ELECTRONIC SYSTEMS TRANSCON ®

chapter:

ML 121

5.1.1

Application

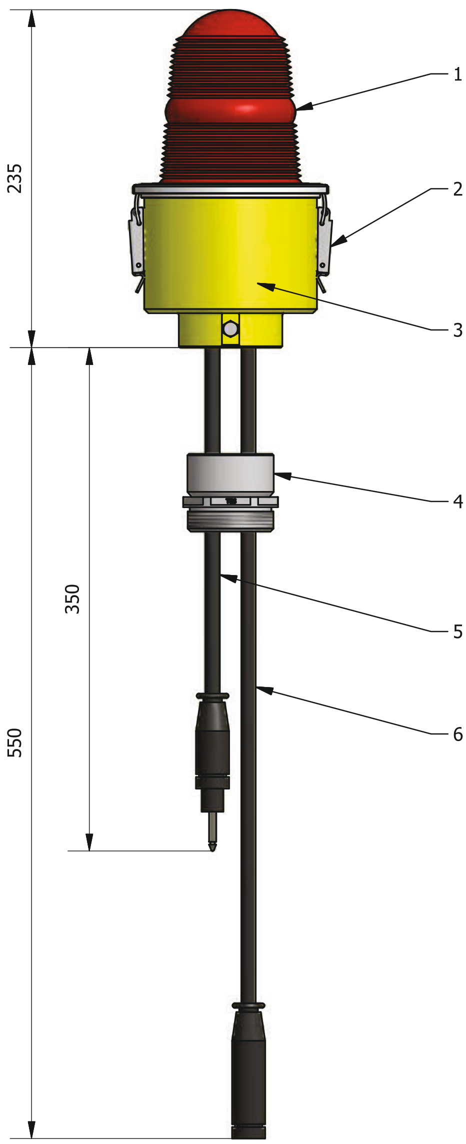
- halogen 6,6 A elevated omnidirectional low/medium intensity lights with integrated transformer for stationary/mobile aerodromes/heliports
  - APP approach centre line and crossbars light
  - THR runway threshold light
  - END runway end light
  - TWY taxiway edge light
  - FATO, TLOF, HAPP, TWY heliport lighting system
  - UL unserviceability light

Certificate basis

- ICAO AERODROMES ANNEX 14 Volume I-4rd
- FAA AC 150/5345-46B
- STANAG 3316
- MAK

Description/Properties

- primary outlets are lead out at the bottom part of the aluminum case through the light support
- optical system and integrated insulating transformer imbedded in aluminum case form one unit
- the lights are made of castings and formed pieces of aluminium alloys, a glass formed piece and connecting stainless steel parts that are resistant to salty environment and UV radiation
- support is an aluminium casting to which the marker is fixed
- it also serves as fixing of the light in the tube to the breaking coupling
- the colour dioptres are made of glass resistant to thermal shocks
- the glass dioptre is sealed in an aluminium annular ring and this unit is tied to the aluminium cover using two stainless steel clips



Construction

1	Dioptre with sealed annular ring
2	Stainless steel clips
3	Transformer aluminium cover
4	Breakable coupling threaded 2" NPSM
5	Primary outlets with connector FAA L-823 style 2
6	Primary outlets with connector FAA L-823 style 9

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Connection / supplying

- powered via isolation transformer from the constant current regulator series circuit
- primary outlets are provided with connectors FAA L-823 style 2 and style 9
- the secondary outlet is led to the lamp cap prism Pk 30d

Mechanical parameters

- weight ~ 4,2 kg
- dimensions
  - heigh 237 ±1 mm, diametr 145 ±1 mm
- adjustability
  - horizontal 0° ÷ 360°, vertical 0°

Electrical parameters

- supplying current loop 6,6 A
- insulation resistance 50 MΩ
- total power demand ± 10% acc. to alternatives 45/65/100 VA
- lamp nominal current 6,6 A
- electric strength 15 kV

