

## End Window Counter Tube

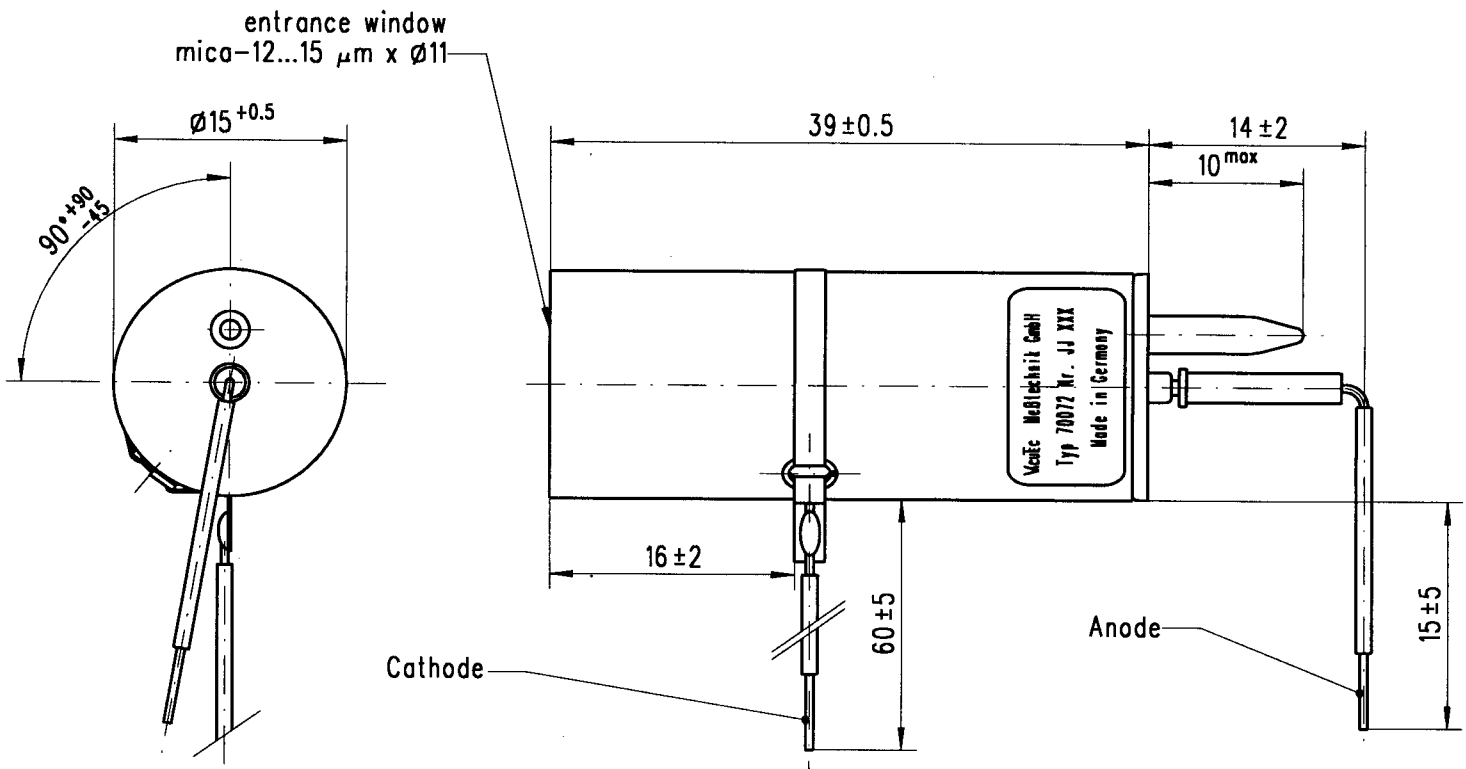
**Type 70 072**  
 Order No. 072 00 02

### Application

The halogen-quenched Geiger Müller tube 70 072 is proven suitable for Alpha and Beta radiation. It can be used also for measuring Gamma radiation and x-rays.

### Construction

Metal sheaf with a mica entrance window (Al-coated).

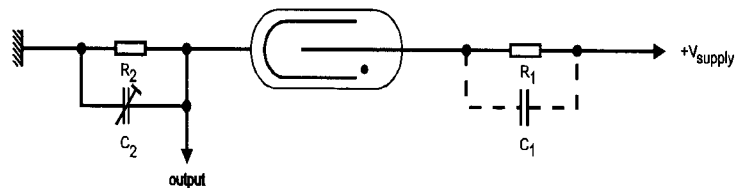


### Measurement circuit

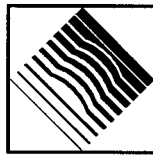
$$R_1 = 10 \text{ M}\Omega$$

$$R_2 = 220 \text{ k}\Omega$$

$$R_1 C_1 = R_2 C_2$$



We reserve the right to alter the specifications.



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### Technical data

The given values apply for ambient temperature (+25°C) for the following working conditions.

### Physical data

Energy range	
Alpha particles	≥ 3,5 MeV
Beta particles	≥ 50 keV
x-ray or gamma rays	≥ 2,5 keV
Background (5 cm Pb + 0,3 cm Al)	≤ 7 Imp/min
Entrance window	
Diameter	11 mm
Thickness	1.5 to 2 mg/cm <sup>2</sup>
Material	Mica (Al coated)
Length of active volume	36 mm
Cathode diameter	13 mm
Anode diameter	1 mm
Mass (weight)	30 g
Gas filling	Neon/Halogen
Life expectancy	> 6 · 10 <sup>10</sup> Imp

### Electrical data

(measured at +25°C and n = 10<sup>4</sup> pulses per minute with a <sup>90</sup>Sr/<sup>90</sup>Y source, measurement circuit shown overleaf)

starting voltage	(350 ... 380) V
Plateau voltage range	(400 ... 600) V
Plateau length	200 V
Plateau gradient	≤ 4 % / 100V
Recommended supply voltage working conditions	500 V
Dead time (for R <sub>1</sub> = 10 MΩ, 500 V)	≤ 90 μs
Anode resistor R <sub>1</sub>	10 MΩ

### Limiting values

Storage temperature range	(-30 ...+70) °C
Working temperature range	(-30 ...+70) °C
Anode resistor	min 4.7 MΩ
Anode voltage	max 600 V

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