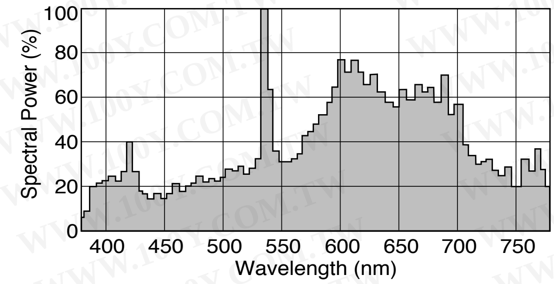
EYE Color Arc®
(3000K Series)

For applications which require natural, well - balanced light from a high efficiency light source. You can choose from three different lighting atmospheres, warm white, neutral white or cool white.

FEATURES

1. Excellent colour rendition - Ra, R9 (red colour) is especially high
2. Warm white colour for colour temperature 3000K, series
   (Neutral white colour for colour temperature 4500K series)
   (Cool white colour for colour temperature 6500K series)
3. Compact tubular bulb and E27 base (up to 150W)
4. Remarkable power savings due to high efficacy
5. Universal burning position
6. The outer bulb is made of UV - absorbing hard glass and an add on UV cut coating (E27 base lamps)
7. Protective sleeve surrounding discharge tube allows operation in open fixtures for indoor use (up to 150W)

Spectral distribution 3000K



CHARACTERISTICS 3000K Series

Type	Watts (W)	Base	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Ra	Rated Av. Life (hrs)	Fig. No.
Clear Type												
MT150SLW	150	E27	T40	12	155	97	95	1.9	9500	96	6000	1
MT150SLW/G12	150	G12	T25	24	105	56	95	1.9	9500	96	6000	2
Frosted Type												
MT150FSLW	150	E27	T40	12	155	——	95	1.9	9000	96	6000	1

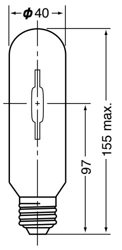


Fig.1

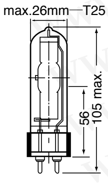


Fig.2

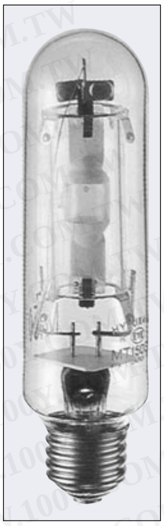
BALLAST & IGNITOR

EYE Electronic Ballasts are available for the lamp operation with excellent performance.
or
EYE Color Arc® can be operated on a standard HPS ballast or a metal halide ballast※, and ignitor for E27 base (70W, 150W) and E40 base (150W, 250W).

※For safe operation and best performance, please contact Iwasaki or any local ballast manufacturer or ignitor manufacturer.

EYE Color Arc®

(3500K Series)

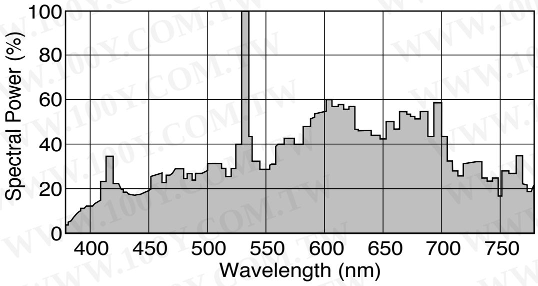


For applications which require natural, well - balanced light from a high efficiency light source.
You can choose from three different lighting atmospheres, warm white, neutral white or cool white.

FEATURES

1. Excellent colour rendition - Ra, R9 (red colour) is especially high
2. Warm white colour for colour temperature 3500K series
   (Neutral white colour for colour temperature 4500K series)
   (Cool white colour for colour temperature 6500K series)
3. Compact tubular bulb and E27 base (up to 150W)
4. Remarkable power savings due to high efficacy
5. Universal burning position
6. The outer bulb is made of UV - absorbing hard glass and an add on UV cut coating (E27 base lamps)
7. Protective sleeve surrounding discharge tube allows operation in open fixtures for indoor use (up to 150W)

Spectral distribution 3500K



CHARACTERISTICS 3500K Series

Type	Watts (W)	Base	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Ra	Rated Av. Life (hrs)	Fig. No.
Clear Type												
MT70SDW	70	E27	T35	12	140	89	90	1.0	4500	96	9000	1
MT100SDW ※1	100	E27	T35	12	140	89	95	1.3	6500	96	9000	1
MT150SDW	150	E27	T40	12	155	97	95	1.9	10000	96	12000	2
MT70SDW/G8.5	70	G8.5	T18	24	85	52	90	1.0	4500	96	6000	3
MT70SDW/G12	70	G12	T18	24	105	56	90	1.0	4500	96	6000	4
MT150SDW/G12	150	G12	T25	24	105	56	95	1.9	10000	96	6000	4
Frosted Type												
MT70FSDW	70	E27	T35	12	140	——	90	1.0	4300	96	9000	1
MT100FSDW ※1	100	E27	T35	12	140	——	95	1.3	6000	96	9000	1
MT150FSDW	150	E27	T40	12	155	——	95	1.9	9600	96	12000	2

※1 MT100SDW, MT100FSDW lamps require only EYE Electronic Ballast for the operation.

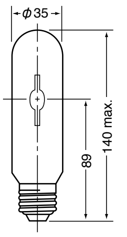


Fig.1

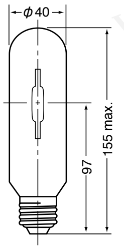


Fig.2

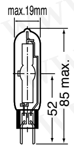


Fig.3

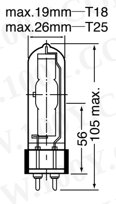


Fig.4

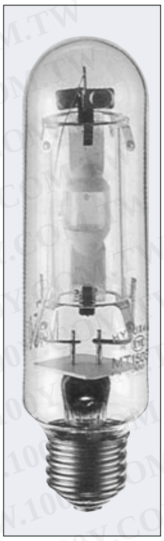
BALLAST & IGNITOR

EYE Electronic Ballasts are available for the lamp operation with excellent performance.
or
EYE Color Arc®can be operated on a standard HPS ballast or a metal halide ballast※, and ignitor for E27 base (70W, 150W) and E40 base (150W, 250W).

※For safe operation and best performance, please contact Iwasaki or any local ballast manufacturer or ignitor manufacturer.

EYE Color Arc®

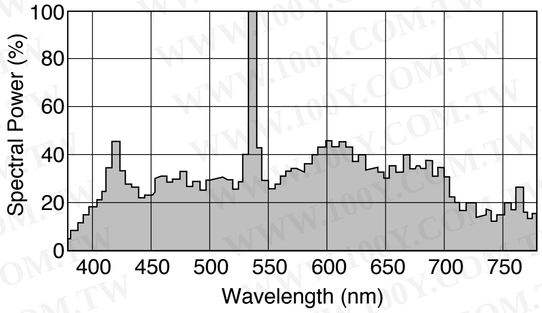
(4500K Series)



FEATURES

1. Excellent colour rendition, Ra 96, R9 (red colour) is especially high.
2. Warm white colour (Colour temperature 4500K)
3. Compact tubular bulb, E27 & E40 bases.
4. Remarkable power savings due to high efficacy
5. Universal burning position. (MT250SW : BU±15° burning only)
6. The outer blub is made of UV-cut coating glass. (E27 base lamps)
7. Protective sleeve surrounding discharge tube allows operation in open fixtures for indoor use.

Spectral distribution 4500K



CHARACTERISTICS 4500K Series

Type	Watts (W)	Base	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Ra	Rated Av. Life (hrs)	Fig. No.
Clear Type												
MT70SW	70	E27	T35	12	140	89	90	1.0	5000	96	9000	1
MT100SW ※1	100	E27	T35	12	140	89	95	1.3	7000	96	9000	1
MT150SW	150	E27	T40	12	155	97	95	1.9	11000	96	12000	2
MT150SW/E40	150	E40	T48	12	211	127	95	1.9	11000	96	12000	3
MT250SW	250	E40	T48	12	220	150	100	3.0	19000	96	6000	4
MT70SW/G8.5	70	G8.5	T18	24	85	52	90	1.0	5000	96	6000	5
MT70SW/G12	70	G12	T18	24	105	56	90	1.0	5000	96	6000	6
MT150SW/G12	150	G12	T25	24	105	56	95	1.9	11000	96	6000	6
Frosted Type												
MT70FSW	70	E27	T35	12	140	—	90	1.0	4800	96	9000	1
MT100FSW ※1	100	E27	T35	12	140	—	95	1.3	6500	96	9000	1
MT150FSW	150	E27	T40	12	155	—	95	1.9	10500	96	12000	2

※1 MT100SW, MT100FSW lamps require only EYE Electronic Ballast for the operation.

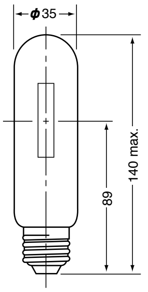


Fig.1

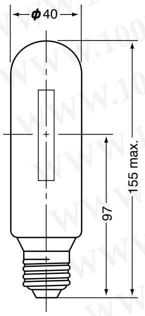


Fig.2

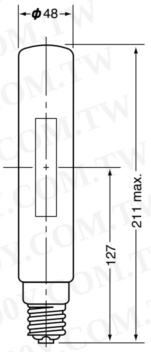


Fig.3

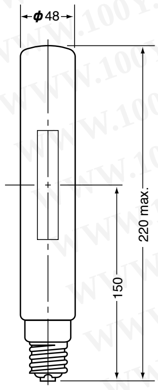


Fig.4

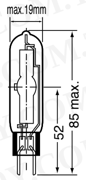


Fig.5

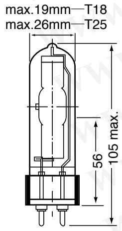


Fig.6

BALLAST & IGNITOR

EYE Electronic Ballasts are available for the lamp operation with excellent performance.

or

EYE Color Arc® can be operated on a standard HPS ballast or a metal halide ballast※ and ignitor for E27 base (70W, 150W) and E40 base (150W, 250W).

※For safe operation and best performance, please contact Iwasaki or any local ballast manufacturer or ignitor manufacturer.

EYE Color Arc

(6500K Series)

EYE Color Arc lamps operate on Iwasaki electronic ballasts and appropriate high-pressure sodium or metal halide lamp ballasts with ignitors.

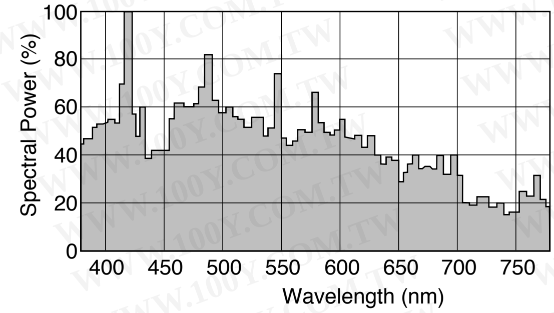
FEATURES

1. Excellent colour rendtion. Ra 96 (except for 70W)
2. Cool white colour (colour temperature 6500K)
3. Products a spectrum very similar to that of natural sunlight.
4. Compact tubular bulb and E27 bases.
5. Excellent power savings due to high efficacy
6. Universal burning position.
7. The outer blub is made of UV-cut coating glass.
8. Protective sleeve surrounding discharge tube allows operation in open fixtures for indoor use.

APPLICATIONS

Recommended for use in special applications that require light very similar to that of natural sunlight such as aquarium illumination, painting shops, factories and greenhouses.

Spectral distribution 6500K



CHARACTERISTICS 6500K Series

Type	Watts (W)	Base	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Ra	Rated Av. Life (hrs)	Fig. No.
Clear Type												
MT70D	70	E27	T35	12	140	89	90	1.0	5000	92	9000	1
MT100D ※1	100	E27	T35	12	140	89	95	1.3	7000	96	9000	1
MT150D	150	E27	T40	12	155	97	95	1.9	11000	96	12000	2
MT70D/G8.5	70	G8.5	T18	24	85	52	90	1.0	5000	92	6000	3
MT70D/G12	70	G12	T18	24	105	56	90	1.0	5000	92	6000	4
MT150D/G12	150	G12	T25	24	105	56	95	1.9	11000	96	6000	4
Frosted Type												
MT70FD	70	E27	T35	12	140	—	90	1.0	4800	92	9000	1
MT100FD ※1	100	E27	T35	12	140	—	95	1.3	6500	96	9000	1
MT150FD	150	E27	T40	12	155	—	95	1.9	10500	96	12000	2

※1 MT100D, MT100FD lamps require only EYE Electronic Ballast for the operation.

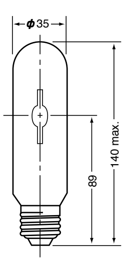


Fig.1

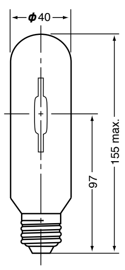


Fig.2

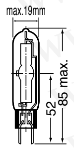


Fig.3

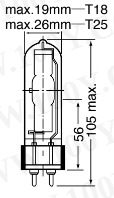


Fig.4

BALLAST & IGNITOR

EYE Electronic Ballasts are available for the lamp operation with excellent performance.

or

EYE®Color Arc can be operated on a standard HPS ballast or a metal halide ballast※, and ignitor for E27 base (70W, 150W) and E40 base (150W, 250W).

※For safe operation and best performance, please contact Iwasaki or any local ballast manufacturer or ignitor manufacturer.

EYE Color Arc PAR™

(3500K,4500K,and 6500K Series)

PAR 36

PAR 38

FEATURES

1. Simple & Compact design
The arc tube lays in the PAR36 & PAR38 outer bulb and has a compact design.

2. Wide colour temperature range
Lamps with colour temperatures of 3500K, 4500K, and 6500K are available.
Also lamps with Mediterranean Blue & Enhanced Fresh Pink light colour are available. These lamps are suitable for a wide range of applications.

3. High luminous flux and high colour rendition
Compared to the dichroic mirror halogen lamps, these lamps have a higher luminous flux and the same high colour rendition.

4. Beam angle selection
Medium beam and wide beam distribution are available.
Excellent beam control offers a high luminous efficacy and related energy saving.

5. Ballast & ignitor
EYE COLOR ARC PAR^{TM} lamps can be operated with the same ballast & ignitor of EYE Color Arc® lamps.
Also, Iwasaki's electronic ballast can be used with these lamps.

6. Safety
Open fixture use and UV-cut coating on the front glass.
Indoor use only
For outdoor use, specific fixtures are required.

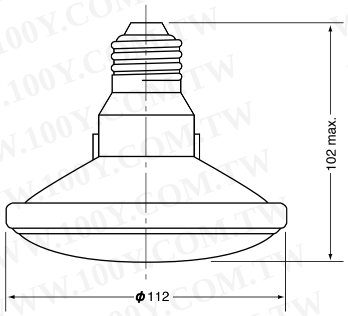


Fig.1

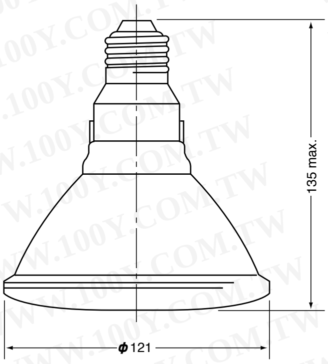


Fig.2

Aluminum reflector type
PAR 36/ E27 base

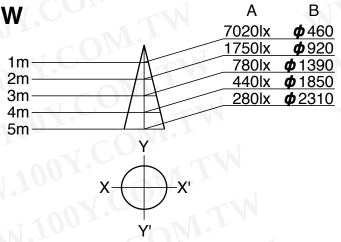
CHARACTERISTICS

Type	Watts (W)	Initial lumens (ℓm)	Beam lumens (ℓm)	Beam angle(˚)	Max. light intensity (cd)	Colour temperature (K)	Ra	Rated Av. Life (hrs)	M.O.L. (mm)	Fig. No.
M70P36SSDW	70	3000	720	26	7020	3500	96	6000	102	1
M70P36FSDW	70	2700	1000	65	1600	3500	96	6000	102	1
M150P36SSDW	150	8100	1800	23×29	11700	3500	96	6000	102	1
M150P36FSDW	150	7650	2700	62×67	4320	3500	96	6000	102	1
M70P36SSW	70	3300	800	26	7800	4500	96	6000	102	1
M70P36FSW	70	3000	1100	65	2000	4500	96	6000	102	1
M150P36SSW	150	9000	2000	23×29	13000	4500	96	6000	102	1
M150P36FSW	150	8500	3000	62×67	4800	4500	96	6000	102	1
M70P36SD	70	3300	800	26	7800	6500	92	6000	102	1
M70P36FD	70	3000	1100	65	2000	6500	92	6000	102	1
M150P36SD	150	9000	2000	23×29	13000	6500	96	6000	102	1
M150P36FD	150	8500	3000	62×67	4800	6500	96	6000	102	1

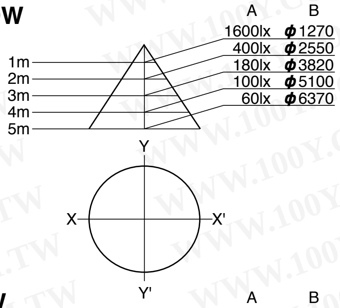
CONICAL DIAGRAM OF ILLUMINANCE

A: Illuminance level directly under the lamp (lx)
B: The distance to the point of 1/2 illuminance level of A (mm)

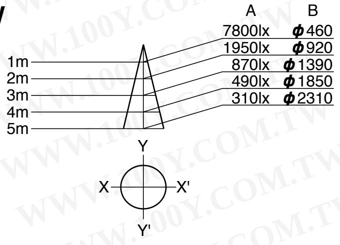
M70P36SSDW



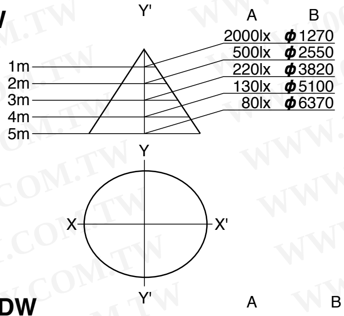
M70P36FSDW



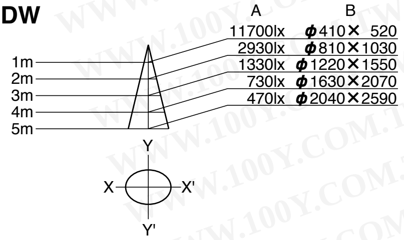
M70P36SSW
M70P36SD



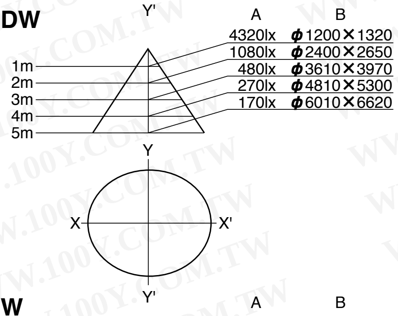
M70P36FSW
M70P36FD



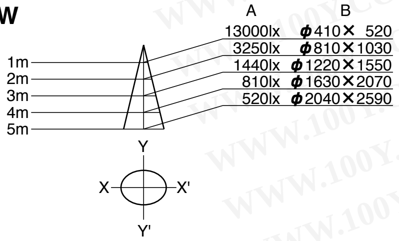
M150P36SSDW



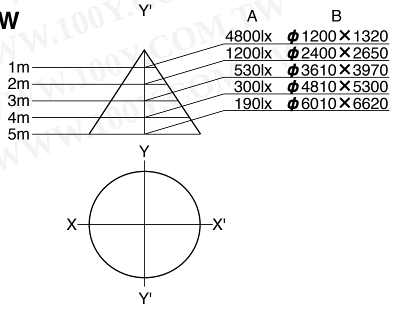
M150P36FSDW



M150P36SSW
M150P36SD



M150P36FSW
M150P36FD



Dichroic reflector type
PAR 38/E27 base

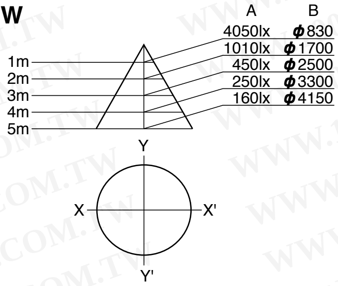
CHARACTERISTICS

Type	Watts (W)	Initial lumens (ℓm)	Beam lumens (ℓm)	Beam angle(°)	Max. light intensity (cd)	Colour temperature (K)	Ra	Rated Av. Life (hrs)	M.O.L. (mm)	Fig. No.
M70P38FSDW	70	2610	1350	45	4050	3500	96	6000	135	2
M150P38FSDW	150	5400	2700	60	4500	3500	96	6000	135	2
M70P38FSW	70	2900	1500	45	4500	4500	96	6000	135	2
M150P38FSW	150	6000	3000	60	5000	4500	96	6000	135	2
M70P38FD	70	2900	1500	45	4500	6500	92	6000	135	2
M150P38FD	150	6000	3000	60	5000	6500	96	6000	135	2

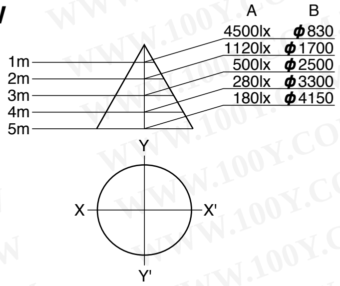
CONICAL DIAGRAM OF ILLUMINANCE

A:Illuminance level directly under the lamp (lx)
B:The distance to the point of 1/2 illuminance level of A (mm)

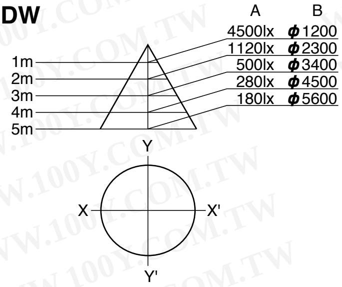
M70P38FSDW



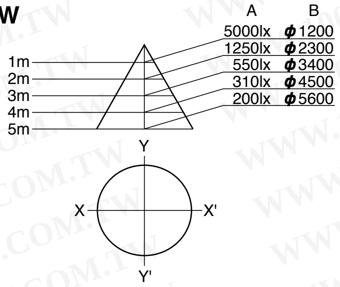
M70P38FSW
M70P38FD



M150P38FSDW



M150P38FSW
M150P38FD



Dichroic reflector type
PAR 36/E27 base

CHARACTERISTICS

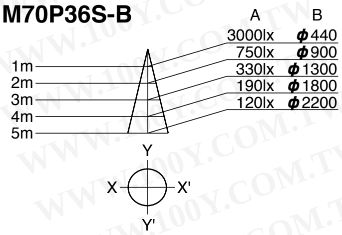
Type	Watts (W)	Initial lumens (ℓm)	Beam lumens (ℓm)	Beam angle(˚)	Max. light intensity (cd)	Colour temperature (K)	Ra	Rated Av. Life (hrs)	M.O.L. (mm)	Fig. No.
Mediterranean blue ※										
M70P36S-B	70	4100	300	25	3000	≒21000	85	6000	102	1
M70P36F-B	70	4000	750	77	800	≒21000	85	6000	102	1
M150P36S-B	150	9500	1100	28×34	7000	≒21000	85	6000	102	1
M150P36F-B	150	9400	2700	72×77	2800	≒21000	85	6000	102	1
Enhanced fresh pink ※										
M70P36S-P	70	3400	400	25	4800	≒2500	85	6000	102	1
M70P36F-P	70	3000	650	70	840	≒2500	85	6000	102	1
M150P36S-P	150	8200	1400	28×34	9000	≒2500	85	6000	102	1
M150P36F-P	150	7800	2400	67×72	3100	≒2500	85	6000	102	1

※ The photometric values are not colour corrected.

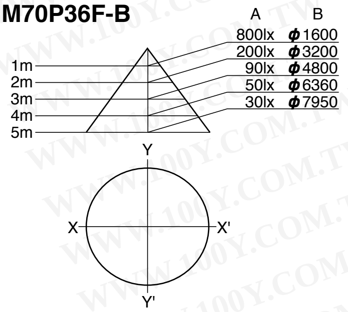
CONICAL DIAGRAM OF ILLUMINANCE

A:Illuminance level directly under the lamp (lx)
B:The distance to the point of 1/2 illuminance level of A (mm)

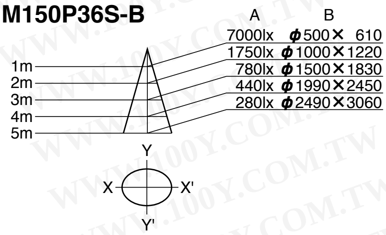
M70P36S-B



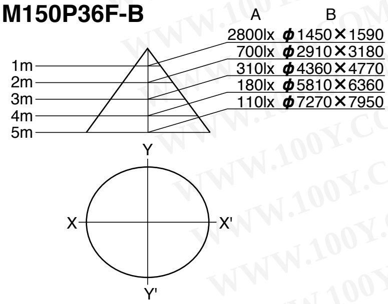
M70P36F-B



M150P36S-B



M150P36F-B



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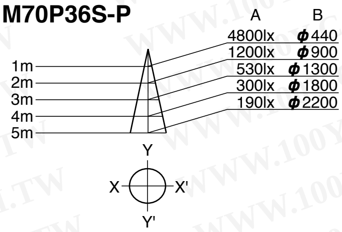

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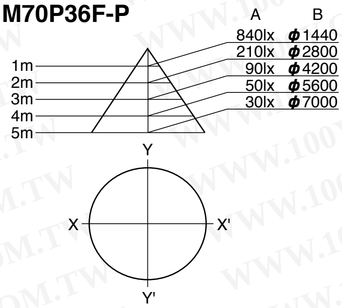
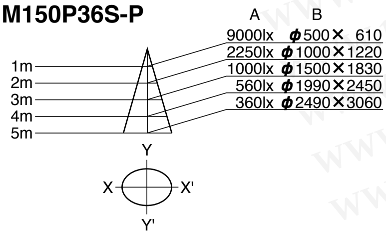


M150P36S-P



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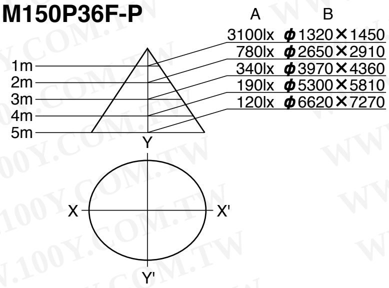


EYE Color Arc Renaissance™ and colour lamps

(Double ended Series)

EYE Color Arc Renaissance lamps operate on IEC61167 ballast and ignitor

FEATURES

1. Excellent colour rendition. Ra 96
2. Available in 3500K, 4500K and 6500K colour temperatures.
3. UV-cut coating
4. Colour lamps are available.

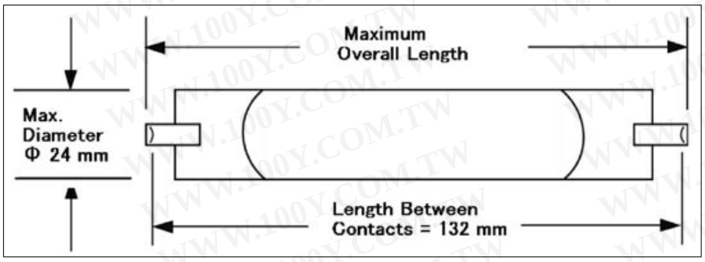
Applications:

- Architectural - Office - Landscape - Retail
- Critical commercial and industrial colour applications

CHARACTERISTICS

Type	Watts (W)	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. InitialLumens (ℓm)	Ra, Colour	Rated Av. Life (hrs)
MTD70SDW	70	Rx7s	24	118.2	58.8	90	1.0	4500	96 3500K	6000
MTD70SW	70	Rx7s	24	118.2	58.8	90	1.0	5000	96 4500K	6000
MTD70D	70	Rx7s	24	118.2	58.8	90	1.3	5000	92 6500K	6000
MTD150SDW	150	Rx7s	24	136	68	95	1.9	10000	96 3500K	12000
MTD150SW	150	Rx7s	24	136	68	95	1.9	11000	96 4500K	12000
MTD150D	150	Rx7s	24	136	68	95	1.9	11000	96 6500K	12000
MTD150/V	150	Rx7s	24	136	68	95	1.9	4000*	- Blue	6000
MTD150G	150	Rx7s	24	136	68	95	1.9	12000*	- Green	6000
MTD150R	150	Rx7s	24	136	68	95	1.9	5000*	- Magenta	-
MTD150AQUA	150	Rx7s	24	136	68	95	1.9	6000*	- 50000K*	6000
MTD150AQUA2	150	Rx7s	24	136	68	95	1.9	8000*	- 20000K*	6000

*Reference value



EYE Color Arc colour

(Single ended Series)

CHARACTERISTICS

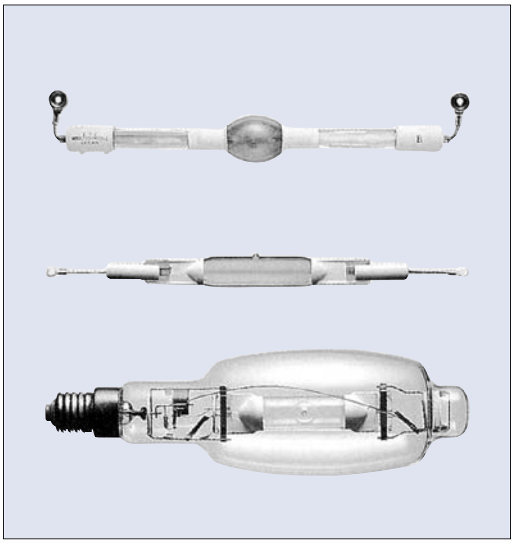
Type	Watts (W)	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. InitialLumens (ℓm)	Ra, Colour	Rated Av. Life (hrs)
MT150/V	150	E27	12	155	97	95	1.9	4000*	- Blue	6000
MT150G	150	E27	12	155	97	95	1.9	12000*	- Green	6000
MT150R	150	E27	12	155	97	95	1.9	5000*	- Magenta	-
MT150AQUA	150	E27	12	155	97	95	1.9	6000*	- 50000K*	6000
MT150AQUA2	150	E27	12	155	97	95	1.9	8000*	- 20000K*	6000

Note : The ballast and ignitor is the same as EYE Color Arc lamps.
Refer to the Fig. 2 page 17

*Reference value

EYE Quartz Arc™

(For use with Metal Halide Lamp Ballast and ignitor.)

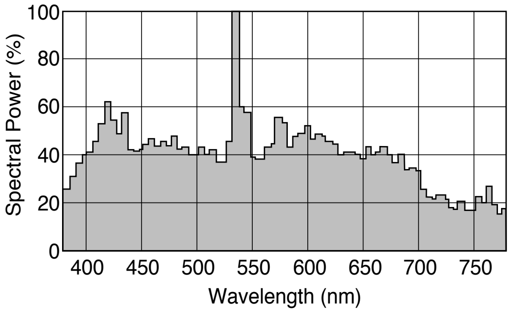


The EYE Quartz Arc™ lamp is a high wattage metal halide lamp which has high colour rendition and natural white or daylight.

FEATURES

1. Double ended short arc type and tubular single base type are available.
2. Excellent colour rendition (Ra 92) and high colour temperature produces superb colour reproduction which enhances its suitability for colour television and future HDTV. (Ra 85 for MLD2000BED-I)
3. Colour temperature : Tc=5500K
4. Compact and high power lamp makes use with a compact fixture possible. (double ended type)
5. Precise beam control is possible and stray light is reduced. (double ended type)
6. Best for medium and large size stadia or entertainment complexes where colour television broadcasting is to take place.

Spectral distribution



OPERATING INSTRUCTIONS

1. MLD2000BED-I : 380V or 400V or 415V, 10.3A type metal halide 2000W reactor ballast & ignitor is required.
2. MSD2000BED-I : 415V, 10.3A type metal halide 2000W reactor ballast & ignitor is required.
3. MT1500B-D/BH, M1500B-D/BH : ANSI M48 ballast (CW, CWA) is required.
4. MT1500A-D/BH : Specified ballast & ignitor is required.
5. MT1000B-D/BH,M1000B-D/BH : ANSI M47 ballast (CW, CWA) is required.

CHARACTERISTICS Clear Type

Type	Watts (W)	Bulb	Std. Pkg Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Initial lumens (ℓ m)	Burning position	Rated Av. Life (hrs)	Fig. No.
						Voltage (V)	Current (A)				
MT1000B-D/BH	1000	T120	6	395	245	255	4.2	80000	BH±60°	6000	1
M1000B-D/BH	1000	BT180	6	395	245	255	4.2	80000	BH±60°	6000	2
MT1500A-D/BH 240V	1500	T120	6	395	245	120	14.0	125000	BH+15°−75°	6000	1
MT1500B-D/BH	1500	T120	6	395	245	265	6.3	130000*	BH±60°	6000	1
M1500B-D/BH	1500	BT180	6	395	245	265	6.3	130000*	BH±60°	6000	2
MSD2000BED-I 415V	2000	——	12	309	155	205	11.3	200000	BH±15°	3000	3
MLD2000BED-I	2000	——	12	282	140	230	9.2	200000	BH±15°	3000	4

*Max. value

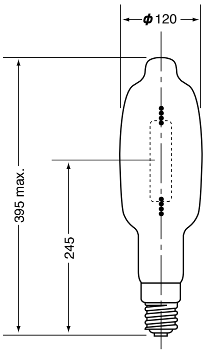


Fig.1

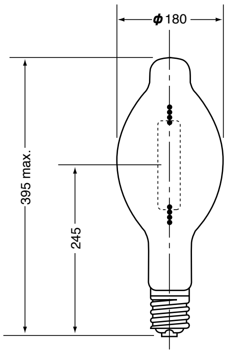


Fig.2

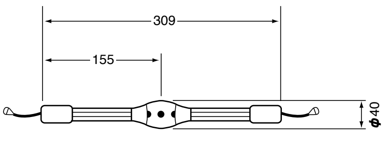


Fig.3

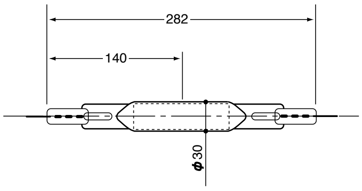
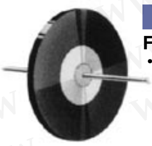


Fig.4

EYE Multi Super Ace™

(For use with Mercury Lamp Ballast only.)



IAT

FEC

- World's first switching capacitor that can resist the high temperature present in the lamp's outer jacket.

The EYE Multi Super Ace lamp is a metal halide lamp with an internal FEC ignitor.

IAT **Iwasaki Advanced Technology**

FEATURES

1. Reliability

Built-in FEC ignitor

Controlled pulse voltage, width and phase therefore the lamp will start immediately after switching on.

2. Economy

High efficacy, 100 lm/w, 1.6 times greater than mercury vapour lamps. (for a 400W lamp)

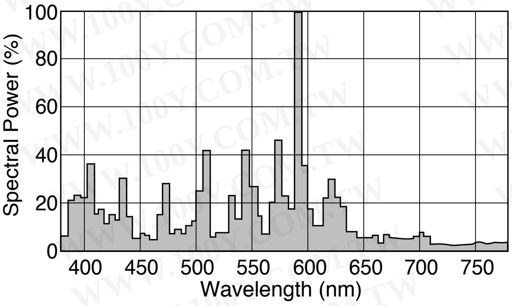
Produces well balanced white light.

LS TYPE	LSH TYPE	
Ra 70, Tc=3800K	Ra 75, Tc=4200K	(Phosphor coated lamp)
Ra 65, Tc=4200K	Ra 70, Tc=4500K	(Clear lamp)

3. Safety

Reduced ignitor pulsing at end of lamp life.

Spectral distribution



OPERATING INSTRUCTIONS

EYE Multi Super Ace lamps operate on standard high-pressure mercury reactor ballasts (IEC Pub. 60188).

EYE Multi Super Ace™ and mercury lamp ballast combination. (Max. wiring distance from the ballast)

Type	Mercury lamp ballast (Reactor)	Allowable external capacitance ※
MF125LSH/U	125W	1500pF
MF250LSH/U	250W	2500pF
MF400LSH/U	400W	5000pF
MF700LS/U	700W	5000pF
MF1000LS/U	1000W	5000pF

※100pF stray capacitance is equivalent to about 1 meter length of twin cable.

