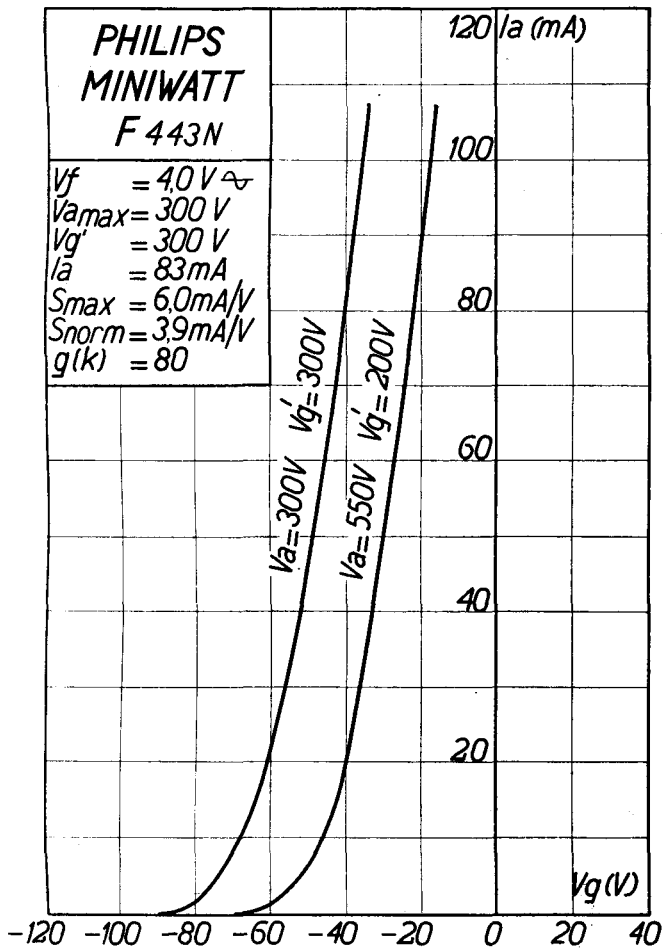


PHILIPS „MINIWATT“

Heizspannung	Tension de chauffage	Filament voltage	V_f	= 4,0 V
Heizstrom	Courant de chauffage	Filament current	I_f	ca. = env. 2,0 A appr.
Anodenspannung	Tension anodique	Anode voltage	$V_{a \max}$	= 300 V
Schirmgitterspannung	Tension de grille-écran	Screen-grid voltage	V_g'	= 300 V
Normaler Anodenstrom	Courant anodique normal	Normal anode current	I_a	= 83 mA
Neg. Gittervorspannung	Polarisation négative de grille	Negative grid bias	V_g	ca. = env. 40 V appr.
Verstärkungsfaktor	Coefficient d'amplification	Amplification factor	$g(k)$	= 80
Steilheit (max.)	Inclinaison (max.)	Slope (max.)	$S_{\max}$	= 6 mA/V
Steilheit (norm.)	Inclinaison (norm.)	Slope (norm.)	S_{norm}	= 3,9 mA/V
Innerer Widerstand (norm.)	Résistance intérieure (norm.)	Internal resistance (norm.)	R_i	= 20000 Ohm
Anodenverlustleistung	Dissipation anodique	Anode dissipation	$W_{a \max.}$	= 25 W
Max. Länge	Longueur max.	Overall length	l	= 160 mm
Grösster Durchmesser	Diamètre max.	Max. diameter	d	= 67 mm
Sockel	Culot	Base		= 0 40
Sockelschaltung	Connexion du culot	Base connection		= S. VIII
Anwendung:	Endstufe	Application:	Tube final	
Function:	Power valve			

PHILIPS MINIWATT F 443N

$V_f = 4,0 V \approx$
 $V_{a\max} = 300 V$
 $V_{g'} = 300 V$
 $I_a = 83 mA$
 $S_{\max} = 6,0 mA/V$
 $S_{\text{norm}} = 3,9 mA/V$
 $g(k) = 80$



