

Pfeiffer Smart Test Helium Leak Detector

M/N HLT-560



With its modular design, ease of operation and modern optics, the Smart Test is setting new standards in vacuum leak detection. Fast, reliable results, lowest detectable leak rates and short recovery time are what characterize the Smart Test and make it such a powerful and dependable product.

This self contained unit includes a 60 l/sec turbo molecular pump, a 5 m³/h rotary vane backing pump and an ultra sensitive 180° magnetic sector mass spectrometer. Employing the Twin Flow principle the Smart Test achieves a smallest detectable leak rate of 5 x 10⁻¹² with a response time of less than .5 seconds.

Maximum inlet pressure of 25 mbar and effective pumping speed of 2.5 l/sec allows for fast testing cycles. The unit comes standard with both vacuum and sniffer operating modes. The unit comes standard with both vacuum and sniffer operating modes. The unit also has the ability to detect masses 2, 3 and 4 and contains an internal calibrated leak standard. The interface is rugged, easy to use back lit LED with advanced functions. The Smart Calc software algorithm provides accurate measurements at unsurpassed speed and stability in all measurement ranges giving a stable leak rate even when looking at the smallest minimum leak ranges.

General Technical Data

Smallest detectable leak rate for He	< 5.10 ⁻¹² mbar l/s
Test method	Vacuum and sniffing leak detection
Detectable gases	⁴ He, ³ He, H ₂
Internal He- Test leak	10 ⁻⁷ mbar l/s
Leak rate display	10 ⁻¹² -1 mbar l/s
Cold start to ready	3 min
Response time	0.5 s
Pumping speed: for He	2.5 l/s
Flange (in)	DN 25 ISO-KF
Inlet pressure max.	25 mbar
Ambient temperature	+ 10 to +35 °C in process
Interface	RS-232-C, RS-485
Input: Analog	Compact Gauge
Input: Digital	Start/Stop, Zero, Calibration, bypass identification



Areas of Application

- Electronics
- Thin Film Technology
- Process Technology
- Manufacture of lamps and tubes
- Scientific
- Analytical