

The data should be read in conjunction with the 3-electrode Spark Gap Preamble.

### DESCRIPTION

The GXG Series of triggered 3-electrode spark gaps are gas discharge tubes, hermetically sealed in a ceramic/metal envelope. Tubes with a DC hold-off voltage in the standard range 15 to 50 kV are available. This is signified by numerals following the type letters, expressed in hundreds of volts, e.g. GXG350L has a 35 kV DC hold-off voltage capability.

### TYPICAL APPLICATIONS

- Medical lithotripsy
- Crowbar circuits
- High di/dt switching
- High voltage switches for laser firing
- High energy switches

### ELECTRICAL AND PHYSICAL CHARACTERISTICS

All ratings given in this data sheet are absolute, non-simultaneous ratings. It is the equipment designer's responsibility to ensure that they are not exceeded. The spark gap life depends on circuit conditions such as peak discharge current and duration, charge transfer per discharge and the repetition rate.

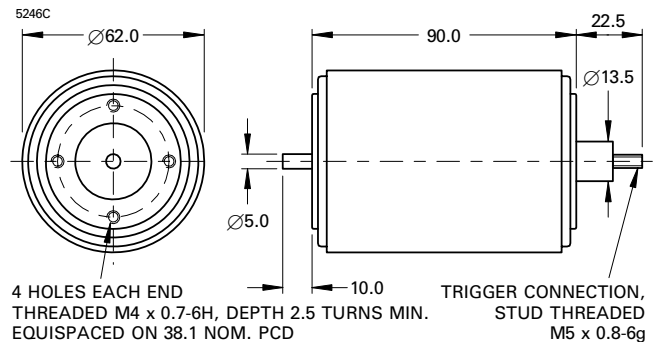
DC hold-off voltage range (see note 1)	15 kV to 50 kV
Hold-off voltage tolerance	0 to +10%
Operating voltage range	40 to 80% of hold-off
Trigger requirements	15 kV min at $\geq 15$ kV/ $\mu$ s (open circuit peak amplitude), trigger current > 1.0 A
Peak current, single discharge	140 kA max
Charge transfer, single discharge	0.5 C max
Cumulative charge transfer at 16 mC per discharge, 4 Hz, 10 kA peak current under-damped	16 000 C
Anode delay time at 2 Hz	$\leq 15$ $\mu$ s (see note 2)
Operating temperature	-40 to +70 °C
Mechanical shock, half-sine	40 g for 6 ms
Mounting position (see Preamble)	any
Net weight	635 g approx

### NOTES

- Other voltage variants are available on request. For use above 40 kV, immersion of the device in insulating oil to BS148:1972 or an equivalent medium is recommended.
- Typical value measured from 90% of trigger breakdown to anode peak current, at 50 to 80% of hold-off voltage.

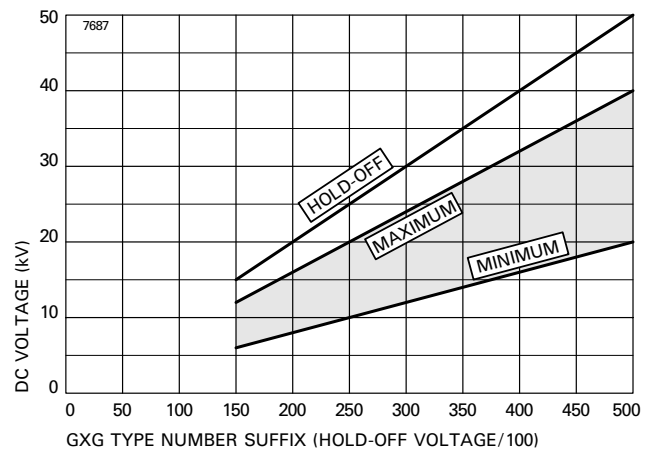


### OUTLINE (Maximum dimensions in millimetres)



**Outline Note:** The holes at each end are in the same angular position to within  $\pm 5^\circ$ ; one end must be flexibly connected.

### OPERATING VOLTAGE RANGE



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