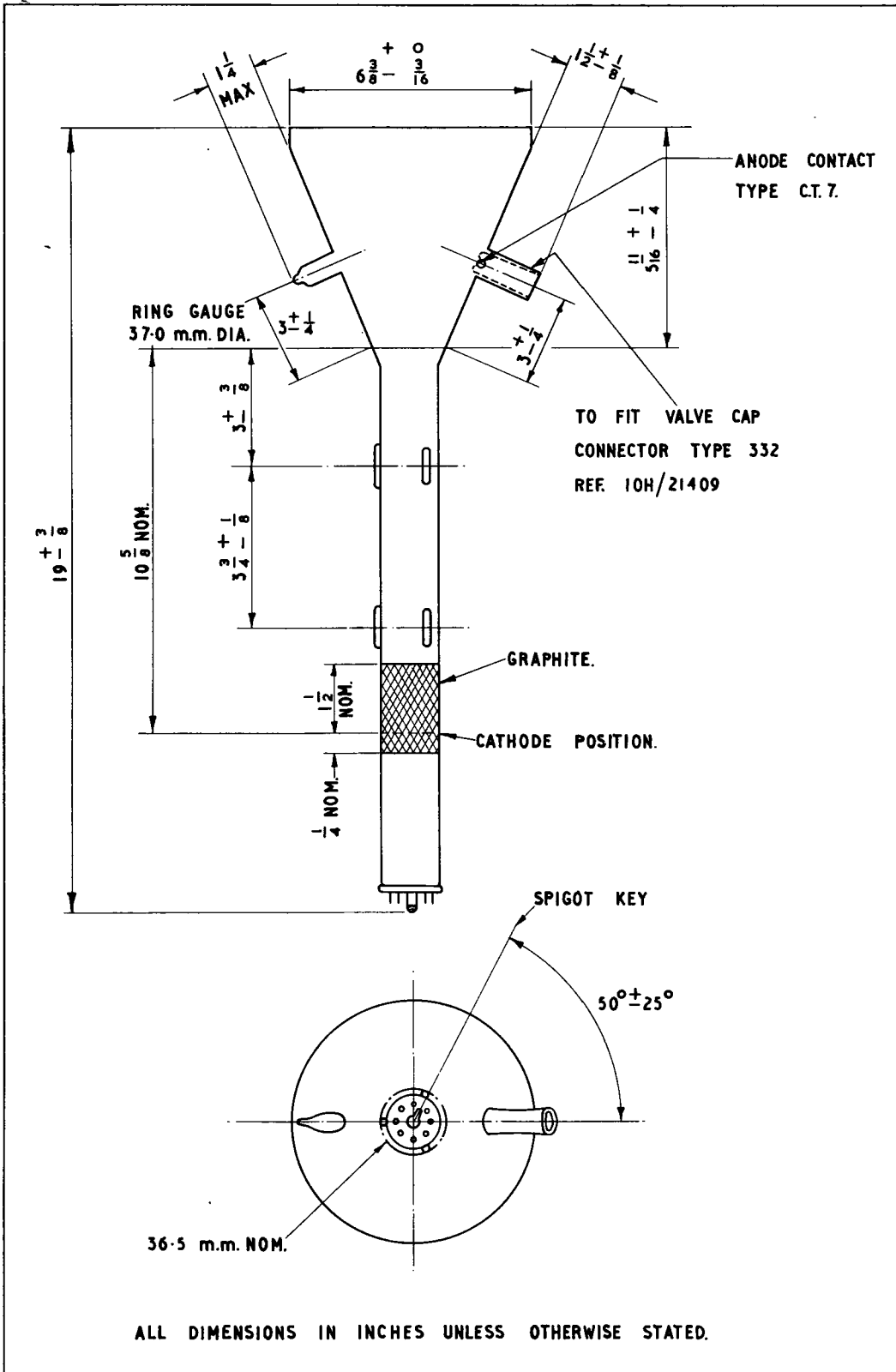


Specification MOS/CV1738 Issue 1A - dated 2nd July, 1960 To be read in conjunction with K1001 and BS448		<u>SECURITY</u> Specification Valve Unclassified Unclassified	
—————> Indicates a change			
<u>TYPE OF VALVE:-</u> Cathode Ray Tube <u>TYPE OF DEFLECTION:-</u> Magnetic <u>TYPE OF FOCUS:-</u> Magnetic <u>BULB:-</u> Glass, Internally coated with conductive coating. <u>SCREEN:-</u> EB1 (Zinc Oxide) aluminium backed		<u>MARKING</u> See K1001/4	
		<u>BASE</u> BS448 B8G	
		<u>CONNECTIONS</u>	
<u>RATING</u>		Note	
Heater Voltage (v)	4		
Heater Current (A)	1		
Max. Anode Voltage (kV)	25		
Max. Heater - Cathode Voltage (v)	150	A	
<u>TYPICAL OPERATING CONDITIONS</u>			
Anode Voltage (kV)	22		
Grid Voltage (cut-off) (v)	-50		
Grid Drive to give a light output of 0.08 Candela (v)	25		
Heater - Cathode Voltage (v)	10	A	
<u>CAPACITANCES</u>			
Max. C _g to all other electrodes (pf)	12		
Max. C _c to all other electrodes (pf)	12		
		<u>SIDE CONTACT</u> To fit cap valve Connector Type 332 Ref No.10H/214.09	
		<u>DIMENSIONS</u> See drawing, page 4	
<u>NOTES</u>			
A. Heater negative to cathode			

To be performed in addition to those applicable in K1001

Clause	Test Conditions	Test	Limits		No. Tested
			Min.	Max.	
a	See K1001/5A.13	<u>Capacitances</u> (pf) 1. Grid to all other electrodes 2. Cathode to all other electrodes		12 12	2%(5) 2%(5)
FOR ALL TESTS BELOW $V_h = 4.0V$ EXCEPT CLAUSE j					
b		<u>Heater Current</u> (A)	0.8	1.1	100%
FOR ALL TESTS BELOW $V_a = 22$ kV EXCEPT CLAUSE j					
c	Adjust for optimum focus Adjust V_g for cut-off See K1001/5A.10.	<u>Grid Base</u> - V_g (V) (Value to be noted)	30	70	100%
d	Adjust V_g for a light intensity of 0.08 candela using a raster of convenient size.	<u>Grid Drive</u> Change in V_g from value found in test (c) (V)	15	30	100%
