

WELLGLAS LIGHTING FIXTURES FOR DISCHARGE LAMP (H.I.D)



TIS 1955-2542



ISO9001:2008

Technical data

Type of Protection: Ex de IIA T3 - T5

Conforming to : Standards IEC 60079-0 to1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 / 67 acc.To IEC 60529

Ambient Temp. (Ta) : -20°C to + 55°C

Rated Voltage : 220-240V.AC. 50/60Hz.

Type : F.....C

Lamp : Mercury vapour ,High pressure sodium and Metal halide

Lamp holder : E27 , E40

Transparent cover : Borosilicate glass

Protection class for UL. : Class I, Divition1 or 2 Group.C,D

Class II, Division 1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2



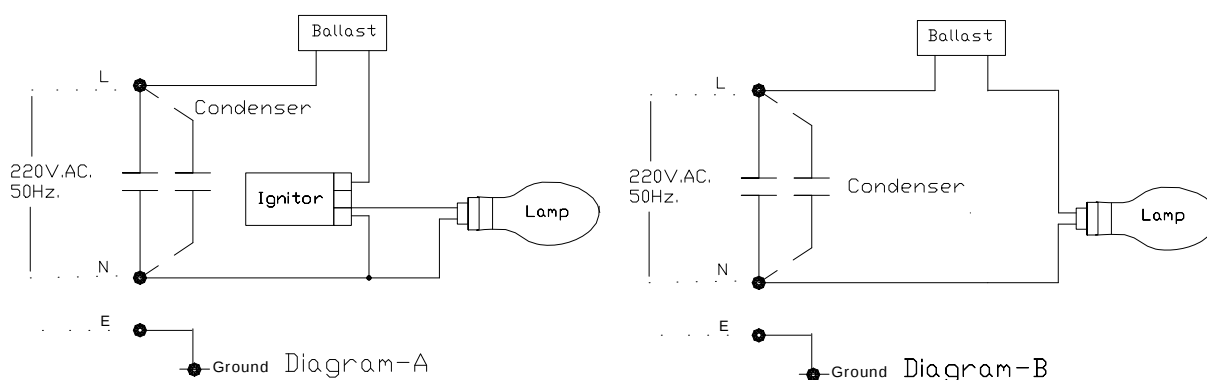
● Descriptions:

- Housing and connection box are made of copper free aluminium alloy and coated with epoxy-polyester powder for high corrosion resistant.
- Integral control gear with in fixture body.
- Silicone gasket sealed against water and dust.
- Terminal Block is provided for 2P+E, 4 Squmm.
- 2 x NPT Thread with 1 blind plug si standard for cable entries or 2 x ISO thread is option.
- Heat and impact resistant glass globe.

● **Options:**

- | | | | | |
|---|------------------------------|--------|---|----------|
| - | Cable entries in ISO thread: | Suffix | - | <i>M</i> |
| - | Aluminium external reflector | Suffix | - | <i>R</i> |
| - | Stainless steel guard: | Suffix | - | <i>G</i> |
| - | Stainless steel bracket: | Suffix | - | <i>B</i> |

Wiring Diagram:



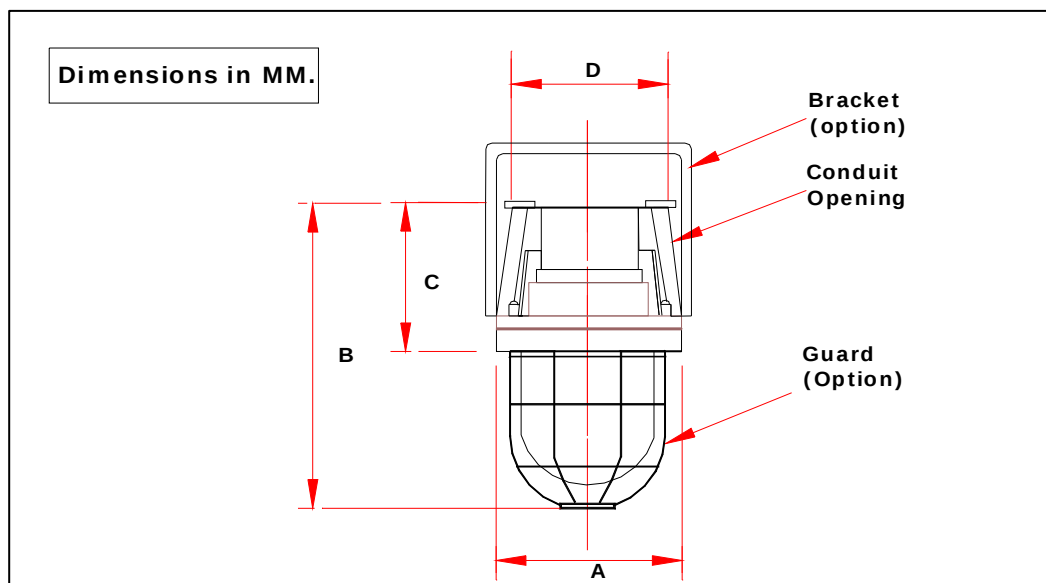


WELLGLAS LIGHTING FIXTURES FOR DISCHARGE LAMP (H.I.D)