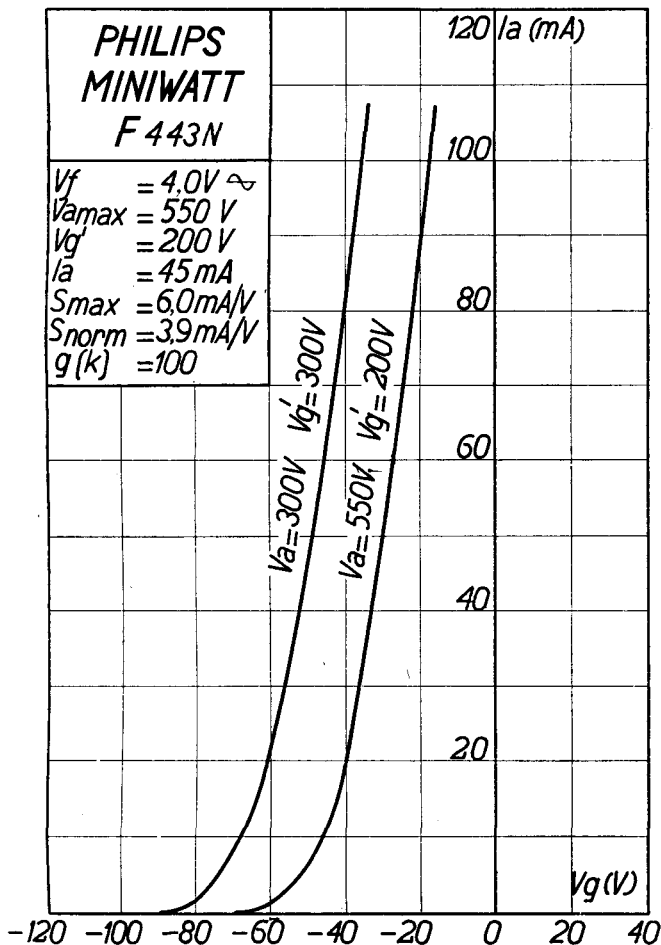
PHILIPS „MINIWATT“

Heizspannung	v_f	= 4,0 V
Tension de chauffage		
Filament voltage		
Heizstrom	i_f	= 2,0 A
Courant de chauffage		
Filament current		
Anodenspannung	$v_{a\max.}$	= 550 V
Tension anodique		
Anode voltage		
Schirmgitterspannung	$v_{g'}$	= 200 V
Tension de grille-écran		
Screen-grid voltage		
Normaler Anodenstrom	i_a	= 45 mA
Courant anodique normal		
Normal anode current		
Neg. Gittervorspannung	v_g	= ca. env. 30 V appr.
Polarisation négative de grille		
Negative grid bias		
Verstärkungsfaktor	$g(k)$	= 100
Coefficient d'amplification		
Amplification factor		
Steilheit (max.)	$S_{\max.}$	= 6 mA/V
Inclinaison (max.)		
Slope (max.)		
Steilheit (norm.)	$S_{\text{norm.}}$	= 3,9 mA/V
Inclinaison (norm.)		
Slope (norm.)		
Innerer Widerstand (norm.)	R_i	= 25000 Ohm
Résistance intérieure (norm.)		
Internal resistance (norm.)		
Anodenverlustleistung	$w_{a\max.}$	= 25 W
Dissipation anodique		
Anode dissipation		
Max. Länge	l	= 160 mm
Longueur max.		
Overall length		
Grösster Durchmesser	d	= 67 mm
Diamètre max.		
Max. diameter		
Sockel		= C 40
Culot		
Base		
Sockelschaltung		= S. VIII
Connexion du culot		
Base connection		

Anwendung: Endstufe
 Application: Tube final
 Function: Power valve

**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0V \approx$
 $V_{amax} = 550V$
 $V_{g'} = 200V$
 $I_a = 45mA$
 $S_{max} = 6,0mA/V$
 $S_{norm} = 3,9mA/V$
 $g(k) = 100$



