

TAXIWAY LIGHTING

FTS/FTC

Taxiway Centerline, Stop Bar and Intersection Inset Light

MEDIUM-INTENSITY



Compliance with Standards

- FAA:** Fittings for straight sections in compliance with FAA L-852A and L-852C specification, AC150/5345-46 (current edition) Fittings for curves in compliance with FAA L-852B and L-852D, except horizontal light distribution.
- ICAO:** In compliance with Annex 14, Vol. I, para 5.3.
- NATO:** In compliance with STANAG 3316.

Uses

Centerline taxiway lights, on straight and curved sections and on rapid exit taxiways. Taxiway stop bar and intermediate holding position. Apron lights, to assist aircraft docking manoeuvres. Guard lights where required.

Features

- Part of a comprehensive range of 8 and 12 inch diameter inset lights covering all aviation ground lighting requirements.
- Lightweight, sturdy, low-energy and environment friendly lighting fixtures (no cadmium plating).
- Designed and built with simplicity and ease of maintenance in mind.
- Extensive use of aluminum alloys reduces fixture weight and eases handling in the field.
- Many components are common to all F-range lights.
- Low protrusion above ground (10 mm) reduces vibrations induced in aircraft landing gear and in lighting fixture itself, thereby increasing lifetime, particularly for the lamps.
- Shallow gully in front of lens windows maintains optimal light output under heavy rainfall.
- Smooth outer surface of light cover avoids tire damage and makes light less sensitive to snowplows.
- Outer lenses mechanically clamped to light cover through moulded, replaceable seals. Lens replacement by airport maintenance personnel is fast and easy and does not require any sealing compound or resin.
- No optical adjustment required after replacement of lamp, lens or reflector.
- Long life halogen lamps. 1000 hours at full intensity, up to 4000 hours in practical use.
- Standard adaptor rings for installation on 12" FAA deep bases.

- Specific rings available to fit mounting bases and seating rings to other standards.
- Specific tools have been developed to ease installation and subsequent maintenance.
- Plug for pressure-testing of fixture after overhaul.
- Low-temperature lights. Temperature elevation at centre of top cover remains below 160 °C ICAO specified limit.
- Finish: Aluminum alloy cover, inner cover and optical assembly. Plain stainless steel hardware.

Ordering Code

	FTX	X	XXX	X	XX	X	X
Location FTS = Straight section FTC = Curved section	•						
Direction 1 = Unidirectional 2 = Bidirectional		•					
Lamp Power 045 = 1 x 45 W 065 = 1 x 48 W 100 = 1 x 100 W			•				
Beam Width N = Narrow (FTS only) W = Wide					•		
Color G = Green Y = Yellow R = Red M = Red HT ² N = Blank						•	
Mounting 0 = Without shallow base 1 = With 8" shallow base							•
Special Requirements S = Special requirements to be specified in full text ¹							•
Options Film disc cutout Electronic cutout							
Note ¹ Special executions adapted to specific national standards available ² For use with 100W lamp.							

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Construction

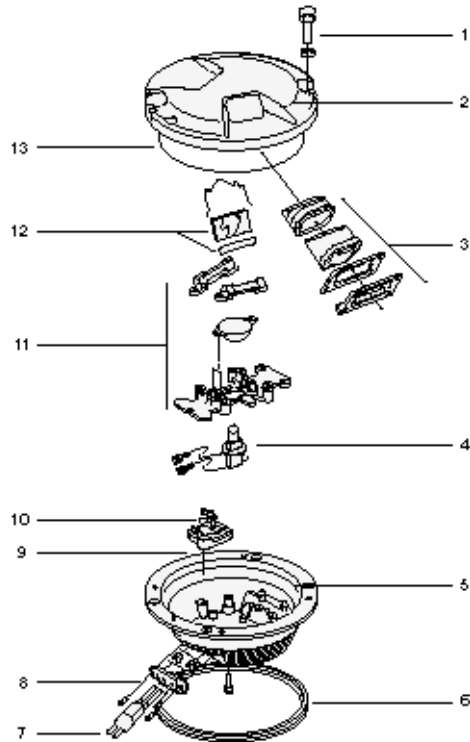


Fig. 1

1. High tensile strength screw with washer (2)
2. Aluminum alloy cover
3. Lens with retainer and gaskets
4. Prefocus halogen lamp 45W, 65W or 100W - 6.6 A
5. Die cast aluminum alloy inner cover
6. Seal
7. FAA L-823 2-pole plug moulded on heat resistant wires
8. Wire clamp with grommets
9. Terminal block
10. Film disc cutout (optional)
11. Optical assembly
12. Filter with filterspring
13. "O" ring seal.