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2



Catalogue Numbers:

Lamp Type	Cat.,No.	Temp.	Class	Emtries	Thread	Dimension in MM.				Wiring	Weight
		Ta 40 C	Ta 55 C	NPT(inch)	ISO	A	B	C	D	Diagram	(kgs.)
Mercury Vapor											
HPL-N125W	FMV 125C	T5	T4	1/2"	M20 x 1.5	275	355	195	210	Diagram - B	14.00
HPL-N250W	FMV 250C	T4	T4	3/4"	M25 X 1.5	330	495	275	275	Diagram - B	23.00
HPL-N400W	FMV 400C	T4	T3	3/4"	M25 X 1.5	330	495	275	275	Diagram - B	24.20
High Pressure Sodium											
SON-70WI	FPS 70C	T5	T5	1/2"	M20 x 1.5	275	355	195	210	Diagram - B	14.00
SON-150W	FPS 150C	T5	T5	3/4"	M25 X 1.5	330	540	320	275	Diagram - A	18.20
SON-250W	FPS 250C	T4	T4	3/4"	M25 X 1.5	330	540	320	275	Diagram - A	25.50
SON-400W	FPS 400C	T4	T3	3/4"	M25 X 1.5	330	540	320	275	Diagram - A	26.50
Metal Halide											
HPI PLUS 250W BU	FMH 250C	T4	T4	3/4"	M25 X 1.5	330	540	320	275	Diagram - A	23.80
HPI PLUS 400W BUS	FMH 400C	T4	T3	3/4"	M25 X 1.5	330	540	320	275	Diagram - B	25.50

WELLGLAS LIGHTING FIXTURES FOR DISCHARGE LAMP (H.I.D)

