13122/FKZ,13528, 13529, 13711/FLT

13124/FKY

13125/GJT, 13131/GED

13158

13186/EPX/EPV

FLT facetted

13137/FHX, 13155/FJX, 13189/EPZ/DJT, 13194/DED

EPZ, DJT, 13160/DDS, 14501/DDL

Features

Halogen lamps with an internal reflector for use in microfilm and microfiche projectors.
The glass reflectors of these lamps have a dichroic coating which reflects the light forward, but radiates about 75% of the generated heat backwards and thus away from the microfiche/film.
The halogen burner is precisely aligned using an optical system so that, when the lamp is replaced, no realignment is necessary.
These lamps also offer the familiar advantages of all halogen lamps: negligible light output depreciation and high efficacy (thus low energy consumption).

Low voltage halogen lamps should not be dimmed by more than 10% of their rated voltage since this will result in a reduction in life.

Standard tungsten filament lamps (with no halogen filling), can be dimmed to zero volts, resulting in virtually endless life. However if low voltage tungsten halogen lamps are dimmed by more than 10%, the lamp will be operating at too low a temperature and the free halogens in the gas fill, will attack the cooler parts of the tungsten filament i.e. where enters the quartz or glass envelope. The wire at that point will then be eroded and eventually will fail.
So if dimmed by 10% or more, low voltage tungsten halogen lamps will not have an extended life but are unlikely even to reach their rated life.

Applications

Microfiche readers and projectors, microfilm readers and printers and jacket fillers (all also in combination with information retrieval systems), as well as in, for example, medical equipment.
Some types are nowadays also used in light boxes for lighting with fibres.

Type	ANSI code	J code	Cap/ base	Lamp voltage	Lamp wattage	Colour temperature	Reflector diameter in mm	Reflector surface	Fig.	Burning position	Lamp life	Max. permissible pinch temp. degr. C*	Max. permissible bulb temp. degr. C*	Ordering number
				V	W	K								
13124	FKY	-	G3.9	6	9	3000	35	smooth	2	ANY	250	400	900	9238 997 10100
13529	-	-	GZ4	6	9	3000	35	smooth	1	ANY	250	400	900	9238 961 10100
13528	-	-	GZ4	6	15	2900	35	smooth	1	ANY	750	350	900	9238 838 10100
13122	FKZ	-	GZ4	13,8	25	3100	35	smooth	1	ANY	250	400	900	9239 194 18200
13137	FHX	-	GZ4	13,8	25	3100	50	smooth	3	ANY	250	400	900	9239 162 18200
13711	FLT	-	GZ4	13,8	25	3100	35	smooth	1	ANY	250	400	900	9239 262 18200
-	FLT	-	GZ4	13,8	25	3100	35	facetted	1	ANY	400	350	900	9247 962 18200
13155	FJX	-	GX5.3	13,8	30	3150	50	smooth	3	ANY	500	350	900	9238 935 18200
13125	GJT	-	Cable	13,8	50	3150	50	smooth	4	ANY	1000	350	900	9239 195 18200
13189	EPZ/DJT	-	GX5.3	13,8	50	3150	50	smooth	3	ANY	1000	350	900	9238 835 18200
13160	DDS	-	GX5.3	21	80	3125	50	facetted	3	ANY	1000	350	900	9239 212 19800
-	-	JCR 21V 80W	GX5.3	21	80	3125	50	facetted	3	ANY	500	350	900	9248 124 19800
13131	GED	-	Cable	13,8	85	3125	50	smooth	4	ANY	1000	350	900	9239 193 18200
13194	DED	-	GX5.3	13,8	85	3150	50	smooth	3	ANY	1000	350	900	9238 836 18200
13186	EPX/EPV	-	GX5.3	14,5	90	3200	50	smooth	3	ANY	500	350	900	9238 912 14900
-	EPX	-	GX5.3	14,5	90	3150	50	stippled	3	ANY	500	350	900	9238 912 14900
-	-	JCR 20V 115W	GX5.3	20	115	-	50	facetted	3	ANY	500	350	900	9248 122 19700
14501	DDL	-	GX5.3	20	150	3150	50	facetted	3	ANY	500	350	900	9239 214 20500
-	DDL-3	DDL 20V 150W-3	GX5.3	20	150	3150	50	facetted	3	ANY	500	350	900	9249 107 19700
13158	ELD/EJN	-	GX5.3	21	150	3400	50	stippled	3	ANY	40	400	900	9239 213 19800

