

### **INFRARED RADIANT HEATERS** air heaters

GID.



www.wattco.com

air heaters

### **OVERVIEW**

Economic, efficient, and clean, WATTCO<sup>™</sup> infrared radiant heaters are designed for comfort heating applications that require radiant heat in indoor, outdoor, and exposed areas through direct infrared heat transfer.

### **KEY FEATURES**

- » High operating temperatures
- » Quick heat-up and cool-down
- » Sheath material:
  - Metal sheathed fixtures
  - Quartz tube elements
  - Quartz lamp elements
  - Incoloy<sup>®</sup>
  - Stainless steel emitter strip
- » Special sizes, wattages, and materials available upon request
- » Custom-designed to meet the requirements of your application



TYPE of WORK	NORMAL AIR TEMPERATURE	EQUIVALENT TEMP. with INFRARED HEATING
Heavy Work	66-68°F	55-60°F
Light Work	70-72°F	60-65°F
Seated	74-76°F	65-70°F
Swimming Pool	85-90°F	75-80°F



#### **BENEFITS**

- » Versatile
- » Corrosion and oxidation resistant
- » Easy to maintain
- » Easy to install
- » Durable
- » Compatible with local power supplies
- » Built for safety
- » Maximal dielectric strength and heat transfer
- » Minimal heat loss
- » Maintained wiring cooler
- » Clean heat
- » Easy service

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» Minimal downtime

### SERVICE LIFE

LIFE Please consider the following factors when determining the expected service life of your radiant heater.

- » Watt density
- » Operating conditions

### Note:

- » High ambient temperature applications or high frequent switching processes will affect the service life of your radiant heater
- Inquire about the expected service life of a specific application by calling us at 1-800-4WATTCO (1-800-492-8826)

### WARNING FIRE HAZARD

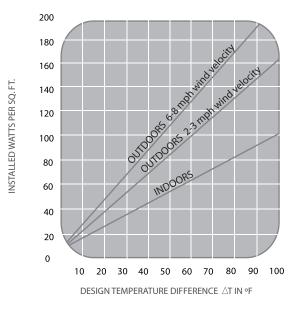
LIFE Please consider the following factors when determining the expected service life of your radiant heater.

- » Do not contact the heater case and the combustible surfaces.
- » Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- » Use ground fault interrupters in the circuit to reduce the risk of short circuits.

### APPLICATION

Infrared radiant heaters are often regarded as complicated solutions. Making allowances for in-field adjustments to output intensity and heater positioning is mandatory.

FIG. 1 – Recommended installed watts/sq. ft. of floor surface using quartz lamp heaters



Please determine the energy spread in order to optimize your heater.

air heaters

### ENERGY SPREAD

Table 1 will help you establish the effective energy spread for the following fixtures:

- » 45°
- » 60°
- » 70°

Use this information to determine an efficient layout for uniform infrared coverage of the application or area.

### **KILOWATTS**

Refer to Figure 3 to choose the appropriate kW for your application.

 TABLE 1 - RADIANT COVERAGE

 AT DIFFERENT HEIGHTS

 REFER TO THESE LISTINGS

 TO DETERMINE THE

 HEATED LENGTH.

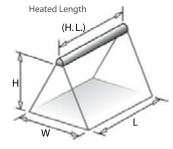


TABLE 1

### **Radiant Coverage at Various Heights**

SPREAD	WIDTH (W)	LENGTH (L)
45°	.83H	H + H.L.*
60 °	1.15H	п
70 °	1.4H	Ш

### SELECTING YOUR WATTCO™ INFRARED RADIANT HEATER

The following sections will help you select the WATTCO<sup>™</sup> infrared radiant heater that meets the requirements of your application.

Please call us at **1-800-4WATTCO (1-800-492-8826)** for further assistance.

### Note:

- » Compared to quartz tube and metal tube heaters, quartz lamp heaters are the most efficient solutions.
- » Avoid using quartz tube or quartz lamp heaters if there is a risk of vibration or mechanical shock.
- » Protect terminal ends from extreme moisture and contaminating vapors.
- » Use moisture resistant terminal housings to prevent moisture and contamination.
- » Request for a two-fixture model, custom mounting frames, and carts if necessary.
- » The deep reflector model provides more efficient radiation than the standard mounting height.
- » JAD Series heaters come with anodized and chemically brightened extruded aluminum reflector and 200°C supply wires.



