

Application

- elevated high intensity directional lights suitable for CAT I-III
 - APP approach centre line and crossbars light
 - ASR approach side row light
 - END runway end light
 - THR runway threshold light
 - THRWB runway threshold and wing bar light

Certificate basis

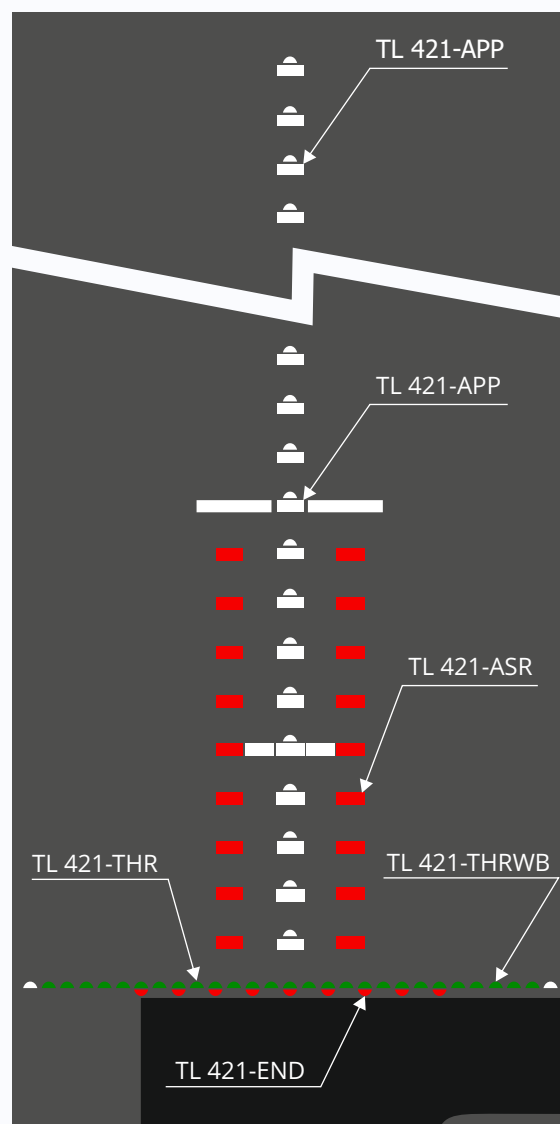
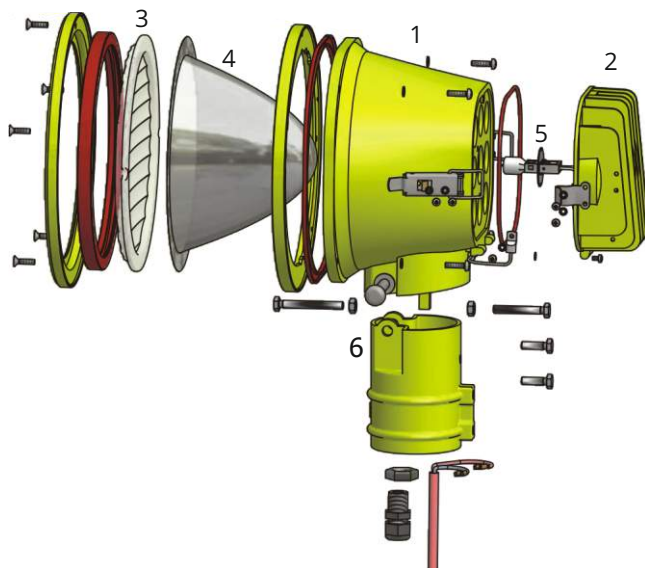
- ICAO Annex 14, Vol. 1, App. 1 a App. 2
- EASA CS ADR-DSN.U.930 a 940
- ICAO Doc 9157, Part 4, 18.2.14
- ICAO Doc 9157, Part 6, 4.9.1

Description/properties

- robust all-metal construction ensures high durability
- high degree of protection IP 67
- light construction allows easy elevation adjustment (-10 ° to +14 °)
- removable rear cover allows easy bulb replacement
- all main parts are painted on RAL 1021

