

Fig. 9.

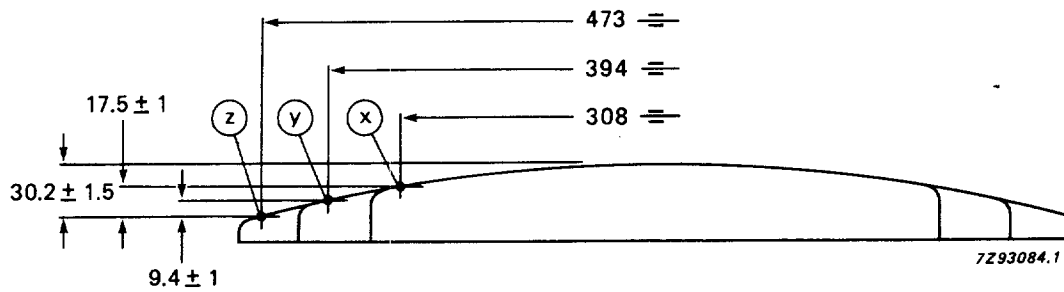


Fig. 10 Screen reference points.

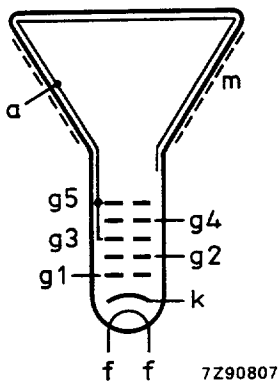


Fig. 11 Electrode configuration.

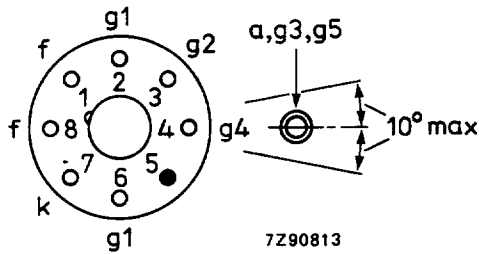


Fig. 12 Pin arrangement.

(1) The displacement of any lug with respect to the plane through the three other lugs is max. 1.5 mm.