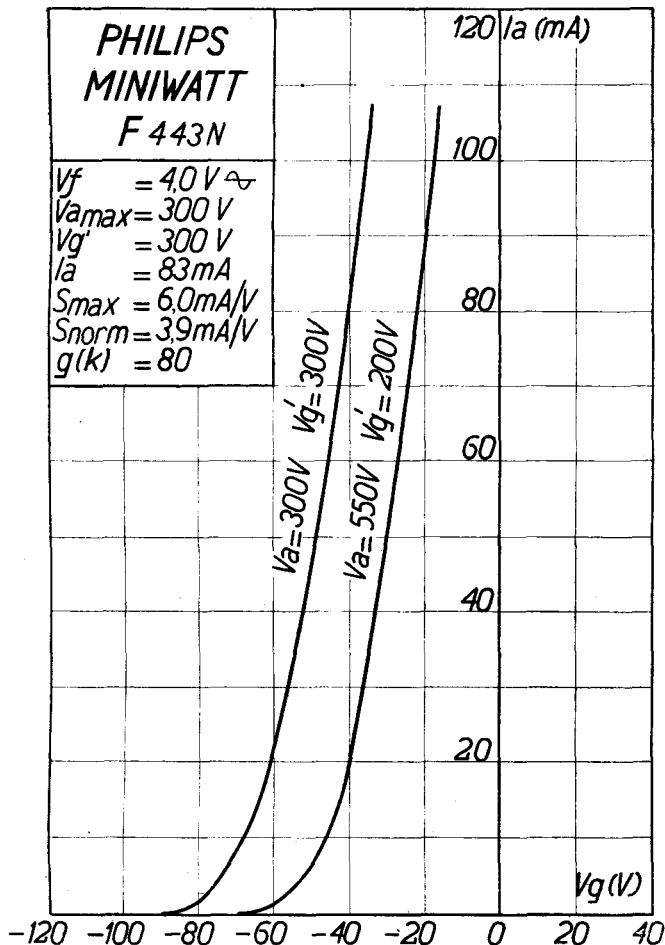
PHILIPS „MINIWATT“

Heizspannung	v_f	= 4,0 V
Tension de chauffage		
Filament voltage		
Heizstrom		ca.
Courant de chauffage	i_f	= env. 2,0 A
Filament current		appr.
Anodenspannung	$v_a \text{ max.}$	= 300 V
Tension anodique		
Anode voltage		
Schirmgitterspannung	$v_{g'}$	= 300 V
Tension de grille-écran		
Screen-grid voltage		
Normaler Anodenstrom	i_a	= 83 mA
Courant anodique normal		
Normal anode current		
Neg. Gittervorspannung		ca.
Polarisation négative de grille	v_g	= env. 40 V
Negative grid bias		appr.
Verstärkungsfaktor	$g(k)$	= 80
Coefficient d'amplification		
Amplification factor		
Steilheit (max.)	$S_{\text{max.}}$	= 6 mA/V
Inclinaison (max.)		
Slope (max.)		
Steilheit (norm.)	$S_{\text{norm.}}$	= 3,9 mA/V
Inclinaison (norm.)		
Slope (norm.)		
Innerer Widerstand (norm.)	R_i	= 20000 Ohm
Résistance intérieure (norm.)		
Internal resistance (norm.)		
Anodenverlustleistung	$w_{a\text{max.}}$	= 25 W
Dissipation anodique		
Anode dissipation		
Max. Länge	l	= 160 mm
Longueur max.		
Overall length		
Grösster Durchmesser	d	= 67 mm
Diamètre max.		
Max. diameter		
Sockel		= 0 40
Culot		
Base		
Sockelschaltung		= S VIII
Connexion du culot		
Base connection		

Anwendung: Endstufe
 Application: Tube final
 Function: Power valve

**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0 \text{ V} \approx$
 $V_{a\max} = 300 \text{ V}$
 $V_{g'} = 300 \text{ V}$
 $I_a = 83 \text{ mA}$
 $S_{\max} = 6,0 \text{ mA/V}$
 $S_{\text{norm}} = 3,9 \text{ mA/V}$
 $g(k) = 80$