Construction

- 1 light body
- 2 back cover
- 3 diopter (spreader lens)
- 4 parabolic mirror
- 5 bulb (lamp) Pk30d
- 6 elevation adjustment part



chapter:

5.1.5

TL 421

**Connection / supplying:**

- installation on fixing elements Ø 60 mm
 - breakable coupling 001 057.1
 - breakable coupling 001 057 and tube (Ø 60 mm)
 - crossbar with peg (Ø 60 mm)
- power-ups by isolating transformer with 6,6 A on secondary output (transformer power according to used lamp/lamps)
- standard light includes lamp and power-ups cable for installation directly on breakable coupling, connector L-823 Type II, Class B, Style 5
- optional cable lengths
0,5; 1,0; 1,5; 2,0; 2,5; 3,0 m

Operating conditions

- level of protection IP 67
- temperature -50 to +55 °C
- humidity up to 95 % at +55 °C
- wind resistance up to 480 km/h

Source of light / optical system

- halogen airport bulb PK30d 6,6 A
- lamp power
 - TL 421-END 65/100 W
 - TL 421-APP/ASR/THR 150 W
 - TL 421-THRWB 200 W

Mechanical parameters

- dimensions 214×292×179 mm
- dimensions (cardboard box)
(packed in 2 pieces) 320×320×270 mm
- light weight 2,3 kg
- adjustability
- horizontal 0 to 360°
- vertical -10 to +14°

Accessories

- fixing elements (tubes, breakable couplings, base plates, etc.) and extension cables of the secondary wiring must be ordered separately

Ordering codes

TL 421-APP-150-W

TL 421-THR-150-G

light fixture function

APP - approach centre line and crossbars light

ASR - approach side row light

END - runway end light

THR - runway threshold light

THRWB - runway threshold and wing bar light

lamp power

65 - END

100 - END

150 - APP, ASR, THR

200 - THRWB

* for "END" light - it is necessary to set the required lamp power

beam color

G - green | R - red | W - white

Note:

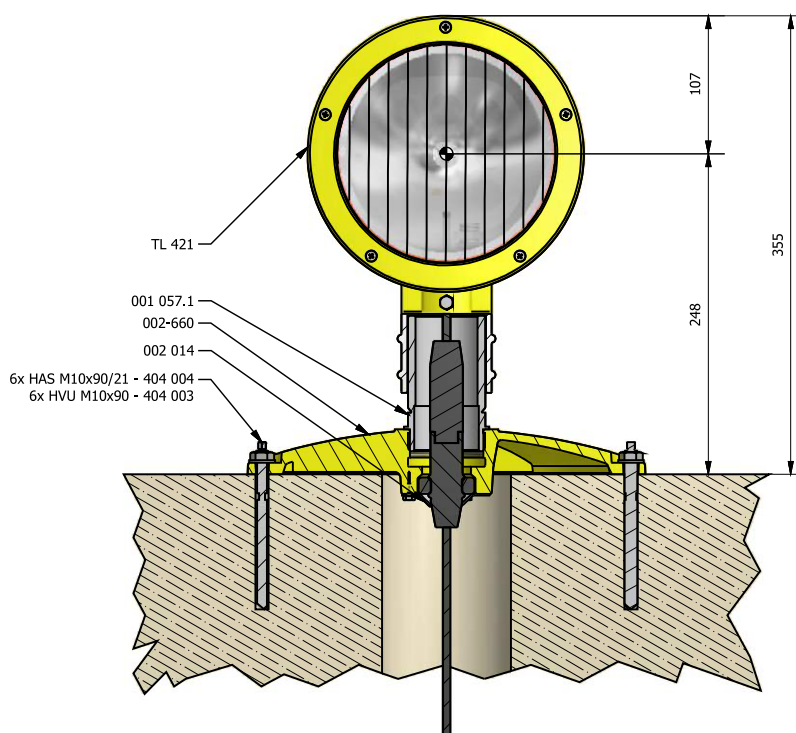
- spaces in examples above used for clarity only
- optional parameters used only if necessary
- lamp power is optional part of ordering code, except for "END" light

