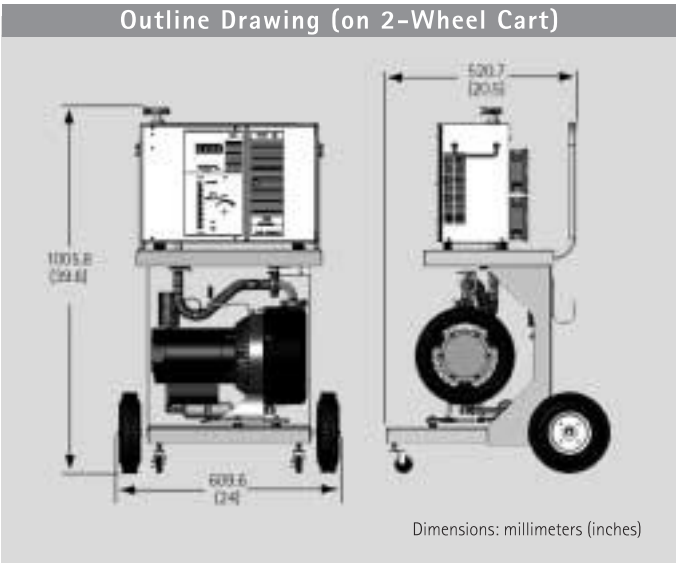
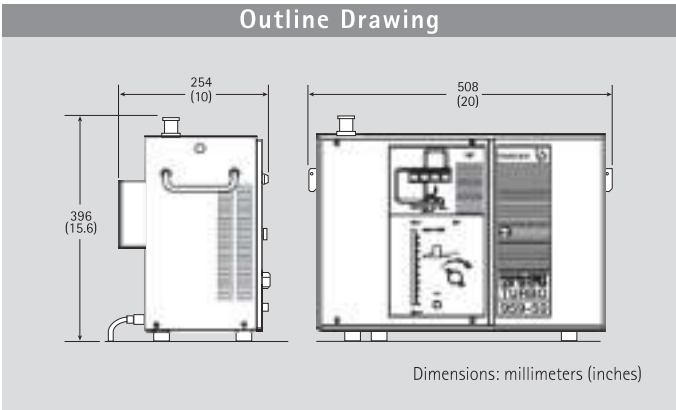




The 959 MacroTorr Helium Leak Detector fulfills the need for a rugged and dependable leak detector in the most demanding industrial applications. With its low initial price and low cost of ownership, this unit is the most cost effective leak detector available. It is available in stand-alone, bench-top, and two-wheel cart configurations. We have designed these units with large externally-mounted primary pumps that deliver high roughing speeds for fast pump down times. The bench-top and cart-mounted versions are available with Varian DS 302 rotary vane pumps or TriScroll™ 320 dry pumps.

- External mounting of large primary pumps results in fast pump down cycles
- High test port pressure tolerance reduces time required to reach test mode
- Available in wet and dry versions, on two- or four-wheel carts, or bench-top
- Simple, rugged design provides the cost effective solution for many applications



Technical Specifications		
Sensitivity ranges		10 <sup>-4</sup> thru 10 <sup>-8</sup> atm cc/sec
Minimum detectable leak at 1000 ppm ambient helium		2 x 10 <sup>-9</sup> atm cc/sec helium
Maximum test port pressure		1 Torr
High Vacuum Pump		V70D MacroTorr turbo/drag pump
Primary Pump Type	Rotary vane pump	DS 302
	Dry scroll pump	TS 320
Inlet flange		NW-25 (optional 1 1/8" compression adapter)
Calibration routine		Manual
Background suppression		Manual
Leak indication		50 segment bar graph w/exponent display
Leak units displayed		Atmospheric cc/sec.
Ranging		Manual
Analog leak rate output (plug)		Phone jack, 0-5 VDC
Audio alarm		Threshold and volume control (103 dBA maximum @ 1 ft.) and output jack for remote speaker
Electronic response time		2 seconds
Recommended ambient operating temperature		5 to 35 °C
Power requirements		115 V or 230 V, 50/60 Hz (15/20 amps)
Weight, base unit		22.7 kgs (50 lbs)

Ordering Information				
Configuration	Part Number			
	Base	x = Mounting	x = Sensitivity	xxx = Voltage
	Stand-Alone (Pumps not Included)*	S9590000xxxxx	• 0 (None supplied)	• M = Standard Sensitivity
	Single Rotary Vane Pump DS-302	L9593000xxxxx	• B = Bench • T = Two-wheel	
Single Dry Scroll Pump TS-320	D9593500xxxxx	• B = Bench • T = Two-wheel		
Description	Shipping Weight kg (lbs)		Part Number	
<b>Accessories and Options</b>				
Sniffer probe, NW25, 10' hose	1.8 (4)		K9565306	
Sniffer probe, NW25, 25' hose	1.8 (4)		K9565307	
Calibrated leak, external, NW25, 10 <sup>-7</sup> range (NIST-traceable)	1.8 (4)		F8473321	
Calibrated leak, external, NW25, 10 <sup>-8</sup> range (NIST-traceable)	1.8 (4)		F8473322	
Tuning leak/throttle valve, NW25	2.3 (5)		R1947301	
Spectrometer tube cleaning kit	1.4 (3)		670029096	
<b>Replacement Parts</b>				
O-ring kit	0.9 (2)		L6930301	
Ion Source, thoriated iridium	0.1 (0.2)		82850302	
Preamplifier, MacroTorr	0.5 (1)		L9030301	
Manual	1.4 (3)		699909745	

\* 959 sensitivity is influenced by the speed of the system's primary pump. The above specifications are obtained with a nominal 10 cfm displacement pump.

For information on Support Plans, refer to page 258.

For information on pump options, refer to page 250.

For information on additional accessories and options, refer to pages 251 through 255.