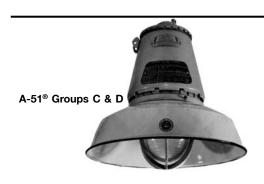
Incandescent Lighting: Explosionproof









Page	Description
5–11	A–51 [®] Series Lighting Fixtures— Class I, Groups C and D
2,3	Features
4	Classified Area Suitability, Weights
5,6	Ordering Information
7	Mounting Hoods, Fixture Units, Globes and Guards
8	Reflectors, Colored Globes, and Parts
9	Dimensions
10, 11	Photometrics
12,15	A–51 [®] Series Lighting Fixtures— Class I, Groups A and B
2,3	Features
12	Ordering Information and Reflectors
13	Mounting Hoods, Fixture Units, Globes, Guards and Parts
14	Dimensions
15	Photometrics
16	AHL and EHL Portable Handlamps
16	Features
17	Fixtures, Parts and Dimensions
18	EDT Lighting Fixtures and Accessories
19–24	ELS Series Emergency Lighting System
19	Features
20-22	Ordering Information
23	Replacement Parts and Technical Data
24	Weights and Dimensions
25–31	Code–Master™ Strobe and Beacon Factory Sealed Lighting Fixtures
25	Features
26	Order Information and Technical Data
27-29	Fixtures
30	Optional Guard and Replacement Parts
31	Dimensions
Soo Soction	on O for Explosionproof Floodlights

See Section Q for Explosionproof Floodlights.

G2—2

A-51® Incandescent Explosionproof Lighting Fixtures: Factory Sealed

Suitable for use in Wet Locations. UNILETS for use with Threaded Metal Conduit.

Applications

- A-51 Series Incandescent Class I, Groups A, B, C and D; Class II, E, F and G applications (see listings and area suitability chart).
- Ideal for use in chemical and petrochemical plants and in other heavy process areas where ignitable vapors, dust, moisture and corrosive atmospheres may be present.
- Suitable for use in wet locations.
- Wide range of wattages 60 thru 500 watt incandescent lamps.
- Choice of units with or without guard as well as choice of porcelain or polyester reflectors.
- Choice of mountings pendant, ceiling, stanchion, long bracket and short bracket.
- Porcelain reflectors for standard applications and fiberglass reinforced polyester reflectors for installations where fixture is subject to exceptionally severe corrosive atmospheres. High bay reflector for installations where mounting height from work plane ranges from 20 to 30 feet.
- Class I, Groups A and B fixtures have special UL approved sintered metal flame arrester.

Features

- All A-51 fixtures are factory sealed no external sealing fittings are required.
- New high temp phenolic connection block in mounting hood has rugged leaf spring contacts—loosen two screws, rotate and remove for quick wiring.
- Safe, easy servicing or relamping without disconnecting any wiring. "Wireless" fixture unit easily threads off mounting hood for convenient servicing or for immediate exchange with "stand-by" unit.
- All joints are flame tight.



Polyester Reflector

Porcelain Reflector















Porcelain Reflector







A-51® Incandescent Explosionproof Lighting Fixtures: Factory Sealed

Suitable for use in Wet Locations.
UNILETS® for use with Threaded Metal Conduit.

- Specially formulated two coat baked epoxy enamel provides superior protective finish to resist corrosion. Applied to all mounting hoods, fixture units and guards.
- New high temperature glass reinforced phenolic socket block in fixture unit has collector ring and pin which automatically makes electrical contact as fixture unit is threaded onto mounting hood.
- Globes in A-51 fixtures are explosion-proof and heat and impact resisting glass. Prismatic configuration on globe interior provides light control while allowing smooth exterior surface for cleaning.
- A-51 fixture units have standardized threads to fit all A-51 and mounting hoods
- All fixtures have Alzak® aluminum inner reflector for increased lumen efficiency.
- A-51 fixture guards are of rugged copper-free aluminum construction and double epoxy coated—provide protection to globe. Easily mounts to globe ring with 3 screws.

Standard Materials

- Fixtures and guards: copper-free aluminum (4/10 of 1%).
- Pendant mounting hoods: copper-free aluminum (4/10 of 1%).
- Ceiling and bracket mounting hoods: malleable iron with aluminum adapters.
- Reflectors: porcelain enameled steel, Alzak aluminum or fiberglass reinforced polyester.

Standard Finishes

- Fixtures, guards and mounting hoods: two coat epoxy-clad finish. Epoxy powder coat finish, electrostatically applied for complete, uniform surface protection.
- Steel reflectors: white porcelain enamel.
- Polyester and Alzak aluminum reflectors: natural finish.

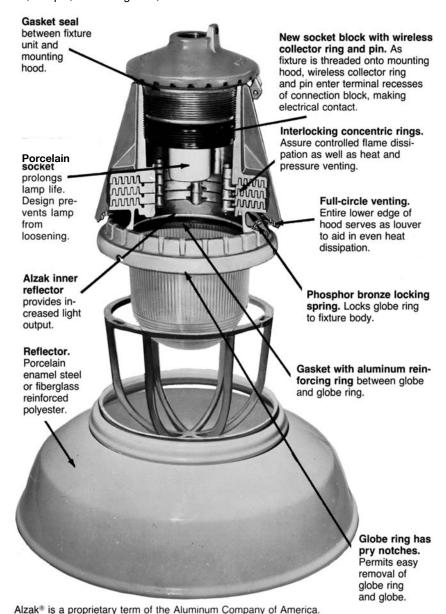
Compliances

- UL Listed.
- UL 1598 and 844.

- Class I,* Div. 1 and 2, Groups A,B,C,D. Class II,* Div. 1 and 2, Groups E,F,G.
- *Some models.
- Suitable for use in wet locations.
- Appleton malleable iron products conform to ASTM A47-77, Grade 32510, which has the following properties: tensile strength, 50,000 psi; yield, 32,000 psi; and elongation, 10%.
- Appleton aluminum products are produced from a high strength copper-free (4/10 of 1% max.) alloy.

Product Cross Reference

• See general introduction to catalog for information on fixture selection. For HID fixtures with integral ballasts, see Code•Master Series in catalog section G1. Fluorescent fixtures are in section F3 and G3.





A-51® Incandescent Fixtures Classified Area Suitability and Weights

		Class I Div.	1 and Div. 2 Groups	C and D		
Fixture Unit	Lamp Watts	Without Reflectors	Standard Dome	30° Angle	High Bay	Supply Wire
AAU1N	100W A19 100W A21	T5 T5	T5 T5	T5 T5	_ _	125°C 125°C
AAU15N	150W A23 200W A25 200W PS25 300W PS25	T3C T3C T3C T3C	T3C T3C T3C T3A	T3C T3C T3C T3A (D)	- - -	125°C 125°C 125°C 125°C
AAU2NS	200W PS25 200W PS30 300W PS25 300W PS30	T3C T3C T3C T3C	T3C T3C T3C T3C	T3C T3C T3C T3C	- - -	110°C 110°C 110°C 110°C
AAU5NS	500W PS35 500W PS40	T3C T3C	T3C T3C	T3C T3C	_ _	135°C 135°C
		Class I Div. 1 a	and Div. 2 Groups A,	B, C and D		
AAUA15	150W A23 150W A25 200W A25 200W PS25	T3C T3C T3C T3C	T3C T3C T3C T3C	T3C T3C T3C T3C	- - - -	110°C 110°C 110°C 110°C
AAUA2	200W PS25 200W PS30 300W PS25 300W PS30	T3C T3C T3C T3C	T3C T3C T3C T3C	T3C T3C T3C T3C	- - -	110°C 110°C 110°C 110°C
		Class II Div. 1	I and Div. 2 Groups I	E, F and G		
AAU1N	100W A19 100W A21	T3C T3C	T3C T3C	T3C T3C	_ _ _	125°C 125°C
AAU15N	150W A23 200W A25 200W PS25 300W PS25	T3C T3C T3 T3	T3C T3C T3	T3C T3C T3	- - -	125°C 125°C 125°C 125°C
AAU2NS	200W PS25 200W PS30 300W PS25 300W PS30	T3C T3C T3C T3C	T3C T3C T3C T3C	T3C T3C T3A (EF) T3A (EF)	- - -	110°C 110°C 110°C 110°C
AAU5NS	500W PS35 500W PS40	T3C T3C	T3C T3C	T3C T3C	_ _	135°C 135°C

Weights

Group A Pendant Mount only. NOTE: Ambient suitability of these incandescent fixtures: 40° C

Fixture Ur	nits	Mounting Hoods		Guards		Standard Ref	lectors	30° Angle Ref	lectors	High Bay Ro	eflectors
Cat. No.	Wt., Lbs.	Cat. No.	Wt., Lbs.	Cat. No.	Wt., Lbs.	Cat. No.	Wt., Lbs.	Cat. No.	Wt., Lbs.	Cat. No.	Wt., Lbs.
AAU-1N	7.6	Pendant	1.3	AAGU-1	.4	AARP-2ST	2.8	AARP-2AN	3.3	AARE-2HB	2.9
AAU-15N	7.6	Ceiling	4.8	AAGU-2	.8	AARW-15ST	2.1	AARW-15AN	2.1	AARE-5HB	3.9
AAU-2NS	10.7	Stanchion	1.6	AAGU-5	1.9	AARW-2ST	2.9	AARW-2AN	2.4		
AAU-5NS	20.3	Long Bracket	8.9	AAGUA-15	.5	AARW-5ST	4.3	AARW-5AN	7.0		
AAUA-15	15.0	Short Bracket	4.8			AARW-15ST	2.1	AARW-15AN	2.1		
AAUA-2	18.0										



Class I, Div. 1 and 2 Groups C,D Class II, Div. 1 and 2 Groups E,F,G* Class III

A-51® Incandescent Explosionproof Lighting Fixtures: Factory Sealed

Suitable for use in Wet Locations.