** Maximum permissible bulb temperature: 900°C*

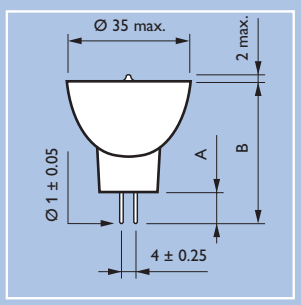


Fig. 1

Dimensions in mm

Type	A	B
13529, 13528	6	40
13122, 13711	6	40
FLT	4.5	35

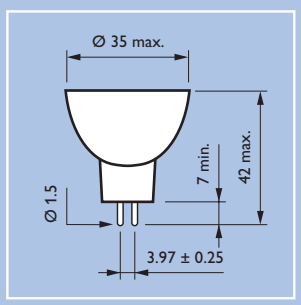


Fig. 2

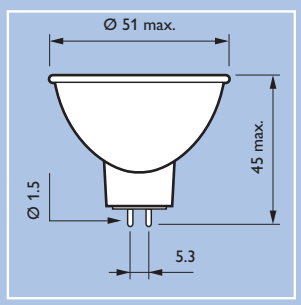


Fig. 3

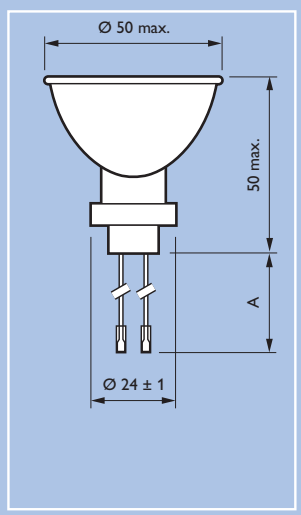
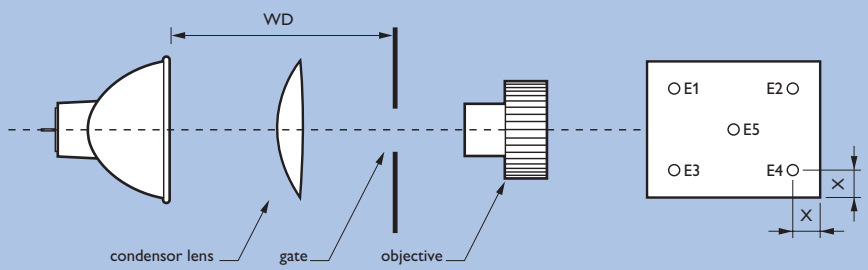


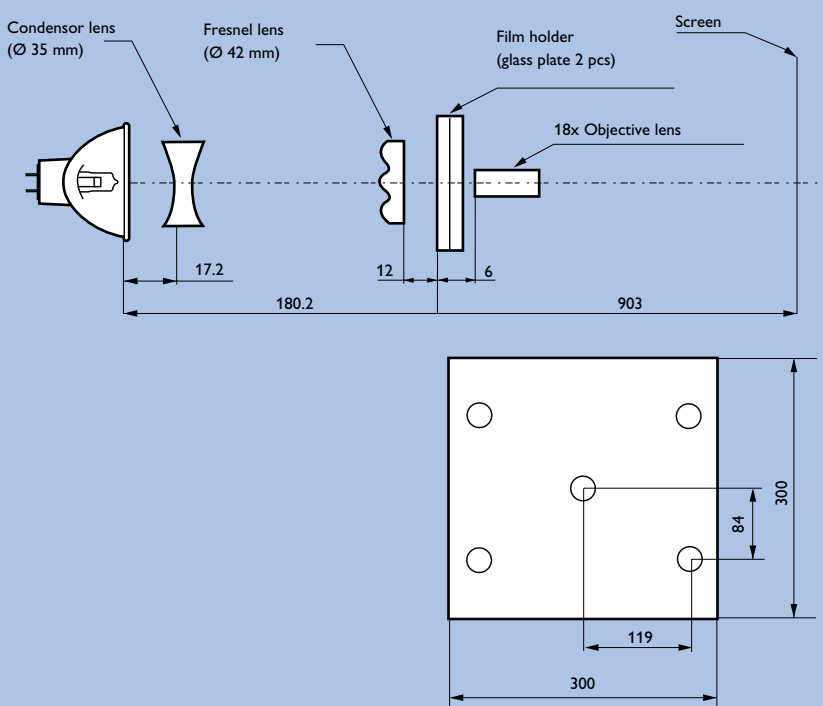
Fig. 4

Type	A
Cap/base Special/ceramic	
13125	190.0 ± 5.0
13131	75.0 ± 5.0

FF



Optical system, all lamps except JCR 21/80



Optical system JCR 21/80

FF

Type	ANSI Code	J Code	WD mm	Diameter gate mm	Condensor f mm	Objective f mm	Screen size	X/Y mm	Min.center intensity lx	Emax-Emin/ Emax %
13124	FKY	-	108	9.4 round	60	17	279 x 356	40/40	170	50
13529	-	-	108	9.4 round	60	17	279 x 356	40/40	170	50
13528	-	-	92	18 round	42	20	279 x 356	40/40	700	20
13122	FKZ	-	92	18 round	42	20	279 x 356	40/40	1100	50
13137	FHX	-	108	9.4 round	60	17	279 x 356	40/40	400	60
13711	FLT	-	155	9.7 round	53	15	279 x 356	40/40	400	50
13155	FJX	-	108	9.4 round	60	17	279 x 356	40/40	330	50
-	FJX	-	108	9.4 round	no	50	279 x 356	32.5/32.5	350	40
13125	GJT	-	108	9.4 round	60	17	279 x 356	40/40	380	70
13189	EPZ/DJT	-	108	9.4 round	60	17	279 x 356	40/40	380	70
13160	DDS	-	165	9.4 round	no	50	279 x 356	32.5/32.5	250	80
-	-	JCR 21V 80W	17.2	see drawing on left page			300 x 300	-	-	-
13131	GED	-	165	16 round	60	29	279 x 356	40/40	950	75
13194	DED	-	165	16 round	60	29	279 x 356	40/40	1000	75
13186	EPX/EPV	-	155	18.3 round	yes	33	279 x 356	40/40	1100	60
-	EPX	-	165.1	9.09 round	no	50	420 x 420	40/40	250	75
-	-	JCR 20V 115W	185	yes	no	17	355 x 355	67.5/67.5	250	20
14501	DDL	-	194.5	9.4 round	no	50	279 x 356	32.5/32.5	250	90
-	DDL-3	DDL 20V 150W-3	194.5	9.4 round	no	50	279 x 356	32.5/32.5	-	-
13158	ELD/EJN	-	50.8	12 round	yes	50	1113 x 835	58/58	780	30