8 Accessories

8.1 Overview

A full range of accessories for various applications and industrial environments are available. Accessories include items that may be ordered at any time and added on-site:

- Adjustable Mounting Bracket (XXXMIACAB)
- Fixed Mounting Bracket (XXXMIACFB)
- Air Purging Jacket (XXXMIACAJ)
- Air Cooling System with 0.8 m (2.6 ft.) air hose (XXXMIACCJ) or with 2.8 m (9.2 ft.) air hose (XXXMIACCJ1)
- Right Angle Mirror (XXXMIACRAJ, XXXMIACRAJ1)
- Box Lid (XXXMIACV)
- Protective Window (XXXMIACPW)
- Protective Window, transmission already set in the unit (XXXMIACPWI)
- PC connection kit for models with RS232, including DataTemp MultiDrop Software (RAYMISCON)
- PC connection kit for models with RS485, including DataTemp MultiDrop Software and RS232/485 converter: 110 VAC (RAYMINCONV1)
 230 VAC (RAYMINCONV2)



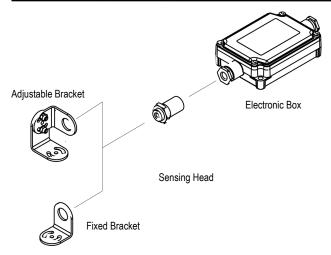


Figure 31: Standard Mounting Accessories

8.2 Adjustable Mounting Bracket

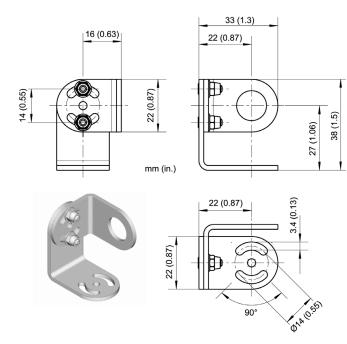


Figure 32: Adjustable Mounting Bracket (XXXMIACAB)

8.3 Fixed Mounting Bracket

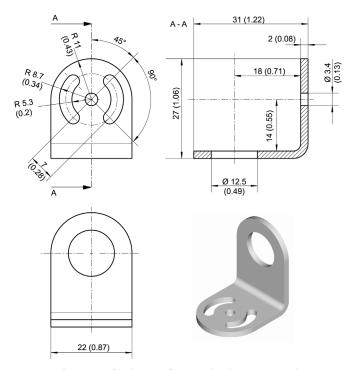


Figure 33: Fixed Mounting Bracket (XXXMIACFB)

8.4 Air Purging Jacket

The air purge jacket is used to keep dust, moisture, airborne particles, and vapors away from the sensing head. Clean, oil free air is recommended. The air purge jacket withstands ambient temperatures up to 180° C (356° F) and can only limited used for cooling purposes. The recommended air flow rate is 30 to 60 l/min (0.5 to 1 cfm). The max. pressure is 5 bar.

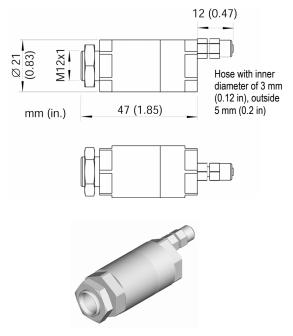


Figure 34: Air Purging Jacket (XXXMIACAJ)

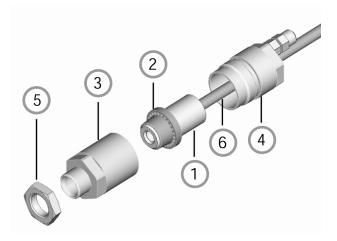


Figure 35: Mounting the Air Purge Jacket

- Remove the sensor (1) and cable from the electronic box by disconnecting the wires from the electronic box.
- 2. Open the Air Purging Jacket (3, 4) and screw the white plastic fitting (2) onto the sensor up to the end of the threads, do not over tighten!
- 3. Slip the cable (6) through the backside (4) of the jacket.
- **4.** Close the Air Purging Jacket (3, 4) and reconnect the wires to the electronic box and apply the mounting nut (5).

8.5 Air Cooling System

The sensing head can operate in ambient temperatures up to 200°C (392°F) with the air-cooling system. The air-cooling system comes with a T-adapter including 0.8 m / 31.5 in (optional: 2.8 m / 110 in) air hose and insulation. The T-adapter allows the air-cooling hose to be installed without interrupting the connections to the box.

