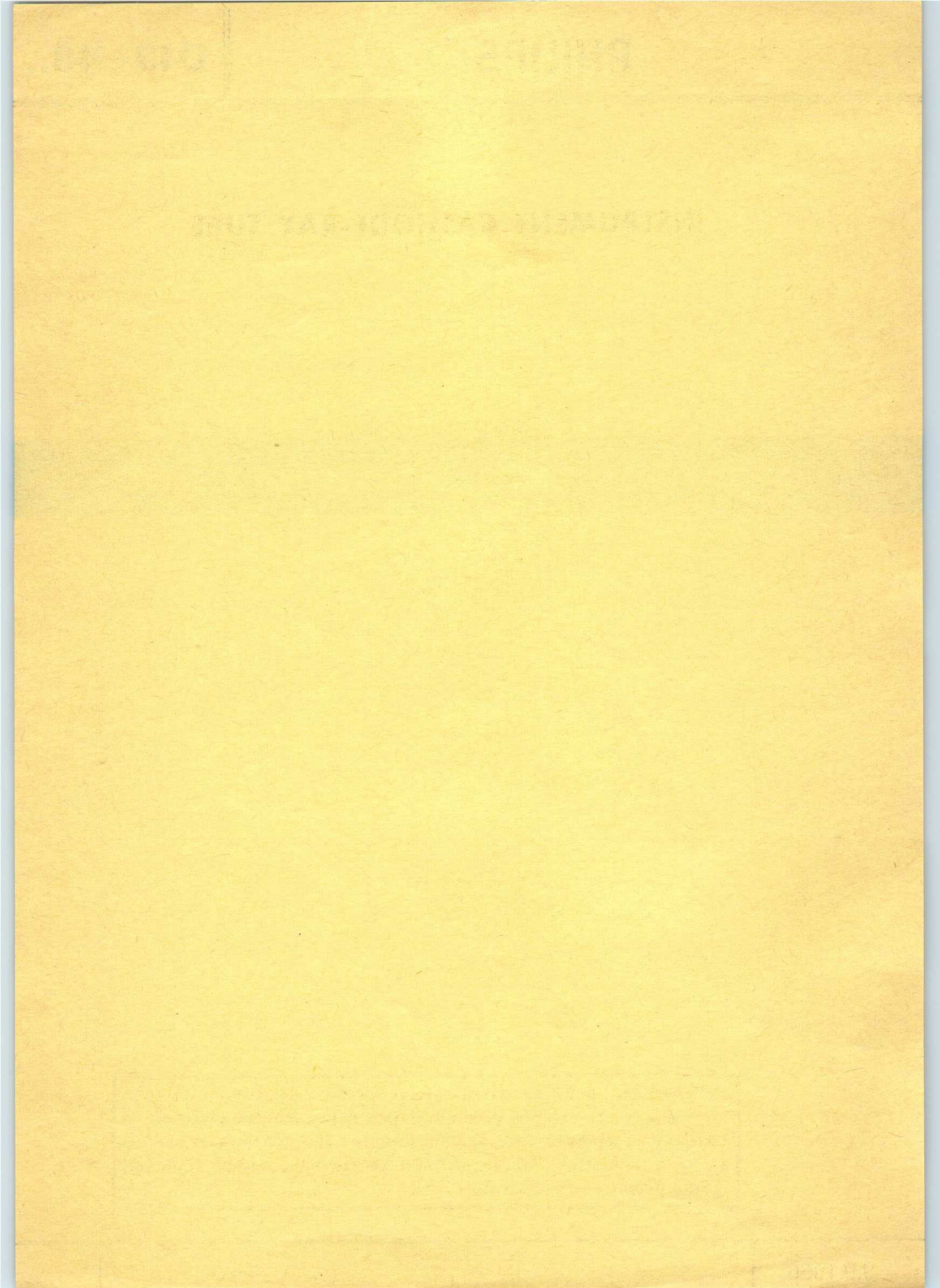


**INSTRUMENT CATHODE-RAY TUBE****development sample data**

Development samples are distributed without guarantee for further supply. Development sample data represent the characteristics and ratings of development samples and are to be regarded as first indications of the ultimate performance to be achieved by the product in preparation.





## INSTRUMENT CATHODE-RAY TUBE

13 cm diameter flat faced monoaccelerator oscilloscope tube primarily intended for use in inexpensive oscilloscopes and read-out devices.

