Ferranti

CATHODE RAY TUBE

A 9-inch diameter Triode Tube which has a high quality flat face with ground internal and external surfaces.
Primarily designed for use in Telecording and in Television Transmission Systems Converters.

FOCUS  ...  Magnetic
DEFLECTION  ...  Magnetic
SCREEN  ...  Metal Backed

Phosphor  ...  Type 'D'
Fluorescence  ...  Green
Persistence  ...  Short

Other phosphors are available such as Type 'A' (Green) or 'Q' (Violet) for Flying Spot Scanner applications or Type 'P' (Blue) for Photographic Recording.

For further details, refer to the relevant phosphor characteristics at the front of this section of the handbook.

PHYSICAL DETAILS.
Base  ...  B12A (Duodecal)
Anode Cap  ...  CT8 (Cavity Type)
Max. Overall Length  ...  595 mm
Max. Diameter  ...  226 mm
Useful Screen Area  ...  200 mm dia
Nom. Neck Diameter  ...  35 mm
For other dimensions see drawing overleaf.

BASE CONNECTIONS.
Pin 1—Heater  Pin 7—Not connected
Pin 2—Grid  Pin 8—No pin
Pin 3—No pin  Pin 9—No pin
Pin 4—No pin  Pin 10—Not connected
Pin 5—No pin  Pin 11—Cathode
Pin 6—Not connected  Pin 12—Heater
Side Contact—Anode

HEATER.
Heater Voltage  ...  6.3 volts
Heater Current  ...  0.3 amp

RATINGS.
Max. Anode Voltage  ...  30 kV
Nom. $V_g$ for visual cut-off  ...  $V_a/120$
Max. $V_{thk}$ (Heater Negative)  ...  200 volts
Max. $V_{thk}$ (Heater Positive)  ...  200 volts

TYPICAL OPERATION.
Heater Voltage  ...  6.3 volts
Anode Voltage  ...  25 kV
$V_g$ for visual cut-off  ...  -210 volts
Grid Drive for $I_g = 100\mu A$  ...  35 volts
Screen Resolution at 50 f.p.s.  ...  1000 lines
†Focus Coil  ...  570 amp turns (aprox)

X-RAY WARNING.
When operated at an anode voltage in excess of 16 kV shielding may be required to protect against harmful X-ray radiation which could cause possible injury from prolonged exposure.

CAPACITANCE.
$C_k$—all  ...  $< 8 \, \mu F$
$C_g$—all  ...  $< 8 \, \mu F$

†Ferranti Focus Coil units Type FC.4 or FC.5 are available.
Dimensions in millimetres