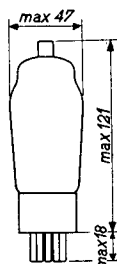
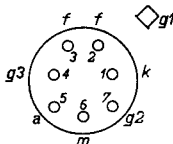
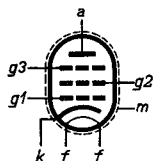


PENTODE for use in telephone equipment  
 PENTHODE pour utilisation en équipement téléphonique  
 PENTHODE zur Verwendung in Telephon-Anlagen

Heating : indirect by A.C. or D.C.;  
 parallel supply  
 Chauffage: indirect par C.A. ou C.C.;  $V_f = 4$  V  
 alimentation en parallèle  $I_f = 1,3$  A  
 Heizung : indirekt durch Wechsel-  
 oder Gleichstrom;  
 Parallelspeisung

Dimensions in mm  
 Dimensions en mm  
 Abmessungen in mm



Capacities  
 Capacités  
 Kapazitäten

$C_a = 7,5$  pF  
 $C_{g1} = 9,8$  pF  
 $C_{ag1} < 0,012$  pF  
 $C_{glf} < 0,2$  pF

Typical characteristics  
 Caractéristiques typiques  
 Kenndaten

|                          |        |                |
|--------------------------|--------|----------------|
| $V_a$                    | =      | 200 V          |
| $V_{g3}$                 | =      | 0 V            |
| $V_{g2}$                 | =      | 200 V          |
| $R_k$                    | =      | 265 $\Omega$   |
| $I_a$                    | =      | 8 mA           |
| $I_{g2}$                 | =      | 1,5 mA         |
| $S$                      | =      | 5 mA/V         |
| $\mu_{g2g1}$             | =      | 48 -           |
| $R_i$                    | =      | 1 M $\Omega$   |
| $Req$ (H.F.)             | = max. | 2,5 k $\Omega$ |
| $Req$ (L.F.; B.F.; N.F.) | = max. | 10 k $\Omega$  |

Operating conditions for use as pre-amplifier  
 Caractéristiques d'utilisation comme préamplificatrice  
 Betriebsdaten zur Verwendung als Vorverstärker

|                           |                       |        |                   |        |        |
|---------------------------|-----------------------|--------|-------------------|--------|--------|
| Va                        | =                     | 200 V  | Ig2               | =      | 1,5 mA |
| Vg3                       | =                     | 0 V    | S                 | =      | 5 mA/V |
| Vg2                       | =                     | 200 V  | Ri                | =      | 1 MΩ   |
| Rk                        | =                     | 265 Ω  | $\frac{V_o}{V_i}$ | =      | 4,5 Nj |
| Ra                        | =                     | 20 kΩ  |                   |        |        |
| Ia                        | =                     | 8 mA   | Rgl               | = max. | 1 MΩ   |
| (with fixed grid bias)    |                       |        |                   |        |        |
| Rgl                       | (à polarisation fixe) | = max. | 0,5 MΩ            |        |        |
| (bei fester Gittervorsp.) |                       |        |                   |        |        |

Operating conditions for use as output valve  
 Caractéristiques d'utilisation comme tube de sortie  
 Betriebsdaten zur Verwendung als Endröhre

|                           |                       |               |                  |        |        |
|---------------------------|-----------------------|---------------|------------------|--------|--------|
| Va                        | =                     | 200 V         | Ig2              | =      | 1,5 mA |
| Vg3                       | =                     | 0 V           | S                | =      | 5 mA/V |
| Vg2                       | =                     | 200 V         | Ri               | =      | 1 MΩ   |
| Rk                        | =                     | 265 Ω         | Wo               | =      | 0,1 W  |
| Ra                        | =                     | 30 kΩ         | d <sub>tot</sub> | <      | 5 %    |
| Ia                        | =                     | 8 mA          | Rgl              | = max. | 0,3 MΩ |
| (with fixed grid bias)    |                       |               |                  |        |        |
| Rgl                       | (à polarisation fixe) | = max.0,15 MΩ |                  |        |        |
| (bei fester Gittervorsp.) |                       |               |                  |        |        |

Limiting values  
 Caractéristiques limites  
 Grenzdaten

|                     |        |        |
|---------------------|--------|--------|
| Va <sub>o</sub>     | = max. | 450 V  |
| Va                  | = max. | 220 V  |
| Wa                  | = max. | 1,8 W  |
| Vg2 <sub>o</sub>    | = max. | 450 V  |
| Vg2                 | = max. | 220 V  |
| Wg2                 | = max. | 0,4 W  |
| Ik                  | = max. | 12 mA  |
| Vg1 (Igl = +0,3 μA) | = max. | -1,3 V |
| Vfk                 | = max. | 50 V   |
| Rfk                 | = max. | 20 kΩ  |



|      | 18013 |            |
|------|-------|------------|
| page | sheet | date       |
| 1    | 1     | 1948.09.18 |
| 2    | 2     | 1948.09.18 |
| 3    | FP    | 1999.08.14 |