Ordering code examples:

- TL 421-APP approach centre line or crossbars light
- TL 421-ASR approach side row light
- TL 421-END-65 runway end light, 65 W
- TL 421-END-100 runway end light, 100 W
- TL 421-THR runway threshold light
- TL 421-THRWB runway threshold or wing bar light

assembly on base plate

⊕ optical centre



assembly on base plate with tube (stake)

⊕ optical centre

h - optical height

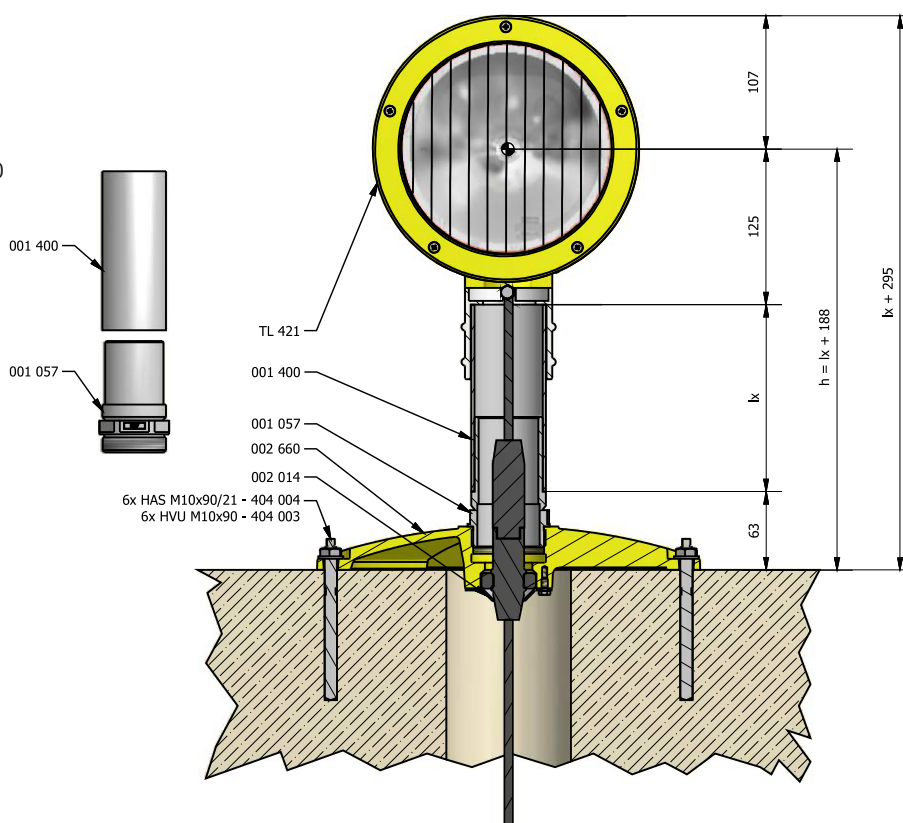
$$h = lx + 188$$

$$248 \leq h \leq 1999$$

lx - tube length 001 400

$$lx = h - 188 \text{ mm}$$

$$(60 \leq lx \leq 1811)$$



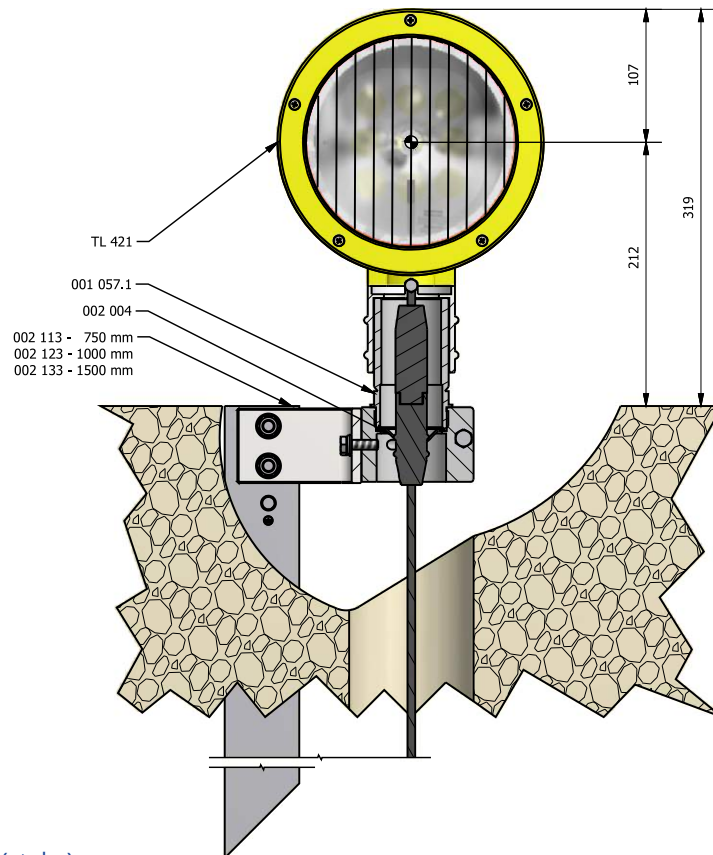
5.1.5

TL 421

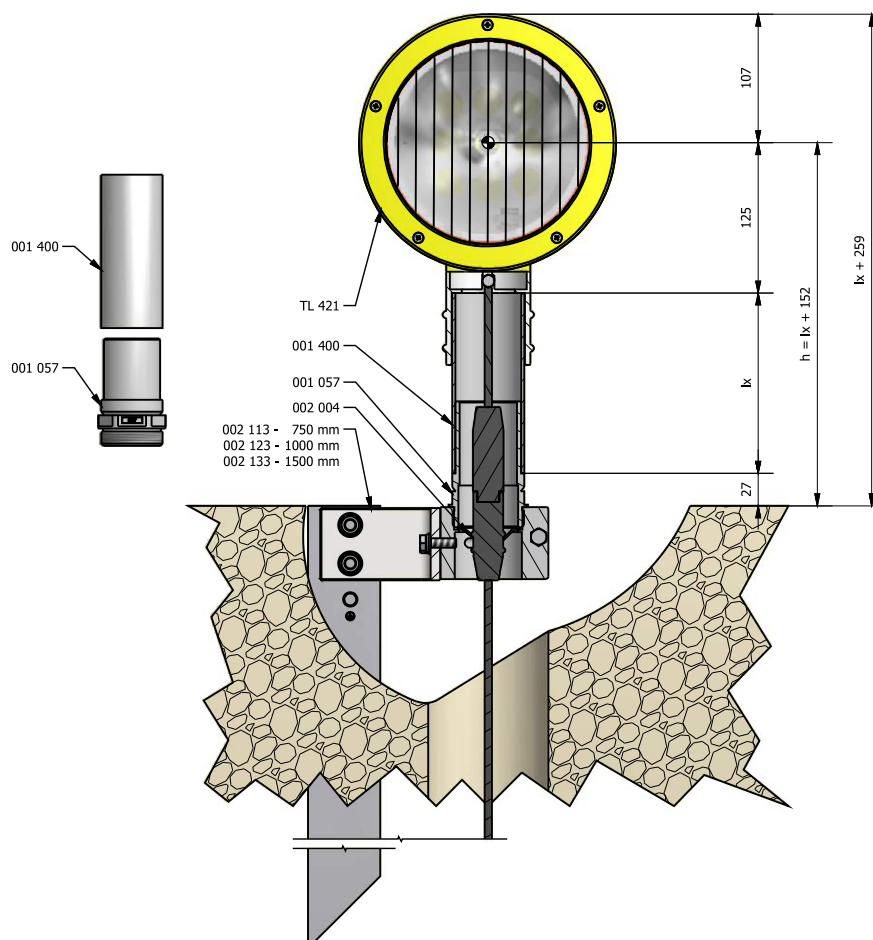


assembly on needle

⊙ optical centre



assembly on needle with tube (stake)