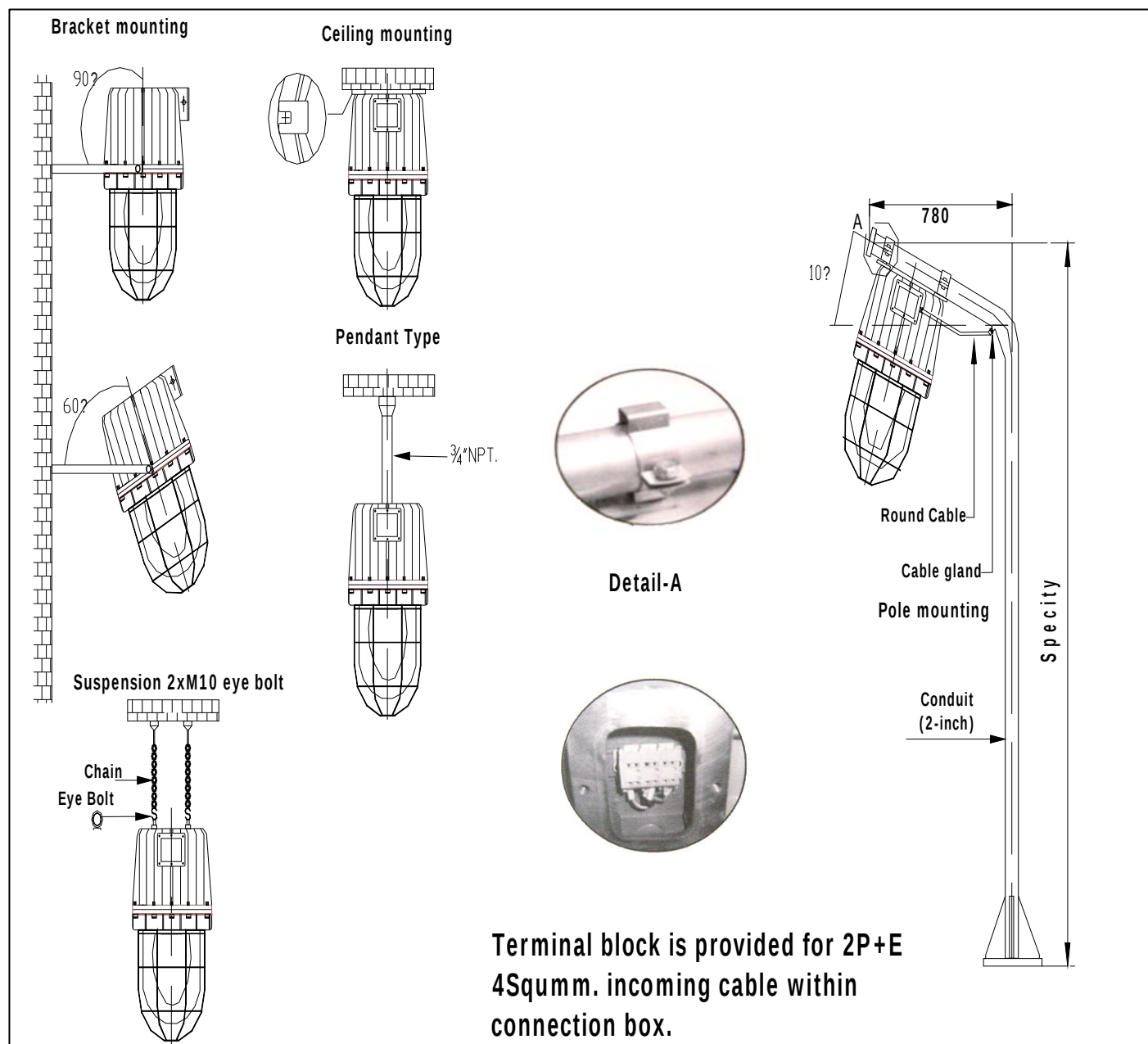


EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2

● Installation information



Options: Aluminium external reflector Suffix - R (WITH DOME)



AFE 1 Floodlights



TIS 1955-2542

● Technical data

Type of Protection: Ex de IIA T3 - T5

Conforming to : Standards IEC 60079-0 to 1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 / 67 acc.To IEC 60529

Ambient Temp. (Ta) : -20 °C to + 55 °C

Rated Voltage : 220-240V.AC. 50/60Hz.

Type : AFE

Lamp : Mercury vapour ,High pressure sodium and Metal halide

Lamp holder : E40

Transparent cover : Borosilicate glass

Protection class for UL. : Class I, Divition1 or 2 Group.C,D

Class II, Division 1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2

● Applications:

The **AFE1** For use hazardous locations due to the presence of flammable gases or vapors, combustible dusts or flying fibers.

illumination in process plants, oil refineries, petrochemical

plants, aircraft servicing areas, pump stations, storage

areas where hazardous substances are handled.

indoor, outdoor or wet and corrosive locations.

● Features:

- Compact fixture size and easy installation.
- Integral ballast, ignitor and condenser in fixture body.
- Multi-finned out side for maximum heat dissipation.
- Two pieces hinge, and gasket provided on the flange cover to protect against the ingress of dust or leakage of liquid.
- Permanently installed with adjustable bracket to provide rotation of wide angle in vertical.
- Long life ballast with Class H insulation wire.
- Terminal block suitable for 4 Sqmm. Cable and one earth Terminal are provided.

● **Standard Materials:**

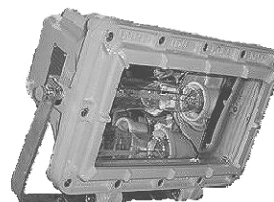
- Fixture body - Copper-free aluminium
- Lens - Heat and impact resistant clear glass
- Bracket - Stainless steel
- Reflector - Anodized aluminium
- Hinge , bolts - Stainless steel

Standard Finishes:

- Copper-free aluminium - Epoxy-polyester power.
- Stainless steel - Natural
- Anodized aluminium - Natural



