

# TCH Series Safety Flashlights

## Increased Safety. Halogen, Incandescent

Zone 1 and 2 - 21 and 22  
Gas (G) and Dust (D)

### Applications

- To provide maintenance staff with task specific portable lighting in Zone 1 hazardous areas.
- Ideal for persons requiring task specific portable lighting in refineries, oil and gas process and chemical plants, FPSO, FLNG, ...

### Features

- Type TCH1:
  - Luminescent switch facilitates locating flashlight in dark.
  - Can be used to transmit a Morse code.
  - Halogen version provides twice the lumen output of incandescent lamps.
  - Hook for hands free operation.
  - Uses R20 or LR20 batteries (not included).
  - Supplied with 1 lamp.
- Type TCH2:
  - Dual optics (one at the end and one on the side) permitting:
    - Focused beam for safe movement.
    - Wide angle side beam for task specific focused lighting.
  - Ergonomic design permits easy manipulation: User can select one of the two beams with one hand.
  - Two beams can be switched on separately and not simultaneously.
  - Should one lamp fail, the second lamp will still provide illumination.
  - Flashlight is stable when placed upright on a horizontal surface.
  - Pocket clip allows for hands free work.
  - Luminescent ring allows easy locating of flashlight in dark.
  - Suspension hook for hands free use.
  - Uses 2 R20 or LR20 batteries (not included).
  - Supplied with one halogen lamp for main beam and one incandescent lamp for side beam.
  - Supplied with one special opening tool.

### Standard Materials

- Type TCH1:
  - Housing: shockproof and antistatic polyamide
  - Internal reflector: polished
  - Lens: polycarbonate
  - Hardware: stainless steel
  - Switch: luminescent
- Type TCH2:
  - Housing: black polycarbonate
  - Internal reflector: polished
  - Lens: polycarbonate
  - Hardware: stainless steel
  - Ring: luminescent

### Certifications and Compliances

#### ◆ ATEX Certification

- Certification Type: TCH1**
  - Gas: Zones 1-2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection: Ex eib IIC
    - Temperature Class: T4
  - Dust: Zone 21-22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex td A21
    - Surface Temperature: +95 °C



TCH1



TCH2

- Ambient Temperature:  $-20\text{ °C} \leq T_a \leq +40\text{ °C}$
- CE Declaration of Conformity: 50259
- ATEX Certificate: LCIE 03 ATEX 6064
- Index of Protection according EN/IEC 60529: IP66
- Certification Type: TCH2**
  - Gas: Zones 1-2
    - Conforming to ATEX 94/9/CE: II 2 G
    - Type of Protection: Ex eib IIC
    - Temperature Class:
      - Incandescent PR6:T4 (+55°C)
      - Krypton PR102: T4 (+55°C)
      - Halogen HPR52: T4 (+40°C) - T3 (+55°C)
      - Halogen HPR01: T4 (+55°C)
  - Dust: Zone 21-22
    - Conforming to ATEX 94/9/CE: II 2 D
    - Type of Protection: Ex td A21
    - Surface Temperature: +130 °C
  - Ambient Temperature:  $-20\text{ °C} \leq T_a \leq +55\text{ °C}$
  - CE Declaration of Conformity: 50238
  - ATEX Certificate: LCIE 02 ATEX 6229
  - Index of Protection according EN/IEC 60529: IP66/68 (25m)
- ◆ Others Certification**
  - Certification Type: TCH1 / TCH2**
    - INMETRO Certificate: BVC11.0419 (TCH1) and BVC11.0420 (TCH2) <sup>①</sup>

<sup>①</sup> Inmetro certification available on special request only. Contact your local sales for more information

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#### Ordering Information:

Number of lamps (included)	Type of Lamps (not included)	Number of Battery Cells	Weight kgs	Volume dm <sup>3</sup>	Catalog Number
1	Incandescent — 2.5 V – 0.3 A	2	0.4	3.4	TCH12C
1	Incandescent — 3.7 V – 0.3 A	3	0.4	3.4	TCH13C
1	Halogen — 2.8 V – 0.5 A	2	0.4	3.4	TCH12H
2	Incandescent — 2.5 V – 0.3 A Halogen — 2.8 V – 0.5 A	2	0.4	1.9	TCH22M

#### Spare Lamps for Replacement (Lamp Holder P13, 5S)

Lamp Type	Rating	Catalog Number
Incandescent (PR6)	2.5 V – 0.3 A	TCHL25C
Incandescent (PR7)	3.7 V – 0.3 A	TCHL37C
Halogen (HPR01)	2.8 V – 0.5 A	TCHL28H

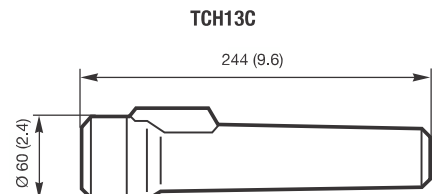
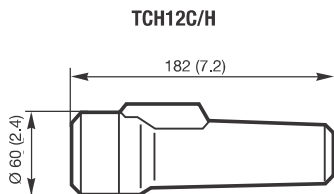
*Shaded catalog numbers are normally stocked items. All other items are made to order.*

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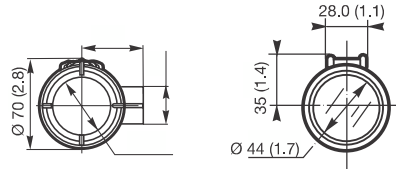
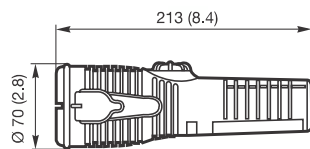
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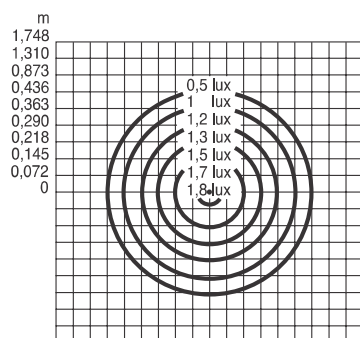
### Dimensions in Millimeters (Inches)



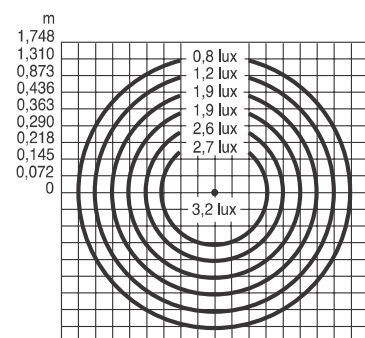
### TCH22M



### Photometric Data



Catalog Number TCH12C (at 25 meters) Incandescent



Catalog Number TCH13C (at 25 meters) Incandescent