

## BW10 water cooled electron tube

Output power 30 KW

RF Metal-ceramic triode  
Mainly used for industrial applications.  
The anode cooling is water-cooled

Maximum Anode dissipation power: 15 kW  
Maximum operating frequency 60 MHz



### Electrical parameters

Filament voltage	7.5 V
Filament current	135 A
maximum instantaneous filament current	205 A
Magnification factor	22
Transconductance	50 mA/V

### Electrode capacitance

Anode - the grid	31 pF
Cathode - the grid	56 pF
Anode - Cathode	2.5 pF

### Maximum rating

The maximum anode DC voltage	12 kV
Maximum anode DC current	4.5 A
Maximum grid DC current	1 A
Maximum anode dissipation power	15 kW
Maximum grid power dissipation	600 W

### Mechanical properties

Quality	5.5 kg
Cooling method	water -cooled
Anode water-cooled flow SA	≥ 25 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	10 kV
Grid DC bias	-1400 V
Anode DC Current	3.54 A
Grid DC current	0.75 A
Anode output power	30 kW

## Mechanical properties:

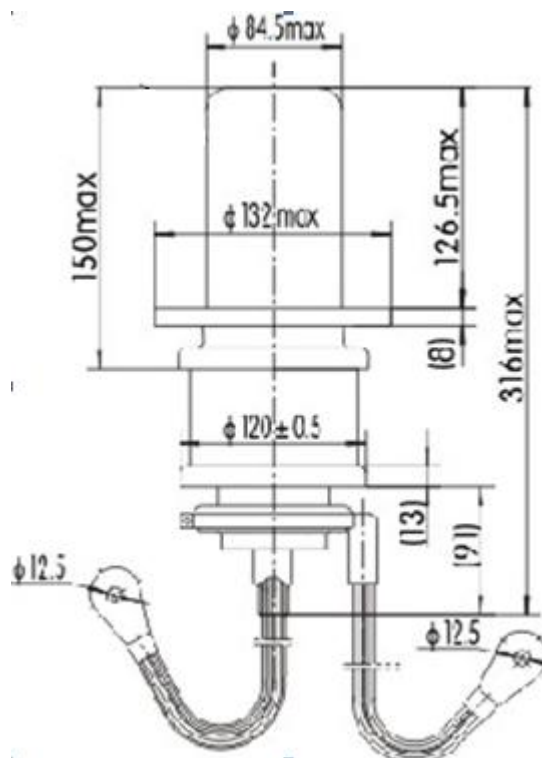
Quality	5.5Kg (SA) – 8.5 (FA) approx
Cooling method	forced air , water -cooled
Anode air-cooled flow FA	≥ 18m <sup>3</sup> /min
Anode water-cooled flow SA	≥ 25L/min
Core column air-cooled flow	≥ 1 m <sup>3</sup> /min
Shell and tube maximum temperature	250 °C
Terminal maximum temperature	200 °C
Installation	vertical, anode down

## Working status:

### B W-10

In typical operation class C telegraph

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