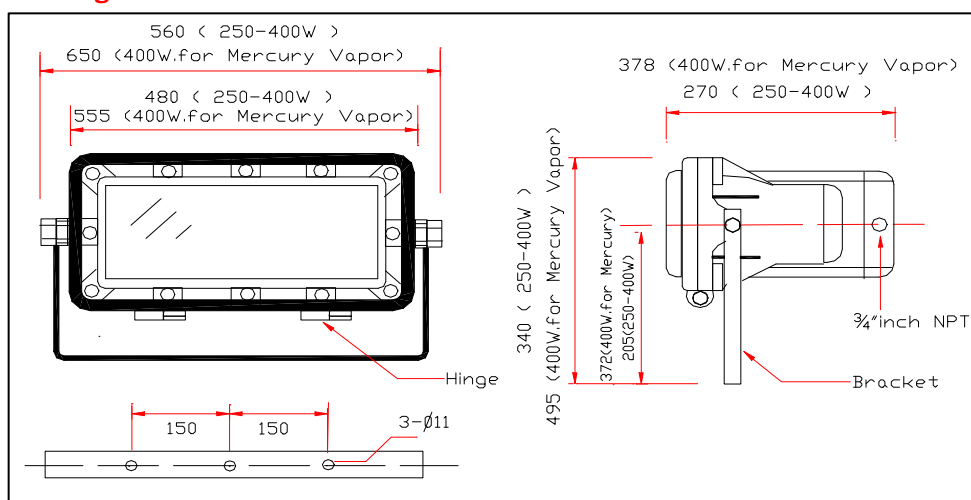
AFE1 250 250-400 W.
for Mercury Lamp



AFE1 250 -400 W.
for Metal and Sodium Lamp

Lamp	Temp. Class (Surface Temp.)						Cat. No.
Watts	40	C	Ta	55	C	Ta	
Mercury Vapor							
250			T4			T3C	AFE1 250M
400			T3A			T3	AFE1 400M
High Pressure Sodium							
250			T4			T3C	AFE1 250S
400			T3C			T3B	AFE1 400S
Metal Halide							
250			T4			T3C	AFE1 250H
400			T3C			T3A	AFE1 400H

Catalogue Numbers and Dimensions:



FHG Halogen Lamp

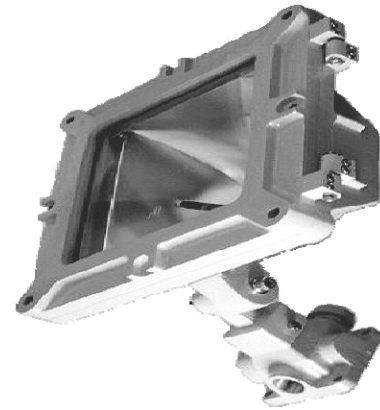
Certification Number:



ISO9001:2008

Technical data

Type of Protection: Ex de IIA T1 - T3
 Conforming to : Standards IEC 60079-0 to 1 or UL 60079-1
 Marking for test : Ex II2G
 Degree of Protection : IP 65 acc.To IEC 60529
 Ambient Temp. (Ta) : -20°C to+ 55°C
 Rated Voltage : 220-240V.AC. 50/60Hz.
 Type : FHG
 Lamp : Halogen
 Transparent cover : Borosilicate glass
 Protection class for UL. : Class I, Division1 or 2 Group.C,D
 Class II, Division1 or 2 Groups.E,F,G
 Class III
 Protection class for IEC : Zone1and Zone 2



Applications:

FHG lighting fixtures are permanently installed to provide general illumination in locations having hazardous atmospheres, such as :
 process plants
 Benzene plants
 Methane plants
 outdoor or wet and corrosive locations.

Standard Materials:

- Fixture body - Copper-free aluminium
- Lens - Heat and impact resistant clear glass
- Bracket - Brass - Epoxy-polyester powder
- Reflector - Anodized aluminium
- Hinge , bolts - Stainless steel

Standard Finishes:

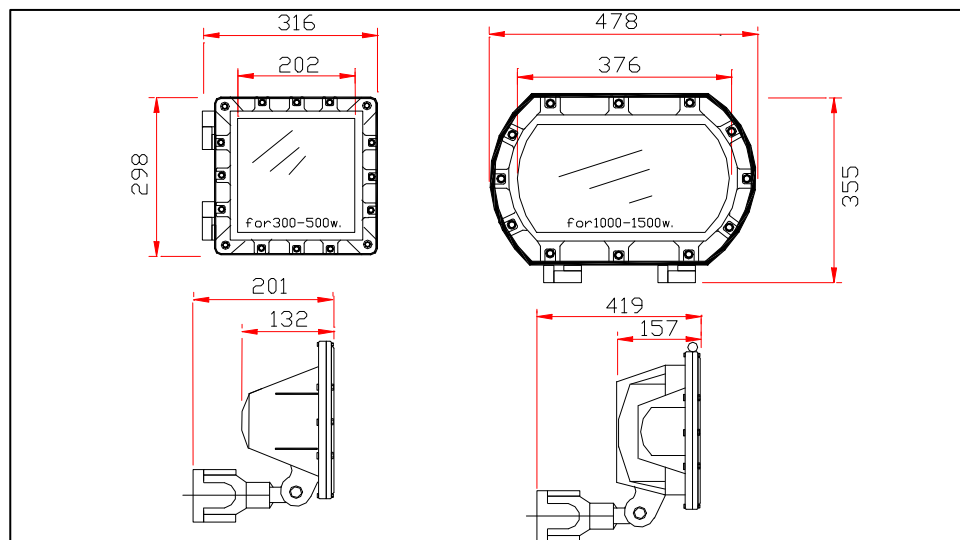
- Copper-free aluminium - Epoxy-polyester power.
- Brass,Stainless - Natural
- Anodized aluminium - Natural

