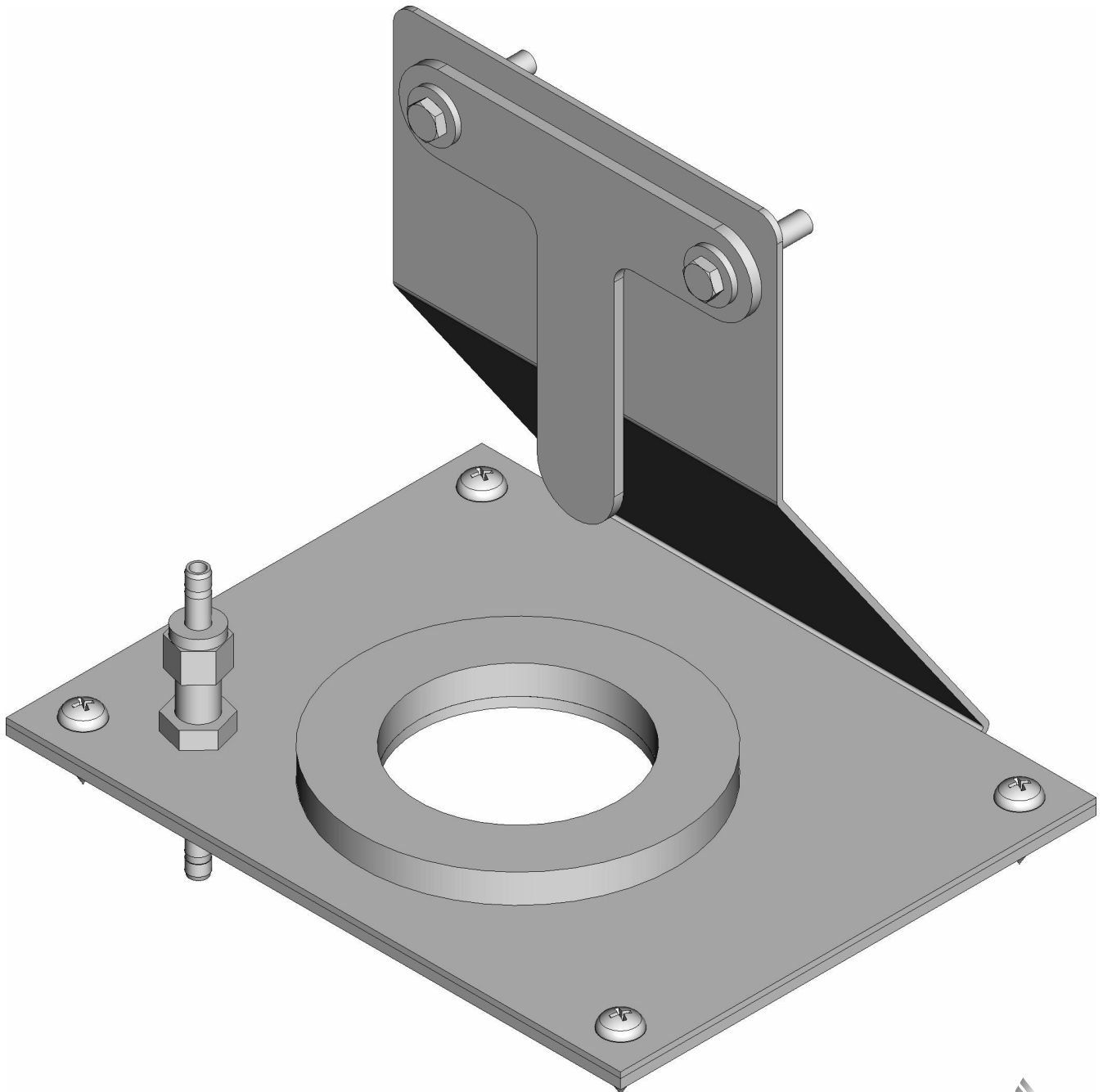


Net Safety™ Universal Duct Mount Assembly Kit

UDM-003



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1 Introduction

The Net Safety UDM-003 (Universal Duct Mount) is Net Safety's latest design for allowing sensors to monitor ducts. With its angular design and flexibility, it firmly supports a variety of Net Safety's sensors with multipurpose junction boxes to ducts.