UL 1598, UL 844

	Туре	Hub Size (Inches)	Catalog Number
	Pendant		
	One hub, rigid or flexible mounting	J.	
	60-100 Watt (AAU-1N)	1/2	AP1050
	A-21	3/4	AP1075
		1	AP10100
A GENERAL	150-300 Watt (AAU-15N)	1/2	AP1550
	A-23 PS-25	3/4	AP1575
		1	AP15100
	200-300 Watt (AAU-2NS)	1/2	AP2050
VISA MILITARIA REPORT	PS-30	3/4	AP2075
		1	AP20100
	300-500 Watt (AAU-5NS)	1/2	AP5050
	PS-35	3/4	AP5075
		1	AP50100
	Ceiling		
	Four hubs and three close-up plug	gs.	
	60-100 Watt (AAU-1N)	1/2	AC1050
	A-21	3/4	AC1075
		1	AC10100
	150-300 Watt (AAU-15N)	1/2	AC1550
	A-23 PS-25	3/4	AC1575
		1	AC15100
Maria Line	200-300 Watt (AAU-2NS)	1/2	AC2050
Carried Statement of the Control of	PS-30	3/4	AC2075
		1	AC20100
	300-500 Watt (AAU-5NS)	1/2	AC5050
	PS-35	3/4	AC5075
		1	AC50100
	25° Stanchion (Not UL Listed) One hub		
4	60-100 Watt (AAU-1N)		
8	A-21	1-1/2◆	AN10150
	150-300 Watt (AAU-15N) A-23 PS-25	1-1/2◆	AN15150
		•	
	200-300 Watt (AAU-2NS) PS-30	1-1/2◆	AN20150
	300-500 Watt (AAU-5NS)		
	PS-35	1-1/2◆	AN50150

^{*}For specific classified area suitability of each fixture listed, see table on page G2-4. ◆1-1/2" tapped hub furnished with a 1-1/2" to 1-1/4" reducer.



Class I, Div. 1 and 2 Groups C,D Class II, Div. 1 and 2 Groups E,F,G* Class III

UL 1598, UL 844

A-51[®] Incandescent Explosionproof Lighting Fixtures: Factory Sealed

Suitable for use in Wet Locations.

	Туре	Hub Size (Inches)	Catalog Number
	Long Bracket Four hubs and three close-up plu	gs	
- F	60-100 Watt (AAU-1N) A-21	1/2 3/4 1	ALB1050 ALB1075 ALB10100
	150-300 Watt (AAU-15N) A-23 PS-25	1/2 3/4 1	ALB1550 ALB1575 ALB15100
	200-300 Watt (AAU-2NS) PS-30	1/2 3/4 1	ALB2050 ALB2075 ALB20100
	300-500 Watt (AAU-5NS) PS-35	1/2 3/4 1	ALB5050 ALB5075 ALB50100
	15° Short Bracket Two hubs and one close-up plug		
	60-100 Watt (AAU-1N) A-21	1/2 3/4	ASB1050 ASB1075
	150-300 Watt (AAU-15N) A-23 PS-25	1/2 3/4	ASB1550 ASB1575
	200-300 Watt (AAU-2NS) PS-30	1/2 3/4	ASB2050 ASB2075
	Three-Way Exit Sign Epoxy enameled steel — 6"-high i	red lettering	CJEXRN
EXII	60-200W (Mounts to AAU-1N or A in place of guard)	AU-15N fixture units	
	Single Sided Exit Sign Epoxy enameled steel — 6"-high i	red letterina	AEXR-15R
EXIT	60-200W (Mounts to AAU-1N or A in place of guard)	-	
	(See page G2-24 for dimensions)		
	Accessories Add Suffix to Fixture Catalog Num	ber	Suffix
	Guard Standard Dome Reflector 30° Angle Reflector High Bay Reflector		-G -ST -AN -HB



A-51® Incandescent Explosionproof Lighting Fixtures: Mounting Hoods, Fixture Units, Globes, Guards

Copper-Free Aluminum Fixture with Gray Epoxy Finish. Mounting Hoods in Aluminum and Malleable Iron.*

	Туре	Hub Size (Inches)	Catalog Number
	Mounting Hoods*		
	Pendant		
	One hub,	1/2	AAP-50
	rigid or flexible mounting	3/4	AAP-75
		1	AAP-100
	Ceiling		
	Four hubs	1/2	AAC-50
CHE THE SEC	and three	3/4	AAC-75
	close-up plugs	1	AAC-100
	25° Stanchion (Not UL Listed)		
De	One hub	1-1/2	AAN-150†
	Long Bracket		
	Four hubs	1/2	AALB-50
	and three	3/4	AALB-75
	close-up plugs	1	AALB-100
19	15° Short Bracket		
	Two hubs and	1/2	AASB-50
	one close-up plug	3/4	AASB-75
	Fixture Units		
	60-100W A-21		AAU-1N
	150-300W A-23 & PS-25		AAU-15N
	200-300W PS-30		AAU-2NS
	300-500W PS-35		AAU-5NS
	Prismatic Glass Globes		
	60-100W (AAU-1N)		AAGL-1PR
	150-300W (AAU-15N)		AAGL-1PR
	200-300W (AAU-2NS)		AAGL-1111
	300-500W (AAU-5NS)		AAGL-5PR
	Aluminum Guards		
	60-100W (AAU-1N)		AAGU-1
	150-300W (AAU-15N)		AAGU-1
1/// 11//	200-300W (AAU-2NS)		AAGU-2
	300-500W (AAU-5NS)		AAGU-5

†1-1/2" Tapped hub furnished with a 1-1/2" to 1-1/4" reducer. * Pendant and stanchion mounting hoods are copper-free aluminum. Ceiling and bracket types are malleable iron with aluminum adapters.



A-51® Incandescent Explosionproof Lighting Fixtures: Reflectors, Colored Globes, Parts

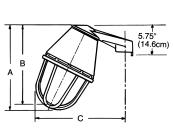
Porcelain, Alzak Aluminum or Polyester Reflectors.

	Fixture Size	Catalog N	umber
	Porcelain and Polyester Reflectors		
	Standard Dome (Not for use with short brackets)	Porcelain	Polyester
Porcelain Standard Dome Standard Dome	60-100W (AAU-1N) 150-300W (AAU-15N) 200-300W (AAU-2NS) 300-500W (AAU-5NS)	AARW-15ST AARW-15ST AARW-2ST AARW-5ST	AARP-2ST
30° Angle Porcelain Polyester	30° Angle 60-100W (AAU-1N) 150-300W (AAU-15N) 200-300W (AAU-2NS) 300-500W (AAU-5NS)	AARW-15AN AARW-15AN AARW-2AN AARW-5AN	AARP-2AN
	Alzak Aluminum Reflectors High Bay		
6	200-300W (AAU-2NS) 300-500W (AAU-5NS)	AARE-2HB AARE-5HB	
	Colored Glass Globes		
	Amber 60-100W (AAU-1N) 150-300W (AAU-15N) 200-300W (AAU-2NS)	AAGL-1A AAGL-1A AAGL-2A	
	Green 60-100W (AAU-1N) 150-300W (AAU-15N) 200-300W (AAU-2NS)	AAGL-1G AAGL-1G AAGL-2G	
	Red 60-100W (AAU-1N) 150-300W (AAU-15N) 200-300W (AAU-2NS)	AAGL-1R AAGL-1R AAGL-2R	
	Replacement Socket		
AASP-22 AASP-44	60-100W (AAU-1N)—Medium Base 150-300W (AAU-15N)—Medium Base 200-300W (AAU-2NS)—Medium Base 300-500W (AAU-5NS)—Mogul Base	AASP-11 AASP-22 AASP-22 AASP-44	
	Connection Block		
	60-500W. Fits A-51 Mounting Hoods	VPT-7	
	Globe Gaskets—Fiber and Aluminum Requires one of each		
	60-300W (AAU-1N and AAU-15N) 200-300W (AAU-2NS) 300-500W (AAU-NS)	Fiber AASP-15V AASP-2V AASP-5V	Aluminum AASP-15A AASP-2A AASP-5A

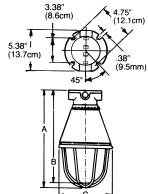


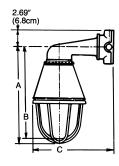
Dimensions: A-51® Incandescent Lighting Fixtures

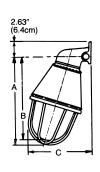
A-51 Lighting Fixtures







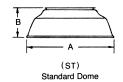


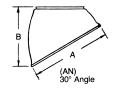


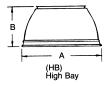
		Pendant	t♦		Ceiling		Lo	ng Brac	Short Bracket						
Size (Watts	Α	В	С	Α	В	С	Α	В	С	Α	В	С	Α	В	С
Dimensions i	n Inches	;													
60-100	11.47	10.85	11.50	12.25	11.63	7.06	13.75	13.13	7.06	13.75	13.13	12.38	13.56	12.94	9.13
150-300	11.47	10.85	11.50	12.25	11.63	7.06	13.75	13.13	7.06	13.75	13.13	12.38	13.56	12.94	9.13
200-300	13.07	12.38	12.71	13.94	13.25	8.81	15.44	14.75	8.81	15.50	14.75	13.25	15.19	14.50	10.13
300-500	15.09	14.34	14.64	16.00	15.25	12.13	17.50	17.75	12.13	17.50	16.75	14.88	17.25	16.50	11.94
Dimensions i	n Centin	neters													
60-100	29.1	27.6	29.2	31.1	29.5	17.9	34.9	33.3	17.9	34.9	33.3	31.4	34.4	32.9	23.2
150-300	29.1	27.6	29.2	31.1	29.5	17.9	34.9	33.3	17.9	34.9	33.3	31.4	34.4	32.9	23.2
200-300	33.2	31.4	32.3	35.4	33.7	22.4	39.2	37.5	22.4	39.4	37.5	33.7	38.6	36.8	25.7
300-500	38.3	36.4	37.2	40.6	38.7	30.8	44.5	45.1	30.8	44.5	42.5	37.8	43.8	41.9	30.3

◆For dimensions of fixture unit only, subtract pendant hood dimension 1.31" (3.3cm) from dimensions A and B as listed.