Features:

- FHG quartz lighting fixtures have :
- rugged and compact design
 - door which includes threaded lens ring that encloses heat and impact-resistant glass lens
 - the base joined to housing by factory sealed coupling
 - an access door in base for wiring and positioning
 - a one-piece reflector, precision-formed with polished or etched surface

Lamp Watts	Temp. Class (Surface Temp.)		Cat. No.
	40 C Ta	55 C Ta	
300	T3C	T3B	FHG0300
500	T3C	T2D	FHG0500
1000	T2B	T2A	FHG01000
1500	T1	T1	FHG01500

Catalogue Numbers and Dimensions:





EATK Tank Lights



Bosston
A QUALITY PRODUCT

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2

Technical data

Type of Protection: Ex d IIA T3 - T4

Conforming to : Standards IEC 60079-0 to 1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 / 67 acc.To IEC 60529

Ambient Temp. (Ta) : -20°C to+ 55 °C

Rated Voltage : 220V.AC. 50/60Hz.

Type : EATK

Lamp : 70 w.Halogen,PAR30 ,60 - 100w.Incandescent

Lamp holder : E27

Transparent cover : Borosilicate glass

Protection class for UL. : Class I, Division1 or 2 Group.C,D

Class II, Division1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2



EATK 75



EATK 75S

Standard Materials:

- Body - Copper-free aluminium
- Lens - Heat and impact resistant glass

Standard Finishes:

- Copper-free aluminium - Epoxy-polyester powder

Applications:

The EATK tank lights are suitable to

- illuminate the interior of tanks,containers or process vessels where hazardous substance are present.
- suspend over tank porthole by flexible fixture hanger.

Features:

- Compact designed and factory sealed.
- Ease of relamping by unthreaded the fixture cap.
- Heat and impact resistant glass for non effect of thermal shock.

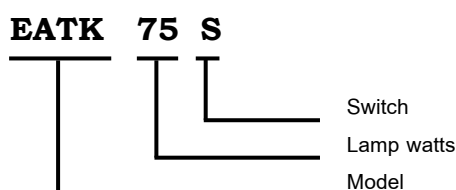
Type Lamps	Lamp Watts	Temp. Class (Surface Temp.)		Cat. No.
		40 C Ta	55 C Ta	
PAR 30	75	T3B	T3A	EATK 75
INCAN	60	T4A	T4A	EATK 60
INCAN	100	T4	T4	EATK 100

Options :

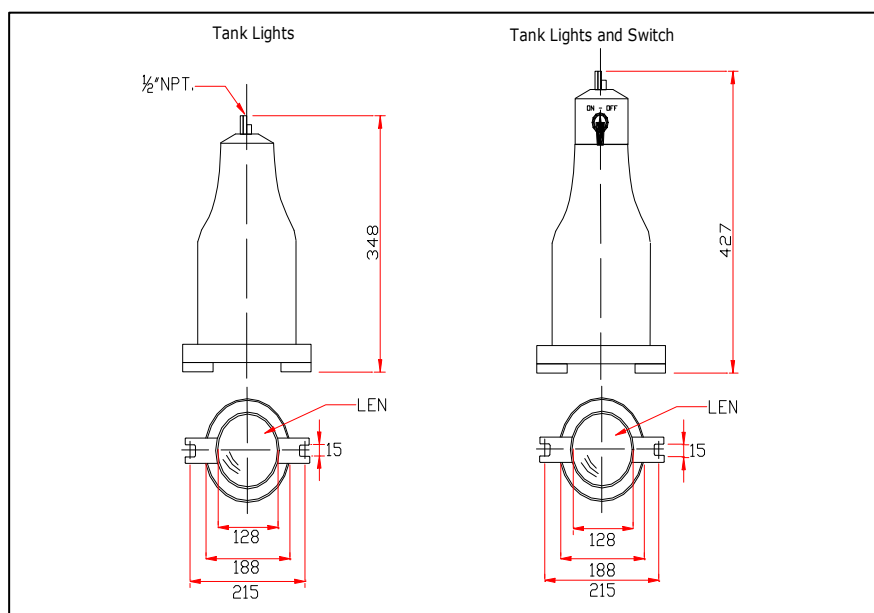
For tank lights and switch, and suffix - s
to Cat.,No.

Ordering Information :

Dimension : (in mm.)