QUICK REFERENCE DATA			
Accelerator voltage	$V_{g_2, g_4, g_5}(\ell)$	2000	V
Display area		100 x 80	mm <sup>2</sup>
Deflection factor, horizontal	$M_x$	approx. 30	V/cm
vertical	$M_y$	approx. 15	V/cm

### SCREEN

	colour	persistence
D13-48GH	green	medium short

Useful screen diameter min. 114 mm

Useful scan at  $V_{g_2, g_4, g_5}(\ell) = 2000$  V

horizontal min. 100 mm

vertical min. 80 mm

The useful scan may be shifted vertically to a max. of 5 mm with respect to the geometric centre of the faceplate.

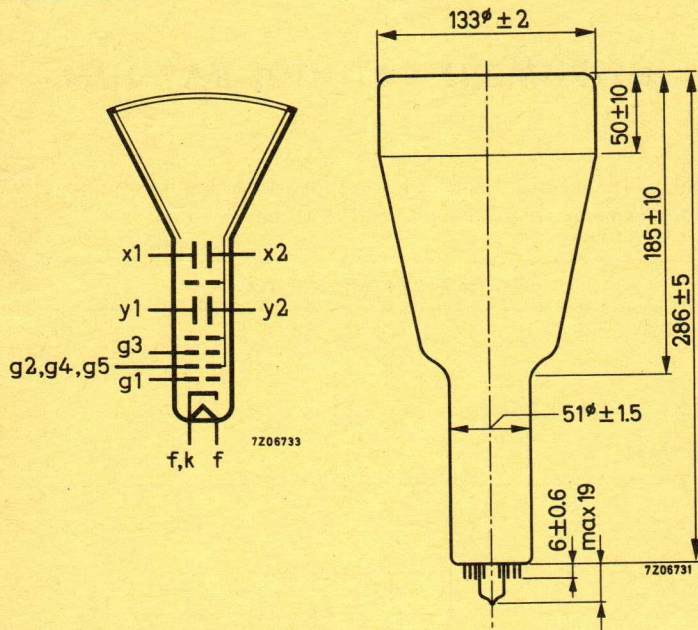
**HEATING:** Indirect by A.C. or D.C.; parallel supply

Heater voltage	$V_f$	6.3	V
Heater current	$I_f$	300	mA

7Z2 7548

## MECHANICAL DATA

Dimensions in mm



### CONNECTIONS INDICATED ON SAMPLES

Mounting position: any

The tube should not be supported by the base alone and under no circumstances should the socket be allowed to support the tube.

### Dimensions and connections

See also outline drawing

Overall length max. 310 mm

Face diameter max. 135 mm

Base 14 pin all glass

Net weight approx. 650 g

### Accessories

Socket (supplied with tube) type 55566

Mu-metal shield type 722 7549





## TYPICAL OPERATING CONDITIONS

Accelerator voltage	$V_{g_2, g_4, g_5(\ell)}$	2000 V
Astigmatism control voltage	$\Delta V_{g_2, g_4, g_5(\ell)}$	$\pm 75$ V <sup>1)</sup>
Focusing electrode voltage	$V_{g_3}$	approx. 300 V
Control grid voltage for visual extinction of focused spot	$V_{g_1}$	approx. -40 V
Deflection factor, horizontal	$M_x$	approx. 30 V/cm
vertical	$M_y$	approx. 15 V/cm
Deviation of linearity of deflection		max. 2 % <sup>2)</sup>
Useful scan, horizontal		min. 100 mm
vertical		min. 80 mm

## LIMITING VALUES

Accelerator voltage	$V_{g_2, g_4, g_5(\ell)}$	max. 2200 V min. 1500 V
Focusing electrode voltage	$V_{g_3}$	max. 2200 V
Control grid voltage, negative	$-V_{g_1}$	max. 200 V min. 0 V
Cathode to heater voltage	$V_{kf}$	cathode connected to heater
Grid drive, average		max. 20 V
Screen dissipation	$W_\ell$	max. 3 mW/cm <sup>2</sup>

1) The astigmatism control electrode voltage should be adjusted for optimum spot shape. For any necessary adjustment the control voltage will be within the stated range.

2) The sensitivity at a deflection of less than 75% of the useful scan will not differ from the sensitivity at a deflection of 25% of the useful scan by more than the indicated value.