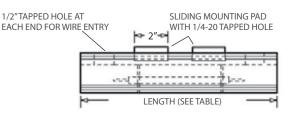
JAD SERIES HEATERS	
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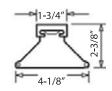
APPLICATIONS	CONSTRUCTION TYPE	FEATURES
Conveyorized or batch type ovens Drying Curing	Single tubular element (Type 1)	The mineral insulated alloy sheath heating element prevents splashing and vibration and provides a longer service life than other source types.
Degreasing, Weld preheating, Roll heating, Drying, Sterilization	Double tubular element (Type 2)	Two series wired heating elements in reflectors
Outdoor installations Washdown exposed areas	Hairpin tubular element with moisture resistant terminal housing (Type 3)	N/A
Industrial applications with medium intensity infrared heat: Paint spray, Booths, Curing, Drying Softening resins, Vinyl and Plastics	Quartz tube (Type 4)	Horizontal mounting for tube fixtures
High intensity heat applications	Double quartz tube elements (Type 5)	Horizontal mounting for tube fixtures
High intensity radiation, on/off heating: Baking, Drying, Curing (paint, varnishes, lacquers, adhesives, softening plastics, food processing)	Quartz lamp element (Type 6)	Horizontal mounting for tube fixtures

Please call us at 1-800-4WATTCO (1-800-492-8826) for further assistance.



TABLE 1





Type 1 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	HEATED LENGTH CAT		SHIPPING	<b>WEIGHT</b>
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series -	TYPE 1 - SINGLE TUBULA	RELEMENT						
0.95	120, 208, 240	737	29	508	20	JAD2900R1	1.1	2.5
1.5	Ш	1041	41	813	32	JAD4115R1	1.5	3.4
1.9	208, 240, 480, 600	1194	47	965	38	JAD4719R1	1.9	4.2
2.0	6.0	1041	41	813	32	JAD4120R1	1.7	3.8
2.3	Ш	1194	47	965	38	JAD4723R1	1.9	4.3
3.0	Ш	1499	59	1270	50	JAD5930R1	2.4	5.2
3.8	Ш	1803	71	1575	62	JAD7138R1	2.8	6.2

TABLE 2

TABLE 3

Type 3 - 60° Spread

Type 2 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPING WEIGHT	
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series - T	YPE 2 - DOUBLE TUBUL	AR ELEMENT						
1.8	208, 240, 480, 600	737	29	508	20	JAD2918R2	1.6	3.5
3.2	Ш	1041	41	813	32	JAD4132R2	2.2	4.8
3.8	Ш	1194	47	965	38	JAD4738R2	2.5	5.4
5.0	Ш	1499	59	1270	50	JAD5950R2	3.0	6.7
6.2	Ш	1803	71	1575	62	JAD7162R2	3.6	8.0



KW	STANDARD	OVERAL	LENGTH	HEATED	HEATED LENGTH CATALOG SHIPPING WE		G WEIGHT	
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series -	TYPE 3 - HAIRPIN TUBUL	AR ELEMENT W	ITH MOISTURE R	ESISTANT TERM	INAL HOUSING			
1.1*	208, 240, 480, 600	463	18 1/4	356	14	JAD1810R3	1.3	2.9
1.6	Ш	590	23 1/4	483	19	JAD2316R3	2.2	4.8
2.1	Ш	743	29 1/4	635	25	JAD2921R3	2.5	5.4
2.5	Ш	844	33 1/4	737	29	JAD3325R3	2.6	5.8
3.0	Ш	971	38 1/4	864	34	JAD3830R3	2.9	6.4
3.6	Ш	1149	45 1/4	1041	41	JAD4536R3	3.2	7.1
4.2	Ш	1301	51 1/4	1194	47	JAD5142R3	3.5	7.8
5.3	Ш	1606	63 1/4	1499	59	JAD6353R3	4.1	9.1
6.5	Ш	1911	75 1/4	1803	71	JAD7565R3	4.7	10.4

\*1.1 kW UNIT ALSO AVAILABLE IN 120V

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

#### WARNING – FIRE HAZARD

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Please take the following warnings into consideration to avoid the risk of fire:

Use ground fault interrupters in the circuit to reduce the risk of short circuits.

Do not contact the heater case and the combustible surfaces.

<sup>•</sup> Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).