A-51 Reflectors*







Size (Watts)	Α	В	Α	В	Α	В
Dimensions in Inc	hes					
60-100	12.00	4.50	10.00	7.63	_	_
150-200	14.00	4.38	10.00	7.63	_	_
200-300	16.00	5.19	12.00	7.88	12.00	6.06
300-500	20.00	6.84	18.00	13.13	18.00	9.13
Dimensions in Cer	ntimeters					
60-100	30.5	11.4	25.4	19.4	_	_
150-200	35.6	11.1	25.4	19.4	_	_
200-300	40.6	13.2	30.5	20.0	30.5	15.4
300-500	50.8	17.4	45.7	33.3	45.7	23.2

*Dimensions illustrated are for porcelain steel (dome and angle) and etched Alzak aluminum (high bay). Overall dimensions for fiberglass reinforced polyester reflectors are: standard dome—16-1/2" dia., 6" high; 30° Angle—14-3/8" dia., 10" high.

Photometric Data: A-51® Incandescent Explosionproof Lighting Fixtures

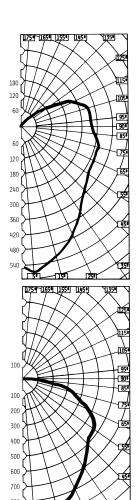
Class I, Groups C and D Fixtures.

Coefficients of Utilization: Zonal Cavity Method

Photometric data shown here is based on a 200 watt type PS-30 lamp and is representative of the performance for all A-51 incandescent fixtures using 60 watt to 500 watt lamps. For candlepower values of fixtures with other lamps, use the following multipliers: 60 watt A-19—.23; 100 watt A-19—.47; 150 watt A-21—.75; 200 watt A-23—1.07; 200 watt A-25—1.02; 200 watt PS-25—1.03: 300 watt PS-25—1.70; 300 watt PS-30—1.63; 300 watt PS-35—1.55; 500 watt PS-35—2.95; 500 watt PS-40—2.69. To determine candlepower values of fixtures with a guard, multiply by value shown with each curve.

A-51 Incandescent Fixture without Reflector Spacing to Mtg. Ht. Ratio 1.25:1 Guard.877





Effective Floor Cavity Reflectance (Rfc) is 20%

% Ceiling Rcc		80			70				50			30		10			0
% Walls	Rw	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RATIOS	1	.735	.690	.651	.695	.655	.618	.622	.590	.561	.554	.530	.506	.493	.473	.454	.422
	2	.621	.558	.503	.588	.530	.481	.525	.478	.437	.467	.430	.396	.413	.384	.357	.327
Ħ	3	.540	.468	.411	.512	.446	.394	.457	.404	.359	.406	.363	.327	.360	.325	.294	.267
	4	.474	.400	.342	.450	.381	.328	.402	.346	.301	.359	.312	.274	.318	.280	.248	.223
_ ≧	5	.415	.341	.284	.394	.325	.272	.354	.295	.251	.316	.266	.229	.280	.240	.207	.184
CAVIT	6	.372	.297	.245	.352	.284	.233	.316	.258	.215	.283	.234	.197	.252	.210	.178	.157
	7	.334	.262	.213	.317	.249	.203	.285	.227	.187	.255	.207	.170	.228	.187	.155	.136
ROOM	8	.300	.231	.182	.285	.221	.175	.256	.202	.162	.231	.183	.148	.206	.165	.135	.117
Æ	9	.271	.204	.157	.258	.195	.152	.233	.178	.140	.209	.162	.128	.187	.146	.117	.100
	10	.246	.181	.139	.234	.175	.135	.212	.160	.124	.191	.145	.113	.172	.132	.102	.087

A-51 Incandescent Fixture with Standard Dome Reflector Spacing to Mtg. Ht. Ratio 1.25:1

Guard .890



Effective Floor Cavity Reflectance (Rfc) is 20%

% Ceilin	% Ceiling Rcc		80			70			50			30		10			0
% Walls	Rw	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
	1	.757	.727	.700	.740	.713	.689	.709	.686	.667	.681	.663	.646	.656	.641	.627	.612
SO _	2	.660	.613	.572	.647	.603	.567	.621	.585	.552	.598	.568	.540	.577	.551	.528	.512
RATIOS	3	.580	.524	.478	.570	.516	.475	.549	.504	.466	.529	.490	.458	.511	.478	.449	.434
> -	4	.514	.452	.403	.504	.446	.400	.486	.436	.395	.469	.425	.390	.454	.415	.384	.368
	5	.451	.385	.336	.442	.380	.334	.427	.372	.332	.413	.364	.327	.399	.357	.323	.308
CAVIT	6	.402	.336	.291	.394	.333	.286	.381	.326	.285	.369	.319	.282	.358	.313	.279	.264
	7	.361	.296	.254	.355	.293	.250	.343	.286	.247	.332	.282	.245	.323	.278	.243	.229
ROOM -	8	.323	.261	.216	.318	.258	.216	.308	.254	.215	.299	.249	.213	.290	.245	.211	.197
Æ	9	.291	.230	.187	.287	.227	.187	.278	.223	.186	.269	.219	.184	.262	.216	.182	.169
	10	.264	.204	.166	.259	.204	.166	.253	.200	.164	.245	.197	.162	.240	.194	.161	.149



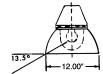
Photometric Data: A-51® Incandescent Explosionproof Lighting Fixtures

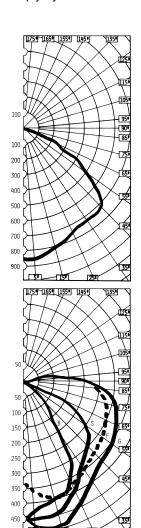
Class I, Groups C and D Fixtures.

Coefficients of Utilization: Zonal Cavity Method

Photometric data shown here is based on a 200 watt type PS-30 lamp and is representative of the performance for all A-51 incandescent fixtures using 60 watt to 500 watt lamps. For candlepower values of fixtures with other lamps, use the following multipliers: 60 watt A-19—.23; 100 watt A-19—.47; 150 watt A-21—.75; 200 watt A-23—1.07; 200 watt A-25—1.02; 200 watt PS-25—1.03: 300 watt PS-25—1.70; 300 watt PS-30—1.63; 300 watt PS-35—1.55; 500 watt PS-35—2.95; 500 watt PS-40—2.69. To determine candlepower values of fixtures with a guard, multiply by value shown with each curve.

A-51 Incandescent Fixture with High Bay Reflector Spacing to Mtg. Ht. Ratio 1.40:1 Guard .865





Effective Floor Cavity Reflectance (Rfc) is 20%

% Ceiling	% Ceiling Rcc		80			70			50			30		10			0
% Walls	Rw	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
	1	.686	.644	.645	.671	.651	.634	.644	.628	.614	.620	.607	.595	.598	.588	.577	.566
so_	2	.614	.580	.549	.603	.571	.545	.581	.555	.531	.562	.540	.520	.544	.525	.508	.496
RATIOS –	3	.550	.508	.473	.542	.501	.470	.524	.490	.461	.507	.478	.454	.492	.467	.446	.434
<u> </u>	4	.493	.445	.408	.486	.441	.404	.470	.431	.400	.456	.422	.395	.443	.413	.389	.377
Ę	5	.439	.387	.349	.432	.383	.347	.420	.376	.344	.407	.369	.340	.396	.383	.336	.324
CAVIT	6	.393	.340	.304	.387	.338	.300	.376	.331	.298	.366	.326	.296	.356	.320	.293	.281
	7	.352	.299	.264	.347	.296	.261	.337	.290	.258	.327	.287	.256	.320	.283	.254	.242
ō_	8	.313	.261	.224	.309	.259	.223	.300	.255	.222	.293	.251	.220	.285	.247	.219	.207
۶ 2	9	.280	.228	.191	.276	.225	.191	.268	.222	.190	.261	.219	.189	.254	.216	.187	.176
	10	.252	.201	.168	.248	.201	.168	.242	.197	.167	.236	.195	.165	.231	.192	.164	.153
ROOM CA	7 8 9	.352 .313 .280	.299 .261 .228	.264 .224 .191	.347 .309 .276	.296 .259 .225	.261 .223 .191	.337 .300 .268	.290 .255 .222	.258 .222 .190	.327 .293 .261	.287 .251 .219	.256 .220 .189	.320 .285 .254	.283 .247 .216	.254 .219 .187	.24

A-51 Incandescent Fixture with 30° Reflector



B-Back S-Side F-Front

G—Front W.Guard

Class I, Div. 1 and 2 Groups A♠,B,C,D Class II, Div. 1 and 2 Groups E,F,G Class III UL 1598, UL 844 Listed

A-51® Incandescent Groups A and B Explosionproof Lighting Fixtures: Factory Sealed

Suitable for use in Wet Locations.

