



INSTRUMENTS

Flow Through Adapters:

30-0951-CSA-01

30-0951-ST-01

30-0951RK-01

30-0951RK-01SS

30-0951RK-HS-01

30-0951RK-IR-01

30-0951RK-OC-01

30-0951RK-IR01S

Part Number: 71-0281RK

Revision: D

Released: 12/30/21

Description

The attached detector head operator's manual can be used in conjunction with this supplement for the 30-0951-CSA-01, 30-0951-ST-01, 30-0951RK-01, 30-0951RK-01SS, 30-0951RK-HS-01, 30-0951RK-IR-01, 30-0951RK-OC-01, or the 30-0951RK-IR01S flow through adapters.

The flow through adapter includes a detector adapter and a detector chamber with two compression fittings.

A detector adapter gasket seals to the 1/2 NPT combustible sensor when installed. A detector adapter O-ring seals to all other types of detectors when installed. This O-ring is different for different types of detectors. A detector chamber O-ring seals the detector chamber to the detector adapter. This O-ring is the same for all versions.

The detector adapter and detector chamber for the -ST-01 flow through adapter are made of PVC to prevent sample gas absorption. The detector adapter and detector chamber for all other versions are made of aluminum. The material of the compression fittings depends on the flow through adapter part number.

| Flow Through Adapter Part Number | Fitting Material |
|---|-------------------------|
| 30-0951-CSA-01 | brass |
| 30-0951-ST-01 | stainless steel |
| 30-0951RK-01 | brass |
| 30-0951RK-01SS | stainless steel |
| 30-0951RK-HS-01 | stainless steel |
| 30-0951RK-IR-01 | brass |
| 30-0951RK-OC-01 | brass |
| 30-0951RK-IR01S | stainless steel |

Installation

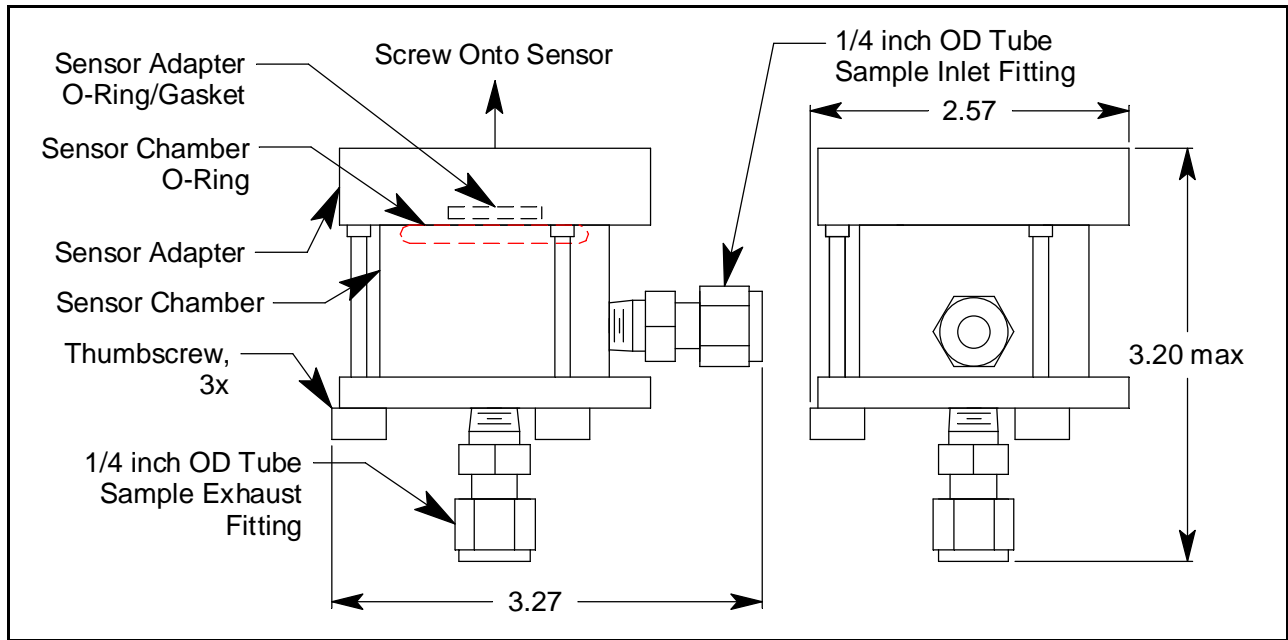


Figure 1: Outline and Mounting Dimensions/Component Location

- 1 . The flow through adapter is normally shipped installed to the detector. If it is not installed, screw the flow through adapter onto the detector tightening firmly by hand.

