ELECTRONIC SYSTEMS

chapter:

# TI70

# 5.2.7

## Application

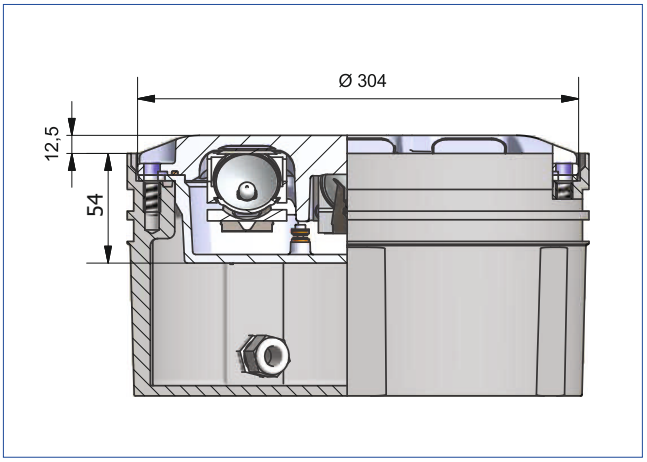
- APP - approach centre line and crossbar light
- ASR - approach side row light
- THR - threshold light
- THREND - threshold and runway end light
- END - runway end light
- RWY - runway edge light
  * usable as stopway light
- RGL - high intensity runway guard light, configuration B

## Classification

- FAA AC 150/5345-46: Class 2, Mode 1, Style 2
- IEC TS 61827: Style 3

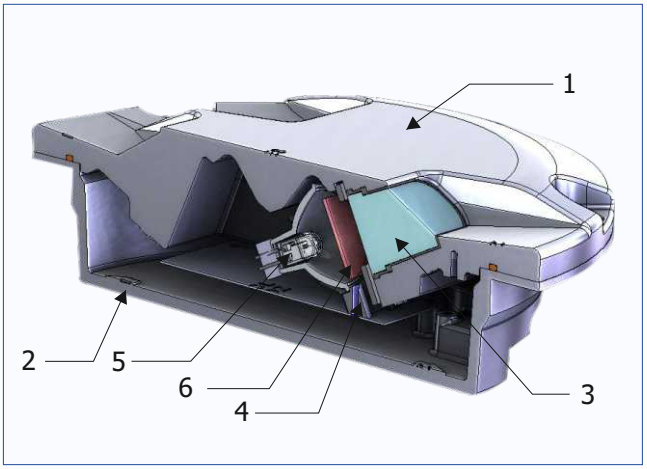
## Accordance with

- ICAO Annex 14, Vol. 1
  Figure: A1-1a, A2-1, A2-2, A2-3/4, A2-8, A2-9/10, A2-20
- IEC TS 61827
- EASA CS-ADR-DSN
  Figure: U-1, U-6, U-7/8, U-12, U-13/14, U-24
- TP312
  Figure: B-1, B-2, B-3/4, B-8, B-9/10, B-17
- FAA AC 150/5345-46E*
  L-850C, L-850D, L-852G
  * photometrically compatible
- АП-170, Том II




## Properties

- standard protrusion: 12,5 mm
- size: diameter 304 mm (12")
- installation depth in base: 54 mm
- optimized optical parameters
- 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 with TI40, TI41, TI70, TI71 and TI72 series




## Mechanical parameters

- weight (cardboard box) ~7,0 kg
- dimensions (cardboard box) 325×315×115 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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## 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

## Power source

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

## Light source

- standard 50 mm diameter airfield cold mirror reflector halogen 6,6 A lamp

## Ordering code

**TI703-ASR /L -R -3×105 -SPC**
**TI702-RWY -WY -2×105**

**ligth fixture group**
1 - unidirectional (APP, ASR, END, RGL, RWY, THR)
2 - bidirectional (RWY, THREND)
3 - bidirectional, separate power leads (RWY, THREND)

**light fixture function**
APP - approach centre line and crossbars light
ASR - approach side row light
END - runway end light
RWY - high-intensity runway edge light
RGL - high-intensity runway guard light
THR - threshold (threshold wing bar) light
THREND - threshold (threshold wing bar) and runway end light

**toe-in (L/R defined for first specified color)**
/L - left toe-in
/R - right toe-in
* required for THREND, unidirectional RWY
* optional for ASR, THR
* for bidirectional RWY not noted (first color always left toe-in)

**beam color**
G - green | R - red | W - white | Y - yellow

**lamp power**
105 - END
2×105 - ASR, RWE, THR
3×105 - APP, ASR, THREND
3×62 - RGL

**other specifications**
* code for "other specification" must be written in alphabetical order
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

**Ordering code examples:**

| | |
|---|---|
| TI703-THREND/L-GR-3×105 | bidirectional threshold and RWY end light, green/red, toe-in to the left |
| TI701-ASR/R-R | unidirectional approach side row light, red, toe-in to the right, |
| TI701-APP | unidirectional approach centre line light, white |