e	Adjust for optimum focus. Linear line scan $5\frac{1}{4}$ " long. Adjust V_g as determined in (d). With an interlaced 405 line T.V. raster with the frame scan expanded to facilitate line width measurement.	<u>Line Width</u> measured at the centre of the trace (mm)		0.15	100%
f	Adjust for optimum focus, set = 0 using a raster of convenient size	<u>Light intensity</u> (candela)		0.6	100%
g	$V_g = -50V$	<u>Grid Insulation</u> Leakage current (uA)		5	100%
h	$V_{hk} = 150$ Volts See K1001/5A.3.3.	<u>Heater-Cathode Insulation</u> Leakage current (uA)		150	100%
j	$V_h = 0$ Volts $V_a = 25$ kV.	Anode Leakage Current (uA)		0.1	100%
k	Adjust for optimum focus V_g taken beyond cut-off.	<u>Stray Emission</u> There shall be no visible screen excitation. Heater-cathode voltage adjusted for optimum value (V)		20	100%

Clause	Test Conditions	Test	Limits		No Tested
			Min.	Max.	
l	Adjust for optimum focus. Vg as in test "d". Raster to cover screen area	<u>Useful Screen Dia</u> (in)	5 $\frac{1}{4}$		100%
m	With a defocussed raster covering the useful screen area	<u>Blemishes</u> (mm) 1. The screen and inner part of the glass face in a central area 1 $\frac{2}{3}$ " dia. shall be free from non-uniformity such as swirls or mottling and from (a) opaque blemishes of mean dia. or (b) semi transparent blemishes of mean dia. 2. The screen area between the 1 $\frac{2}{3}$ " dia. and 5 $\frac{1}{4}$ " dia. shall be free from (a) opaque blemishes of mean dia. or (b) semi transparent blemishes of mean dia. 3. In the outer half of the thickness of the glass face, blemishes of mean dia. (a) may be present in the central area or of the mean dia. (b) in the rest of the face.		(a)0.25 (b)0.4 (a)0.8 (b)1.0 (a)0.8 (b)1.0	100%
n	No focussing or deflecting fields. Vg any convenient value.	<u>Centrality</u> Deviation of spot from geometric centre of screen (mm)		7	100%



CV 1738/1A/4