Operating conditions

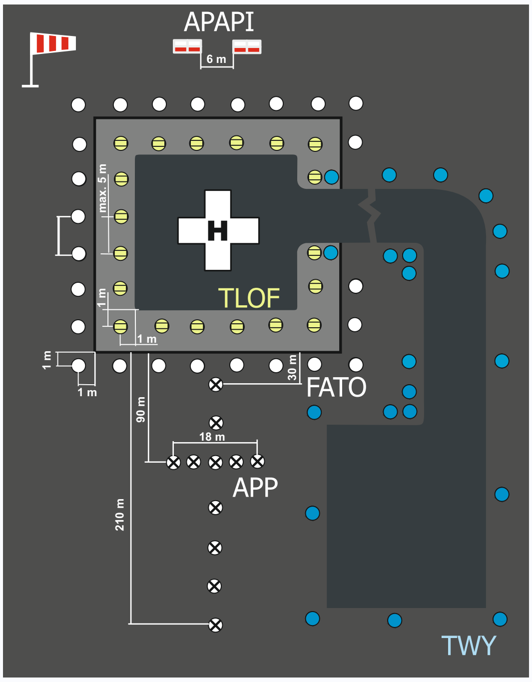
- level of protection IP 65
- climatic conditions ±55 °C
- ML 121 and ML 121 H resistance to wind and exhaust gases 480 km/hod.

Source of light

- halogen airport bulb 45/65/100 W/6,6 A with cap Pk 30d

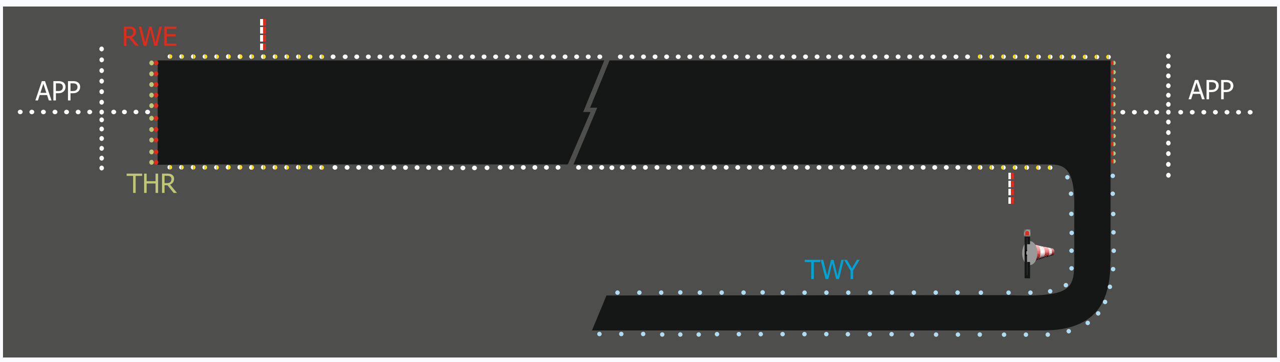
Accessories

- accesories must be ordered separately (see also section “mounting system”)



SKU / application

Type	el. power [W]	color	application	code
ML 121-APP-100-W	100	white	approach centre line and crossbars light	913-070
ML 121-THR-100-G	100	green	runway threshold light	913-071
ML 121-END-45-R	45	red	runway end light	913-072
ML 121-TWY-45-B	45	blue	taxiway edge light	913-076
ML 121 H-FATO-100-W	100	white	final approach and take-off area light	913-060
ML 121 H-TLOF-45-Y	45	yellow	touchdown and lift-off area light	913-061
ML 121 H-TLOF-65-G	65	green	touchdown and lift-off area light	913-094
ML 121 H-APP-100-W	100	white	heliport approach steady burning light	913-063
ML 121 H-TWY-45-B	45	blue	taxiway edge light	913-062
ML 121 UL-45-R	45	red	unserviceability light	913-068