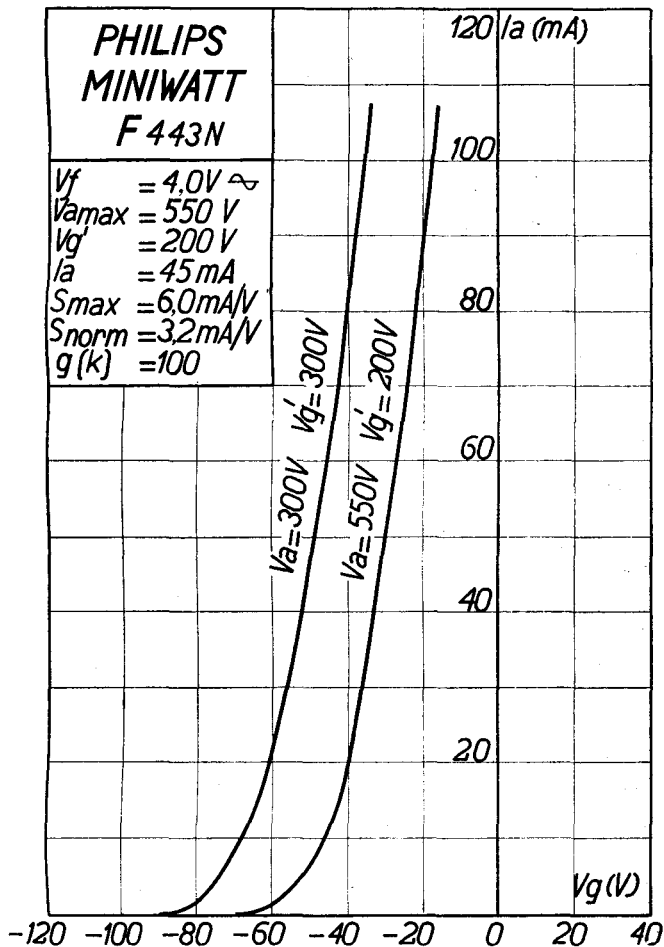
PHILIPS „MINIWATT“

Heizspannung Tension de chauffage Filament voltage	v_f	= 4,0 V
Heizstrom Courant de chauffage Filament current	i_f	ca. = env. 2,0 A appr.
Anodenspannung Tension anodique Anode voltage	$v_a \text{ max.}$	= 550 V
Schirmgitterspannung Tension de grille-écran Screen-grid voltage	v_{g1}	= 200 V
Normaler Anodenstrom Courant anodique normal Normal anode current	i_a	= 45 mA
Neg. Gittervorspannung Polarisation négative de grille Negative grid bias	v_g	ca. = env. 30 V appr.
Verstärkungsfaktor Coefficient d'amplification Amplification factor	$g(k)$	= 100
Steilheit (max.) Inclinaison (max.) Slope (max.)	$S_{\text{max.}}$	= 6 mA/V
Steilheit (norm.) Inclinaison (norm.) Slope (norm.)	$S_{\text{norm.}}$	= 3,2 mA/V
Innerer Widerstand (norm.) Résistance intérieure (norm.) Internal resistance (norm.)	R_i	= 30000 Ohm
Anodenverlustleistung Dissipation anodique Anode dissipation	$w_{a \text{ max.}}$	= 25 W
Max. Länge Longueur max. Overall length	l	= 160 mm
Grösster Durchmesser Diamètre max. Max. diameter	d	= 67 mm
Sockel Culot Base		= 0 40
Sockelschaltung Connexion du culot Base connection		= S VIII

