F-RANGE FTO

Heliport
Omnidirectional Inset Light 8-inch

Compliance with Standards (current Versions)

ICAO   Annex 14, Volume II

NATO   STANAG 3652

Uses

- Touchdown zone and lift off area perimeter (TLOF)
- Final approach and take off area (FATO)
- Aiming point

Features and Benefits

Efficiency

- Designed and built with simplicity and ease of maintenance in mind
- Extensive use of aluminum alloys reduces fitting weight and eases 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
- Double water barriers seal all possible moisture ingress paths
- Low temperature lights: temperature at center of top cover remains below 160 °C ICAO specified limit
- IP67 protected, finish: corrosion-proof aluminum 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 heliport lighting requirements
- Shallow gully in front of prism windows maintains optimal light output under heavy rainfall
- Low temperature light

Note: For use on runways or taxiways, refer to DS-5021.

Accessories

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

Power Supply

Series supply

6.6 A through a series transformer.

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

Parallel supply

230 VAC through a step - down transformer, mounted in a dedicated extension of the shallow base.

F-RANGE FTO

Maintenance and Installation

Refer to the F-Range user manual for the 8-inch FTO heliport 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

1 T 0 ☐☐☐☐☐☐☐☐

FITTING VERSION
A = ADB
F = French
G = German

LAMP POWER
1 = 1 X 45 W (without cut-out; except blue and TLOF)
2 = 1 X 65 W (without cut-out)
3 = 1 X 48 W (without cut-out, for Green TLOF heliport light)
4 = 1 X 45 W (with cut-out, for 6,6 A series supplied lights only)
5 = 1 X 65 W (with cut-out, for 6,6 A series supplied lights only)
6 = 1 X 48 W (with cut-out, for 6,6 A series supplied Green TLOF light only)

BEAM COLOR
1 = White
3 = Green
4 = Yellow

FIXED DIGIT
0 = FREE DIGIT

FIXED DIGIT
0 = FREE DIGIT

SUPPLY
1 = 1 Plug

BASE
1 = None
8 = 8 in with transformer 48 W (1 entry, only for parallel supply)
9 = 8 in with transformer 65 W (1 entry, only for parallel supply)
A = (With gasket for ERNI bases, one 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 - TLOF (omnidirectional)	48 VA	45 W	9 VA	0.85	57 VA
FTO - FATO (omnidirectional)	65 VA	65 W	11 VA	0.85	76 VA
FTO - FATO (omnidirectional)	45 VA	45 W	8 VA	0.85	53 VA
FTO – aiming point (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: 45W, 65W (6.6A PKX30D Halogen lamp), 48W (cold mirror prefocus halogen lamp).

Color	Lamp power		
	45 W	48 W	65 W
White	x	–	x
Yellow	x	–	x
Green	–	x	–

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

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.

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