

ADMIRALTY SIGNAL ESTABLISHMENT

Specification AD/CV119/Issue 4. Dated 10.3.47. To be read in conjunction with K1001, ignoring clause:- 5.8.	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td><u>Specn.</u></td><td><u>Valve</u></td></tr> <tr> <td><del>Restricted</del></td><td>Unclassified</td></tr> <tr> <td><i>Unclass</i></td><td></td></tr> </table>	SECURITY		<u>Specn.</u>	<u>Valve</u>	<del>Restricted</del>	Unclassified	<i>Unclass</i>	
SECURITY									
<u>Specn.</u>	<u>Valve</u>								
<del>Restricted</del>	Unclassified								
<i>Unclass</i>									

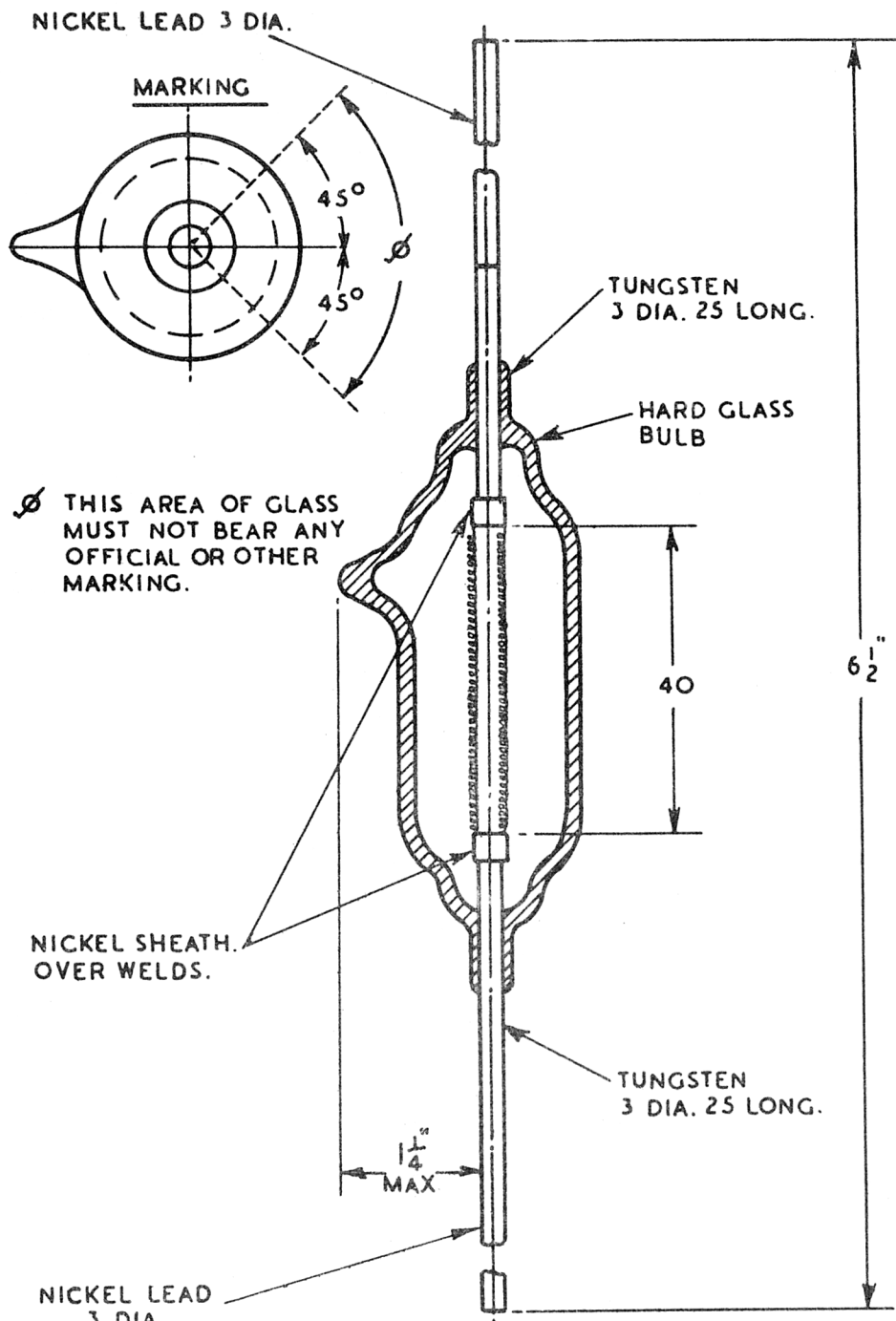
<u>TYPE OF VALVE:-</u> Bolometer indicator. <u>FILAMENT:-</u> Directly heated tungsten. <u>ENVELOPE:-</u> Glass, clear. <u>PROTOTYPE:-</u> A.S.E. Type "XJ".	<u>MARKING</u> See K1001/4. For Additional Marking. See Fig. 1.								
<table border="1"> <tr> <th><u>RATING</u></th><th>Note</th></tr> <tr> <td>Current for "just glowing"</td><td></td></tr> <tr> <td>(A)</td><td>0.7</td></tr> <tr> <td>Max. running dissipation (W)</td><td>50</td></tr> </table>	<u>RATING</u>	Note	Current for "just glowing"		(A)	0.7	Max. running dissipation (W)	50	<u>DIMENSIONS &amp; CONNECTIONS</u> See Fig. 1.
<u>RATING</u>	Note								
Current for "just glowing"									
(A)	0.7								
Max. running dissipation (W)	50								
	<u>PACKING</u> See K1001/7.								

NOTES & TEST

1. The indicator is to be evacuated to a pressure of about  $10^{-6}$  mm of mercury. Before sealing off, the filament must be run for 5 minutes with  $I_f = 4.8$  A. At the end of this period, the  $V_f$  for  $I_f = 4.8$  A shall be between the limits  $20 \pm 2$  V.
2. The indicator should be mounted vertically during pumping, to minimise sagging of the filaments.

CONSTRUCTIONAL NOTES

- A. Filament. Tungsten 0.15 mm. dia. wound and annealed to dull red on 0.56 mandril. Two 15 mm. lengths of the close-wound spiral stretched to 35 mm. and welded to supports, and then stretched to 37 mm. Final stretching to 40 mm. done at sealing in. Axes of filament 4 mm. apart.
- B. Glass bead. Centred on tungsten part of lead-out wire.



DIMENSIONS ARE IN MILLIMETRES AND NOMINAL UNLESS OTHERWISE STATED.

