

**LUDLUM MODEL 43-135
WINDOWLESS GAS PROBE
MAY 2014**

**LUDLUM MODEL 43-135
WINDOWLESS GAS PROBE
MAY 2014**



LUDLUM MEASUREMENTS, INC
501 OAK STREET, P.O. BOX 810
SWEETWATER, TEXAS 79556
325-235-5494, FAX: 325-235-4672

STATEMENT OF WARRANTY

Ludlum Measurements, Inc. warrants the products covered in this manual to be free of defects due to workmanship, material, and design for a period of twelve months from the date of delivery. The calibration of a product is warranted to be within its specified accuracy limits at the time of shipment. In the event of instrument failure, notify Ludlum Measurements to determine if repair, recalibration, or replacement is required.

This warranty excludes the replacement of photomultiplier tubes, G-M and proportional tubes, and scintillation crystals which are broken due to excessive physical abuse or used for purposes other than intended.

There are no warranties, express or implied, including without limitation any implied warranty of merchantability or fitness, which extend beyond the description of the face there of. If the product does not perform as warranted herein, purchaser's sole remedy shall be repair or replacement, at the option of Ludlum Measurements. In no event will Ludlum Measurements be liable for damages, lost revenue, lost wages, or any other incidental or consequential damages, arising from the purchase, use, or inability to use product.

RETURN OF GOODS TO MANUFACTURER

If equipment needs to be returned to Ludlum Measurements, Inc. for repair or calibration, please send to the address below. All shipments should include documentation containing return shipping address, customer name, telephone number, description of service requested, and all other necessary information. Your cooperation will expedite the return of your equipment.

**LUDLUM MEASUREMENTS, INC.
ATTN: REPAIR DEPARTMENT
501 OAK STREET
SWEETWATER, TX 79556**

**800-622-0828 325-235-5494
FAX 325-235-4672**

Ludlum Model 43-135 Windowless Gas Proportional Detector. P/N 47-3466

Physical:

- Size: Approximately 18.3 x 43.2 x 53.3 cm (7.2 x 17 x 21 in.) (HxWxL)
- Maximum source dimension: 1.3 x 21.6 x 14 cm (0.5 x 8.5 x 5.5 in.) (HxWxL)
- Weight: Approximately 37.2 kg (82 lb)

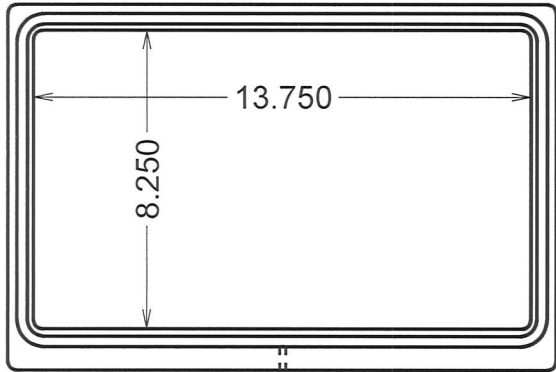
Pressure Requirements:

- Working Pressure: 22.1 to 29.4 psia, 1.5 to 2 atmospheres absolute (152.4-202.8 kPa)
- Maximum pressure: 45 PSIA (310.3 kPa)
- Equipped with:
 - ✓ Inlet and outlet for counting gas
 - ✓ Pressure relief valve for over pressure protection
 - ✓ Pressure gauge, 30 inch to 30 psi, range (vacuum to 30 psig)

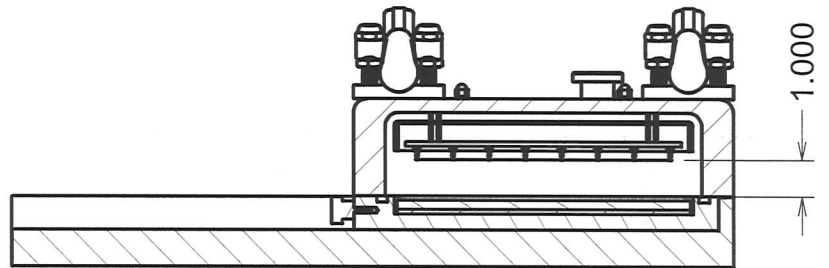
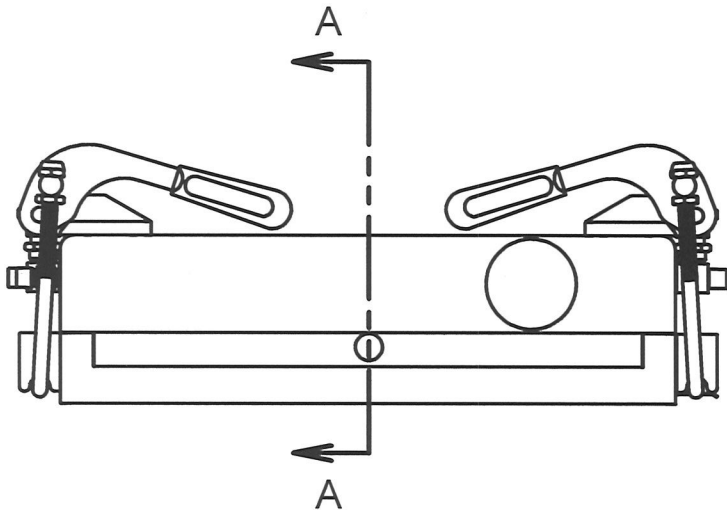
Operational Requirements:

- Chamber is sealed by manually operated clamps
- Anode wire: 0.001 inch platinum on 1-inch spacing, mounted on Teflon insulated posts.
- Inherent background to allow accurate measurements of sample activities as low as 3 counts/second.
 - ✓ Alpha background: approximately 0.0558 cps
 - ✓ Beta background: approximately 27.4 cps
- Detector will have a uniform response of +/- 1% within the active area.
- Plateau length of >200 volts with a slope of approximately 1%.
- Operating voltage shall be less than 5000 Vdc.
- Electronic noise to produce signals less than obtained by sources with energies 50 keV or greater.
- Typical plateau from 1200 to 2700 volts.
- Typical count rates are 10 to 2000 cps.
- The High Voltage and signal supplied to the unit with a hermetically sealed SHV connector. Ceramaseal part number 9263-06A or equivalent.
- Detector assembly sealed to source base with Viton O-Ring.

REVISION HISTORY			
REV	DESCRIPTION	DATE	BY
1	VALID	5/22/14	DDW



TRAY SIZE



SECTION A-A
SCALE 3/16

DWN	DATE	CHK	DATE	APP	DATE
DDW	5/22/14			<i>[Signature]</i>	5/22/14
DWG NUM: 4304-167				SCALE: FULL <input type="checkbox"/> OTHER <input type="checkbox"/>	
TITLE M 43-135 DIMS					
	LUDLUM MEASUREMENTS, INC. 501 OAK STREET SWEETWATER, TEXAS 79556		SERIES 304	SHEET 167B	