⊙ optical centre

h - optical height

$$h = lx + 152$$

$$212 \leq h \leq 1999$$

lx - tube length 001 400

$$lx = h - 152 \text{ mm}$$

$$(60 \leq lx \leq 1847)$$

assembly on shallow bases - side outlet

● optical centre

A pouring concrete

* recommended size

TL 421

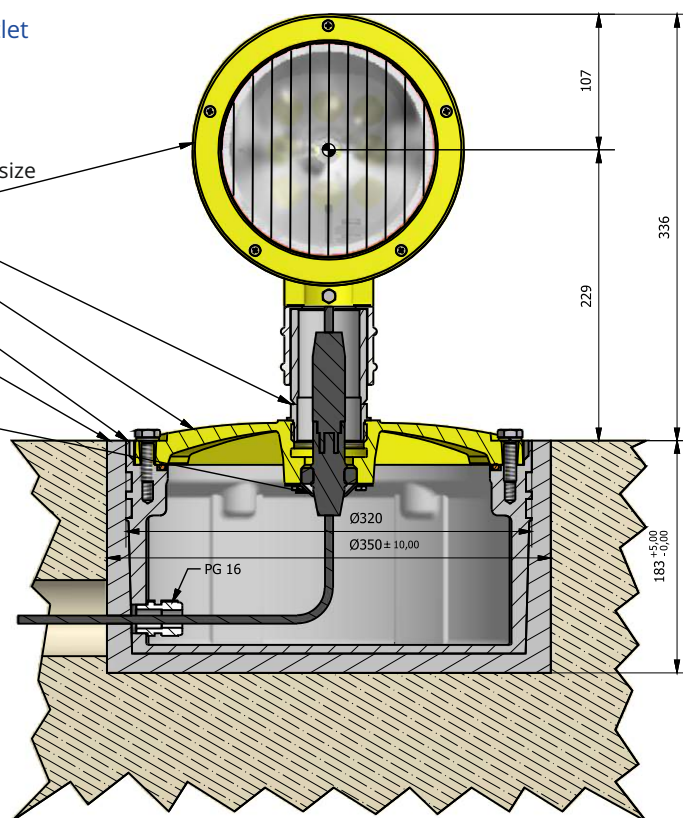
001 057.1

002 661

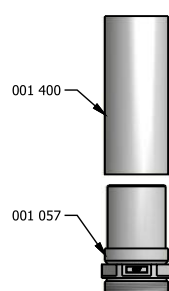
002 560

A

002 014



assembly on shallow bases with tube - side outlet