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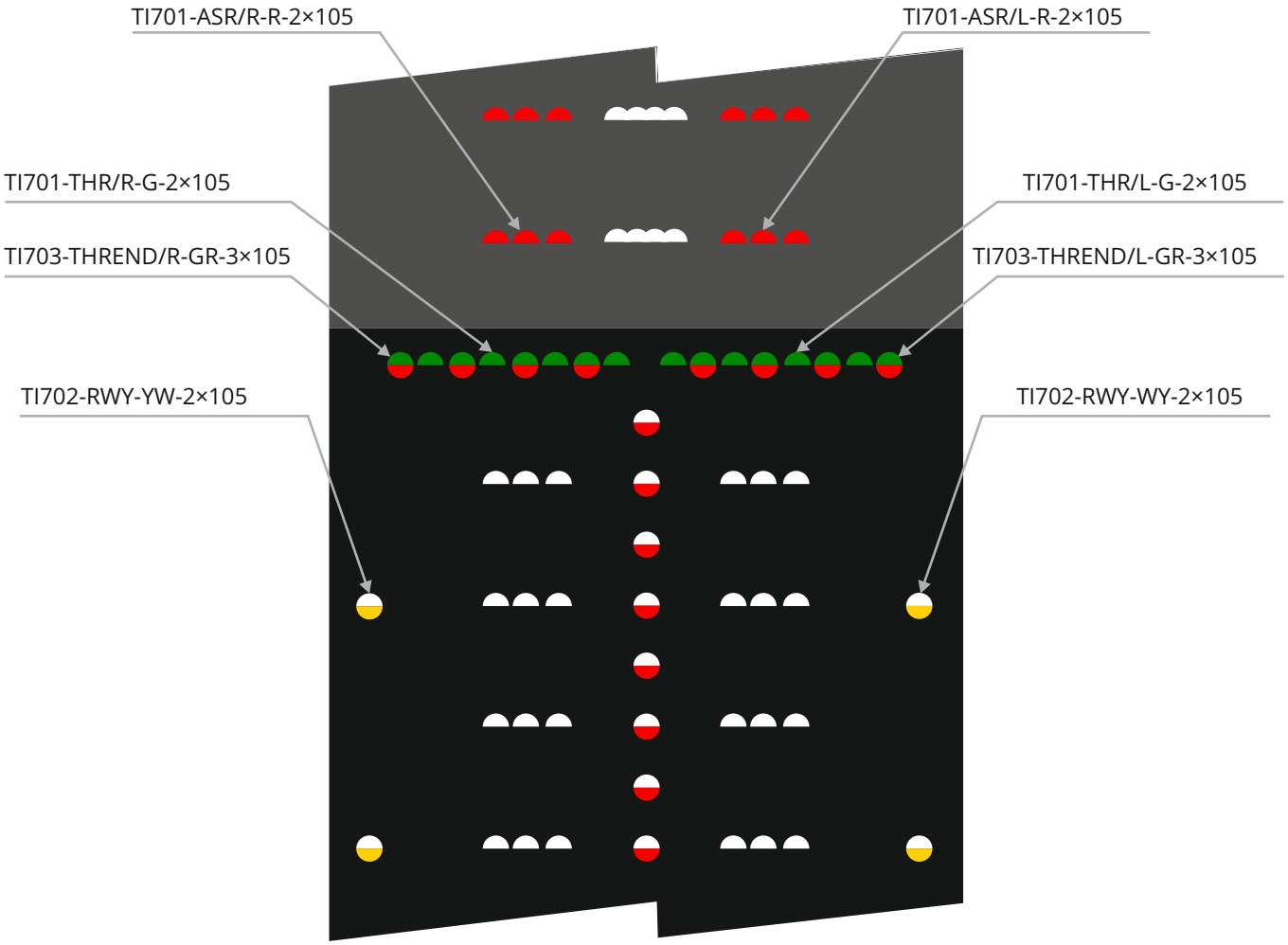
## Toe-in

- applies when using shallow bases installed parallel to the RWY centerline
- when using shallow bases installed with toe-in to the RWY centerline, lights without toe-in shall be used




## Certified types according to UCL CR

| | | |
|---|---|---|
| TI701-APP-W-3×105 | | |
| TI701-ASR-R-2×105 | TI701-ASR/L-R-2×105 | TI701-ASR/R-R-2×105 |
| TI701-END-R-105 | | |
| TI701-RWY/L-W-105 | TI701-RWY/R-W-105 | |
| TI701-RWY/L-Y-105 | TI701-RWY/R-Y-105 | |
| TI701-RWY/L-R-105 | TI701-RWY/R-R-105 | |
| TI702-RWY-WW-2×105 | TI702-RWY-WY-2×105 | TI702-RWY-YW-2×105 |
| TI702-RWY-YR-2×105 | TI702-RWY-RY-2×105 | |
| TI703-RWY-WW-2×105 | TI703-RWY-WY-2×105 | TI703-RWY-YW-2×105 |
| TI703-RWY-YR-2×105 | TI703-RWY-RY-2×105 | |
| TI701-THR-G-2×105 | TI701-THR/L-G-2×105 | TI701-THR/R-G-2×105 |
| TI702-THREND/L-GR-3×105 | TI702-THREND/R-GR-3×105 | |
| TI703-THREND/L-GR-3×105 | TI703-THREND/R-GR-3×105 | |

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