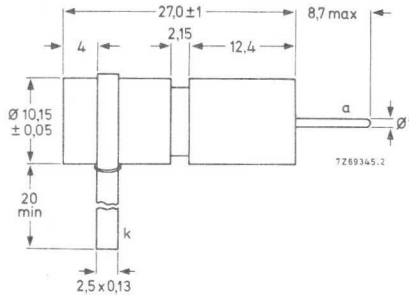


## GEIGER-MÜLLER TUBE

Halogen quenched radiation counter tube for the measurement of  $\gamma$  radiation.  
The tube is provided with a filter. The energy response is flat within 15% referred to the 1,33 MeV point.

QUICK REFERENCE DATA		
Effective range	$10^{-3}$ to $3 \times 10^2$	R/h
Energy range	40 to 3000	keV
Plateau	500 to 650	V
Recommended supply voltage	575	V
Cr Fe cathode	80 to 100	mg/cm <sup>2</sup>
Sn filter	2	mm

### DIMENSIONS AND CONNECTIONS



Use only cathode connector  
supplied with tube.

#### FILTER

Thickness	2	mm
Material	tin	

#### CATHODE

Thickness	80 to 100	mg/cm <sup>2</sup>
Effective length	16	mm
Material	chrome-iron, $\approx 28\%$ Cr, $\approx 72\%$ Fe	

#### FILLING

helium, neon, halogen

## CAPACITANCES

Anode to cathode 2 pF

## OPERATING CHARACTERISTICS ( $t_{amb} = 25\text{ }^{\circ}\text{C}$ ) measured in circuit of Fig. 1

Starting voltage	$\leq$ 380 V
Recommended operating voltage	575 V
Plateau	500 to 650 V
Plateau slope	$\leq$ 0,15 %/V
Background, shielded with 50 mm Pb and 3 mm Al lining, at $V_b = 575\text{ V}$	$\leq$ 2 count/min
Dead time at $V_b = 600\text{ V}$	$\leq$ 15 $\mu\text{s}$

## LIMITING VALUES (Absolute max. rating system)

Anode resistor	min. 2,2 M $\Omega$
Anode voltage	max. 650 V
Ambient temperature	min. -40 $^{\circ}\text{C}$
for continuous operation	max. +75 $^{\circ}\text{C}$
	max. +50 $^{\circ}\text{C}$

## LIFE EXPECTANCY

Life expectancy at  $t_{amb} = 25\text{ }^{\circ}\text{C}$ , count rate 4500 c/s 5 x 10<sup>10</sup> count

## MEASURING CIRCUITS

$R_1 = 2,2\text{ M}\Omega$

$R_2 = 47\text{ k}\Omega$

$C_1 = 1\text{ pF}$

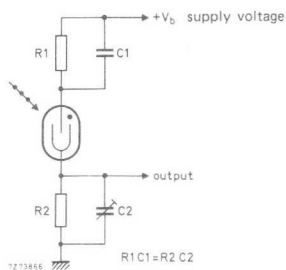


Fig. 1

