# **F-RANGE FTO**

Runway and Taxiway Omnidirectional Inset Light 8-inch



# **Compliance with Standards (current Versions)**

FAA	AC150/5345-46
ICAO	Annex 14, Volume I Annex 14, Volume II
NATO	STANAG 3316, part III

### Uses

- Taxiway and apron edge
- Runway circling guidance
- Low intensity runway edge
- Aircraft stand manoeuvring guidance

# **Features and Benefits**

### Efficiency

- Designed and built with simplicity and ease of maintenance in mind
- Extensive use of aluminum alloys limits fixture weight to less than 8 kg to ease handling in the field
- Many components are common to all F-range lights
- Outer prisms mechanically clamped to light cover through molded, replaceable seals: prism 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
- Specific tools have been developed to ease installation and subsequent maintenance
- Plug for pressure-testing of fixture after overhaul
- Absence of negative slope guarantees optimal light output under worst weather conditions
- Lens mechanically clamped to light cover through molded, replaceable seals. Lens replacement by airport maintenance personnel is fast and easy and does not require any sealing compound or resin.
- Available for series (6,6A) and parallel supply (230V AC)

#### Sustainability

- Lightweight, sturdy, low-energy and environment friendly lighting fixtures (no cadmium plating)
- Normal protrusion (10 mm) reduces vibrations induced in aircraft Landing gear and in lighting fixture itself, thereby increasing lifetime, particularly for the lamps
- Smooth outer surface of light cover avoids tire damage and makes light less sensitive to snowplows
- Long life halogen lamps: 1000 hours at full intensity, in excess of 3000 hours in practical use
- Low temperature lights: temperature at center of top cover remains below 160 °C ICAO specified limit
- IP67 protected, finish: aluminum alloy cover, inner cover and optical support; plain stainless steel hardware
- Hardened optical glass lens, clear or through colored; no need for separate color filter

**Note:** Standard adapter rings for installation on 12-inch diameter FAA deep bases. Specific rings available to fit mounting bases and seating rings to other standards.

### Safety

- Part of a comprehensive range of 8- and 12-inch diameter inset lights covering all aviation ground lighting requirements
- Shallow gully in front of prism windows maintains optimal light
  output under heavy rainfall

Note: For use on heliports, refer to DS-5019.

### Accessories

Refer to the F-range user manual for the 8-inch FTO light.

# **Power Supply**

6.6 A through an isolating transformer.

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



# **F-RANGE FTO**

Note: For parallel supply, please contact ADB SAFEGATE.

### **Maintenance and Installation**

Refer to the F-Range user manual for the 8-inch FTO light and to the interoperability info for installation in a specific base.

# **Dimensions and Weight**

Outer diameter / depth	Approx. 210 x 210 / 100 mm
	8.3 x 8.3 / 3.9 in
Weight without packaging	Approx. 2.7 kg
	5.9 lb

# **Operating Conditions**

Operating temperature	-122 to +122 °F / -50 to +50 °C
Storage temperature	-131 to +131 °F / -55 to +55 °C
Relative humidity	Up to 98 % at +77 °F / 25° C

#### **Ordering Code** 1T000000000 FITTING VERSION A = ADB ī Т Т F = FrenchG = German LAMP POWER 1 = 1 X 45 W (without cut-out) 4 = 1 X 45 W (with cut-out, for 6,6 A series supplied lights only) $5 = 1 \times 65 W$ (with cut-out, for 6,6 A series I Т supplied lights only) T. Т ī **BEAM COLOR** 1 Т L ī ī 1 = White ī. Т 2 = Red I Т ı T 4 =Yellow Т Т 5 = Blue (Only 45 W and series supply) FIXED DIGIT I I Т 0 = FREE DIGIT Т Т ī Т FIXED DIGIT Т Т Т 0 = FREE DIGIT ī. н SUPPLY Т 1 = 1 Plug Т BASE Т 1 = None ı. 7 = 8 in with transformer 45 W (1 entry, only for Т parallel supply) A = ERNI (With gasket for ERNI bases, 1 entry, only for parallel supply) SPECIAL EXECUTIONS • 0 = Standard (1T0A... 1T0F... 1T0G...) EXECUTIONS 3 = Without fixing hardware

### Note:

- Deep base and / or adapter rings to be ordered separately.
- Use of a cutout is not compatible with the *Lamp Fault Detection* (*LFD*) functionality of a regulator.
- Special execution for heliports with 230 V 50/60 Hz parallel supply: 65 W / white 1T0A21001900; 65 W / red 1T0A22001900 and 65 W / yellow 1T0A24001900





# **ANNEX**

Fixture type	Fixture load	Isolation transformer			CCR load
		Rating	Loss	Efficiency	
FTO (omnidirectional)	48 VA	45 W	9 VA	0.85	57 VA
FTO (omnidirectional)	65 VA	65 W	11 VA	0.85	76 VA
FTO (omnidirectional)	45 VA	45 W	8 VA	0.85	53 VA

### Note:

- Extra losses in secondary cables or due to extra equipment (e.g. ILCMS remotes) are not included in above table; these extra losses will result in a higher required size of isolation transformers.
- Extra losses in primary cables are not included in above table; these extra losses will result in a higher required CCR load.
- Efficiency of the secondary transformer depends on the supplier of secondary transformers.

## Explanation to power table

Lamp: 45, 48 or 65 W — 6,6 A PKX30D prefocus halogen lamp with nominal lifetime of 1000 hours

Color	Lamp power				
	45 W	48 W	65 W		
White	х	-	x		
Yellow	х	-	x		
Red	х	-	-		
Blue	х	-	-		

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

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

www.adbsafegate.com