Anwendung: Endstufe
Application: Tube final
Function: Power valve

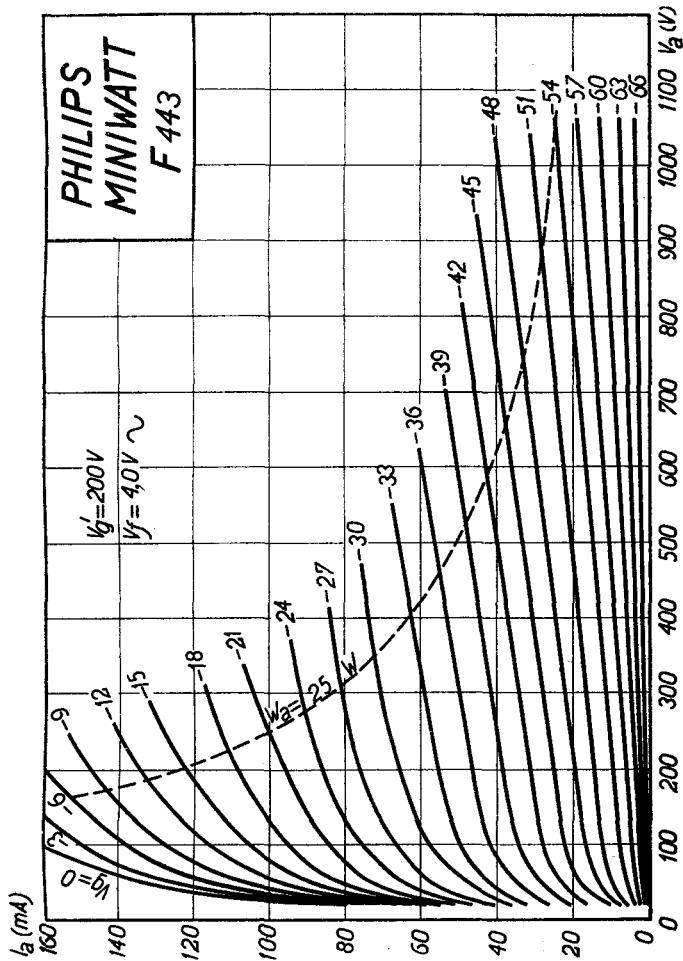
**PHILIPS
MINIWATT
F 443N**

$V_f = 4,0V \approx$
 $V_{amax} = 550V$
 $V_{g'} = 200V$
 $I_a = 45mA$
 $S_{max} = 6,0mA/V$
 $S_{norm} = 3,2mA/V$
 $g(k) = 100$



PHILIPS „MINIWATT“

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 550 V
Max. anode voltage		
Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		
Max. Kathodenstrom	I_c	= 90 mA
Courant cathodique max.		
Max. cathode current		
Max. Schirmeitterspannung	$V_{g' / o}$	= 900 V
Tension de grille-écran max.	$V_{g' / o}$	= 200 V
Max. screen-grid voltage		
Max. Schirmgitterbelastung	W_g	= 1,8 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		
Mittlerer Schirmgitterstrom	I_g	= 6,5 mA
Courant de grille-écran moyen		
Average screen-grid current		
Ungefähre Grenzw. des Schirmgitterstr.	$I_{g' / o}^{min.}$	= 3,5 mA
Limites approxim. du cour. de gr.-écran	$I_{g' / o}^{max.}$	= 8,5 mA
Approx. limits of screen-grid current		
Gitterstrom-Einsatzpunkt	V_{gi}	= -2 V
Point de commenc. du courant de grille		
Starting point of grid current		
Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M.Ωhm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M.Ωhm
Max. resistance in grid circuit		
Nutzleistung	W_{o1} ($V_{geff} = 11,5$ V)	= 7,6 W
Puissance utile	$(R_a = 14000 \text{ Ωhm})$	
Output	W_{o2} ($V_{geff} = 16,2$ V)	= 11,5 W
	$(R_a = 14000 \text{ Ωhm})$	
Kapazitäten	C_{ag}	= 3 $\mu\mu\text{F}$
Capacités	C_{ak}	= 12 $\mu\mu\text{F}$
Capacities	C_{gk}	= 14,6 $\mu\mu\text{F}$



PHILIPS „MINIWATT”

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 550 V
Max. anode voltage		

Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		

Max. Kathodenstrom	I_c	= 100 mA
Courant cathodique max.		
Max. cathode current		

Max. Schirmgitterspannung	$V_{g'0}$	= 500 V
Tension de grille-écran max.	$V_{g'}$	= 200 V*)
Max. screen-grid voltage		

Max. Schirmgitterbelastung	$W_{g'}$	= 2,0 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		

Mittlerer Schirmgitterstrom	$I_{g'}$	= 1,4 mA
Courant de grille-écran moyen		
Average screen-grid current		

Ungefähre Grenzw. des Schirmgitterstr.	$I_{g'}^{\text{min.}}$	= 0,4 mA
Limites approxim. du cour. de gr.-écran	$I_{g'}^{\text{max.}}$	= 2,2 mA
Approx. limits of screen-grid current		

Gitterstrom-Einsatzpunkt	V_{gf}	= -2 V
Point de commenc. du courant de grille	$(V_{gf} = 4 \text{ V} \wedge \searrow)$	
Starting point of grid current		

Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M. Ohm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M. Ohm
Max. resistance in grid circuit		