### INFRARED RADIANT HEATERS air heaters

TABLE 4 Type 4 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED LENGTH		CATALOG SHIPPING WEIG		<b>S WEIGHT</b>
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series - T	YPE 4 - QUARTZ TUBE E	<b>LEMENT -</b> Quartz	tube fuxtures m	ust be mounted h	norizontally			
0.8	120, 208, 240	635	25	406	16	JAD2510R4	1.2	2.6
1.6	Ш	1041	41	813	32	JAD4116R4	1.7	3.8
2.5	208, 240, 480, 600	1499	59	1270	50	JAD5925R4	2.3	5.0
3.1	Ш	1803	71	1575	62	JAD7131R4	2.6	5.8



TABLE 5

### Type 5 - 60° Spread

KW	KW STANDARD		ANDARD OVERALL LENGTH		HEATED LENGTH		SHIPPING WEIGHT	
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series - T	YPE 5 - DOUBLE QUART	Z TUBE ELEMEN	<b>rs -</b> Quartz tube	fixtures must be i	mounted horizo	ntally		
1.6	120, 208, 240	635	25	406	16	JAD2516R5	1.5	3.2
3.2	Ш	1041	41	813	32	JAD4132R5	2.1	4.6
5.0	208, 240, 480, 600	1499	59	1270	50	JAD5950R5	2.8	6.1
6.2	Ш	1803	71	1575	62	JAD7162R5	3.2	7.1

TABLE 6

### Type 6 - 60° Spread

KW	STANDARD	OVERALL	OVERALL LENGTH HEATED LENGTH CATALOG SHIPPIN		ATED LENGTH CATALOG		5 WEIGHT	
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAD Series - TYPE 5 - DOUBLE QUARTZ TUBE ELEMENTS - Quartz tube fixtures must be mounted horizontally								
0.5	120	356	14	127	5	JAD1405R6	0.9	1.9
1.0	208, 240	483	19	254	10	JAD1910R6	1.0	2.2
1.6	Ш	635	25	406	16	JAD2516R6	1.2	2.6
2.5	480, 600	864	34	635	25	JAD3425R6	1.5	3.3
3.8	600	1194	47	965	38	JAD4738R6	1.9	4.2

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

### WARNING - FIRE HAZARD

- Please take the following warnings into consideration to avoid the risk of fire:
- Do not contact the heater case and the combustible surfaces.
- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

### **JAK SERIES HEATERS**

APPLICATIONS	CONSTRUCTION TYPE	FEATURES
		Thermal insulation reduces heat loss and is efficient.
High density rugged heat applications: Process heating Comfort heating	Incoloy <sup>®</sup> tubular elements	Low power required Tarnish free, high lustre, aluminum reflector provided.
connorricuting		General purpose and/or weatherproof terminal boxes provided.

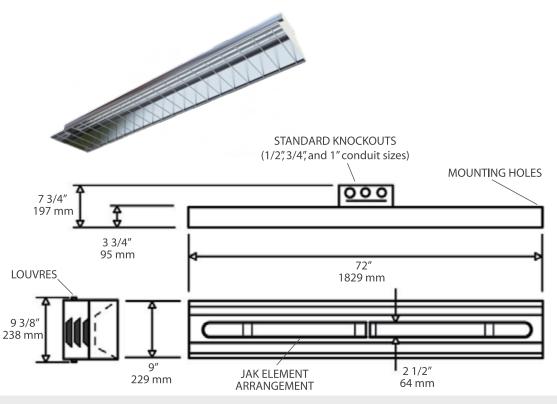
Please call us at 1-800-4WATTCO (1-800-492-8826) for further assistance.

TABLE 7

### Type JAK - 60° Spread

KW	STANDARD	CATALOG NUMBER	CATALOG NUMBER	SHIPPIN	G WEIGHT
	VOLTAGES	general purpose housing	moisture resistant housing	lb.	kg
6.4	208, 240, 480, 600	JAK0164	JAK0164MR	38	17.4
8.0	Ш	JAK0180	JAK0180MR	38	17.4
10.0	Ш	JAK01100	JAK01100MR	38	17.4

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.