	Fixture Type and Type	Hub Size (Inches)	Catalog Number
	Pendant One hub, rigid or flexible mounting.		
artin s	60-200 Watt (AAUA-15) PS-25	1/2 3/4	AAPA1550 AAPA1575
	200-300 Watt (AAUA-2) PS-30	1/2 3/4	AAPA2050 AAPA2075
	Ceiling Four hubs and three close-up plugs.		
	60-200 Watt (AAUA-15) PS-25	1/2 3/4	AACA1550 AACA1575
	200-300 Watt (AAUA-2) PS-30	1/2 3/4	AACA2050 AACA2075
	15° Short Bracket Two hubs and one close-up plug.		
military of the same of the sa	60-200 Watt (AAUA-15) PS-25	1/2 3/4	AASBA1550 AASBA1575
	200-300 Watt (AAUA-2) PS-30	1/2 3/4	AASBA2050 AASBA2075
	Accessories Add suffix to fixture catalog number		Suffix
	Guard Standard Dome Reflector 30° Angle Reflector		-G -ST -AN
00	Porcelain Steel and Polyester Reflectors		
16"		Porcelain	Polyester
Porcelain Standard Dome Standard Dome	Standard Dome 60-200 Watt (AAUA-15) 200-300 Watt (AAUA-2)	AARW-15ST AARW-2ST	AARP-2ST
30° Angle Porcelain Polyester	30° Angle 60-200 Watt (AAUA-15) 200-300 Watt (AAUA-2)	AARW-15AN AARW-2AN	AARP-2AN

◆ Shaded area indicates pendant mount is suitable for Class I, Group A in addition to other applicable area suitabilities. For specific classified area suitability of each fixture, see page G2-4.



A-51® Incandescent Groups A[†] and B Explosionproof Lighting Fixtures: Mounting Hoods, Fixtures and Parts

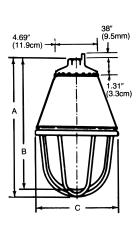
Mounting Hoods in Aluminum and Malleable Iron.* Copper-Free Aluminum Fixture with Gray Epoxy Finish.

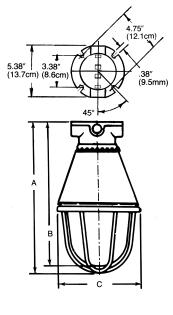
	Туре	Hub Size (Inches)	Catalog Number
	Mounting Hoods		
	Pendant		
	One hub, rigid or flexible mounting	1/2 3/4	AAP-50† AAP-75†
-	Ceiling		
O	Four hubs and three close-up plugs	1/2 3/4	AAC-50 AAC-75
	15° Short Bracket		
	Two hubs and one close-up plug	1/2 3/4	AASB-50 AASB-75
	Fixture Units		
	60-200 Watt PS-25 200-300 Watt PS-30		AAUA-15 AAUA-2
	Globe and Ring Assembly		
	60-200 Watt (AAUA-15)		AAGLA-15
	200-300 Watt (AAUA-2)		AAGLA-2
	Aluminum Guards		
	60-200 Watt (AAUA-15)		AAGUA-15
	200-300 Watt (AAUA-2)		AAGU-2
	Medium Base Lamp Socket		
	60-200 Watt (AAUA-15)		AASPA-15
OOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO<l< td=""><td>200-300 Watt (AAUA-2)</td><td></td><td>AASPA-22</td></l<>	200-300 Watt (AAUA-2)		AASPA-22
A-6	Connection Block		
	Fits all A-51 and AA-51 mount	ng hoods	
	60-300 Watt		VPT-7

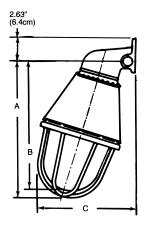
[†] Group A pendant mount only. * Pendant mounting hoods are copper-free aluminum. Ceiling and bracket types are malleable iron with aluminum adapters.



Dimensions: A-51® Groups A and B Incandescent Lighting Fixtures







Pendant

Ceiling

Short Bracket

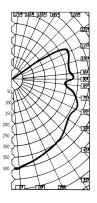
		Pendant			Ceiling			Short Bracket		
Size (Watts)	Α	В	С	A	В	С	Α	В	С	
Dimensions in	Inches									
60-200	13.69	13.13	7.06	16.50	15.94	7.06	15.00	14.44	9.50	
200-300	14.75	13.69	8.81	17.56	16.50	8.81	16.00	15.44	10.38	
Dimensions in	Centimeters									
60-200	34.8	33.3	17.9	41.9	40.5	17.9	38.1	36.7	24.1	
200-300	37.5	34.8	22.4	44.6	41.9	22.4	40.6	39.2	26.4	

Photometric Data: A-51® Incandescent Explosionproof Lighting Fixtures

Class I, Groups A and B Fixtures.

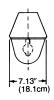
Coefficients of Utilization: Zonal Cavity Method

Photometric data shown here is based on a 200 watt type PS-25 lamp, and is representative of the performance for A-51 incandescent fixtures (Groups A and B). For candlepower values of fixtures with other lamps, use the following multipliers: 150 watt (PS-25), .70; 300 watt (PS-25), 1.6. To determine candlepower values of fixtures with a guard, multiply by value shown with each curve.



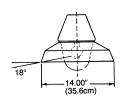
A-51 Incandescent Fixture without Reflector

Spacing to Mtg. Ht. Ratio 1.34:1 Guard .80



A-51 Incandescent Fixture with Standard Dome Reflector

Spacing to Mtg. Ht. Ratio 1.2:1 Guard .80

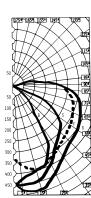


Effective Floor Cavity Reflectance (Rfc) is 20% (No Reflector)

% (Ceiling	Rcc		80			70			50			30			10		0
% V	Valls	Rw	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
		1	.711	.669	.630	.669	.631	.595	.590	.560	.533	.518	.495	.473	.452	.434	.417	.383
	so.	2	.602	.541	.488	.567	.511	.465	.499	.455	.416	.437	.402	.371	.380	.352	.327	.296
i	RATIOS -	3	.519	.449	.393	.488	.424	.374	.430	.379	.336	.375	.335	.300	.325	.292	.264	.236
i	₹	4	.456	.384	.328	.430	.364	.312	.379	.325	.282	.332	.288	.252	.288	.252	.223	.197
Ì	_	5	.400	.328	.274	.378	.311	.260	.334	.278	.236	.293	.247	.211	.254	.217	.187	.164
	CAVITY -	6	.357	.285	.234	.336	.270	.221	.297	.242	.200	.261	.215	.180	.227	.188	.159	.138
		7	.318	.248	.200	.300	.234	.190	.265	.209	.171	.233	.187	.153	.204	.165	.135	.116
	M 00M _	8	.287	.219	.172	.270	.208	.164	.240	.187	.149	.212	.167	.134	.104	.147	.119	.101
		9	.260	.194	.150	.246	.185	.143	.218	.166	.130	.192	.148	.117	.168	.131	.103	.087
or		10	.236	.173	.132	.222	.166	.126	.199	.149	.114	.175	.133	.102	.154	.117	.090	.075

Effective Floor Cavity Reflectance (Rfc) is 20% (Std. Dome Reflector)

%	Ceiling	Rcc		80			70			50			30			10		0
%	Walls	Rw	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
		1	.797	.763	.733	.779	.748	.721	.745	.720	.697	.715	.695	.676	.689	.671	.655	.640
	S	2	.687	.633	.586	.673	.622	.581	.645	.603	.566	.620	.585	.553	.597	.567	.541	.524
	RATIOS	3	.594	.530	.478	.583	.522	.474	.560	.508	.464	.538	.494	.457	.519	.481	.448	.431
		4	.527	.458	.404	.517	.452	.400	.497	.440	.395	.479	.430	.390	.462	.419	.384	.366
	_ ₫	5	.466	.393	.340	.456	.388	.337	.440	.379	.335	.424	.371	.330	.410	.364	.326	.310
	CAWITY	6	.414	.342	.292	.406	.339	.288	.391	.331	.286	.378	.324	.283	.367	.317	.280	.264
	Σ	7	.369	.298	.252	.362	.294	.248	.350	.288	.245	.337	.284	.242	.328	.279	.240	.225
	ROOM	8	.333	.265	.217	.327	.262	.216	.316	.257	.215	.307	.252	.213	.297	.248	.211	.196
		9	.302	.235	.189	.297	.232	.189	.287	.229	.188	.278	.224	.186	.270	.221	.185	.170
		10	.273	.209	.167	.268	.209	.167	.261	.204	.166	.253	.201	.163	.247	.198	.162	.149



A-51 Incandescent Fixture with 30° Angle Reflector



B—Back S—Side

F—Front W/Guard

AHL and EHL Incandescent Explosionproof Lighting Fixtures and Handlamp: Factory Sealed

Suitable for use in Wet Locations.

Applications

- AHL general purpose Explosionproof lighting fixture - an A-51 fixture with handle assembly of hook and cable clamp. CAUTION: For safe operation, the AHL fixture weight must be supported by the hanger hook, not by the flexible cord, per NEC 502-11(a)(3).
- EHL general purpose Explosionproof portable handlamp. Only 5" in diameter for ease of movement.
- The EHL handlamp may be used with AE Automatic Take-Up Reelites listed in Catalog Subsection W3 and ECC Cord Connector and Plugs and Receptacles in Catalog Section L.

Features: AHL and EHL

- Equipped with connection block for ease of wiring and relamping.
- Cable clamp diameters: AHL— .375" to .625". EHL—.406" for 16-3 AWG.
- Heat- and impact-resistant glass globes.

AHL Features

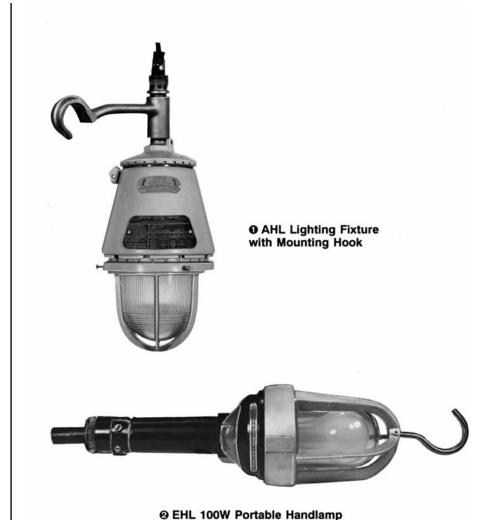
- Sturdy fixture with rugged hanging hook.
- Safety grounding additional terminal furnished to connect to grounding conductor.

