

BW5 - Water cooled electron tube

Output power up to 10 kW

RF Metal-ceramic triode

Mainly used for industrial applications
The anode cooling is water-cooled

Maximum Anode dissipation power 5 KW
Maximum operating frequency 75 MHz



Electrical parameters

Filament voltage	7.5 V
Filament current	76 A
Maximum instantaneous filament current	115 A
Magnification factor	19
Transconductance	50m A/V

Electrode capacitance

Anode - the grid	22 pF
Cathode - the grid	50 pF
Anode - Cathode	2 pF

Maximum rating

The maximum anode DC voltage	8 kV
Maximum anode DC current	2.3 A
Maximum grid DC current	0.5A
Maximum anode dissipation power	5kW
Maximum grid power dissipation	75W

Mechanical properties

Cooling method	water -cooled
Quality	2.5-3 kg (water cooling)
Anode water-cooled flow	≥ 20 L/min
Shell and tube maximum temperature	250 °C
Terminal maximum temperature	200 °C
Installation	vertical, anode down

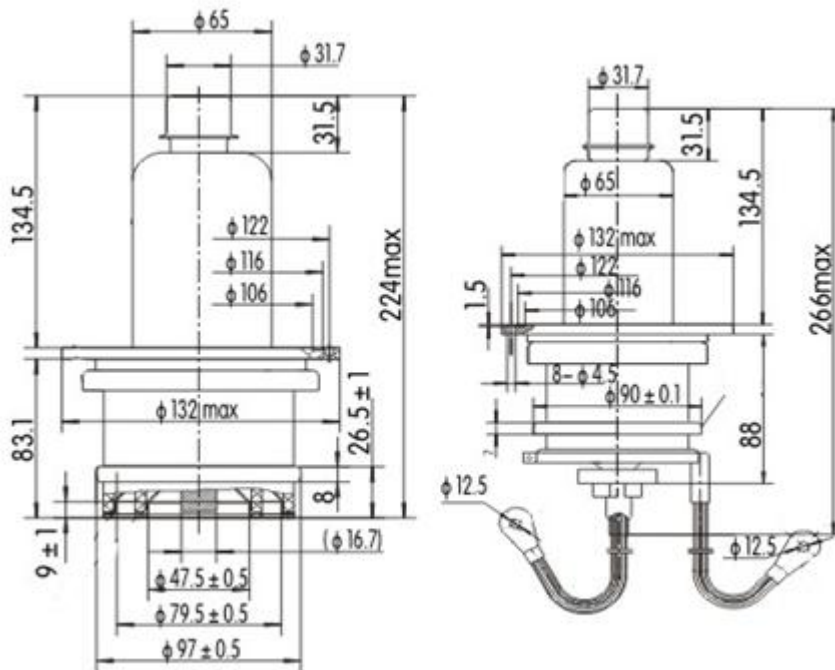
In typical operation class C telegraph

Filament voltage	7.5 V
Anode DC voltage	7.5 kV
Grid DC bias	-1000 V
Anode DC Current	1.63 A
Grid DC current	0.31 A
Anode output power	10 kW

Working status

BW5

Ua (kV)	8	9	10	11	11.5
Uam (kV)	7	8	9	9.8	10.2
-Ug (kV)	-1.2	-1.3	-1.4	-1.5	-1.6
Ugm (kV)	1.64	1.74	1.84	1.92	2.05
Iao(A)	3.74	3.61	3.54	3.54	3.52
Igo (A)	0.874	0.818	0.749	0.697	0.708
Pin (kW)	29.91	32.46	35.38	38.9	40.46
Pout (kW)	24.2	26.79	29.58	32.34	33.68
η a (%)	80.9	82.5	83.6	83.1	83.2
Pa (kW)	5.71	5.67	5.8	6.56	6.77
Pgd (kW)	1.375	1.368	1.328	1.292	1.403
Pg (W)	327	305	280	247	270
Roe (Ω)	1012	1194	1369	1485	1544
Rg (Ω)	1373	1590	1869	2152	2260
Uf (V)	7.5	7.5	7.5	7.5	7.5



Constant current characteristics