ISO9001:2008





TIS 1955-2542

EMG Emergency Light

Certification Number:

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2

A QUALITY PRODUCT

Technical data

Type of Protection: Ex de IIA T6

Conforming to : Standards IEC 60079-0 to 1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 / 67 acc.To IEC 60529

Ambient Temp. (Ta) : -5°C to + 40°C

Rated Voltage : 220 - 240 V.AC. 50/60Hz. Output 12V.DC.

Type : EMG

Lamp : 2 x 35 W. , 2 x 55 W.

Protection class for UL. : Class I, Division1 or 2 Group.C,D

Class II, Division1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2



ISO9001:2008



EMG 235

Applications:

The EMG12235H emergency lights are specially designed for hazardous areas due to the presence of flammable gases or vapors, combustible dusts and flying fivers.

automatic supply to illuminate in areas where normal lighting system are failed or interrupted.

indoor, sever corrosion areas.

Features:

- Compact factory sealed fixture.
- Multi-Rate solid state charge with automatic switching from high to float charge to prevent battery from damage.
- Solid state components are designed with wide safety factor.
- Automatic disconnecting load from the battery when voltage drop near to the deep-discharge level to prevent battery from damage.
- Maintenance-free sealed lead acid batteries.
- Provided the discharge time in lighting for a period of 2 hours, if longer period on request.
- Fully recharged the battery about 18 hours.
- Explosionproof light fixtures with flexible coupling are adjusted easily by hand.
- MAIN - ON pilot light indicates as power is being supply to the system.
- Provided the "TEST" push button enables to test the lamps.

Standard Materials:

- Body and fixtures - Copper-free aluminium
- Flexible Coupling - Stainless steel

Standard Finishes:

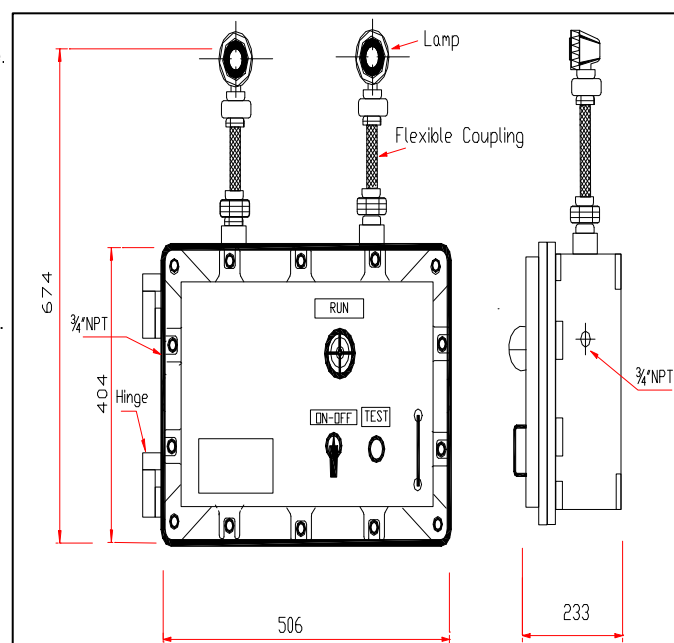
- Copper-free aluminium - Epoxy-polyester powder
- Stainless steel - Natural

Options :

For outdoor used on request.

For input supply 240 V.AC. 50 Hz.

Dimension : (in mm.)



EMG 235H

2 X 35W. Halogen lamp

Model

Portable Hand Lamps


Bosston

A QUALITY PRODUCT

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 ,2



ISO9001:2008

Technical data

Type of Protection: Ex d IIA T6

Conforming to : Standards IEC 60079-1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP66/67 acc.To IEC 60529

Ambient Temp. (Ta) : -20°C to+ 55 °C

Rated Voltage : 12V.DC , 24V.DC. And 220V.AC. 50Hz.

Type : ECFHL and EICHL

Lamp : 11 - 15w. For Compact , 60w. For Incandescent

Protection class for UL. : Class I, Division1 or 2 Group.C,D

Class II, Division1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1 and Zone 2



EICHL60 , ECFHL11

Applications:

The EICHL Incandescent and ECFHL Compact Fluorescent portable hand lamps are suitable for hazardous areas of variety industries. vehicle maintenance, air field service or inspection of inspection of process equipments.