EHL Features

- Portability, with phenolic handle and non-sparking guard with hook.
- Easy relamping loosen setscrew, unscrew guard, remove globe and insert lamp.
- Safety grounding remove cable and clamp and make connections to terminal (including one ground terminal) then tighten clamp.

Standard Materials

- Globes: heat-and impact-resistant glass.
- AHL fixture unit, hook and guard: copper-free aluminum.
- AHL cable clamp: brass.
- EHL fixture body and handle: laminated phenolic.
- EHL handle: laminated phenolic.
- EHL hook: brass.
- EHL guard: copper-free aluminum.



Standard Finishes

- AHL fixture unit, guard, handle and hook: two-coat epoxy enamel.
- AHL cable clamp: natural finish.
- EHL fixture body: laminated phenolic.
- EHL handle: phenolic.
- EHL guard and hook: guard natural finish, hook zinc electroplate and clear chromate.
- EHL cable clamp: laminated phenolic.

Compliances

with Hook/Guard Assembly (For

for spring requirements)

Reelite applications consult factory

- UL Standard 1598 (supersedes UL 57) and 844.
- Suitable for use in wet locations.
- Appleton malleable iron products conform to ASTM A47-77, Grade 32510, which has the following properties: tensile strength, 50,000 psi; yield, 32,000 psi; and elongation, 10%.
- Appleton aluminum products are produced from a high strength copper-free (4/10 of 1% max.) alloy.



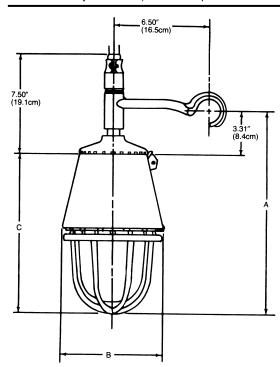
AHL:
Class I, Div. 1 and 2
Groups C,D
Class II, Div. 1 and 2
Groups F+,G
Class III
EHL:
Class I, Div. 1 and 2
Groups C,D

AHL and EHL Incandescent Explosionproof Lighting Fixtures and Handlamp: Factory Sealed

Suitable for use in Wet Locations.

U.S. Pat. 3,170,750 Pat. Can. 1968	Description	Cable Dia. (Inches)	T Ratings	Catalog Number
	AHL—Explosionproof 60-300W Lighting Fixtures Class I, Groups C and D; Class II, Groups F and G CAUTION: For safe operation, we must be supported by hanger hanger hanger because the flexible cord, per NEC 502-	ook, not by		
	60-100 Watt, A-21 (AAU-1N)	.375 to .625	T4	AHL100
	200-300 Watt, PS-30 (AAU-2NS)	.375 to .625	T4A	AHL200
	*EHL—Explosionproof 100W Portable Handlamp Laminated Phenolic Handle. Wi Block takes from #16 to #14 Wi Class I, Groups C and D			
	100 Watt, A-21	.406	ТЗА	EHL100N
	EHL Replacement Globe and Guard			
	Heat-resistant glass globe Aluminum guard with hook			XP419 XP163SA

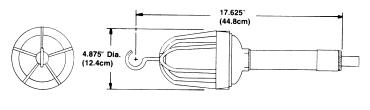
† To reduce the risk of ignition of hazardous atmospheres, do not use where electrically conductive dusts are present (most coal dusts are not electrically conductive). *Handlamp accommodates 16-3 SO cable. Consult factory if 14-3 cable is required.



AHL Dimensions

	Dim. in Dim. in Inches			Centimeters			
Cat. No.,	Α	В	С	Α	В	С	
AHL100	14.25	7.06	10.94	36.2	17.9	27.8	
AHL200	15.94	8.81	12.63	40.5	22.4	32.1	

EHL Dimensions





Class II, Div. 1 and 2 Groups E,F,G Class III

UL 1598, UL 844

EDT Incandescent Dust-Ignitionproof Lighting Fixtures and Accessories

Suitable for use in Wet Locations.

	Watts	Hub Size	Catalog Number
9"	Pendant Lighting Fixture* One tapped opening for rigid or flexible mounting, with heat resistant clear globe		
→ 5-1/4"	60-200 Watt	1/2"	EDTP2050
Ĭ I	Fixture Accessories and Parts		
7"	Heat Resistant Clear Glass Globe		
5-1/4"	60-200 Watt		VSGL-2HR
7" 4-9/32"	Globe Guard		
5-1/4"	60-200 Watt		DPGU-2
	Replacement Porcelain Shock-Absorbing Socket Medium Base		
VPLR-123	60-200 Watt		VPLR-123

^{*} T3C maximum operating temperature. Supply wire 150°C. Maximum ambient temperature 25°C. Vertical mount only (globe down).



ELS Series Emergency Lighting System: Explosionproof, Dust-Ignitionproof

Remote and direct mounted fixtures for hazardous location applications

Applications

- ELS Series features an emergency lighting power unit that is designed to provide safe operation in the presence of hazardous gasses, vapors, or dusts, defined by the National Electrical Code as Class I, Groups C and D, and Class II, Groups E,F,G.
- Typical applications include all means of egress (such as walkways, exit ramps, stairs and aisles) for hazardous areas which include oil refineries, petrochemical facilities, pulp and paper mills, chemical storage areas, waste water treatment facilities and grain elevators.

Features

- The electronics consist of a solidstate charger, transfer circuit and low voltage battery disconnect circuit.
- The unit test switch and AC "On" indicator light are housed in a separate module that may be attached directly to the unit housing or mounted remotely for ease of testing.
- All ELS Series units are rated for operation in NEC Class I, Divisions 1 or 2 Groups C and D and Class II, Divisions 1 or 2 Groups E, F, and G environment.
- Housing provisions allow for the attachment of two optional Explosion-proof lighting fixtures.
- Unit capacity is sufficient for the connection of up to four, 6- or 12- volt, 18-watt fixtures
- Units provide 90 minutes of emergency operation.
- The solid-state charger maintains battery at full charge.
- Upon failure of utility voltage, the DC emergency lighting load is connected to the battery.
- During emergency operation, automatic battery protection from deep discharge damage is provided by a low-voltage battery disconnect (LVD) circuit.
- Upon restoration of normal power, the charger will begin a recharge cycle.
 It will bring the battery to full capacity within acceptable UL time standards.
- A pilot light indicates the presence of AC line voltage, and a test switch is provided for checking transfer operation.



Lock out type guard on push button accepts locks with up to 1/4" hasp.

- A universal transformer allows operation on 120 or 277 VAC lines.
- Emergency power source is a maintenance-free, sealed, pure-lead battery suited for harsh temperature environments for 0° to 40°C.
- Expected life is 10 years
- Compact in design.
- Never necessary to add water.
- Standard illumination is provided using fixtures specially designed for emergency lighting in hazardous environments, supplied with double contact bayonet base 18 or 28-watt incandescent lamps.
- Designed for easy installation.
 Provided with 4 mounting holes for attachment to a wall or other suitable surface. Mounting hardware not included.
- Housing is drilled and tapped for installation of utility 1/2" NPT conduit.
- Quick access to internal wiring and components is provided by thread-on cover.
- All necessary fittings for test switch/ pilot light module supplied standard.

Standard Materials

- Battery Enclosure: Copper Free Aluminum.
- Fixtures and guards: Copper Free Aluminum.

- Ceiling and bracket mounts: Malleable Iron with aluminum adapter.
- Pendant mount: Copper Free Aluminum.
- Reflectors: Porcelain enameled steel.
- Test Switch: Copper free Aluminum with stainless steel hardware.

Standard Finishes

- Enclosure, Fixtures and Test Station: Epoxy Powder Coat Finish Electrostatically applied for complete and uniform surface protection
- Steel Reflectors: White Porcelain Enamel.

Options

- The fixture may be adapted to serve as an exit sign through use of an Auxiliary Exit Housing.
- Time Delay Relay (15 min.) available to permit normal lighting to re-establish brightness. Add suffix T1 for 120 VAC or T2 for 277 VAC.

Compliances

- UL 844
- UL 924
- NFPA101 (Life Safety Code)

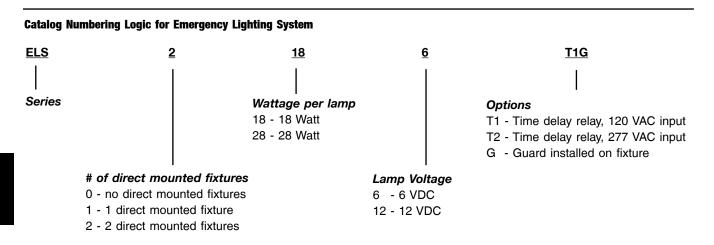




Class I, Div. 1 and 2 Groups B*,C,D Class II, Div. 1 and 2 Groups E,F,G Class III

ELS Series Emergency Lighting System: Explosionproof, Dust-Ignitionproof

Remote and direct mounted fixtures for hazardous location applications



Reflectors and exit signs ordered separately. See accessories page.

Capacity of standard ELS unit (75 Watt for 90 minutes).

Combination Number	Number of Fixtures	Wattage per Fixture	Total Wattage
1	1	18	18
2	1	28	28
3	2	18	36
4	2	28	56
5	3	18	54
6	1	28	64
	2	18	
7	4	18	72

Up to 2 fixtures may be direct mounted. The remainder must be remote mounted.

^{*} Consult factory for Class I, Group B rating.

