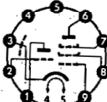


<b>ECL 80</b>  Triode/ Leistungs- pentode  Triode: Multivibrator NF-Verstärker  Pentode: Vertikal- Ablenk- Leistungsstufen NF-Leistungs- verstärker	Pico 9 Noval  Größe 10 Outlines.10  Stift · Pin 1 a <sub>T</sub> 2 g <sub>T</sub> 3 k, s 4 i 5 f 6 a <sub>P</sub> 7 g <sub>3</sub> 8 g <sub>2</sub> 9 g <sub>1</sub>	$U_f = 6,3 \text{ V}$ $I_f \text{ ca. } 300 \text{ mA}$  $I_f = 300 \text{ mA}$ $U_f \text{ ca. } 6,3 \text{ V}$  indirekt geheizt indir. heated  <b>Triode</b> $U_a = 100 \text{ V}$ $U_g = 0 \text{ V}$ $I_a = 8 \text{ mA}$ $S = 1,9 \text{ mA/V}$ $\mu = 20$  <b>Pentode</b> $U_a = 200 \text{ V}$	<b>Triode</b> <b>NF-Verstärker</b> AF amplifier: $U_b = 200 \text{ V}$ $R_a = 220 \text{ k}\Omega$ $R_{g'} = 680 \text{ k}\Omega$ $U_g = -4,2 \text{ V}$ $V = 11 \text{ fach}$ $U_{a \text{ eff}} = 30 \text{ V}$ $k = 6,5 \%$  <b>Pentode</b> <b>Amplitudensieb</b> Amplitude filter $U_a = 20 \text{ V}$ $U_{g3} = 0 \text{ V}$	<b>Pentode</b> <b>NF-Eintakt-A-Betrieb</b> Class A amplifier $U_a = 200 \text{ V}$ $U_{g3} = 0 \text{ V}$ $U_{g2} = 200 \text{ V}$ $U_{g1} = -8 \text{ V}$ $I_a = 17,5 \text{ mA}$ $I_{g2} = 3,3 \text{ mA}$ $R_a = 11 \text{ k}\Omega$  $U_{g1 \text{ eff}} (N) = 4,1 \text{ V}$ $N (10\%) = 1,4 \text{ W}$ $U_{g1 \text{ eff}} (50 \text{ mW}) = 0,7 \text{ V}$	<b>Triode</b> $U_a = 200 \text{ V}$ $N_a = 1 \text{ W}$ $I_k = 8 \text{ mA}$ $I_{k \text{ sp}}^1) = 200 \text{ mA}$ $R_{g2}^2) = 3 \text{ M}\Omega$ $R_{g3}^3) = 1 \text{ M}\Omega$  <b>Pentode</b> $U_a = 400 \text{ V}$ $U_{asp} = 1200 \text{ V}$ $U_{asp} = -500 \text{ V}$ $N_a = 3,5 \text{ W}$ $U_{g2} = 250 \text{ V}$ $N_{g2} = 1,2 \text{ W}$ $I_k = 25 \text{ mA}$ $I_{k \text{ sp}}^1) = 350 \text{ mA}$
Triode/power pentode  Triode: multivibrator AF amplifiers  Pentode: vertical deflection power amplifiers AF power amplifiers		$U_{g3} = 0 \text{ V}$ $U_{g2} = 200 \text{ V}$ $U_{g1} = -8 \text{ V}$ $I_a = 17,5 \text{ mA}$ $I_{g2} = 3,3 \text{ mA}$ $S = 3,3 \text{ mA/V}$ $R_i = 150 \text{ k}\Omega$ $\mu_{g2g1} = 14$	$U_{g2} = 12 \text{ V}$ $I_a (U_{g1} = 0 \text{ V}) = 2 \text{ mA}$ $I_a (U_{g1} = -1,45 \text{ V}) = 0,1 \text{ mA}$  <b>Kapazitäten · Capacitances</b> <b>Triode</b> $c_e = 2,1 \text{ pF}$ $c_a = 0,8 \text{ pF}$ $c_{ga} = 0,9 \text{ pF}$ $c_{gTg1} < 0,2 \text{ pF}$	<b>Pentode</b> $c_e = 4,3 \text{ pF}$ $c_a = 4,8 \text{ pF}$ $c_{g1a} < 0,2 \text{ pF}$ $c_{aTaP} < 1,2 \text{ pF}$	$R_{g1}^2) = 2 \text{ M}\Omega$ $R_{g1}^3) = 1 \text{ M}\Omega$ $U_f/k = 150 \text{ V}$ $R_f/k = 20 \text{ k}\Omega$  1) Impulsdauer = 10% einer Periode, $t_{\text{max}} = 2 \text{ ms}$ Pulse time = 10% per period, $t_{\text{max}} = 2 \text{ ms}$ 2) $U_g$ mittels $R_k$ $U_g$ by $R_k$ 3) $U_g$ fest fixed grid bias