MAZDA
30.E.6
CATHODE RAY TUBE—ALL ELECTROSTATIC 12" Dia.
For measurement purposes

RATING
Heater Voltage (volts) \( V_h \) 4.0
Heater Current (amps) \( I_h \) 0.72
Maximum 1st Anode Voltage (volts) \( V_{a1(max)} \) 500
Maximum 2nd Anode Voltage (volts) \( V_{a2(max)} \) 1,200
Maximum 3rd Anode Voltage (volts) \( V_{a3(max)} \) 6,000
Average Sensitivity of "X" Plates (mm/V) \( \* 900/V \)
Average Sensitivity of "Y" Plates (mm/V) \( \* 900/V \)

\* Where "V" denotes the voltage on the 3rd Anode.

DIMENSIONS
Maximum Overall Length (mm) 640
Maximum Diameter (mm) 312
Nominal Screen Diameter (inches) 12
Approximate Nett Weight (lbs) 7½
Approximate Packed Weight (lbs) 40

NOTES
For general measurement work the 30E6/P1 is recommended.
This has a screen with a medium persistence green phosphor.
For special applications, however, the tube may be supplied
with any of the standard phosphors described in the
Introductory page to this Section.
All Maximum Ratings are Absolute values not Design Centres.
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**TYPICAL OPERATION**

3rd Anode Voltage (volts)  
\[ V_a3 \]  5,000  6,000

*2nd Anode Voltage – approximate for focus (volts)  
\[ V_a2 \]  1,000  1,200

1st Anode Voltage (volts)  
\[ V_{a1} \]  400  400

Negative Bias on Control Grid for Cut-off of beam Current (volts)  
\[ V_g \]  30-60  30-60

* The voltage required on the 2nd Anode for focus decreases with an increase of beam current and the above figure gives the voltage required at low currents.

**BASE** 12 Contact Key Base (BS 6448)

**VIEW OF FREE END**

**PERMISSIBLE ANGULAR VARIATION OF MOUNTS ±10°**

- **CONNECTIONS**
  - Pin 1: Control Grid  
  - Pin 2: Cathode  
  - Pin 3: Heater  
  - Pin 4: Heater  
  - Pin 5: Anode 1  
  - Pin 6: Anode 2  
  - Pin 7: Internal Coating  
  - Pin 8: Deflecting Plate Y2  
  - Pin 9: Deflecting Plate X2  
  - Pin 10: Anode 3  
  - Pin 11: Deflecting Plate X2  
  - Pin 12: Deflecting Plate Y1