Mount the Net Safety UDM-003 with the following sensors:

- Net Safety Millennium II Series sensors
- Net Safety Millennium Premium ST Series sensors
- Gas shield sensors

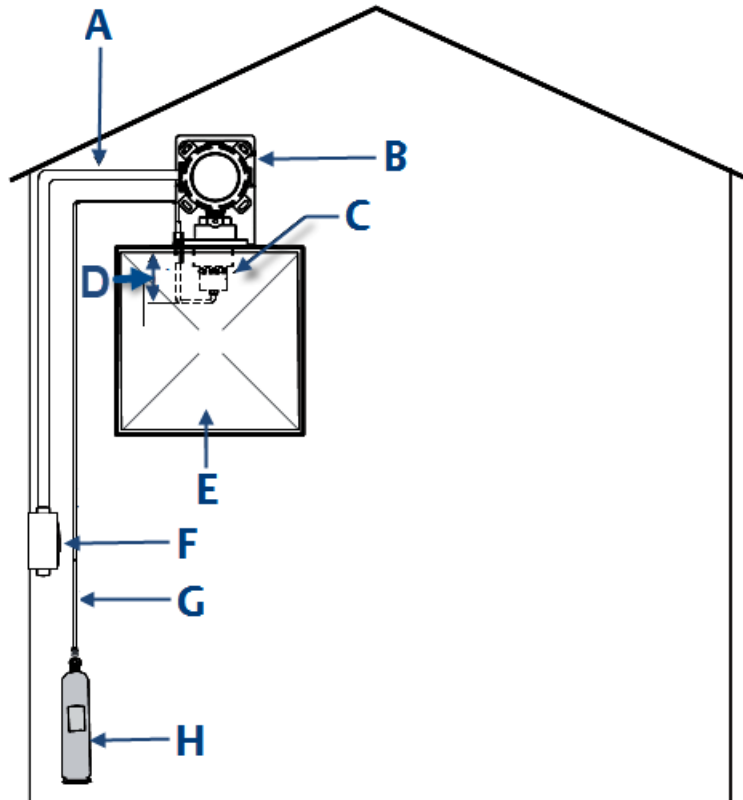
The instructions in this Reference Manual will guide you in setting up and mounting the Net Safety UDM-003 with a sensor and multipurpose junction box to a duct. In order to ensure proper and safe mounting, follow the instructions given and ensure that all screws, nuts, and bolts are tightly fitted. When calibrating, refer to the specific Reference Manual as required. Emerson recommends using a 2.5 (or greater) liters per minute regulator when calibrating.

⚠ WARNING

Never install the Net Safety UDM-003 at the bottom (underside) of a duct.

2 Mounting

Figure 2-1: Mounting the Net Safety UDM-003



- A. Conduit to controller
- B. Net Safety UDM-003 and sensor with junction box mounted on top of duct
- C. Calibration cup with tubing
- D. Insertion distance
- E. Duct
- F. Controller
- G. Calibration tubing
- H. Calibration gas

Figure 2-1, showing the mounting of the Net Safety UDM-003 and sensor with junction box to a duct, is a general representation.