Class I, Div. 1 and 2 Groups C,D Class II, Div. 1 and 2 Groups E,F,G Class III

ELS Series Emergency Lighting System: Explosionproof, Dust-Ignitionproof

Remote and direct mounted fixtures for hazardous location applications

Emergency Lighting System with Direct Mounted Fixtures



Number of Fixtures	Watts per Lamp	Lamp Input Voltage Voltage	Catalog Number (Lamp(s) Included)	
2	18	6 VDC 120/277 VAC	ELS2186 0960	
2	28	6 VDC 120/277 VAC	ELS2286 0999	
2	18	12 VDC 120/277 VAC	ELS21812 0999	
2	28	12 VDC 120/277 VAC	ELS22812 0999	
1	18	6 VDC 120/277 VAC	ELS1186 0999	
1	28	6 VDC 120/277 VAC	ELS1286 0999	
1	18	12 VDC 120/277 VAC	ELS11812 0999	
1	28	12 VDC 120/277 VAC	ELS12812 0000	

Emergency Lighting System Enclosure with Battery and Charger



Lamp Voltage	Input Voltage	Catalog Number with Push-to-Test (Incl. Fittings)	
6 VDC	120/277 VAC	ELS06 000	
12 VDC	120/277 VAC	ELS012 000	

Emergency Lighting System Fixture for Direct Mounting to Enclosure

Includes all necessary fittings and lamp.



Watts Per Lamp	Lamp Voltage	Catalog Number Lamp Included
18	6 VDC	AP1050-186-DM ⊕
28	6 VDC	AP1050-286-DM
18	12 VDC	AP1050-1812-DM @
28	12 VDC	AP1050-2812-DM @

- 1/2" NPT provided for AC input.
- 2 Add suffix T1 for time delay relay for 120 VAC input.
- Add suffix T2 for time delay relay for 277 VAC input.
- To order fixtures with guard installed add suffix G. Reflectors and exit signs are ordered separately. See accessories page.

G2—22
Class I, Div. 1 and 2
Groups C,D
Class II, Div. 1 and 2
Groups E,F,G
Class III

ELS Series Emergency Lighting System: Explosionproof, Dust-Ignitionproof

Remote and direct mounted fixtures for hazardous location applications

Emergency Lighting System Fixture for Remote Mounting

Lamp included









Pendant Mount

Ceiling Mount

Long Bracket Mount

Short Bracket Mount

Mounting Type	Watts Per Lamp	Lamp Voltage	Catalog Number Lamp Included 0
Pendant	18	6 VDC	AP1050-186
One 1/2" Hub	28	6 VDC	AP1050-286
	18	12 VDC	AP1050-1812
	28	12 VDC	AP1050-2812
Ceiling	18	6 VDC	AC1050-186
Four 1/2" Hubs,	28	6 VDC	AC1050-286
Three Close-Up Plugs	18	12 VDC	AC1050-1812
, ,	28	12 VDC	AC1050-2812
ong Bracket	18	6 VDC	ALB1050-186
Four 1/2" Hubs,	28	6 VDC	ALB1050-286
Three Close-Up Plugs	18	12 VDC	ALB1050-1812
, ,	28	12 VDC	ALB1050-2812
Short Bracket (15 degrees)	18	6 VDC	ASB1050-186
آwo 1/2" Hubs,	28	6 VDC	ASB1050-286
One Close-Up Plug	18	12 VDC	ASB1050-1812
. 5	28	12 VDC	ASB1050-2812

Emergency Lighting System Replacement Fixtures

Lamp included. Fits existing mounting hood



Watts Per Lamp	Lamp Voltage	Catalog Number Lamp Included
18	6 VDC	AAU1N-186
28	6 VDC	AAU1N-286
18	12 VDC	AAU1N-1812
28	12 VDC	AAU1N-2812

● To order fixtures with guard installed add suffix – G. Reflectors and exit signs are ordered separately. See accessories page.



ELS Series Emergency Lighting System: Accessories, Replacement Parts and Technical Data

	Description	Catalog Number
	Guard	AAGU1
EXIT	Three-Way Exit Sign Epoxy enameled steel — 6"-high red lettering Mounts to fixture units in place of guard.	CJEXRN
EXIT	Single Sided Exit Sign Epoxy enameled steel — 6"-high red lettering Mounts to fixture units in place of guard.	AEXR-15R
	30° Angle Reflector	AARW15AN
	Standard Dome Reflector	AARW15ST
	Push-to-Test Station Cover with Switch and Pilot Light Switch Only Pilot Light Only	EFDCB150J1U1-T-A EFKB-J1U1-TEST SPBB-U1-Q SPLNS-RE-B
	Lamp, 18 W, 6 VDC Lamp, 28 W, 6 VDC Lamp, 18 W, 12 VDC Lamp, 28 W, 12 VDC	59620527074 59620527075 59620527076 59620527078

Technical Data: Operating Temperature

Lamp	Supply Wire	Ambient Temp	Class I, Div. 1 & 2	Class II, Division 1 & 2 (Groups E, F & G) Operating Temperature
Watts	Temp (degrees C)	(degrees C)	Operating Temperature	
18	125	40	T5	T3C
28	125	40	T5	T3C

Operating temperatures are with and without reflectors and guards

"T" numbers represent the maximum surface temperature for Class I, Div. 1 locations and the maximum surface temperature under dust blanket for Class II, Div. 1 locations.

"T" Number	T1	350	325	T2	T2A	T2B	T2C	T2D	Т3	ТЗА	тзв	тзс	T4	T4A	T 5	Т6
Temp. Range (°C)	351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	85

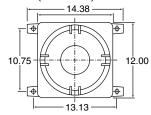
NOTE: The maximum operating temperature of the fixture must not exceed the ignition temperature of the gas, vapor or dust to be encountered per NEC 500-2(c).



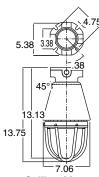
ELS Series Emergency Lighting System: Weights and Dimensions

phts							
Weight (lbs.)	Catalog Number	Weight (lbs.)	Catalog Number				
52	ELS06, ELS012	7.6	AAU1N-186				
11	AP1050-186-DM	0.4	AAGU1				
9	AP1050-186	5	AEXR-15R				
12.5	AC1050-186	5	CJEXRN				
16.6	ALB1050-186	2.1	AARW15AN				
12.5	ASB1050-186	2.1	AARW15ST				
4	EFDCB150J1U1-T-A						

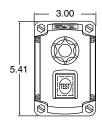
Dimensions (In Inches)



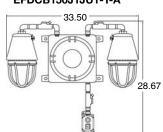
Battery Enclosure



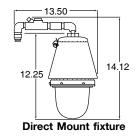
Ceiling Mount



EFDCB150J1JU1-T-A

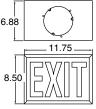


ELS with 2 direct mounted fixtures

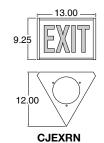




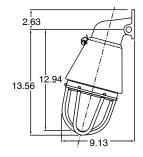
Long Bracket Mount



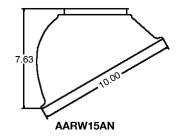
AEXR-15R

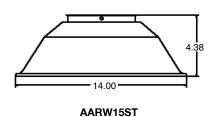


14.69 38 11.63 12.25 1.31 Pendant Mount



Short Bracket Mount







Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof

Applications

- Code•Master Explosionproof Strobe and Beacon Fixtures are designed to provide safe operation in the presence of hazardous gases, vapors, or dusts, defined by the National Electrical Code as Class I, Groups C and D, and Class II, Groups E, F and G.
- For use in hazardous locations such as plants where plastics, paints, thinners and petrochemicals are manufactured.
- In areas where audible signals cannot be heard.
- To warn of unsafe conditions and other communication needs.
- -25°C minimum operating temperature.

Features

- Fixtures operate safely in high ambient temperatures.
- Available for fire alarm hearing impaired.
- Strobe 65 flashes per minute.
- Beacon 75 rotations per minute.
- Fixtures are complete with lamp.
- Patented "wireless" design. Threading of fixture unit onto mounting hood makes electrical connection. The only wiring required is attaching two wires to connection block in mounting hood.
- Connection block is easily wired: (a) loosen two screws, (b) make wire connections, (c) re-position connection
- Safe, easy servicing without disconnecting any wiring. "Wireless" fixture unit threads off mounting hood for convenient servicing or for immediate replacement with a "stand-by" unit.
- Acme double-lead threads speed installation and fixture removal from mounting hood only half as many turns are required as for single-lead threads. The threads do not stick or gall, eliminating problems often encountered with single-lead threads during fixture unit removal.
- All threaded joints are flame-tight.
- Lens available in five colors: Red, Amber, Blue, Green and Clear. (Factory installed).
- Factory sealed. External seals not required.
- Heat and impact resistant globes have smooth dust-resistant exterior.



Fixtures are suitable for mounting in any position including globe up or globe down utilizing pendant, ceiling or wall bracket type mounts. Fixtures shown with optional guard.

- Superior corrosion-resistance, with epoxy powder coat finish.
- Fixture is suitable for mounting globe up or globe down utilizing pendant, ceiling or wall bracket type mounts.
- Optional guards protect globes from damage. Secured to fixture with three stainless steel screws.

Standard Materials

- Fixture housing and guards: copperfree aluminum (less than 4/10 of 1% maximum copper content).
- Mounting hoods: copper-free aluminum (less than 4/10 of 1%).
- Globes: Prismatic Glass.

Standard Finishes

• Fixture housing, guards and mounting hoods: Epoxy power coat finish, electrostatically applied for complete, uniform corrosion protection.

Compliances

- UL and cUL Listed.
- Class I, Div. 1 and 2, Groups C and D.
- Class I, Div. 2, Groups A, B, C and D.
- Class II, Div. 1 and 2, Groups E, F, and G.
- Class III.
- Type 3R and 4X
- Marine Outside Type (Saltwater).
- UL 1203.
- UL 1638 Visual Signaling Appliances.
- UL 1971 Visual Signaling Equipment has been investigated for fire protective signaling services to alert hearing impaired persons. This signaling equipment is intended to be used in conjunction with Listed compatible units and devices. Visual signaling equipment Listed in this category is intended to be used in the "Public Operating Mode" as defined in NFPA 72.