Electrical Supply

6.6 A through an isolating transformer (cat. leaflet A.06.110).

Two or more fittings may be series-connected and fed from an isolating transformer making use of optional film disc or electronic cutouts.

Packing Data

FTS/FTC light with lamp, without shallow base nor adaptor ring: net weight: 2.7 kg.

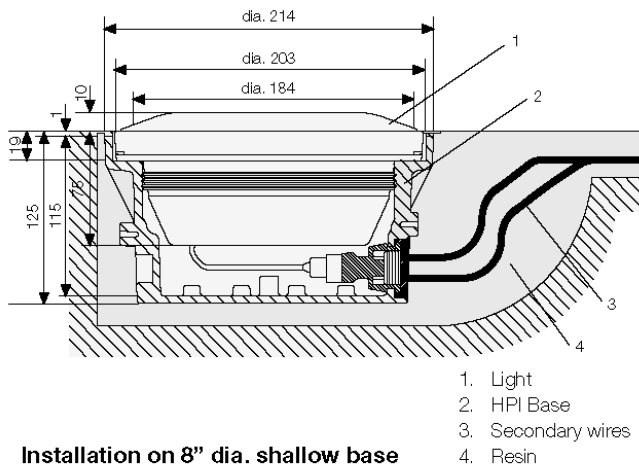
In cardboard box: 210 × 210 × 100 mm; gross weight: 2.9 kg.

FTS/FTC light with lamp and shallow base: net weight: 5.5 kg.

In cardboard box: 230 × 230 × 150 mm; gross weight: 5.7 kg.

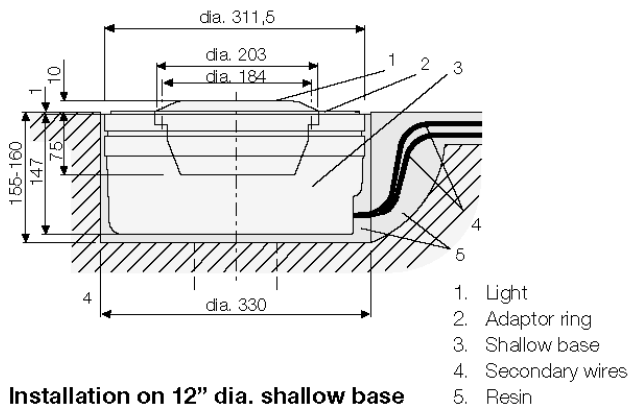
Installation Diagrams

Installation & Outline Dimensions (mm)



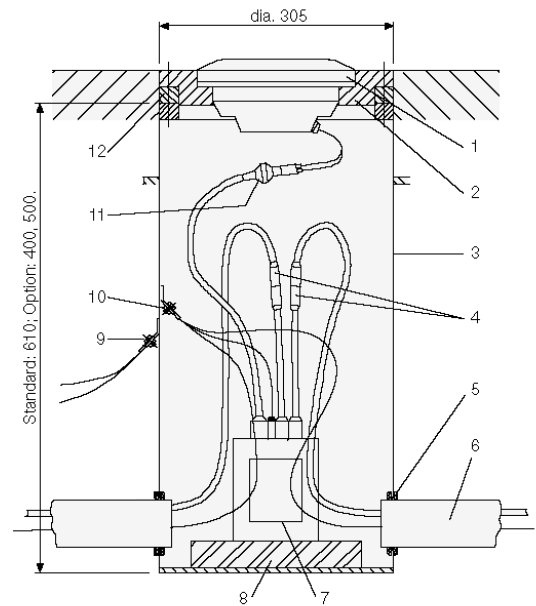
Installation on 8" dia. shallow base

Fig. 2



Installation on 12" dia. shallow base

Fig. 3



- 1. Light
- 2. Adaptor ring
- 3. Deep base
- 4. Primary connectors
- 5. Rubber grommet
- 6. Conduit
- 7. Isolating transformer
- 8. Spacer
- 9. Outer earth terminal
- 10. Inner earth terminal
- 11. Secondary connector
- 12. Flange ring

Installation on FAA L-868 base

Fig. 4

Installation

1) On a shallow base (Fig. 2-3).

This method is used in existing pavements. The 8" or 12" dia. base is sealed by means of resin. Correct positioning and levelling are obtained with a jig with sighting telescope. Wires between the light and the isolating transformer are installed in sawcuts in the pavement filled with resin. Mounting on existing or new larger diameter bases is made possible by means of dedicated adaptor rings.