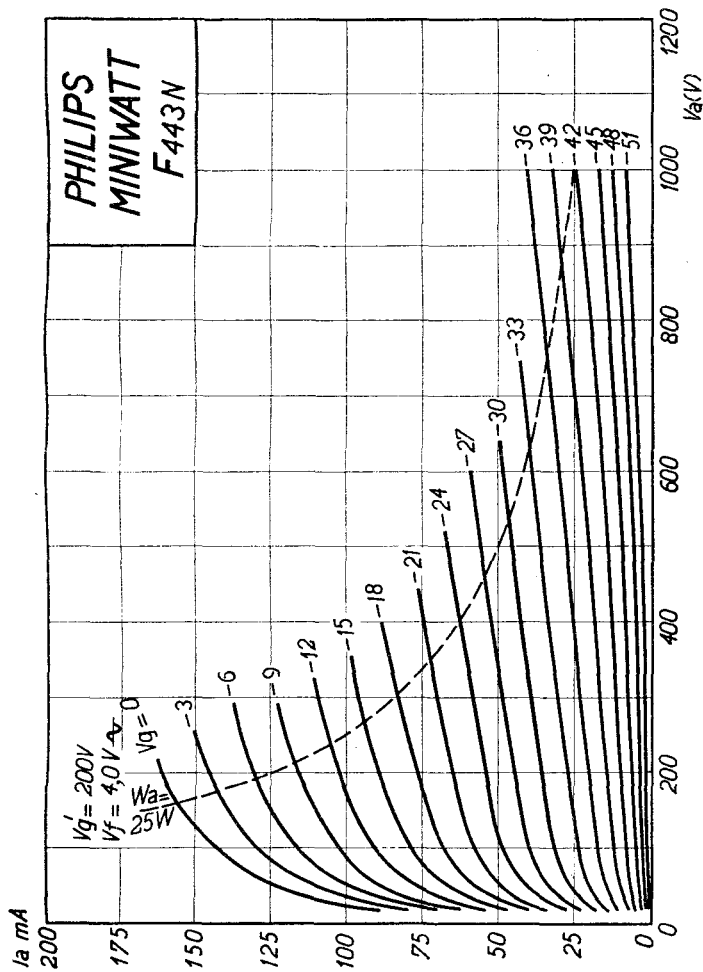
Nutzleistung	W_{01}	= 8 W
Puissance utile	(R_a)	
Output	W_{02}	= 13,4 W
	(R_a)	

Kapazitäten	C_{ag}	= 1,1 $\mu\mu\text{F}$
Capacités	C_{ak}	= 13,7 $\mu\mu\text{F}$
Capacities	C_{gk}	= 15,5 $\mu\mu\text{F}$

*) $V_{g'}$ muss einem Potentiometer entnommen werden.

$V_{g'}$ doit être dérivée d'un potentiomètre.

$V_{g'}$ must be derived from potentiometer.



PHILIPS „MINIWATT“

Max. Anodenspannung	V_{ao}	= 900 V
Tension anodique max.	V_{aL}	= 300 V
Max. anode voltage		
Max. Anodenbelastung	W_a	= 25 W
Dissipation anodique max.		
Max. anode dissipation		
Max. Kathodenstrom	I_c	= 100 mA
Courant cathodique max.		
Max. cathode current		
Max. Schirmgitterspannung	V_{g^1o}	= 500 V
Tension de grille-écran max.	V_{g^1}	= 300 V
Max. screen-grid voltage		
Max. Schirmgitterbelastung	W_{g^1}	= 2,0 W
Dissipation de grille-écran max.		
Max. screen-grid dissipation		
Mittlerer Schirmgitterstrom	I_{g^1}	= 4,6 mA
Courant de grille-écran moyen		
Average screen-grid current		
Ungefähre Grenzw. des Schirmgitterstr.	$I_{g^1}^{min.}$	= 2 mA
Limites approxim. du cour. de gr.-écran	$I_{g^1}^{max.}$	= 6,5 mA
Approx. limits of screen-grid current		
Gitterstrom-Einsatzpunkt	V_{gi}	= -2 V
Point de commenc. du courant de grille	$(V_f = 4 \text{ V} \searrow)$	
Starting point of grid current		
Max. Widerstand im Gitterkreis	R_{g1}	= 0,3 M. Ohm
Résistance max. dans le circuit de grille	R_{g2}	= 0,1 M. Ohm
Max. resistance in grid circuit		
Nutzleistung	$W_{01} \left(\begin{matrix} V_{g^1 eff} = 16,5 \text{ V} \\ R_a = 3500 \Omega \end{matrix} \right)$	= 8,6 W
Puissance utile	$W_{02} \left(\begin{matrix} V_{g^1 eff} = 23,5 \text{ V} \\ R_a = 3500 \Omega \end{matrix} \right)$	= 12,9 W
Output		
Kapazitäten	C_{ag}	= 1,1 $\mu\mu\text{F}$
Capacités	C_{ak}	= 13,7 $\mu\mu\text{F}$
Capacities	C_{gk}	= 15,5 $\mu\mu\text{F}$

I_a (mA)