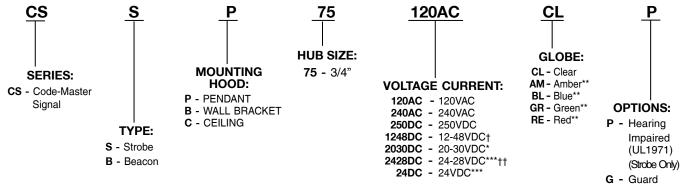
i2-26

Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof

Ordering Information:

Order using catalog numbering guide below or select catalog number from pages G2-27 through G2-30.

CATALOG NUMBERING GUIDE FOR CODE-MASTER STROBE AND BEACON LUMINAIRES



- * UL1971 Strobe Only
- ** Not for use with UL1971 Strobe
- *** Diode Polarized (Current limiter supplied as standard).
- †Strobe Only
- ††Beacon Only

Technical Data: Thermal Suitability of Code-Master Strobe and Beacon Fixture.

Operating Temperatures Class I, Div. 1 and 2 Class I, Div. 2 Class II, Div. 1 & 2 Ambient Groups C & D Groups A & B Class III Strobe Beacon Strobe Strobe Beacon Temp. Beacon 40°C T6 T6 T2B 450°C T4A T4A 55°C T6 T5 T2B 450°C T4A T4A 65°C T6 T5 T2A 450°C T4 T4

Operating Temperatures: Represent the Maximum Internal Temperature for Class I, Div. 2 Locations and Maximum Surface Temperature for Class I, Div. 1 Locations, and Maximum Surface Temperature Under Dust Blanket for Class II, Div. 1.

"T' Number	T1	350	325	T2	T2A	ТВ	T2C	T2D	Т3	ТЗА	тзв	Т3	T4	T4A	T5	Т6
Temp Range (°C)	351-450	326-350	301-325	281-300	261-280	231-260	216-230	201-215	181-200	166-180	161-165	136-160	121-135	101-120	86-100	85

NOTE: The maximum operating temperature of the fixture must not exceed the ignition temperature of the gas, vapor or dust to be encountered per NEC 500-5(e, f).



Catalog Number* +

Class I, Div. 1 and 2, Groups C,D Class I, Div. 2, Groups A,B Class II, Div. 1 and 2 Groups E,F,G Class III NEMA 3R, 4X UL and cUL Listed Standards UL 1638 and UL1203 Suitable for Wet Locations Marine Outside Type (Saltwater)

Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof



		VOILS	Catalog Nulliber
B I I	<u> </u>	120VAC	CSSP75120ACCL
Pendant	Strobe	240VAC	CSSP75240ACCL
One Hub 3/4" NPT		250VDC	CSSP75250DCCL
Rigid Conduit.		12-48VDC	CSSP751248DCCL
		24VDC	CSSP7524DCCL**
		120VAC	CSBP75120ACCL
	Beacon	240VAC	CSBP75240ACCL
		24-28VDC	CSBP752428DCCL**

Volte



Ceiling Rigid Conduit Four Hubs 3/4" NPT Three Close-Up Plugs	Strobe	120VAC 240VAC 250VDC 12-48VDC 24VDC	CSSC75120ACCL CSSC75240ACCL CSSC75250DCCL CSSC751248DCCL CSSC7524DCCL**
	Beacon	120VAC 240VAC 24-28VDC	CSBC75120ACCL CSBC75240ACCL CSBC752428DCCL**



W. II B I I	a	120VAC	CSSB75120ACCL
Wall Bracket	Strobe	240VAC	CSSB75240ACCL
Rigid Conduit		250VDC	CSSB75250DCCL
Four Hubs 3/4" NPT		12-48VDC	CSSB751248DCCL
Three Close-Up Plugs		24VDC	CSSB7524DCCL**
		120VAC	CSBB75120ACCL
	Beacon	240VAC	CSBB75240ACCL
		24-28VDC	CSBB752428DCCL**

[†]To order colored lens replace last digits of catalog number CL with AM for Amber, BL for Blue, GR for Green, RE for Red.



 $^{^{\}star}$ Catalog numbers shown are supplied with clear lens. Add G suffix for optional Guard.

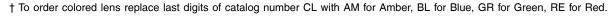
^{**} Diode Polarized (Current limiter supplied as standard).

Class I, Div. 1 and 2, Groups C,D Class I, Div. 2, Groups A,B Class II, Div. 1 and 2 Groups E,F,G Class III NEMA 3R, 4X UL and cUL Listed Standards UL 1638 and UL1203 Suitable for Wet Locations Marine Outside Type (Saltwater)

Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Mounting Hoods, Fixture Units, Weights

Mounting Hoods:	Type Mounting	Hub Size (In.)	Hood Weight	Catalog Number
	Pendant One Hub Rigid Conduit	3/4	2 lbs.	CAP75
	Ceiling Four Hubs Three Close-Up Plugs Rigid Conduit	3/4	4 lbs.	CAC75
	Bracket Four Hubs Three Close-Up Plugs Rigid Conduit	3/4	6 lbs.	CALB75

ixture Unit Only: (not including r	mounting h	nood)	Volts	Unit Weight	Catalog Number*†
A B .	Strobe	120VAC	10 lbs. 3 oz.	CSST120ACCL	
		240VAC	10 lbs. 3 oz.	CSST240ACCL	
married to		250VDC	10 lbs. 3 oz.	CSST250DCCL	
		12-48VDC	10 lbs. 3 oz.	CSST1248DCCL	
		24VDC	10 lbs. 3 oz.	CSST24PDCCL**	
	Beacon	120VAC	10 lbs. 10 oz.	CSB120ACCL	
The state of the s		240VAC	10 lbs. 10 oz.	CSB240ACCL	
		24-28VDC	10 lbs. 10 oz.	CSB2428PDCCL**	•





Class I, Div. 1 and 2, Groups C,D Class I, Div. 2, Groups A,B Class II, Div. 1 and 2 Groups E,F,G Class III NEMA 3R, 4X UL and cUL Listed Standards UL 1638 and UL1203 Suitable for Wet Locations Marine Outside Type (Saltwater)

Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof

Strobes For The Hearing Impaired

Stroboo	Toma Marintina	Volto	Hearing Impaired Catalog Number
Strobes:	Type Mounting Pendant One Hub 3/4" NPT Rigid Conduit	Volts 20-30VDC	UL1971 - Hearing Impaired* CSSP752030DCCLP
	Ceiling Rigid Conduit, Four Hubs 3/4" NPT, Three Close-Up Plugs	20-30VDC	CSSC752030DCCLP
	Bracket Rigid Conduit, Four Hubs 3/4" NPT, Three Close-Up Plugs	20-30VDC	CSSB752030DCCLP
Mounting Hoods:	Type Mounting	Hub Size (Inches)	Hearing Impaired Catalog Number
À	Pendant One Hub Rigid Conduit	3/4	CAP75-1971
	Ceiling Four Hubs Three Close-up Plugs Rigid Conduit	3/4	CAC75-1971
	Bracket Four Hubs Three Close-up Plugs	3/4	CALB75-1971
Fixture Unit Only: (less mounting hood)		Volts	Hearing Impaired Catalog Number
		20-30VDC	CSST2030PDCCL
Connection Block: (replacement part)			Hearing Impaired Catalog Number
OES-	For Hearing Impaired Code-Master Fixtures		VPT-7P

^{*} Only clear globes are available for UL1971 Applications.



Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Accessories, Replacement Parts, Weights

	Description	Weight	Catalog Number
P	Optional Aluminum Guard Copper-Free Aluminum.	1.0 lbs.	CJGU-15



Replacement Connection Block

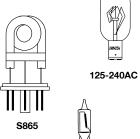
For Non-Hearing Impaired Code-Master Fixtures.

0.5 lbs.

VPT-7

Replacement Lamps

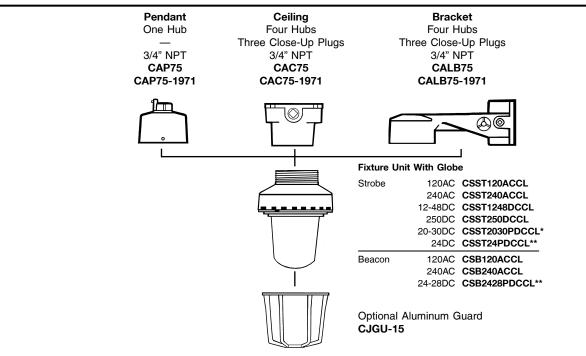
For Strobe and Beacon Code-Master Fixtures.





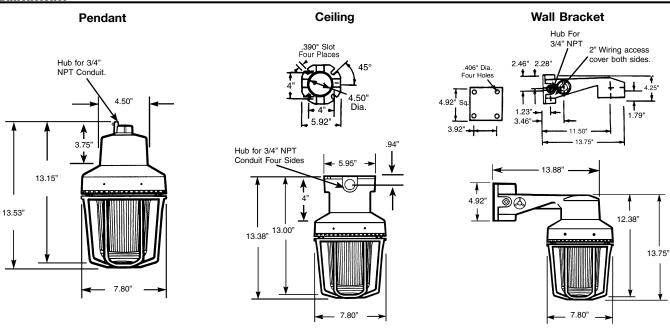
Fixture Type	Lamp Type	Voltage	Wattage	Base Type	Catalog Number
Beacon	Halogen	120VAC	40W	DBL Bayonet	Q4OA9-120AC
Beacon	Halogen	24-28VDC	18W	DBL Bayonet	Q20A-24VDC
Beacon	Incand.	240VAC	25W	DBL Bayonet	125-240AC
Strobe	Xenon	All		Octal Socket	S865

Code•Master™ Strobe and Beacon Factory Sealed Lighting Fixtures: Family Tree and Dimensions



- * UL1971 (See page G2-25).
- ** Diode Polarized (Current limiter supplied as standard).

