ELECTRONIC SYSTEMS

chapter:

TI44

5.2.5

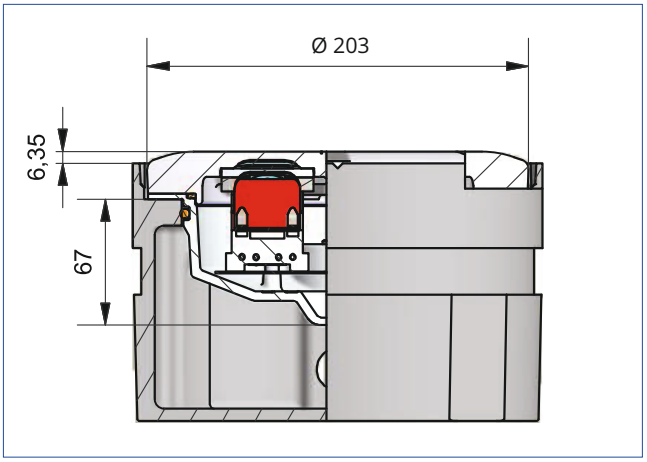
Application

- END - runway end light (low/medium intensity)
- EREX - enhanced rapid exit taxiway centre line light
- REL - runway entrance light
- RGL - runway guard light
  (low intensity, configuration B)
- SBL - stop bar and no-entry bar light
  (straight section)
- TCL - taxiway centre line light (straight section, can also be used as runway turn pad lights)
- THR - runway threshold light (low/medium intensity)
- THREND - threshold/runway end light
  (low/medium intensity)



Classification

- FAA AC 150/5345-46: Class 2, Mode 1*, Style 3
- IEC TS 61827: Style 3
  * does not apply to 20 W/2,2 A bulbs

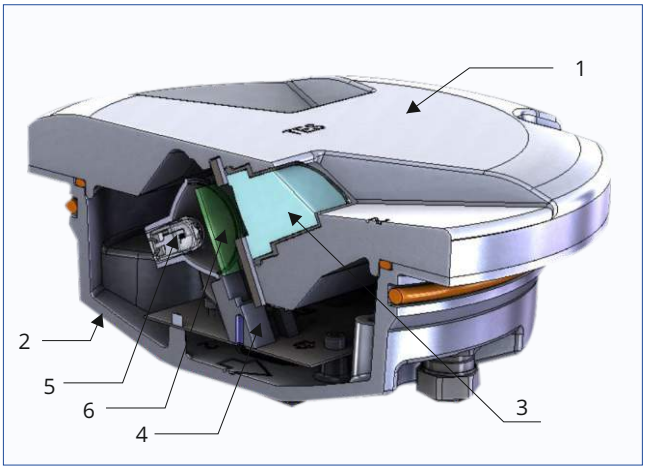


Accordance with

- ICAO Annex 14, Vol. 1
  Figure: A1-1a, A2-12, A2-14 (only REL)
- IEC TS 61827
- EASA CS-ADR-DSN
  Figure: U-1, U-16
- TP312
  Figure: B-12, B-24(b)
- AP-170
  6.1.6.4, 6.1.7.4
- АП-170, Том II

Properties

- very low protrusion: 6,35 mm
- small size: diameter 203 mm (8")
- installation depth in base: 67 mm
- simple and durable aluminum design
- long-term optical stability due to the usage of cold mirror reflector lamps
- non-glued easily replaceable prisms
- effective maintenance due to many common parts of TI44 and TI45 series
- easy transport and handling due to small size and weight
- available also with 4 fixing holes
- TCL lights can be fitted with a 20 W / 2,2 A bulb (except for lights with blue filters)
- for alternate parallel taxiway line the lights can be fitted with blue filters



Mechanical parameters

- weight (cardboard box) ~3,0 kg
- dimensions (cardboard box) 220×220×115 mm

Construction

1. aluminium body - top part
2. aluminium body - bottom part
3. prism with gasket (sealing)
4. lamp holder
5. cold mirror reflector lamp
6. dichroic filter

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chapter:

5.2.5 TI44

Resistance to

- temperature -55 ÷ +55 °C and thermal shock
- humidity, snow, ice and water, watertight IP68
- salt fog, solar and UV radiation
- static and shear load, recurrent mechanical and hydraulic impact according to the IEC TS 61827
- vibrations 20 ÷ 2 000 Hz with acceleration 10/15 G

Light source

- standard airfield cold mirror reflector halogen 6,6 A lamp
  - Ø 50 mm, 6,6 A
  - Ø 35 mm, 6,6 A
  - Ø 35 mm, 2,2 A

Power source

- isolating transformer with 6,6 A or 2,2 A on secondary output (transformer power according to used lamp/lamps)

Ordering code

TI441-SBL -R -40 -H
TI443-TCL -GY -2×40

ligth fixture group
1 - unidirectional (EREX, REL, SBL, TCL)
2 - bidirectional (EREX, SBL, TCL)
3 - bidirectional, separate power leads (EREX, SBL, TCL)

light fixture function
END - runway end light
EREX - enhanced rapid exit taxiway centre line light
REL - runway entrance light
RGL - runway guard light (low intensity, configuration B)
SBL - stop bar and no-entry bar light (straight section)
TCL - taxiway centre line light (straight section)
THR - runway threshold light
THREND - threshold/runway end light

beam color
B - blue | G - green | R - red | Y - yellow

lamp power/power system
30 - END, THR, THREND
40 - RGL, SBL, TCL
105 - EREX, REL
20/S2 - RGL, TCL (except blue variants)

other specifications
* code for „other specification“ must be written in alphabetical order
H - 4 fixing holes
SPC - on-demand specification

Note:
- spaces in examples above used for clarity only
- optional parameters used only if necessary
- lamp power is optional part of ordering code, if the power supply system is not used, the light is designed for airfield series power supply system 6,6 A
- for EREX lights is first specificated color for EREX direction

Ordering code examples:

TI441-SBL-R-H	unidirectional stop bar and no-entry bar lights (straight section), red, 40 W / 6,6 A, 4 fixing holes
TI442-TCL-YG-2×20/S2	bidirectional taxiway centre line lights (straight section), green yellow, 20 W / 2,2 A, common power leads
TI443-EREX-YG-105+40	bidirectional enhanced rapid exit taxiway centre line lights, yellow in EREX direction, green in TCL direction, 105 W EREX, 40 W TCL, separate power leads (2 inlets)

Certified types according to UCL CR

TI441-END-R-30		
TI441-EREX-G-105	TI441-EREX-Y-105	
TI442-EREX-GG-105+40	TI442-EREX-GY-105+40	
TI443-EREX-GG-105+40	TI443-EREX-GY-105+40	
TI441-SBL-R-40	TI442-SBL-RR-2×40	TI443-SBL-RR-2×40
TI441-TCL-G-40	TI441-TCL-Y-40	
TI442-TCL-GG-2×40	TI442-TCL-GY-2×40	
TI443-TCL-GG-2×40	TI443-TCL-GY-2×40	
TI441-THR-G-30	TI442-THREND-GR-2×30	TI443-THREND-GR-2×30

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