CAUTION: *Make sure the flow through adapter is installed tightly and after installation is complete, verify that the flow through adapter is still tightened firmly onto the detector to avoid possible leaks.*

- 2 . If necessary, re-orient the detector chamber so the inlet fitting faces away from the mounting surface by unscrewing the three thumbscrews, rotating the detector chamber, and tightening the three thumbscrews.
- 3 . Install and startup the detector head as described in the detector head operator’s manual. Make sure there is sufficient room between the detector and the mounting surface for the flow through adapter.
- 4 . The inlet and exhaust fittings accept 1/4” OD rigid tubing. The inlet fitting is located on the side of the detector chamber and the exhaust fitting is located on the bottom. Insert the desired length of tubing into each fitting and tighten the fittings so that the ferrules crimp onto the tubing. Tubing material options are listed below.

| Flow Through Adapter Part Number | Tubing Material |
|----------------------------------|--|
| 30-0951-CSA-01 | <ul style="list-style-type: none"> • aluminum • copper • polypropylene • stainless steel • Teflon |
| 30-0951RK-01 | |
| 30-0951RK-IR-01 | |
| 30-0951RK-OC-01 | |

| Flow Through Adapter Part Number | Tubing Material |
|---|---|
| 30-0951-ST-01 30-0951RK-01SS 30-0951RK-HS-01 30-0951RK-IR01S | <ul style="list-style-type: none"> • polypropylene • stainless steel • Teflon <p><i>NOTE: For absorptive gases like HCl and HF, use only Teflon tubing and limit the tubing length to 30 feet.</i></p> |

5 . Install appropriate device(s) (pump, aspirator, etc.) to draw sample to the detector.

NOTE: Be sure to use the inlet and exhaust ports as intended to ensure correct sensor response and to allow any accumulated liquid to drain out the bottom of the flow through adapter.

6 . Calibrate the detector head as described in the attached manual and in the next section.

NOTE: Calibrate the detector head with the flow through adapter installed to ensure an accurate reading.

Calibration

A demand flow regulator should be used for calibration.

- 1 . Follow the calibration instructions outlined in the attached detector head manual.
- 2 . When the instructions call for applying gas, connect the cylinder.
 - If you are drawing sample through the system, connect the cylinder to the inlet fitting of the flow through adapter.
 - If you are pushing sample through the system, connect the cylinder to the pump inlet.
- 3 . Perform a calibration as outlined in the attached detector head manual.
- 4 . When the instructions call for removing the gas, disconnect the cylinder.

Parts List

See the table below for spare parts not listed in the attached detector manual.

| Part Number | Description |
|---------------|--|
| 07-0107RK | Gasket, for LEL type detector adapter (rainshield removed) |
| 07-7123RK | O-ring, for replaceable-sensor, CSA LEL, and super toxic detector adapter |
| 07-7218RK | O-ring, for 3/4 NPT IR detector adapter |
| 07-7225RK | O-ring, for detector chamber |
| 13-1070RK | Captive panel screw, 10-32 x 1.75 |
| 81-1054RK | Regulator, demand flow type, for all gases that the 81-1054RK-H2S is not appropriate for in 34 liter aluminum, 58 liter, and 103 liter calibration cylinders (cylinders with internal threads) |
| 81-1054RK-H2S | Regulator, demand flow type, for CO, CO ₂ , H ₂ S, N ₂ , NO, NO ₂ , PH ₃ , SiH ₄ , SO ₂ , zero air, and LEL combustible gases in 34 liter aluminum, 58 liter, and 103 liter calibration cylinders (cylinders with internal threads) |
| 81-1055RK | Regulator, demand flow, for all gases in 17 liter and 34 liter steel calibration cylinders (cylinders with external threads) |