Dimensions:



UL and cUL Listed
Class I, Div. 1, Groups C,D
Class I, Zone 1, Group IIB
Class II, Div. 1 and 2, Groups E,F,G
Class III

UL 844 UL 1598A NEMA 3R and 4X

Applications

- Code•Master Incandescent Explosionproof Fixtures are designed to provide safe operation in the presence of hazardous gases, vapors, or dusts, defined by the National Electrical Code as Class I, Groups C and D, Class I, Zone 1, Group IIB and Class II, Groups E, F and G.
- For use in hazardous locations such as plants where plastics, paints, thinners and petrochemicals are manufactured.
- For use in chemical and petrochemical plants, such as manufacturers of plastics, paints, and thinners, in refineries, and in other areas where ignitable vapors, dust, moisture and corrosive elements may be present.
- Suitable for outdoor saltwater locations and for other wet locations.

Features

- Fixtures operate safely in high ambient temperatures.
- Patented "wireless" design. Threading of fixture unit onto mounting hood makes electrical connection. The only wiring required is attaching two wires to connection block in mounting hood.
- Connection block is easily wired: (a) loosen two screws, (b) make wire connections, (c) re-position connection block.
- Safe, easy servicing without disconnecting any wiring. "Wireless" fixture unit threads off mounting hood for convenient servicing or for immediate replacement with a "stand-by" unit.
- Acme double-lead threads speed installation and fixture removal from mounting hood only half as many turns are required as for single-lead threads. The threads do not stick or gall, eliminating problems often encountered with single-lead threads during fixture unit removal.
- Strategic location of lamp socket, in combination with interior prism design of the glass globe, provides optimum light distribution and control.
- Heat-and impact-resistant globes have smooth dust-resistant exterior.
- Superior corrosion-resistance, with epoxy powder coat finish.

Code•Master™ Incandescent Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof

For use with threaded metal conduit.



- Porcelain socket with nickel plated phosphor bronze screw shell. Assures long trouble-free operation in high ambient areas.
- Choice of mountings: pendant, ceiling, bracket and stanchion.
- Fiberglass reinforced polyester reflectors, in standard dome, or 30° angle styles, are ideal in installations where luminaire is subject to exceptionally severe corrosive atmospheres.
- All threaded joints are flame-tight.
- Heat and impact resistant globes have smooth dust-resistant exterior.
- Superior corrosion-resistance, with epoxy powder coat finish.
- Optional guards protect globes from damage. Secured to fixture with three stainless steel screws.

Standard Materials

- Fixture housing and guards: copperfree aluminum (less than 4/10 of 1% maximum copper content).
- Mounting hoods: copper-free aluminum (less than 4/10 of 1%).

- Globes: Prismatic Glass.
- Reflectors: fiberglass reinforced polyester.

Standard Finishes

• Fixture housing, guards and mounting hoods: Epoxy power coat finish, electrostatically applied for complete, uniform corrosion protection.

Compliances

- UL and cUL Listed.
- Class I, Div. 1, Groups C and D.
- Class I, Zone 1, Group IIB.
- Class II, Div. 1 and 2, Groups E, F, and G.
- Class III.
- UL 844 Hazardous Locations
- UL 1598A Marine Type Electric Fixtures Outside Type (Salt Water) Outdoor Wet Locations
- NEMA 3R and 4X



Code • **Master** ™ **Incandescent Factory Sealed Lighting Fixtures: Explosionproof, Dust-Ignitionproof**

For use with threaded metal conduit.

Ordering Information:

Order using catalog numbering guide below or select catalog number from pages G2-34.

CATALOG NUMBERING GUIDE FOR CODE-MASTER INCANDESCENT LUMINAIRES

CI

P

30

75

G

SERIES:

CI - Code•Master Incandescent MOUNTING HOOD:

P - Pendant

B - Wall Bracket

C - Ceiling

S - Stanchion

WATTAGE:

30 - 100W A21 200W A23 300W PS25 **HUB SIZE:**

75 – 3/4"

100 – 1" 150 - 1-1/4" or 1-1/2"

OPTIONS:

- Guard Blank - No Guard

Technical Data: Thermal Suitability of Code-Master Incandescent Fixture.

Lamp Type	Lamp Watts (Max.)	Use Wire Supply	Ambient Temperature	Class I, Division 1, Groups C & D	Class II, Division 1, Groups E, F & G
Incandescent (A21)	100	75°C	40°C	T5	T3C
Incandescent (A23)	200	75°C	40°C	T4	T3C
Incandescent (PS25)	300	75°C	40°C	T3C	T3C

"T" Numbers Represent the Maximum External Temperature for Class I, Div. 1 Locations and Maximum Surface Temperature Under Dust Blanket for Class II, Div. 1 Locations.

"T" Number	T1	350	325	T2	T2A	T2	T2C	T2D	Т3	ТЗА	тзв	ТЗ	T4	T4A	T 5	Т6
Temp Range (C°)	351- 450	326- 350	301- 325	281- 300	261- 280	231- 260	216- 230	201- 215	181- 200	166- 180	161- 165	136- 160	121- 135	101- 120	86- 100	85

NOTE:

The maximum operating temperature of the fixture must not exceed the ignition temperature of the gas, vapor or dust to be encountered per NEC 500-5(e, f).

NEMA 3R and 4X

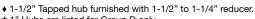
UL and cUL Listed Class I, Div. 1, Groups C,D Class I, Zone 1, Group IIB Class II, Div. 1 and 2, Groups E,F,G Class III UL 844 UL 1598A

Code•Master™ Incandescent Factory Sealed Lighting Fixtures: Fixtures, Mounting Hoods

For use with threaded metal conduit.

		Hub Size (In.)	Catalog Number *
<u></u>	Pendant		
	One Hub	3/4	CIP3075
	Rigid Conduit.	1	CIP30100 †
(0)	Ceiling		
	Rigid Conduit	3/4	CIC3075
	Four Hubs	1	CIC30100 †
	Three Close-Up Plugs		
	Wall Bracket		
	Rigid Conduit	3/4	CIB3075
FAID	Four Hubs	1	CIB30100 †
	Three Close-Up Plugs		
	25° Stanchion		
	One Hub	1-1/2 ♦	CIS30150

Mounting Hoods:	Type Mounting	Hub Size (In.)	Hood Weight	Catalog Number
woulding Hoods.	Type Mounting	Hub Size (III.)	Hood Weight	Catalog Nulliber
	Pendant	3/4	2 lbs.	CAP75
	One Hub	1	2 lbs.	CAP100 †
	Rigid Conduit			
	Ceiling	3/4	4 lbs.	CAC75
	Four Hubs	1	4 lbs.	CAC100 †
	Three Close-Up Plugs			
	Rigid Conduit			
	Bracket	3/4	6 lbs.	CALB75
	Four Hubs	1	6 lbs.	CALB100 †
	Three Close-Up Plugs			
	Rigid Conduit			
	25° Stanchion	1-1/4 or 1-1/2 ♦		CAS-150 ◆
5	One Hub			



^{† 1&}quot; Hubs are listed for Group D only.



UL and cUL Listed Class I, Div. 1, Groups C,D Class I, Zone 1, Group IIB Class II, Div. 1 and 2, Groups E,F,G Class III UL 844 UL 1598A

Code•Master™ Incandescent Factory Sealed Lighting Fixtures: Fixture Unit, Accessories, Replacement Parts, Weights

For use with threaded metal conduit.

Fixture Unit Only: (not including mounting hood)

Catalog Number

CJNC30I



NEMA 3R and 4X

Description	Weight	Catalog Number			
Optional White Polyester F	Optional White Polyester Reflector				
Standard Dome	2.5 lbs.	KR2-ST			
Optional White Polyester F	Reflector				
Angled Reflector	2.5 lbs.	KR2-AN			
Optional Aluminum Guard					
Copper-Free Aluminum.	0.5 lbs.	CJGU-15			
Optional Three Way Exit Si	gn				
		CJEXRN			
Replacement Connection I	Block				
	0.5 lbs.	VPT-7			
	Optional White Polyester F Standard Dome Optional White Polyester F Angled Reflector Optional Aluminum Guard Copper-Free Aluminum.	Optional White Polyester Reflector Standard Dome 2.5 lbs. Optional White Polyester Reflector Angled Reflector 2.5 lbs. Optional Aluminum Guard Copper-Free Aluminum. 0.5 lbs. Optional Three Way Exit Sign Replacement Connection Block			

Fixture and Accessory Weights

Fixture	Fixture Weight	Reflector Weight	Guard Weight	
	11 lbs.	3 lbs.	1 lb.	
Mounting Hood	Pendant	Ceiling	Bracket	Stanchion
	2 lbs.	4 lbs.	6 lbs.	2 lbs.

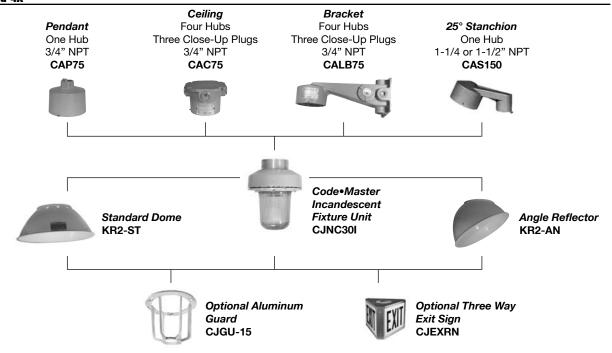


UL and cUL Listed Class I, Div. 1, Groups C,D Class I, Zone 1, Group IIB Class II, Div. 1 and 2, Groups E,F,G Class III

UL 844 UL 1598A NEMA 3R and 4X

Code•Master™ Incandescent Factory Sealed Lighting Fixtures: Family Tree, Dimensions

For use with threaded metal conduit.



Dimensions:

