resistance (@100 Vdc) E1/M;E2/M	Capacitance (@1MHZ) E1/M;E2/M	8/20µs Nominal Impulse Discharge Current (10 times) E1+E2/M	8/20µs Single Impulse Discharge Current (1 time) E1+E2/M	AC Nominal Discharge Current (50Hz; 1s; 10 times) E1+E2/M	AC Alternating Discharge Current (50Hz; 9 cycles) E1+E2/M	Approval
A450 S0 0230 01 00 A450 F0 0230 01 00** A451 S0 0230 01 04 A452 S0 0230 01 04 A452 F0 0230 01 04**	230V	+/- 20%	< 450V	~ 200V	> 10GΩ	< 1.5 pF	20kA	25kA	10A	50A	•
A450 S0 0250 01 00** A451 S0 0250 01 04 A452 S0 0250 01 04 A452 F0 0250 01 04**	250V	+/- 20%	< 550V	~ 200V	> 10GΩ	< 1.5 pF	20kA	25kA	10A	50A	•
A450 S0 0350 01 00 A451 S0 0350 01 04 A452 S0 0350 01 04 A452 F0 0350 01 04**	350V	+/- 20%	< 600V	~ 200V	> 10GΩ	< 1.5 pF	20kA	25kA	10A	50A	•
A450 S0 0420 11 00 A450 F0 0420 11 00** A452 S0 0420 11 04	420V	-17/+30%	< 800V	~ 200V	> 10GΩ	< 1.5 pF	20kA	25kA	10A	50A	

other values on request

\*\* with failsafe

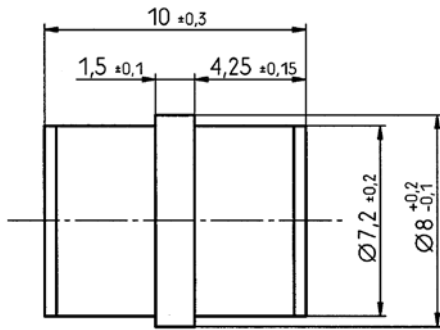
Specifications are subject to change without notice.

### Order Example

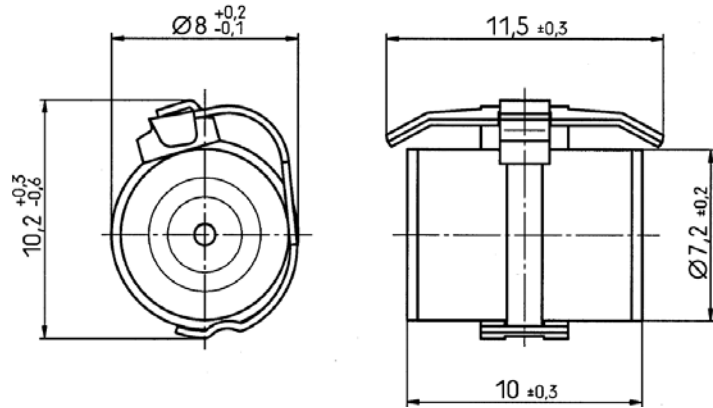
Qty.	Order- Number	Type	Failsafe Option	Sparkover Volt.	Tolerance	Packaging
		A450	S0	0230	01	00

## Dimensions (mm) A450/A451/A452

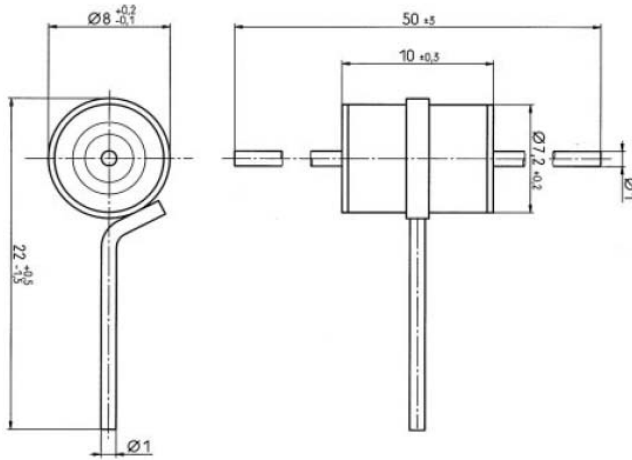
### A450



### A450 with Failsafe



### A451



### A452 with Failsafe

### A452