2.1 Fit Net Safety UDM-003 to duct

Procedure

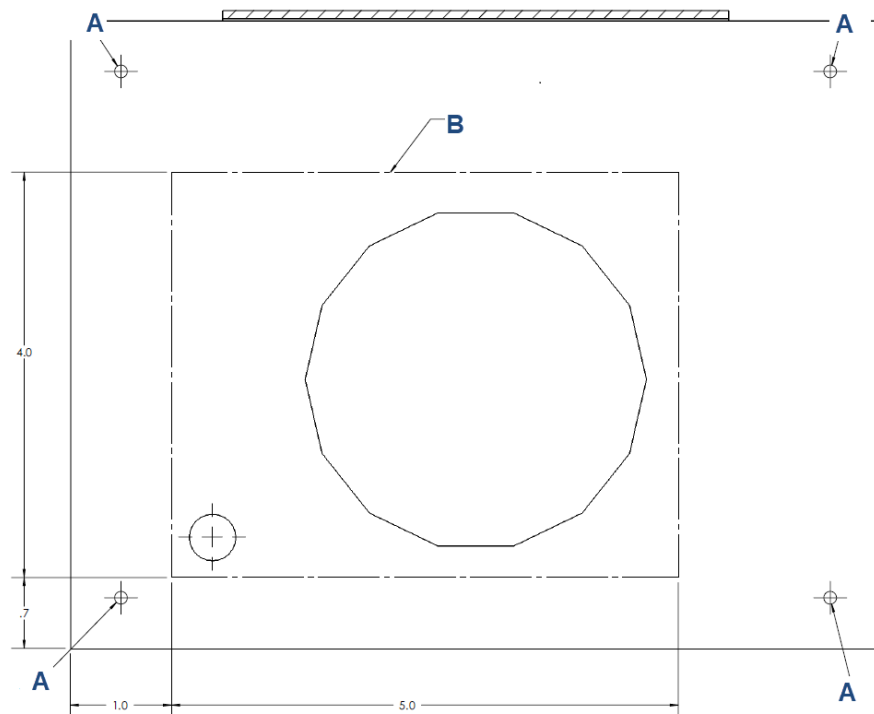
1. Locate the desired place on the duct to mount the Net Safety UDM-003.

Note

Fit sensor and junction box to the Net Safety UDM-003 before mounting to duct.

2. Use the template provided for drilling and cutting holes in the duct. Use a small pilot drill to drill holes for the provided self tapping screws.
For a proper fit, make sure holes on the template are concentric to holes on the duct. See [Figure 2-2](#).
-

Figure 2-2: Net Safety UDM-003 Template



Measurements are in inches.

- A. Recommended 0.125-in. pilot hole
 - B. Cut line
-

3. Fit a calibration cup with tubing to the Net Safety UDM-003 as illustrated in [Figure 2-1](#). Secure the sensor and junction box to the Net Safety UDM-003 with the screws, washers, and nuts provided.

2.2 Insertion distance

- 5.1 in. (130 mm) for Net Safety Millennium II series sensors
- 6.3 in. (160 mm) for Net Safety ST series sensors

3 Specifications

Material	Stainless steel
Weight (Net Safety UDM-003 without sensor and junction box)	3.68 lb. (1.67 kg)