2) On a FAA L-868B size B steel base (Fig. 4).

This method of installation is used when building new or resurfacing existing taxiways. The 8" dia. FTS or FTC light is mounted in a 8" to 12" dia. adaptor ring bolted on the base. The bases are interconnected by means of conduits protecting the cables. The isolating transformer is installed under the light or better, in a separate pit. See catalogue leaflet A.05.120.

For detailed information, please refer to the mounting instructions supplied with the fittings.

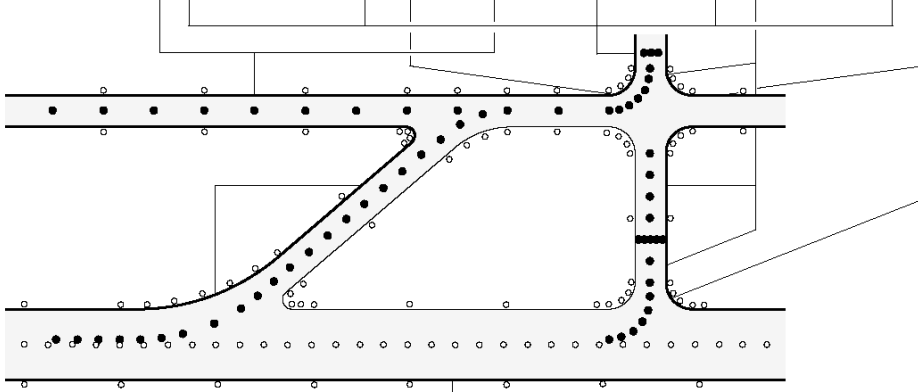
ADB Safegate's technical team is at disposal of users and contractors to provide guidance and advice in order to help solving any particular installation problem.

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Selection Chart

Use	Description	CAT. I - II			CAT. III	
Taxiway centerline, Intersection and guard lights	Type	FTS-2-045-W	FTC-2-045-W	FTS-2-045-N	FTS-2-065-W	FTC-2-065-W
	Lamp power	45 W	45 W	45 W	65 W	65 W
	Filters	Green or Yellow	Green or Yellow	Green or Yellow	Green or Yellow	Green or Yellow
	Distribution curve Fig.	6.1	6.2	6.3	6.4	6.5



Stop Bar	Type	FTS-1-065-W	FTC-1-065-W	FTS-1-065-N	FTS-1-100-W	FTC-1-100-W
	Lamp power	65 W	65 W	65 W	100 W	100 W
	Filters	Red	Red	Red	Red HT	Red HT
	Distribution curve Fig.	6.6	6.7	6.8	6.9	6.10

Use	Description	CAT. I - II			CAT. III	
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Fig. 5

Photometric Performances

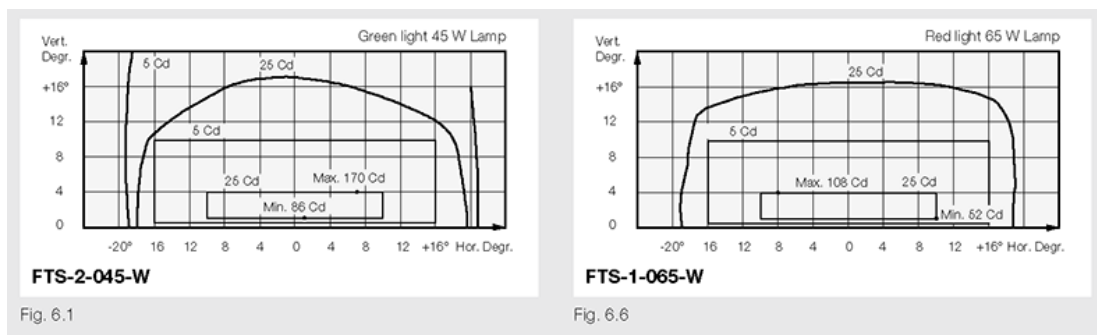
Lamps: 45, 65 or 100 W - 6.6 A

PKX30d prefocus halogen lamp with nominal lifetime of 1000 hrs.