M47EAA
M47EAB

Front view and lug dimensions of tube M47EAA

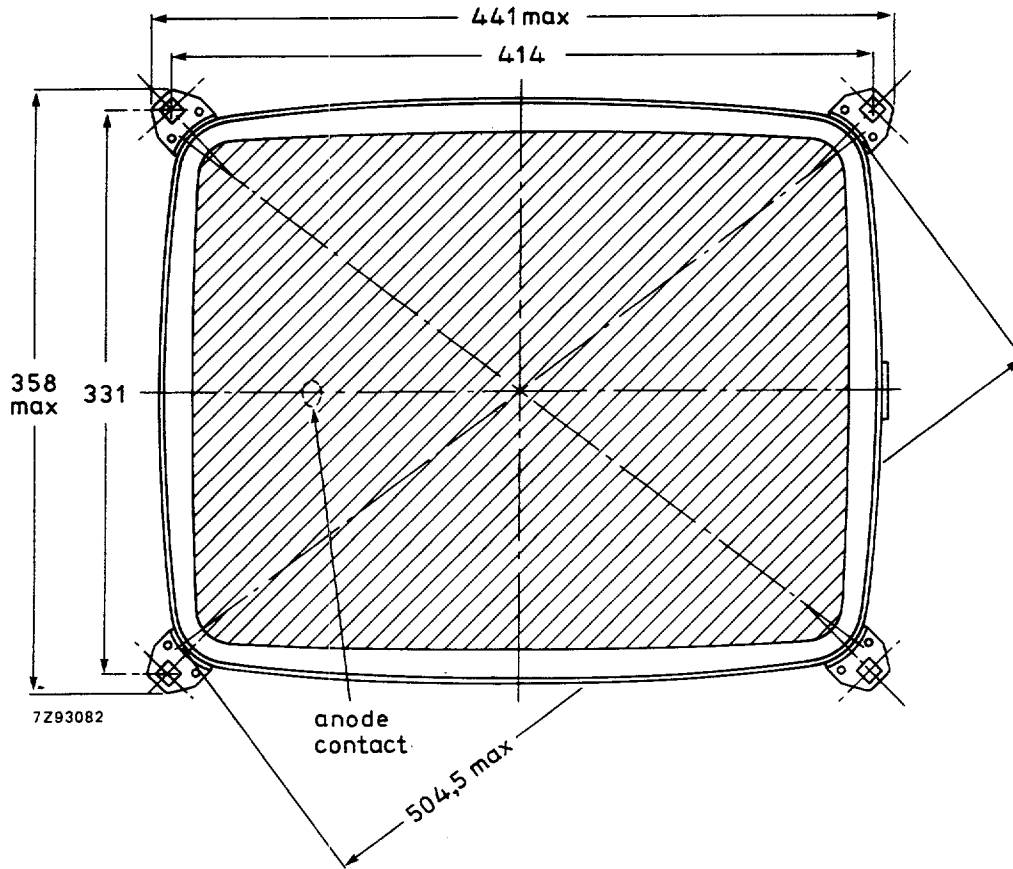


Fig. 13 Tube mounting dimensions; front view.

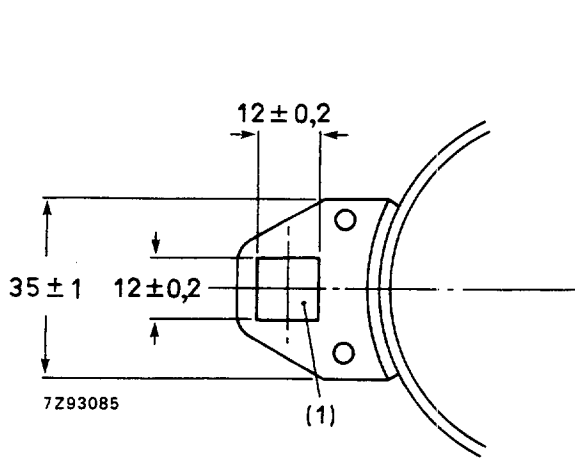


Fig. 14 Lug dimensions.

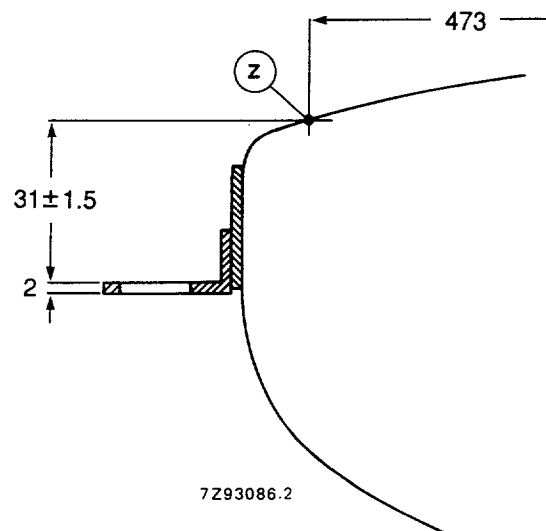


Fig. 15 Lug position.

(1) The mounting screws in the cabinet must be situated inside a circle of 8 mm diameter drawn around the true geometrical positions i.e. at the corners of a rectangle of 414 mm x 331 mm.