● optical centre

* - recommended size

A - pouring concrete

h - optical height

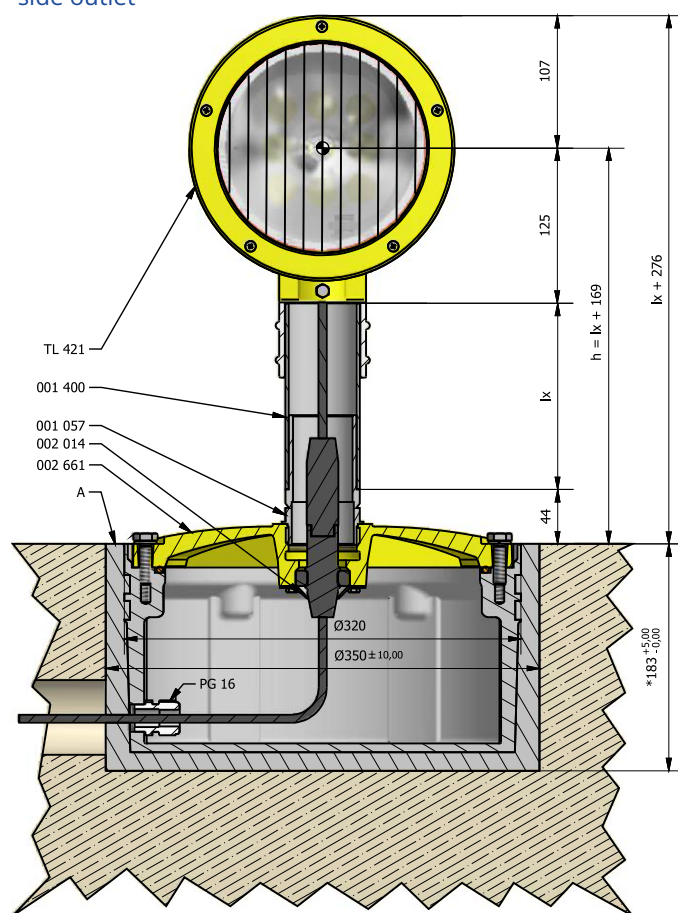
$h = lx + 169$

$229 \leq h \leq 1999$

lx - tube length 001 400

$lx = h - 169 \text{ mm}$

$(60 \leq lx \leq 1830)$



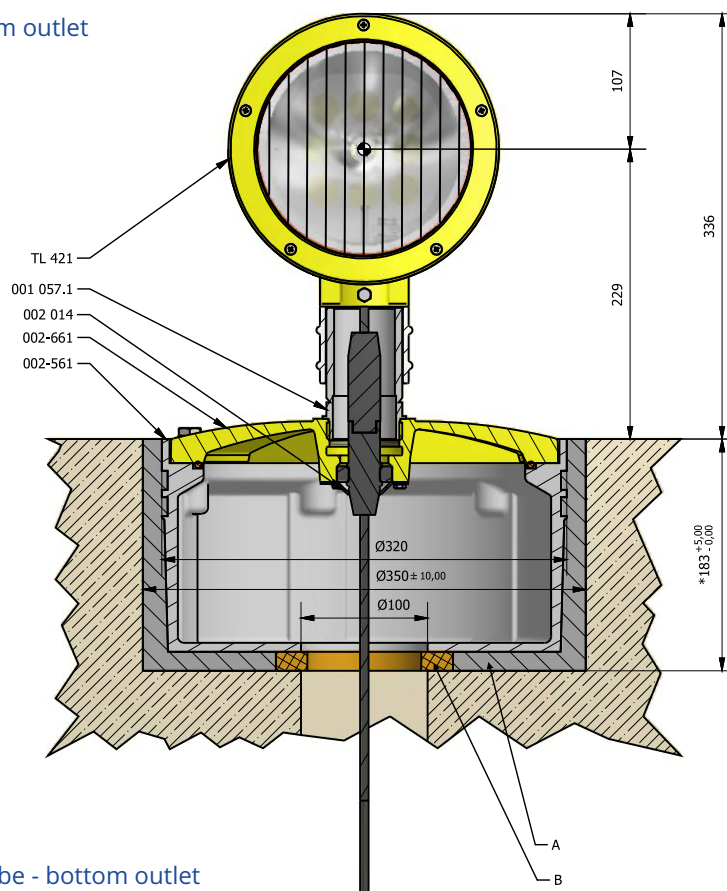
5.1.5

TL 421

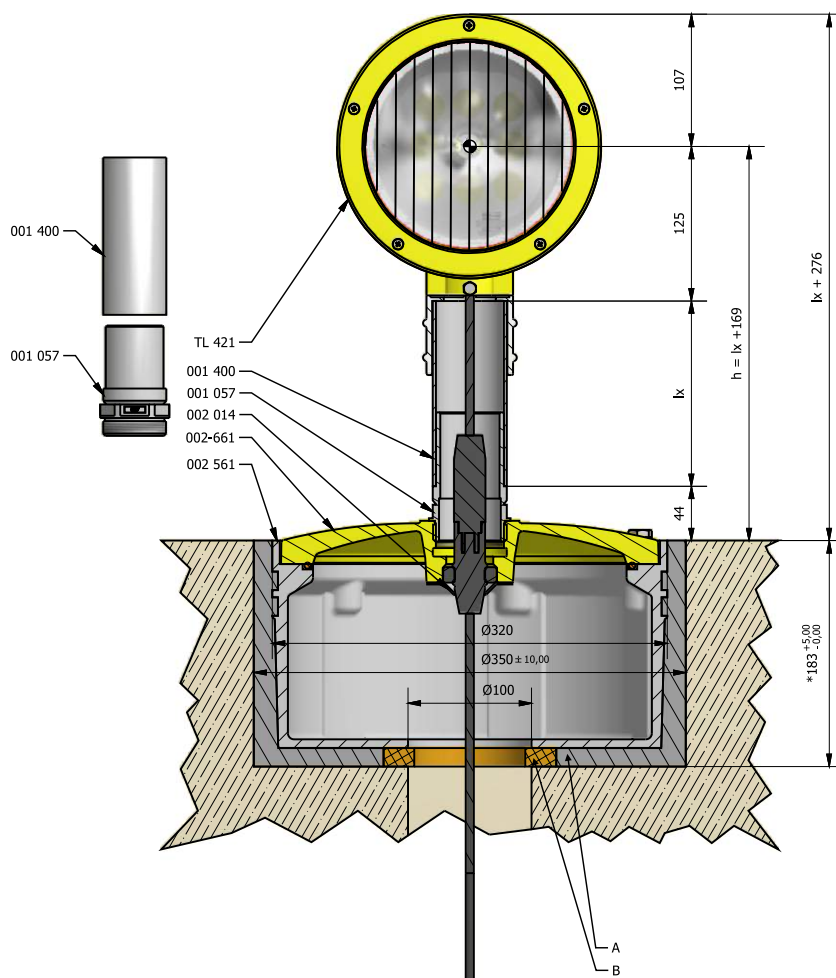


assembly on shallow bases - bottom outlet

- ⊙ optical centre
- * - recommended size
- A - pouring concrete