4 Views and dimensions

Figure 4-1: Views and Dimensions

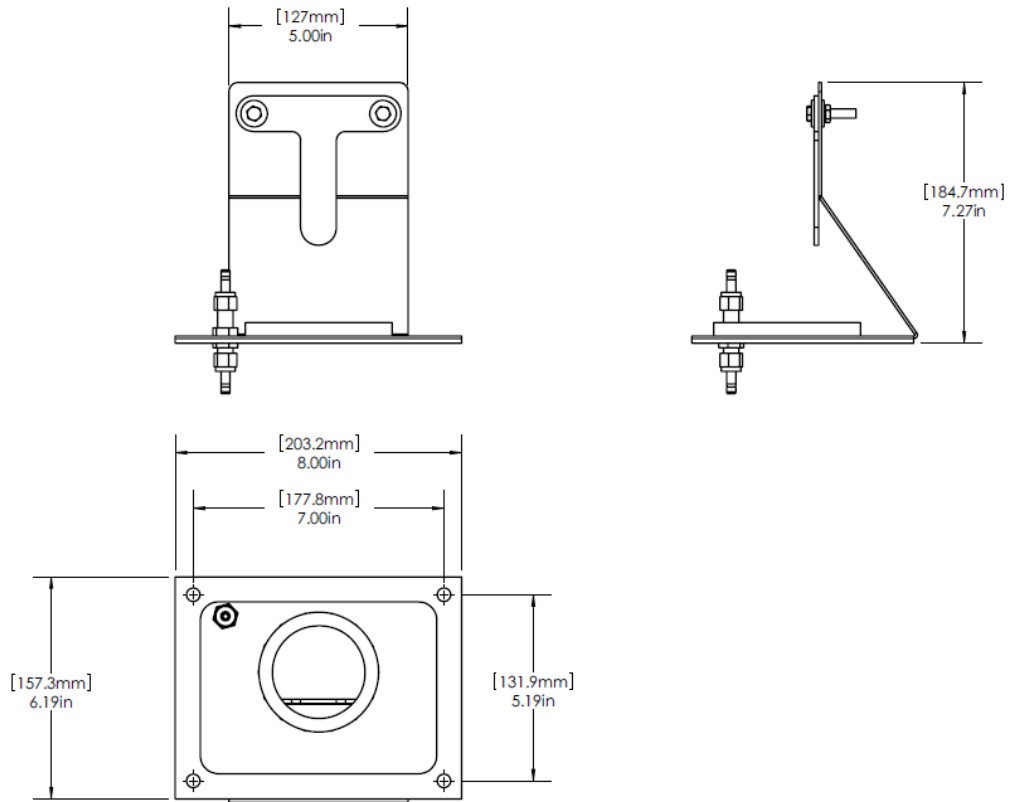


Figure 4-2: Net Safety UDM-003 Exploded View

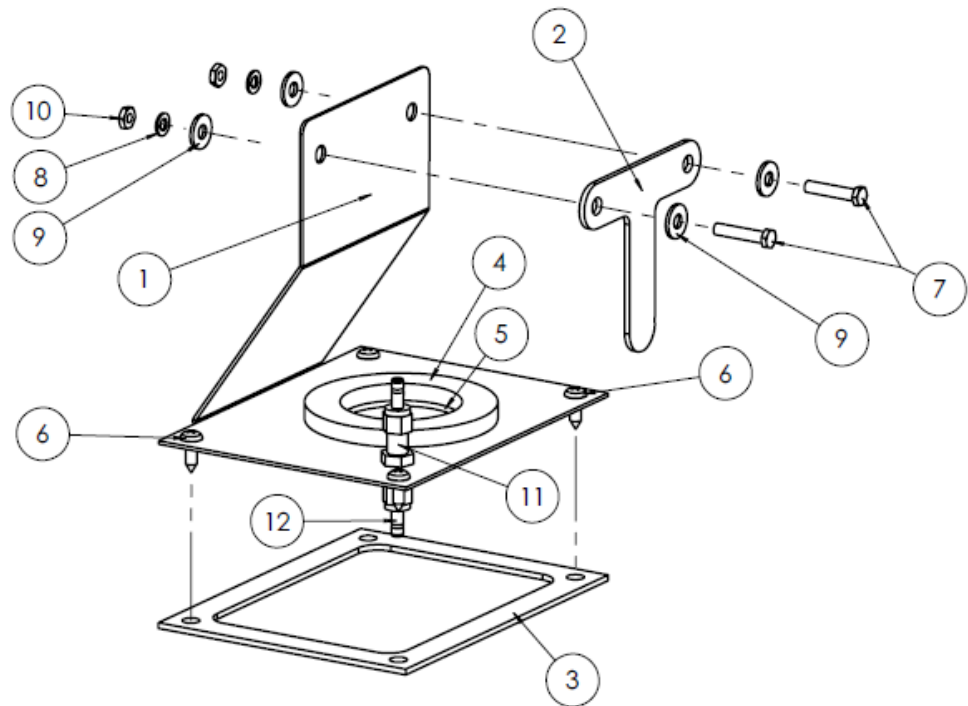


Table 4-1: Part Numbers

Item number in Figure 4-2	Part number	Description	Quantity
1	MFG-0256	Main body	1
2	MFG-0257	Spacer ⁽¹⁾	1
3	GSK-0040	Square gasket	1
4	GSK-0041	Upper round gasket	1
5	GSK-0042	Lower round gasket	1
6	SCR-0129	Screw, Phillips pan head, 14 diameter - A/B, ¾-in. LG, tap	4
7	SCR-0130	¼ - 20 x 1¼-in. LG GR 5 hex head cap, zinc plated	2
8	WSH-0015	¼-in. split ring lock washer, zinc-plated steel	2
9	WSH-0029	¼-in. flat washer, zinc-plated steel	2
10	NUT-0027	¼-in. - 20 hex nut, grade 5, zinc-plated steel	2
11	HDW-0171	Swagelok® bulkhead union, stainless steel ¼-in. tube OD	1

Table 4-1: Part Numbers (continued)

Item number in Figure 4-2	Part number	Description	Quantity
12	HDW-0172	Port connector, Swagelok stainless steel, ¼-in. tube	2

(1) Spacer (MFG-0257) is not used when mounting with aluminum junction box.

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