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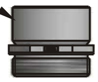
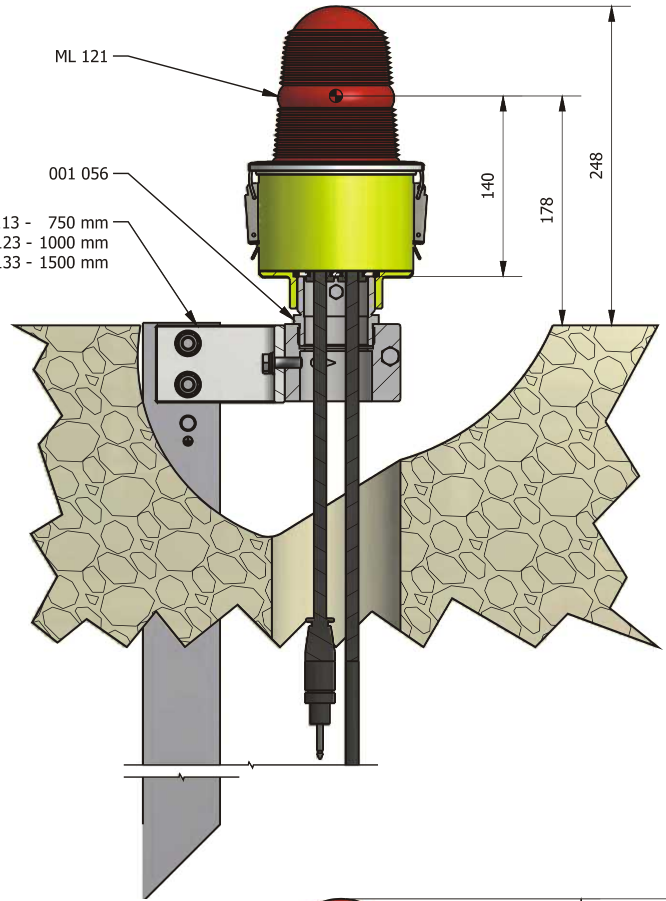
assembly on needle

⊕ optical centre

001 056

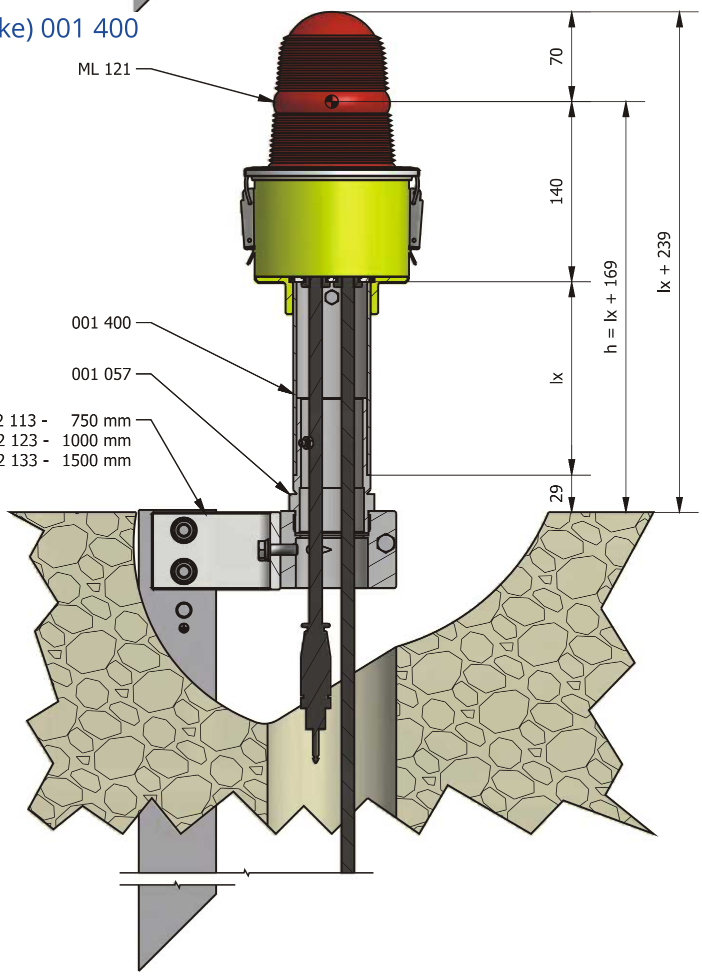




assembly on needle + tube (stake) 001 400

001 400

001 057



⊕ optical centre

h - optical height

h = lx + 169

(229 ≤ h ≤ 1999)

lx - tube length 001 400

lx = h - 169

(60 ≤ lx ≤ 1830)

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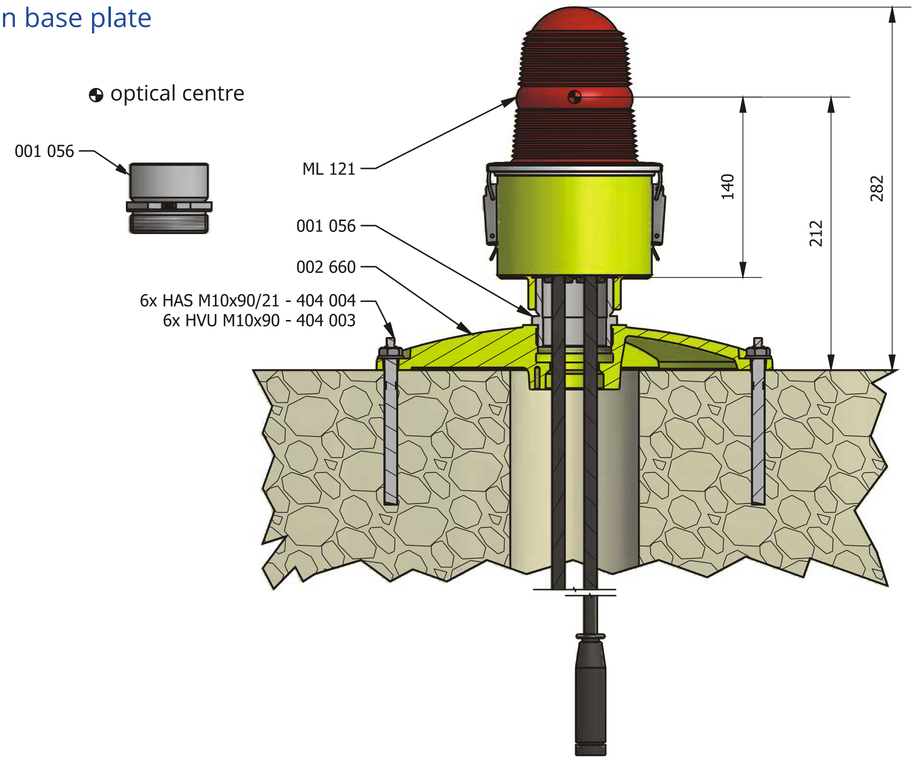
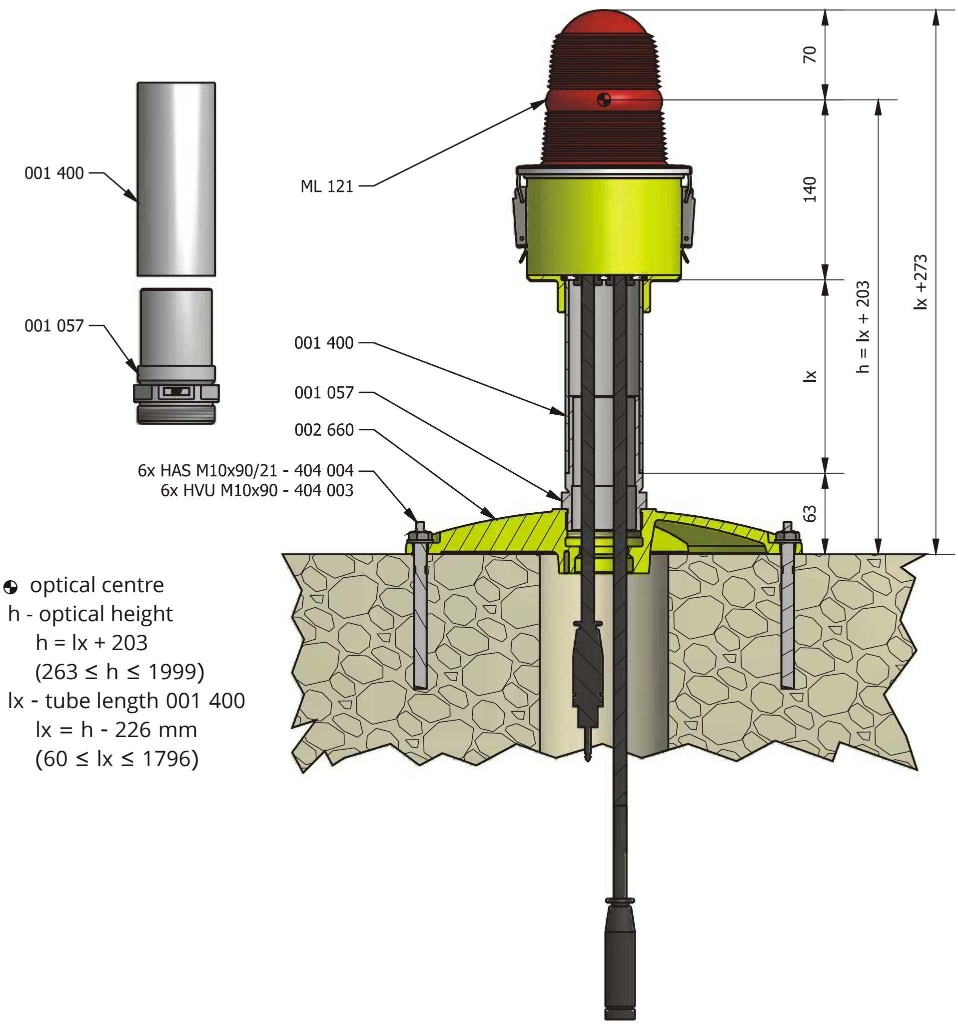
assembly on base plate



assembly on base plate + tube (stake) 001 400



optical centre
h - optical height
h = lx + 203
(263 ≤ h ≤ 1999)
lx - tube length 001 400
lx = h - 226 mm
(60 ≤ lx ≤ 1796)

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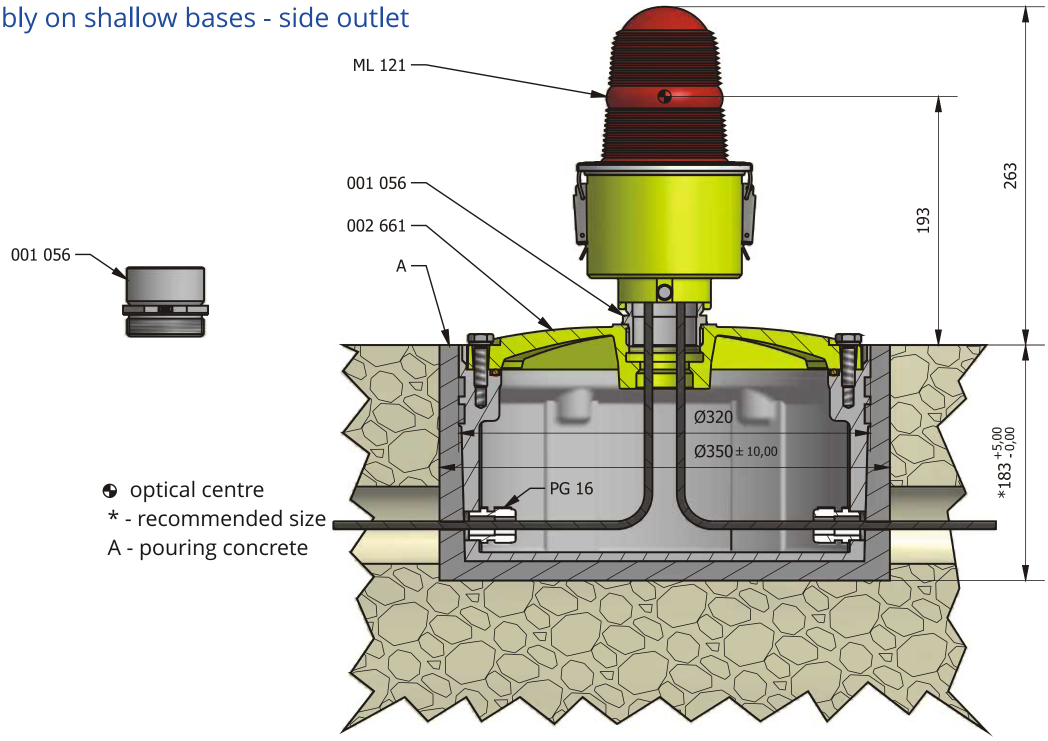
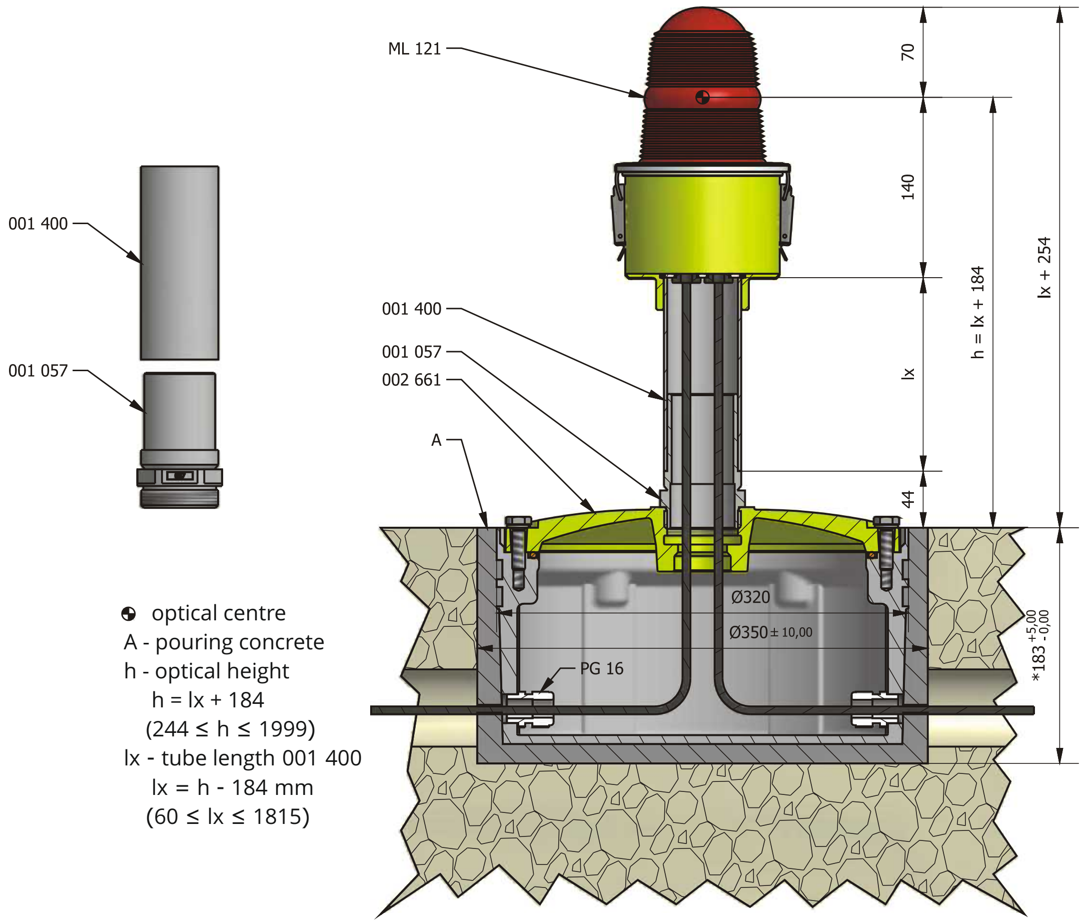
assembly on shallow bases - side outlet



⊕ optical centre
* - recommended size
A - pouring concrete

assembly on shallow bases - side outlet + tube (stake) 001 400



⊕ optical centre
A - pouring concrete
h - optical height
h = lx + 184
(244 ≤ h ≤ 1999)
lx - tube length 001 400
lx = h - 184 mm
(60 ≤ lx ≤ 1815)

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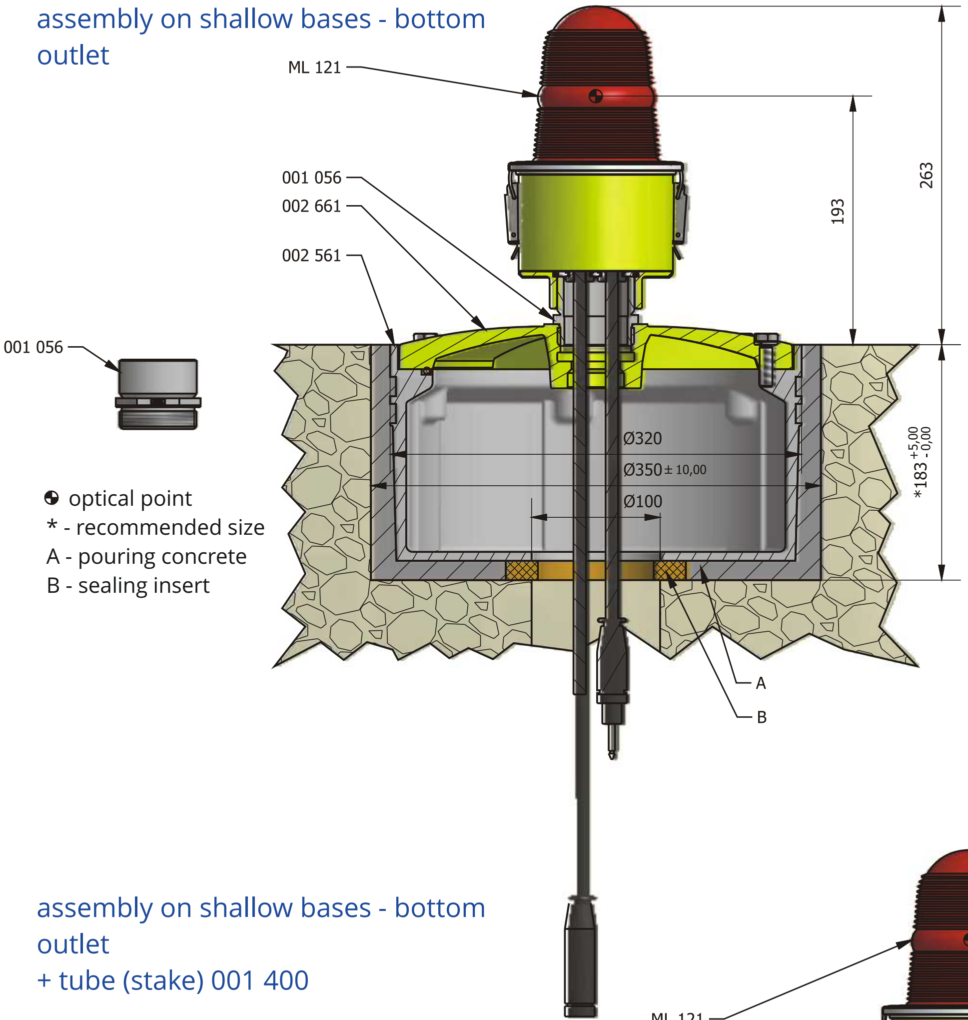
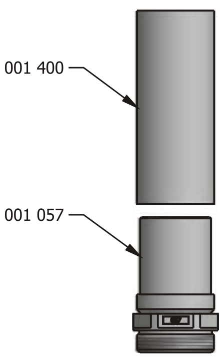
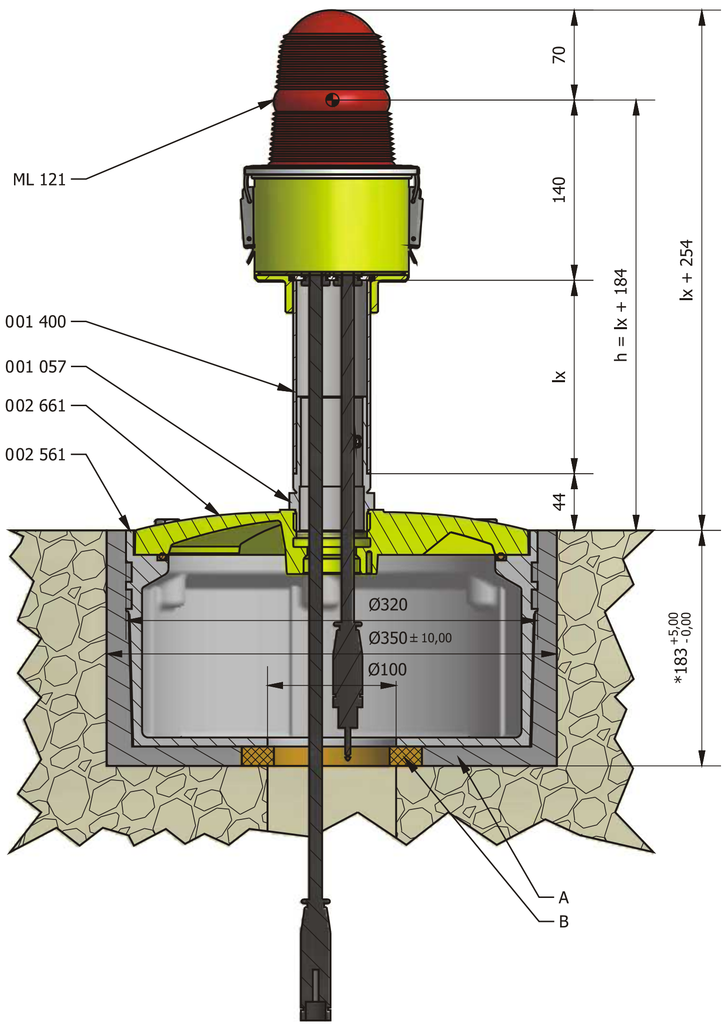
assembly on shallow bases - bottom outlet



- optical point
- * - recommended size
- A - pouring concrete
- B - sealing insert

assembly on shallow bases - bottom outlet + tube (stake) 001 400





- optical point
- * - recommended size
- A - pouring concrete
- B - sealing insert
- h - optical point
  - h = lx + 184
  - (244 ≤ h ≤ 1999)
- lx - tube length 001 400
  - lx = h - 184 mm
  - (60 ≤ lx ≤ 1815)

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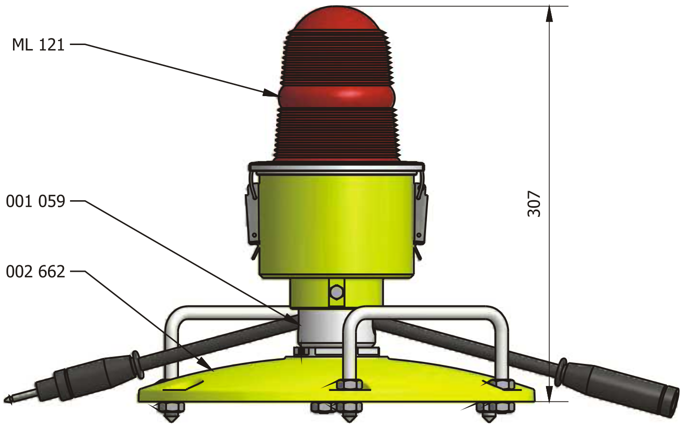
mobile assembly



ML 121 UL

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