### WARNING - FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

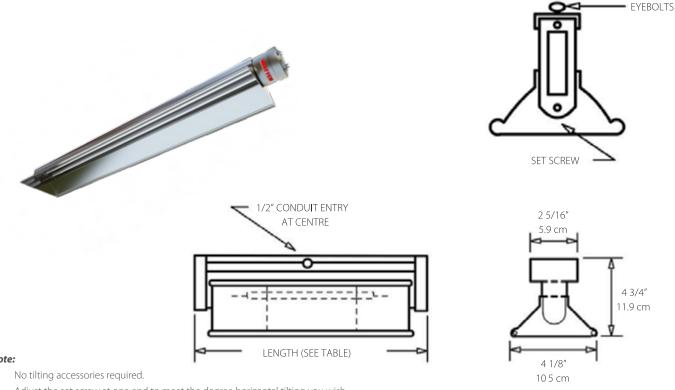
- Do not contact the heater case and the combustible surfaces.
- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

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### **JAV SERIES HEATERS**

APPLICATIONS	CONSTRUCTION TYPE	FEATURES
Indoor spot heating: Churches Garages Indoor pools	Single tubular element (Type 1)	Extruded aluminum, anodized and chemically brightened reflectors. Swivel bracket and set screw adjustment, and eyebolts provided.
Small indoor areas that require intense heat.	Double tubular element (Type 2)	N/A
Indoor and outdoor applications for fast heat up: Canopies Patios Garages	Quartz tube (Type 4)	Horizontal mounting for tube fixtures.
Indoor and outdoor comfort heating applications with mounting height over 15ft, and small compact unit.	Quartz lamp (Type 6)	Horizontal mounting for tube fixtures.

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.



### Note:

- >>
- Adjust the set screw at one end to meet the degree horizontal tilting you wish. >>
- Heater is supplied with eyebolts with holes for chain mounting. >>

### WARNING - FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

- Do not contact the heater case and the combustible surfaces.
- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

(1-800-492-8826)

### TABLE 8 Type 1 - 60° Spread

KW	STANDARD	OVERALI	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAV Series - T	YPE 1 - SINGLE TUBULAF	RELEMENT						
0.95	120, 208, 240	800	31.5	508	20	JAV3101R1	2.3	5.1
1.5	Ш	1105	43.5	813	32	JAV4315R1	3.1	6.8
1.9	Ш	1257	49.5	965	38	JAV4919R1	3.6	8.0
2.0	208, 240, 480, 600	1105	43.5	813	32	JAV4321R1	3.3	7.2
2.3	Ш	1257	49.5	965	38	JAV4923R1	3.7	8.1
3.0	Ш	1562	61.5	1270	50	JAV6130R1	4.5	9.9
3.8	Ш	1867	73.5	1575	62	JAV7338R1	5.3	11.7

### TABLE 9

### Type 2 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAV Series - T	YPE 2 - DOUBLE TUBULA	R ELEMENT						
1.8	208, 240, 480, 600	800	31.5	508	20	JAV3118R2	2.7	6.0
3.2	Ш	1105	43.5	813	32	JAV4332R2	3.7	8.2
3.8	Ш	1257	49.5	965	38	JAV4938R2	4.2	9.2
5.0	Ш	1562	61.5	1270	50	JAV6150R2	5.2	11.4
6.2	Ш	1867	73.5	1575	62	JAV7362R2	6.1	13.5

### TABLE 10

### Type 4 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAV Series - T	YPE 4 - QUARTZ TUBE - (	Quartz tube fixtur	es must be mou	nted horizontally				
0.8	120, 208, 240	699	27.5	406	16	JAV2708R4	2.2	4.9
1.6	Ш	1105	43.5	813	32	JAV4316R4	3.2	7.1
2.5	208, 240, 480, 600	1562	61.5	1270	50	JAV6125R4	4.4	9.7
3.1	Ш	1867	73.5	1575	62	JAV7331R4	5.1	11.3

TABLE 11

### Type 6 - 60° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPING	5 WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAV Series - T	YPE 6 - QUARTZ LAMP - (	Quartz lamp fixtu	ires must be mou	nted horizontally	ý			
0.5	120	419	16.5	127	5	JAV1605R6	1.5	3.4
1.0	208, 240	547	21.5	254	10	JAV2110R6	1.9	4.1
1.6	П	699	27.5	406	16	JAV2716R6	2.2	4.9
2.5	480, 600	927	36.5	635	25	JAV3625R6	2.8	6.2
3.8	600	1257	49.5	965	38	JAV4938R6	3.6	8.0

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

### WARNING – FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

• Do not contact the heater case and the combustible surfaces.

- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

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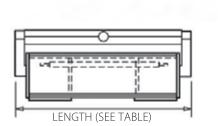
### JAB SERIES HEATERS

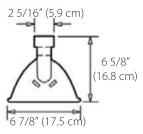
APPLICATIONS	CONSTRUCTION TYPE	FEATURES
Indoor applications with larger and more solidly built unit required: Arenas Indoor comfort heating applications: Factory work stations Isolated service booths	Incoloy® tubular elements (Type 1)	Good temperature control is necessary in comfort heating applications
Indoor and outdoor installations that require high heat concentration	Hairpin tubular element with moisture resistant terminal housing (Type 3)	No tilting fixture
Indoor and outdoor areas that require high density at high mounting heights: Racetracks Outdoor stadiums Parking garage ramps Aircraft hangars High bay industrial buildings	Quartz tube (Type 4)	Horizontal mounting for tube fixtures
Indoor and outdoor areas that require high density at high mounting heights: Racetracks Outdoor stadiums Parking garage ramps Aircraft hangars High bay industrial buildings	Quartz lamp (Type 6)	Horizontal mounting for tube fixtures

### WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

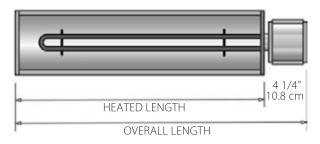


Deep reflector provides radiation in high heights





### TYPE R - HAIRPIN TUBULAR ELEMENT WITH MOISTURE RESISTANT TERMINAL HOUSING (Page 12.9)



### WARNING – FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

- Do not contact the heater case and the combustible surfaces. •
- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

TABLE 12 Type 1 - 45° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAB Series - T	YPE 1 - INCOLOY TUBUL	AR ELEMENT						
0.95	120, 208, 240	800	31.5	508	20	JAB3109R1	3.5	7.7
1.5	Ш	1105	43.5	813	32	JAB4315R1	4.6	10.2
1.9	Ш	1257	49.5	965	38	JAB4919R1	5.4	11.9
2.0	208, 240, 480, 600	1105	43.5	813	32	JAB4321R1	4.8	10.6
2.3	Ш	1257	49.5	965	38	JAB4923R1	5.4	11.9
3.0	Ш	1562	61.5	1270	50	JAB6130R1	6.6	14.6
3.8	Ш	1867	73.5	1575	62	JAB7338R1	7.9	17.3

#### TABLE 13

### Type 3 - 60° Spread

KW	STANDARD VOLTAGES	OVERAL mm	L LENGTH in.	HEATED	LENGTH in.	CATALOG NUMBER	SHIPPIN( kg	G WEIGHT lb.
JAB Series - T	YPE 3 - HAIRPIN TUBULA							151
1.6	208, 240, 480, 600	590	23 1/4	483	19	JAB2316R3	2.9	6.3
2.1	Ш	742	29 1/4	635	25	JAB2921R3	3.4	7.4
3.0	Ш	971	38 1/4	864	34	JAB3830R3	4.1	9.0
4.2	Ш	1301	51 1/4	1194	47	JAB5142R3	5.1	11.3
5.3	Ш	1606	63 1/4	1499	59	JAB6353R3	6.1	13.5
6.5	Ш	1911	75 1/4	1803	71	JAB7565R3	7.1	15.6

### TABLE 14

### Type 4 - 45° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAB Series - T	YPE 4 - QUARTZ TUBE EI	L <b>EMENT -</b> Quartz	tube fixtures mu	st be mounted he	orizontally			
0.8	120, 208, 240	699	27.5	406	16	JAB2708R4	3.3	7.2
1.6	Ш	1105	43.5	813	32	JAB4316R4	4.8	10.6
2.5	208, 240, 480, 600	1563	61.5	1270	50	JAB6125R4	6.5	14.3
3.1	Ш	1867	73.5	1575	62	JAB7331R4	7.6	16.8

### TABLE 15

### Type 6 - 45° Spread

KW	STANDARD	OVERALL	LENGTH	HEATED	LENGTH	CATALOG	SHIPPIN	G WEIGHT
	VOLTAGES	mm	in.	mm	in.	NUMBER	kg	lb.
JAB Series - T	YPE 6 - QUARTZ LAMP E	LEMENT - Quartz	lamp fixtures m	ust be mounted l	norizontally			
0.5	120	419	16.5	127	5	JAB1605R6	2.2	4.9
1.0	208, 240	547	21.5	254	10	JAB2110R6	2.7	6.0
1.6	П	699	27.5	406	16	JAB2716R6	3.3	7.2
2.5	480, 600	927	36.5	635	25	JAB3625R6	4.1	9.1
3.8	600	1257	49.5	965	38	JAB4938R6	5.4	11.8

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

### WARNING – FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

• Do not contact the heater case and the combustible surfaces.

- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.

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### **JAM SERIES HEATERS**

	APPLICATIONS		CONS	STRUCTION TYPE		FEATU	IRES	
					Doub	e reflector heate	ers with JAM fix	tures.
Lar	ge unheated factories: Sawmills		Incoloy	<sup>®</sup> tubular elements	On	e element/reflec reflector ef		um
	lce rinks		,	(Type 1)		45° or 70° ene	rgy spreads.	
	Gymnasiums					Mounted wi		
HEN ORDERING	G, PLEASE SPECIFY: Qua	antity, catalogue no.	, voltage, and wa	ittage.			ł	
CABLE 16 Type 1 - 45° Spr	read			ENGTH (SEE TABLE)	25, 5.9	13 3/4"	-	6 5/- 16.8 d
ype 1 - 45° Spr						13 3/4" 34.9 cm	- 	16.8 0
	STANDARD	OVERALL L		ENGTH (SEE TABLE)		13 3/4" 34.9 cm	SHIPPING WEI	16.8
/pe 1 - 45º Spr			ENGTH	HEATED LENGTH		13 3/4" 34.9 cm	SHIPPING WEI	16.8
/pe 1 - 45º Spr	STANDARD		ENGTH	HEATED LENGTH		13 3/4" 34.9 cm 0G ER		GHT
rpe 1 - 45° Spr KW	STANDARD VOLTAGES	mm	ENGTH in.	HEATED LENGTH mm in.		13 3/4" 34.9 cm 0G ER	kg	GHT Ib.
<b>FPE 1 - 45° Spr</b> <b>KW</b> 1.9	STANDARD VOLTAGES 120, 208, 240	<b>mm</b> 800	ENGTH in. 31.5	HEATED LENGTH mm in. 508 20		13 3/4" 34.9 cm 0G ER 19R1 ( 30R1 8	<b>kg</b> 6.5	<b>GHT</b> <b>Ib.</b> 14.3
<b>KW</b> 1.9 3.0	STANDARD VOLTAGES 120, 208, 240 "	<b>mm</b> 800 1105	ENGTH in. 31.5 43.5	HEATED LENGTH           mm         in.           508         20           813         32		13 3/4" 34.9 cm 0G ER 19R1 6 30R1 8 38R1 1	<b>kg</b> 6.5 8.6	<b>GHT</b> <b>Ib.</b> 14.3 19.0
KW         Image: 1.9         Image: 3.0         Image: 3.8         Image: 3.8	STANDARD VOLTAGES 120, 208, 240 "	mm 800 1105 1257 1105 1257	ENGTH in. 31.5 43.5 49.5	HEATED LENGTH           mm         in.           508         20           813         32           965         38		13 3/4" 34.9 cm 0G ER 9R1 ( 30R1 ( 38R1 1 10R1 (	<b>kg</b> 6.5 8.6 10.1	16.8 GHT Ib. 14.3 19.0 22.2 19.8 22.3
<b>KW</b> 1.9 3.0 3.8 4.0	<b>STANDARD</b> <b>VOLTAGES</b> 120, 208, 240 " " 208, 240, 480, 600	mm 800 1105 1257 1105	ENGTH in. 31.5 43.5 49.5 43.5	HEATED LENGTH           mm         in.           508         20           813         32           965         38           813         32	Jamai           JAM31           JAM433           JAM433           JAM434	13 3/4" 34.9 cm 0G ER 9R1 6 30R1 8 38R1 1 40R1 9 46R1 1	kg 6.5 8.6 10.1 9.0	16.8 GHT Ib. 14.3 19.0 22.2 19.8

WHEN ORDERING, PLEASE SPECIFY: Quantity, catalogue no., voltage, and wattage.

### WARNING – FIRE HAZARD

Please take the following warnings into consideration to avoid the risk of fire:

- Do not contact the heater case and the combustible surfaces.
- Space energized heaters in order to prevent high combustible surface temperatures (194°F/90°C).
- Use ground fault interrupters in the circuit to reduce the risk of short circuits.