The air-cooling jacket may be combined with the right angle mirror.

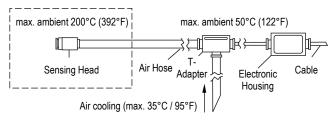


Figure 36: Air Cooling System

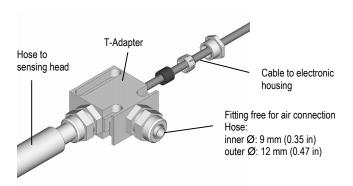


Figure 37: Connecting the T-Adapter (XXXMIACCJ)

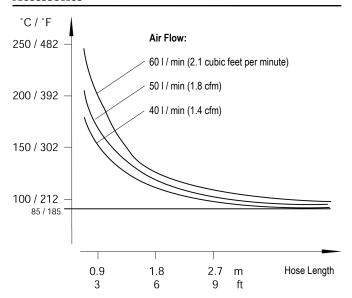


Figure 38: Maximum Ambient Temperature depending on Air Flow and Hose Length

Note: "Hose Length" is the length of hose exposed to high ambient temperature (not the overall length of the hose).

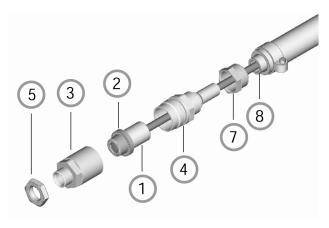


Figure 39: Air Cooling System: Purging Jacket

The Air Cooling System consists of:

- (1) sensing head
- (2) inner plastic fitting (air purging jacket)
- (3) front part of the air-purging jacket
- (4) back part of the air-purging jacket
- (5) mounting nut
- (6) preinstalled cable between sensor and box, leading through the T-adapter
- (7) hose connecting nut
- (8) inner hose
- (9) outer hose
- (10) T-adapter
- (11) rubber washer
- (12) plastic compression fitting

(13) cap

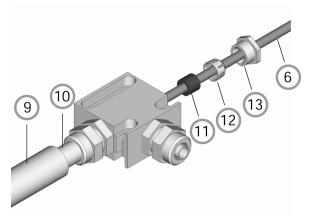
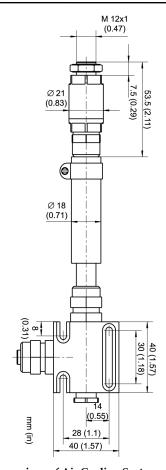


Figure 40: Air Cooling System: T-Adapter



Hose: inner Ø: 9 mm (0.35 in) outer Ø: 12 mm (0.47 in)

Figure 41: Dimensions of Air Cooling System

8.6 Right Angle Mirror

The right angle mirror comes in two different versions:

XXXMIACRAJ right angle mirror as accessory for air purging

jacket or air cooling system

XXXMIACRAJ1 right angle mirror with integrated air purging



Figure 42: Right Angle Mirror XXXMIACRAJ (left), Right Angle Mirror with Air Purging XXXMIACRAJ1 (right)

The right angle mirror with stands ambient temperatures up to 180°C (356°F).

For mounting the right angle mirror (XXXMIACRAJ) see section 8.4 Air Purging Jacket on page 53. However, instead of using the front part of the air purging jacket (3), mount the right angle mirror.

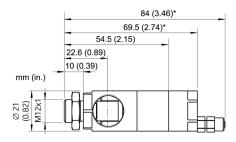


Figure 43: Right Angle Mirror (* with Air Purging)

The IR beam length within the right angle mirror is 18~mm (0.7 in.) which needs to be considered for spot size calculations.

8.7 Box Lid



Figure 44: Box Lid with View Port for Post Installations (XXXMIACV)

8.8 Protective Window

The protective window can be used to protect the sensing head from dust and other contamination. This should be applied especially for sensors without a lens. These are all models with an optical resolution of 2:1.

The protective window is made from non-poisonous zinc sulfide, with a transmission factor of 0.75 ± 0.05 . It has an outer diameter of 17 mm (0.67 in). The protective window can be directly screwed to the sensing head. It withstands ambient temperatures up to 180° C (356° F).



For correct temperature readings, the transmission of the protective window must be set via the control panel in the sensor's electronic housing, see section 6.2 Setting of Modes on page 38!



Figure 45: Protective Window (XXXMIACPW)