Standard Materials:

- Body Rubber coated copper free aluminium
- Guard and hook PVC coated steel wire
- Globe Heat and impact resistant glass

Standard Finishes:

- Natural

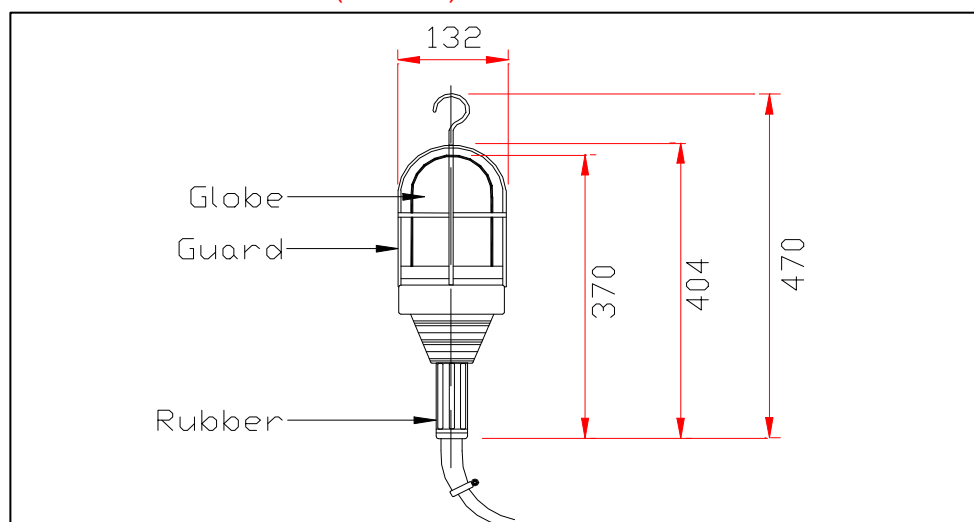
Features:

- Heavy duty, light weight and compact designed for rough service.
- Non-sparking materials designed for safety in accidental friction or impact.
- Heat and impact resistant glass globe with PVC coated on steel wire guard and hook.
- Furnished with cord,3/C-1Squmm. VCT, 10 meters length as standard (any lengths are available on request), the third conductor to ground aluminium housing.
- Flexible cord entrance is factory sealed.
- Explosionproof plug on request.

Catalogue Numbers:

Lamp Watts	Cat.,No.		Volt
	Incandescent	Compact Fluorescent	
11	—	ECFHL11	220
15	—	ECFHL15	220
60	EICHL60	—	220
60	EICHL60-12	—	12VDC
60	EICHL60-24	—	24VDC

Dimensions : (in mm.)


L



EXIT Exit Signs

Certification Number:



TIS 1955-2542

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2



ISO9001:2008

Technical data

Type of Protection: Ex de IIA T6

Conforming to : Standards IEC 60079 - 0 to 1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 acc.To IEC 60529

Ambient Temp. (Ta) : -5°C to + 50°C

Rated Voltage : 220 - 240 V.AC. 50/60Hz. Output 12V.DC.

Type : EXIT

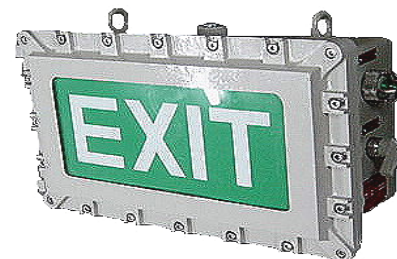
Lamp : 1 x 10w. For Flu. , 2 x 9w. For Compact Flu.

Protection class for UL : Class I, Division 1 or 2 Group C,D

Class II, Division 1 or 2 Groups, E, F, G

Class III

Protection class for IEC : Zone1and Zone 2



● Applications:

The EXT 110F exit signs are used in hazardous areas to mark the direction of exits.

provide distinctly and highly visible exit marking.

indoor or outdoor use.

● **Features:**

- Factory sealed, no external seals required.
- Inner lighting fixture is 1 x 10 W. explosionproof fluorescent with ballast and starter type or 2 x 9 W. compact fluorescent.
- Body and Cover Copper-free aluminium
- Two side red,,white EXIT lettering on white or green acrylic.
- Seal glass in cover for EXIT lettering.
- MAIN - ON pilot light indicates as power is being supply to the system.
- Selector switch 2 position for ON - OFF
- Standard hub size 3/4 inch NPT.
- Single side and Double side signs.
- Battery Charge ROCKET Sealed Acid/Calcium Battery.
- Maintenance free,joint ventured with YUASA,SONY or SUNNY under for ISO9001 and Certified and UL

Options :

For outdoor used on request.

For input supply 240 V.AC. 50 Hz.

Provided with emergency power pack,
add suffix - *E* to Cat..No.