CHARACTERISTICS

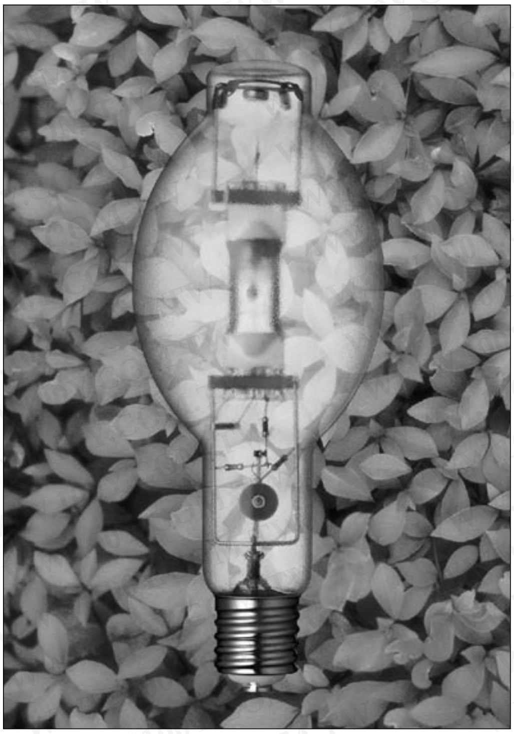
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Initial Lumens (ℓ m)	Rated Av. Life (hrs)	Fig. No.
Coated Type										
MF125LSH/BU	125	BT70	E27	24	178	125	1.15	9400	9000	1
MF250LSH/U	250	BT90	E40	12	226	130	2.13	20000	15000	2
MF400LSH/U	400	BT116	E40	12	292	135	3.25	38000	15000	3
MF700LS/U	700	BT150	E40	6	357	——	——	——	——	4
MF1000LS/U	1000	E165	E40	6	395	145	7.50	87000	9000	5
Clear Type										
M125LSH/BU	125	BT70	E27	24	178	125	1.15	10000	9000	1
M250LSH/U	250	BT90	E40	12	226	130	2.13	21500	15000	2
M400LSH/U	400	BT116	E40	12	292	135	3.25	40000	15000	3
Tubular Type										
MT250LSH/BH	250	T48	E40	12	245	130	2.13	19400	15000	——
MT400LSH/BH	400	T55	E40	12	292	135	3.25	39000	15000	——

NOTE: For use in enclosed fixtures only.
Figure is shown on next page.

EYE Multi Super Ace™

(For use with Mercury Lamp Ballast only.)

TEFLON COATED MULTI SUPER ACE



EYE Multi Super Ace is a metal halide lamp which creates fresh white light from the emission of five elements, each of differing wavelengths. It acieves high colour rendering (Ra), long life and flicker-less.

Superior Characteristics of EYE Multi Super Ace™

1. By adding three extra elements to the current elements, a five band multi-wavelength white light is generated.
2. Improved colour rendering index (Ra) 75.
3. Higher than normal colour temperature provides brighter and whiter appearance in the lit environment.
4. Superior new flicker-less performance over standard EYE Multi-Hi-Ace.
5. Rated Average Life of 15,000hrs (250W & 400W).
6. Total lumens increased by up to 15% over conventional types.
7. Run up time is reduced by up to half of conventional types (100W).

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Initial Lumens (ℓ m)	Rated Av. Life (hrs)	Fig. No.
Coated Type										
MF100LSH/BUP	100	BT70	E27	24	178	115	1.00	7500	9000	1
MF125LSH/BUP	125	BT70	E27	24	178	125	1.15	9400	9000	1
MF250LSH/BUP	250	BT90	E40	12	250	130	2.13	20000	15000	2
MF400LSH/BUP	400	BT116	E40	12	292	135	3.25	38000	15000	3
Clear Type										
M100LSH/BUP	100	BT70	E27	24	178	115	1.00	8000	9000	1
M125LSH/BUP	125	BT70	E27	24	178	125	1.15	10000	9000	1
M250LSH/BUP	250	BT90	E40	12	250	130	2.13	21500	15000	2
M400LSH/BUP	400	BT116	E40	12	292	135	3.25	40000	15000	3

NOTE: Burning position of Teflon coated type is base up only.

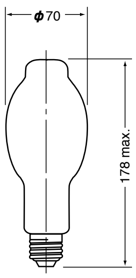


Fig.1

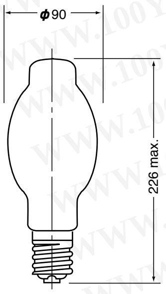


Fig.2

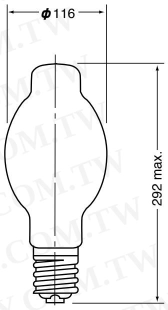


Fig.3

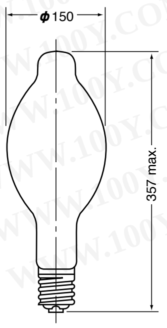


Fig.4

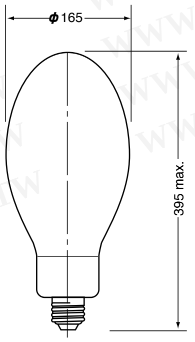
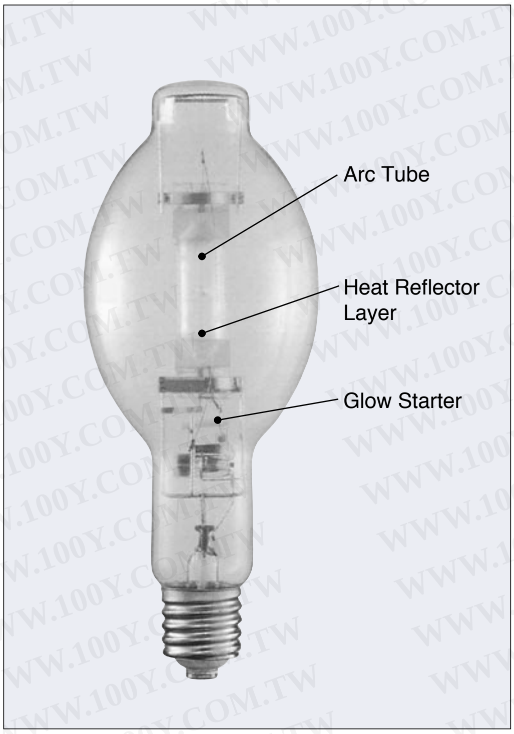


Fig.5

EYE Multi-Hi-Ace

(For use with Mercury Lamp Ballast only.)



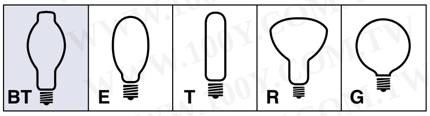
The EYE Multi-Hi-Ace lamp is a metal halide lamp with an internal ignitor.

FEATURES

1. The lamp exterior bulb features a built-in starter with a glow switch and ceramic heater combined.
2. Features the same light colour and beam characteristics as the Multi-Metal Lamp,which does not feature a starter.

OPERATING INSTRUCTIONS

EYE Multi-Hi-Ace lamps operate on standard high-pressure mercury reactor ballasts (IEC Pub. 60188).



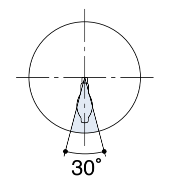
PHYSICAL DATA AND CHARACTERISTICS

BT Bulb Series (Phosphor Coated Type)

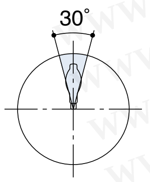
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
MF100LE/BU	100	BT70	E27	24	178	—	115	1.00	6500	9000
MF100LE/BD	100	BT70	E27	24	178	—	115	1.00	6500	9000
MF125LE/BUH	125	BT70	E27	24	178	—	125	1.15	8500	9000
MF125LE/BD	125	BT70	E27	24	178	—	125	1.15	8500	9000
MF250LE/BUH	250	BT100	E40	12	250	—	130	2.13	20000	15000
MF250LE/BD	250	BT100	E40	12	250	—	130	2.13	20000	15000
MF300LE/BUH	300	BT116	E40	12	292	—	130	2.50	25500	15000
MF300LE/BD	300	BT116	E40	12	292	—	130	2.50	25500	15000
MF400LE/BUH	400	BT116	E40	12	292	—	135	3.25	38000	15000
MF400LE/BD	400	BT116	E40	12	292	—	135	3.25	38000	15000
MF700LE/BUH	700	BT150	E40	6	375	—	140	5.40	58000	9000
MF700LE/BD	700	BT150	E40	6	375	—	140	5.40	58000	9000
MF1000LE/BUH	1000	BT180	E40	6	395	—	145	7.50	87000	9000
MF1000LE/BD	1000	BT180	E40	6	395	—	145	7.50	87000	9000

NOTE: Clear type is shown on next page.
For use in enclosed fixtures only.

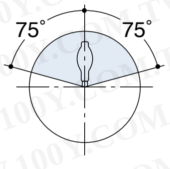
Burning Position



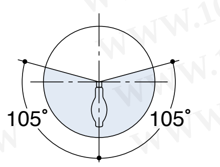
Base up(BU)/(100W)



Base down(BD)/(100W)



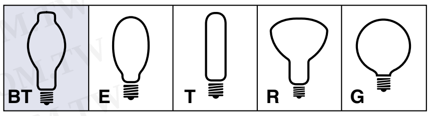
Base down(BD)



Base up/Base horizontal/(BUH)

EYE Multi-Hi-Ace

(For use with Mercury Lamp Ballast only.)



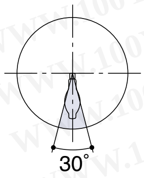
PHYSICAL DATA AND CHARACTERISTICS

BT Bulb Series (Clear Type)

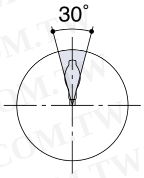
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
							Voltage (V)	Current (A)		
M100LE/BU	100	BT70	E27	24	178	115	115	1.00	7000	9000
M100LE/BD	100	BT70	E27	24	178	115	115	1.00	7000	9000
M125LE/BUH	125	BT70	E27	24	178	115	125	1.15	9000	9000
M125LE/BD	125	BT70	E27	24	178	115	125	1.15	9000	9000
M250LE/BUH	250	BT100	E40	12	250	160	130	2.13	21500	15000
M250LE/BD	250	BT100	E40	12	250	160	130	2.13	21500	15000
M300LE/BUH	300	BT116	E40	12	292	185	130	2.50	27000	15000
M300LE/BD	300	BT116	E40	12	292	185	130	2.50	27000	15000
M400LE/BUH	400	BT116	E40	12	292	185	135	3.25	40000	15000
M400LE/BD	400	BT116	E40	12	292	185	135	3.25	40000	15000
M700LE/BUH	700	BT150	E40	6	375	240	140	5.40	60000	9000
M700LE/BD	700	BT150	E40	6	375	240	140	5.40	60000	9000
M1000LE/BUH	1000	BT180	E40	6	395	245	145	7.50	90000	9000
M1000LE/BD	1000	BT180	E40	6	395	245	145	7.50	90000	9000

NOTE: For use in enclosed fixtures only.

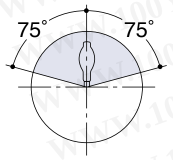
Burning Position



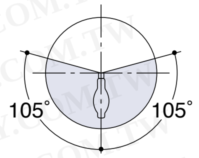
Base up(BU)/(100W)



Base down(BD)/(100W)



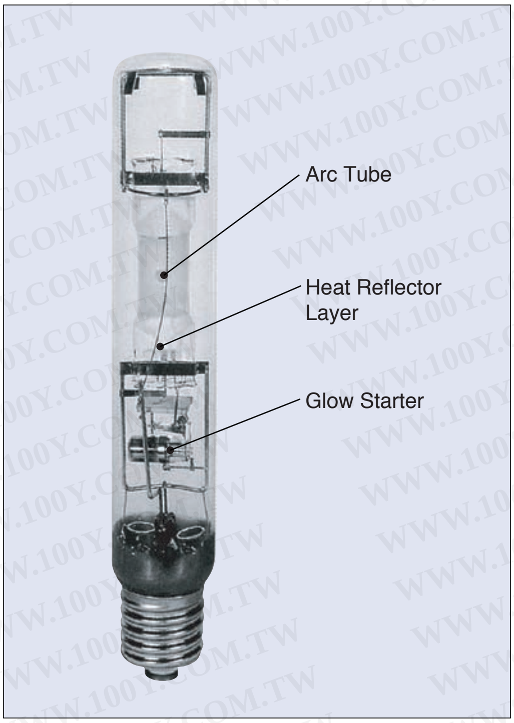
Base down(BD)



Base up/Base horizontal/(BUH)

EYE Clean-Ace

(For use with Mercury Lamp Ballast only.)



With its excellent colour rendering properties, this metal halide lamp features a light colour which is closer to natural daylight than that of any other H.I.D. lamps. This lamp is popular for commercial aquatic installations.

FEATURES

1. Excellent colour rendition virtually equivalent to daylight.
2. Operation with inexpensive mercury lamp ballast.
3. Remarkable power savings due to high efficiency and improved life expectancy.
3. Brightness approximately 1.5 times that of mercury lamp of equal wattage (400W).

Colour temperature	6500K
Average colour rendition	Ra.90

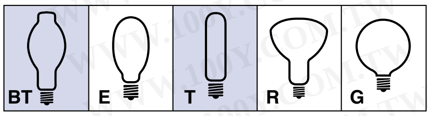
REMARKS

1.The operation of EYE Clean-Ace lamps is limited to the reactor and/or auto-transformer ballast for mercury vapour lamp.

2.Variation of the line volts should be kept within ±6% of the rated voltage of the ballast.

OPERATING INSTRUCTIONS

EYE Clean-Ace lamps operate on standard high-pressure mercury reactor ballasts (IEC Pub. 60188).
For use in enclosed fixtures only.



PHYSICAL DATA AND CHARACTERISTICS

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm) (1)	Rated Av. Life (hrs) (2)
							Voltage (V)	Current (A)		
Tubular Clear Type										
MT250DL	250	T48	E40	12	250	160	130	2.13	18200	10000
MT400/DL/BH	400	T55	E40	12	292	185	135	3.25	29000	12000
MT400/DL/BUD	400	T48	E40	12	295	185	135	3.25	32000	12000
Coated Type										
MF250DL	250	BT100	E40	12	250	——	130	2.13	14500	10000
MF400DL	400	BT116	E40	12	292	——	135	3.25	24500	12000
Clear Type										
M250DL	250	BT100	E40	12	250	160	130	2.13	15500	10000
M400DL	400	BT116	E40	12	292	185	135	3.25	26500	12000

NOTE:

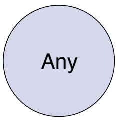
☒This lumen rating is at vertical burning position expect for BH type.

☒Lumens at horizontal position are 14,500lm for M250DL 13,500lm for MF250DL, 14,800lm for MT250DL ,25,000lm for M400DL and 23,000lm for MF400DL.

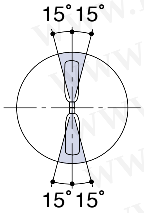
☒This life is at vertical burning position. (except for MT400/DL/BH, UBD) Life at horizontal burring position is 6000hrs. for M (MF) 250DL and M (MF) 400DL.

- For use in enclosed fixtures only.
- Values in lamp voltage and lamp current stated in the above table will vary somewhat according to the supply voltage.

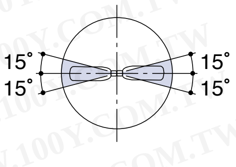
Burning Position



MT250DL
M(F)250DL
M(F)400DL



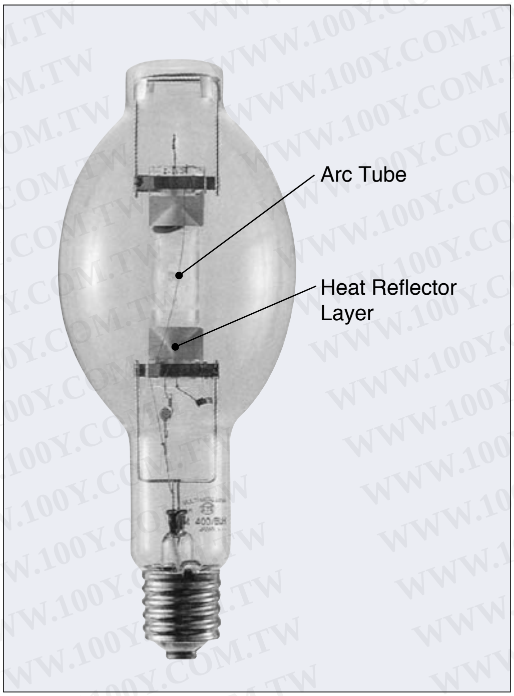
MT400DL/BUD



MT400DL/BH

EYE Multi-Metal

(For use with appropriate Ballast and ignitor.)



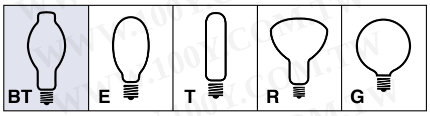
EYE Multi-Metal lamp provides even white light illumination

FEATURES

1. Produces sharp white light featuring continuous spectra across the visible region.
2. Provides high efficiency and is 1.8 times brighter than mercury vapour lamp of equal wattage (at 400W).

OPERATING INSTRUCTIONS

EYE Multi-Metal lamps operate on standard high-pressure mercury ballasts with metal halide external ignitors (up to 1000W). 1500W, 2000W lamps require metal halide lamp ballasts and external ignitors.



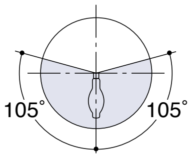
PHYSICAL DATA AND CHARACTERISTICS

BT Bulb Series (Phosphor Coated Type)

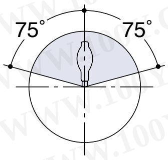
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
MF250/BUH	250	BT100	E40	12	245	—	130	2.13	20000	15000
MF250/BD	250	BT100	E40	12	245	—	130	2.13	20000	15000
MF400/BUH	400	BT116	E40	12	290	—	135	3.25	38000	15000
MF400/BD	400	BT116	E40	12	290	—	135	3.25	38000	15000
MF700/BUH	700	BT150	E40	6	370	—	140	5.40	58000	9000
MF700/BD	700	BT150	E40	6	370	—	140	5.40	58000	9000
MF1000A/BUH	1000	BT180	E40	6	395	—	145	7.50	87000	9000
MF1000A/BD	1000	BT180	E40	6	395	—	145	7.50	87000	9000
MF1000B/BUH	1000	BT180	E40	6	395	—	250	4.50	112000	9000
MF1000B/BD	1000	BT180	E40	6	395	—	250	4.50	112000	9000
MF1500B/BUH	1500	BT180	E40	6	395	—	250	6.40	140000	3000
MF1500B/BD	1500	BT180	E40	6	395	—	250	6.40	140000	3000
MF2000B/BUH	2000	BT200	E40	1	490	—	230	9.20	180000	9000
MF2000B/BD	2000	BT200	E40	1	490	—	230	9.20	180000	9000

NOTE:
1. For use in enclosed fixtures only.
2. Values in lamp voltage and lamp current stated in the above table will vary somewhat according to the supply voltage.

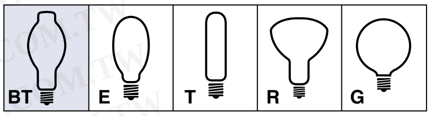
Burning Position



Base up/Base horizontal/(BUH)



Base down(BD)



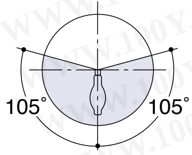
PHYSICAL DATA AND CHARACTERISTICS

BT Bulb Series (Clear Type)

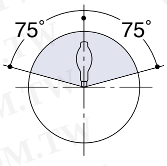
Type	Watts (W)	Bulb	Base	Std. Pkg Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
M250/BUH	250	BT100	E40	12	245	160	130	2.13	21500	15000
M250/BD	250	BT100	E40	12	245	160	130	2.13	21500	15000
M400/BUH	400	BT116	E40	12	290	185	135	3.25	40000	15000
M400/BD	400	BT116	E40	12	290	185	135	3.25	40000	15000
M700/BUH	700	BT150	E40	6	370	240	140	5.40	60000	9000
M700/BD	700	BT150	E40	6	370	240	140	5.40	60000	9000
M1000A/BUH	1000	BT180	E40	6	395	245	145	7.50	90000	9000
M1000A/BD	1000	BT180	E40	6	395	245	145	7.50	90000	9000
M1000B/BUH	1000	BT180	E40	6	395	245	250	4.50	115000	9000
M1000B/BD	1000	BT180	E40	6	395	245	250	4.50	115000	9000
M1500B/BUH	1500	BT180	E40	6	395	245	250	6.40	145000	3000
M1500B/BD	1500	BT180	E40	6	395	245	250	6.40	145000	3000
M2000B/BUH	2000	BT200	E40	1	490	310	230	9.20	185000	9000
M2000B/BD	2000	BT200	E40	1	490	310	230	9.20	185000	9000

NOTE:
1. For use in enclosed fixtures only.
2. Values in lamp voltage and lamp current stared in the above table will vary somewhat according to the supply voltage.

Burning Position



Base up/Base horizontal/(BUH)



Base down(BD)

EYE Multi White Ace™ NEW

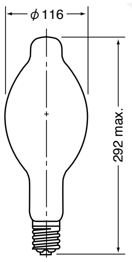


Fig.1

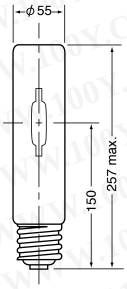


Fig.2

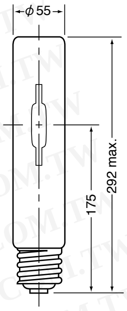


Fig.3

The EYE Multi White Ace™ is a metal halide lamp which operates on high pressure sodium lamp (EN60662) ballast and ignitor.

FEATURES

High efficacy : 85lm/W (400W)
UV block (Tubular type)
Open fixture rated (BT type)
Ra 70, Tc=3800K (Phosphor coated lamp)
Ra 65, Tc=4200K (Tubular clear lamp)
E40 base

PHYSICAL DATA AND CHARACTERISTICS

Type	Watts (W)	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Initial lumens (ℓm)	Burning position	Rated Av. Life (hrs)	Fig. No.
Phosphor coated											
MFP400SX/BU/LU	420	BT116	12	292	—	105	4.45	36000	BH±15°	10000	1
Tubular clear											
MT250SX/BH/LU	270	T55	12	257	150	100	3.0	20000	BH±15°	10000	2
MT400SX/BH/LU	420	T55	12	292	175	100	4.6	40000	BH±15°	10000	3

NOTE: For use in enclosed fixtures only. (Tubular type)

EYE Multi-Metal

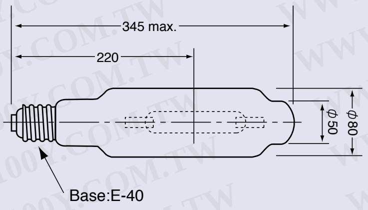
Tubular Bulb Series

(For use with appropriate ballast and ignitor)

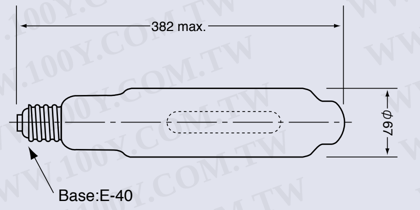
EYE Multi-Metal Lamps in the tubular bulb series are available with "Accelerated Re-start" type and "Ignitor-less Start" models which include the same characteristics as the conventional BT or reflector bulb series.

DIMENSIONS

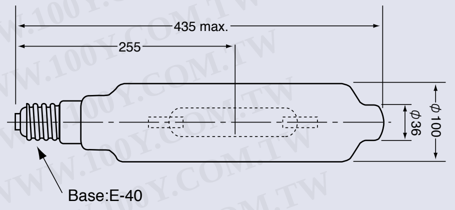
MT-1000A-BH-L
MT-1000B-BH-N



MT1000-A-BH/67



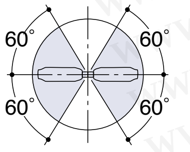
MT2000B-BH-N
MT2000B-BH-L
MT3500B-BH-N



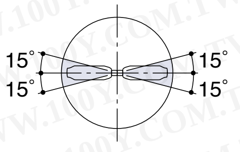
PHYSICAL DATA AND CHARACTERISTICS (Clear Type)

Type	Watts (W)	Bulb	Std. Pkg Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Req. Starting Voltage(V)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
MT125/BUH	125	T38	24	168	117	125	1.15	1000	8000	9000
MT250/BH	250	T48	12	225	150	130	2.13	1000	18000	10000
MT400/BH	400	T48	12	285	175	135	3.25	1000	32000	10000
MT400SX/HOR	400	T55	12	285	175	135	3.25	1000	39000	15000
MT1000A-BH-L	1000	T80	12	345	220	145	7.50	1200	85000	6000
MT1000A-BH/67	1000	T67	12	382	240	145	7.50	1200	85000	6000
MT1000B-BH-N	1000	T80	12	345	220	230	4.70	4000	115000	9000
MT2000B-BH-N	2000	T100	12	435	255	230	9.20	4000	200000	9000
MT2000B-BH-L	2000	T100	12	435	255	230	9.20	360	220000	9000
MT3500B-BH-N	3500	T100	12	435	255	230	16.00	4000	350000	1500

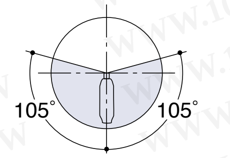
Burning Position



Base horizontal(BH)



Base horizontal(HOR)



Base up/Base horizontal(BUH)

NOTE:

1.For use in enclosed fixtures only.

2.Values in lamp voltage and lamp current stared in the above table will vary somewhat according to the supply voltage.

3.125W～400W:Use with mercury lamp ballast and metal hailed ignitor.

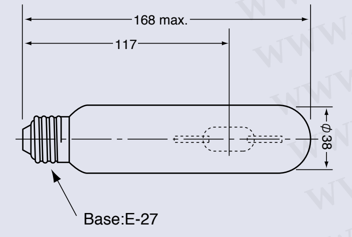
REMARKS:

N:For use with metal halide discharge lamp ballast and ignitor providing a high voltage pulse.

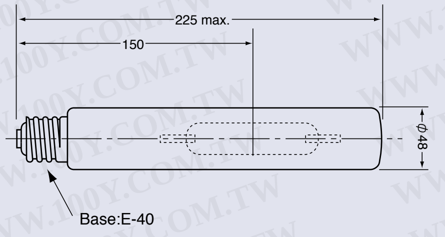
L:MT1000A-BH-L:Use with mercury lamp 1000W ballast and external ignitor.

MT2000B-BH-L:Operate with metal halide lamp 2000W 8.8A reactor type ballast without ignitor but use of external ignitor is recommended when the temperature is below －10° C.

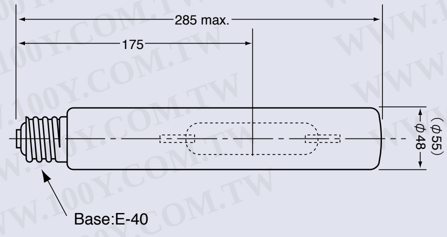
MT125/BUH



MT250/BH



MT400/BH (MT400SX/HOR)



EYE Multi-Metal

(Operate on CWA ballast)

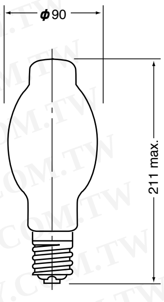


Fig.1

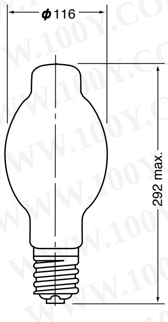


Fig.2

X/U Type metal halide lamp operates on metal halide CWA ballast without external ignitor. Also it operates on mercury reactor ballast with metal halide ignitor. P type (Teflon coated type) is available for 400W.

PHYSICAL DATA AND CHARACTERISTICS E40 base

Type	Watts (W)	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Initial lumens (ℓm)	Burning position	Rated Av. Life (hrs)	Fig. No.
Phosphor Coated Type											
MF250X/U	250	BT90	12	211	–	130	2.13	20000	Any	15000	1
MF400X/U	400	BT116	12	292	–	135	3.25	36000	Any	15000	2
MF1000BX/U	1000	BT180	6	395	–	263	4.10	110000	Any	9000	—
Clear Type											
M250X/U	250	BT90	12	211	131	130	2.13	21000	Any	15000	1
M400X/U	400	BT116	12	292	185	135	3.25	38000	Any	15000	2
M1000BX/U	1000	BT180	6	395	245	263	4.10	115000	Any	9000	—
HIGH LUMEN TYPE											
Phosphor Coated Type											
MF400SX/BU	400	BT116	12	292	–	135	3.25	40000	Base up	20000	2
MF1000BSX/BU	1000	BT180	6	395	–	263	4.10	118000	Base up	9000	—
Clear Type											
M400SX/BU	400	BT116	12	292	185	135	3.25	42000	Base up	20000	2
M1000BSX/BU	1000	BT180	6	395	245	263	4.10	120000	Base up	9000	—

NOTE: For use in enclosed fixtures only.

Type	Watts (W)	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Initial lumens (ℓm)	Burning position	Rated Av. Life (hrs)	Fig. No.
MF400X/BUP	400	BT116	12	292	–	135	3.25	36000	Base up	15000	2
M400X/BUP	400	BT116	12	292	185	135	3.25	38000	Base up	15000	2

EYE Multi White Ace™ NEW

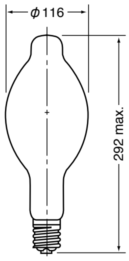


Fig.1

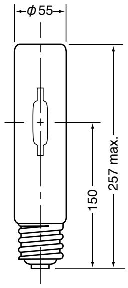


Fig.2

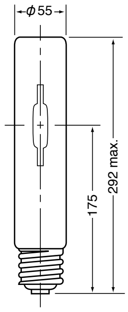


Fig.3

The EYE Multi White Ace™ is a metal halide lamp which operates on high pressure sodium lamp (EN60662) ballast and ignitor.

FEATURES

High efficacy : 85lm/W (400W)
UV block (Tubular type)
Open fixture rated (BT type)
Ra 70, Tc=3800K (Phosphor coated lamp)
Ra 65, Tc=4200K (Tubular clear lamp)
E40 base

PHYSICAL DATA AND CHARACTERISTICS

Type	Watts (W)	Bulb	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Initial lumens (ℓm)	Burning position	Rated Av. Life (hrs)	Fig. No.
						Voltage (V)	Current (A)				
Phosphor coated											
MFP400SX/BU/LU	420	BT116	12	292	——	105	4.45	36000	BH±15°	10000	1
Tubular clear											
MT250SX/BH/LU	270	T55	12	257	150	100	3.0	20000	BH±15°	10000	2
MT400SX/BH/LU	420	T55	12	292	175	100	4.6	40000	BH±15°	10000	3

NOTE: For use in enclosed fixtures only. (Tubular type)

EYE SDX®
(2500K Series)

SUPER-COMPACT WHITE COLOUR

High intensity, high colour rendition, high efficacy, plus long service life, Iwasaki HID lamps incorporate these features in wattage 50, 70, 100, 150, 250 and 400W lamps. The white light produced by EYE SDX lamps is virtually identical to that produced by incandescent lamps :EYE SDX is a new, compact, high colour rendering HID lamp that looks and feels just like an incandescent lamp.

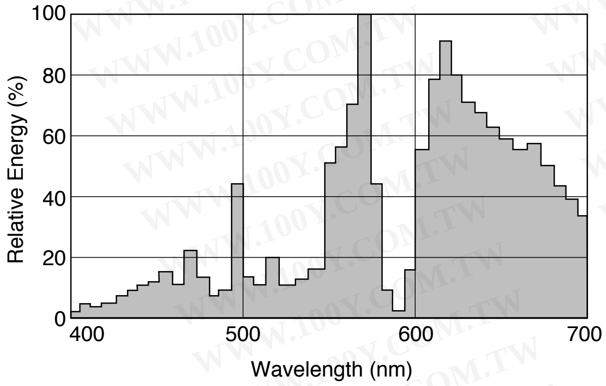
FEATURES

1. Compact construction along with precise light distribution control.
Universal burning position provided by tubular hard glass bulb.
E27 base
E40 series lamps with high lumen and long life: An ideal choice for lighting systems.
2. Outstanding colour rendition and fresh, clear tints. Ra82-85
3. Warm white light virtually identical to incandescent lamps.
2500K
4. Approximately 3 to 5 times more efficient than incandescent lamps.
50 - 60lm/W.
5. 6,000 - 9,000 hours service life. Approximately 3 to 9 times that of incandescent lamps and tungsten halogen lamps.
6. Stronger against shocks and vibrations than filament lamps.
7. Emits very little UV radiation.
8. No front glass required for fixtures.
9. Uses specified ballasts.
10. Perfect for commercial applications, municipal applications and all other lighting applications where comfortable lighting is desired.

OPERATING INSTRUCTIONS

EYE SDX lamps operate on Iwasaki electronic ballasts and also dedicated ballasts & ignitors in the market.

SPECTRAL DISTRIBUTION



PHYSICAL DATA AND CHARACTERISTICS E27 Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Approx. Initial Lumens (ℓm)	Colour Rendering Index(Ra)	Rated Av. Life (hrs)	Fig.
Clear Type											
NHT50SDX/E27	50	T30	E27	24	110	75	45	2500	82	6000	1
NHT70SDX/E27	70	T35	E27	12	140	89	85	3500	83	6000	2
NHT100SDX/E27	100	T35	E27	12	140	89	80	5000	83	6000	2
NHT150SDX/E27	150	T40	E27	12	155	97	100	7800	85	9000	3
Frosted Type											
NHT50FSDX/E27	50	T30 frosted	E27	24	110	—	45	2400	82	6000	1
NHT70FSDX/E27	70	T35 frosted	E27	12	140	—	85	3350	83	6000	2
NHT100FSDX/E27	100	T35 frosted	E27	12	140	—	80	4800	83	6000	2
NHT150FSDX/E27	150	T40 frosted	E27	12	155	—	100	7300	85	9000	3

PHYSICAL DATA AND CHARACTERISTICS E40 Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Colour Rendering Index(Ra)	Rated Av. Life (hrs)	Fig.
							Voltage (V)	Current (A)				
Clear Type												
NHT150SDX/E40	150	T48	E40	12	211	127	100	1.90	7800	85	9000	4
NHT250SDX/E40	250	T48	E40	12	211	127	100	3.10	13500	85	9000	4
NHT400SDX/E40	400	T48	E40	12	257	150	100	4.70	24000	85	9000	5

Note:
1. Lamp performance will vary depending on the characteristic curve of each type of ballast.
2. Initial lumens are the value after 100hours operation.

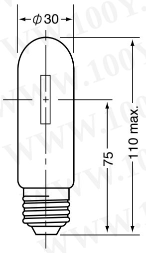


Fig.1

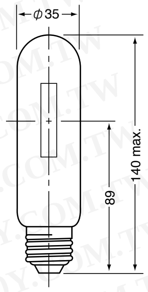


Fig.2

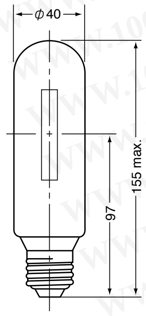


Fig.3

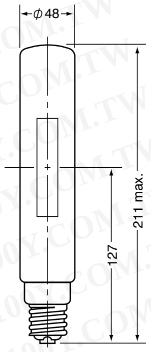


Fig.4

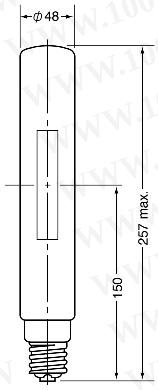


Fig.5

BALLASTS

Use specialized ballasts for the best performance.

a) Electronic ballast for EYE-SDX available from IWASAKI.

b) Choke type ballast for EYE-SDX available from TRIDONIC (Austria), WJ Parry (U.K.), ATCO (Australia), Europhane Thorn (France), Vossloh Schwahbe. (Germany), ERC (Italy), INECSSA, ELT (Spain), Leuenberger (Swiss),BAG TURGI (Swiss).

EYE SDX PAR™ Ⓔ NEW

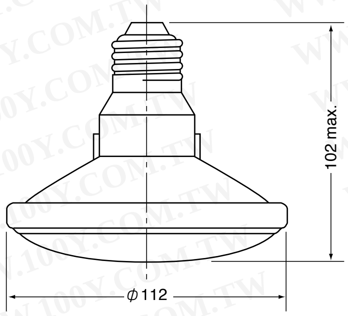


Fig.1

High pressure sodium lamps with white light colour

FEATURES

1. Simple & Compact design
The arc tube lays in the PAR36 outer bulb and has a compact design.

2. Warm white light
Lamps with colour temperatures of 2500K is available.
These lamps are suitable for a wide range of applications.

3. High luminous flux and high colour rendition.
Compared to the dichroic mirror halogen lamps, these lamps have a higher luminous flux and the same high colour rendition.

4. Beam angle selection
Medium beam and wide beam distribution are available.
Excellent beam control offers a high luminous efficacy and related energy saving.

5. Ballast & ignitor
EYE SDX PAR™ lamps can be operated on the same ballast & ignitor as that for EYE SDX® lamps.
Also,Iwasaki's electronic ballast can be used with these lamps.

6. Safety
Open fixture use.
Indoor use only.

Dichroic reflector type
PAR 36/E27 base

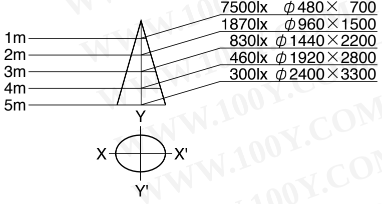
CHARACTERISTICS

Type	Watts (W)	Initial lumens (ℓm)	Beam lumens (ℓm)	Beam angle(°)	Max. light intensity (cd)	Colour temperature (K)	Ra	Rated Av. Life (hrs)	M.O.L. (mm)	Fig. No.
NH100P36SSDX	100	5000	1200	27×40	7500	2500	83	6000	102	1
NH100P36FSDX	100	4800	1600	60×65	2700	2500	83	6000	102	1
NH150P36SSDX	150	7000	3200	28×48	8500	2500	85	6000	102	1
NH150P36FSDX	150	6000	2600	62×75	3300	2500	85	6000	102	1

CONICAL DIAGRAM OF ILLUMINANCE

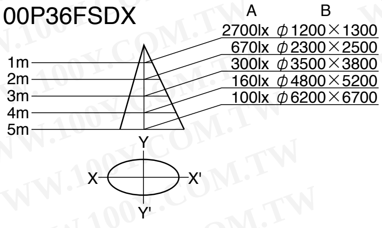
A:Illuminance level directly under the lamp (lx)
B:The distance to the point of 1/2 illuminance level of A (mm)

NH100P36SSDX



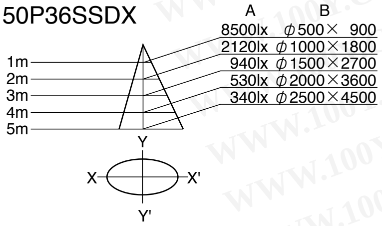
	A	B
1m	7500lx	ϕ480× 700
2m	1870lx	ϕ960×1500
3m	830lx	ϕ1440×2200
4m	460lx	ϕ1920×2800
5m	300lx	ϕ2400×3300

NH100P36FSDX



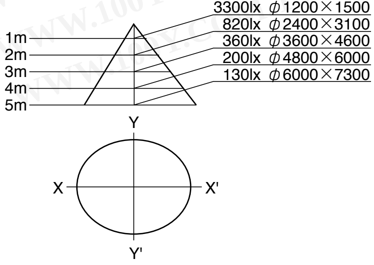
	A	B
1m	2700lx	ϕ1200×1300
2m	670lx	ϕ2300×2500
3m	300lx	ϕ3500×3800
4m	160lx	ϕ4800×5200
5m	100lx	ϕ6200×6700

NH150P36SSDX



	A	B
1m	8500lx	ϕ500× 900
2m	2120lx	ϕ1000×1800
3m	940lx	ϕ1500×2700
4m	530lx	ϕ2000×3600
5m	340lx	ϕ2500×4500

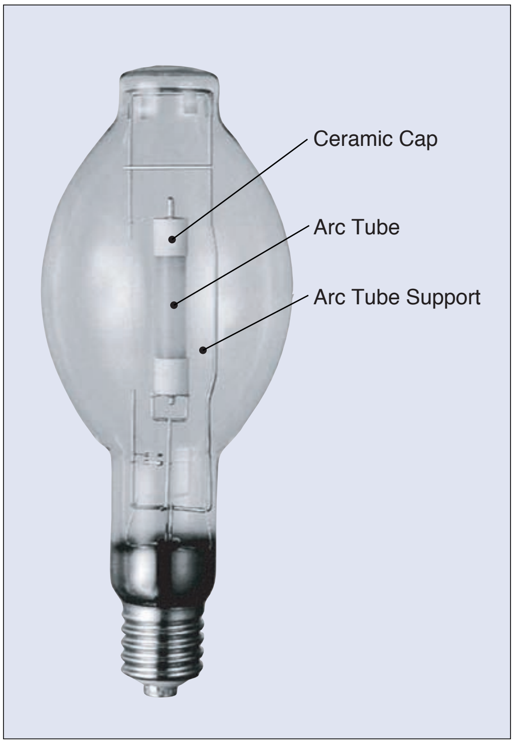
NH150P36FSDX



	A	B
1m	3300lx	ϕ1200×1500
2m	820lx	ϕ2400×3100
3m	360lx	ϕ3600×4600
4m	200lx	ϕ4800×6000
5m	130lx	ϕ6000×7300

EYE Specialux™ Ⓔ

(High Colour Rendition)



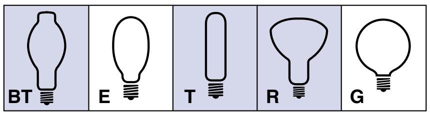
The EYE Specialux lamp is a high-pressure sodium lamp with high colour rendition.

FEATURES

With high sodium vapour pressure that exceeds even the level of Sunlux (high pressure sodium lamp), EYE SPECIALUX features a wide emission spectrum extending over the full visible range, developing virtually the same light source colour and colour rendition as the incandescent lamp.This lamp is comparable to the mercury lamp in lamp efficiency which is about three times higher than that of the incandescent lamp and thus reduces the number of lamps to be installed for a given illuminance. With this lamp, you can enjoy both the warmth of incandescent lamp lighting and the merit of power saving at the same time. Moreover, the arc tube is made of aluminum ceramics and affords a 9,000-hour life expectancy, nine times greater than the incandescent lamp.
Colour Temperature : 2500K
Average Colour Rendition : Ra=85

OPERATING INSTRUCTIONS

EYE Specialux lamps operate on standard high-pressure sodium lamp ballasts with external ignitors (IEC Pub. 60662).
Also EYE Specialux lamps operate on EYE SDX ballasts.



PHYSICAL DATA AND CHARACTERISTICS

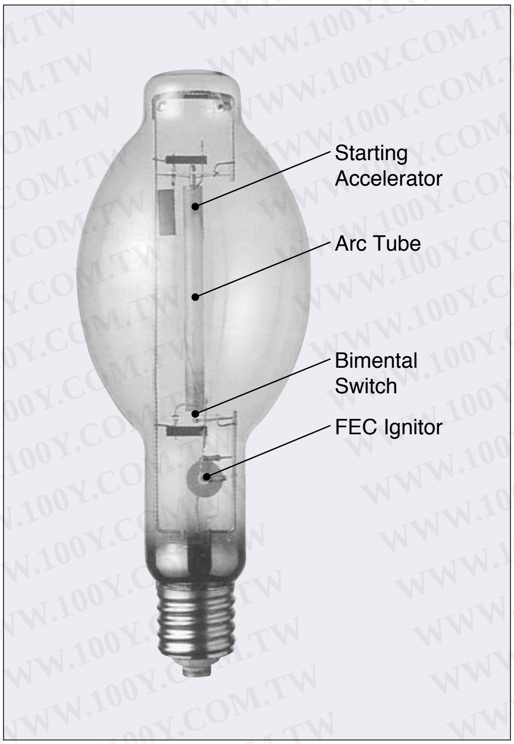
BT & T Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
Diffuse Type										
NH150FDX/PN	150	BT90	E40	12	226	—	100	1.80	7300	9000
NH250FDX/PN	250	BT90	E40	12	226	—	100	3.00	12800	9000
NH400FDX/PN	400	BT116	E40	12	295	—	105	4.45	23000	9000
Clear Type										
NHT150DX/PN	150	T48	E40	12	211	132	100	1.80	7800	9000
NHT250DX/PN	250	T48	E40	12	257	150	100	3.00	13500	9000
NHT400DX/PN	400	T48	E40	12	287	175	100	4.60	24000	9000

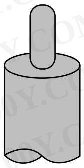
R Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Beam Lumens (ℓ m)	Max.Light Intensity (cd)	Rated Av. Life (hrs)
NHR150DX/PN	150	R165	E40	6	310	100	1.80	0～65° 4800 0～90° 5900	1400	9000
NHR250DX/PN	250	R165	E40	6	310	100	3.00	0～65° 8000 0～90° 9500	2200	9000
NHR400DX/PN	400	R180	E40	6	320	105	4.45	0～65° 15500 0～90° 18000	4200	9000

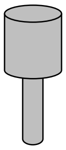
EYE Sunlux Ace® ⚠



IAT **FEC**
- World's first switching capacitor that can resist the high temperature presents in the lamp's outer bulb



IAT **Plasma Sealing**
- More reliable
- Prevents arc tube leakage, a common problem with mechanically crimp sealed lamps



IAT **Sintered Electrode**
- Extends life span of low wattage H.P.S. lamps
- World's first manufacturer to apply sintered electrodes to H.P.S. lamps

IAT **IAT Iwasaki Advanced Technology**

EYE Sunlux Ace® and mercury lamp ballast combination

(Max. wiring distance from the ballast)

Type	Mercury Lamp Ballast (Reactor or Auto-transformer)	Allowable External Capacitance ※
NH50FLX	50W	1500 pF
NH75FLX	80W	1500 pF
NH110FLX	125W	1500 pF
NH220FLX	250W	2500 pF
NH360FLX	400W	2500 pF
NH660FLX	700W	5000 pF
NH940FLX	1000W	5000 pF
NHT220LX	250W	2500 pF
NHT360LX	400W	2500 pF
NHT660LX	700W	5000 pF
NHT940LX	1000W	5000 pF

※100pF stray capacitance is equivalent to about 1 meter length of twin cable.

The EYE Sunlux Ace uses a built-in ceramic ignitor instead of a mechanical switching device and thus can get easily adapted to present mercury vapour installations.

FEATURES

1. RELIABILITY

Built-in ceramic ignitor - no moving parts
Controlled pulse voltage - identical on every cycle ensures excellent starting

2. ECONOMY

Compared to equal wattage mercury vapour lamps, EYE Sunlux Ace provides double the lumen package
No continuous high voltage pulsing at end of lamp life to cause possible ballast failure
No need to replace lamp immediately at the end of its life as required with standard type high pressure sodium lamps

3. SAFETY

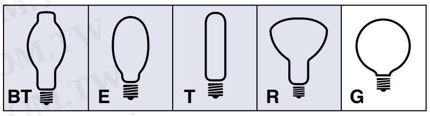
Prevents ignitor pulsing at end of lamp life
If arc tube leakage occurs, lamp will cease to operate at the switch on, thus eliminating possible damage to ballast
At end of lamp life, pulse voltage is ceased or reduced to harmless level due to a special characteristic of FEC

4. OTHER

NH50FLX is the world's smallest plug-in HPS lamp; can be used in security and private lighting applications.

OPERATING INSTRUCTIONS

1. EYE Sunlux Ace lamps operate on standard mercury vapour reactor or auto-transformer type ballasts (IEC Pub. 60188 M.V.L. Ballast). The use of incompatible ballasts will result in failure or damage to the lamp.
2. The wiring distance between the ballast and the lamp is extendible up to 50m. (15m maximum for 50W,75W and 110W rated lamp 25m for 220W and 360W.)
3. EYE Sunlux Ace will continue to burn after its rated average life. However lamps used after this time cannot perform according to the lamp characteristics described on the next page. Thus, please change the lamps after the expiration of the rated life.
4. Refer to other catalogues for lighting fixture information concerning EYE Sunlux Ace or the existing Sunlux lamp, as the characteristics of lamps may be affected due to the type of lighting fixture in which the lamp is used.



PHYSICAL DATA AND CHARACTERISTICS

E & BT Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
							Voltage (V)	Current (A)		
Diffuse Type										
NH50FLX	50	E55	E27	30	130	—	95	0.61	3400	16000
NH75FLX/70S	75	E70	E27	24	156	—	115	0.80	6200	20000
NH75FLX/70H	75	E70	E27 or B22d-3	24	156	—	115	0.80	6200	20000
NH110FLX	115	BT70	E27 or B22d-3	24	178	—	125	1.15	11000	24000
NH220FLX	235	BT90	E40	12	226	—	130	2.13	25500	24000
NH360FLX	375	BT116	E40	12	292	—	135	3.25	46000	24000
NH660FLX	660	BT150	E40	6	357	—	140	5.40	90000	24000
NH940FLX	940	E165	E40	6	395	—	145	7.50	131000	24000
Clear Type										
NH50LX	50	E55	E27	30	130	85	95	0.61	3400	16000
NH75LX/70S	75	E70	E27	24	156	98	115	0.80	6500	20000
NH75LX/70H	75	E70	E27 or B22d-3	24	156	98	115	0.80	6500	20000
NH110LX	115	BT70	E27 or B22d-3	24	178	115	125	1.15	11600	24000
NH220LX	235	BT90	E40	12	226	146	130	2.13	28000	24000
NH360LX	375	BT116	E40	12	292	185	135	3.25	50000	24000
NH660LX	660	BT150	E40	6	357	230	140	5.40	95000	24000
NH940LX	940	E165	E40	6	395	245	145	7.50	138000	24000

T Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
							Voltage (V)	Current (A)		
Clear Type										
NHT220LX	235	T48	E40	12	257	150	130	2.13	28000	24000
NHT360LX	375	T48	E40	12	285	175	135	3.25	50000	24000
NHT660LX	660	T55	E40	12	330	205	140	5.40	95000	24000
NHT940LX	940	T67	E40	12	375	222	145	7.50	138000	24000

R Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp		Beam Lumens (ℓ m)	Max. Light Intensity (cd)	Rated Av. Life (hrs)
						Voltage (V)	Current (A)			
NHR75LX	75	R126	E27 or B22d-3	6	201	115	0.80	0～67.5° 3700 0～90° 4400	1120	16000
NHR110LX	115	R126	E27 or B22d-3	6	201	125	1.15	0～67.5° 6200 0～90° 7400	1900	24000
NHR220LX	235	R165	E40	6	310	130	2.13	0～67.5° 14000 0～90° 20000	4500	24000
NHR360LX	375	R180	E40	6	320	135	3.25	0～67.5° 25500 0～90° 34000	7300	24000

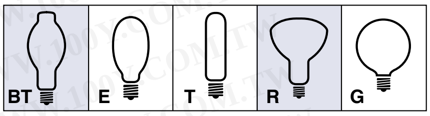
NOTE:
NH-LX indicates clear lamp, NH-F,LX diffused lamp,and NHR-LX reflector lamp
Initial lumens is the value after 100 hrs of operation.
Burning position: Any
NH75LX/70S indicates soft glass and NH75LX/70H hard glass.

EYE Improved Colour Rendering Sunlux Ace ⚠

The EYE Improved Colour Rendering Sunlux Ace lamp is similar to the LX type in appearance, dimensions, but boasts improved colour rendering characteristics without sacrificing efficiency.

FEATURES

1. High efficiency with improved colour rendition (Ra=60)
2. Operates with standard mercuty lamp reactor type ballast
3. Provides warm light colour (Colour temperature Tc=2150 K)



PHYSICAL DATA AND CHARACTERISTICS

BT Bulb Series

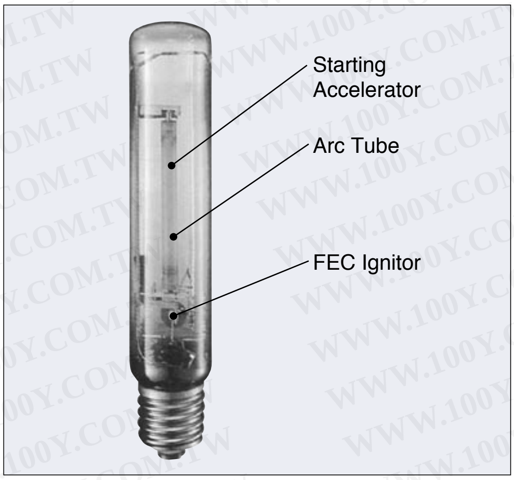
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
Diffuse Type										
NH220FDLX	220	BT90	E40	12	226	—	130	2.13	19000	24000
NH360FDLX	360	BT116	E40	12	292	—	135	3.25	36000	24000
NH660FDLX	660	BT150	E40	6	375	—	140	5.40	69000	24000
Clear Type										
NH220DLX	220	BT90	E40	12	226	146	130	2.13	20000	24000
NH360DLX	360	BT116	E40	12	292	185	135	3.25	38000	24000
NH660DLX	660	BT150	E40	6	375	240	140	5.40	73000	24000

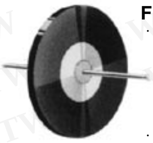
R Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Beam Lumens (ℓm)	Max. Light Intensity (cd)	Rated Av. Life (hrs)
NHR220DLX	220	R165	E40	6	310	130	2.13	0～65° 12000 0～90° 14500	3200	24000
NHR360DLX	360	R180	E40	6	320	135	3.25	0～65° 22000 0～90° 27000	5900	24000

NOTE:
Initial lumens are the values after 100 hours of operation.
Burning position:Any

EYE Ignitron Super™⚠
EYE Ignitron™⚠

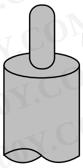




IAT

FEC

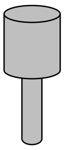
- World's first switching capacitor that can resist the high temperature presents in the lamp's outer bulb
- Pulse-cut feature stops ignitor pulsing at lamp life end



IAT

Plasma Sealing

- More reliable
- Prevents arc tube leakage, a common problem with mechanically crimp sealed lamps



IAT

Sintered Electrode

- Extends life span of low wattage H.P.S. lamps
- World's first manufacturer to apply sintered electrodes to H.P.S. lamps

The EYE Ignitron Super lamp is a high efficiency high-pressure sodium lamp with an internal FEC ignitor. The EYE Ignitron lamp is a high-pressure sodium lamp with an internal FEC ignitor.

FEATURES

1. RELIABILITY
Built-in ceramic ignitor-no moving parts
Controlled pulse voltage-identical on every cycle ensures excellent starting
Lower pulse voltage required to start lamp than that of conventional external ignitor.

2. PROTECTION (Ignitron Super)
Special cut-out feature in FEC eliminating ignitor pulsing at end of lamp life protects ballasts and wiring.

3. ECONOMY
Higher luminous efficacy than standard H.P.S. lamps (Ignitron Super)
No need to immediately replace lamp at the end or its life as required with standard external ignitor type H.P.S. lamps

4. SAFETY
In the event of arc tube leakage, the lamp will cease operation at the next attempt to start the lamp thus preventing possible ballast damage.

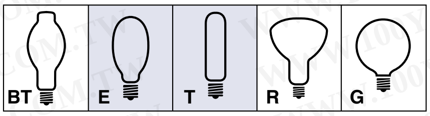
5. BROAD APPLICATION RANGE (Ignitron Super)
Can be operated in areas subject to high amounts of radio frequency energy without causing any interference, a significant shortcoming with standard external ignition systems

6. OTHER
Low wattage lamps, especially NH50/I & NH70/I, can be used with rather compact fixtures. (No external ignitor to take up space)

OPERATING INSTRUCTIONS

EYE Ignitron Super and EYE Ignitron lamps operate on standard high-pressure sodium lamp ballasts without external ignitors(IEC Pub. 60662).

EYE Ignitron Super™⚠



PHYSICAL DATA AND CHARACTERISTICS

Tubular Bulb Series (Clear Type)

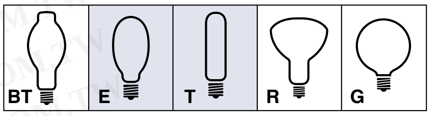
Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)	Fig.
NHT150/I-S	150	T48	E40	12	211	127	100	1.80	16000	24000	2
NHT250/I-S	250	T48	E40	12	257	153	100	3.00	33000	24000	3
NHT400/I-S	400	T48	E40	12	287	175	100	4.60	56000	24000	4

Elliptical Bulb Series (Diffuse Type)

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)	Fig.
NH150F/I-S	150	E90	E40	12	226	100	1.80	15500	24000	8
NH250F/I-S	250	E90	E40	12	226	100	3.00	30000	24000	8
NH400F/I-S	400	E120	E40	12	285	105	4.45	53000	24000	9

NOTE: 1.Initial lumens are the value after 100hours operation. 2.Burning position:Any

EYE Ignitron™ I



PHYSICAL DATA AND CHARACTERISTICS

Tubular Bulb Series (Clear Type)

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)	Fig.
							Voltage (V)	Current (A)			
NHT50/I	50	T35	E27	24	156	104	85	0.76	4000	16000	1
NHT70/I	70	T35	E27	24	156	104	90	0.98	6000	16000	1
NHT100/I	100	T48	E40	12	211	127	100	1.20	10000	24000	2
NHT150/I	150	T48	E40	12	211	127	100	1.80	14500	24000	2
NHT250/I	250	T48	E40	12	257	153	100	3.00	27500	24000	3
NHT400/I	400	T48	E40	12	287	175	100	4.60	50000	24000	4
NHT1000/I	1000	T67	E40	12	375	240	100	10.60	133000	24000	5

Elliptical Bulb Series (Diffuse Type)

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)	Fig.
						Voltage (V)	Current (A)			
NH50F/I	50	E70	E27	24	156	85	0.76	3800	16000	6
NH70F/I	70	E70	E27	24	156	90	0.98	5800	16000	6
NH100F/I	100	E75	E40	12	186	100	1.20	9500	24000	7
NH150F/I	150	E90	E40	12	226	100	1.80	14000	24000	8
NH250F/I	250	E90	E40	12	226	100	3.00	25800	24000	8
NH400F/I	400	E120	E40	12	285	105	4.45	47800	24000	9
NH1000F/I	1000	E165	E40	6	395	110	10.30	125000	24000	10

Note:
1.Initial lumens are the value after 100 hours operation.
2.Burning position:Any

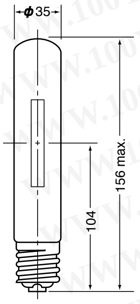


Fig.1

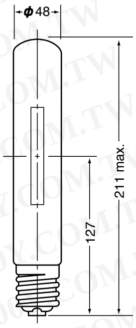


Fig.2

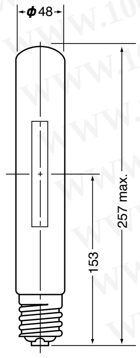


Fig.3

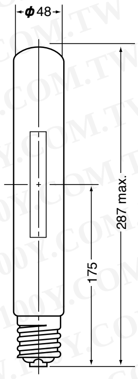


Fig.4

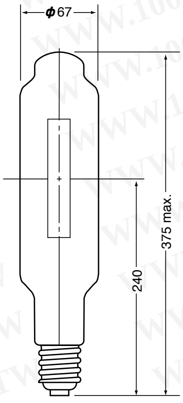


Fig.5

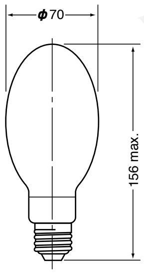


Fig.6

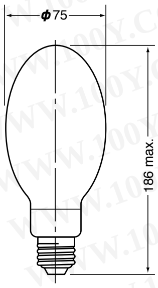


Fig.7

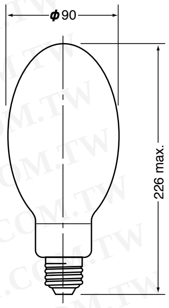


Fig.8

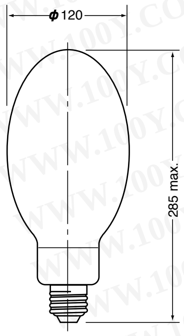


Fig.9

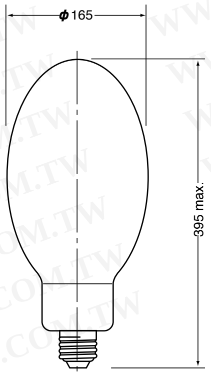


Fig.10

EYE Sunlux Super

The EYE Sunlux Super lamp is a high-pressure sodium lamp with high efficiency.

FEATURES

1.High efficiency
Higher luminous efficacy than standard H.P.S. lamps.

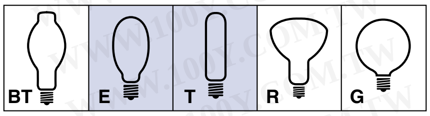
2. Warmth of colour
Warm colour in comparison with that of mercury lamps.

OPERATING INSTRUCTIONS

EYE Sunlux Super lamps operate on standard high-pressure sodium lamp ballasts with external ignitors (IEC Pub. 60662).

APPLICATIONS

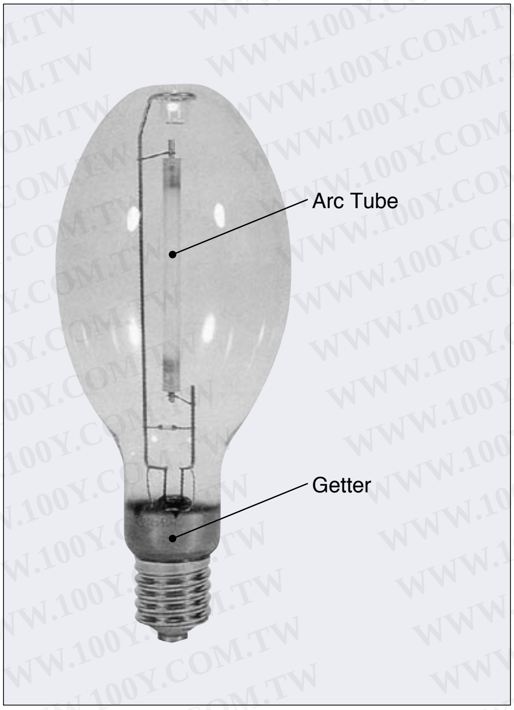
Factory
Highway
Sports facility



PHYSICAL DATA AND CHARACTERISTICS

Type	Watts (W)	Bulb	Base	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
						Voltage (V)	Current (A)		
Diffuse Type									
NH100FS	100	E75	E40	186	—	100	1.20	9500	24000
NH150FS	150	E90	E40	226	—	100	1.80	15500	24000
NH250FS	250	E90	E40	226	—	100	3.00	30000	24000
NH400FS	400	E120	E40	285	—	105	4.45	54000	24000
Clear Type									
NHT50S	50	T35	E27	156	104	85	0.76	4000	16000
NHT70S	70	T35	E27	156	104	90	0.98	6500	16000
NHT100S	100	T48	E40	211	127	100	1.20	10000	24000
NHT150S	150	T48	E40	211	127	100	1.80	16000	24000
NHT250S	250	T48	E40	257	153	100	3.00	33000	24000
NHT400S	400	T48	E40	287	175	100	4.60	56000	24000

EYE Sunlux®



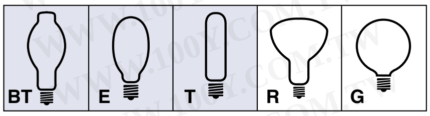
IWASAKI's most popular high pressure sodium lamps

FEATURES

1. **High Efficiency**
   Features lamp lumens which are twice as intense as mercury lamps rated at the same wattage
2. **Warmth of Colour**
   Warm colour in comparison with that of mercury lamps
   Colour Temperature : 2100 K
   Average Colour Rendition : Ra=25

OPERATING INSTRUCTIONS

1. As no restriction is imposed on the type of wiring cables connecting the ballast and the lamp, any cables including 600 IV cable, F cable, cab type cable, or CV power cable can be used. The wiring distance between the ballast and the lamp is extendible up to 100m (15m maximum for 70W and 6m maximum for : 50W rating lamps).
2. Ensure that existing ballasts which are used in conjunction with new types are in good serviceable condition. Ballasts used over a long period may deteriorate and should be replaced as a preventive measure.



PHYSICAL DATA AND CHARACTERISTICS

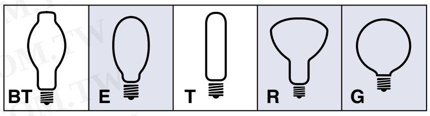
E & BT Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
							Voltage (V)	Current (A)		
Diffuse Type										
NH100F	100	E75	E40	12	186	—	100	1.20	9500	24000
NH150F	150	E90	E40	12	226	—	100	1.80	14000	24000
NH250F	250	E90	E40	12	226	—	100	3.00	25800	24000
NH400F	400	E120	E40	12	285	—	105	4.45	47800	24000
NH700F	700	BT150	E40	6	375	—	105	7.50	84000	24000
NH1000F	1000	BT180	E40	6	395	—	110	10.30	125000	24000
Clear Type										
NH100	100	E75	E40	12	186	127	100	1.20	10000	24000
NH150	150	E90	E40	12	226	146	100	1.80	14500	24000
NH250	250	E90	E40	12	226	146	100	3.00	27500	24000
NH400	400	E120	E40	12	285	185	105	4.45	50000	24000
NH700	700	BT150	E40	6	375	240	105	7.50	88000	24000
NH1000	1000	BT180	E40	6	395	245	110	10.30	133000	24000

T Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp		Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
							Voltage (V)	Current (A)		
Clear Type										
NHT50	50	T35	E27	24	156	104	85	0.76	4000	16000
NHT70	70	T35	E27	24	156	104	90	0.98	6000	16000
NHT100	100	T48	E40	12	211	127	100	1.20	10000	24000
NHT150	150	T48	E40	12	211	127	100	1.80	14500	24000
NHT250	250	T48	E40	12	257	153	100	3.00	27500	24000
NHT400	400	T48	E40	12	287	175	100	4.60	50000	24000
NHT700	700	T55	E40	12	330	205	105	7.50	88000	24000
NHT1000	1000	T67	E40	12	375	240	100	10.60	133000	24000
NHT1000B	1000	T80	E40	12	386	230	250	4.70	140000	24000

Please refer to next page for R, G and E Bulb Series



PHYSICAL DATA AND CHARACTERISTICS

R Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Beam Lumens (ℓm)	Max. Light Intensity (cd)	Rated Av. Life (hrs)
NHR150	150	R165	E40	6	310	100	1.80	0~65° 8500 0~90° 9700	2200	24000
NHR250	250	R165	E40	6	310	100	3.00	0~65° 17400 0~90° 19800	5500	24000
NHR400	400	R180	E40	6	315	105	4.45	0~65° 29800 0~90° 33600	8600	24000

G Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
Clear Type									
NHG250	250	G150	E40	6	255	100	3.0	27500	24000
Diffuse Type									
NHG250F	250	G150	E40	6	255	100	3.0	25800	24000

E70 Bulb Series

Type	Watts (W)	Bulb	Base	Std. Pkg. Qty.	M.O.L. (mm)	L.C.L. (mm)	Lamp Voltage (V)	Lamp Current (A)	Approx. Initial Lumens (ℓm)	Rated Av. Life (hrs)
Diffuse Type										
NH50F/HV/70S	50	E70	E27	24	153	——	85	0.76	3400	16000
◎ **NH50F/N/HV/70S**	50	E70	E27	24	153	——	85	0.76	3800	16000
NH70F/HV/70S	70	E70	E27	24	153	——	90	0.98	5800	16000
◎ **NH70F/N/HV/70S**	70	E70	E27	24	153	——	90	0.98	5800	16000
Clear Type										
NH50/HV/70S	50	E70	E27	24	153	98	85	0.76	4000	16000
NH50/N/HV/70S	50	E70	E27	24	153	98	85	0.76	4000	16000
NH70/HV/70S	70	E70	E27	24	153	98	90	0.98	6000	16000
NH70/N/HV/70S	70	E70	E27	24	153	98	90	0.98	6000	16000

NOTE:
Meaning of symbols
HV:High voltage
S:Soft bulb
H:Hard bulb
N:No external ignitor is required
F: Diffuse bulb
Initial lumens are values after 100 hours of operation
Burning position: Any

◎ Please refer to page 42 of this catalogue. (NH50F/I & NH70F/I, EYE Ignitron lamps.)

Cross Reference Guide

Metal Halide Lamps

EYE	PHILIPS	OSRAM	GE		SYLVANIA
M250/BUH					
M250/BD					
MF250/BUH			MBIF250W/BUH		MS250W/CO/HDR
MF250/BD					
MRF250/BU					
M400/BUH			MBI400W/BU		
M400/BD					
MF400/BUH			MBIF400W/BU H		MS400W/CO/HDR
MF400/BD					
MRF400/BU					
M700/BUH					
M700/BD					
MF700/BUH					
MF700/BD					
M1000A/BUH					
M1000A/BD					
MF1000A/BUH		HQI-E1000W/N			
MF1000A/BD					
M1000B/BUH			MBI1000W/U		MS1000/BU
M1000B/BD					MS1000/BD
MF1000B/BUH			MBIF1000W/U		MS1000/C/BU
MF1000B/BD					MS1000/C/BD
MRF1000B/BU					
M1500B/BUH				MV1500/HBU/E	MS1500/ $\substack{HOR\\BU}$
M1500B/BD				MV1500/HBD/E	MS1500/BD
MF1500B/BUH					
MF1500B/BD					
M2000B/BUH					
M2000B/BD					
MF2000B/BUH					
MF2000B/BD					

1)Please note that due to continuing research and development, some products may vary slightly from descriptions given.
2)No responsibility for error or omissions
3)Although our lamps and those of other companies may be similar, they are not necessarily interchangeable.

EYE	PHILIPS	OSRAM	GE		SYLVANIA
MT125/BUH					
MT250/BH	HPI-T250W		MQI-T250W	MBI250/T	
MT400/BH	HPI-T400W		MQI-T400W	KRC400/T/H/960/E40	HSI-T 400W
MT250DL					
MT400DL/BUD					
MT1000A-BH/67	HPI-T1000W				HSI-T 1000W
MT1000B-BH-N					
MT2000B-BH-N	HPI-T2000W/415V				
MT2000B-BH-L		HQI-T2000W/N			
MT3500B-BH-N					
M100LE/BU					
M100LE/BD					
MF100LE/BU					
MF100LE/BD					
M125LE/BUH					
M125LE/BD					
MF125LE/BUH					
MF125LE/BD					
M250LE/BUH					
M250LE/BD					
MF250LE/BUH					
MF250LE/BD					
M400LE/BUH					
M400LE/BD					
MF400LE/BUH	HPI PLUS 400W BUS				
MF400LE/BD					
M700LE/BUH					
M700LE/BD					
MF700LE/BUH					
MF700LE/BD					
M1000LE/BUH					
M1000LE/BD					
MF1000LE/BUH					
MF1000LE/BD					

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Cross Reference Guide

High Pressure Sodium Lamps

EYE	PHILIPS	OSRAM	GE		SYLVANIA
NH100					
NH150					
NH250					
NH400					
NH700					
NH1000					
NH100F	SON100W	NAV-E100W	SON100W		SHP100/40
NH150F	SON150W	NAV-E150W	SON150W		SHP150W
NH250F	SON250W	NAV-E250W	SON250W	LU250/D/40	SHP250W
NH400F	SON400W	NAV-E400W	SON400W	LU400/D/40	SHP400W
NH700F					
NH1000F	SON1000W	NAV-E1000W	SON1000W	LU1000/110/D/40	
NHR150					
NHR250					SHP-R/250
NHR400					
NHT70	SON-T70W	NAV-T70W/E	SON-T70W	LU70/90/T12/27	SHP-T/70/CL/E
NHT100	SON-T100W	NAV-T100W	SON-T100W	LU100/100/T/40	SHP-T/100/40
NHT150	SON-T150W	NAV-T150W	SON-T150W	LU150/100/40	SHP-T150W
NHT250	SON-T250W	NAV-T250W	SON-T250W	LU250/T/40	SHP-T250W
NHT400	SON-T400W	NAV-T400W	SON-T400W	LU400/T/40	SHP-T400W
NHT700					
NHT1000	SON-T1000W	NAV-T1000W	SON-T1000W	LU1000/110/T/40	SHP-T1000W
NHT1000B					
NH50/N/HV/70S (H)	SON50W-I CLEAR			LU50/90/I/27	SHP50/CL/I
NH50F/N/HV/70S (H)	SON50W-I	NAV-E50W/I		LU50/90/D/I/27	SHP50/CO/I
NH50/HV/70S (H)					SHP50/CL/E
NH50F/HV/70S (H)	SON50W-E	NAV-50W/E	SON50W	LU50/90/D/27	SHP50/CO/E
NH70/N/HV/70S (H)	SON70W-I CLEAR			LU70/90/I/27	SHP70/CL/I
NH70F/N/HV/70S (H)	SON70W-I	NAV-E70W/I		LU70/90/D/I/27	SHP70/CO/I
NH70/HV/70S (H)				LU70/90/27	SHP70CL/E
NH70F/HV/70S (H)	SON70W-E	NAV-E70W/E	SON70W	LU70/90/D/27	SHP70CO/ET1000W

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EYE	PHILIPS	OSRAM	GE		SYLVANIA
NH150FDX/PN			SONDL-E150W	LU150/CL/E	SHP150W-HCRI
NH250FDX/PN			SONDL-E250W	LU250/CL/E	SHP250W-HCRI(*)
NH400FDX/PN			SONDL-E400W	LU400/CL/E	SHP400W-HCRI(*)
NHR150DX/PN					
NHR250DX/PN					
NHR400DX/PN					

NH75/LX/70S(H)					
NH110LX					
NH220LX					
NH270LX				LUH215/EZ	
NH360LX					
NH660LX					
NH940LX					
NH75F/LX/70S(H)					
NH110FLX	SON-H110W	NAV-E110W	SON-H110W	LUH110/D/27	SHX110W
NH150FLX					
NH220FLX	SON-H220W	NAV-E210W	SON-H210W	LUH215/D/EZ/40	SHX210W
NH270FLX					
NH360FLX	SON-H350W	NAV-E350W	SON-H350W		SHX350W
NH660FLX					
NH940FLX					

*Disparity in lumen output

1)Please note that due to continuing research and development, some products may vary slightly from descriptions given.
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3)Although our lamps and those of other companies may be similar, they are not necessarily interchangeable.

Cross Reference Guide

Mercury Lamps

EYE	PHILIPS	OSRAM	GE		SYLVANIA
H40 soft					
H50 soft				H50/27	
H80 soft				H80/27	
H100 soft				HR100A38	
H125 soft				H125/27	
H175				HR175A39	
H200					
H250				H250/40	
H300					
H400				H400/40	
H700				H700/40	
H1000				H1000/40	
H1000B				H1000A36	
H2000B					
HF40PD soft				HR40/50DX45-46	
HF50PD soft	HPL-N50W	HQL50W	MBF50W	HR40/50DX45-46	HSL-BW50W
HF80PD soft	HPL-N80W	HQL80W	MBF80W		HSL-BW80W
HF100PD soft				HR100DX38	
HF125PD soft	HPL-N125W	HQL125W	MBF125W		HSL-BW125W
HF175PD	HPL-N175W			HR175DX39	
HF200PD					
HF250PD	HPL-N250W	HQL250W	MBF250W	HR250DX37/40	HSL-BW250W
HF300PD					
HF400PD	HPL-N400W	HQL400W	MBF400W	HR400DX33/40	HSL-BW400W
HF700PD	HPL-N700W	HQL700W	MBF700W	HR700DX35	HSL-BW700W
HF1000PD	HPL-N1000W	HQL1000W	MBF1000W	HR100DX34	HSL-BW1000W
HF1000B-PD				HR100DX36	
HF2000B-PD	HPL-N2000W				
HRF80PD					
HRF100PD 127* 200**				HR100RDXFL38	
HRF125PD 127 200	HPLR125W 127 187				
HRF200PD 166 310					
HRF250PD 166 310	HPLR250W 162.5 259	HQL-R250W 165 260	MBFR250W 166 260	H250R	HSR-BW 250W 165 260
HRF300PD 166 310					
HRF400PD 181 320	HPLR400W 178.5 299	HQL-R400W 180 300	MBFR400W 181 300	H400R	HSR-BW 400W 180 300
HRF700PD 282 415	HPLR700W 202 327		MBFR700W 202 328	H700R	
HRF1000PD 282 415	HPLR1000W 219 382		MBFR1000W 221 380	H1000R	
HRF1000B-PD					

* upper: Max dia.
** down: Max length

1)Please note that due to continuing research and development, some products may vary slightly from descriptions given.
2)No responsibility for error or omissions
3)Although our lamps and those of other companies may be similar, they are not necessarily interchangeable.

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR8/CG, Cover Glass Series

FEATURES

1. Displayed goods appear bright and vivid
2. Conserves energy and has high candle power
3. Less temperature rise on irradiated surface
4. Uniform colour on irradiated surface
5. Compact size

GENERAL LIGHTING

Model No.	Rated voltage(V)	Watts (W)	Base	Axis Cd (cd)	Beam angle (°)	Colour Temp.(K)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JM8051	6	10	GZ4	750	9 / Narrow	2950	2000	1
JM8251	12	20	GZ4	1700	10 / Narrow	3050	2000	2
JM8252	12	20	GZ4	800	23 / Wide	3050	2000	3
JM8351	12	35	GZ4	2300	13 / Narrow	3050	2000	4
JM8352	12	35	GZ4	1400	26 / Wide	3050	2000	5

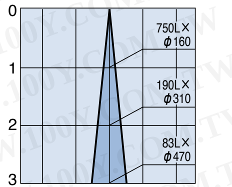
POPULAR TYPE (NEW)

Model No.	Rated voltage(V)	Watts (W)	Base	Axis Cd (cd)	Beam angle (°)	Colour Temp.(K)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JM8231	12	20	GU4	1400	10 / Narrow	2950	2000	6
JM8232	12	20	GU4	700	21 / Wide	2950	2000	7
JM8331	12	35	GU4	2000	12 / Narrow	3050	2000	8
JM8332	12	35	GU4	1300	24 / Wide	3050	2000	9

50%BEAM CIRCLE AT DISTANCE 1 METRE (φmm)

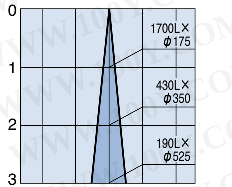
POPULAR TYPE (NEW)

10W



(Dia.-1)

20W



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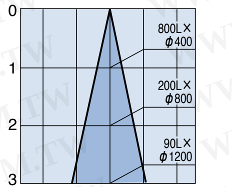

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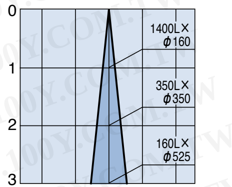

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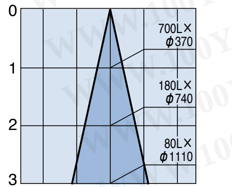

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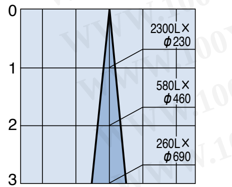
35W



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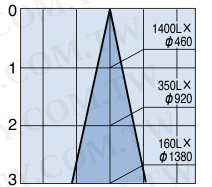

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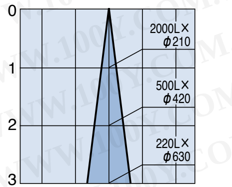

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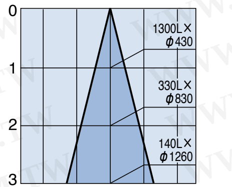


(Dia.-9)

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

FEATURES

1. LONGER LIFE
For MR16, 4000 - 5000Hrs/35 - 75W, 4000Hrs/20W

2. HIGHER PERFORMANCE.
MAX 17.5% UP※ centre Cd POWER

3. WIDE VARIATION
※Comparison figures are all our products.

IWASAKI DICHRO-COOL MR16 are manufactured by fully automatic machines in our plant.

The superior performance is realized by a line of machines automating the process from filament coiling to packaging.

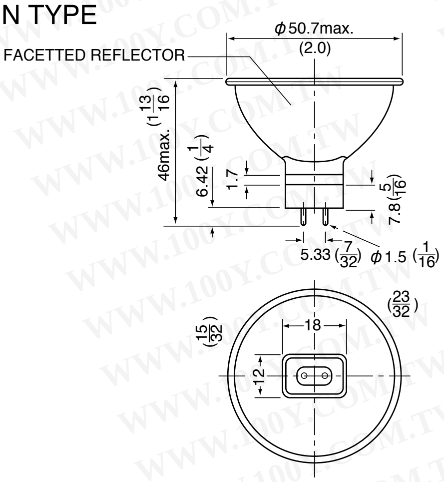
Each manufacturing process is computer controlled for excellent quality.

Wide Variation of EYE MR16 and MR11

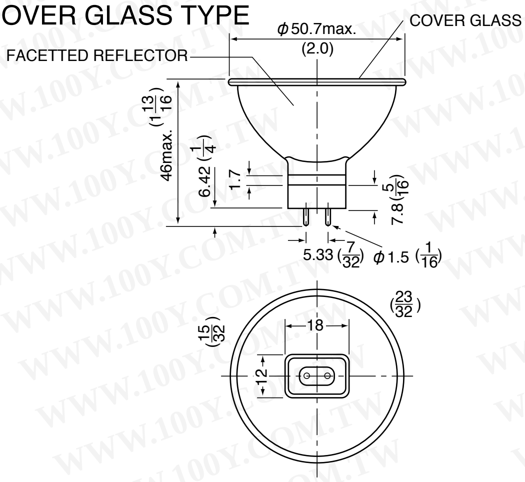
	Neodymium series	UV-Cut series	24V Cover glass series	12V Open series	12V Cover glass series
MR-16	○	○	○	○	○
MR-11	—	—	○	○	○
MR-8	—	—	—	—	○

DIMENSIONS OF MR16 unit ; mm (inch)

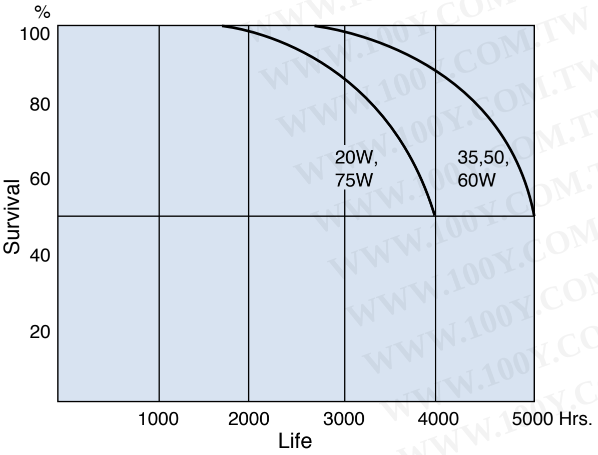
OPEN TYPE



COVER GLASS TYPE



LAMP MORTALITY



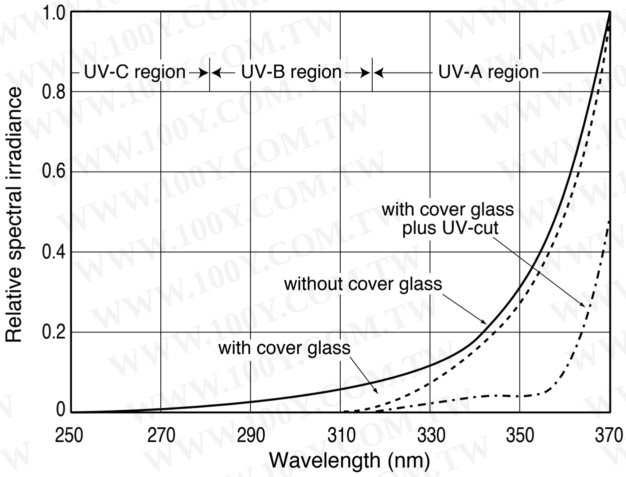
These curves are typical MR16's characteristics of IWASAKI lamps.
(source ; IWASAKI laboratory deta.)

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

MR16 UV-Cut Cover Glass Series

Allows the lighting of UV-sensitive objects and materials such as fine art, fabrics and so on by greatly reducing UV-A radiation.

UV SPECTRAL IRRADIANCE OF MR-16 LAMPS



PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Rated Av. Life (hrs)
JR5251.000	ESX	12	20	GU5.3	12	4000	12	4000
JR5253.000	BAB	12	20	GU5.3	12	500	38	4000
JR5351.000	FRB	12	35	GU5.3	12	7600	12	5000
JR5352.000	FRA	12	35	GU5.3	12	2300	23	5000
JR5353.000	FMW	12	35	GU5.3	12	1100	38	5000
JR5551.000	EXT	12	50	GU5.3	12	9800	13	5000
JR5552.000	EXZ	12	50	GU5.3	12	3200	26	5000
JR5553.000	ENL	12	50	GU5.3	12	2250	32	5000
JR5554.000	EXN	12	50	GU5.3	12	1600	38	5000
JR5566.000	FNV	12	50	GU5.3	12	700	56	5000
JR6651.000	FPA	12	65	GU5.3	12	12000	13	5000
JR6652.000	FPC	12	65	GU5.3	12	4100	26	5000
JR6653.000	FPB	12	65	GU5.3	12	2100	38	5000

MR16 10000 hrs Long Life Halogen

12V Dichroic Reflector 2-Pin Base - GU5.3 with Cover Glass

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Rated Av. Life (hrs)
JR8351	FRB	12	35	GU5.3	12	7400	12	10000
JR8353	FMW	12	35	GU5.3	12	1100	36	10000
JR8551	EXT	12	50	GU5.3	12	9500	12	10000
JR8553	EXN	12	50	GU5.3	12	1650	38	10000

MR16 24V Cover Glass Series

Low power consumption

Wide application range

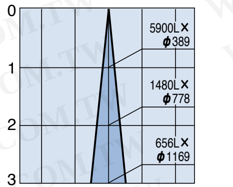
Boat cabin, Aircraft, Bus, Etc.

PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JR7351.000	FRB	24	35	GU5.3	12	5900	11	4000	1
JR7352.000	FRA	24	35	GU5.3	12	1700	23	4000	2
JR7353.000	FMW	24	35	GU5.3	12	870	40	4000	3
JR7551.000	EXT	24	50	GU5.3	12	8600	12	4000	4
JR7552.000	EXZ	24	50	GU5.3	12	2600	26	4000	5
JR7553.000	EXN	24	50	GU5.3	12	1500	40	4000	6

50%BEAM CIRCLE AT DISTANCE 1 METRE (φ:mm)

35W



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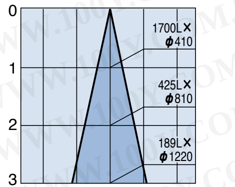

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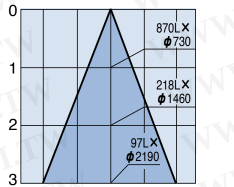
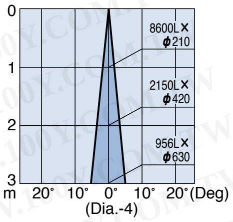


(Dia.-3)

50W



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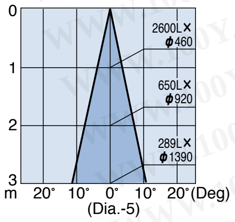

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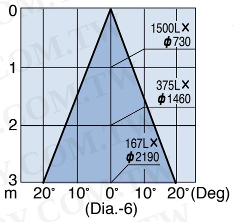


(Dia.-6)

Anti-Vibration Type MR16 24V Cover Glass

Strong against vibrations and shocks thanks to reinforced filament construction

PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Colour Temp.	Rated Av. Life (hrs)	Fig. No.
JR7583.000	——	24	50	GU5.3	12	850	36	3000	4000※	1

※The rated average life is for general lighting applications. The life may vary, depending on vibration and shock condition.

DIMENSIONS OF MR16 unit ; mm (inch)

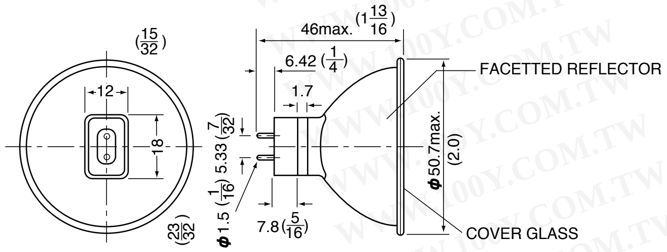


Fig.1

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

MR11 24V Cover Glass Series

Low power consumption
Wide application range

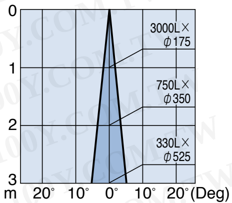
Boat cabin
Aircraft
Bus
Etc.

PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (°)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JM7261.000	FTB	24	20	GZ4	50	3000	10	2000	1
JM7262.000	FTC	24	20	GZ4	50	1100	19	2000	2
JM7263.000	FTD	24	20	GZ4	50	580	29	2000	3
JM7361.000	FTE	24	35	GZ4	50	4100	12	2000	4
JM7362.000	FTF	24	35	GZ4	50	1900	20	2000	5
JM7363.000	FTH	24	35	GZ4	50	1100	30	2000	6

50%BEAM CIRCLE AT DISTANCE 1 METRE (φ:mm)

20W



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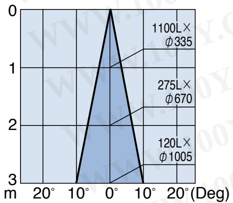

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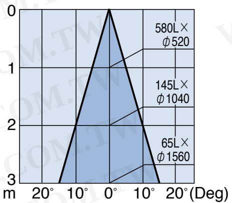
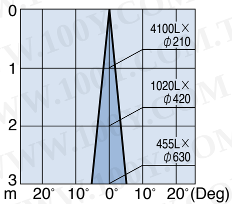


(Dia.-3)

35W



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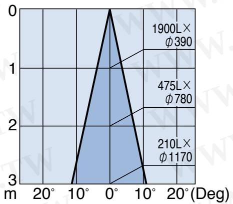

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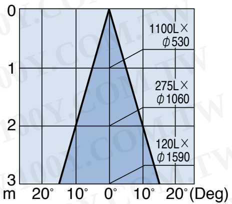
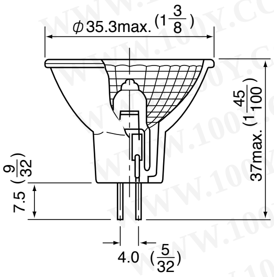


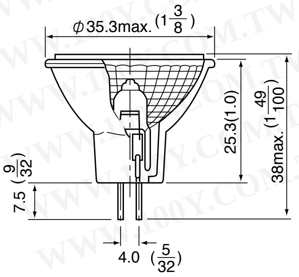
(Dia.-6)

DIMENSIONS OF MR11 UNIT ; mm (inch)

OPEN TYPE



COVER GLASS TYPE



MR16 12V Cover Glass Series

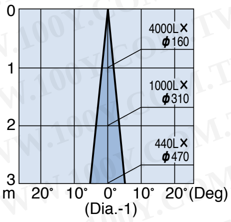
PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Colour Temp. (k)	Beam angle (˚)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JR1251.000	ESX	12	20	GU5.3	12	4000	2950	9	4000	1
JR1252.000	BBF	12	20	GU5.3	12	880	2950	23	4000	2
JR1253.000	BAB	12	20	GU5.3	12	500	2950	38	4000	3
JR1351.000	FRB	12	35	GU5.3	12	7600	3050	12	5000	4
JR1352.000	FRA	12	35	GU5.3	12	2300	3050	23	5000	5
JR1353.000	FMW	12	35	GU5.3	12	1100	3050	38	5000	6
JR1551.000	EXT	12	50	GU5.3	12	9800	3050	13	5000	7
JR1552.000	EXZ	12	50	GU5.3	12	3200	3050	26	5000	8
JR1553.000	ENL	12	50	GU5.3	12	2250	3050	32	5000	9
JR1554.000	EXN	12	50	GU5.3	12	1600	3050	38	5000	10
JR1566.000	FNV	12	50	GU5.3	12	700	3050	56	5000	11
JR2651.000	FPA	12	65	GU5.3	12	12000	3050	13	5000	12
JR2652.000	FPC	12	65	GU5.3	12	4100	3050	26	5000	13
JR2653.000	FPB	12	65	GU5.3	12	2100	3050	38	5000	14

※DC bayonet base is also available.

50%BEAM CIRCLE AT DISTANCE 1 METRE (φ:mm)

20W



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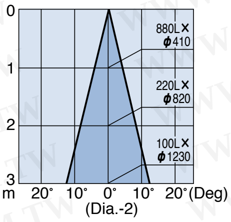

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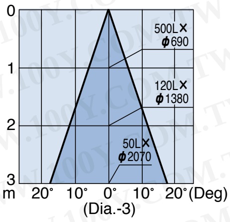
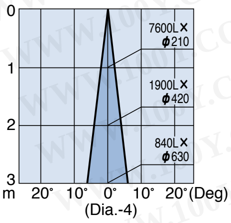


(Dia.-3)

35W



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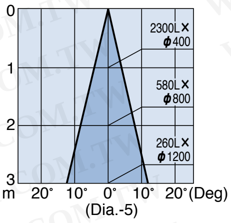

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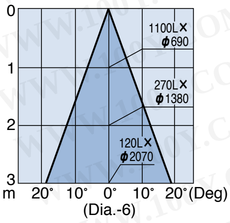
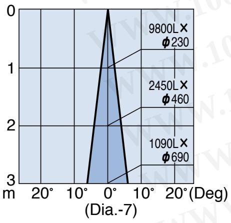


(Dia.-6)

50W



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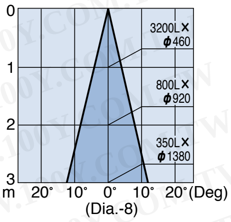

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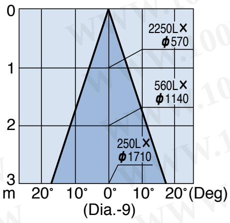

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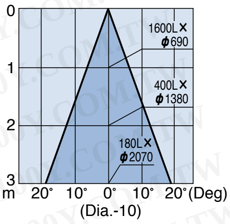

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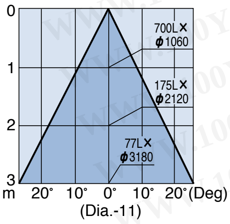
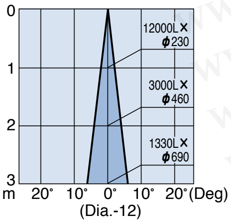
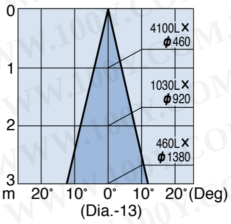


(Dia.-11)

65W



(Dia.-12)



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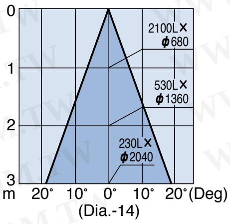


(Dia.-14)

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

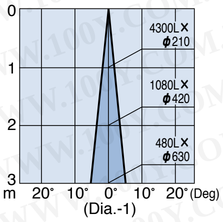
MR16 12V Open Type Series

PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Colour Temp. (k)	Beam angle (˚)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JR1201.000	ESX	12	20	GU5.3	12	4300	2950	12	4000	1
JR1203.000	BAB	12	20	GU5.3	12	525	2950	40	4000	2
JR1301.000	FRB	12	35	GU5.3	12	8000	3050	12	5000	3
JR1302.000	FRA	12	35	GU5.3	12	2500	3050	23	5000	4
JR1303.000	FMW	12	35	GU5.3	12	1200	3050	40	5000	5
JR1401.000	EYR	12	42	GU5.3	12	8200	3050	12	5000	6
JR1402.000	EYS	12	42	GU5.3	12	2850	3050	25	5000	7
JR1403.000	EYP	12	42	GU5.3	12	1200	3050	40	5000	8
JR1501.000	EXT	12	50	GU5.3	12	10500	3050	13	5000	9
JR1502.000	EXZ	12	50	GU5.3	12	3400	3050	26	5000	10
JR1503.000	ENL	12	50	GU5.3	12	2450	3050	32	5000	11
JR1504.000	EXN	12	50	GU5.3	12	1750	3050	40	5000	12
JR1516.000	FNV	12	50	GU5.3	12	750	3050	60	5000	13
JR2701.000	EYF	12	75	GU5.3	12	13500	3050	13	4000	14
JR2702.000	EYJ	12	75	GU5.3	12	4600	3050	26	4000	15
JR2703.000	EYC	12	75	GU5.3	12	2400	3050	44	4000	16

50%BEAM CIRCLE AT DISTANCE 1 METRE (ϕ:mm)

20W



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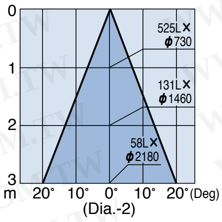
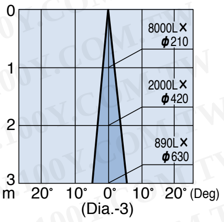


(Dia.-2)

35W



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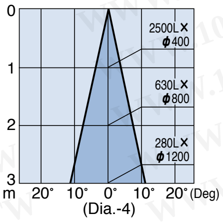

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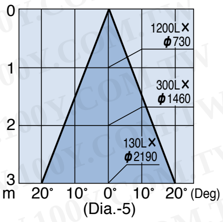
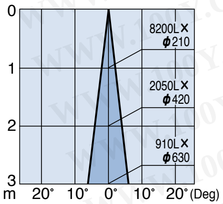


(Dia.-5)

42W



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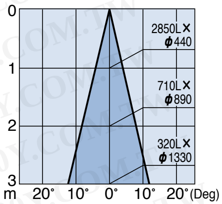

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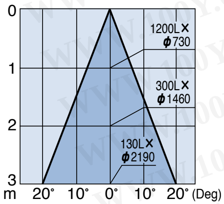
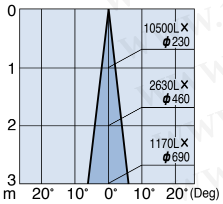


(Dia.-8)

50W



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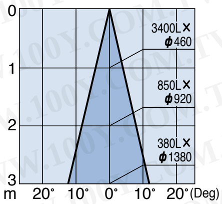

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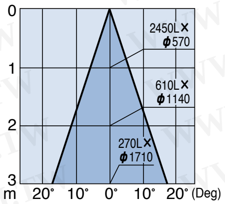

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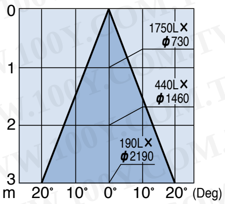

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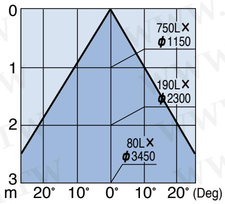
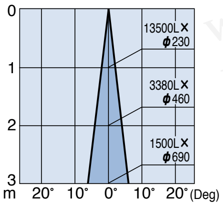
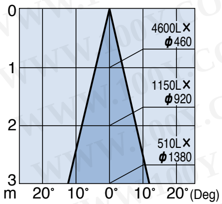


(Dia.-13)

75W



(Dia.-14)



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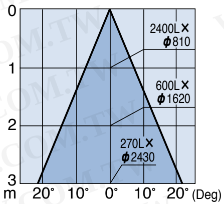


(Dia.-16)

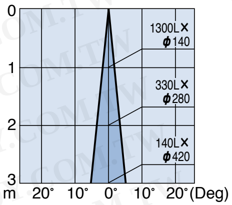
MR11 12V Cover Glass Series

PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Colour Temp. (k)	Beam angle (˚)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JM1161	FTA	12	12	GZ4	50	1300	2900	8	2000	1
JM1162	———	12	12	GZ4	50	470	2900	19	2000	2
JM1163	———	12	12	GZ4	50	330	2900	25	2000	3
JM1261	FTB	12	20	GZ4	50	3750	2950	8	2000	4
JM1262	FTC	12	20	GZ4	50	1360	2950	19	2000	5
JM1263	FTD	12	20	GZ4	50	670	2950	28	2000	6
JM1361	FTE	12	35	GZ4	50	4200	3050	10	3000	7
JM1362	FTF	12	35	GZ4	50	2350	3050	20	3000	8
JM1363	FTH	12	35	GZ4	50	1280	3050	29	3000	9

50%BEAM CIRCLE AT DISTANCE 1 METRE (φ:mm)

12W



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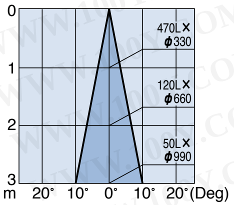

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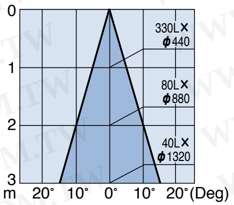
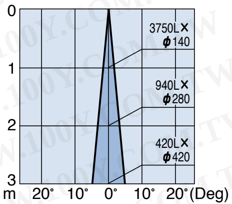


(Dia.-3)

20W



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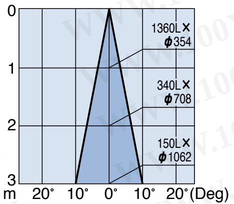

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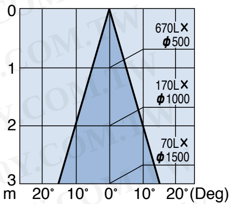
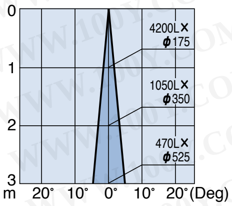


(Dia.-6)

35W



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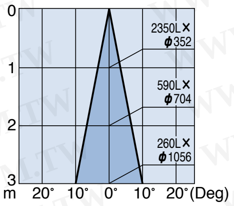

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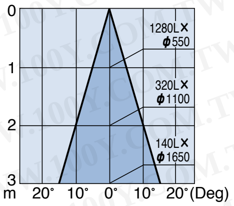


(Dia.-9)

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

MR11 12V Open Type Series

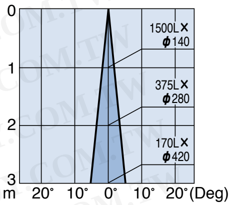
PHYSICAL DATA AND CHARACTERISTICS

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Colour Temp. (k)	Beam angle (°)	Rated Av. Life (hrs)	Beam Circle Diagram No.
JM1111	FTA	12	12	GZ4	50	1500	2900	8	2000	1
JM1112	——	12	12	GZ4	50	500	2900	19	2000	2
JM1113	——	12	12	GZ4	50	350	2900	25	2000	3
JM1211	FTB	12	20	GZ4	50	4200	2950	8	2000	4
JM1212	FTC	12	20	GZ4	50	1450	2950	19	2000	5
JM1213	FTD	12	20	GZ4	50	700	2950	28	2000	6
JM1311	FTE	12	35	GZ4	50	6000	3050	10	3000	7
JM1312	FTF	12	35	GZ4	50	2500	3050	20	3000	8
JM1313	FTH	12	35	GZ4	50	1350	3050	29	3000	9

※DC bayonet base is also available.

50%BEAM CIRCLE AT DISTANCE 1 METRE (ϕ:mm)

12W



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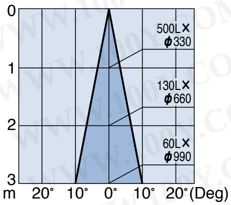
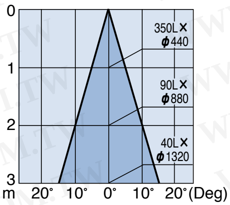
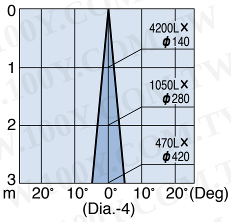


(Dia.-2)

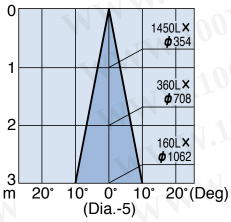


(Dia.-3)

20W



(Dia.-4)



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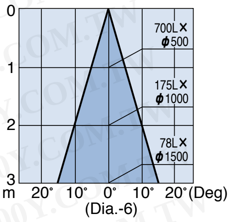
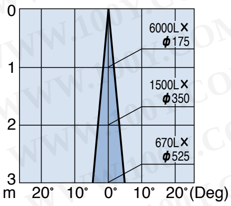
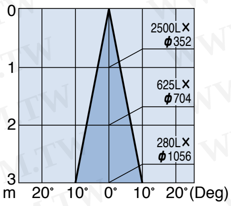


(Dia.-6)

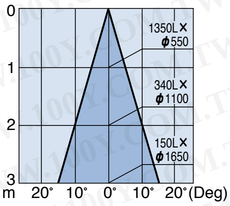
35W



(Dia.-7)



(Dia.-8)



(Dia.-9)

MR16 Neodymium Cover Glass Series

FEATURES

1. MR-16 dichroic neodymium halogen lamps operate on the same fixtures as equivalent wattage MR-16 dichroic halogen lamps
2. Displayed goods appear bright and vivid
3. Conserve energy and have high candle power (power consumption: 1/2 or less of incandescent neodymium lamp under same beam angle and same illuminance)
4. Less temperature rise on irradiated surface (about 1/3 of incandescent neodymium lamp under same illuminance)
5. Uniform colour light on irradiated surface
6. Compact size
7. With cover glass

APPLICATIONS

Displays and showrooms   Restaurants,lounges,bars   Meat shops   Beauty salons   Fruit shops

PHYSICAL DATA CHARACTERISTICS

Type	Beam Type	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Rated Av. Life (hrs)
JR1254.000	Medium	12	20	GU5.3	12	750	20	4000
JR1255.000	Wide	12	20	GU5.3	12	600	25	4000
JR1354.000	Medium	12	35	GU5.3	12	1700	21	5000
JR1355.000	Wide	12	35	GU5.3	12	1100	32	5000
JR1568.000	Medium	12	50	GU5.3	12	2700	21	5000
JR1569.000	Wide	12	50	GU5.3	12	1800	32	5000
JR2654.000	Medium	12	65	GU5.3	12	3500	20	5000
JR2655.000	Wide	12	65	GU5.3	12	2500	29	5000

MR16 WHITE LIGHT 4200K, 3450K & 3350K

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Colour Temp.	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (˚)	Rated Av. Life (hrs)
MR16 4200K									
JR1256	BAB	12	20	GU5.3	4200K	12	220	38	4000
JR1356	FMW	12	35	GU5.3	4200K	12	500	38	5000
JR1580	EXN	12	50	GU5.3	4200K	12	840	38	5000
JR1581	FNV	12	50	GU5.3	4200K	12	300	56	5000
MR16 3350K, 3450K									
JR1251D	ESX	12	20	GU5.3	3350K	12	2200	10	4000
JR1253D	BAB	12	20	GU5.3	3350K	12	400	36	4000
JR1351D	FRB	12	35	GU5.3	3450K	12	4200	12	5000
JR1353D	FMW	12	35	GU5.3	3450K	12	880	36	5000
JR1551D	EXT	12	50	GU5.3	3450K	12	5300	12	5000
JR1552D	EXZ	12	50	GU5.3	3450K	12	2250	26	5000
JR1554D	EXN	12	50	GU5.3	3450K	12	1300	36	5000

MR16 Aluminium Coated

Features:

1. MR16 aluminium coated halogen lamps operate on the same fixtures as equivalent wattage MR16 dichroic halogen lamps.
2. There is no back light from the mirror.

Applications:

- Displays andshowrooms
- Restaurants, launges, bars

Type	Beam Type	Volts (V)	Watts (W)	Base	Axis Cd (cd)	Colour Temp.(K)	Beam angle (˚)	Rated Av. Life (hrs)
JR3551.000	Narrow	12	50	GU5.3	8000	2950	12	5000
JR3552.000	Medium	12	50	GU5.3	2500	2950	26	5000
JR3554.000	Wide	12	50	GU5.3	1600	2950	38	5000
JR3566.000	S.Wide	12	50	GU5.3	600	2950	56	5000

EYE DICHRO-COOL® HALOGEN Lamps-low Volts, MR16 and MR11

MR8, MR11 & MR16 Colour Halogen, Cover Glass

MR8

Type	Colour	Beam Type	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (°)	Rated Av. Life (hrs)
MR8-12V Dichroic Reflector Miniature 2-Pin Base - GZ4 with Cover Glass									
JM8253	Red	Wide	12	20	GZ4	50	240	23	2000
JM8254	Green	Wide	12	20	GZ4	50	480	23	2000
JM8255	Blue	Wide	12	20	GZ4	50	80	23	2000
JM8353	Red	Wide	12	35	GZ4	50	420	23	2000
JM8354	Green	Wide	12	35	GZ4	50	840	23	2000
JM8355	Blue	Wide	12	35	GZ4	50	140	23	2000

MR11

Type	Colour	Beam Type	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (°)	Rated Av. Life (hrs)
MR11-12V Dichroic Reflector Miniature 2-Pin Base - GZ4 with Cover Glass									
JM1264	Red	Wide	12	20	GZ4	50	300	30	2000
JM1265	Green	Wide	12	20	GZ4	50	540	30	2000
JM1266	Blue	Wide	12	20	GZ4	50	90	30	2000
JM1364	Red	Wide	12	35	GZ4	50	390	30	3000
JM1365	Green	Wide	12	35	GZ4	50	780	30	3000
JM1366	Blue	Wide	12	35	GZ4	50	130	30	3000

MR16

Type	Colour	Beam Type	Volts (V)	Watts (W)	Base	Std. Pkg. Qty.	Axis Cd (cd)	Beam angle (°)	Rated Av. Life (hrs)
MR16-12V Dichroic Reflector Miniature 2-Pin Base - GU5.3 with Cover Glass									
JR1558	Red	Narrow	12	50	GU5.3	12	2100	13	5000
JR1559	Red	Wide	12	50	GU5.3	12	500	32	5000
JR1560	Yellow	Narrow	12	50	GU5.3	12	7500	13	5000
JR1561	Yellow	Wide	12	50	GU5.3	12	1800	32	5000
JR1562	Green	Narrow	12	50	GU5.3	12	3900	13	5000
JR1563	Green	Wide	12	50	GU5.3	12	900	32	5000
JR1564	Blue	Narrow	12	50	GU5.3	12	500	13	5000
JR1565	Blue	Wide	12	50	GU5.3	12	150	32	5000

MR16 - Super Soft

Features:
- Frosted Cover Glass
- Soft diffused light

Applications:
- Displays • Retail stores • Restaurants
- Dining Rooms/Kitchens • Anywhere soft light is required

Type	Ref. ANSI	Volts (V)	Watts (W)	Base	Colour Temp.	Std. Pkg. Qty.	Axis Cd (cd)	Rated Av. Life (hrs)
MR16 Super Soft 12V Dichroic Reflector 2-Pin Base - GU5.3 Frosted with Cover Glass								
JR1253F	BAB	12	20	GU5.3	2950K	12	290	4000
JR1353F	FMW	12	35	GU5.3	3000K	12	600	5000
JR1554F	EXN	12	50	GU5.3	3050K	12	950	5000
JR1566F	FNV	12	50	GU5.3	3050K	12	540	5000

NOTE: MR8 Super Soft is also available.

EYE DICHRO-COOL® Halogen Lamps-100V Range

EYE DICHRO-COOL® Halogen Lamp is a reflector type tungsten halogen spot lamp for General Lighting Service in combination with the super miniature tungsten halogen lamp and dichroic mirror.

FEATURES

1. White light having a colour temperature of 3600K or 3000K.
2. Radiating less heat towards front (about 1/5 of beam lamp,1/3 of heat cut type beam lamp).
3. Small and light (about 1/10 of beam lamp in cubic volume, weight: 25 - 60g)
4. Able to light by direct 100-120V AC commercial power source.

MR16 Line Voltage type(JDR)

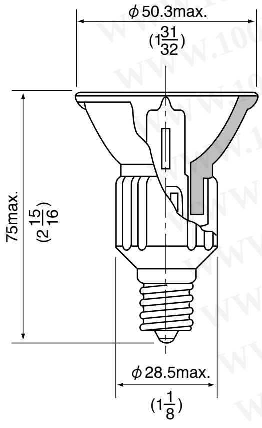
Lamps in three different beam types are available.

	Narrow Beam	Medium Beam	Wide Beam
3000K Series			
120V 75W	FSA"2N" Intermediate Base(E17) CG	FSB"2M" Intermediate Base(E17) CG	FSD"2W" Intermediate Base(E17) CG
120V 100W	FSC"2N" Intermediate Base(E17) CG	FSE"2M" Intermediate Base(E17) CG	FSF"2W" Intermediate Base(E17) CG
3600K Series			
120V 75W	"N" Intermediate Base(E17) CG	"M" Intermediate Base(E17) CG	"W" Intermediate Base(E17) CG
120V 100W	"N" Intermediate Base(E17) CG	"M" Intermediate Base(E17) CG	"W" Intermediate Base(E17) CG

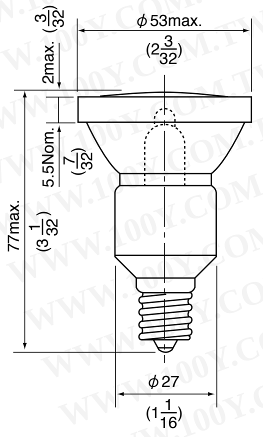
Neodymium Type is also available

DIMENSIONS OF MR16 unit ; mm (inch)

OPEN TYPE



COVER GLASS TYPE

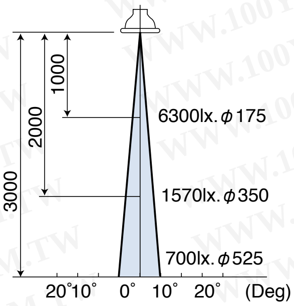


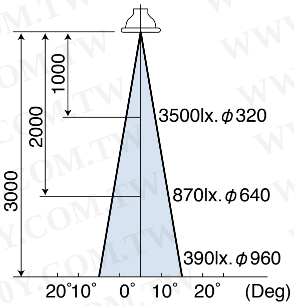
EYE DICHRO-COOL® HALOGEN Lamps-100V Range

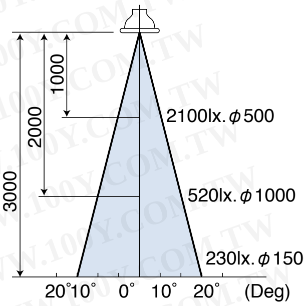
3000K SERIES

ANSI	FSA	——	FSB	——	FSD	——
Type	JX1016.000 OPEN TYPE	JX1061.000 CG TYPE	JX1017.000 OPEN TYPE	JX1062.000 CG TYPE	JX1018.000 OPEN TYPE	JX1063.000 CG TYPE
Volts (V)	120	120	120	120	120	120
Watts (W)	75	75	75	75	75	75
Base	E17	E17	E17	E17	E17	E17
Std. Pkg. Qty.	12	12	12	12	12	12
Axis Cd (cd)	6300	6300	3500	3500	2100	2100
Beam angle (˚)	10	10	18	18	28	28
Rated Av. Life (hrs)	3000	3000	3000	3000	3000	3000
Colour Temp. (K)	3000	3000	3000	3000	3000	3000

※50% Beam Circle at
Distance of 1m
unit : mm

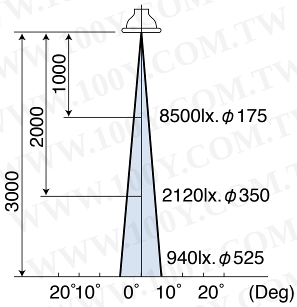


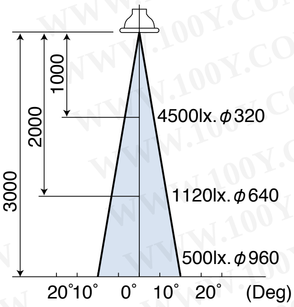


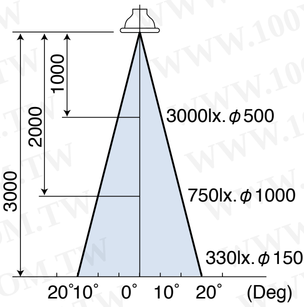


ANSI	FSC	——	FSE	——	FSF	——
Type	JX1044.000 OPEN TYPE	JX1084.000 CG TYPE	JX1045.000 OPEN TYPE	JX1085.000 CG TYPE	JX1046.000 OPEN TYPE	JX1086.000 CG TYPE
Volts (V)	120	120	120	120	120	120
Watts (W)	100	100	100	100	100	100
Base	E17	E17	E17	E17	E17	E17
Std. Pkg. Qty.	12	12	12	12	12	12
Axis Cd (cd)	8500	8500	4500	4500	3000	3000
Beam angle (˚)	10	10	18	18	28	28
Rated Av. Life (hrs)	3000	3000	3000	3000	3000	3000
Colour Temp. (K)	3000	3000	3000	3000	3000	3000

※50% Beam Circle at
Distance of 1m
unit : mm



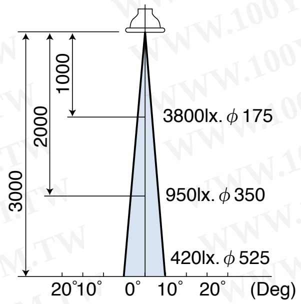


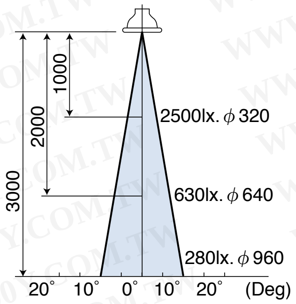


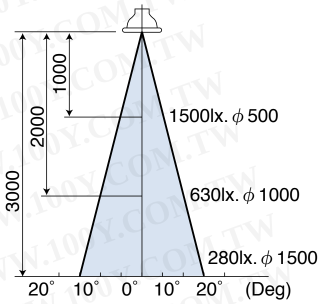
3600K SERIES

ANSI	——	——	——	——	——	——
Type	**JX1013.000 OPEN TYPE**	**JX1058.000 CG TYPE**	**JX1014.000 OPEN TYPE**	**JX1059.000 CG TYPE**	**JX1015.000 OPEN TYPE**	**JX1060.000 CG TYPE**
Volts (V)	120	120	120	120	120	120
Watts (W)	75	75	75	75	75	75
Base	E17	E17	E17	E17	E17	E17
Std. Pkg. Qty.	12	12	12	12	12	12
Axis Cd (cd)	3800	3800	2500	2500	1500	1500
Beam angle (˚)	10	10	18	18	28	28
Rated Av. Life (hrs)	3000	3000	3000	3000	3000	3000
Colour Temp. (K)	3600	3600	3600	3600	3600	3600

※50% Beam Circle at
Distance of 1m
unit : mm

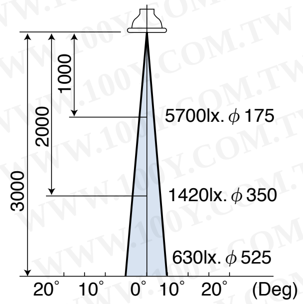


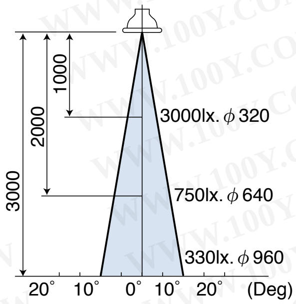


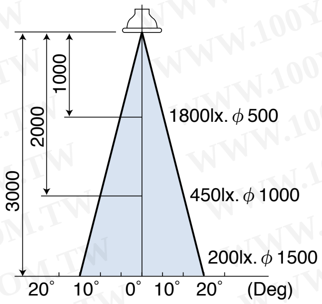


ANSI	——	——	——	——	——	——
Type	**JX1058.000 OPEN TYPE**	**JX1081.000 CG TYPE**	**JX1059.000 OPEN TYPE**	**JX1082.000 CG TYPE**	**JX1060.000 OPEN TYPE**	**JX1083.000 CG TYPE**
Volts (V)	120	120	120	120	120	120
Watts (W)	100	100	100	100	100	100
Base	E17	E17	E17	E17	E17	E17
Std. Pkg. Qty.	12	12	12	12	12	12
Axis Cd (cd)	5700	5700	3000	3000	1800	1800
Beam angle (˚)	10	10	18	18	28	28
Rated Av. Life (hrs)	3000	3000	3000	3000	3000	3000
Colour Temp. (K)	3600	3600	3600	3600	3600	3600

※50% Beam Circle at
Distance of 1m
unit : mm







Single Ended Type

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JD28V75W/M1	28	75	1350	2950	2000	10.3	61	29.5	E10	CC-6	1
JD75W/M2 (M3～M7)	100,110,120	75	1200	2850	1500	11.5	70	46	E11 or E14	CC-8	2
JD100W/M2 (M3～M7)	100,120	100	1600	2850	1500	11.5	70	49	E11 or E14	CC-8	2
JD100W/M2 (M5～M7)	220/230	100	1400	2850	1500	16.0	80	55	E11 or E14	CC-13	3
	240/250	100	1400	2850	1500	16.0	80	55	E11 or E14	CC-13	3
JD150W/M2 (M3～M7)	110,120	150	2400	2850	1500	14.0	70	49	E11 or E14	CC-8	2
JD150W/M2 (M5～M7)	220/230	150	2250	2900	1500	16.0	80	55	E11 or E14	CC-13	3
	240/250	150	2250	2900	1500	16.0	80	55	E11 or E14	CC-13	3
JD250W/M2 (M5～M7)	110,120	250	4500	2900	2000	14.0	81	61	E11 or E14	CC-8	4 (5)
JD250W/M2 (M5～M7)	220/230	250	4500	2900	2000	15.0	81	61	E11 or E14	CC-8	4
	240/250	250	4500	2900	2000	15.0	81	61	E11 or E14	CC-8	4
JD500W/M2 (M5～M7)	110,120	500	9500	2950	2000	14.0	95	66	E11 or E14	CC-8	4
JD500W/M2 (M5～M7)	220/230	500	9500	2950	2000	15.0	95	66	E11 or E14	CC-8	4 (6)
	240/250	500	9500	2950	2000	15.0	95	66	E11 or E14	CC-8	4 (6)

Burning position: Any

LAMP FIGURES unit : mm

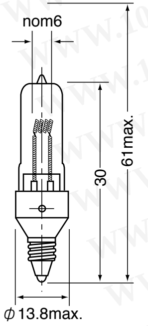


Fig.1

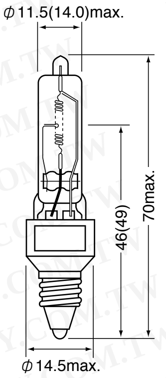


Fig.2

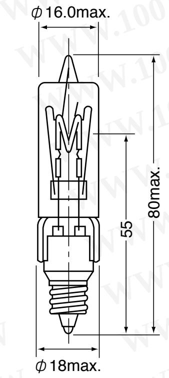


Fig.3

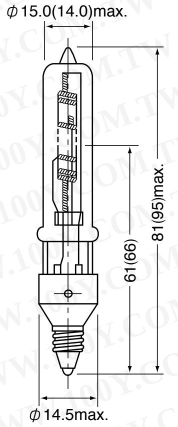


Fig.4

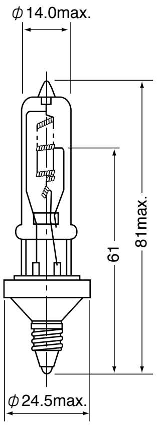


Fig.5
JD250W/M5

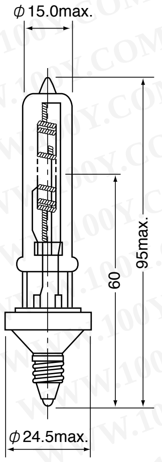


Fig.6
JD500W/M5

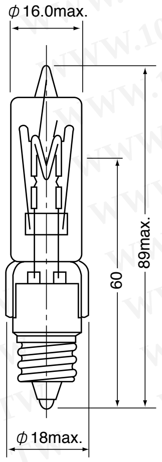
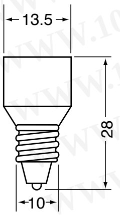


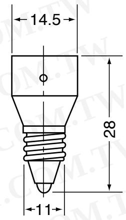
Fig.7
JD100W & 150W/M7
220/230V
240/250V

＊Please specify base type when ordering.
Example: JD220/230V 150W/M2 E11-14
JD220/230V 100W/M6 E14-17

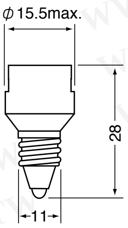
BASE TYPE



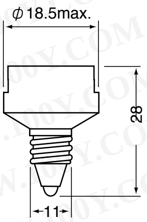
E10 (M1)



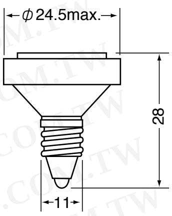
E11-14 (M2)



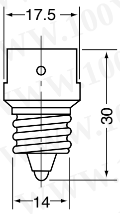
E11-15 (M3)



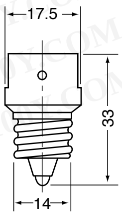
E11-18 (M4)



E11-24 (M5)



E14-17 (M6)



E14-17A (M7)

Single Ended Type

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JD28V75W/BD	28	75	1350	2950	2000	10.3	60	37	BA15d	CC-8	3
JD100W/E2 (E1)	100,120	100	1600	2850	2000	11.5	88	69	E27-30	CC-8	1
JD100W/BD	100,120	100	1600	2850	2000	11.5	63	33	BA15d	CC-8	4
JD100W/E2 (E1)	220,230	100	1400	2850	1500	16.0	105	77	E27-30	CC-13	2
	240,250	100	1400	2850	1500	16.0	105	77	E27-30	CC-13	2
JD100W/BD	220,230	100	1400	2850	1500	16.0	87	55	BA15d	CC-13	5
	240,250	100	1400	2850	1500	16.0	87	55	BA15d	CC-13	5
JD150W/E2 (E1)	110,120	150	2800	2850	2000	14.0	90	69	E27-30	CC-8	1
JD150W/BD	110,120	150	2800	2850	2000	14.0	63	33	BA15d	CC-8	6
JD150W/E2 (E1)	220,230	150	2250	2900	1500	16.0	105	77	E27-30	CC-13	2
	240,250	150	2250	2900	1500	16.0	105	77	E27-30	CC-13	2
JD150W/BD	220,230	150	2250	2900	1500	16.0	87	55	BA15d	CC-13	7
	240,250	150	2250	2900	1500	16.0	87	55	BA15d	CC-13	7

Burning position: Any

LAMP FIGURES unit : mm

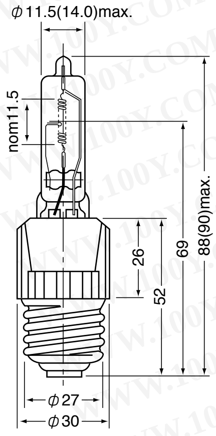


Fig.1 ( )150W

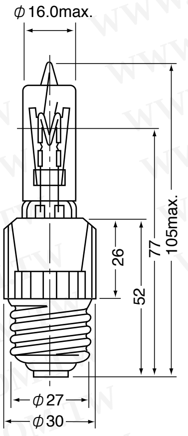


Fig.2

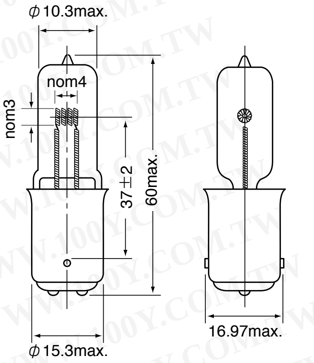
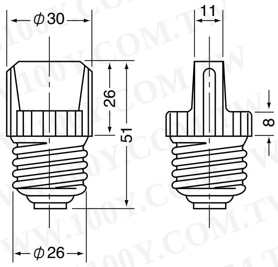
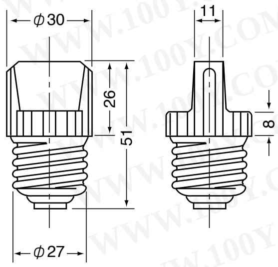


Fig.3

BASE TYPE



E26/25 (E1)



E27/25 (E2)

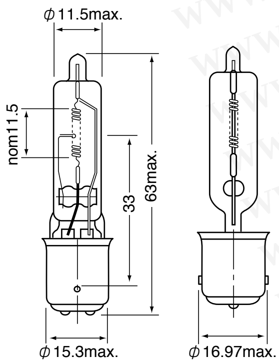


Fig.4

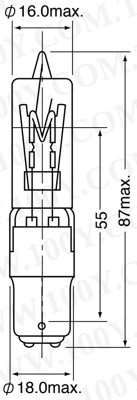


Fig.5

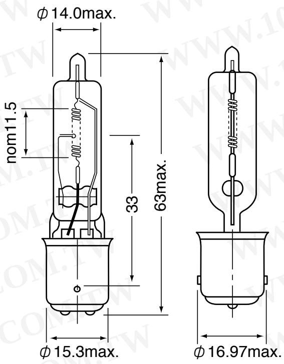


Fig.6

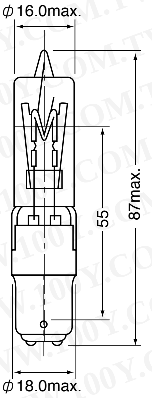
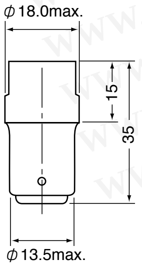


Fig.7



BA15d
for 200V range
100W & 150W

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JD250W/E2 (E1)	110,120	250	5000	2900	2000	14.0	100	72	E27-30	CC-8	1
JD250W/BD	110,120	250	5000	2900	2000	14.0	75	42	BA15d	CC-8	3
JD250W/E2 (E1)	220,230	250	4500	2900	2000	15.0	100	72	E27-30	CC-8	(1)
	240,250	250	4500	2900	2000	15.0	100	72	E27-30	CC-8	(1)
JD250W/BD	220,230	250	4500	2900	2000	15.0	75	42	BA15d	CC-8	4
	240,250	250	4500	2900	2000	15.0	75	42	BA15d	CC-8	4
JD500W/E2 (E1)	110,120	500	10450	2950	2000	14.0	113	81	E27-30	CC-8	(2)
JD500W/BD	110,120	500	10450	2950	2000	14.0	90	48	BA15d	CC-8	5
JD500W/E2 (E1)	220,230	500	9500	2950	2000	15.0	113	81	E27-30	CC-8	2
	240,250	500	9500	2950	2000	15.0	113	81	E27-30	CC-8	2
JD500W/BD	220,230	500	9500	2950	2000	15.0	90	48	BA15d	CC-8	6
	240,250	500	9500	2950	2000	15.0	90	48	BA15d	CC-8	6

Burning position: Any

LAMP FIGURES unit : mm

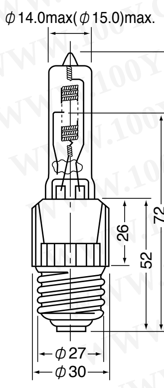


Fig.1

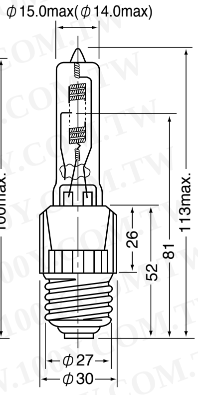


Fig.2

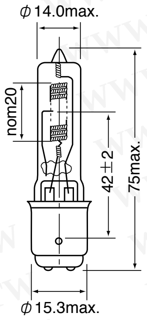


Fig.3

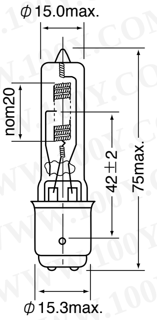


Fig.4

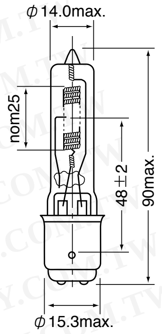


Fig.5

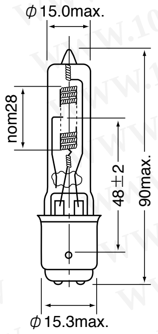
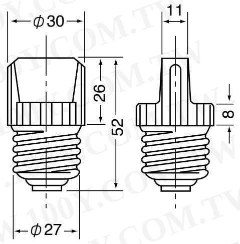


Fig.6

BASE TYPE



E27/30 (E2)
(E26/30 (E1)

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JC12V20W20H/G4	12	20	330	2850	2000	9.0	33	19.5	G4	C-6	1
JC12V20W20H/G1	12	20	280	2850	2000	11.0	44	30.0	G6.35	C-6	2
JC12V50W20H/G1	12	50	900	2900	2000	11.0	44	30.0	G6.35	C-6	2
JC12V100W20H/G1	12	100	1900	3000	2000	11.0	44	30.0	G6.35	C-6	2

Burning position: Any

LAMP FIGURES unit : mm

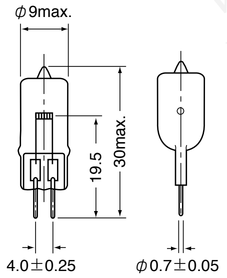


Fig.1

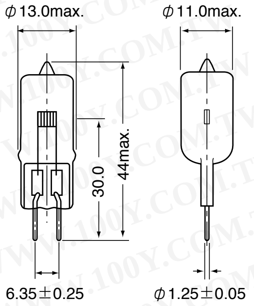
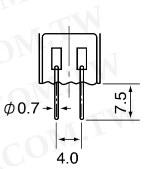
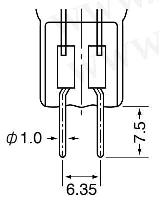


Fig.2

BASE TYPE



G4



G6.3 5(G1)

Double Envelope Type

PHYSICAL DATA AND CHARACTERISTICS-E27 BASE

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JT75W	JT1043	120	75	1150	2850	1500	30	86	53	E26	CC-8	1
JT75W	JT2020	220/230	75	1000	2800	1000	30	86	55	E27	CC-13	2
	JT2021	240/250	75	1000	2800	1000	30	86	55	E27	CC-13	2
JT100W	JT1047	120	100	1600	2900	1500	30	86	53	E26	CC-8	1
JT100W	JT2023	220/230	100	1400	2850	1500	30	86	55	E27	CC-13	2
	JT2024	240/250	100	1400	2850	1500	30	86	55	E27	CC-13	2
JT150WL	JT2097	220/230	150	2500	2900	1500	30	105	75	E27	CC-13	3
	JT2098	240/250	150	2500	2900	1500	30	105	75	E27	CC-13	3
JT250WL	JT2100	220/230	250	4200	2900	1500	30	105	75	E27	CC-13	3
	JT2101	240/250	250	4200	2900	1500	30	105	75	E27	CC-13	3

Burning position: Any
Enclosed fixtures only

LAMP FIGURES unit : mm

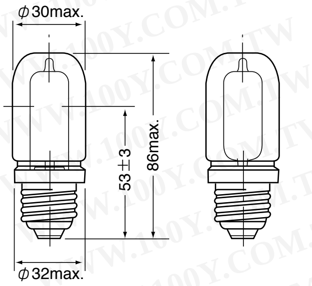


Fig.1

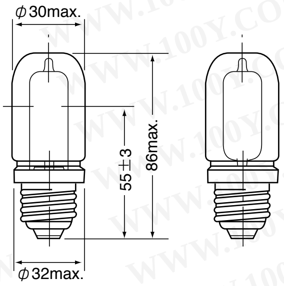


Fig.2

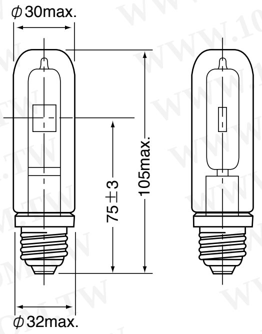
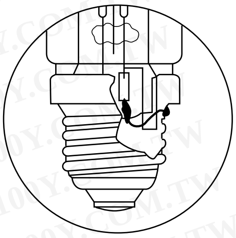


Fig.3



Integrated Fuse

PHYSICAL DATA AND CHARACTERISTICS-E40 BASE

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JT500W	125/130	500	12000	3000	2000	39	215	130	E40	C-8	1
JT500W	230/240	500	10000	3000	2000	39	215	130	E40	CC-8	1
	240/250	500	10000	3000	2000	39	215	130	E40	CC-8	1
JT1000W	230/240	1000	24000	3000	2000	38	255	155	E40	C-8	2
	240/250	1000	24000	3000	2000	38	255	155	E40	C-8	2

Burning position: Horizontal ±15˚
Enclosed fixtures only

LAMP FIGURES unit : mm

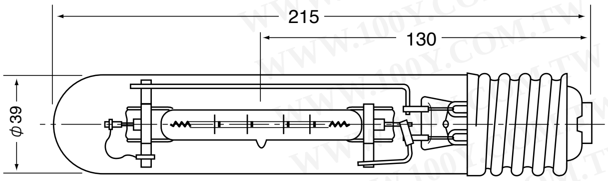


Fig.1

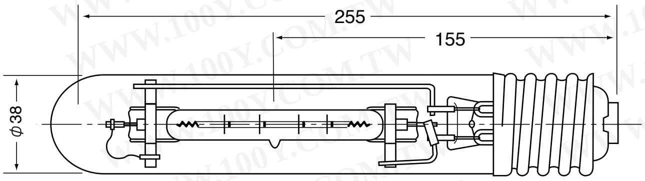


Fig.2

Double Ended Type-Short Size

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm) M.D. d	Dimensions (mm) M.O.L. l	Base	Filament	Fig. No.
J100W-S	110/120	100	1500	2800	2000	9.0	80.3	R7s	C-8	2
J100W-S	220/230	100	1350	2750	2000	9.0	80.3	R7s	CC-8	2
	240/250	100	1350	2750	2000	9.0	80.3	R7s	CC-8	2
J150W-S	110/120	150	2400	2900	2000	9.0	80.3	R7s	C-8	2
J150W-S	220/230	150	2100	2800	2000	9.0	80.3	R7s	CC-8	2
	240/250	150	2100	2800	2000	9.0	80.3	R7s	CC-8	2
J200W-S	110/120	200	3200	2900	2000	9.0	80.3	R7s	C-8	2
J200W-S	220/230	200	3000	2800	2000	9.0	80.3	R7s	CC-8	2
	240/250	200	3000	2800	2000	9.0	80.3	R7s	CC-8	2
J250W-S	220/230	250	4000	2850	2000	11.0	80.3	R7s	CC-8	2
	240/250	250	4000	2850	2000	11.0	80.3	R7s	CC-8	2
J300W-S	110/120	300	5400	3000	2000	11.0	80.3	R7s	CC-8	2
J150W	110/120	150	2250	2850	2000	9.0	119.0	R7s	C-8	1
J150W	220/230	150	2100	2800	2000	9.0	119.0	R7s	C-8	1
	240/250	150	2100	2800	2000	9.0	119.0	R7s	C-8	1

LAMP FIGURES unit : mm

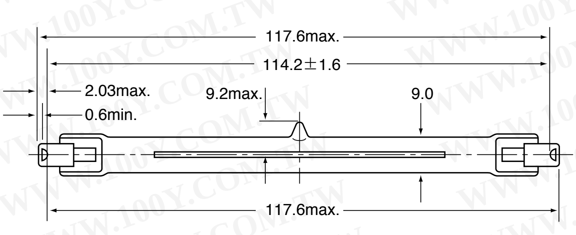


Fig.1

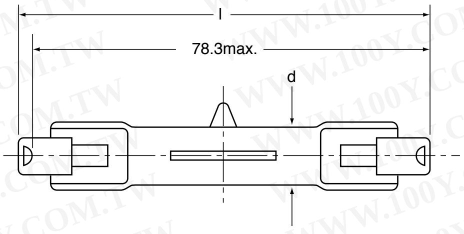


Fig.2

Double Ended Type

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig.No. & Remarks
						M.D. d	C.to B.E. c	M.O.L. l			
J200W	110/120	200	3300	2850	2000	9.0	117.6	119.0	R7s	C-8	1
J200W	220/230	200	3200	2800	2000	9.0	117.6	119.0	R7s	C-8	1
	240/250	200	3200	2800	2000	9.0	117.6	119.0	R7s	C-8	1
J250W	110/120	250	4500	2850	2000	9.0	117.6	119.0	R7s	C-8	1
J250W	220/230	250	4000	2800	2000	9.0	117.6	119.0	R7s	C-8	1
	240/250	250	4000	2800	2000	9.0	117.6	119.0	R7s	C-8	1
J300W	110/120	300	5700	2900	2000	9.0	117.6	119.0	R7s	C-8	1
J300W	220/230	300	5000	2850	2000	9.0	117.6	119.0	R7s	C-8	1
	240/250	300	5000	2850	2000	9.0	117.6	119.0	R7s	C-8	1
J500W	110/120	500	10000	3000	2000	9.0	117.6	119.0	R7s	C-8	1A
J500W	220/230	500	9500	2900	2000	9.0	117.6	119.0	R7s	C-8	1
	240/250	500	9500	2900	2000	9.0	117.6	119.0	R7s	C-8	1
J500W-L	220/230	500	8750	2900	2000	11.0	189.1	190.5	R7s	C-8	1
	240/250	500	8750	2900	2000	11.0	189.1	190.5	R7s	C-8	1
J750W	110/120	750	15000	3000	2000	11.0	189.1	190.5	R7s	C-8	1A
J750W	220/230	750	15000	3000	2000	11.0	189.1	190.5	R7s	C-8	1
	240/250	750	15000	3000	2000	11.0	189.1	190.5	R7s	C-8	1
J1000W	110/120	1000	21000	3000	2000	11.0	189.1	190.5	R7s	C-8	1A
J1000W	220/230	1000	21000	3000	2000	11.0	189.1	190.5	R7s	C-8	1A
	240/250	1000	21000	3000	2000	11.0	189.1	190.5	R7s	C-8	1A
J1000W-L	110/120	1000	21000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
J1000W-L	220/230	1000	21000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
	240/250	1000	21000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
J1500W	110/120	1500	33000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
J1500W	220/230	1500	33000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
	240/250	1500	33000	3000	2000	11.0	254.1	255.7	R7s	C-8	1A
J2000W	220/230	2000	44000	3000	2000	11.0	331.9	333.5	R7s	C-8	1
	240/250	2000	44000	3000	2000	11.0	331.9	333.5	R7s	C-8	1
J2000W/Fa4	220/230	2000	44000	3000	2000	11.0	—	334.4	Fa4	C-8	2
	240/250	2000	44000	3000	2000	11.0	—	334.4	Fa4	C-8	2
JD500W	120	500	7500	2850	2000	14.0	74.9	78.4	RSC	CC-8	3A
JD1000W	120	1000	20000	3000	2000	20.0	138.1	140.0	RSC	CC-8	3A

Burning position: Horizontal ±5°
Remarks: A = Burning position: Any

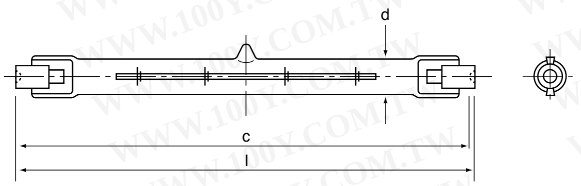


Fig.1

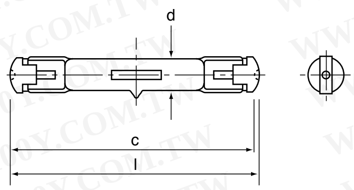


Fig.3

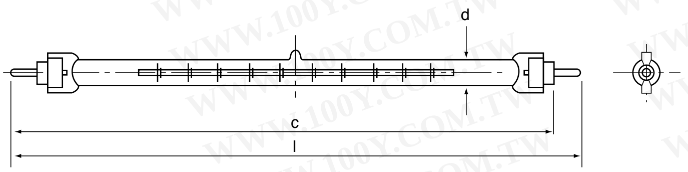


Fig.2

Projection Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JC12V40W/G1		12	40	1040	3300	50	11	44	30	G6.35	C-6	1
JC12V50W/G1	BRL A1/220	12	50	1400	3400	50	11	44	30	G6.35	C-Bar-6	1
JC12V100W/G2	FCR A1/215	12	100	2800	3350	70	11	44	30	GY6.35	C-Bar-6	2
JC15V150W/G1	BRJ A1/234	15	150	4700	3400	70	11	44	30	G6.35	C-Bar-6	1
JC24V150W/G1	A1/216	24	150	4700	3400	70	13.5	50	32	G6.35	C-Bar-6	4
JC24V150W1H/G1	FDV	24	150	4300	3250	100	13.5	50	30	G6.35	C-Bar-6	5
JC24V150W2H/G1		24	150	4350	3300	200	13.5	50	30	G6.35	C-Bar-6	5
FCS24V150W	FCS	24	150	4700	3400	70	13.5	50	30	G6.35	C-Bar-6	5
JC24V250W/G1	EHJ A1/223	24	250	8250	3400	70	13.5	55	33	G6.35	C-Bar-6	6
JC24V250WR/G1		24	250	8250	3400	50	13.5	55	33	G6.35	C-Bar-6	6
JC24V300W/G2		24	300	9900	3400	50	13.5	55	33	GY6.35	C-Bar-6	7
JC36V400W/G1	EVD A1/239	36	400	14000	3400	50	16	60	36	G6.35	C-Bar-6	8

Burning position: Any

LAMP FIGURES unit : mm

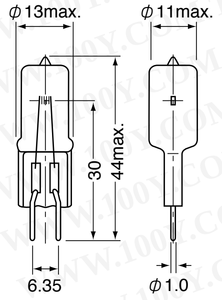


Fig.1

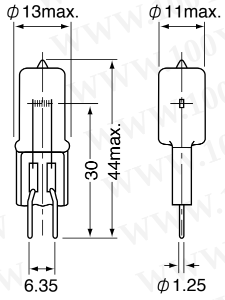


Fig.2

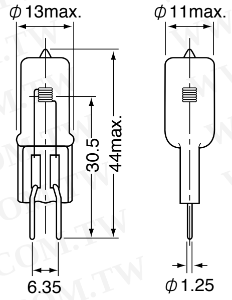
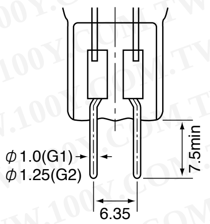


Fig.3

BASE TYPE



G6.35 (G1)
GY6.35 (G2)

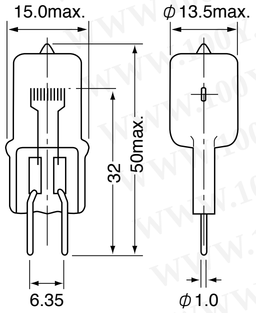


Fig.4

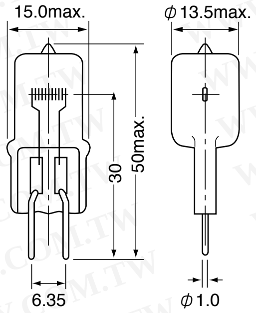


Fig.5

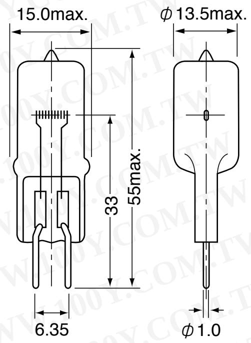
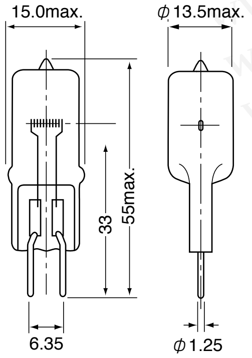


Fig.6



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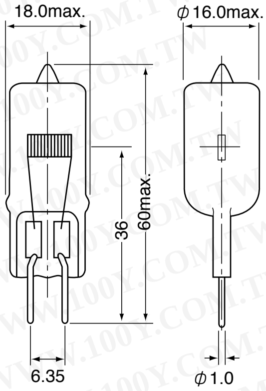


Fig.8

Projection Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)		Base	Working Distance	Filament	Fig. No.
						M.D.	M.O.L.				
MR8											
JCR6V10W20H/2GZ	——	6	10	2900	2000	25.3	31.6	GZ4	14.5	C-8	1
JCR12V20W20H/2GZ	——	12	20	2950	2000	25.3	31.6	GZ4	14.5	C-8	1
JCR12V30W20H/2GZ	——	12	30	3000	2000	25.3	31.6	GZ4	14.5	C-8	1
JCR12V35W20H/2GZ	——	12	35	3000	2000	25.3	31.6	GZ4	14.5	C-8	1
MR11											
JCR 12V35W2H/GZ4	——	12	35	3100	700	35.3	40.0	GZ4	37.9	C-8	2
MR16											
JCR12V20W20H/G1	——	12	20	2950	2000	50.0	42.0	GZ6.35	32.0	C-6	3
JCR12V30W20H/G1	——	12	30	3000	2000	50.0	42.0	GZ6.35	32.0	C-6	3
JCR6V50W20H/G1	——	6	50	3000	2000	50.0	44.0	GZ6.35	50.0	C-8	3
JCR12V50W20H/G1	——	12	50	3000	2000	50.0	42.0	GZ6.35	32.0	C-8	3
JCR12V50W20H/G1UV	——	12	50	3000	2000	50.0	42.0	GZ6.35	32.0	C-8	3
JCR9.5V55W15H/G1	——	9.5	55	3000	1500	50.0	42.0	GZ6.35	——	C-8	3
JCR12V75W/G1	EFN	12	75	3400	50	50.0	42.0	GZ6.35	32.0	C-8	3
JCR12V75W15H/G1	——	12	75	3000	1500	50.0	42.0	GZ6.35	32.0	C-8	3
JCR12V100W/G1	EFP	12	100	3400	50	50.0	42.0	GZ6.35	32.0	C-8	3
JCR12V100W10H/G1	——	12	100	3100	1000	50.0	42.0	GZ6.35	32.0	C-8	3
JCR19.5V150W/G2	——	19.5	150	3250	150	50.5	44.5	GX5.3	——	CC-6	4
JCR15V150W/G1	EFR	15	150	3400	50	50.5	42.0	GZ6.35	32.0	C-8	4
JCR15V150W5H/G1	——	15	150	3200	500	50.5	42.0	GZ6.35	32.0	C-8	4
※ JCR24V150W10H/G2/H50	——	24	150	3200	1000	50.5	44.5	GX5.3	——	CC-6	4
※ JCR24V200W10H/G2/H50-D	——	24	200	3200	1000	50.5	44.5	GX5.3	——	CC-6	4

※Minimum order quantity is required.

LAMP FIGURES unit : mm

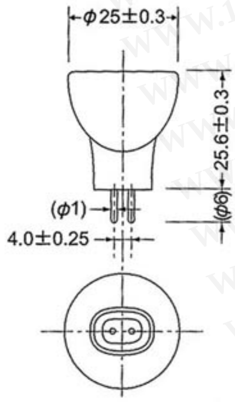


Fig.1

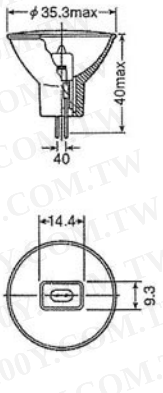


Fig.2

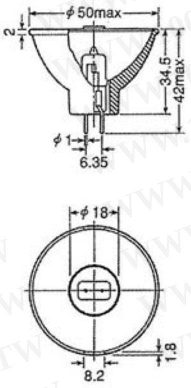


Fig.3

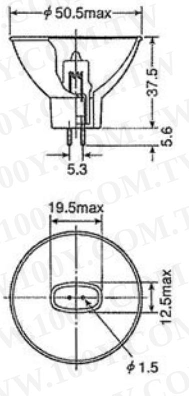
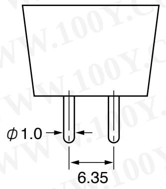
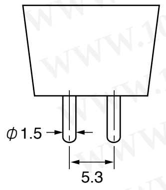


Fig.4

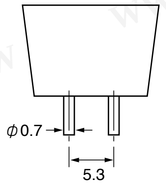
BASE TYPE



GZ6.35 (G1)



GX5.3 (G2)



GY5.3

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JCD150W-S/G1		100,120	150	4050	3250	50	13.5	50	30	G6.35	CC-6	1
JCD200W-S/G1		220/230	200	4700	3100	50	21.0	63	40	G6.35	CC-13	3
		240/250	200	4700	3100	50	21.0	63	40	G6.35	CC-13	3
JCD250W-S/G1		100,120	250	7000	3300	50	16.0	50	33	G6.35	CC-6	2
JCD250W-S/G1		220/230	250	6250	3200	50	21.0	63	40	G6.35	CC-13	3
		240/250	250	6250	3200	50	21.0	63	40	G6.35	CC-13	3
JCD300W-S/G1		100,120	300	8400	3250	50	16.0	50	33	G6.35	CC-6	2
JCD300W-S/G1		220/230	300	7500	3200	50	21.0	63	40	G6.35	CC-13	3
		240/250	300	7500	3200	50	21.0	63	40	G6.35	CC-13	3
FDX12V100W	FDX	12	100	2800	3350	70	11.0	44	30	GY6.35	C-Bar-6	4
FDW24V150W	FDW	24	150	4700	3400	70	13.5	50	30	G6.35	C-Bar-6	4
FDT12V100W	FDT	12	100	2800	3350	70	11.0	52	27	GY9.5	C-Bar-6	5
FDS24V150W	FDS A1/262	24	150	4700	3400	70	13.5	60	33	GY9.5	C-Bar-6	6
DZE24V150W	DZE	24	150	4300	3250	100	13.5	60	33	GY9.5	C-Bar-6	6

Burning position: Any

LAMP FIGURES unit : mm

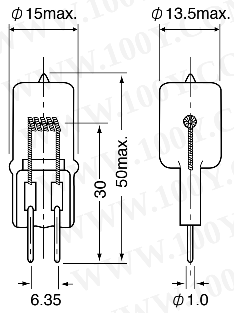


Fig.1

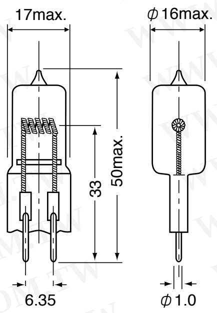


Fig.2

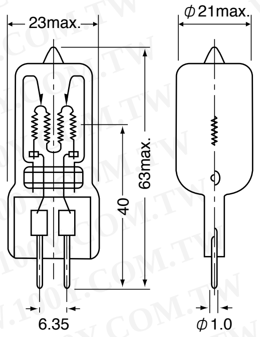


Fig.3

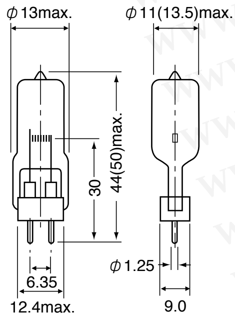


Fig.4

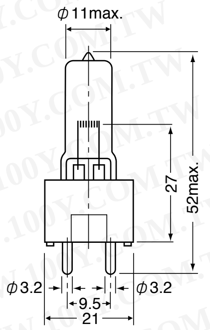


Fig.5

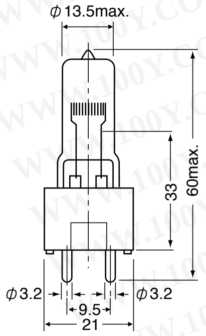
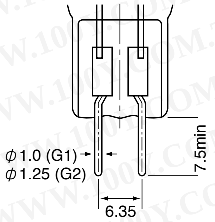
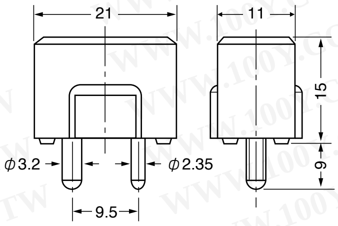


Fig.6

BASE TYPE



G6.35 (G1)
GY6.35 (G2)



GY9.5 (B)

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig.No. & Remarks
							M.D.	M.O.L.	L.C.L.			
JCD360W/A1	EYB	82	360	11000	3250	75	11	57	32.8	G5.3	CC-8	1
JCD500WS/A1		100,120	500	15500	3400	25	22	61	37	G5.3	CC-6	(2)
JCD500WC/A1		100,120	500	14000	3200	75	22	61	37	G5.3	CC-6	(2)
JCD500WS/A2		100,120	500	15500	3400	25	22	61	37	G6.35-1.5	CC-6	2
JCD500WC/A2		100,120	500	14000	3200	75	22	61	37	G6.35-1.5	CC-6	2
JCD600WS/A1		100,120	600	18600	3400	25	22	61	37	G5.3	CC-6	(2)
JCD600WC/A1	DYH	100,120	600	17000	3200	75	22	61	37	G5.3	CC-6	(2)
JCD600WS/A2		100,120	600	18600	3400	25	22	61	37	G6.35-1.5	CC-6	2
JCD600WC/A2		100,120	600	17000	3200	75	22	61	37	G6.35-1.5	CC-6	2
JCD650WS/B		100,120	650	20000	3400	25	22	63	36.5	GY9.5	CC-6	3
JCD650WC/B		100,120	650	18200	3200	50	24	66	36.5	GY9.5	CC-6	3
JCD650WC/B	DYR	220/230	650	16500	3200	50	24	66	36.5	GY9.5	2CC-8	4
		240/250	650	16500	3200	50	24	66	36.5	GY9.5	2CC-8	4
JCD530WC/B	DYR A1/244	220/230	530	14500	3200	50	22	66	36.5	GY9.5	2CC-8	5
		240	530	14500	3200	50	22	66	36.5	GY9.5	2CC-8	5

Burning position: Any
Remarks : A = Burning position Base down ±90°

LAMP FIGURES unit : mm

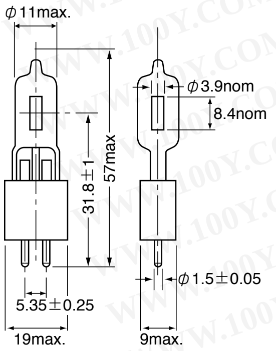


Fig.1

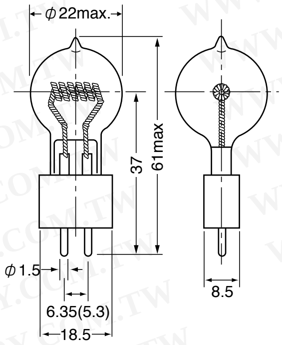


Fig.2

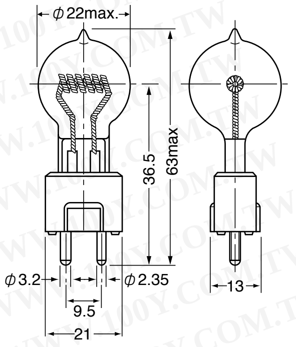


Fig.3

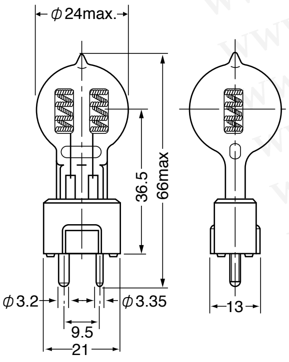


Fig.4

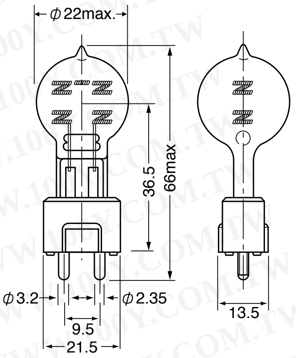
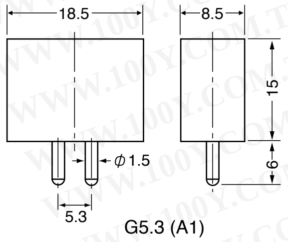
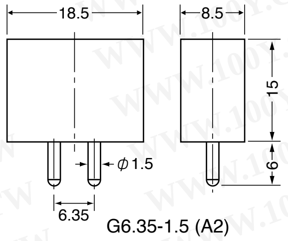


Fig.5

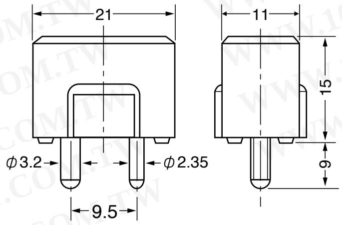
BASE TYPE



G5.3 (A1)



G6.35-1.5 (A2)



GY9.5 (B)

Miscellaneous Projector Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JC12V20W20H/G1		12	20	350	2850	2000	11.0	44	30	G6.35	C-6	1
JC12V20W20H/G2		12	20	350	2850	2000	11.0	44	30	GY6.35	C-6	2
JC12V20W20H/G4		12	20	350	2850	2000	9.0	33	19.5	G4	C-6	3
JC12V35W20H/G1		12	35	560	2900	2000	11.0	44	30	G6.35	C-6	4
JC12V35W20H/G2		12	35	560	2900	2000	11.0	44	30	GY6.35	C-6	5
JC12V50W20H/G1		12	50	950	3000	2000	11.0	44	30	G6.35	C-6	1
JC12V50W20H/G2		12	50	950	3000	2000	11.0	44	30	GY6.35	C-6	2
JC12V50W20H/G2S	M32	12	50	850	3000	2000	11.0	44	30	GY6.35S	C-Bar-6	6
JC24V50W20H/G1		24	50	850	2950	2000	11.0	44	30	G6.35	C-Bar-6	7
JCD24V55W10H/G1		24	55	990	3000	1000	11.0	40	27.8	G6.35	CC-8	8
JCD24V75W20H/G1		24	75	1350	3000	2000	11.0	44	30	G6.35	CC-6	9
JC12V100W10H/G2		12	100	2200	3100	1000	11.0	44	30	GY6.35	C-Bar-6	10
JC12V100W20H/G1		12	100	2000	3000	2000	11.0	44	30	G6.35	C-Bar-6	7
JC12V100W20H/G2		12	100	2000	3000	2000	11.0	44	30	GY6.35	C-Bar-6	10
JC12V100W20H/G2S	M28	12	100	2000	3000	2000	11.0	44	30	GY6.35S	C-Bar-6	6
JC12V100W10H/B	DZZ	12	100	2200	3000	1000	11.0	52	27	GY9.5	C-Bar-6	11
JCD24V100W20H/G1		24	100	1800	3000	2000	11.0	44	30	G6.35	CC-6	9
JC24V150W10H/G1		24	150	3450	3100	1000	13.5	50	30	G6.35	C-Bar-6	12
JC24V150W20H/G1		24	150	3150	3000	2000	13.5	50	30	G6.35	C-Bar-6	12

Burning position: Any

LAMP FIGURES unit : mm

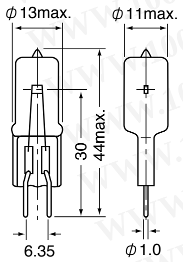


Fig.1

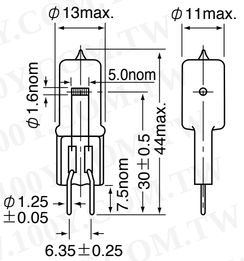


Fig.2

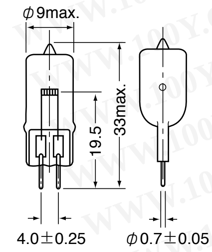


Fig.3

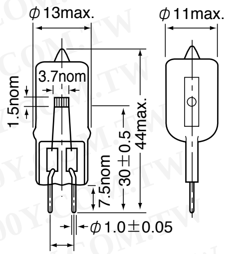


Fig.4

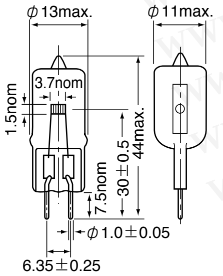


Fig.5

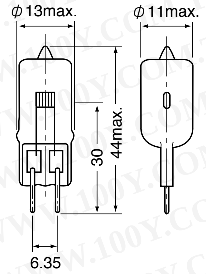


Fig.6

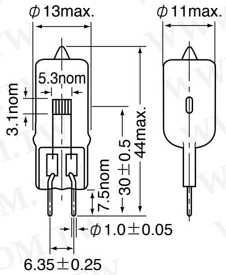


Fig.7

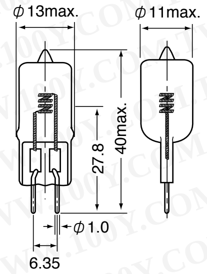


Fig.8

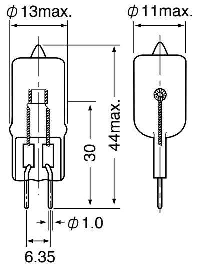


Fig.9

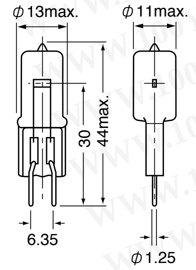


Fig.10

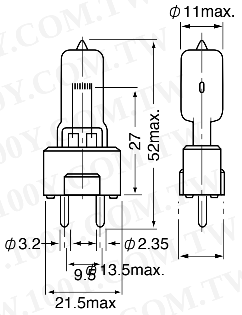


Fig.11

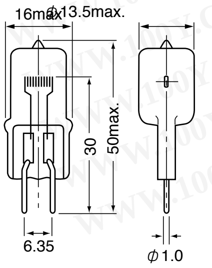
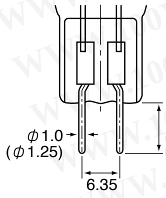
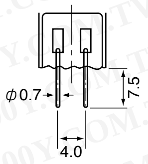


Fig.12

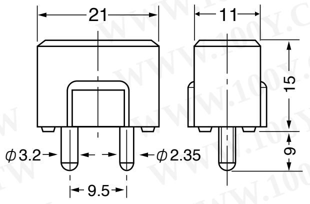
BASE TYPE



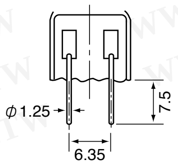
G6.35 (G1)
GY6.35 (G2)



G4 (G4)



GY9.5 (B)



GY6.35S (G2S)

Miscellaneous Projector Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm) M.D.	M.O.L.	L.C.L.	Base	Filament	Fig.No. & Remarks
JCR9.5V55W15H/G1		9.5	55	—	3000	1500	50.0	42	—	GZ6.35	C-8	1A
JCR12V75W15H/G1		12	75	—	3000	1500	50.0	42	—	GZ6.35	C-8	1B
JC24V200W20H/G1		24	200	4400	3000	2000	13.5	50	30	G6.35	C-Bar-6	3
JC24V250W3H/G1	M33	24	250	6750	3300	300	13.5	55	33	G6.35	C-Bar-6	4
JC24V250W20H/G1	M36	24	250	5500	3000	2000	13.5	55	33	G6.35	C-Bar-6	4

Burnig position: Any
Remarks :
A=Aluminium reflector
B=Dichroic mirror

LAMP FIGURES unit : mm

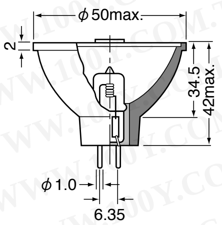


Fig.1

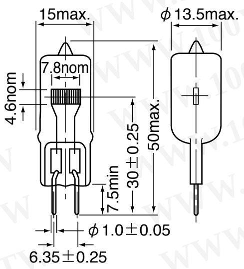


Fig.2

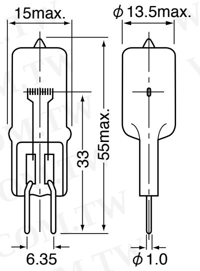
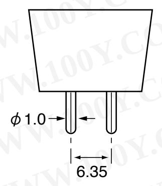
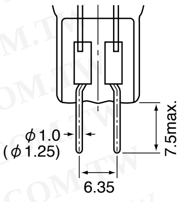


Fig.3

BASE TYPE



GZ6.35 (G1)



G6.35 (G1)

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm) M.D.	M.O.L.	L.C.L.	Base	Filament	Fig. No.
JCD150WL/G1		100,120	150	3300	3100	300	13.5	50	30	G6.35	CC-6	1
JCD200WL/G1		100,120	200	4400	3100	300	15.5	50	33	G6.35	CC-6	1
JCD200WL/G1		220/230	200	4000	3000	150	15.5	63	40	G6.35	CC-13	2
		240/250	200	4000	3000	150	15.5	63	40	G6.35	CC-13	2
JCD250WL/G1		100,120	250	5750	3100	300	15.5	50	33	G6.35	CC-6	1
JCD250WL/G1		220/230	250	5000	3100	200	15.5	63	40	G6.35	CC-13	2
		240/250	250	5000	3100	200	15.5	63	40	G6.35	CC-13	2
JCD300WL/G1	DRA	100,120	300	6900	3100	300	15.3	50	33	G6.35	CC-6	1
JCD300WL/G1	A1/249	220/230	300	6600	3100	300	21.0	63	40	G6.35	CC-13	2
		240/250	300	6600	3100	300	21.0	63	40	G6.35	CC-13	2

Burning position: Any

LAMP FIGURES unit : mm

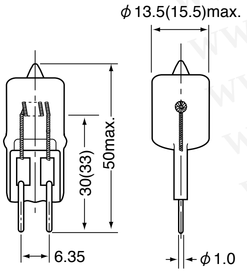


Fig.1

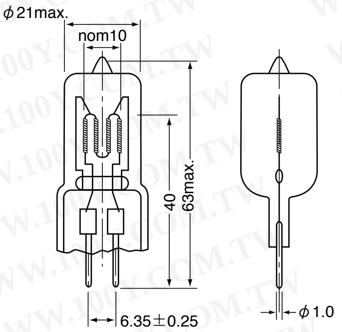
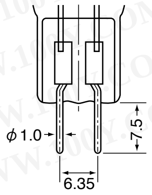
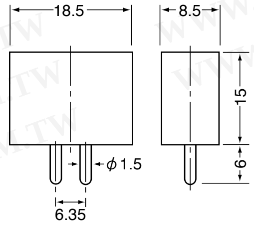


Fig.2

BASE TYPE



G6.35



G6.35-1.5 (A2)

Photographic Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)				Filament	Fig. No.
							M.D. d	L.L. a	M.O.L. l	C to B.E. c		
JPD250W/DXM	DXM	30	250	8400	3400	12	14.0	8	59.6	56.6	CC-8	1
JPD375W/DWZ	DWZ	30	375	7200	3000	1000	14.0	10	79.3	76.3	CC-8	1
JPD420WC/FAL	FAL A1/227	120	420	11000	3200	75	14.0	19	66.9	63.6	CC-8	1
JPD650WC		220/230	650	16250	3200	100	14.0	26	79.3	76.3	CC-8	1
		240	650	16250	3200	100	14.0	26	79.3	76.3	CC-8	1
JPD650WS		220/230	650	19500	3400	25	14.0	26	79.3	76.3	CC-8	1
		240	650	19500	3400	25	14.0	26	79.3	76.3	CC-8	1
JPD800WC/DXX	DXX P2/13	220/230	800	20000	3200	75	14.0	29	79.3	76.3	CC-8	1
		240	800	20000	3200	75	14.0	29	79.3	76.3	CC-8	1
JPD600WC/FCB	FCB A1/228	120	600	16250	3200	75	14.0	19	93.6	90.2	CC-8	1
JPD600WC/FEB	FEB A1/228	220/230	600	15000	3200	75	14.0	19	93.6	90.2	CC-8	1
JPD600WC/FEA	FEA A1/228	240	600	15000	3200	75	14.0	19	93.6	90.2	CC-8	1

Burning position: Any
Base: R7s

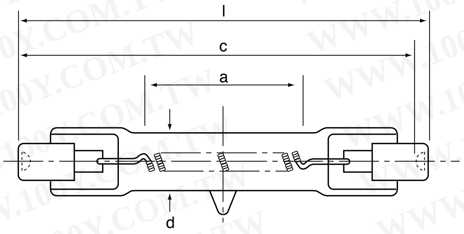


Fig.1

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)				Filament	Fig. No.
							M.D. d	L.L. a	M.O.L. l	C to B.E. c		
JP1000WS	P1/12	220/230	1000	32000	3400	15	11.0	80	127.0	124	C-8	1
JPD650WS/DWY	DWY P1/9	115/120	650	19500	3400	25	14.0	25	79.3	76.3	CC-8	1
JPD1000WS/DXN	DXN	120	1000	30000	3400	30	16.0	25	95.1	92.1	CC-8	1
JCR150W/G1/A1		100	150	—	3000	50	50.0	—	—	—	CC-8	2

Burning position: Any

LAMP FIGURES unit : mm

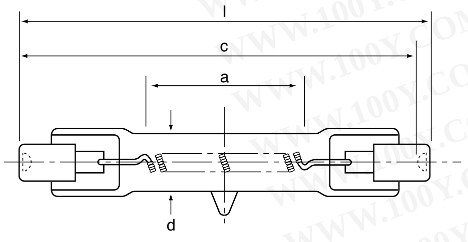


Fig.1

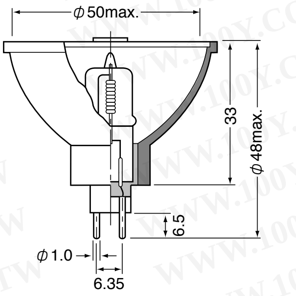
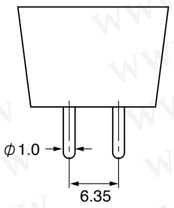


Fig.2

BASE TYPE



GZ6.35 (G1)

Studio Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm) M.D. d	L.L. a	M.O.L. l	C to B.E. c	Filament	Fig. No.
JPD250W/DXM	DXM	30	250	8400	3400	12	14.0	8.0	59.6	56.6	CC-8	1
JPD375W/DWZ	DWZ	30	375	7200	3000	1000	14.0	10.0	79.3	76.3	CC-8	1
JPD400WC/FDA	FDA	120	400	10400	3100	200	14.0	25.0	79.3	76.3	CC-8	1
JPD400W20H/EHR	EHR	120	400	7500	3000	2000	14.0	20.0	79.3	76.3	CC-8	1
JPD420WC/FAL	FAL	120	420	11000	3200	75	14.0	19.0	66.9	63.6	CC-8	1
※ **JPD500WC/FGD**	FGD	120	500	13000	3200	100	14.0	19.0	79.3	76.3	CC-8	1
JPD600WC/FFJ	FFJ	120	600	17000	3200	75	14.0	19.0	66.9	63.6	CC-8	1
JPD600WC/FCB	FCB	120	600	16250	3200	75	14.0	19.0	93.6	90.2	CC-8	1
JPD600WC/FEB	FEB, A1/228	220/230	600	15000	3200	75	14.0	19.0	93.6	90.2	CC-8	1
JPD600WC/FEA	FEA, A1/228	240	600	15000	3200	75	14.0	19.0	93.6	90.2	CC-8	1
JPD650WC/FAD	FAD	120	650	16500	3200	100	14.0	25.0	79.3	76.3	CC-8	1
JPD650WC	——	220/230	650	16250	3200	100	14.0	26.0	79.3	76.3	CC-8	1
JPD650WC	——	240/250	650	16250	3200	100	14.0	26.0	79.3	76.3	CC-8	1
※ **JPD650WC**	——	240	650	16250	3200	100	14.0	26.0	79.3	76.3	CC-8	1
※ **JPD650WS**	——	220/230	650	19500	3400	25	14.0	26.0	79.3	76.3	CC-8	1
※ **JPD650WS**	——	240	650	19500	3400	25	14.0	26.0	79.3	76.3	CC-8	1
JPD650WS/DWY	DWY, P1/9	115/120	650	19500	3400	25	14.0	25.0	79.3	76.3	CC-8	1
※ **JPD750WC/FGB**	FGB	120	750	19500	3200	125	16.0	26.0	95.1	92.1	CC-8	1
JPD800WC/DXX	DXX	220/230	800	20000	3200	75	14.0	29.0	79.3	76.3	CC-8	1
※ **JPD800WC/DXX**	DXX	240	800	20000	3200	75	14.0	29.0	79.3	76.3	CC-8	1
JPD1000WS/DXN	DXN	120	1000	30000	3400	30	16.0	25.0	95.1	92.1	CC-8	1
※ **JPD1000WC/DXW**	DXW	120	1000	25000	3200	150	16.0	25.0	95.1	92.1	CC-8	1
※ **JPD1000WC/DYN**	DYN	120	1000	24500	3100	150	16.0	28.0	111.1	108.1	CC-8	1
※ **JPD1000WC/DYA**	DYA	120	1000	28000	3200	200	16.0	28.0	111.1	108.1	CC-8	1
※ **JPD1000W/DWT**	DWT	120	1000	23400	3000	2000	19.0	20.0	142.9	138.8	CC-8	1
※ **JPD1000WC/FER**	FER	120	1000	27500	3200	500	19.0	20.0	142.9	138.8	CC-8	1
※ **JPD2000WC/FEY**	FEY	120	1000	57000	3200	400	25.0	25.0	142.9	138.8	CC-8	1
※ **JPD2000WC/FEX**	FEX	220/230	2000	50000	3200	200	26.0	35.0	142.9	138.8	CC-8	1
※ **JPD2000WC/FEX**	FEX	240	2000	50000	3200	200	26.0	35.0	142.9	138.9	CC-8	1

※Minimum order quantity is required.

LAMP FIGURES unit : mm

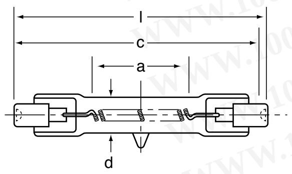


Fig.1

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs)	Dimensions (mm)				Filament	Fig. No.
							M.D. d	L.L. a	M.O.L. l	C to B.E. c		
JP425WC1	—	115/120	425	10600	3200	300	11.0	62.0	119.0	117.6	C-8	1
JP500WC1/FDF	FDF	120	500	13000	3200	400	11.0	75.0	119.0	117.6	C-8	1
JP500WC1	—	115/120	500	13250	3200	400	11.0	68.0	119.0	117.6	C-8	1
JP625WC1	P2/15	115/120	625	16250	3200	75	11.0	68.0	119.0	117.6	C-8	1
※ JP625WC1	P2/15	220/230	625	16250	3200	150	11.0	68.0	119.0	117.6	C-8	1
※ JP625WC1	P2/15	240	625	16250	3200	150	11.0	68.0	119.0	117.6	C-8	1
※ JP800WC1	P2/11	220/230	800	21600	3200	150	11.0	68.0	119.0	117.6	C-8	1
JP1000WC1	—	115/120	1000	26000	3200	300	11.0	75.0	119.0	117.6	C-8	1
JP1000WC1/FCM	FCM	120	1000	27000	3200	400	11.0	65.0	119.0	117.6	C-8	1
JP1000WC1	—	220/230	1000	26000	3200	300	11.0	75.0	119.0	117.6	C-8	1
JP1000WC2	—	115/120	1000	25000	3200	200	11.0	75.0	127.0	125.6	C-8	1
JP1000WC2	—	220/230	1000	25000	3200	200	11.0	75.0	127.0	125.6	C-8	1
※ JP1000WC2	—	240	1000	25000	3200	200	11.0	75.0	127.0	125.6	C-8	1
※ JP1000WS	P1/12	220/230	1000	32000	3400	15	11.0	80.0	127.0	124.0	C-8	1
※ JP1000WC3	P2/7	115/120	1000	26000	3200	200	11.0	115.0	190.5	189.1	C-8	1
JP1000WC3	P2/7	220/230	1000	26000	3200	200	11.0	133.0	190.5	189.1	C-8	1
JP1000WC3	P2/7	240	1000	26000	3200	200	11.0	133.0	190.5	189.1	C-8	1
JP1000W1/FHM	FHM	120	1000	26000	3200	400	11.0	65.0	119.0	117.6	C-8	1
JP1250WC3	P2/12	115/120	1250	33500	3200	200	11.0	120.0	190.5	189.1	C-8	1
※ JP1250WC3	P2/12	220/230	1250	33500	3200	200	11.0	138.0	190.5	189.1	C-8	1
※ JP1250WC3	P2/12	240	1250	33500	3200	200	11.0	138.0	190.5	189.1	C-8	1
※ JP2000WC	—	220/230	2000	54000	3200	200	11.0	260.0	333.5	331.9	C-8	1
※ JP2000WC	—	240	2000	54000	3200	200	11.0	260.0	333.5	331.9	C-8	1
JP2000W10H/Fa4	—	220/230	2000	47000	3050	1000	11.0	250.0	334.4	—	C-8	2
JP2000W10H/Fa4	—	240	2000	47000	3050	1000	11.0	250.0	334.4	—	C-8	2

※Minimum order quantity is required.

LAMP FIGURES unit : mm

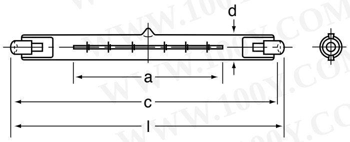


Fig.1

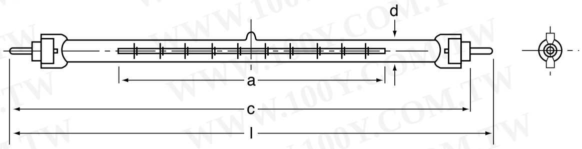


Fig.2

HALOGEN

Studio Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm) M.D.	Dimensions (mm) M.O.L.	Dimensions (mm) L.C.L.	Base	Filament	Fig.No. & Remarks
JCD30V250WSB/B	DYG	30	250	7500	3300	30	22.0	60	36.5	GY9.5	CC-6	3
JCD30V250W/M1	FBV	30	250	7000	3400	30	10.3	61	27.5	E10	CC-8	1
JCD250WC/A1		120	250	6250	3200	75	22.0	61	37.0	G5.3	CC-6	2 Video
JCD600WC/A1	DYH	120	600	17000	3200	75	22.0	61	37.0	G5.3	CC-6	2
JCD650WC/A1	DVY	120	650	20000	3400	25	22.0	61	37.0	G5.3	CC-6	2
JCD600WC/B	DYS	120	600	17000	3200	75	22.0	63	36.5	GY9.5	CC-6	3
JCD650WC/B		120	650	18200	3200	75	22.0	63	36.5	GY9.5	CC-6	3
JCD650WS/B	EKD	120	650	20000	3400	25	22.0	63	36.5	GY9.5	CC-6	3
JCD650WC/B	DYR	220/230	650	16500	3200	50	24.0	66	36.5	GY9.5	2CC-8	4
		240/250	650	16500	3200	50	24.0	66	36.5	GY9.5	2CC-8	4
JPD750WB/G9.5		220/230	750	16500	3000	750	15.0	105	60.5	G9.5	CC-8	6
		240	750	16500	3000	750	15.0	105	60.5	G9.5	CC-8	6
JPD1000WC/G9.5	FEL	100	1000	28000	3200	300	19.0	105	60.5	G9.5	CC-8	6
		120	1000	28000	3200	300	19.0	105	60.5	G9.5	CC-8	6
JPD1000WC/G9.5	FEP	220/230	1000	25000	3200	150	19.0	105	60.5	G9.5	CC-8	6
		240/250	1000	25000	3200	150	19.0	105	60.5	G9.5	CC-8	6
JPD1000WB/G9.5		220/230	1000	22000	3050	500	19.0	105	60.5	G9.5	CC-8	6
		240/250	1000	22000	3050	500	19.0	105	60.5	G9.5	CC-8	6
JCD1000WC/C3		100	1000	28000	3200	75	26.0	75	46.0	GY9.5	2CC-8	5
		120	1000	28000	3200	75	26.0	75	46.0	GY9.5	2CC-8	5
JCD1000WC/C3		220/230	1000	26000	3100	75	26.0	80	46.0	GY9.5	2CC-8	5
		240/250	1000	26000	3100	75	26.0	80	46.0	GY9.5	2CC-8	5

Burning position: Any

LAMP FIGURES unit : mm

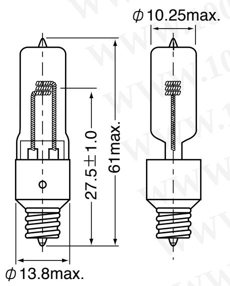


Fig.1

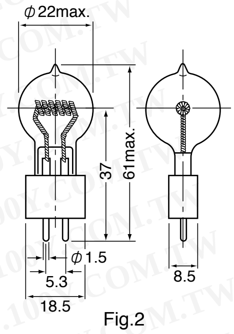


Fig.2

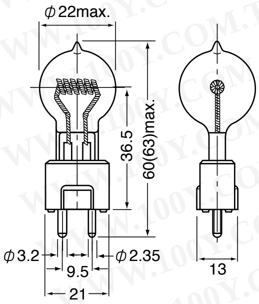


Fig.3

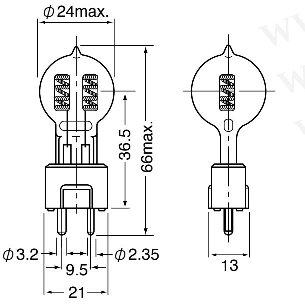


Fig.4

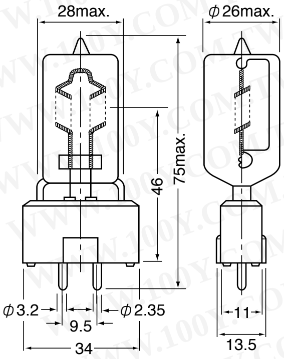


Fig.5

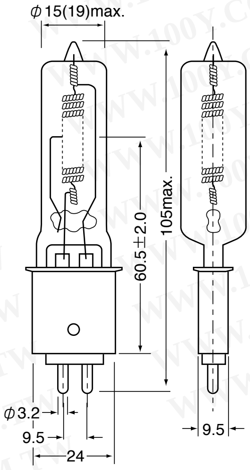
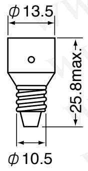
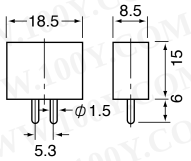


Fig.6

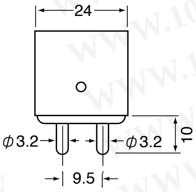
BASE TYPE



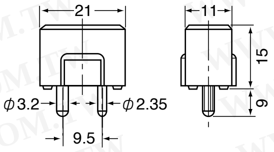
E10 (M1)



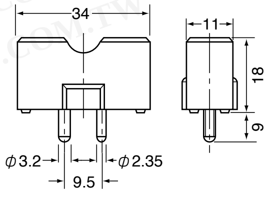
G5.3 (A1)



G9.5



GY9.5 (B)



GY9.5 (C3)

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JP650WC/GX/55	CP23/47	115/120	650	17000	3200	100	22.0	110	55.0	GX9.5	C-13×8	1
JP650WC/GX/55	CP23	220/230	650	16800	3200	100	22.0	110	55.0	GX9.5	C-13×8	1
		240	650	16800	3200	100	22.0	110	55.0	GX9.5	C-13×8	1
JP1000C/GX/55	CP24	115/120	1000	27000	3200	200	25.0	110	55.0	GX9.5	C-13×8	1
JP1000C/GX/55	CP24	220/230	1000	26000	3200	200	25.0	110	55.0	GX9.5	C-13×8	1
		240	1000	26000	3200	200	25.0	110	55.0	GX9.5	C-13×8	1
※ **JP650WC/G22**	CP39	115/120	650	17000	3200	100	22.0	140	63.5	G22	C-13×8	3
※ **JP650WC/G22**	CP39	220/230	650	16800	3200	100	22.0	140	63.5	G22	C-13×8	3
		240	650	16800	3200	100	22.0	140	63.5	G22	C-13×8	3
※ **JP1000WC/G22**	CP40	220/230	1000	26000	3200	200	25.0	140	63.5	G22	C-13×8	3
		240	1000	26000	3200	200	25.0	140	63.5	G22	C-13×8	3
※ **JP2000WC/GY16**	CP43	220/230	2000	54000	3200	400	30.0	145	70.0	GY16	C-13×8	2
		240	2000	57000	3200	400	30.0	145	70.0	GY16	C-13×8	2
※ **JP650WC/P28S**	CP51/69	115/120	650	17000	3200	100	22.0	130	55.5	P28S	C-13×8	4
※ **JP650WC/P28S**	CP51/69	220/230	650	16800	3200	100	22.0	130	55.5	P28S	C-13×8	4
		240	650	16800	3200	100	22.0	130	55.5	P28S	C-13×8	4
※ **JP1000WC/P28S**	CP52	115/120	1000	27000	3200	200	25.0	130	55.0	P28S	C-13×8	4
※ **JP1000WC/P28S**	CP52	220/230	1000	26000	3200	200	25.0	130	55.0	P28S	C-13×8	4
		240	1000	26000	3200	200	25.0	130	55.0	P28S	C-13×8	4

Burning position: Base down ±90°

※Minimum order quantity is required

LAMP FIGURES unit : mm

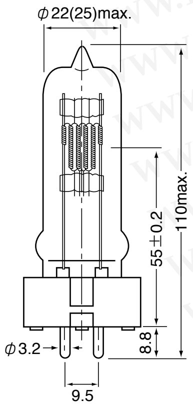


Fig.1

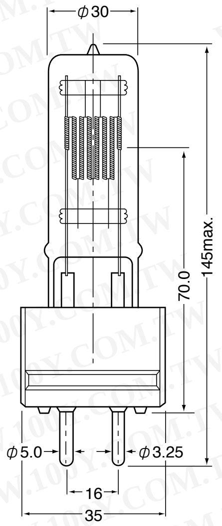


Fig.2

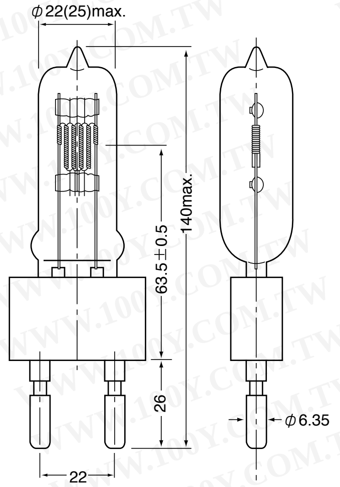


Fig.3

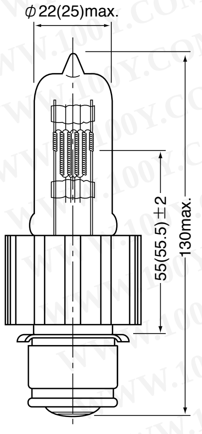


Fig.4

Traffic Signal Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm)			Base	Filament	Fig. No.
							M.D.	M.O.L.	L.C.L.			
JC12V50W20H/G2	M32	12	50	950	3000	2000	11.0	44	30	GY6.35	C-Bar-6	1
JC12V100W20H/G2	M28	12	100	2000	3000	2000	11.0	44	30	GY6.35	C-Bar-6	1
JCD24V100W20H/G1		24	100	1800	3000	2000	11.0	44	30	G6.35	CC-6	2

Burning position: Any

LAMP FIGURES unit : mm

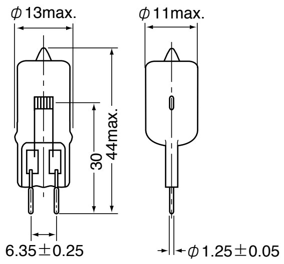


Fig.1

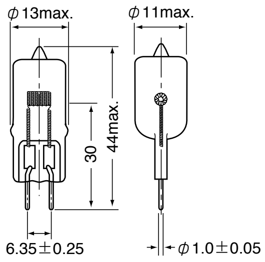
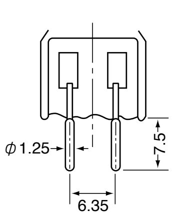
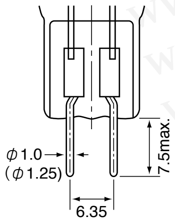


Fig.2

BASE TYPE



GY6.35 (G2)



G6.35 (G1)

Stage Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm) M.D.	M.O.L.	L.C.L.	Base	Filament	Fig. No.
JP500WB/GY/46		115/120	500	11000	3050	300	22.0	90	46.5	GY9.5	C-13×8	1
JP500WB/GY/46	T/18	220/230	500	11000	3050	300	22.0	90	46.5	GY9.5	C-13×8	1
		240	500	11000	3050	300	22.0	90	46.5	GY9.5	C-13×8	1
JP650WB/GX/55		115/120	650	13500	3000	750	25.0	110	55.0	GX9.5	C-13×8	2
JP650WB/GX/55	T/12	220/230	650	13500	3000	750	25.0	110	55.0	GX9.5	C-13×8	2
		240	650	13500	3000	750	25.0	110	55.0	GX9.5	C-13×8	2
JP650W/GY/46	T/26	220/230	650	14300	3050	300	22.0	90	46.5	GY9.5	C-13×8	(2)
		240	650	14300	3050	300	22.0	90	46.5	GY9.5	C-13×8	(2)
JP1000WB/GX/55		115/120	1000	23000	3050	750	25.0	110	55.0	GX9.5	C-13×8	2
JP1000WB/GX/55-BP	T/11	220/230	1000	23000	3050	750	25.0	110	55.0	GX9.5	C-13D	(2)
		240	1000	23000	3050	750	25.0	110	55.0	GX9.5	C-13D	(2)
JP1000WB/GX/55	T/11	220/230	1000	23000	3050	750	25.0	110	55.0	GX9.5	C-13×8	2
		240	1000	23000	3050	750	25.0	110	55.0	GX9.5	C-13×8	2

Burning position: Base down ±90˚

LAMP FIGURES unit : mm

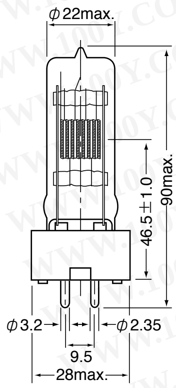


Fig.1

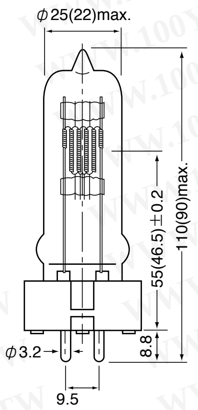
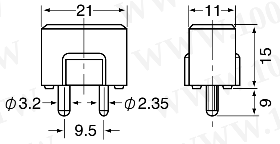
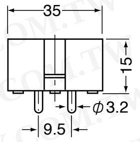


Fig.2

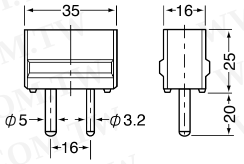
BASE TYPE



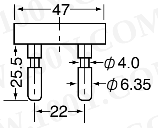
GY9.5



GX9.5



GY16



G22

Aircraft Use Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JCD24V150W10H/G1	24	150	2700	3000	1000	15.0	63.0	38.5	G6.35	CC-6	1
JCD26V150W10H/G1	26	150	2700	3000	1000	15.0	63.0	38.5	G6.35	CC-8	1
JC12V125W10H/BD	12	125	2400	3000	1000	11.0	52.0	28.8	BA15d/19	C-8	2
JCD24V150W5H/BD	24	150	3630	3150	500	14.0	49.0	28.8	BA15d/19	CC-8	3
JCD26V150W5H/BD	26	150	3630	3150	500	14.0	49.0	28.8	BA15d/19	CC-8	3
J10V100W	10	100	1800	2950	2000	11.0	52.0		Metal Sleeve	C-8	4

Burning position: Any

LAMP FIGURES unit : mm

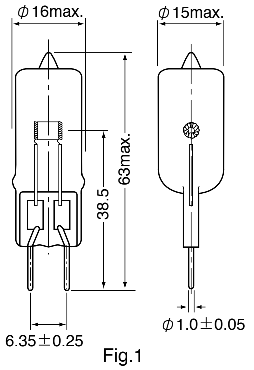


Fig.1

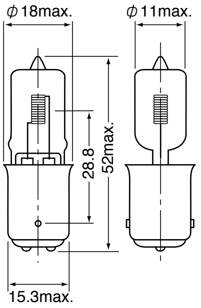


Fig.2

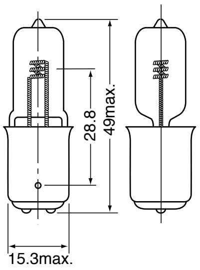


Fig.3

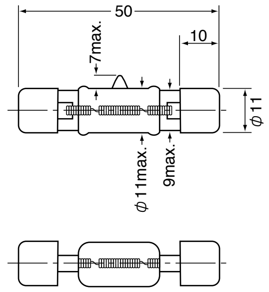
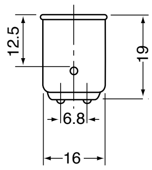


Fig.4

BASE TYPE



BA15d/19 (BD)

Airfeld Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

	Type	Reference or Substitute Lamp	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm) M.D.	M.O.L.	L.C.L.	Base	Filament	Fig. No.
※	**JF6.6A45W/B**		—	45	740	2900	500	11.0	65.0	39.0	GY9.5	C-Bar-6	(1)
	JF6.6A45W02/B	EXM	—	45	750	2900	1000	11.0	44.0	25.4	GY9.5	C-8	2
	JF6.6A150W/B	EWR	—	150	3600	3100	500	13.5	65.0	39.0	GY9.5	C-Bar-6	1
	JF6.6A200W/B		—	200	4300	3000	500	13.5	65.0	39.0	GY9.5	CC-6	3
	JF6.6A30W02/B		—	30	375	2800	1000	11.0	44.0	25.4	GY9.5	C-8	2
※	**JF6.6A115W/B**		—	115	2500	3000	500	13.5	65.0	39.0	GY9.5	C-Bar-6	1
	JF6.6A45W		—	45	630	2850	1000	8.0	52.0		R7s	C-8	4
	JF6.6A100W		—	100	2120	3000	1000	11.0	63.6		R7s	CC-8	5
	JF6.6A100W-2		—	100	2120	3000	1000	11.0	58.0		R7s	CC-8	5
	JF6.6A200W		—	200	4240	3000	1000	11.0	63.6		R7s	CC-8	5
	JF6.6A100W Wire Lead		—	100	2120	3000	1000	11.0	50.0		Wire Lead	CC-8	6
	JF6.6A200W Wire Lead		—	200	4240	3000	1000	11.0	50.0		Wire Lead	CC-8	6

Burning position: Any
※Minimum order quantity is required.

LAMP FIGURES unit : mm

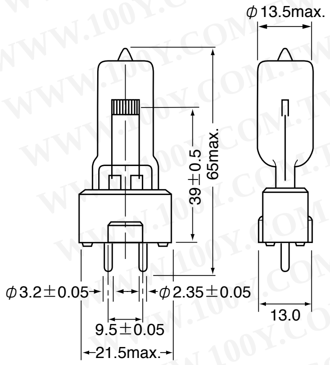


Fig.1

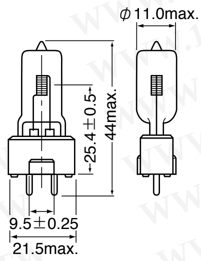


Fig.2

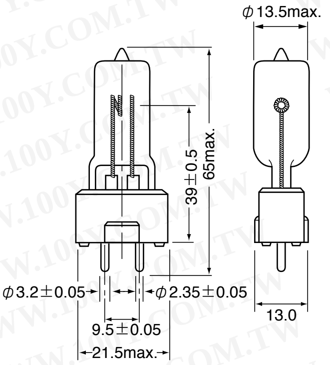
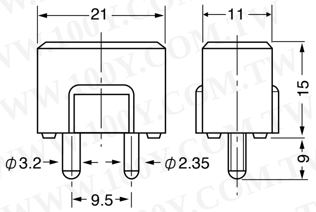


Fig.3

BASE TYPE



GY9.5 (B)'

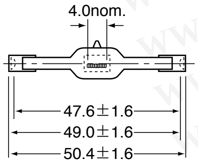


Fig.4

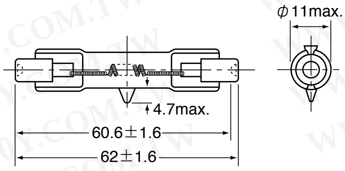


Fig.5

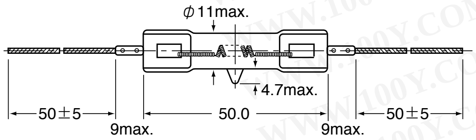


Fig.6

Marine & Boat Use Tungsten Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D. d	M.O.L. l	L.C.L. f			
JCD24V150W5H/BD	24	150	3650	3150	500	14.0	49	28.8	BA15d/19	CC-8	1
JD250W/M5	120	250	4500	2900	2000	15.0	81	61	E11-24	CC-8	2
JD250W/M5	220/230	250	4500	2900	2000	15.0	81	61	E11-24	CC-8	2
	240/250	250	4500	2900	2000	15.0	81	61	E11-24	CC-8	2
JD500W/M5	120	500	9500	2950	2000	15.0	95	66	E11-24	CC-8	2
JD500W/M5	220/230	500	9500	2950	2000	15.0	95	66	E11-24	CC-8	2
	240/250	500	9500	2950	2000	15.0	95	66	E11-24	CC-8	2
JD250W/E2	120	250	4500	2900	2000	15.0	102	73	E27-30	CC-8	3
JD250W/E2	220/230	250	4500	2900	2000	15.0	102	73	E27-30	CC-8	3
	240/250	250	4500	2900	2000	15.0	102	73	E27-30	CC-8	3
JD500W/E2	120	500	9500	2950	2000	14.0	113	81	E27-30	CC-8	3
JD500W/E2	220/230	500	9500	2950	2000	15.0	113	81	E27-30	CC-8	3
	240/250	500	9500	2950	2000	15.0	113	81	E27-30	CC-8	3
JT500W	125/130	500	12000	3000	2000	39.0	215	130	E40	C-8	4
JT500W	230/240	500	10000	3000	2000	39.0	215	130	E40	CC-8	4
	240/250	500	10000	3000	2000	39.0	215	130	E40	CC-8	4
JT1000W	230/240	1000	24000	3000	2000	38.0	255	155	E40	C-8	4
	240/250	1000	24000	3000	2000	38.0	255	155	E40	C-8	4

Burning position: JCD & JD: Any, JT: Horizontal ±15°

LAMP FIGURES unit : mm

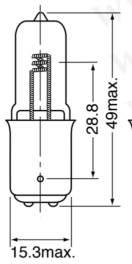


Fig.1

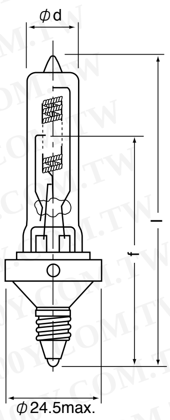


Fig.2

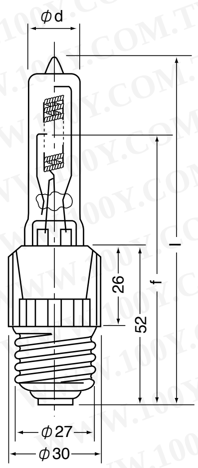
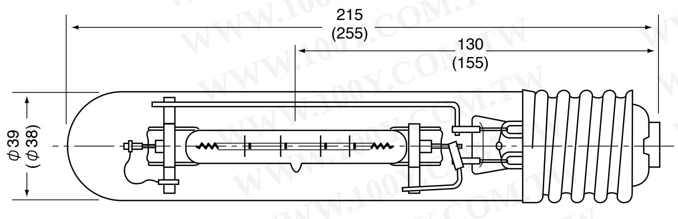


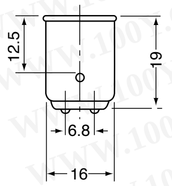
Fig.3



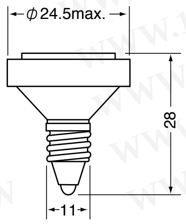
( )1000W

Fig.4

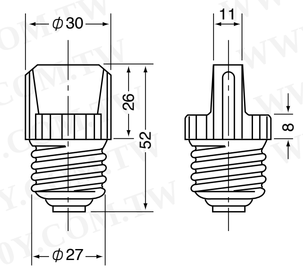
BASE TYPE



BA15d/19 (BD)



E11-24 (M5)



E27/30 (E2)

Quartz Heaters

Infrared Ray lamps

FEATURES

1. Clean heat source : No gas release, no dust release
2. Compact, light weight and high power radiation
3. Rapid start up for heating and rapid cool down of the heat source after power-off
4. Unifomity of heat radiation
5. High efficiency heating and to the lamp design which can adapt to the absorption wave length of an object

PHYSICAL DATA AND CHARACTERISTICS

Type	Rated voltage(V)	Watts (W)	Colour Temp.(K)	M.O.L. (mm)	L.C.L. (mm)	Base	Rated Av. Life (hrs)	Filament	Fig. No.
Double ended type									
QIR100/110V350W	100/110	350	2500	222	—	lead wire	5000	C-8	1
QIR100/110V400W	100/110	400	2500	222	—	lead wire	5000	C-8	1
QIR100/110V500W	100/110	500	2500	222	—	lead wire	5000	C-8	1
QIR115/125V300W	115/125	300	2500	222	—	lead wire	5000	C-8	1
QIR115/125V376W	115/125	376	2500	222	—	lead wire	5000	C-8	1
QIR120V500W	120	500	2500	222	—	lead wire	5000	C-8	1
QIR120V900W	120	900	2500	422	—	R7s lead wire	5000	C-8	2
QIR200/220V1000W	200/220	1000	2500	350	—	R7s lead wire	5000	C-8	1
QIR220V1000W	220	1000	2500	512	—	lead wire	5000	C-8	2
QIR240V600W	240	600	2500	280	—	lead wire	3000	C-8	1
QIR240V700W	240	700	2500	290	—	lead wire	3000	C-8	1
QIR240V700W/L	240	700	2500	530	—	lead wire	3000	C-8	1
QIR240V1000W	240	1000	2500	303	—	lead wire	5000	C-8	1
QIR240V1000W/R7s	240	1000	2500	303	—	R7s lead wire	5000	C-8	2
QIR240V1000W/L	240	1000	2500	348	—	lead wire	5000	C-8	1
QIR240V1500W	240	1500	2500	530	—	lead wire	3000	C-8	1
QIR240V1600W	240	1600	2500	501	—	R7s lead wire	5000	C-8	2
QIR240V2000W	240	2000	2500	350	—	lead wire	5000	C-8	1
QIR240V2000W/L	240	2000	2500	650	—	lead wire	3000	C-8	1
QIR480V2500W	480	2500	2400	730	—	R7s lead wire	5000	C-8	2
QIR480V3650W	480	3650	2400	1055	—	R7s lead wire	5000	C-8	2
QIR480V6000W	480	6000	3200	298	—	lead wire	150	C-8	1
Single ended type									
QAP120V2000W/G22	120	2000	3000	150	80	G22	1000	CC-8	3

LAMP FIGURES unit : mm

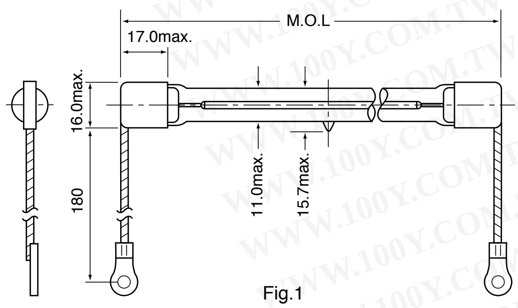


Fig.1

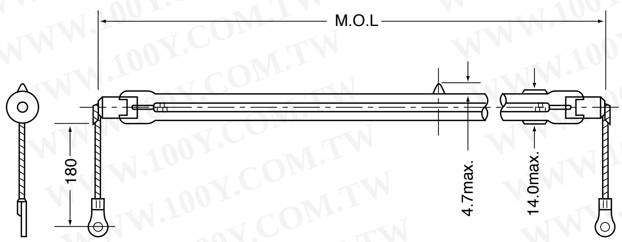


Fig.2

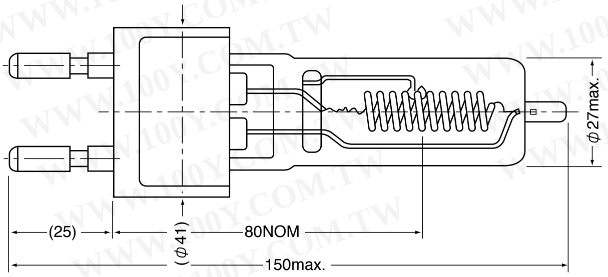


Fig.3

Infrared Ray lamps

MR16 Reflector type heat lamps

Type	Rated voltage(V)	Watts (W)	Colour Temp.(K)	Reflector coating	Base	Rated Av. Life (hrs)	Filament	Working distance (mm)	Fig. No.
JCR12V100W10H/G1/AL	12	100	2800	Aluminum	GZ6.35	1000	C-8	42	1
JCR12V100W10HG/G1	12	100	2800	Gold	GZ6.35	1000	C-8	42	1
JCR15V150WG/G1	15	150	3350	Gold	GZ6.35	50	C-8	42	1
JCR24V200W10HAL/G2/H50	24	200	2800	Aluminum	GX5.3	1000	CC-8	44.5	2

DRAWING unit : mm

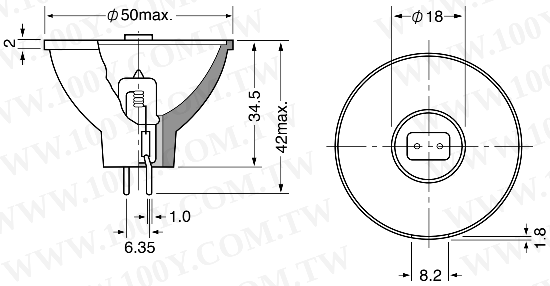


Fig.1

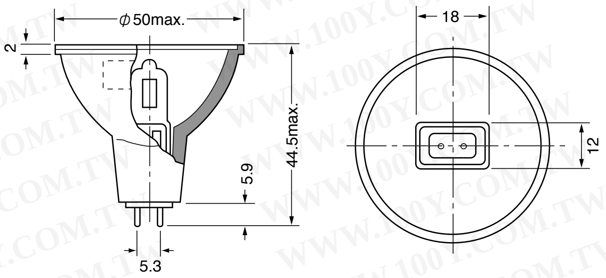


Fig.2

Miniature Halogen Lamps

PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Approx. Initial Lumens (ℓm)	Colour Temp. (k)	Rated Av. Life (hrs.)	Dimensions (mm)			Base	Filament	Fig. No.
						M.D.	M.O.L.	L.C.L.			
JC6V10W20H/G4	6	10	140	2850	2000	9.0	33.0	19.5	G4	C-6	1
JC6V20W20H/G4	6	20	280	2850	2000	9.0	33.0	19.5	G4	C-6	1
JC12V20W20H/G4	12	20	350	2850	2000	9.0	30.0	19.5	G4	C-6	2
JC12V20W20H/BS	12	20	350	2850	2000	9.0	36.5	15.5	Ba9s	C-6	3

Burning position: Any

LAMP FIGURES unit : mm

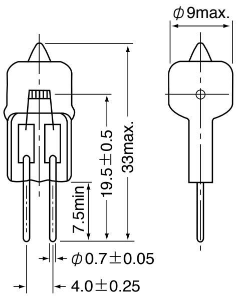


Fig.1

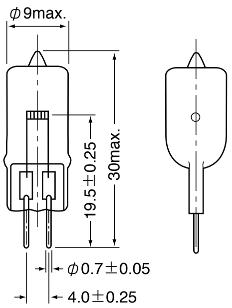


Fig.2

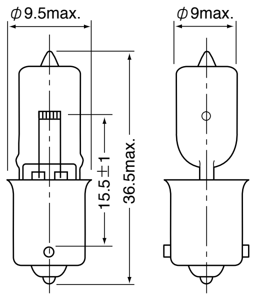
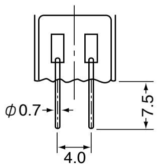
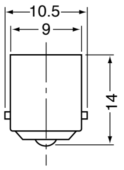


Fig.3

BASE TYPE



G4



Ba9S

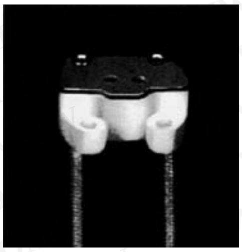
Cross Reference Guide (Reference only)

ANSI CODE	IWASAKI TYPE NO.	ANSI CODE	IWASAKI TYPE NO.	ANSI CODE	IWASAKI TYPE NO.	ANSI CODE	IWASAKI TYPE NO.
BAB	JR1203.000(BAB)	EFP	JCR12V100W/G1	ETE	JD120V100WF/02/M2	FCR	JC12V100W/G2
BRJ	JC15V150W/G1	EFR	JCR15V150W/G1	EVA	JC12V100W10H/G2	FCS	FCS24V150W
BRL	JC12V50W/G1	EHG	JPD120V750WB/G9.5	EVR	JD120V500W/M2	FCZ	J120V500WF
DRA	JCD300WL/G1	EHJ	JC24V250W/G1	EXN	JR1504.000(EXN)	FDA	JPD400WC/FDA
DVS	110/120V500W	EHM	J110/120V300W	EXT	JR1501.000(EXT)	FDS	JC24V150W
DVY	JCD650WC/A1	EJL	JCR24V200W/G2	EXZ	JR1502.000(EXZ)	FDT	JC12V100W
DWY	JPD120V650WS/DWY	EJM	JCR21V150W/G2	EYB	JCD82V360W/EYB	FDV	JC24V150W1H/G1
DXM	JPD250W/DXM	EKD	JCD120V650WS/B	EYC	JR2703.000(EYC)	FDW	FDW24V150W
DXN	JPD1000WS/DXN	ELB	JCR30V80W/G2	EYF	JR2701.000(EYF)	FDX	JC12V100W
DXW	JPD1000WC/DXW	ELC	JCR24V250W/G2	EYH/FKT	JCD120V250WC/A1	FEA	JPD600WC/FEA
DXX	JPD800WC/DXX	ELH	JCR120V300W/ELH	EYP	JR1403.000(EYP)	FEB	JPD600WC/FEB
DYA	JPD1000WC/DYA	ENL	JR1503.000(ENL)	EYR	JR1401.000(EYR)	FEL	JPD120V1000WC/G9.5
DYH	JCD120V600WC/A1	ENX	JCR82V360W/ENX	EYS	JR1402.000(EYS)	FEP	JPD240V1000WC/G9.5
DYH	JCD220V600WC/A1	EPZ	JR1505.000(EPZ)	EYV	JD130V150WF/M2	FEX	JPD2000WC/FEX
DYN	JPD120V1000WC/DYN	ESL	JD120V150W/02/M2	EYW	JD130V500W/M2	FFJ	JPD600WC/FFJ
(DYR)	(JCD530WC/B)	ESN	JD120V100W/02/M2	EYX	JD120V500WF/M2	FGB	JPD750WC/FGB
DYR	JCD220V650WC/B	ESP	JD120V150W/02/BD	FAD	JPD120V650WC/FAD	FGD	JPD500WC/FGD
DYR	JCD240V650WC/B	ESR	JD120V100W/02/BD	FAL	JPD120V420WC/FAL	FSA	JDR120V75W/2N
DYS/BHC/DYV	JCD120V600WC/B	ESS	JD120V250W/BD	FBV	JCD30V250W/M1	FSB	JDR120V75W/2M
DZE	JC24V150W	ESX	JR1201.000(ESX)	FCB	JPD120V600WC/FCB	FSC	JDR120V100W/2N
DZZ	JC12V100W	ESY	JCD150WL/G1	FCL	J120V500W	FSD	JDR120V75W/2W
EFM	JCR8V50W/G1	ETB	JD120V250WF/BD	FCM	JP120V1000WC1	FSE	JDR120V100W/2M
EFN	JCR12V75W/G1	ETD	JD120V100WF/02/BD			FSF	JDR120V100W/2W

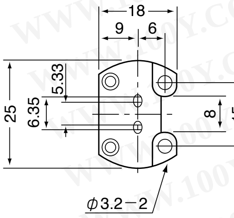
Sockets for 2PIN Base Type

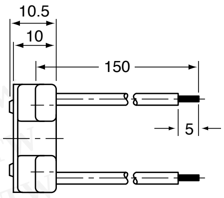
NICKEL CONTACT TYPE (unit : mm)

HS-300

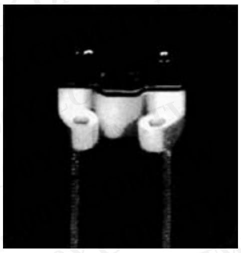


Adaptable Lamp Base : G5.3, GX5.3
Lead Wire Length : 200mm

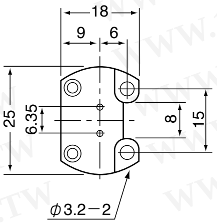


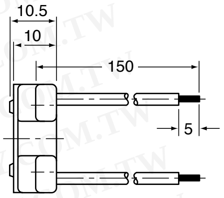


HS-310

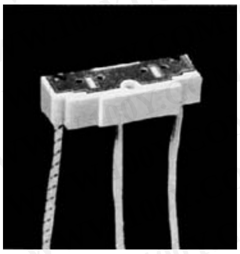


Adaptable Lamp Base : G6.35, GZ6.35, GY6.35
Lead Wire Length : 200mm

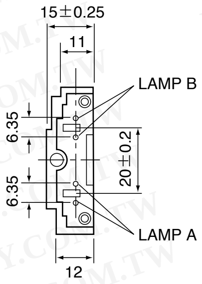


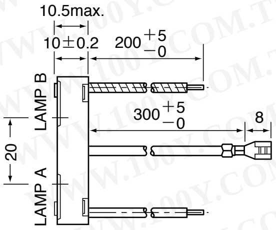


HS-900D



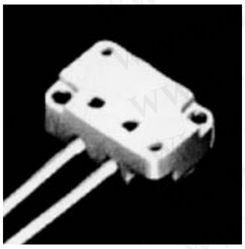
Adaptable Lamp Base : G6.35, GY6.35
Lead Wire Length : 200mm



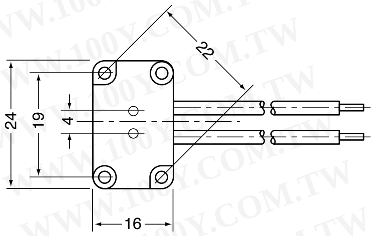


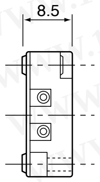
COPPER ALLOY CONTACT TYPE (unit : mm)

HS-G400



Adaptable Lamp Base : G4
Lead Wire Length : 200mm

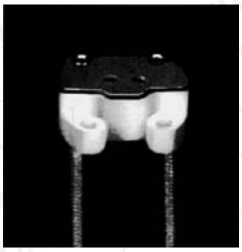




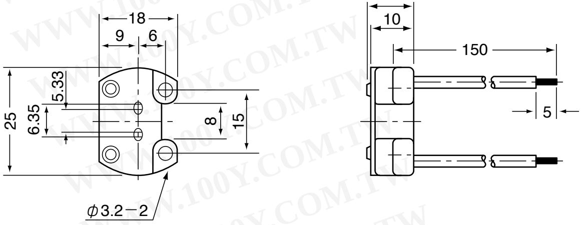
Sockets for 2PIN Base Type

NICKEL CONTACT TYPE (unit : mm)

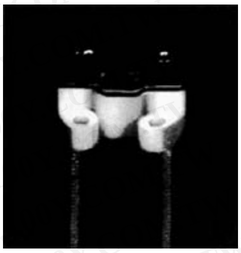
HS-300



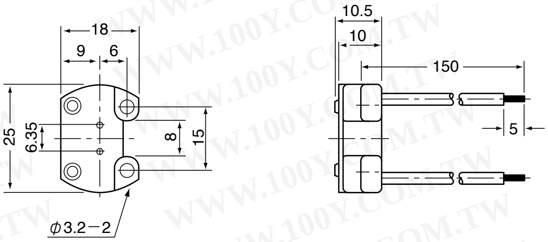
Adaptable Lamp Base : G5.3, GX5.3
Lead Wire Length : 200mm



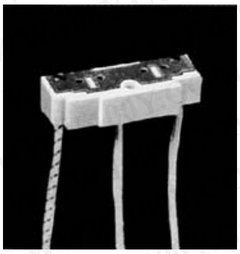
HS-310



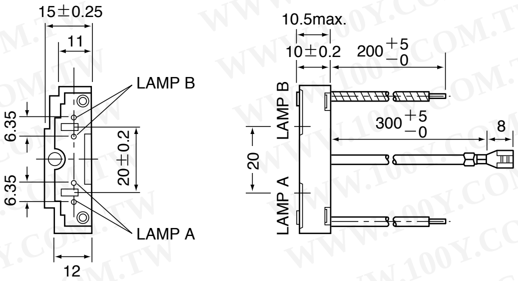
Adaptable Lamp Base : G6.35, GZ6.35, GY6.35
Lead Wire Length : 200mm



HS-900D

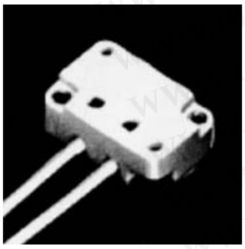


Adaptable Lamp Base : G6.35, GY6.35
Lead Wire Length : 200mm

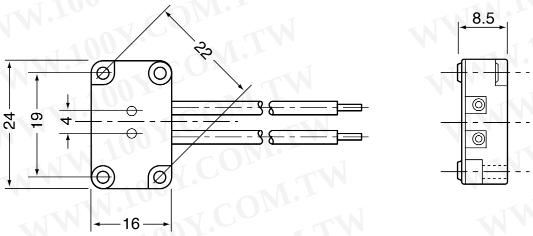


COPPER ALLOY CONTACT TYPE (unit : mm)

HS-G400



Adaptable Lamp Base : G4
Lead Wire Length : 200mm



3 INCANDESCENT REFLECTOR LAMPS

EYE Reflector Lamps for Outdoor Use

PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Bulb	Base	Std.Pkg. Qty.	M.O.L. (mm)	Total Lumens (ℓm)	Max.Light Intensity (cd)	Rated Av. Life (hrs)
90	**RS220V 90WH**	R120	E27	10	160	760	4000	2000
	RF220V 90WH	R120	E27	10	160	700	400	2000
135	**RS220V 135WH**	R120	E27	10	160	1280	5920	2000
	RF220V 135WH	R120	E27	10	160	1160	960	2000
180	**RS220V 180WH**	R120	E27	10	160	1840	7200	2000
	RF220V 180WH	R120	E27	10	160	1550	1350	2000
270	**RS220V 270WH**	R135	E40	10	214	2920	5200	2000
	RF220V 270WH	R135	E40	10	214	2920	3200	2000
450	**RS220V 450WH**	R160	E40	10	241	5120	9000	2000
	RF220V 450WH	R160	E40	10	241	5120	5280	2000
900	**RS220V 900WH**	R200	E40	6	315	10800	16000	2000
	RF220V 900WH	R180	E40	6	320	10800	8000	2000

240 range lamp is available upon request, but characteristics may vary somewhat.

EYE HI-BEAM Reflector Lamps for Indoor Use

PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Bulb	Base	Std.Pkg. Qty.	M.O.L. (mm)	Beam Lumens (ℓm)	Max.Light Intensity (cd)	Rated Av. Life (hrs)
Frosted Type								
100	**RM100W/F**	R100	E27	10	143	240	400	1500
150	**RM150W/F**	R100	E27	10	143	480	800	1500
200	**RM200W/F**	R110	E27	10	158	640	1120	1500
300	**RM300W/F**	R120	E27	10	166	800	1760	1500

EYE Infrared Ray Lamps

OUTLINE

The EYE Infrared Ray lamp has a built-in reflector and is designed to produce more infrared rays at a lower filament temperature compared with that of ordinary incandescent lamps.

Our infrared Ray lamps are manufactured strictly in accordance with Japanese industrial Standards (JIS) at our authorized factory. Materials used for filaments, outer bulbs, bases, etc., are carefully selected under strict quality control standards and manufactured with precision and care.

FEATURES

1.As heat radiation increases, it is absorbed directly by the object materials with minimal loss and high speed.

2.These infrared ray lamps can be installed in small places because of their compact size and their high efficiency is insured by a built-in vaporized aluminum reflector.

3.A mechanical base is employed, instead of a conventional asbestos one, which increases mechanical strength as it reduces the possiblity of accidents due to a loose base or an electric shock.

4.The outer bulb is made of hard, heat-resistant glass which ensures satisfactory service in all weather conditions.

5.Because the gas is sealed into bulbs with a special mechanism, a higher efficiency can be maintained and reflector deterioration can be eliminated. Thus, EYE infrared Ray lamps have longer life with less maintenance costs.

6.The replacement of lamps and cleaning can be performed easily and safety.

APPLICATIONS

Painting Industries: Heating for electric apparatus, painting of automobiles, etc.

Textile Industries: Heating for starching,dyeing and weaving of textiles.

Metal Industries: Heating for soaking pit and galvanizing line. Heating for cast iron and sand casts.

Electrical Industries: Heating for motor, generator and electric cathode.

Chemical Industries: Heating for plastics, fine products, rubber, vinyl, oiled paper, clothes, etc.

Glass Industries: Heating for glass and mirror coatings, bottles and glass plates.

Food Industries: Heating for mushrooms, tea, seaweed, dried small sardines and orher agricultural and fishery products.

Printing Industries: Heating for photogravure printing, metal plate printing, papers for printing and colour rendition processes

Pharmaceutical Industries: Heating for powder and tablets, explosives, ampoules and germicidal use.

Medical use: Warming affected parts and drying gypsum, etc.

Beauty Salon: For beauty culture and permanent dryers.

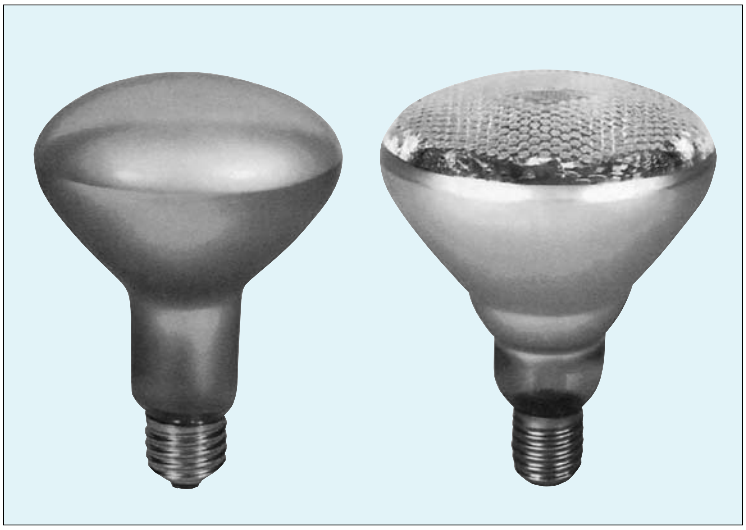
Household: Heating for bathroom, Kitchen and bedroom.

Livestock and Poultry Farm: Heating System used for example in egg incubator, pigfarms and sericulture.

PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Bulb	Base	Std.Pkg. Qty.	M.O.L. (mm)	Initial Characteristics		Colour Temperature (K)	Rated Av. Life (hrs)
						Total Radiant Flax (W)	Radiant Efficiency (%)		
125	**IR100/110V125WRH**	R127	E27	10	188	80min.	65min.	2300	6000
	IR220V125WRH	R127	E27	10	188	77min.	62min.	2250	6000
250	**IR100/110V250WRH**	R127	E27	10	188	175min.	70min.	2400	6000
	IR220V250WRH	R127	E27	10	188	165min.	66min.	2350	6000
375	**IR100/110V375WRH**	R127	E27	10	188	270min.	72min.	2400	6000
	IR220V375WRH	R127	E27	10	188	255min.	68min.	2400	6000

EYE Neodymium Lamps



OUTLINE

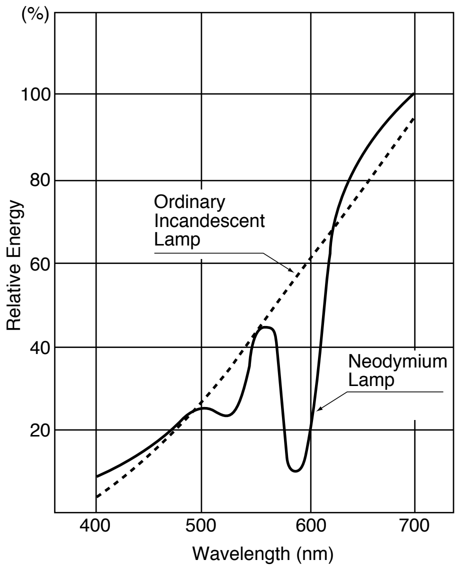
1. The EYE Neodymium Lamp is designed to highlight and enhance all the colours of the visible spectrum.
2. Standard incandescent lamps tend to shade the colour spectrum with a yellow tint, reducing the brilliance of colour.
3. By introducing neodymium (rare earth element) into the lamp, absorption to 590nm's of the visible light spectrum is obtained and therefore the natural colour is highlighted.
4. The EYE Neodymium Lamp creates true colours and is ideal for use where good colour rendition is required for merchandising consumer products.

FEATURES

1. Enhanced presentation of products by highlighting appealing natural colour.
2. Can be used in both commercial and domestic applications.
3. The EYE Neodymium Reflector type lamp is an energy-efficient light source.

APPLICATIONS

1. Domestic lighting, Department stores, Supermarkets, Meat Markets, Beauty Salons, Florist shops.
2. EYE Neodymium Lamps are especially recommended where colour plays an important role in the consumer decision.
3. EYE Neodymium Lamps create a pleasant atmosphere in Restaurants, Coffee shops, Bars, Hotel lobbies.
4. EYE Neodymium Lamps also are effective in enhancing that special display or architectural feature.

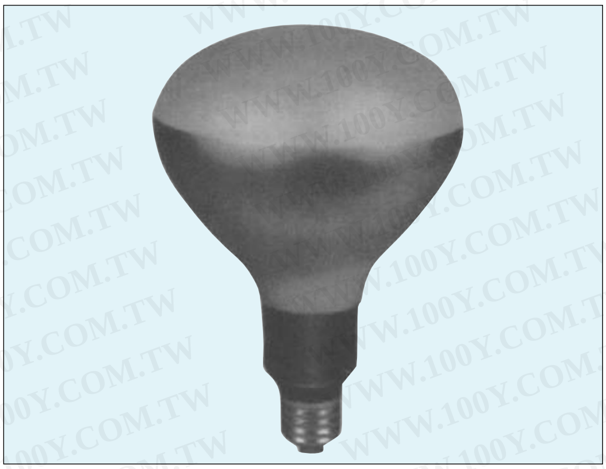


PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Bulb	Base	Std.Pkg. Qty.	M.O.L. (mm)	Beam Lumens (ℓm)	Max.Light Intensity (cd)	Rated Av. Life (hrs)
100	**ARF100N/PAR38**	PAR38	E27	10	147	650	1800	1500
150	**RF150N/R127**	R127	E27	10	171	1200	1300	1500
	RS150N/R127	R127	E27	10	171	1100	2800	1500
	ARF150N/PAR38	PAR38	E27	10	147	1100	2800	1500

※When ordering, please specify the voltage required.

EYE Photographic Incandescent Lamps



PRF (Photo-Flood)

OUTLINE

EYE Photo-Flood provides broad-beam main or fill lighting. Shadows are minimized particularly when cross beams from several lamps are employed.
Combinations of floods and spots produce excellent effects.

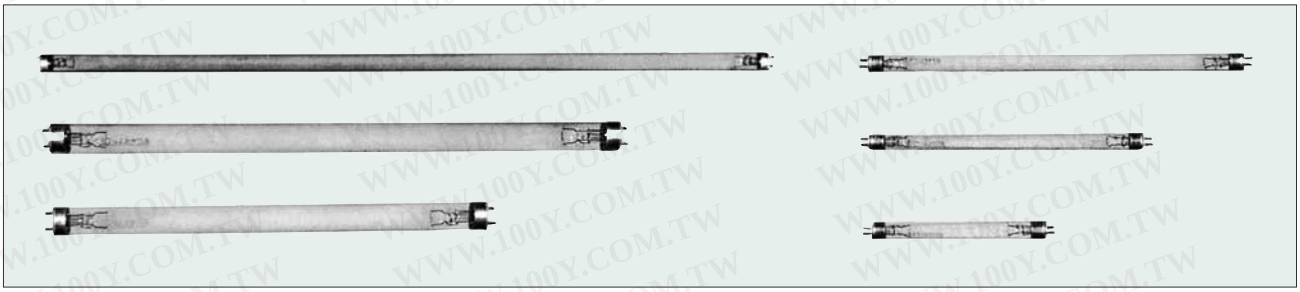
PHYSICAL DATA AND CHARACTERISTICS

Type	Volts (V)	Watts (W)	Dimensions and lamp base			Initial characteristics		
			Base	Bulb shape	Overall length (mm)	Initial Lumens (ℓm)	Rated Av. Life (hrs)	Colour Temp. (K)
Flood								
PRF100V500W/E26	100	500	E26	R127	175	9000	100	3200
PRF120V500W/E26	120	500	E26	R127	175	9000	100	3200
PRF230V250WD/E27	230	250	E27	R100	135	4000	50	5900
PRF230V500W/E26	230	500	E26	R127	175	8100	100	3200
PRF230V500W/E27	230	500	E27	R127	175	8100	100	3200

4

SPECIAL APPLICATION LAMPS

EYE Ultraviolet Germicidal Lamps



OUTLINE

It is well known that natural sunlight has germicidal properties which, as scientists have discovered, are the result of ultraviolet rays. Further research revealed additional properties of ultraviolet light and eventually succeeded in it's artificial production.

As a result, our germicidal lamps have been successfully designed and manufactured to produce the highest ultraviolet ray of 2537 angstrom for the most effective germicidal reaction.

EYE germicidal lamps also have an excellent reputation for efficiency, economy and effectiveness among pharmaceutical industries for the prevention of offensive odors, elimination of harmful bacteria from drinking water and food stuffs, as well as a wide range of other applications.

CHARACTERISTICS

1.Effective against all kinds of bacteria.

2.Does not affect at all the quality of the subject to the radiation.

3.Can be easily handled at low cost.

4.Germicidal reaction completed without alteration of taste and smell. The germicidal reaction created by the ultraviolet rays is completely harmless to humans-it has the same effect as boiling water.

5.Air, water and the surfaces of other materials are effectively rid of bacteria by EYE germicidal lamps.

PHYSICAL DATA AND CHARACTERISTICS

Germicidal Lamps

Type	Nominal Watts (W)	Bulb Designation	Base	Std.Pkg. Qty.	Overall Length (mm)	Diameter (mm)	Approx. Tube Amperes (A)	Ultraviolet Output Total Watts	Ultraviolet Micro Watts at 1 Meter(4)	Rated Av. Life (hrs)	Auxiliary (Ballast,Starter, Socket,Etc.)
G30T8	30	T-8	Medium Bipin	120	893	25.5	0.355	11.6	117	8000	Same as for 30W Fluorescent Lamp
G15T8	15	T-8	Medium Bipin	200	436	25.5	0.300	4.8	49	8000	Same as for 15W Fluorescent Lamp
G10T8	10	T-8	Medium Bipin	200	330	25.5	0.230	2.6	27.1	6000	Same as for 10W Fluorescent Lamp
G8T5	8	T-5	Medium Bipin	500	287	15.5	0.170	2.5	26	6000	Same as for 8W Fluorescent Lamp
G6T5	6	T-5	Medium Bipin	500	210	15.5	0.147	1.6	16.7	6000	Same as for 6W Fluorescent Lamp
G4T5	4	T-5	Medium Bipin	500	134	15.5	0.162	0.8	8.3	6000	Same as for 4W Fluorescent Lamp

NOTE:

1.Wattage is bulb lamp Watts only.

2.Length is base face to base face.

3.2537 angstrom output after 100 hours burning measured in still air at 26° C (80° F) ambient and under specified test conditions.

4.Microwatts per square centimeter at one meter from lamp.

EYE Black Light Lamps

OUTLINE

"EYE" Black Light is designed to effectively absorb visible light and emit near ultraviolet rays through a dark bulb of special filter glass. Using a near ultraviolet phosphor like that used for fluorescent chemical lamps, it produces highly efficient ultraviolet rays without a loss of visible light.

APPLICATIONS

1.Food Industries:
To inspect classification, freshness, harmful mixtures, etc. in food stuffs.

2.Metal and Mining industries:
To discriminate ores such as uranium, tungsten, etc. and also to detect the defects on the surface of metals and others.

3.Textile industries:
To analyse the materials in textiles by their unique fluorescent reaction.

4.Lighting:
Illumination for sign boards, show windows, wall decorations, stages, control boards, etc.

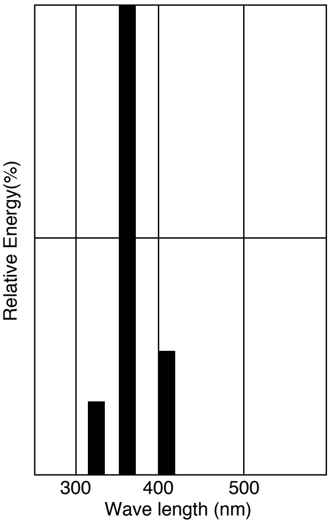
5.Reproduction:
To utilize the maximum sensitivity to light at 350-400nm, the black light to be used for the effective source of photo-sensitivity.

6.Insecticidal Use:
To ensure the effective elimination of harmful insects because of their sensitive reaction to blue light or near ultraviolet rays.

7.Promotion of Photo-Chemical Reaction:
To be utilized for the acceleration of photo-chemical reactions such as chloride addition to BHC, composition of artificial rubber, disposal of pulps, etc.

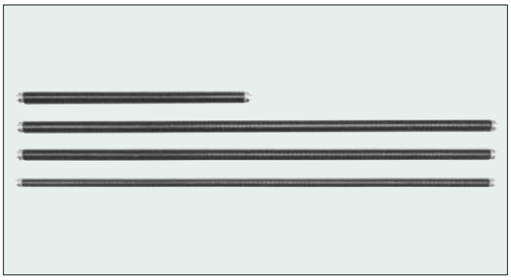
8.Discovery of Forgery:
To discover the forgery of checks, stamps, documents, etc. and also the imitation of jewels.

SPECTRAL DISTRIBUTION



PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Bulb	Base	Std.Pkg. Qty.	M.O.L. (mm)	Lamp		Rated Av. Life (hrs)
						Voltage (Volts)	Current (A)	
100	**H100-BL**	E75	E27	12	177	115	1.00	3000
125	**H125-BL**	E75	E27	12	177	125	1.15	3000
250	**H250-BL**	BT100	E40	12	250	130	2.13	3000
400	**H400-BL**	BT116	E40	12	292	135	3.25	3000
160	**160W SB/E24-BL**	E24	E27	12	175	220/230	0.80	3000



PHYSICAL DATA AND CHARACTERISTICS

Watts (W)	Type	Dimension		Lamp		Rated Av. Life (hrs)
		Length (mm)	Diameter (mm)	Voltage (Volts)	Current (A)	
4	**FL 4 BLB**	134	15	100	0.125	3000
6	**FL 6 BLB**	210	15	100	0.147	3000
8	**FL 8 BLB**	287	15	100	0.170	3000
10	**FL 10 BLB**	330	25	100	0.230	4000
15	**FL 15 BLB**	436	25	100	0.300	4000
20	**FL 20 BLB**	580 or 588.5	32	100	0.350	4000
40	**FL 40 BLB**	1198	32	200	0.415	5000

For the safety use. please refer to the instruction(caution) sheet in a package.

EYE Xenon Flashtubes

OUTLINE

"EYE" Xenon Flashtubes and Xenon Arc Lamps are products manufactured by Iwasaki Electric Co.,Ltd., the specialist in lamps and lighting fixture. Their high quality and excellent characteristics have been appreciated by many customers and are responsible for their outstanding reputation.

FEATURES

1. "EYE" Xenon Flashtube converts electric energy charged in a capacitor into a high intensity flash in a matter of seconds.
2. "EYE" Xenon Flashtube is powerful in a misty atomosphere owing to high penetration of its flash and is used as a warning light or beacon in misty, rainy and cloudy conditions. Such applications increase year by year.

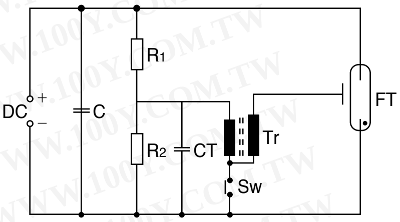
Guidance for selection of Xenon flashtubes and lamps on each application

1. Arc length
2. Tube overrall length
3. Tube diameter
4. Quality of tube
5. Spectrum distribution
6. Lamp operating voltage
7. Lamp input wattage
8. Flash repetition (Flash/min.)
9. Trigger voltage
10. Lamp life

APPLICATIONS

Photograph
Laster stimulation
Marine beacons
Aerial beacons
Signals
Photographic plate making and printing use
Emergency light
Warning signals
Laboratory use
Strobo scopic use
Timing lights
Wheel balancer
Advertising display
Beam-guns
General lighting

Trigger coil (Flash-tubes)
The most suitable trigger coil is used for obtaining the maximum intensity of flashtubes.



DC:Input power source
FT:Flashtube
C:Capacitor
R1R2:Registor
CT:Trigger capacitor
Tr:Trigger transformer
Sw:Trigger switch

Energy consumption
$E=1/2CV^2$
E=Energy in joules
C=Capacitance,in microfarads
V=Operating voltage, in kilo-volts Other types may be available upon request.

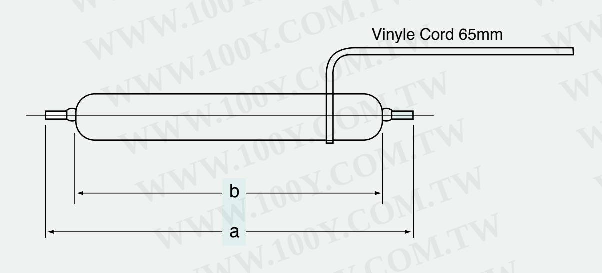


Fig.1

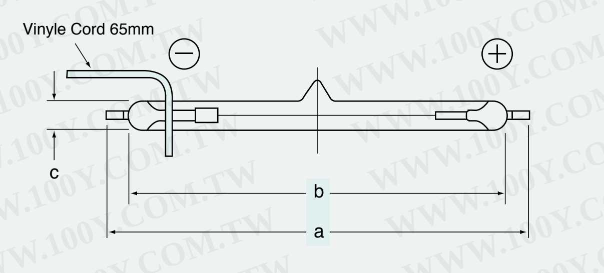


Fig.2

PHYSICAL DATA AND CHARACTERISTICS

Type	Max. Energy Input per Flash (W/sec.)	Design Flash Voltage	Max. Flash Voltage	Min. Starting Voltage with Mini 4KV Trigger	Arc Length (mm)	Max. Flash Repetition at Max. Energy Input per Min.(flash)	Rated Av. Life (flash)	Applications	Max. Dimensions (mm)			
									a	b	c	Fig.No.
IFT-3124C (IFT-3124G)	15	330	360	240	15	4	3000	Photography	28	25.5	φ3.3	1
IFT-3235C (IFT-3235G)	22	330	350	230	22	4	3000	Photography	39	35.5	φ3.33	1
IFT-3245C (IFT-3245G)	22	330	350	240	33	4	6000	Photography	51	46.5	φ3.35	1
IFT-3650C (IFT-3650G)	80	330	350	240	35	4	3000	Photography	55	51.5	φ3.75	1
IFT-45S	30	300	400	200	30	5	5000	Photography	55	45	φ6	2
IFT-47S	35	300	400	200	35	5	5000	Photography	58	47	φ5	2
IFT-50S	30	350	500	200	40	5	5000	Photography	56	50	φ4.2	2
IFT-55S	40	300	350	220	40	5	5000	Photography	65	55	φ5.5	2
IFT-60S	45	300	500	200	40	5	5000	Photography	68	60	φ5.5	2

EYE Xenon Flashtubes for Timing Lights & EYE U-Type Xenon Flashtubes

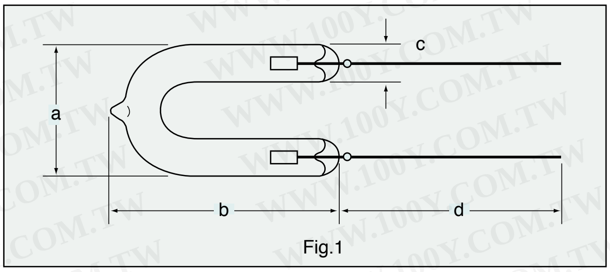


Fig.1

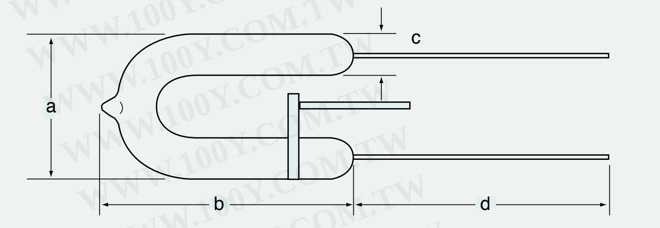


Fig.2

PHYSICAL DATA AND CHARACTERISTICS

Type	Max. Energy Input per Flash (W/sec.)	Design Flash Voltage	Max. Flash Voltage	Connect to Ignition Coil Directly	Arc Length (mm)	Max. Flash Repetition at Max. Energy Input per Min.(flash)	Rated Av. Life (flash)	Applications	Max. Dimensions(mm) a	b	c	d	Fig.No.
EYE Xenon Flashtubes for Timing Lights													
IFT-1000	5	300	400	150	35	60	5×10^6	Timing Light, Signal Light	23	34	φ6.5	40 (min)	1
IFT-1210	5	300	400	150	33	60	5×10^6	Timing Light, Signal Light	18.5	37	φ6.5	40 (min)	1
IFT-1200	4	250	350	150	43	60	5×10^6	Timing Light, Signal Light	18.5	42	φ6.5	40 (min)	1
EYE U-Type Xenon Flashtubes													
IFT-106	50	300	400	200	46	5	10000	Photography	16	38	φ6	40 (min)	2
IFT-110	100	300	500	220	73	5	10000	Photography	22.5	38	φ6	40 (min)	2

EYE Ring Type Xenon Flashtubes

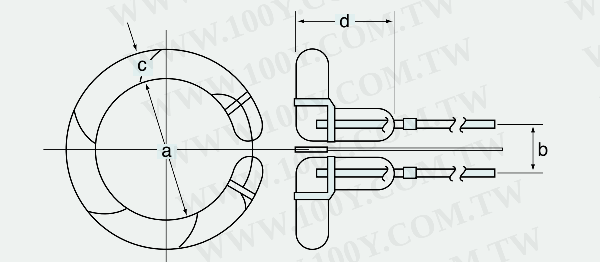


Fig.1

PHYSICAL DATA AND CHARACTERISTICS

Type	Max. Energy Input per Flash (W/sec.)	Design Flash Voltage	Max. Flash Voltage	Min. Starting Voltage with Min. 8KV Trigger	Arc Length (mm)	Max. Flash Repetition at Max. Energy Input per Min.(flash)	Rated Av. Life (flash)	Applications	Max. Dimensions(mm) a	b	c	d	Fig.No.
IFT-200R	200	450	700	220	16	5	10000	Photography Printing Process Use	42	17	φ6.7	25	1
IFT-500R	500	600	700	260	20	3	10000	Photography Printing Process Use	47	21.5	φ12	40	1
IFT-800R	800	630	700	300	20	6	10000	Photography Printing Process Use	58	20	φ12	45	1
IFT-1200R	1200	630	700	400	20	6	10000	Photography Printing Process Use	80	20	φ13	45	1
IFQ-1200S	1200	600	700	350	15	10	10000	Photography Printing Process Use	45	17	φ10	40	1
IFQ-2400C	2400	630	700	350	20	12	10000	Photography Printing Process Use	40	20	φ13	55	1

EYE Helical Type Xenon Flashtubes

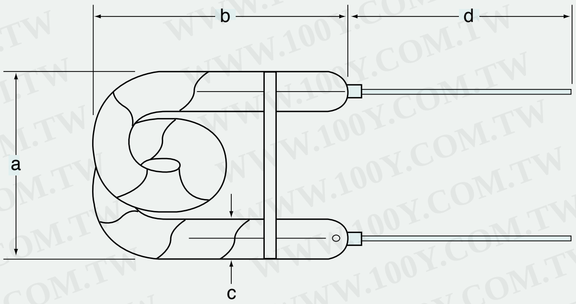


Fig.1

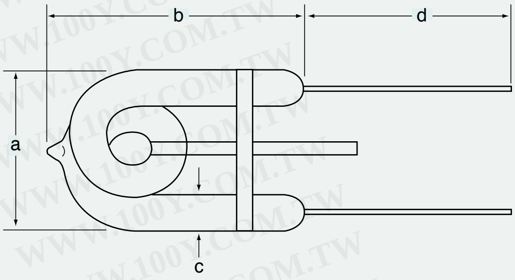
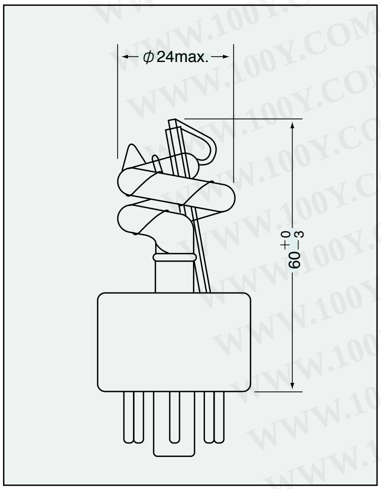


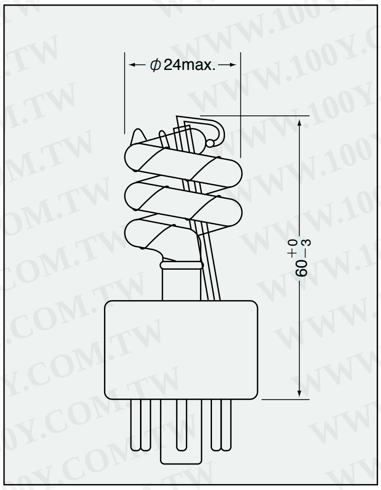
Fig.2

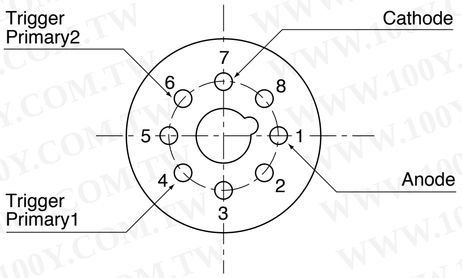
PHYSICAL DATA AND CHARACTERISTICS

Type	Max. Energy Input per Flash (W/sec.)	Design Flash Voltage	Max. Flash Voltage	Min. Starting Voltage with Min. 5KV Trigger	Arc Length (mm)	Max. Flash Repetition at Max. Energy Input per Min.(flash)	Rated Av. Life (flash)	Applications	Max. Dimensions(mm)				
									a	b	c	d	Fig.No.
IFT-152L	16	280	400	(10KV) 230	95	60	1000	Timing Light, Signal Light	29	42	φ6.5	40 (min)	1
IFT-118	125	500	550	400	102	4	10000	Timing Light, Signal Light	25	45	φ5	40 (min)	2
IFT-218	200	900	1050	800	120	4 or 60	20000 5×10^6	Timing Light, Signal Light	30	50	φ6	40 (min)	2

EYE Spiral Type Xenon Flashtubes







Radio Octal Base

PHYSICAL DATA AND CHARACTERISTICS

Type	Max. Energy Input per Flash (W/sec.)	Design Flash Voltage	Max. Flash Voltage	Min. Starting Voltage with Min. 4KV Trigger	Arc Length (mm)	Max. Flash Repetition at Max. Energy Input per Min.(flash)	Rated Av. Life (flash)	Applications	Fig.No.
IFT-75S	75	450	500	300	10	15W 75	20000	Signal Light	1
IFT-150S	150	450	500	300	10	24W 150	20000	Signal Light	2