Taxiway Centerline Intersection and Guard Lights	Color	Fig.*	Performances (Typical Data)		
			Average Intensity Cd	Main Beam Spread	
				Horiz.(°)	Vert.(°)
CAT. I-II					
FTS-2-045-W	Green	6.1	120	-10 to +10	1 to 4
FTS-2-045-W	Yellow		197	-10 to +10	1 to 4
FTC-2-045-W	Green	6.2	76	-3.5 to +35	1 to 4
FTC-2-045-W	Yellow		125	-3.5 to +35	1 to 4
CAT. III					
FTS-2-045-N	Green	6.3	285	-3.5 to +3.5	1 to 8
FTS-2-045-N	Yellow		468	-3.5 to +3.5	1 to 8
FTS-2-065-W	Green	6.4	237	-10 to +10	1 to 8
FTS-2-065-W	Yellow		389	-10 to +10	1 to 8
FTC-2-065-W	Green	6.5	133	-3.5 to +35	1 to 10
FTC-2-065-W	Yellow		218	-3.5 to +35	1 to 10

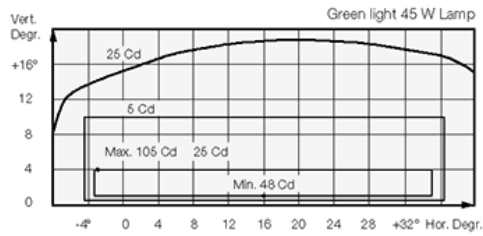
Stop bars	Color	Fig.*	Performances (Typical Data)		
			Average Intensity Cd	Main Beam Spread	
				Horiz.(°)	Vert.(°)
CAT. I-II					
FTS-1-065-W	Red	6.6	79	-10 to +10	1 to 4
FTC-1-065-W	Red	6.7	62	-3.5 to +35	1 to 4
CAT. III					
FTS-1-065-N	Red	6.8	245	-3.5 to +3.5	1 to 8
FTS-1-100-W	Red HT	6.9	247	-10 to +10	1 to 8
FTC-1-100-W	Red HT	6.10	142	-3.5 to +35	1 to 10

Note: All curves shown are for green light.



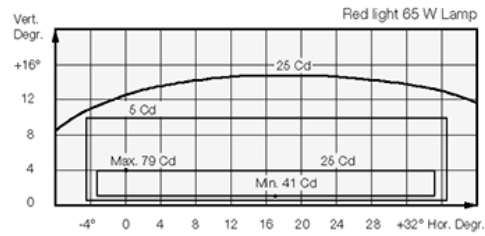
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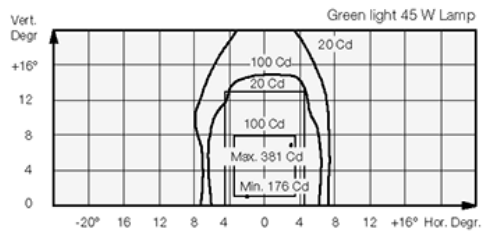
FTC-2-045-W

Fig. 6.2



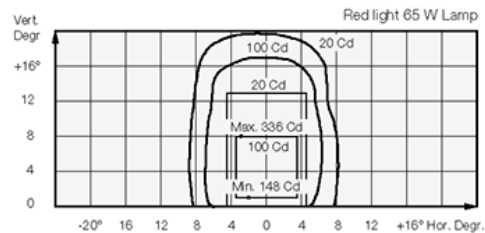
FTC-1-065-W

Fig. 6.7



FTS-2-045-N

Fig. 6.3



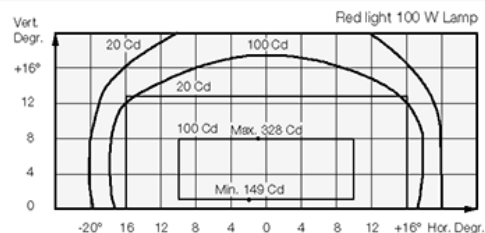
FTS-1-065-N

Fig. 6.8



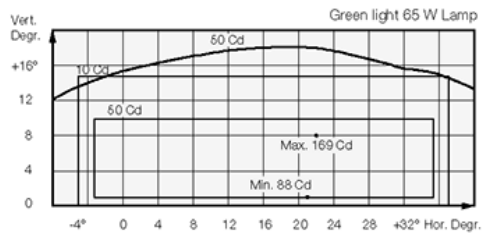
FTS-2-065-W

Fig. 6.4



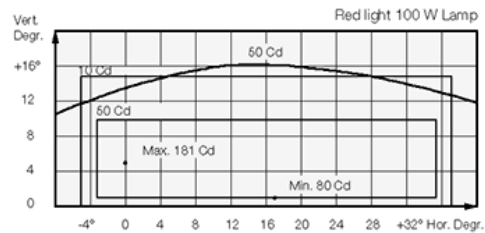
FTS-1-100-W

Fig. 6.9



FTC-2-065-W

Fig. 6.5



FTC-1-100-W

Fig. 6.10