Standard Materials:

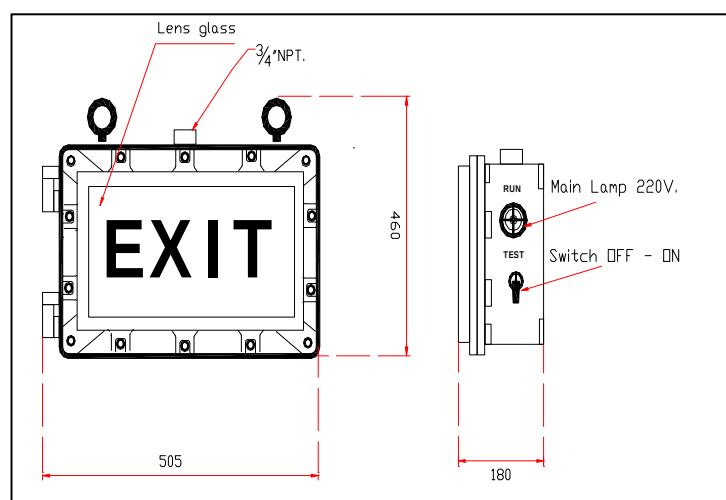
- Body and fixtures - Copper-free aluminium
- Lens - Heat and impact resistant clear glass
- Sign face - White,green acrylic with red,white colour letters.
- Hinge , bolts - Stainless steel

● Standard Finishes:

- Copper-free aluminium - Epoxy-polyester powder
- Stainless steel - Natural
- Acrylic plastic - Natural

Lamp	Temp. Class (Surface Temp.)		Cat.,No.
Watts	40 °C Ia	55 °C Ia	
Fluorescent			
1 x 10 W.	T6	T6	EXIT110F
Compact Fluorescent			
2 x 9 W.	T6	T6	EXIT209C

Dimension : (in mm.)



ECN Incandescent and ECF Compact Fluorescent Lighting Fixtures

Certification Number:

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2



TIS 1955-2542

Bosston
A QUALITY PRODUCT



ISO9001:2008

Technical data

Type of Protection: Ex d IIA T3 for Incan ,T6 for Compact FI

Conforming to : Standards IEC 60079 - 1 or UL 60079-1

Marking for test : Ex II2G

Degree of Protection : IP 66 acc.To IEC 60529

Ambient Temp. (Ta) : -20°C to+ 55 °C

Rated Voltage : 220 - 240 V.AC. 50/60Hz.

Type : ECN and ECF

Lamp : Incandescent 60/100w.,Compact fluorescent 11-20w

Lamp holder : E27 acc. IEC 60238

Protection class for UL. : Class I, Division1 or 2 Group.C,D

Class II, Division1 or 2 Groups.E,F,G

Class III

Protection class for IEC : Zone1and Zone 2

Pendant



Ceiling



Bracket



Applications:

The ECN incandescent, ECF compact fluorescent lighting fixtures are suitable to use for hazardous locations due to the presence of flammable gas or vapors, combustible dusts, refineries, petrochemical plants, and in other process areas. indoor or outdoor in wet and corrosive locations.

Features:

- Factory sealed,no external seals required, easy installation.
- Fixture body is made from copper free aluminium alloy for high corrosion resistant.
- Multi-finned out side for maximum heat dissipation.
- Heat and impact resistant glass globe.
- Stainless steel guard for high corrosion resistant.
- Ease of relamping.
- Terminal block suitable for 4 squmm. Cable and one earth terminal are provided.
- 3/4" Inch NPT for standard conduit hub.
- 3 Type is pendant , ceiling , and bracket Type.

Standard Materials:

- Body - Copper-Free aluminium
- Globe - Heat and impact resistant glass
- Guard - Stainless steel
- External reflector ✦ - Anodized aluminium

Standard Finishes:

- Copper-free aluminium - Epoxy-polyester power coated.
- Stainless steel - Natural
- Anodized aluminium - Natural

Options:

External reflector, add suffix - R to Cat.,No.

Lamp Watt	Temp.Class Surface Temp.		Catalogue Number		
	40 C Ta	55 C Ta	Pendant	Ceiling	Bracket
Incandescent					
60	T4A	T4A	ECN 60P	ECN 60C	ECN 60B
100	T3	T3	ECN 100P	ECN 100C	ECN 100B
Compact Fluorescent					
11	T6	T6	ECF 11P	ECF 11C	ECF 11B
15	T6	T6	ECF 15P	ECF 15C	ECF 15B
20	T6	T5	ECF 20P	ECF 20C	ECF 20B

ECN Incandescent and ECF Compact Fluorescent Lighting Fixtures

**Bosston**

A QUALITY PRODUCT

EXPLOSIONPROOF

For UL.60079-1 Standard Class I,II Div.1 and 2 Groups C,D,E,F and G

For IEC.60079-0 to 1 Standard Zone 1 and Zone 2

Dimensions : (in mm.)