M47EAA
M47EAB

Maximum cone contour

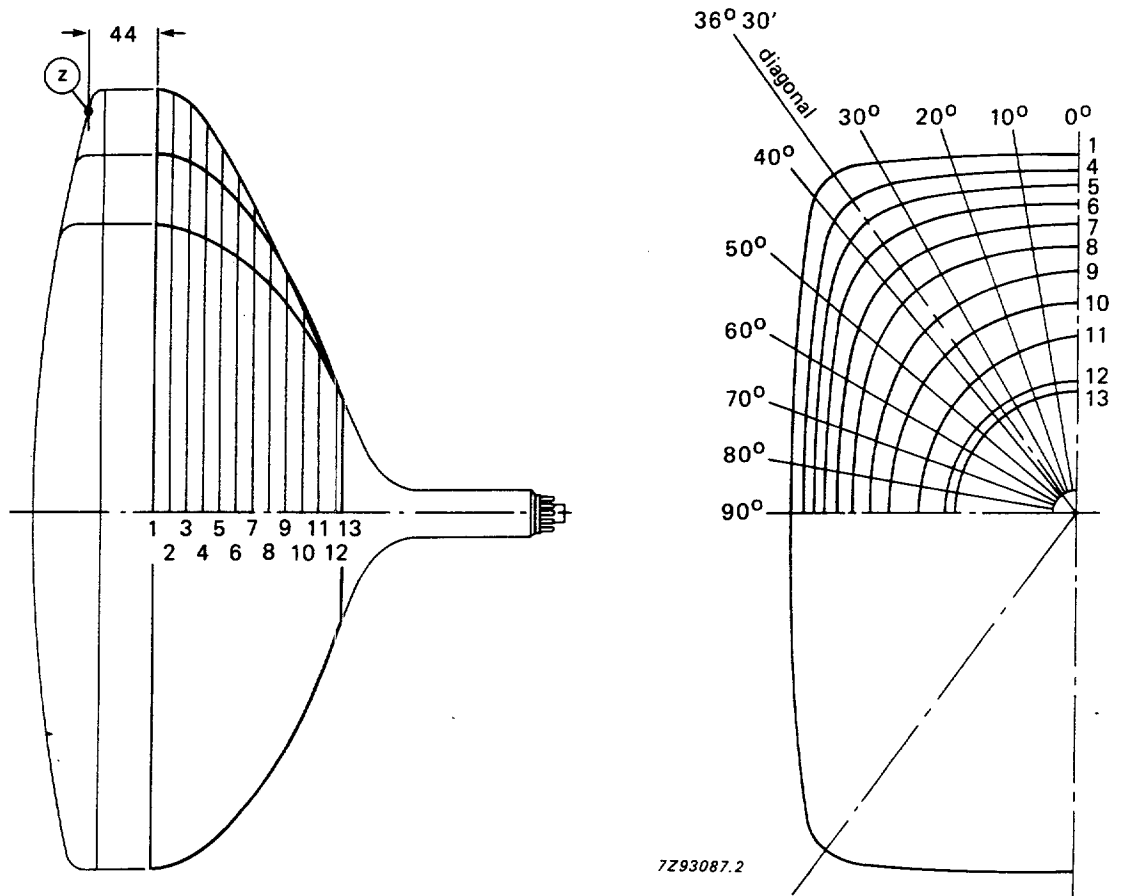


Fig. 19 Cone contour.

Table 1 Cone contour data

sec- tion	nom. distance from section 1	maximum distance from centre										
		0°	10°	20°	30°	diag.	40°	50°	60°	70°	80°	90°
1	0	212,40	215,27	224,24	240,47	250,00	246,96	215,59	193,30	179,48	171,91	169,50
2	10	211,37	214,23	223,15	239,25	249,13	246,39	215,32	192,88	179,00	171,41	168,99
3	20	208,00	210,74	219,25	234,40	244,05	241,65	212,73	190,50	176,69	169,13	166,73
4	30	203,99	206,43	213,93	226,89	233,79	230,99	207,33	186,52	173,13	165,75	163,40
5	40	198,33	200,43	206,81	217,05	220,83	218,32	199,70	181,12	168,49	161,41	159,14
6	50	190,32	192,10	197,40	204,53	205,72	203,55	189,36	173,85	162,55	156,00	153,87
7	60	179,54	181,01	185,01	188,72	187,90	185,85	175,57	163,90	154,70	149,06	147,16
8	70	165,75	166,89	169,39	170,43	168,81	167,08	159,85	151,68	144,83	140,38	138,80
9	80	147,99	148,83	150,23	150,21	148,78	147,54	142,72	137,24	132,45	129,19	127,97
10	90	124,88	125,48	126,40	126,58	126,02	125,48	123,25	120,47	117,83	115,89	115,12
11	100	101,31	100,91	99,98	98,75	97,88	97,42	96,16	95,12	94,37	93,97	93,88
12	110	74,28	74,01	73,54	73,02	72,70	72,54	72,18	71,97	71,92	72,00	72,11
13	113,36	64,18	64,12	64,01	63,89	63,82	63,78	63,70	63,66	63,65	63,68	63,71

TYPE DESIGNATION

Screen glass, screen surface treatment and phosphor are identified by the complete type designation. In the **old system**, used for type numbers M24-306, M31-340, etc., surface treatment and type of screen glass are identified by a type number suffix, as shown in the table below.

Table 1 Type number suffix

surface treatment	screen glass	suffix
normal glare	normal tinted	no
direct grind	normal tinted	/P
direct etch	normal tinted	/E
direct grind	dark tinted	/PD
direct etch	dark tinted	/ED

For tubes without contact strip between external coating and mounting hardware the suffix is:/. . 3.

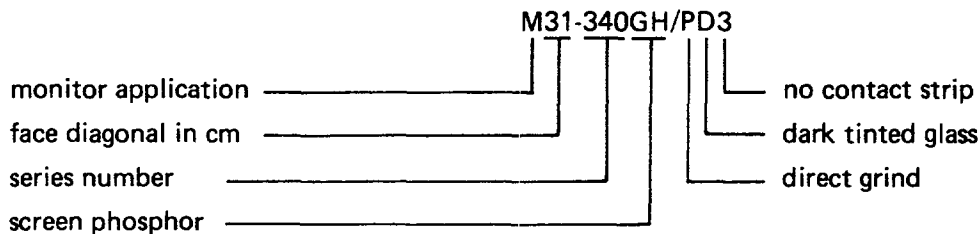
For tubes with an internal surge limiter the suffix is:/ . . 4.

For tubes with the new generation mark 2 gun the suffix is:/ . . 6.

For tubes with a ring trap base the suffix is:/ . . 7.

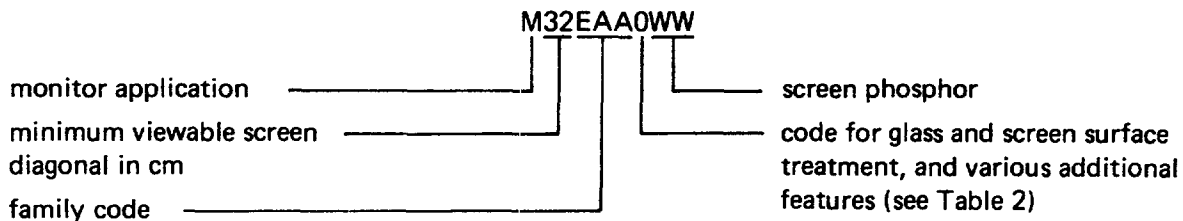
For tubes with an anti static coating (ASC) the suffix is:/ . . S.

Example:



In the **new system**, used for type numbers M29EAA, M32EAA, etc., surface treatment and type of screen glass are identified as shown in the example below.

Example:



GENERAL

Table 2 Codes for glass and screen surface treatments and various additional features

code	glass		anti-glare			ISL	no contact strip	high cut-off gun	without anti-crackling coating
	normal tinted	dark tinted	normal glare	direct grind	direct etch				
0	X		X						
1	X			X					
2		X		X					
3		X			X				
5	X		X			X			
6		X		X			X		
7	X			X		X			
8	X				X				
10	X		X					X	
11	X			X				X	
12		X		X				X	
13		X			X			X	
15	X		X			X		X	
16		X		X			X	X	
17	X			X		X		X	
18	X				X			X	
20		X		X		X			
21	X		X			X			X
22		X		X		X		X	
23		X			X		X	X	
24		X			X	X			
27		X		X		X		X	X
28		X			X	X		X	

Table 3 Tube type and cathode classification

gun	narrow neck high resolution		wide neck high resolution			
	high cut-off	low cut-off	high cut-off		low cut-off	
tube size	9", 12", 14"	9", 12", 14"	12"/15"	17"/20"	12"/15"	17"/20"
cathode						
12 V/130 mA	X	X	X		X	
12 V/75 mA		X				
6.3 V/240 mA			X	X	X	X

GENERAL

Survey of screen phosphors

type	designation	fluorescent colour	phosphorescent colour	persistence*	colour co-ordinates x	y	relative brightness (%) with respect to type WW
WW	P4	white	white	medium short	0.265	0.295	100
WS	P104	white	white	medium short	0.285	0.320	approx. 110
WJ	P115	white	white	medium short	0.315	0.355	approx. 120
WT	P192	white	white	medium	0.340	0.380	approx. 65
WR	—	white	white	medium short	0.355	0.395	approx. 130
WD	—	white	white	medium	0.355	0.395	approx. 65
GH	P31	green	green	medium short	0.265	0.550	approx. 150
GR	P39	yellowish-green	yellowish-green	long	0.205	0.715	75
GW	P42	yellowish-green	yellowish-green	medium	0.238	0.568	approx. 120
HA	—	yellowish-green	yellowish-green	medium	0.220	0.660	approx. 85
HJ	—	yellowish-green	yellowish-green	medium	0.240	0.700	approx. 80
—	(EPU)	greenish-yellow	greenish-yellow	medium	0.465	0.515	approx. 65
KC	—	yellow-green	yellow-green	medium short	0.425	0.550	approx. 170
LA	—	orange	orange	medium	0.554	0.446	approx. 50
LM	—	orange	orange	medium short	0.547	0.446	approx. 85

* medium short: 10 to 1000 μ s

medium: 1 to 100 ms

long: 100 ms to 1 s