- B - sealing insert



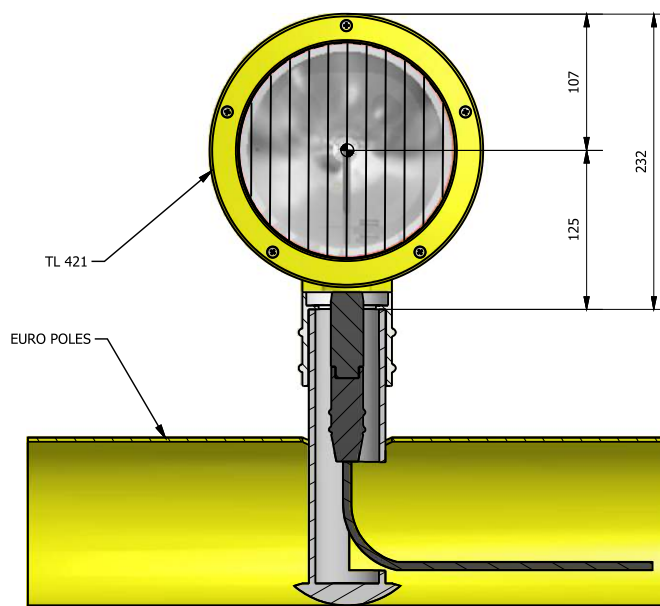
assembly on shallow bases with tube - bottom outlet



- ⊙ optical centre
- * - recommended size
- A - pouring concrete
- B - sealing insert
- h - optical height
- $h = lx + 169$
- $229 \leq h \leq 1999$
- lx - tube length 001 400
- $lx = h - 169 \text{ mm}$
- $(60 \leq lx \leq 1830)$

assembly on crossbar with peg

⊕ optical centre



5.1.5

TL 421



This page is intentionally left blank.